California Outdoor Engagement Coalition

Connecting under-served and under-represented youth with parks throughout California

The California Outdoor Engagement Coalition has been created to inspire the next century of park stewards, who will benefit greatly from transformational connections with the outdoors and in turn advocate for the protection and preservation of these spaces. The University of California is uniquely positioned to serve this role because of its access to a diverse student body and faculty researchers who can guide, mentor and lead youth in life-changing experiences, including, but not limited to, science in the parks, art in the parks and wilderness explorations. Furthermore, the system of UC Natural Reserves affords opportunities to engage youth in hands-on natural resource systems research and stewardship.

There’s a clear need to bring more diverse populations into the parks. At the March 2015 Science for Parks, Parks for Science conference at UC Berkeley, Secretary of the Interior Sally Jewell stated, “…I think it’s a huge issue. There are major demographic shifts going on in this country and park visitors are not reflective of that demographic at all. They’re older, they’re whiter, they’re more affluent than the population generally. And if we do not make the parks relevant and welcoming to the fastest growing segments of this population, the urban segments of this population, the Latino, Asian, African American, women…there’s a lot of disproportionality in our national park assets and we’re not going to change that if we do not make our parks more relevant to the new generation.”

According to the California State Parks Transformation Team Relevancy Committee, “Achieving ‘relevancy’ would mean all people value parks and California State Parks in particular are an essential component of their individual health, inspiration and education as well as that of society.” At the Science for Parks conference, UC President Janet Napolitano observed, “Because we have cooperative extension in every

county throughout California, maybe there's a way to use our capability to get more of those kids outside and into the parks.” We strongly agree.

California currently has a growing population of almost 40 million people. Hispanics now outnumber Caucasians in California and there are twice as many Latinos under the age of 18 than there are Caucasian people under the age of 18. It is critically important to the survival of parks in California that all segments of our diverse population feel connected to, and invested in the stewardship of these protected outdoor spaces. There are also significant personal benefits to connecting to nature in a meaningful way (physical health, mental health, wellness, etc), so all individuals should have access to these vital public resources.

The coalition is a partnership between the University of California, California State Universities, the National Park Service, California state and regional parks, California Department of Education and non-profit organizations. Rather than reinventing the wheel, the coalition seeks to leverage the unique strengths of our partners to maximize impact and efficiency. In this regard, we are focusing on successful models that can be easily replicated, scaled up across the state and made sustainable in order to inspire the next century of park champions.

Currently, California has:
- 10 University of California campuses plus UC cooperative extension in all 58 counties
- 23 California State University (CSU) campuses
- 112 California Community Colleges
- 32 National Park Service Sites
- 279 California State Park Units
- Many regional and county park systems
- 500,000 4th graders
- 6.2 million k-12 students
Part I: BIG PICTURE

THE CHALLENGE

Today, there are 38.8 million people living in California – a highly diverse population of which the predominant segment is Hispanic. There are almost 12,000 publicly accessible parks throughout the state, yet kids today are spending far more time indoors playing video games than they are exploring outside. It’s the first generation where today’s youth aren’t expected to live as long as their parents.

In addition, the very existence of our parks depends upon today’s youth finding our parks relevant to their lives and to the future of the nation. Research indicates declining overall visitation as well as a discrepancy between the current visitors and the demographics of the United States.²

THE OPPORTUNITY

VISION: All children and young adults, regardless of background, have the opportunity to develop deep, personal connections to nature

MISSION: To partner with universities/colleges, parks and other protected spaces, government agencies, non-profit organizations and businesses to provide transformational experiences for young people ages 5-25 to play, learn, serve and work in the outdoors.

COALITION OBJECTIVES

- To create a coalition of members from across the University of California, the National Park Service, California State Universities, California Community Colleges, state, county and regional parks who are committed to connecting under-served youth with parks and other protected spaces throughout California
- To create formal partnerships between UC campuses, CSUs and community colleges and nearby National, State and Regional Parks
- To create a shared, guiding vision and mission focused on connecting under-served youth to play, learn, serve and work in parks throughout California. This vision may include plans to create a pipeline for youth and young-adults to be connected to parks from pre-K-12 to college to careers and a lifelong commitment to park stewardship.
- To identify successful programmatic models that can be replicated, scaled up and institutionalized; potentially including, but not limited to:

○ Science-based programs such as BioBlitzes and Phenology Projects
○ Literacy programs such as Adventure Risk Challenge
○ Art-in-the-parks programs such as National Geographic Photo Camp
○ Leadership programs such as Yosemite Leadership Program

<table>
<thead>
<tr>
<th>Coalition Structure</th>
<th>Advisory Council</th>
<th>Coalition Members</th>
</tr>
</thead>
</table>
| Core Steering Committee | Diverse group of leaders with expertise; includes youth and young adults | Programmatic partners:  
- BioBlitz  
- CA phenology project  
- Outdoors Empowered Network  
- Outdoor Youth Connection | Key Stakeholders integrating Play.Learn.Serve.Work Ladder of Opportunity for ages 5-25 |
| Make final decisions; Budget dedicated to coalition | Approximately 6 meetings/year (3 in-person and 3 calls) | Participation will vary based on working committees, programmatic partnerships, etc |
| Staff who dedicate most of their time to the coalition’s priorities | | Approximately 1 call/month with some touch points in between |

**TRANSFORMATIVE, MEASURABLE IMPACT**

There must be measurable objectives that will demonstrate a transformative impact on youth and the future of parks. These quantifiable goals could be set and measured in partnership with UC’s premier research programs, such as The Greater Good Center at UC Berkeley. Goals could include, but are not limited to, the following benefits to youth, parks and the University of California.

**Benefits to Youth and Young Adults:** Direct, place-based experiences in the parks and increased access to a world-class university will impact the youths’ collective futures as park visitors, enthusiasts, advocates, conservationists and scientists. For under-served youth, these experiences have an even more profound impact when shared with people with similar backgrounds. Berkeley has demonstrated the effectiveness of such efforts through many initiatives. Measurable outcomes could include improved physical and mental health, improved school performance and attendance, and college and career preparation. A “Ladder of Opportunity” would provide every young person, from age 5-25, the opportunity to engage in a meaningful way with parks, ranging from biodiversity studies to camping trips to
Careers in conservation or land management.

**Benefits to Parks:** A primary benefit to parks will be the development of the next generation of park stewards. As highlighted in *Advancing the National Park Idea, National Parks Second Century Commission Report (2009)*, “Just as the 1916 act that created the National Park Service established the structures needed to maintain the park during the first century of the National Park Service, education will be central to the Service’s success in caring for the parks and carrying out its broader mission during the next century.” A top priority of the California State Parks’ Transformation Team is to “Enhance and Develop Outreach Services to Underserved Communities.”  

Measurable benefits to parks could include greater diversity of park visitors ("Park users reflect the ethnic, age, and income diversity of the state"), increased awareness of threats to the parks and increased commitment to protecting them. Long term goals could include having park staff more accurately reflect the demographics of the state.

According to *A New Vision for California State Parks*, "the Department should set a goal to have park visitation mirror California’s demographic makeup in 10 years.”

**Benefits to the University of California:**

UC students will have the opportunity to function as role models to the youth, while building leadership skills, career opportunities and relationships with organizations aligned to their area of expertise and interest. This is an added opportunity for UC to give back to the community in a meaningful way, which is aligned with its mission of public service. Additionally, an increasing number of granting agencies are requiring research programs to have an outreach component. For graduate students, having opportunities to train undergraduates can enhance their professional skills. Measurable objectives for the University of California could include increased recruitment of diverse undergraduate students, undergraduate career preparation, graduate research support, and improved profile of the University of California.

---

**Part II: PROGRAMMING**

3 [http://www.parks.ca.gov/?page_id=28110](http://www.parks.ca.gov/?page_id=28110)

4 *A New Vision for California State Parks: Recommendations of the Parks Forward Commission (February 2015)*
The California Outdoor Engagement Coalition was created in June 2015 and is in the process of creating many programmatic partnerships that can be replicated throughout the state to connect under-served populations with the outdoors.

CLIMATE CHANGE ACTION COURSE SPRING 2016

In the spring 2016 Climate Change Action class at UC Berkeley, undergraduates will be trained to lead high school and elementary school students from Richmond and Berkeley to participate in BioBlitzes (biodiversity surveys to count the number of species in a given area) in the East Bay Regional Parks, school yards and on the UC Berkeley campus. This course is a replicable model for other UCs and parks across the state.

REPLICATING SUCCESSFUL PARTNERSHIPS BETWEEN PARKS AND UNIVERSITIES

We are working to hire a UC Berkeley undergraduate or graduate student to study successful partnerships between universities, such as the partnership between the Pacific Leadership Institute at San Francisco State University and California State Parks as well as the Yosemite Leadership Institute, which is a partnership between UC Merced and Yosemite National Park. We will determine the challenges and opportunities for replicating such models as well as create support materials for other parks and universities interested in forming similar partnerships.

BIOBLITZ 2016

There are plans to have BioBlitzes across the country in 2016, the centennial year of the National Park Service. The University of California is in the position to replicate, scale and make sustainable this growing citizen science movement by creating a partnership between university campuses, parks, partnering organizations and public schools. We are working with leaders across the state to create BioBlitz partnerships:

- UC Davis and the Capitol Corridor in Sacramento
- UCLA and Santa Monica National Recreation Area
- UC Berkeley and the East Bay Regional Parks
- Multiple UC Natural Reserves with campuses such as UC Riverside and UC Irvine

FALL 2016 OUTDOOR CONVENINGS ON ALL 10 UC CAMPUSES

The Outdoor Foundation has provided funding for us to host 10 outdoor convenings on each of the 10 University of California campuses this fall. The purpose of these convenings will be to bring students together to identify the barriers limiting outdoor participation for millennials and to engage, inform and inspire students to connect with the outdoors in a meaningful way.
Part III: SUCCESSFUL PILOT PROGRAMS

As part of the launch of the 2nd century of the National Park Service, UC Berkeley's College of Natural Resources began an Education Outreach Program with two successful pilot programs that can be replicated and scaled up.

BIOBLITZ 2014

By bringing a diverse group of UC Berkeley undergraduates and Berkeley High School (BHS) students to participate in the 2014 BioBlitz at the Golden Gate National Recreation Area, we kick-started the education outreach partnership between UC Berkeley, the National Park Service and the National Geographic Society.

The event allowed citizen scientists to work with professional scientists as they conducted a biodiversity study of the living and non-living organisms in a given area. UC Berkeley students participated in the BioBlitz through a special course at UC Berkeley's College of Natural Resources.

The BHS students (recent immigrants from 20 different countries) participated in the BioBlitz in Muir Woods. These grade 9-12 students were all learning English as a second language.

Following the BioBlitz, the UC Berkeley undergraduates presented their findings and analysis to the BHS students, modeling how to give scientific presentations.

Finally, the BHS and UC Berkeley students co-hosted a poster session at the David Brower Center in downtown Berkeley for their families and representatives from the National Park Service, UC Berkeley, Berkeley Unified School District School Board, Berkeley City Council, Lawrence Hall of Science, and nonprofit outdoor...
education programs. At a break-out session at the “Science for Parks, Parks for Science” conference, College of Natural Resources (CNR) Dean Keith Gilless emphasized how inspiring it was to see high school students from extraordinarily diverse backgrounds so enthusiastic about the connections they had made with the parks.

This pilot program gave a targeted population of high school students in-depth science-based field experiences in the National Parks, meaningful follow-up to internalize their findings and greater access to a world-class university. This is a case study of how a successful program, which had been created and refined by the National Geographic Society, was enhanced by incremental partners. Berkeley made it a priority to add elements to leverage local assets: A college course, a direct connection to a diverse student population, and integration with the Berkeley and University community.

CLIMATE CHANGE ACTION INTERNSHIP 2015

In March 2015, UC Berkeley partnered with Save the Redwoods League to recreate the tripartite partnership between UC Berkeley, local youth, and the parks. We recruited, selected, trained and paid UC Berkeley interns to lead science based research activities on the impact of climate change on redwoods. This was a two-week project, integrated into the high school biology teacher’s ecology unit. The internship included:

- **Intern Training** led by Save the Redwoods League, including a redwoods and climate change presentation and field-based training at Redwood Regional Park
- **2 pre-field trip classroom lessons** on carbon sequestration and redwood forest ecology
- **Field Trip to Redwood Regional Park** where the UC Berkeley interns taught the Berkeley High School students scientific field measurements and led them through activities to collect data in the redwood forest
- **Post field trip classroom lesson** when the students analyzed the data they collected in the forest
- **Climate Change Action Projects at Berkeley High School**: During the second week, the UC Berkeley interns led Berkeley High School students through the planning process to create their climate change action projects, which included educating the Berkeley community about how to mitigate climate change

The Climate Change Action Internship is replicable and scalable. There are 48 redwood parks in California, which provides ample opportunity to partner with Save the Redwoods League to create Climate Change Action programs throughout the state. The program is cost efficient, because we’re using the expertise of Save the Redwoods League for the content and campus structures to recruit interns. This program increases student access to parks and serves as a necessary stepping-stone in continued environmental
education. It incorporates real scientific data collection and analysis into the classroom and emphasizes the conservation of a local resource.

Illustration of the cascading mentorship and increased impact due to a strategic partnership between UC Berkeley’s College of Natural Resources and Save the Redwoods League

Graphic created by Erik Michael Swan, UC Berkeley Class of 2014
There is currently extraordinary momentum towards enhancing the value and appreciation of the parks. Just two weeks prior to the “Science for Parks, Parks for Science” conference, Secretary of the Interior Sally Jewell launched a youth initiative to “inspire millions of young adults to play, learn, serve and work in the great outdoors.” At the conference, UC President Janet Napolitano indicated that she sees the potential for the University of California to be a partner for this change.

The California Outdoor Engagement Coalition aims to connect millions of Californians with our abundant natural resources while simultaneously protecting our parks for generations to come.

APPENDIX A: CALIFORNIA OUTDOOR ENGAGEMENT COALITION MEMBERS AND PARTNERS

Natural Reserve System- University of California, Office of the President
- Peggy Fiedler, Director
- Erin Marnocha, Program Coordinator

UC Berkeley
- Jenny Mulholland-Beahrs, Director, Education Outreach, College of Natural Resources
- Lisa White, Assistant Director, Education and Public Programs, University of California Museum of Paleontology
- Dan Zevin, Education Specialist, Multiverse, Space Sciences Lab

UCLA
- Cully Nordby, Academic Director, Institute of the Environment and Sustainability

UC Merced
- Steve Shackelton, Parks and Protected Area Management; Chancellor's Office of Student Affairs - UC Sierra

San Francisco State University
- Nina Roberts, Professor, Department of Recreation, Parks, and Tourism; Director, Pacific Leadership Institute

University of Southern California
- Linda Chilton, Sea Grant Educator at USC

National Park Service
- NPS Headquarters, DC
  - Ray Sauvajot, Associate Director, Natural Resource Stewardship and Science (NPS Headquarters, DC)
  - Julia Washburn, Associate Director, Interpretation and Education (NPS Headquarters, DC)
  - Tim Watkins, Science & Education Coordinator, Climate Change Response Program (DC)
- Pacific West Region
  - Sarah Allen, Ocean and Coastal Resources Program, Acting Californian Cooperative Ecosystem Studies Unit, Pacific West Region
  - Ray Murray, Partnerships Program Chief, Pacific West Region
  - Charles Thomas, Regional Manager, Youth Programs, Pacific West Region
Northern California
- Ben Becker, Research Coordinator, Point Reyes National Seashore
- Jesse Chakrin, Director, UC Merced Wilderness Education Center; Director, Yosemite WildLink Bridge Program
- Kelli English, Chief of Interpretation and Education, National Park Service Sites in East Bay
- Sue Fritzke, Deputy Superintendent, National Park Service Sites in East Bay
- Matt Holmes, Education Technician, National Park Service Sites in East Bay
- Shauna Potocky, Yosemite Education Branch Chief
- Fernando Villalba, Natural Resource Specialist, National Park Service Sites in East Bay

Southern California
- Lena Lee, Data Manager, Mediterranean Coast Network Inventory & Monitoring Program, Santa Monica Mountains National Recreation Area
- Kerry Olson, Chief of Interpretation, Santa Monica Mountains National Recreation Area

Sonoma County Regional Parks
- Caryl Hart, Director, Sonoma County Regional Parks; California Parks Forward Commission and former member of the California State Parks Commission

California Department of Education
- Chris Breazeale, Education Programs Consultant (STEM office)
- Shannon Gordon, Education Programs Consultant (STEM office), statewide coordinator for the California Environmental Education Community (CREEC) Network
- Stacey Greer, Education Programs Consultant

Partnering Organizations
- José Gonzalez, Founder-Director, Latino Outdoors
- Tom Herman, Director, California Geographic Alliance
- Lila Higgins, Museum Educator, Natural History Museum of Los Angeles County
- Kurt Holland, Environmental Educator and Broader Impacts Project Planner
- Meg Jakubowski, Senior Education Director, Nature Bridge, Southern California
- Rebecca Johnson, Citizen Science Coordinator/Researcher, California Academy of Sciences
- Sarah Ottley, Director, Adventure Risk Challenge
- Dan Rademacher, Nerds for Nature and Stamen Design (creator of caliparks.org)
- Allison Young, Citizen Science Engagement Coordinator, California Academy of Sciences
- Deborah Zierten, Education & Interpretation Manager, Save the Redwoods League

Jenny Mulholland-Beahrs, Director, Education Outreach, College of Natural Resources, UC Berkeley
j.mulholland-beahrs@berkeley.edu (510) 847-3318