Project ID	Applying Organization & Principal Investigator	Project Title	County	Requested Funds	Brief Project Description	Research Project Type
50124212	Board of Regents, NSHE, obo University of Nevada, Reno J Hall Cushman	Assessing the Influence of Climate Change, Wildfire, and Biotic Interactions on Mortality and Regeneration of Threatened Whitebark Pine in California	Alpine, El Dorado, Inyo, Modoc, Mono, Siskiyou	$499,769	We propose research that will assess the effects of climate change, wildfire and biotic interactions on the mortality and recruitment of a threatened conifer, whitebark pine, throughout its range in California. This applied research will help guide efforts to promote the health and regeneration of whitebark pine in the face of accelerating climate change, pest attack, and wildfire regimes.	General
50074218	University of Wyoming Tucker Furniss	Building next generation post-fire tree mortality models and examining interactions between drought, density, and fire severity on post-fire recovery trajectories	Statewide	$499,500	We will build next-generation mortality models that account for the biophysical factors (e.g., physiological traits, climate, and competition) that govern immediate and delayed post-fire mortality. Our research will be used to more accurately plan for the combined impacts of drought and wildfire, and to design forest adaptation treatments to support resilience amidst drier future conditions.	General
50101693	University of Washington Van R. Kane	From trees to ecoregion: A synoptic multi-scale assessment of forest risk and opportunities for increased resilience across the Sierra Nevada	Alpine, Amador, Butte, Calaveras, El Dorado, Fresno, Inyo, Kern, Lassen, Madera, Mariposa, Mono, Nevada, Sierra, Tehama, Tuolumne, Yuba	$499,990	This study examines how the forest structure component of resilience to wildfire spatially varies across the dry conifer forests of the Sierra Nevada by forest type, biophysical gradient, ownership class, and fire history in today's and likely future climates. This will reveal drivers of these variations and provide managers with spatially explicit actionable information to improve resilience.	General
50027587	US Forest Service, Rocky Mountain Research Station Stephanie Yelenik	Post-fire forest regeneration and restoration success in eastside Sierra Nevada Jeffrey pine forests	Alpine, Lassen, Mono, Plumas, Sierra	$499,701	Jeffrey pine ecosystems in the eastern Sierra Nevada are understudied yet are at risk of type conversion following large, high severity fires or short-interval repeat wildfires. We will install permanent plots to assess natural post-fire regeneration and conduct restoration experiments to evaluate conditions and management actions that promote forest resilience.	General

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50090440	The Regents of the University of California, Berkeley Daniel Sanchez	Veneer & lumber quality from commercial and undervalued tree species in stands managed with prescribed fire	Statewide	$488,771	Our proposal aims to demonstrate the use of a new veneer processing technology for the production of high-value engineered wood products made from forest management by-products. If demonstrated in California, it has the potential to support forest restoration projects in stands under prescribed fire treatment and/or mechanical thinning operations.	General
49442118	The Regents of the University of California Jessica Katz	Characterizing deep uncertainty, multiple plausible futures, and adaptation signposts for widespread forest health treatment in Sierra Nevada mixed-conifer forests	Statewide	$99,990	This project uses ecosystem modeling and decision-science methods to characterize long-term, climate-related uncertainties and vulnerabilities related to widespread forest health treatment in Sierra Nevada mixed-conifer forests. It aims to support state-level planning by evaluating proposed treatment strategies and identifying monitorable indicators that could inform adaptive management.	Graduate Student
50122564	The Regents of the University of California Corrina Munger	Influence of post-fire reforestation activities on subsequent wildfire severity	Lassen, Plumas	$100,000	This project will evaluate the impacts of forest management activities following wildfires between 2000 and 2012 on 2021 Dixie Fire burn severity. Management and reforestation data from public datasets and from private forest landowner collaborators along with pre-fire LIDAR data will be used to characterize management units and compare reburn fire severity in early seral vegetation and forests.	Graduate Student
50129013	University of California Davis Jennifer Cribbs	Patterns of drought and fire as predictors of tree resistance to biotic attack	Fresno, Inyo, Kern, Kings, Tulare	$99,943	With climate change and changing patterns of fire and drought, forests are increasingly vulnerable to bark beetle outbreaks. How do historic droughts and fires affect tree resistance to beetles? This study combines tree ring analysis of axial resin ducts, tree demographics, climate and fire severity data to evaluate the influence of prior droughts and fires on tree resistance to biotic attack.	Graduate Student

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50064057	University of California, Davis Nina Venuti	Tracking multi-decadal patterns of conifer phenology to support wild seed collection for post-fire reforestation	Statewide	$95,856	I will leverage historical cone collection records housed at the CalFire and USFS nurseries to model trends in cone ripening phenology across time, space, and climatic conditions. This work will enable the forecasting of cone ripening timing in future years, and will be directly useful to nursery practitioners as they plan and implement wild conifer seed collections for post-fire reforestation.	Graduate Student
50071617	Sonoma State University Monica Delmartini	Using 3D data and fire modeling to examine future wildfire risk following understory fuels management in a mixed hardwood forest	Sonoma	$78,474	Using 3D data derived from terrestrial laser scanning and a physics-based fire model, this project will investigate how understory thinning in mixed hardwood and hardwood/conifer vegetation communities affects future fire intensity. These data could help inform effective hazard fuels reduction while supporting diverse objectives including improved resilience, sequestration, and biodiversity.	Graduate Student
50088397	University of California, Davis Emma Underwood	Statewide Carbon Estimates for Shrublands Using Remote Sensing and FIA Data to Inform Postfire Recovery and Vegetation Type Conversion	Statewide	$499,737	We will adapt peer-reviewed methodologies from southern California to expand mapping of shrub biomass, post-fire regeneration types, and type conversion statewide. We utilize FIA plots, published data, and field measurements to adapt and validate models, and collaborate with USFS resource managers to review outcomes. Data will support the Taskforce's RRKs, Planscape and SoCal EcoServe tools.	Special Topics
50022028	University of California, Irvine Michael Goulden	Using FIA to refine and benchmark geospatial predictions of California's live and dead forest biomass	Statewide	$498,733	This proposal builds on progress made by the Center for Ecosystem Climate Solutions (CECS). CECS produced a geospatial stack of data layers for California-wide carbon, fuels, water, habitat, and other attributes. We request support to use FIA data to test and improve the CECS Datastack, with the ultimate goal of facilitating acceptance and expanding use.	Special Topics

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50123909	Ancient Forest Society Anthony Ambrose	Examining bark beetle attack in giant sequoia trees	Calaveras, Mariposa, Tulare, Tuolumne	$499,878	Giant sequoia trees are threatened by novel and poorly understood interactions between fire, drought, and native bark beetle attack. We propose to examine links between beetle biology, tree physiology, and defense against attack. Canopy-based measurements in trees across the range of the species will inform management strategies aimed at increasing sequoia forest resilience in an altered climate.	State Forests
50061061	Northern Arizona University Salli Dymond	Forest Management to Promote Resilient Coast Redwood Forests	Mendocino	$499,708	This project will investigate the role of forest management in enhancing healthy coast redwood forests facing increased drought and fire threats by 1) studying the ecohydrology across a range of stand densities; 2) linking soil moisture and microclimate conditions to fuel and fire behavior; and 3) increasing knowledge of drought tolerance, management, and productivity in coast redwood ecosystems.	State Forests
50093613	The Regents of the University of California, Davis Melissa Viola Eitzel Solera	Using Participatory Modeling to Build Decision Support for Fire Resilience Communities of Practice	Tuolumne	$497,630	We propose a community-based approach to constructing a decision support toolbox that homeowners and communities can use for discussing and planning ways to reduce fire danger from dense forests. We will pilot the approach in Tuolumne County and reach out to other communities in California for feedback on the applicability of the toolbox to other contexts in fire-prone areas.	Synthesis and Tool Development