

# Narratives

## Executive Summary

American Conservation Experience proposes to engage 82 AmeriCorps members who will reconstruct, revegetate, and restore the trails, waterways, and natural areas that filter and convey fresh water throughout the State of California. At the end of the first program year, members will be responsible for 74 miles of trails and waterways and 195 acres of public land improved. In addition, AmeriCorps members will leverage an additional 690 community volunteers who will be engaged in one-time service projects led by AmeriCorps members in Santa Cruz and South Lake Tahoe. This program will focus on the CNCS focus area of Environmental Stewardship. The CNCS investment of \$417,102 will be matched with \$839,331: \$521,831 in public funding and \$317,500 in private funding.

## Rationale and Approach/Program Design

### PROBLEM/NEED:

On January 17, 2014, California Governor Brown proclaimed a State of Emergency. In this, Governor Brown outlined a list of problems facing California, problems worthy of the weight of such a proclamation. Every single one of the problems dealt with the quality and supply of one resource: water. The ongoing drought in California has underlined and emphasized a statewide need for enhanced water supplies. American Conservation Experience (ACE), a 21st Century Service Corps, is an environmental non-profit organization that undertakes projects in service to this need. The challenge to increase the supply and quality of freshwater in California is monumental and statewide. ACE is prepared to take this call to the lands that contain the many streams and headwaters through which filters much of the state's freshwater supply.

As of November 11, 2014, 94% of California was in severe drought, and 80% in extreme drought (<http://droughtmonitor.unl.edu>). Brown's Proclamation of a State of Emergency quotes, "Extremely dry conditions have persisted since 2012 and may continue beyond this year and more regularly into the future, based on scientific projections." Furthermore, "Dry conditions and lack of precipitation present urgent problems: drinking water supplies are at risk in many California communities... low-income communities heavily dependent on agricultural employment will suffer heightened unemployment and economic hardship; animals and plants that rely on California's rivers, including many species in danger of extinction, will be threatened; and the risk of wildfires across the state is greatly increased" ("Governor Brown Declares State of Emergency."

<http://gov.ca.gov/news.php?id=18379>).

Water is a basic building block of society and California's need for a sustainable supply of clean water

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is immutable. The severity of the problems that result from water scarcity and failing water quality, enumerated fully in Governor Brown's Proclamation, demand a multi-faceted approach, one element of which is conservation of resources. American Conservation Experience is an organization fit to address the challenge with exactly this approach, and has been creating avenues for service-minded people to engage in conservation for a decade.

ACE AmeriCorps members will enhance the water supply by implementing shovel-ready projects on lands throughout the state of California. These projects will fall into one of three categories: restoration of wetlands and riparian areas, erosion control on trails and waterways, and hazardous fuels reduction. On restoration projects, ACE AmeriCorps crews will directly improve streams and wetlands that filter and store water. On trail and waterway projects, crews will minimize erosion, decrease sedimentation, improve water quality, and naturalize hydrologic connectivity across large areas. And on fuels reduction and thinning projects, AmeriCorps members will decrease the likelihood of catastrophic wildfires, the unnaturally destructive blazes that devastate entire watersheds. As is true of most conservation works, there will be many secondary benefits to the projects that AmeriCorps members conduct, including improved ecosystems leading to greater biodiversity, better trails increasing safe public access to public lands, and the protection of lives and structures from wildfire. In addition to implementing on-the-ground conservation projects toward the benefit of California's water supply, ACE will also provide education, training, and guidance in environmental stewardship for individuals. ACE will host onsite and classroom training events on special topics related to resource conservation. Through recruitment at the community level, ACE will facilitate volunteer involvement with these projects alongside AmeriCorps members. Much of the members' work will be conducted outdoors, in direct, constant contact with the natural world, building strong personal connections to nature. On days off, members will live in a cooperative housing environment where conservation is highly encouraged. The AmeriCorps members that serve with ACE will leave the program more attuned to what they can do to conserve water and other resources not only professionally, and not only while recreating on public lands, but how they can do so throughout day-to-day life as well. One area where the need for water quality improvement is greatest is in headwaters, streams, and tributaries throughout the state. From the EPA website, "Streams, headwaters, and streams that flow only part of the year provide many upstream and downstream benefits. They protect against floods, filter pollutants, recycle potentially-harmful nutrients, and provide food and habitat for many types of fish. These streams also play a critical role in maintaining the quality and supply of our drinking water, ensure a continual flow of water to surface waters, and help recharge underground aquifers"

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([water.epa.gov/type/rsl/streams.cfm](http://water.epa.gov/type/rsl/streams.cfm)). EPA Administrator Gina McCarthy wrote for The Huffington Post, "To have clean water downstream in our rivers and lakes -- and enjoy the economic growth clean water brings -- we need healthy headwaters upstream. In fact, a recent survey found that 80 percent of U.S. small business owners favor including small streams and headwaters in federal clean water protections, because every business in America needs clean water to thrive"

([http://www.huffingtonpost.com/gina-mccarthy/clean-water-act\\_b\\_5900734.html](http://www.huffingtonpost.com/gina-mccarthy/clean-water-act_b_5900734.html)). According to the EPA, 32,688 total miles of streams provide water for surface intakes of public drinking water systems, 57% of which are headwater streams. Over 7.3 million people in California receive drinking water from systems that rely on intermittent, ephemeral, or headwater streams. Improving or safeguarding the quality of the water in these headwaters, or the hydrologic systems by which water is released downstream, ACE AmeriCorps members will thus address a high-impact area of improvement with respect to water supply.

The projects ACE AmeriCorps members conduct will occur on lands managed by federal, state, local, community-based non-profit, or other partners and for the benefit of the environment. These lands and open spaces all contain important streams and headwaters as described above. ACE will implement projects designed by the land managers in areas of high need. For example, for restoration work within United States Forest Service lands in California, restoration activities will occur in accordance with the Pacific Southwest Region Ecological Restoration Implementation Plan, which asserts several goals in the next 15-20 years toward improving water quality, including "Restoring at least 50% of accessible, degraded forest meadows to improve their habitat function and ability to hold water longer into the summer and deliver clean water when most needed." This restoration plan includes all national forests within California in which AmeriCorps members would work.

Specific plans for trail management will go further to outline projects to improve water quality. For example, the 2001 Ansel Adams, John Muir, and Dinkey Lakes Wilderness Management Plan states as do many wilderness plans that "When making decisions on trail maintenance, reconstruction, and relocation projects, give priority consideration to riparian and aquatic resources and overall watershed condition." Watershed improvement therefore becomes a driving consideration and outcome of trail work projects, because when trail work occurs, aquatic resources are in priority. The National Park Service prioritizes in its management plan the preservation and restoration of natural floodplains, and calls for the natural and beneficial values of wetlands to be preserved and enhanced (Executive order 11988 and 11990; Rivers and Harbors Act; Clean Water Act; NPS Management Policies). The effects of catastrophic wildland fire are well-documented as devastating to wetlands and watersheds in general,

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and the executive summary of the California Fire Plan describes fuels reduction as a component strategy of pre-fire management that reduces the risk of such an event ([firesafecouncil.org/about/fireplan.cfm](https://firesafecouncil.org/about/fireplan.cfm)).

Each land management partner of ACE prioritizes tasks in accordance with management plans that address water improvement, and ACE AmeriCorps members implement the projects in accordance with these objectives. Restoration work, trail work, and fuels reduction all enhance water supplies in different ways, in addition to providing other environmental and community benefits. During a California State of Emergency, the need to improve water quality is high, as is the need to conserve water resources in as many ways as possible. Through engaging members in field-based projects and providing educational opportunities for members and volunteers, ACE will improve California's waters and create a legacy of environmental stewardship statewide.

### THEORY OF CHANGE AND LOGIC MODEL:

The primary need addressed by the program is improving water quality and supplies in the State of California. The logic model demonstrates which program inputs and activities correspond to which outcomes, as supported by the Evidence Base. The logic model should be read from top to bottom, as well as left to right, for complete logical continuity.

The outputs and outcomes ACE measures address the immediate results on the project sites. The Evidence Base justifies the logical connections between immediate outcomes and long-term outcomes. For example, although ACE does not take the water samples nor measure flow of water downstream, the goal is to show that improvements did occur within the context of a project design whose objectives included aquatic enhancement. It is the task of each project design and land management plan to establish that improvements made on the local level at the headwaters will cascade downstream and positively affect other systems elsewhere.

AmeriCorps members intervene on projects where their training and abilities enable the project to move forward as designed. Volunteers may leverage AmeriCorps efforts in a team environment, but the projects are selected such that a volunteer crew would be unable to safely or effectively advance the project without AmeriCorps members present.

### EVIDENCE BASE:

In order to establish the logical connections within the logic model, we observe two USDA documents as evidence, cited in full below. The first publication synthesizes studies of wildfire and fuels reduction

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impacts on watersheds, and the second concerns trail work and erosion-control effects on water quality. Both apply to the interventions ACE will conduct, and the second is an Environmental Assessment of an actual project ACE has implemented and will continue to implement into the 2015-2016 program year.

In the wildfire publication, two points are confidently asserted. Absent intervention, wildfires are more severe, and this severity substantially harms watersheds. "Areas where organic matter is entirely burned off may not return to the pre-fire state for decades or centuries;" "Large amounts of sediment can be delivered into reservoirs, reducing water storage capacity" (Graham and Others 2004. pp 21-22). Fuels-thinning is one intervention that reduces this likelihood. "Thinning followed by prescribed burning reduces canopy, ladder, and surface fuels, thereby providing maximum protection from severe fires in the future" (p 36). The various treatments including establishing shaded fuel-breaks define the modern industry standards and coincide with fuels reduction prescriptions that ACE conducts. This constitutes strong evidence justifying the intervention ACE implements as an industry best-practice.

A great deal of literature has been written establishing the ecological and watershed effects of logging roads and their contribution to sedimentation and turbidity in streams. Land Managers are now extending these same principles to recreational trail designs. Often cited in this application have been "Project Designs" and "Land Management Plans." Below is an example of an Environmental Assessment for one of the projects ACE is conducting in 2014/2015 and 2015/2016, the Hilton Lakes and Hilton Creek Trail Project. The EA discusses the cumulative effects of the project on Water Quality, and describes several on pages 22 -- 26. For example, with respect to repairing stream crossings, "An average of .08 acre of currently disturbed area of stream banks at each crossing would be stabilized, with an estimated 85% decrease in the amount of sediment entering stream channels." These are typical outcomes for an ACE trail or erosion control project and justify connections within the logic model.

Graham, R. T.; McCaffrey, S.; Jain, T. B. 2004. Science basis for changing forest structure to modify wildfire behavior and severity. RMRS-GTR-120. USDA Forest Service. Fort Collins, Colorado. 43 p.

USDA. 2012. Environmental Assessment Hilton Lakes and Hilton Creek Trail Project. USDA Forest Service. Inyo and Mono Counties, California. 43 p.

NOTICE PRIORITY:

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American Conservation Experience is a member of 21st Century Service Corps, one of only five organizations recognized as a 21CSC National Program, and will focus efforts on the 2015 AmeriCorps funding priority of Environment. ACE CA's program history demonstrates the ability to support crew operations statewide and undertake environmental conservation work to effectively address critical community needs. Given the current water crisis in California, one of the most important of these needs is protecting and enhancing water supplies, and doing so particularly at the level of the headwaters, streams, and wetlands that feed the state's rivers, lakes, groundwater, and reservoirs. ACE trains and deploys crews to conduct trail and waterway enhancement, ecological restoration, and fuel reduction projects, all of which serve to improve California's waters.

ACE's projects are determined and prioritized by the land management policies of dozens of partners. The design of these many projects by separate federal, state, local, and non-profit entities has a legitimizing effect. Taken as a whole, the projects that ACE conducts are representative of a consensus of all of the best management practices of dozens of partners, although the projects themselves will often conform to the particulars of any given locality or environment. The need for improved water quality is to be found in all land management plans, and guides the objectives of each project undertaken in turn. ACE therefore meets program requirements detailed in the 2015 AmeriCorps RFA.

### MEMBER TRAINING:

ACE incorporates significant training into the beginning of and throughout each AmeriCorps term. At the onset, ACE's AmeriCorps Program Manager and other staff discuss grant provisions, the history of the corps movement, the history of national service, and each member's place within AmeriCorps. The Program Manager conducts a session covering all Prohibited Activities in depth; volunteers, members, and all employees of ACE receive this training session. Each member receives an 8-hour ACE orientation that covers safety concerns: environmental safety, tool safety, job hazard analyses, and safety on days off. The orientation also includes camp conduct, housing rules, ACE policies as outlined in member service contracts, and general project expectations.

Throughout the course of their terms, every 900-hour AmeriCorps member in ACE attends a minimum of 8 member development activities, representing a minimum of 80 hours of their 900-hour terms. Specific member development trainings include the core activities of Orientation and Safety (8h), Intro to National Service (2h), Leave No Trace wilderness ethics (3h), CPR (3h), and Wilderness First Aid (16h). Ongoing trainings include Chainsaw Training (16h), Basic Tool

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Maintenance (6h), Resume Building (2h), Conducting Job Searches (2h), Native Plant Identification (3h), Trails Training (9h), Stone Masonry (9h), Aquatic Restoration (8h), Advanced Trail and Saw Skill Training (22h). Every 450-hour AmeriCorps member receives all core training opportunities, and a minimum of 8 hours of ongoing training as listed above.

As new partnerships and project opportunities arise, ACE will host or conduct new training events to ensure that members learn the relevant skills and ideas for today's conservation priorities. For example, in 2014, ACE was one of 5 conservation corps to pilot a new training program, *Waders in the Water*, developed under sponsorship of the Corps Network in partnership with Trout Headwaters, Inc, to provide conservation corps with the toolkit needed to implement aquatic restoration projects effectively and successfully. Fourteen AmeriCorps members attended the training, with plans to continue implementing the training in the future.

ACE ensures that project agreements include provisions for partners to provide enrichment opportunities to members onsite. This includes an introduction to the mission of the entity they represent, an orientation to the site and the value of the resources, and an overview of the environmental impact of the work to be conducted. These orientations complement on-the-job skills trainings to provide a well-rounded and educational experience. Occasionally, project partners provide additional, project-specific skills trainings; for example, in Summer 2014, members on Hilton Lakes and Hilton Creek Trail Project received crosscut saw training. ACE facilitates member-to-partner interactions that enrich the overall experience of serving with ACE.

### MEMBER SUPERVISION:

ACE supervises AmeriCorps members in several ways to ensure effective service and to manage the professional progress of members. Members are supervised for their entire terms. On project, they receive fulltime supervision and guidance of ACE field staff while implementing tasks. They have periodic supervision from project partners and ACE skills trainers at project sites. If they opt-in to housing, they are additionally supervised by housing/logistics staff. The only time any members do not have direct ACE supervision is while implementing their volunteer service projects, at the site where they've coordinated a one-time event. However, ACE staff provides support and guidance up to the event, and during the event, a representative of the partnering agency is present to supervise the activities.

The majority of ACE Staff Crew Leaders were formerly volunteers or AmeriCorps members. These leaders, with additional mentoring, job-shadowing, and training, provide high-quality guidance and

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support to members on project, especially having lived through many of the challenges first-hand. Crew leaders are promoted for their ability to provide guidance and support to their peers, and so they are expected to continue this trend into their leadership roles.

The AmeriCorps Program Manager provides administrative supervision, and ensures that members are completing all paperwork, submitting their hours, and fulfilling other requirements of the program; thus members are directly responsible directly to the program manager.

Managerial supervision occurs at the level of skills trainers and the directorship of the program. Every crew leader writes evaluations of every AmeriCorps member after every project. The Director of Operations maintains a record of all supervisor evaluations of members on a rolling basis. This feedback, in addition to direct feedback from members, is used to develop a schedule to fit members onto projects that correspond to their strengths and interests in balance with project needs and Performance Measure priorities. It also brings to attention instances requiring exceptional praise or correction, and helps members grow and develop.

With direct supervision on project, direct interaction with AmeriCorps Program Manager, and management from skills trainers and senior staff, ACE provides AmeriCorps members with several layers of supervision. Not only does this ensure the best outcomes for the projects, but it ensures high standards of professional development of the members themselves.

### MEMBER EXPERIENCE:

Service and diversity are core values that are emphasized throughout the immersive experience of ACE. ACE AmeriCorps are looked up to by other ACE volunteers. Leadership is cultivated, and ACE AmeriCorps members grow into their positions.

Projects often take members to remote backcountry locations where they live and work close to nature, in tightly knit team environments. Members reflect upon the significance of their efforts and deepen their appreciation of both the environment and of the value of service. ACE fosters ongoing communication and camaraderie among current and prior AmeriCorps members through blogs on the ACE website and through social media sites such as Facebook and Twitter. ACE provides letters of recommendation and ongoing career guidance and support for alumni.

One of the greatest values of the ACE experience comes from diversity. Members serve on diverse projects, employing many different skills in many locations. They have an opportunity to network with varied professionals in resource management, across several agencies and divisions within those agencies. They serve on diverse crews, occasionally alongside international volunteers, and US

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volunteers from diverse socioeconomic backgrounds. All of this serves to diversify the experience of AmeriCorps members while they are with ACE. They learn about the skills required in conservation, and they also learn much about themselves. As they network with professionals from all over the state and all over the world, they build a solid foundation for identifying their calling and turning this into future employment. Service and diversity are the hallmarks of the ACE experience, and together, these two cornerstones form the basis for member experience.

### **COMMITMENT TO AMERICORPS IDENTIFICATION:**

ACE is proud to identify its commitment to the AmeriCorps program and actively seeks opportunities to do so in the broader community. This includes placement of the AmeriCorps logo so that it is visible both inside and outside of our office, on our website, and in our recruitment and outreach materials. ACE uses the AmeriCorps logo on presentations that include discussion of our AmeriCorps members and their accomplishments. ACE provides uniforms to AmeriCorps members that identify them as AmeriCorps members. When press releases are issued within communities, communications come through the Director and Director of Operations, both of whom prioritize identifying with AmeriCorps in these releases. When ACE conducts large volunteer events, such as Earth Day Santa Cruz 2014, AmeriCorps members are highly visible facilitators of these events.

### **Organizational Capability**

#### **ORGANIZATIONAL BACKGROUND AND STAFFING:**

American Conservation Experience has the capacity to run a successful AmeriCorps program. The experience, staff, and management structure are in place to build upon the previous 5 years of experience doing so. ACE has made adjustments to the staffing structure to provide for improved supervision, and therefore greater safety and effectiveness of members at worksites. Furthermore, ACE will continue to grow existing partnerships and establish new ones, ensuring that meaningful projects will abound for all members to put their efforts toward on-the-ground measurable accomplishment.

Two positions will direct the entire California program, the Director and the Director of Operations. The Director oversees staff members to ensure that every input to the program will be working effectively. The Director develops partnerships, projects, and grant opportunities to sustain the program. The Director of Operations has two primary jobs: 1) understand and meet the needs of project partners, and 2) understand and meet the needs of ACE members. The Director of Operations meets these two sets of expectations simultaneously by developing the member schedule and

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managing the allocation of resources to all projects that ACE conducts, for the mutual benefit of partners and members.

The AmeriCorps Program Manager is a full-time position dedicated to managing the AmeriCorps grant, maintaining communication with AmeriCorps funders, and providing an additional level of support and guidance for AmeriCorps members. The Program Manager will ensure the grant is properly administered, that reporting requirements are met, and that performance measures are accurately tracked. Program Manager will submit progress reports quarterly and financial reports monthly. Furthermore, the Program Manager will be a point of contact for members with questions about their AmeriCorps service terms. This position has a transition plan and program manual in place to ensure for smooth transition in case of turnover.

ACE provides member housing and supplies all project food, which requires two Logistics Manager positions, one in Santa Cruz and one in South Lake Tahoe. These individuals manage the housing and warehouses, and conduct food shops each week for the crews going into the field. They ensure vehicles are fully maintained and serviceable for each project.

Skills trainers and regional project managers are placed to maximize safety and effectiveness of crews. A national-level safety coordinator develops and institutes safety policies and incident reporting procedures, and manages insurance policies. ACE's chainsaw program provides a high level of training and oversight for sawyers from a national-level coordinator, to a state-level certified trainer, and crew leaders with specific training to lead saw crews. Crew leaders work with members in the field, and assistant crew leaders develop into crew leaders while providing additional supervision on projects that require it. Because of the tiered development structure, employees at each level are learning the skills necessary for advancement; when staff are promoted or leave the organization, there are trained staff in place ready to assume the responsibilities vacated. ACE has developed training materials to facilitate this pattern of growth and development within the program, including Crew Leader Handbook. ACE staff are trained through a combination of job-shadowing and developed materials.

For the planning of ACE's intervention, ACE ultimately outsources this to the qualified project designers of the land management agencies. ACE benefits from the immense amount of study, public outreach, hearings, and so on...which partners conduct, and which comprises a land management plan or project proposal.

ACE CA will have administered an AmeriCorps grant for 5 years. In 2010, ACE received an AmeriCorps grant to support 20 MSYs. ACE applied for and received an 80% expansion for the 2012-

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2013 contract year from 20 to 36 MSYs. In 2014/2015, ACE received a continuation of the previous grant cycle with 34 MSYs. In the 2015/2016 program year, ACE would therefore have the staff and experience in-house to continue building upon an existing history administering an AmeriCorps grant.

### **COMPLIANCE AND ACCOUNTABILITY:**

ACE will comply with AmeriCorps rules and regulations by building upon a successful history of compliance as a basis, and by encouraging thorough knowledge of the rules at every level. ACE will inform partners of AmeriCorps requirements during contracting, and ACE staff will ensure partner compliance both at the sites and with periodic check-ins from senior-level office staff during project implementation. Staff reviews rules and regulations with members, including volunteers, during every member orientation. The AmeriCorps Program Manager also ensures compliance with background checks throughout staff and membership. During terms of service, when members enter service activities that place them in contact with the public, they are reminded of AmeriCorps rules prior to the event. When in doubt about whether or not an activity or behavior is in compliance, members are encouraged to verify with ACE staff prior to engaging in the activity.

ACE contracts with Fester & Chapman (CPAs) of Phoenix and Scottsdale, AZ, experienced auditors of non-profit organizations to conduct an annual A-133 audit and generalized audit, to oversee and report on our internal controls, general accounting practices, and to ensure that we are in compliance with non-profit rules and regulations on an annual basis. Fester & Chapman provide imperative oversight of ACE's administration of the AmeriCorps grant, ensuring that any mistakes are caught quickly and corrected immediately. ACE also contracts with an accountant, Keith Lindahl, to prepare our IRS Form 990s and to advise us on matters of economic policy. External oversight such as provided by Fester & Chapman and Mr. Lindahl provide a sense of security for our agency project partners that ACE's revenues are being managed professionally and in compliance with all applicable rules and regulations. In 2014, ACE hired a Finance Director with 6 years of non-profit finance experience to ensure fiscal compliance for the program.

### **PAST PERFORMANCE:**

In the most recent full year of program operations, 2013-2014, ACE achieved 100% enrollment in the program year, a success which was achieved for several reasons. ACE has infrastructure to provide for many of the needs of members during their terms of service, by providing camping supplies and food

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while members serve on projects, and housing while on days off. ACE internalizes these logistics and assumes all of the responsibility and liability associated with these practices for one reason: to be as inclusive a service corps as possible, and open doors to as many members as desire to serve as possible, regardless of their financial situations. ACE views 100% enrollment as one natural outcome of this. In the most recent program year, ACE maintained a 94.2% retention rate when failing to retain 4 out of 69 members. For every program year to date, ACE has maintained at least 90% retention of members. Of the four in the most recent year, two members quit and two were fired for cause. Of the two who were fired, one was due to marijuana use, and one for not showing up for work and making obscene remarks at a supervisor. ACE maintains a zero-tolerance policy for alcohol on project sites and in ACE housing, and a zero-tolerance policy for drug use at any time. The goal is to achieve 100% retention. Members are always informed and reminded of what the consequences will be if they violate ACE policies in those regards. For instances of disrespect and poor work ethic, ACE will work with members to develop professionalism, but ultimately, ACE demands a level of personal accountability within each member.

It is ACE's responsibility to cultivate a positive culture that earns the commitment and respect of all members. ACE also needs to establish the trust and buy-in of all members so that each member sees their commitment as a non-negotiable top priority. Only then will ACE achieve 100% retention. ACE will strive for this culture by empowering the members, fostering good communication, and placing the highest value on commitment and integrity. ACE will remain very clear about expectations. Over the past three years, ACE's performance with respect to performance measures generally exceeded targets. For trail targets of 13, 23.4, and 21 miles, ACE accomplished actual improvements on 49, 126.9, and 51.9 miles, respectively. For restoration sites, targets of 120, 216, and 194 acres yielded accomplishments on 174, 231 and 88.7 acres, respectively. In other words, ACE always exceeded accomplishments, with one notable exception. In 2013-2014, ACE fell short of acreage improved on restoration projects.

Generally, previous measurements of improvement on restoration projects utilized a scale of condition classes for ecosystems that, in the opinion of several project partners, oversimplified the accomplishments of the crews. Several projects recorded no improvement on the Performance Measure Instrument sheet, despite the belief of the partners that project objectives were met and that the crews accomplished substantial work. We need to track the idea of "improvement" in a better way, to correctly capture when crews are accomplishing very much or very little of it. Applying a 1-3 scale for health of ecosystems does not capture the important details of what crews are doing to improve

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the environment. A new form should allow for partners to better report on accomplishments for restoration and fuels reduction work, which will result in reporting accomplishments more in tune with determined objectives.

### **Budget/Cost Effectiveness**

#### COST EFFECTIVENESS AND BUDGET ADEQUACY:

ACE proposes a total budget for the 2015-2016 program year of \$1,256,433, with a CNCS share of \$417,102 and a Grantee share of \$839,331 in support of 33.94 MSY. This yields a Cost per MSY of \$12,289, which is no greater than previously-funded grant years, is lower than the amount that may be requested under a Fixed-Award grant (\$13,730), and significantly lower than the amount permitted by CV for a program in its sixth year (\$15,000). To achieve this MSY, the Grantee assumes responsibility for all costs within the budget with the exception of the Member Living Allowance.

These costs are based directly on actual costs from the most recent 2013-2014 fiscal year, with adjustments reflecting the proposed changes in staffing structure and additional costs related to recruitment, background checks, personnel benefits, member benefits, and member travel.

Within the calculations for each line item, it should be noted that a factor of 42% has been applied to certain expenses. Of ACE's membership by MSY, 42% is AmeriCorps members funded under the CV grant, and 58% is volunteers and members funded through other sources. Because most staff work for the benefit of all members equally, and program costs support all members equally, expenses are factored by 42% to account for the portion dedicated exclusively toward the AmeriCorps program.

Items that apply strictly to AmeriCorps members only such as background checks and service gear are included at 100%. ACE policy prohibits volunteers from using chainsaws, and 76% of ACE's non-volunteer membership by MSY is AmeriCorps members funded through CV, so therefore, chainsaw-related expenses are factored by 76%.

In support of the Grantee share, non-CNCS funds will be generated through fee-for-service contributions from federal, state, and local agencies and private non-profit organizations. When federal funds are used as match for the AmeriCorps program, ACE informs the partnering agency and seeks written approval. ACE has several funding sources identified and confirmed for 2015/16, including \$185,000 with Ventana Wilderness Alliance, \$76,960 with Inyo National Forest, and \$99,891 with NFWF in Pinnacles National Park and Sierra National Forest. Other sources can be confidently projected based upon an established history of partnerships every year. These sources are listed within the budget narrative, and the projections are the result of preliminary conversations and verbal commitments with partners, an average of the past 2-3 years of agreements, or both. All

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revenue generated by AmeriCorps members is expended as match towards the AmeriCorps program. As the program grows, ACE continues to establish and maintain strong partnerships with these agencies, ensuring that there will continue to be projects for members to serve on well into the future. Thus, the budget is not only cost-effective and sufficient to carry out program objectives, but also well-backed by our partners.

### Evaluation Summary or Plan

#### INTRODUCTION

American Conservation Experience California will implement on the order of thirty or more projects every year, each with its own project design. These projects occur as one-time treatments or as a single phase of multi-year project implementations. ACE occasionally consults on conservation projects, but ultimately ACE does not design or plan projects, does not conduct environmental assessments, nor reconcile projects with land management plans. Because of the variability between project designs, timelines, objectives, and scales, a universal plan to evaluate the ACE AmeriCorps Program's success at producing expected results in an ecological context must focus on two qualities that underlie the program entirely. First, an evaluation plan must evaluate ACE as a tool of land managers and answer the question, "Does ACE successfully accomplish objectives as set forth by the partners who contract ACE on a fee-for-service basis?" Second, the evaluation plan must gauge the success of the projects in producing results. In other words, it must answer the question, "How successful are ACE's partners at designing projects to achieve results in service to community needs?" These questions must be formulated in a testable way for the time periods in question, in order to enable the evaluation.

#### ACE THEORY OF CHANGE

The interventions that ACE engages in are diverse, but they all support the expected results of improving at-risk ecosystems. The reasons for this expectation are supported by the science of restoration ecology, by the practices of wildland fire management, and by the principles of trail construction and maintenance. Activities do not produce results without context. For example, an ACE crew might build a fence, which says nothing of results, except that a fence stands; a project design indicates that a fence is to be built within BLM-managed grazeland, around a freshwater spring, to keep livestock from fouling the stream, and therefore protecting water quality downstream. The context provides the details necessary to extrapolate a theory of change, in this case, why a fence produces the expected results of enhancing water quality. Understanding the success of the

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intervention requires situation-specific measurements and analyses.

Writ large, this theory of change requires outputs and outcomes to be measured that take into account project specifics. To describe all of ACE's many projects over the past three years, a statistically significant random sample must be selected for analysis and evaluation, the results of which can be applied with statistical methods to the population of projects.

### OUTCOMES:

The primary outcomes that ACE records with each project are the areas of land and lengths of tracks improved within landscapes. The CNCS definition of improved is as follows: "Renovated to reduce human impact or the negative impact of natural disasters or invasive species, restored native plants and habitat, reduced erosion, protected watersheds, reduced wildfire risk, upgraded or repaired outdoor recreation facilities or signage, increased public safe access, protected flora and fauna. Improvement should be consistent with an accepted natural resource restoration, maintenance or improvement plan."

In evaluating the success of the ACE CA AmeriCorps Program, the above definition of improvement does not maintain a vantage nuanced enough to establish that meaningful long-term outcomes were achieved. And each particular example of improvement might require its own set of tests. To recall the previous example, if the output is a fence and outcome is a protected spring, the true meaningful long-term outcome is the test of water quality downstream year-over-year revealing improvements. The evaluation plan questions we ask are as follows.

### QUESTIONS:

\* Did ACE complete the objectives of project partners within the project design?

ACE documents the answer to this question from all project partners upon completion of every project, and so ACE retains the data for this step in the evaluation process. In order to determine the success of a hammer's intervention in building a house, one must first establish that the hammer does what it is supposed to do: drive nails. If it doesn't, then the evaluation of the hammer can cease. This question establishes that ACE as a tool performs its necessary function within the context of a project.

Researching Long-Term Improvements/Outcomes OR Testing Projects

\* Are trails statistically safer as evidenced by a decrease in incidents reported from the trails in years after project implementation?

\* Has biodiversity or native plant coverage increased as a result of the project?

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- \* Has water quality or supply improved as a result of the project?
- \* Are there fewer intense/severe wildfires as a result of the project?

### RESEARCHING THE QUESTIONS:

An evaluator should randomly select a sample of ACE projects and identify the relevant long-term improvement/outcome questions that apply, then answer questions in as much detail as possible. ACE will seek to contract an evaluator qualified to approach these questions rigorously and scientifically, or to revise the approach if suggested. ACE does not anticipate the necessity of field measurements to answer the questions, because partner organizations and agencies will generally have taken measures already and approached the questions within their own project evaluation procedures.

Land managers that implemented the projects should have all necessary data to determine the success of the projects; often studies accompany projects, and if enough time has progressed, results may have already been published. To determine safety of trails, the evaluator will need to collect data from emergency services of the area in question. To report biodiversity, the evaluator will likely need to follow up with the project manager, resources department, or other individual who could provide a quantitative result. This is likewise for water quality following erosion control projects or restoration works. Due to the complexity of fire science and irregularity of wildfires, the evaluator's expertise should guide an appropriate method of determining project efficacy in this regard.

Some projects worked to prevent an adverse condition, such as the spread of invasive species. In such a case, no improvements would be observed for a successful project.

Professionals in restoration ecology are generally very open to share the results of successes and failures alike, so that successes might be repeated elsewhere, and failures avoided. However, if former partners were unwilling or unable to share this data, a different evaluation approach might need to be developed altogether.

### EVALUATOR'S QUALIFICATIONS:

The primary method for research involves compiling data that partners and others have measured and using it to draw conclusions about the complete set of projects that ACE has shared a role in implementing.

The evaluator would need a solid background in statistics, statistical modeling, and data visualization. Familiarity with restoration ecology and the principles at work behind the tests would be helpful. Solid communication skills will be required in order to investigate different projects and solicit the

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cooperation of professionals for the goal of evaluating and improving ACE's AmeriCorps Program. The evaluator will also need to communicate the findings of the study. ACE will prefer to contract an individual with demonstrated experience collecting and modeling data. Because of the anticipated difficulties inherent in the wildfire problem, if an evaluator had experience with wildland fire behavior or analysis, it would be an advantage.

This is ACE CA's first time in planning to conduct an evaluation of this scope, and we are eager to better understand the environmental effects of our work. Even so, we will seek to learn more about the necessary qualifications that an independent evaluator ought to maintain, so we can approach this evaluation process with the highest confidence.

### BUDGETING, TIMELINE, AND EXPECTATIONS:

ACE plans to solidify and refine the evaluation plan within the upcoming year, and to develop a budget and timeline. While ACE believes that an evaluation plan could be implemented over an extended period if needed, the input of the evaluator will determine the timelines at work. For example, perhaps the timing since the intervention will have statistical implications for the project samples. If that's the case, then the evaluator might provide a timetable and budget at odds with ACE's initial estimations.

The general timeline of ACE's Evaluation Plan would be as follows:

2014/2015: Meet with an outside evaluator and develop a budget and refined timeline

2015/2016: First year of funding, second three-year grant -- Finalize Evaluation Plan with input from partners and CNCS guidance

2016/2017: Begin implementing Evaluation

2017/2018: Finalize Evaluation Plan in third year. Evaluation report due after program year.

### Amendment Justification

N/A

### Clarification Summary

#### A. PROGRAMMATIC CLARIFICATION

1. The numerous tasks that AmeriCorps members will execute toward the benefit of water quality and supplies in California include the following: remove invasive plants, stabilize stream banks, propagate native plants, collect and remove debris, stabilize eroding trail sections, reshape trails and stream banks, thin fuel loads in areas susceptible to wildfire, remove, cut, chip, and pile fuel materials, and

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more. Although expanded within the narratives and logic model, for the purposes of the executive summary, the description of these tasks reduces to "AmeriCorps members will reconstruct, revegetate, and restore the trails, waterways, and natural areas that filter and convey fresh water throughout the State of California."

2. This program does not propose to utilize members as team leaders. ACE Staff Crew Leaders provide full-time supervision of crews consisting of AmeriCorps members. See 6.1.e. 'Member Supervision': "The only time any [AmeriCorps] members do not have direct ACE supervision is while implementing their volunteer service projects, at the site where they've coordinated a one-time event." The nature of these events does not place AmeriCorps members into positions of responsibility for other AmeriCorps members, nor for program administration.

3. AmeriCorps members are never called upon to do more than assist full-time Staff Crew Leaders on a crew. This assistance is not for the benefit of the project nor the crew leader as much as for the benefit of the member, who explores additional responsibilities in a controlled and supervised way. ACE CA does not use the term AmeriCorps Team Leader to describe any AmeriCorps members, because all AmeriCorps members are equals who report directly to a staff crew leader, and we do not want to confuse that hierarchy.

The statement within the narrative that "The majority of ACE Staff Crew Leaders join the program as volunteers or AmeriCorps members," refers to their former positions within the organization. This has been reworded now to indicate that crew leaders may have formerly been volunteers or AmeriCorps members, but that they are not AmeriCorps members.

### B. BUDGET CLARIFICATION

1. Updated within application.

2. Updated within application.

3. In order to decrease CNCS Cost Per MSY in 2015-16, the budget item within which the ACE California program could yet economize is living allowance costs per member. The CNCS share of the budget covers a large portion of Living Allowance costs for members, and no other programmatic cost. However, ACE strongly believes that these AmeriCorps positions ought to be open and accessible to individuals from any economic background, and to reduce the living allowance we believe would deter some individuals from applying for financial reasons. This AmeriCorps program runs best when it is firing on all cylinders, and two of those cylinders are inclusion and diversity, which we believe the current Living Allowance levels enable. Therefore ACE does not plan to reduce member living

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allowances in order to decrease Corporation Cost Per MSY in the 2015-16 program year.

### C. PERFORMANCE MEASURE CLARIFICATION

1. Each performance measure instrument worksheet will be completed once for each project site. Therefore, project partners will naturally count each mile or acre only once. To further reduce ambiguity, a question will appear on the instrument, "Has this acreage/mileage already been treated and counted this year?" to allow for this specification to occur at each instance of reporting.
2. The instrument will refer to this definition of improvement in terms to which the land manager will relate through the natural resources plan.
3. The disparity between acreage treated and acreage improved allows for a 75% success rate of treatments to generate improvement to the acceptable level as defined by the sponsoring agency or land manager. This percentage is determined through historical performance of ACE restoration and fuels crews.
4. Each performance measure instrument worksheet will be completed once for each project site. Therefore, project partners will naturally count each mile or acre only once. To further reduce ambiguity, a question will appear on the instrument, "Has this acreage/mileage already been treated and counted this year?" to allow for this specification to occur at each instance of reporting.
5. Updated within instrument description.
6. The targeted output synthesizes a combination of past performance measures met, weighted by a consideration of future project expectations. Although this measure averages to a certain linear accomplishment per member per unit time, this reduction obfuscates the reality for several reasons. (1) These projects necessitate teamwork, and could not be accomplished by a single individual during any amount of time; (2) Highly technical projects such as staircase construction may generate less linear improvement output in terms of length, but more in terms of overall impact; and (3) Conversely, some projects may exert less impact upon an overall greater length, or in a shorter timeframe. Taking this all into account along with our historical program accomplishments, and weighting this with consideration for projects in development, is how the targeted output was determined for 2015-16.
7. With the original MSY application, the total member hours for the program was 70,600 hours; activities toward performance measures comprised 61,120 hours, or about 87% of member time within the program. The remaining 13% was comprised of training events, class time, and volunteer service project preparations. With the current revised MSY target, this application now represents a

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program of 60,300 total member hours, 51,660 of which are directed toward performance measures, or 86% of member service time. For the total of 33.94 MSY, this yields 29.08 MSY on the direct service activities, and 4.86 MSY toward training activities for members and Volunteer Service Projects.

### D. STRATEGIC ENGAGEMENT SLOTS

1. ACE recruits with a deep-seeded philosophy of inclusion, and strives to make accommodations for all members with disabilities. ACE recruits through organizations and groups comprised of individuals with disabilities, and will continue to do so. ACE will expand outreach to state vocational rehabilitation agencies and to interest groups.
2. ACE will not at this time request additional MSYs to be filled by AmeriCorps members with disabilities.

### E. MSY WITH NO PROGRAM FUNDS ATTACHED.

1. ACE will not at this time request additional no-cost MSYs.

### Continuation Changes

N/A

### Grant Characteristics