

**EXHIBIT A**  
**Work Plan, Schedule and Budget**  
**For Fiscal Years 2019-2020 through 2021-2022**

**PROJECT NAME: NCRP Strategic Fire Planning and WKRP State-and-Transition Modeling**

**SUBGRANTEE NAME: Mid Klamath Watershed Council**

**PROJECT DESCRIPTION:**

This demonstration project was selected to help the North Coast Resource Partnership (NCRP) realize the goals of the Regional Forest and Fire Capacity (RFFC) Program. Under the RFFC Program, the NCRP will develop a North Coast Regional Priority Plan (RPP). The RPP will include a comprehensive and integrated set of strategies, actions and projects to support forest and community health and long-term resilience to wildfire. The purpose of the demonstration projects selected by the NCRP is to model processes and on-the-ground projects designed to test concepts, methods, and innovative techniques to identify effective management practices for fuel load reduction and forest health that can be quantified and scaled up in the region and elsewhere. Data, performance measures, and project outcomes/lessons learned from this demonstration project will be documented and integrated into the RPP to ensure adaptive learning and information sharing throughout the region.

This project combines traditional fire management methods with two complementary modeling platforms to create a framework for prioritizing fuels treatments, managing wildfires, restoring cultural resources and fire use, and creating fire resilient forests and communities. The project teams leading fire scientists from across the West Coast with local scientists, cultural specialists, and long-time fire managers.

The purpose of this project is two-fold: (1) to create a Potential Wildfire Operational Delineations (PODs) layer—in effect, a strategic fuelbreaks layer—for the entire NCRP landscape to inform decision-making during fire suppression and increase opportunities for managed wildfire and prescribed fire based on a shared understanding of risk; and (2) to develop State and Transition Models (STMs) for the WKRP Planning area to represent how vegetation and fuels change over time under different fire management scenarios. Development of STMs for the WKRP project area will set the stage for eventual development of a REBURN model to evaluate fire-fire interactions across WKRP landscapes and inform the restoration of fire and fuels management within the PODs framework.

This NCRP project is part of a larger, multi-phased effort to inform strategic fire planning and restoration of fire within the western Klamath Mountains. Benefits stemming from the project are expected to reach across the NCRP region. The tools described above will facilitate development of collaborative strategies for landscape scale fire management and generate widespread social support for those strategies by providing a tangible visualization for shared understanding of risks and opportunities. Once fully implemented, these strategies will expedite the return of characteristic fire and the associated benefits to ecosystem health within the WKRP landscape and the NCRP planning area. As the first phase of a larger effort, this demonstration project will lay the groundwork for collaborations, knowledge sharing and foundations for landscape modeling to inform fire management and restoration.

### **Task 3.1 Project Management**

General project management, including compliance with subgrantee requirements, project planning and oversight, necessary meetings, as well as invoicing and reporting.

#### Task 3.1.A Demonstration Project Detailed Work Plan and Budget Development

Work with the NCRP staff team to develop a detailed work plan and budget based on the successful project concept proposal. This will include at least one strategic planning meeting with NCRP staff and may involve additional meetings with NCRP staff and consultants as well as other demonstration project sponsors.

##### **Deliverable:**

- Detailed work plan and budget

#### Task 3.1.B Sub-grantee Agreement Execution and Management

Execute a sub-grantee agreement with COUNTY for work to be completed on this project. Manage the sub-grantee agreement including compliance with grant requirements, and preparation and submission of supporting grant documents.

##### **Deliverables:**

- Fully Executed Sub-Grantee Agreement

#### Task 3.1.C Invoicing

Compile invoices including relevant supporting documentation. Submit invoices to COUNTY according to the Subgrantee schedule presented in Table 3 below for review and inclusion in the master invoice packet.

##### **Deliverables:**

- Invoices, provided in a format approved by, and including backup documentation as specified by COUNTY

#### Task 3.1.D Progress Reporting

Prepare progress reports detailing work completed during reporting period. Submit reports to COUNTY according to the Subgrantee schedule presented in Table 3 below for review and inclusion in the master progress report

##### **Deliverables:**

- Quarterly Project Progress Reports, using the format required by COUNTY

#### Task 3.1.E Environmental Compliance Documentation and Permitting

There is no on-the-ground work associated with this project and therefore this project will not require official environmental documentation or permits of any kind.

##### **Deliverables:**

- Environmental Compliance Checklist, using the form provided by COUNTY

#### Task 3.1.F Labor Compliance Program

Take all measures necessary to ensure compliance with applicable California Labor Code requirements, including, preparation and implementation of a labor compliance program or including any payments to the Department of Industrial Relations under Labor Code Section 1771.3.

**Deliverables:**

- Proof of labor compliance as applicable, upon request

**Task 3.1.G Contractor Acquisition and Management**

As applicable and based on sub-grantee purchasing policies, secure contractors and award contracts. Establish contracts with qualified individuals and/or organizations for development of PODs layer and associated datasets; development of State and Transition Models (STMs); and workshop facilitation and coordination.

**Deliverables:**

- Bid/RFP documents or sole source justification, if required by purchasing policy
- Documentation of subcontractor insurance, upon request

**Task 3.2 Integration with NCRP Regional Priority Planning Process**

This task will ensure that the project is well integrated into the RPP and NCRP planning processes for information sharing to other parts of the region. This will include at least one kickoff planning meeting with NCRP staff and subsequent meetings as needed to ensure integration of the demonstration project results.

**Task 3.2.A Project Reporting**

Collaborate with NCRP staff or technical consultants to develop a section for inclusion in the RPP that describes the project, outcomes and project applicability to the North Coast region. Include a replicable methodology for development of PODs, STM and REBURN models that also describes how these tools can be applied on the North Coast (i.e. to prioritize landscape scale fuel breaks, increase use of prescribed fire, manage wildfire).

MKWC and PODs consultants will meet with Tukman Geospatial at the beginning and periodically throughout the project to share data and methods to ensure integration into the NCRP geospatial planning and mapping process.

PODs and STM/REBURN Team Members will host webinars to share methodologies for PODs/STM development. If time and funding allow, team members will also share findings from work completed.

**Deliverables:**

- Applicable data, documents, and reports on lessons learned to be integrated into the RPP
- GIS data and metadata for integration into NCRP spatial data and story-maps
- Two one-hour webinars describing the methodologies for developing PODs and STM/REBURN models

**Task 3.3 Project Activities**

MKWC will be responsible for project management and will coordinate with project partners and NCRP regularly to ensure timely progress is being made. Project partners will:

Develop a draft PODs layer for the entire NCRP area in coordination with NCRP staff, consultants, local experts and project collaborators. Assemble data layers on cultural burning practices, fire history and fire-vegetation dynamics. Create initial STMs to represent vegetation development over time under cultural burning practices and lightning ignitions. As possible under COVID-19 guidelines, facilitate webinars or small-group interviews to gather information and refine STMs in the WKRP area.

**Task 3.3.A Development of PODs Layer**

Develop datasets to model Potential Control Locations and Suppression Difficulty across the NCRP planning area. Using Potential Control Locations and Suppression Difficulty, along with existing regional Quantitative Wildfire Risk Assessment datasets to create a draft Potential Wildfire Operational Delineations (PODs) layer for stakeholder review. Host six regional meetings with local project collaborators including tribes, regional experts and key

stakeholders to inform and refine the draft PODs layer. Meetings will likely be remote due to the COVID-19 pandemic.

**Deliverables:**

- Agendas, Meeting Materials, and Attendance Records for regional planning meetings
- Meeting advertisements or outreach materials for NCRP web calendar and email distribution
- Draft PODs layer data and associated datasets
- Draft presentation quality map of PODs layer for NCRP review
- Final presentation quality map of PODs layer

Task 3.3.B Development of State and Transition and REBURN Models

Synthesize the existing plot, regional ethnographic, and historical non-plot data (i.e., oblique landscape and stereo aerial photos, fire atlases, maps, fire history studies, and traditional fire knowledge of the region. These multi-proxy inputs will aid development of an ignition dataset that alters ignition density inputs (location, frequency, seasonality) to couple natural ignitions with the region’s cultural fire regime. Based on these records, draft State and Transition models (STMs) that represent vegetation succession and fire dynamics as influenced by coupled natural and cultural ignitions and burning. As feasible under COVID-19 guidelines, facilitate webinars or small-group interviews with tribes, regional experts and scientists to assemble place-based knowledge of fire history and shared vision for restoring fire and ecosystems with the WKRP.

**Deliverables:**

- Draft for NCRP review and final version of a geospatial map story on place-based historical reference conditions for the WKRP and photo-interpretation of historical reference watersheds
- Summary of findings from webinars and/or small-group interviews; tribal knowledge will be shared as allowable per the project’s Practicing Pikyav Research Agreement with the Karuk
- Webinar to present research findings and STMs
- Webinar advertisements or outreach materials for NCRP web calendar and email distribution
- Final report that documents the STMs and base datasets

**Task 3.4 Project Closeout**

Compile a Project Closeout Packet including, but not limited to California Climate Investments (CCI) reporting metrics; a summary of contributions to NCRP goals and objectives; a section for the RPP that describes the project, outcomes and project applicability to the North Coast region; photographic documentation; final project location map, as applicable; and an RFFC Program feedback survey. Submit the packet to COUNTY according to the schedule presented in Table 3 below.

**Deliverables:**

- Project Closeout Packet, using the format required by COUNTY