



**EXHIBIT A  
PROPOSAL COVER PAGE**

Proposal Type

- Concept Proposal for Demonstration Projects and Processes

Organization Name (Lead Applicant)

County of Humboldt - Economic Development Division

Organization Type

- Federally recognized Indian Tribe
- California State Indian Tribe
- Public agency
- Local or state agency/special district
- Resource Conservation District
- Non-profit organization
- Public utility
- Other: \_\_\_\_\_

Contact Name/Title

Name: Kenneth Spain

Title: Economic Development Coordinator

Email: kspain1@co.humboldt.ca.us

Phone Number (include area code): 707.476.4809

Organization Address (City, County, State, Zip Code):

520 E St., Eureka, Humboldt, CA 95501

Authorized Representative (if different from the contact name)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number (include area code): \_\_\_\_\_

Certification of Authority

By signing below, the person executing the certificate on behalf of the proposer affirmatively represents that s/he has the requisite legal authority to do so on behalf of the proposer. Both the person executing this proposal on behalf of the proposer and proposer understand that the NCRP is relying on this representation in receiving and considering this proposal. The person signing below hereby acknowledges that s/he has read the entire Request for Proposals document and has complied with all requirements listed therein.

Official Authorized to Sign for Proposal

Kenneth Spain / Kenneth Spain  
Signature

03/13/2020 / 5/22/2020 Round 2  
Date

## **County of Humboldt-USFS Grant Application-Round 2**

### **Organization Statement of Qualifications**

The County of Humboldt and United States Forest Service will provide key personnel for this project. The county will be the applicant and will have oversight of the project. The County Economic Development Division will provide the Project Manager and will provide fiscal responsibilities of the project.

Economic Development Coordinator & Headwaters Fund Executive Director, Kenneth Spain, will be the manager, and Economic Development Specialist, Ryan Heitz, will handle overall fiscal tracking and coordination of the project.

The Forest Service will provide several team members from the Six-Rivers National Forest including: Forest Supervisor, Ted McArthur; Silviculturist, Jeff Jones; Project Manager, Christy Prescott; as well as several staff in the field and data analyst in the office. Christy is attached to the area from the National Office in Washington, D.C.

We are still working out arrangements with Humboldt State University on their involvement in the project. Ted McArthur sits on the Forest Advisory Council at HSU and once the Covid-19 emergency subsides, they will meet to discuss this project in more detail. A small amount of funding has been added to the budget for work that may be done by HUS and Schatz Energy Laboratory.

Hourly rates for Kenneth, Ryan, Christy, Jeff, and Ted are provided in the Project Budget.

Resume's for Kenneth, Christy and Jeff are attached. Additional information and further references are available upon request.

All the participants are experienced grant managers and collectively provide more than 120 years of experience.

Kenneth is a Certified Economic Development Professional with the National Development Council with 20 years' experience in Washington State working with manufacturers and loggers in the wood products industry. Ted McArthur and Jeff Jones have extensive knowledge of the entire Six-Rivers National Forest area, its many species, terrain and harvesting challenges. This is a very strong team of well diversified individuals in addition to the in-kind support both organizations are offering to bring to the project.

**North Coast Resource Partnership Grant Application Budget**

**Exhibit C - Budget**

County of Humboldt	Staffing	Staff Person	Staff Role	Time Dedicated	Percent of Time	Burden Hourly Rate	Staff Costs	Materials	HSU/Research Consultants	Total Project Cost
	Economic Development Coordinator	Kenneth Spain	Grant Administrator-Report Writing	10 months	10%	54.37	11,308.96	1,000.00		
	Economic Development Specialist	Ryan Heitz	Grant Research and Support	As needed	5%	39.52	4,110.08			
							<b>Total County Amount</b>	<b>15,419.04</b>		<b>15,419.04</b>
<b>US Forest Service</b>										
Wa DC Office-Enterprise Unit	Social Scientist	Christy Prescott	Project Manager-Research-Report Lead Includes Field Work	10 months	40%	125.00	104,000.00	2,000.00		
Six Rivers National Forest	Forest Silviculturist	Jeff Jones	Data Collection and Analysis Includes Field Work	10 months	20%	62.00	25,792.00			
	Vegetation Program Manager Forest Supervisor	Ted McArthur	Oversight and Coordination with Field Staff		5%	100.00	10,400.00			
Field Work	Implementation Testing in the Field	Undetermined	Determining Actual Costs by observation and review	12 weeks		Varies	15,000.00			
							<b>Total Forest Service Amount</b>	<b>155,192.00</b>	<b>3,000.00</b>	<b>158,192.00</b>
<b>HSU Forest Mgmt Program</b>			Research and Report Editing						5,000.00	
	Forest Mgmt Program-Intern Schatz Energy-Intern		Research and Report Editing						3,000.00	
									<b>8,000.00</b>	<b>8,000.00</b>
<b>Totals</b>										<b>181,611.04</b>
<b>Contingency- 10%</b>										<b>18,161.10</b>
<b>Grand Total</b>										<b>199,772.14</b>

# PROPOSED TIMELINE

## NCRP GRANT APPLICATION

County of Humboldt Economic Development/US Forest Service

### Proposed Grant Schedule

#### USFS Bio-Mass – Converting Waste to Cash Flow

##### Timeline:

1. **May 22, 2020** Submit application.
2. **May 24-June 14, 2020** Respond to questions from NCRP Review Team
3. **June 15, 2020** Attend TPRC Project Review and Scoring meeting.
4. **June 19, 2020** Policy Review Panel considers/approves TPRC recommendation. If selected, project participants will meet to discuss specifics of the project, roles, responsibilities, etc.
5. **June 23 or 30, 2020** Joint presentation of USFS, County and HSU proposal to County of Humboldt Board of Supervisors to obtain Board approval to formalize an agreement for the project.
6. **July 1-10, 2020** Develop detailed project scope and budget with NCRP staff and finalize sub-grant agreements.
7. **July 21, 2020** Agreement presented to Board of Supervisors for final approval. USFS seeks approval from FS Headquarters.
8. **July 27, 2020** Project kick-off.
9. **July – October 2020** USFS and County staff develop current costs the Forest Service incurs under current practices in removing and disposing/burning excess biomass. Costs are summarized for multiple slopes, distances, road conditions, etc. to provide cost centers for multiple industrial uses of waste stream for comparison to alternative means of moving material to locations favorable for private sector access points. On-site analysis with field staff and contractors.
10. **Nov. 2020-Jan. 2021** Carbon footprint and greenhouse gas reductions studied and quantified based on multiple input factors (location, road availability, material source slopes, timber sales-vs-clearing, etc.); cost centers modified for as many options as reasonable. External reports surveyed and information collected from recent data studies.
11. **February-April 2021** On-site pilot demonstration of proposed alternatives. Result, discussion, conclusion and recommendations summarized in report format. Final greenhouse gas comparisons, including end use as replacement for coal in Asian coal fired electrical generation plants.
12. **April-May 2021** Draft and final reports for Converting Waste to Cashflow developed and submitted to NCRP and participating organizations.

**NORTH COAST RESOURCE PARTNERSHIP**

**2020 DEMONSTRATION PROJECT**

**REGIONAL FOREST and FIRE CAPACITY PROGRAM**

**GRANT APPLICATION**

**COUNTY OF HUMBOLDT**

**UNITED STATES FOREST SERVICE**

## EXHIBIT C

### CONCEPT PROPOSAL FOR DEMONSTRATION PROJECTS AND PROCESSES

Project Name: USFS Bio-Mass – Converting Waste to Cash Flow

1. Project Intent – Develop a cost model to determine how biomass can be made available for sale to private industry at an affordable rate. The model will be designed to determine marketability of selling forest biomass removed from forests common throughout the North Coast of California. The Forest Service desires a National model scalable to all terrains and species. On the private side, there are major private sector investments waiting in the wings to see the outcome of this project so they will know if additional sources of biomass will be available and at what cost. The USFS currently uses revenue gained from timber sales to pay for logging slash clean up. Clean up, which is typically piling slash and burning it, is time consuming and expensive. This project is intended to study the most cost-effective means available to create a product from the waste stream in place of burning. The greatest obstacles to selling the biomass have been having a viable end user (buyer), a higher value product to sell and the cost of transporting the product at a reasonable location for the private sector to haul it to their facilities. Major innovations in several industries that need biomass have been developed. The County of Humboldt approved a request from the Forest Service to enter into a “Good Neighbor Agreement” to encourage cooperation between the two entities. This application is intended as a first step in strengthening our relationship as one of many the Forest Service has made within NCRP’s Region. The team will reach out to all counties and Tribes in the project area, an effort that has been delayed by staff being reassigned to Covid-19 activities. The Hoopa Valley Tribe has been notified and all other NCRP regional entities will be notified during the next few weeks. Our team has been made aware of other potential funding opportunities should this project be approved, and the model developed. That funding would allow further analysis and on-the-ground pilot testing of multiple wood product uses. This proposal is to explore and demonstrate how innovations in forest product technology and evolving market opportunities may increase the revenue per unit of harvest leading to increased wood product manufacturing and improved forest health. This proposal considers how to support market mechanisms to increase economic values associated with low value timber and biomass harvest while ensuring the continued viability and sustainability of forest product industries. This proposal considers points in the timber production and manufacturing cycle where there is opportunity to gain efficiencies and increase market potential for the logging industry and forest products. We will utilize existing data, add practical application (test the models) to identify a new product source that will help economic development organizations throughout the region recruit businesses to the North Coast area. We recognize there have been numerous studies done on this topic, however, innovation in harvesting biomass, pellet manufacturing, nano technological uses, storage and shipping technologies dictate the need for updating the information and testing it in the field. It is time to take it out of the classroom and evaluate it in the forest. Experienced based product development is a proven methodology that is being tried in other typographies and needs to be conducted here as well.

Problem Statement – What’s the cost of doing nothing...what’s at risk from fuels build-up? The USFS has multiple ways to collect the biomass that must be removed from the forest to reduce the fire danger. This can include making clean up from timber sales a part of the bid requirements for the private sector; clean up the debris themselves; work with other organizations to assist in cleaning areas. However slim profit margins for timber sale purchasers and declining federal budgets and staffing inhibit the pace and scale that fuels reduction can be implemented. Turning the waste stream into viable products to be manufactured locally will retain and create jobs throughout the NCRP region. Products such as mass timber, structural composite lumber, laminated veneer lumber, parallel strand lumber, laminated strand lumber, oriented strand lumber, black pellets and innovations in nano technology uses are creating great demand for biomass. The Forest Service’s decision to go from 8-inch to 12-inch logs as part their forest management practices will greatly expand the supply for innovative uses of fiber. Many products will be exported, such as black pellets to replace coal in coal fired electric generation plants in Asia. This will be a win-win for our forests, our economy and the overall reduction of greenhouse gas emissions here and abroad. In 2019, bark, logging residue, wood chips, and other unmerchantable wood averaged \$28.83 per ton. We want to capture this value to be used to improve forest health, watershed quality and reduce particulates in the air from slash burning.

Setting & Background – Most of the biomass from logging and forest cleanup is being burned. Biomass availability for existing operations comes from unutilized treetops and limbs produced during commercial timber operations, along with smaller whole trees and shrubs produced from stand-alone non-commercial fuels reduction operations. In both cases, the resulting biomass is typically hand piled or tractor piled (sometimes chipped and left in place on the ground) and later burned. This project will be integrated with community wildfire adaptation efforts.

Traditional end users of forest biomass (waste stream) have been for use as low-grade fuel for electrical generation plants, soil production, firewood, and wood chips. Collecting and transporting the debris from the forest in most instances is too costly to afford removal except when close to highways or facilities that can use the by-product. The Forest Service estimates on average 10% of tree sales are leftover biomass which is collected and burned. This is extremely costly and adds particulate matter to the air. Almost all biomass removed from thinning operations and invasive specie removal is handled in a similar manner to logging cleanup. Recent innovation in logging, grinders (e.g. Veneer HG6000E Horizontal Grinder), one-person loaders, high slope harvesters, and other equipment adds to the innovative technologies of the end use of biomass. Significant changes in technology have not been fully utilized because there has not been a profitable end product to justify the capital expenses. The intent of this study is to change that!

Project Implementation – The County of Humboldt Economic Development Division (EDD) will work with the USFS Regional Supervisor and Staff from the Six Rivers National Forest, Humboldt State University and private sector companies in studying how biomass might be removed and at what cost in comparison to current practices. A major goal of this study is to develop price points for multiple variations of terrain, transport and fuel sources. County ED and Forest Service staff will work together with NCRP in developing a detailed plan and final budget and timeline. The Forest Service will test the concept on the ground and the County Economic Development Division will manage the fiscal end of the project. Both organizations have extensive experience with and knowledge of county and Tribal planning and implementation processes. Although this study will be specific to Forest Service forest management, it is anticipated to be transferrable and scalable to

Federal, State and private forests. The county and the Forest Service will develop and share the model and key practices. It will also provide economically disadvantaged and severely economically disadvantaged communities throughout the Six Rivers and entire North Coast areas with opportunities for employment and increased tax base. This project will be vital to retaining jobs being lost due to Covid-19 business closures. New practices will lead to new products which will in turn lead to new jobs throughout the NCRP and Six-Rivers Forest areas. The state has just agreed to the formation of the North Coast Region of Mendocino, Humboldt, Del Norte and Trinity counties in the Governor's "Regions Rising" program. Go-Biz, the state's economic development department team is aware and supportive of the project.

Expected Benefits – This project aims to reduce fire risk, improve forest health, provide safer communities, create more jobs for local residents (which are traditionally higher paying), reduce the carbon footprint in the USA and Asia, and encourage businesses to locate or expand in California. Asian electric generation facilities that are coal fired are seeking lower carbon alternatives as a fuel source. This could, as it is already doing in Europe and Western Asia, be a long-term renewable source. Innovation in black pellets over the past 2-3 years has revolutionized the pellet industry. Unlike in other areas of America and other countries, this source would be a waste byproduct of forest management.

Should the study show more cost-effective means for the Forest Service to remove logging biomass, they may be able to remove that task from loggers bidding on timber sales and thus increase sales revenue. Cost vary significantly due to logging systems required on each sale. Most often, and in graduating cost, are ground based, cable and helicopter logging.

It is the goal to create a product that reduces or possibly even eliminates the cost to the Forest Service to remove the biomass from the forest without burning it. This plan will address the varying costs associated with multiple grades/slopes and the practicality of the cost to the private sector. All aspects of this study will be tied to reducing catastrophic wildfires.

This project, if successful, would add to the strengths of the North Coast Region where more than 89% of the geographic area is considered economically disadvantaged and 57% is considered severely economically disadvantaged. Since the high cost of energy in the area is a disincentive to business recruitment, the success of this project in demonstrating the the low cost of fibrous material offsetting the cost of energy and simplify the go-no go decision for businesses as they would be reasonably assured of their fiber supply.

Meeting NCRP RFFC Objectives – This plan will evaluate new equipment and practices, production processes, transportation methods, policy enhancements and discover where regulation and permitting changes may be necessary to facilitate the end goal of reducing fire danger and increase resiliency of our National Forests. The plan intends to produce a scalable model and by utilizing innovation in the wood pellet industry, a new product (and thus market) will be born.

This demonstration project is consistent with the goals of the Regional Forest and Fire Capacity Program. It will utilize the combined strengths and knowledge base of the US Forest Service, Humboldt State University, and Humboldt County, the latter of which is currently the NCRP Administration and Contracts Lead and Fiscal Sponsor for this grant. The United States Forest

Service will provide in-region National Forest expertise as well as policy, research, and planning representatives at the local, regional and federal level.

HSU's Forest Advisory Council and Schatz Energy Group will be asked to serve as Academic Partners and provide local experts. At least one HSU student intern in Environmental Economics has already shown an interest in working on the project.

## 2. Specific Project Goals/Objectives

Determine the financial feasibility of removing biomass from the forest to a transfer point that will provide usable fiber for manufacture of black pellets that utilize the most innovative process in the market today. A direct objective is to determine if there is the possibility of providing an affordable cost of raw fiber to the pellet industry. Businesses that have shown a strong interest have voiced a major concern that there needs to be a cost savings in fiber to offset the local expense of electricity and the level of taxation in our state. Specific manufacturers that the county and Forest Service have met with are awaiting the outcome to make their go/no go decision to locate here in California. This will provide a scalable model for other regions to make the same determination in biomass removal and hopefully entice industry to their areas as well.

## 3. Meeting NCRP Goals/Objectives and intent of RFFC Program Block Grant

This study will help timber owners, public and private, a means to determine at what rate the removal of fire prone materials can be removed, and how this is affected on various land, road and area basis. It will also help landowners to determine a long term, sustainable supply level for sale to the private sector.

## 4. Scalability/Replicable/Measurable/Innovative/Results in Scope & Scale of Multi-Benefit Forest Management in North Coast

The results from this study will help the USFS and the County to determine the cost and the sustainable amount of biomass that would be available to the private. There are multiple businesses interested in locating pellet manufacturing facilities on the Samoa Peninsula. One of those businesses has emerged as the most innovative producer in the Nation. Two of the businesses have proposed operations which would produce a particular type of black pellet that would be used in place of coal in Asian markets and another proposed a facility producing white pellets.

The results of this study will provide scalability primarily to areas with like terrain. It will be replicable in those areas such as the National Forest lands along the coast and western interior of California, Oregon, Washington and British Columbia, Canada.

Establishing cost for removal and preparation for transport to market will provide a basis for a market price. None exists currently. The potential manufacturers have stated that having a known price will be a decision point for locating in California. This innovate approach that can be duplicated throughout the North Coast in a measurable manner is key to having end users that will help offset the use of coal without coal fired electrical generation plants having to make extremely

expensive alterations to their plants in order to add wood pellets to their fuel source as is the case with white pellets. This will further reduce the greenhouse effect internationally which will be considered in the carbon footprint analysis in this study.

Innovations in the pellet manufacturing industry over the past three years has been revolutionary. By removing and utilizing volatile compounds from fiber and using it in the production process, the resulting product can be stored in the open.

This is an opportune moment to establish an alternative to burning biomass in the forest. Establishing an alternative use for forest biomass is expected to free up the USFS throughout the North Coast from having to pay for cleanup and burning from their merchantable timber revenues, or at least offset that expense, so that they can use revenues for more desirable forest management practices.

#### 5. Need for the Project/Forest Health/Climate Change-Extreme Event Resiliency

States up and down the West Coast of the US and National agencies have launched major new funding efforts to reduce extreme fire danger and improve the health of the forests as well. This project will help identify ways to turn dead trees, waste from logging, cleanup and other causes of wildfires to be removed quicker which will help reach those goals much quicker.

Climate change is a worldwide problem and by creating a replacement for coal, carbon emissions will be significantly reduced. We intend to show in this study how the recent innovations in the production of black pellets, such as using volatile compounds emitted in the process to be captured and used instead of being released when produced and burned, will revolutionize the way woody debris can be disposed.

The need for this study has never been more important or timely. The problem matched with a potentially cost-effective solution provides a win-win solution to a long-standing challenge.

#### 6. Location and Size of Project/Communities Served

The initial location will be the Six Rivers National Forest lands. Communities served will be identified in the study but are primarily those counties and communities surrounding the SRNF. The initial target is to study the cost of removing and transporting biomass to a pickup point for the private sector that is no further than 50 miles from the Samoa Peninsula. Multiple potential locations will be identified, including the cost associated with each being the most economically and environmentally advantageous.

It is the plan to make this a scalable model that will spread the new jobs associated with each location a primary concern; a spread-the-wealth approach to community/economic development. By hiring locally, the carbon footprint would be reduced significantly. The study will also look at the potential savings of having temporary housing (most likely tiny homes) used onsite, again, to reduce the carbon footprint of commuting to and from the forest.

#### 7. Partnerships/Local Political Support

On March 3, 2020 the County of Humboldt and the USFS/Six Rivers National Forest formally agreed to a Good Neighbor Agreement showing the political support for this type of partnership. This is a great step toward a cooperative solution to a common problem. The Humboldt State University, who has partnered with the SRNF for several decades, will also be a partner in this effort. The SRNF Supervisor, Ted McArthur, serves on the HSU Forest Advisory Council. County Economic Development has been partnering with HSU and Schatz Energy Lab by providing intern opportunities to students.

#### 8. Quantifiable, Measurable Benefits from Project

The main benefits to be quantified by this study are the expense of removing and transporting the raw material out of the forest and identifying the amount of carbon reduction possible by not burning the biomass in the forest and using it for a fuel in place of coal. The study will project a range of new jobs to be created and the financial impact on local economies.

This outcome will hopefully be the creation of a new market for the West Coast. The focus will be on supply for the pellet industry, but will look at other, potentially higher valued uses of biomass being removed. A recent proposed environmental document on the Six Rivers N.F. would allow larger diameter timber to be removed across the forest (increasing from 8 to 12 inches) for stand-alone non-commercial fuels reduction projects, which would expand the opportunity for available biomass and uses such as mass-timber construction.

Ms. Spanberger, Chair of the US House Agriculture Committee in a presentation on Innovative Wood Products: Promoting Rural Economies and Healthy Forests on February 26, 2020, regarding implementing sustainable forest management practices is quoted as saying “The National Forest Products Laboratory has been studying the use of biomass for nano technologies for particular use of nano-cellulose for additives for food coatings, transparent flexible electronics, biomedical applications among many other potential applications. There are studies already underway for mass timber and fiber insulation for the construction industry allowing faster construction and lower emission profiles”.

#### 9. Scientific Studies/Plans/Designs/Reports Completed for the Project

Approach to Data Collection /Performance Measures (acres treated, volume or tons/acre, costs/ton or per acre/Project Reporting Outcomes/Lessons Learned

As mentioned initially, this study will build upon existing work and put it to the test in the field. Our initial findings will be put into action on a pilot basis beginning with the “low hanging fruit”. This will likely be on relatively flat ground, 10% slope or less, cover multiple sources such as from timber sales, thinning/clearing and undesirable species removal. The USFS and HSU have an enormous amount of existing data to draw from. We will develop performance measures with NCRP as part of the negotiations should we be selected for funding.

**Kenneth R Spain**  
4271 D Street  
Eureka, CA 95503  
509-393-9751  
kennyraySpain@gmail.com

**Executive Summary:**

**Accomplishments:**

Commercial Loan Officer (Public & Private)  
Financial Deal Structuring  
Analytical Analysis  
Domestic & International Business Recruitment  
Real Estate Development & Redevelopment  
Program Design & Management  
Grant Management-Federal/State/Local/Non-Profit  
Grant Writing-Federal and Private  
Aligning Business Workforce with College Training Programs  
Senior Management  
Teamwork/Supervision  
Budget Development  
Public Speaking  
Professional Writing  
Computer Proficiency  
Monitoring and Compliance (Federal & State)  
Customer Relations/Governor's Office Level Ombudsperson  
Cost Allocation & Indirect Rate Development (Fed/State/Local Gov't)  
Training/Instruction  
Product Design & Marketing  
Construction Management (Business Owner & Gov't Project Management)

**Employment:**

Humboldt County Economic Development Division Eureka, California  
**Headwaters Fund Executive Director** 3/21/2018-Present  
**CAO Office/Economic Development Specialist**-Wrote County CEDS  
Business Recruitment, Revolving Loan Fund and Grant Management

Mendocino County, California Ukiah, California  
**Administrative Analyst II** 3/13/2016 to 3/20/2018  
**Executive Office/Budget Development-Dept Liaison to multiple Departments**  
**including: Public Works Department/CEO-Facilities Division/Planning &**  
**Building Department/HHSA**

Student/Private Consulting Vader, Washington  
9/2013-2/2016

WA St Dept. of Commerce Olympia, Washington  
**Financial Services Representative** 2/2013 to 8/2013  
**Public Works Trust Fund**

WA St Dept. of Commerce Olympia, WA  
**Community Economic Revitalization Board** 9/2012 to 4/2013  
**(CERB) Manager-Public Works Funding for E.D.**

WA St Dept. of Commerce Olympia and Wenatchee Washington  
**Business Finance Program Manager** 5/2011 to 9/2012

WA St Dept. of Community, Trade & Wenatchee, Washington  
Economic Development  
**Regional Manager Business Services-Infrastructure** 5/2007 to 5/2011  
**Development and Financing (All Rural Washington Counties)**

WA St Dept. of Community, Trade & Olympia, WA

Economic Development <b>Loan Officer and Federal Program Compliance Manager</b>	5/2005 to 5/2007
Spokane Intercollegiate Research & Technology Institute-WSU <b>Senior Investment &amp; Loan Officer-Clean Room Design and Construction Manager</b>	Spokane, WA 5/2004 to 5/2005
WA St Dept. of Community, Trade & Economic Development <b>Monitoring &amp; Compliance Officer-Federal Loan Programs</b>	Olympia, WA 5/2001 to 5/2004
Shorebank Enterprise Pacific (Now Craft-3) <b>Conservation Loan Officer/Construction Manager</b>	Ilwaco, WA 9/2000 to 5/2001
Spain Construction <b>Construction Forman</b>	Vader, WA 10/1999 to 9/2000
David M Griffith (Purchased by Maximus) <b>Senior Consultant-Cost Allocation &amp; User Fee Studies for Local Gov't's in WA, OR, CA</b>	Olympia, WA and Sacramento, CA 5/1997 to 10/1999
WA St Dept. of Commerce (Renamed CTED) <b>Loan Program Manager/Monitoring &amp; Compliance Officer</b>	Olympia, WA 1989 to 5/1997
WA St Dept. of Community Development <b>Housing Programs Manager-State Housing Trust Fund Co-designer and Program Implementation/HUD Section 8/New Construction &amp; Substantial Rehab Programs</b>	Olympia, WA 1986 to 1989
WA St Dept. of Community Development <b>State Building Codes Council-Intern-ICBO Code Adoption</b>	Olympia, WA 1986 to 1986
<b>Education:</b> The Evergreen State College <b>BA Management and the Public Interest-Dual Minors in Construction Management (Univ. of Washington) &amp; Information Systems Management</b>	Olympia, WA 1987
Cameron University <b>General Studies</b>	Lawton, OK 1972-74
University of Maryland-European Extension Campus <b>German Language</b>	Crailsheim, West Germany 1974-75
Lower Columbia College Engineering	Longview, WA 9/1975-6/1976

**Additional Training:**

**National Development Council**

Economic Development Finance Professional Certificate- 2/1990 (Cert # 9012-291)

Courses:

Business Credit Analysis  
Real Estate Finance Credit Analysis  
Loan Packaging Procedures  
Negotiating and Problem-Solving Skills  
Deal Structuring Techniques  
Housing Finance Credit Analysis

**International Economic Development Council**

Currently scheduled to take CEcd exam in June 2019.

Courses:

Real Estate Development and Reuse/Basic and Advanced  
Business Retention & Expansion  
Workforce Development  
Economic Development Marketing & Attraction  
Entrepreneurial & Small Business Development Strategy  
Neighborhood Development Strategies  
Managing Economic Development Organizations  
Technology-Led Economic Development

**Awards:**

Three-time recipient of Director's Awards-DCD/CTED  
Served on multiple Interagency and Legislative Committees  
Presented to State Legislature, County Commissions and City Councils in  
Washington, Cities and Counties in Oregon and California  
Negotiated with unions and trade organizations

**License:**

California State Driver's License

**References:**

Available upon request.

# Christy Prescott

707-672-3005 (mobile)  
Christy.prescott@usda.gov

## Positions

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### ***Social Scientist & Facilitator***

0101 GS – 12 (120 Day Detail) 3/2020 - Present  
0101 GS – 11 4/2018 – Present  
United States Department of Agriculture 40 hours/week  
Washington Office, Business Operations  
Enterprise Program

### ***Environmental Coordinator***

0401 GS – 12 (Two \*120 day details) 6/2014 – 10/2014 & 10/2016 – 2/2017  
0401 GS – 11 11/2010 – 4/2018  
0401 GS – 9 5/2009 – 11/2010  
United States Department of Agriculture 40 hours/week  
**Six Rivers National Forest**  
Eureka, CA 95501 United States

### ***Community Development Leader***

Pro-bono 5/2015 – Present  
City of Eureka 5-10 hours/week  
**Cooper Gulch Common Grounds**  
Coopergulch.org

### ***Social Scientist, Forest Plan Revision***

0401 GS - 9 6/2006 - 12/2008  
United States Department of Agriculture 40 hours/week  
**Lake Tahoe Basin Management Unit**  
South Lake Tahoe, CA 96150 United States

### ***Chairperson, Employee Association***

United States Department of Agriculture 9/2006 -9/2008  
**Lake Tahoe Basin Management Unit**  
South Lake Tahoe, CA 96150 United States

### ***GIS Specialist***

0499 GS 7 SCEP Intern 6/2003 – 8/2004  
United States Department of Agriculture 40 hours/week  
**Plumas National Forest**  
Quincy, CA 95971 United States

## **Duties, Skills & Accomplishments**

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*“Christy has strong leadership skills. She is confident, articulate and her thoughts well organized when talking before a group. She is also focused, engaged, and a good listener when responding to individuals and asks questions to clarify misinterpretations or uncertainties. She also has good analytical skills. She is meticulous, detailed and thorough when working on a particular task, and when she provides feedback it is relevant and thoughtful.”*  
*Jeff Jones, Vegetation Program Manager, Six Rivers National Forest*

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### ***Economic & Social Analysis***

- Perform economic efficiency and impact analysis for the Huckleberry Landscape Level Analysis EIS on the Payette National Forest.
- Perform economic analysis to support analysis of two resource management plans for the Bureau of Land Management on the Bering Sea Western Interior and Central Yukon Management Units.
- Social analysis for the Cibola National Forest Plan Revision DEIS.
- Performed economic and social analysis for two Oversnow Vehicle Designation EISs on the Stanislaus and Plumas National Forest.
- Performed social sustainability analysis to support the Rainy River Watershed Hardrock Minerals Withdrawal for the Superior National Forest.
- Performed social analysis to support Travel Management, Route designation on the Apache-Sitgreaves National Forest.

### ***Team Leader & Project Management Planning***

- Develop project planning scope based on assessment of project complexity.
- Identify requirements for project success in defining scope statements in concert with the stakeholders.
- Lead development of work breakdown schedule (WBS).
- Facilitate risk identification and analysis process to identify critical risks and develop risk response plan
- Utilize risk analysis to inform & recommend to Line Officers level of environmental analyses.
- Planning purchases, acquisitions, and surveys based on WBS, risk response plan, and make or buy analyses. Develop evaluation criteria to assess proposals.
- Define communication plan on who to engage, how and key triggers / process points when communication with stakeholders is expected or warranted.
- Develop data management standards / GIS location / project workspace / project record standards.
- Estimate task duration, sequence tasks, and set-up dependencies.
- Schedule tasks in coordination with program of work priorities and resource constraints.

- Evaluate of public involvement sessions to improve the development of the alternatives, assess public support, and frame key messages.
- Coordinate IDT meetings, agendas, lead meetings, facilitate.
- Monitor and track progress on meeting timelines for deliverables within quality and cost parameters.
- Advise on trade-offs of risks and benefits to responsible official in meeting project milestones.
- Proactive collaborative problem solver in working through project related problems with project team members.
- Develop and manage project record that easily translates to an administrative record.
- Piloted the use of Microsoft Project and Project Web Access to track and monitor progress of planned against actual timelines and costs as a Forest project management tool.
- Adopted orphaned project, lead left-side project development review and revised for Forest Plan, law, policy compliance, and data quality assurance.

### ***Facilitation & Process Design***

- Worked with Chief Financial Officer of the Forest Service to design and lead the CFO leadership summit annual three-day meeting.
- Designed and facilitated a three-day kick-off meeting to launch a change process to design a new conservation education strategy for the Forest Service.
- Provided process guidance, planning support and emceed the 2018 Reforestation Symposium, McLellan, CA.
- Designed and facilitated a two-day strategic action-planning effort to redesign a six week timber training course within the terms of the team charter.
- Facilitated the Region 2 Environmental Coordinators biannual meeting.

## ***Environmental Coordination***

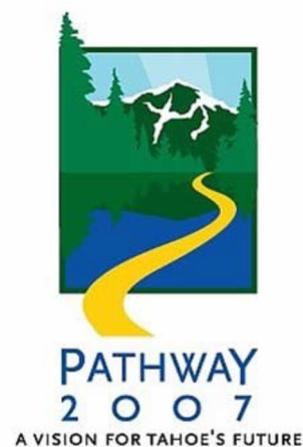
- Review environmental analyses and project records for legal compliance in terms of risk management.
- Summarize review in terms of priorities to avert risk in defining the scope of work.
- Evaluate and make recommendations on analysis defensibility and strategic investments of resources.
- Design analysis framework for efficiency, consistency, defensibility that supports interdisciplinary analysis and work products that work in concert.
- Understands relationships between resources and cross-disciplinary implications of assumptions, analysis parameters, and determinations.
- Mediate conflicting opinions on interdisciplinary teams involved in the preparation of environmental documents subject to NEPA.
- Stage EIS for NOI, NOA of DEIS, and FEIS.
- Coordinate 'in-house' and regional contractors for the printing and distribution of environmental analyses.
- Provide final review and technical expertise on environmental analysis documents to ensure compliance with applicable NEPA, CEQ, NFMA, the Forest Plan and applicable law, policy and regulations.
- Provide technical leadership and guidance to program managers and Forest staff on the interpretation and compliance with NEPA, CEQ NFMA, the Forest Plan, and regulations governing Forest Service practices and policies.

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*“Christy did a fabulous job pointing out areas of risk and asking questions on issues in wildlife for consistency and clarity.” Dan Dill, District Ranger, Mad River Ranger District*

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## ***Lake Tahoe Basin Management Unit Forest Plan Revision***



- Authored the socio-economic assessment for the Forest Plan; framed analysis methodology; performed data searches and analysis; collaborated with the Planning Analysis Group to develop the economic impact analysis.
- Convened Forest heritage, special uses and tribal relations staff to collaborate on drafting the social and economic components of the LTBMU Forest Plan including desired conditions, objectives and strategies.
- Representative for Forest as social scientist in the Pathway 2007, regional interagency collaborative process to define a regional vision and desired conditions for the Lake Tahoe Basin.
- Lead interdisciplinary process for defining management areas and suitability of uses components of the revised LTBMU Forest Plan.

## ***Process Design, Meeting Management & Facilitation***

- Design meetings to achieve stated outcomes through agenda design & process tools.
- Design and facilitate diversity of public engagement methods to open and narrow conversations, e.g., World Café Method, defining priorities pairing brainstorming with N/3.
- Bring meetings back on-track using process observations, grounded in agreed upon agenda and meeting norms.
- Versed in decision-making models, key considerations in determining fit and trade-offs.
- Manage expectations by bringing clarity to the decision making process and scope of decisions to be made early in the process.

## ***Litigation, Objections & Appeals***

- Coordinate, assign, prepare, and review litigation work products, including litigation reports. Ensure the adequacy and completeness of administrative records. Analyze litigation issues, brief and make recommendations to the responsible official.
  - Kelsey Peak Timber Sale and Fuelbreak Project. 5<sup>th</sup> District court summary judgement found that the Forest prevailed on all NEPA, NFMA, and ESA challenges.

*“Defendants met all their environmental obligations for the Project by performing a thorough environmental review and developing a project that actually protects and improves Owl habitat, consistent with the Forest Plan.” US District Judge, Thelton E. Henderson*

- Smith River NRA Restoration & Motorized Travel Management. Litigation proceedings stayed by the Court until the issuance of a draft environmental analysis document, and ultimately dismissed by the plaintiffs after the issuance of the DEIS.
- Facilitated regional office for objections and appeals for Forest level decisions on EISs and EA.
  - Kelsey Peak Timber Sale and Fuelbreak EIS
  - Beaverslide Timber Sale and Fuelbreak EIS
  - Mad River and Lower Trinity Motorized Travel Management EIS
  - Gordon Hill Vegetation Management and Fuelbreak EA
- Coordinate with the RO on Objection Review Team assignments and the projected appeals or objection schedule for projects subject to RO review. Coordinate and support the objection review process at Forest level. Coordinate objection review teams for District level NEPA decisions subject to an administrative review process. Prepare administrative review documents.
- Compliance review team member for the West Side Recovery Project, Klamath National Forest.

## **Partnership Development & Capacity Building**

- Hosted NEPA training for provincial forest staff and community partners.
- Assess interest and provide opportunities for stretch assignments through teaming.
- Formed coalition among county, city and federal governments, private business, non-profit organizations and communities of interest.

- Mentor Humboldt State Graduate student in federal planning practices.
- Engage Humboldt State University natural resource planning students annually on Forest Service organizational culture and NEPA practices.
- Expanded membership base of employee association by 15% by adjusting program services to address issues identified through an employee program evaluation.

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*"Christy is my mentor. She is an extremely detailed oriented, perceptive, dedicated, hard-working problem solver. Christy continues to create learning opportunities that help me develop a solid understanding of the ins and outs of the NEPA process, the leadership skills involved in collaborating with a team of professional scientists and how to organize and write an EIS. Christy is a talented NEPA professional and I would recommend her for any position that involves leading, writing and coordinating NEPA process efforts." Cynthia Davis, Recent Graduate, Humboldt State University*

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- Wrote and awarded grant from Humboldt Area Foundation to support community planning effort.
- Wrote and awarded grant from National Park Service for technical assistance.
- Leveraged commitment from the City of Eureka for staff time, free use of facilities, no cost permitting, and funds to secure technical support required for community planning effort.
- Led fundraising effort to provide economic assistance for employees whose homes were destroyed by the Angora Fire.

## **Public Speaking**

- Versed in extemporaneous speaking on technical topics and persuasive speaking.
- Smith River NRA Travel Management – Presentation of significant issues; draft alternatives; and process overview. August 2013.
- Panel of Architects – Cooper Gulch Common Grounds – persuasive speech to inspire pro-bono affiliation.
- Humboldt State University, International Week Speaker, Presentation on Analysis of Cash and Subsistence Economies in the Pacific Islands and implications for social equity.
- Humboldt State University, Natural Resource Planning & Interpretation Class. Spring 2014, 2015, 2016.

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*"Thank you very much for putting together that far reaching and informative afternoon at the SO for my 20 HSU environmental planning students a couple of weeks ago. It was a perfect mix. You provided a good background to planning in the FS and made it real by linking it to your personal experience."*

*Dr. Yvonne Everett, Professor of Environmental and Natural Resource Planning, Humboldt State University*

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## Software Application Competencies

Software Application	Novice	Intermediate	Advanced
Microsoft		Outlook, MS Access, Publisher	Word, Excel
Project Management Software	PMD	MicroSoft Project Asana	
Other	Mailchimp	IMPLAN SquareSpace Social Pinpoint	CARA, SOPA, SurveyGizmo

### ***Education***

*Master of Arts in Social Science*  
 Environment and Community Program  
 Humboldt State University  
 Arcata, CA  
 May 2007  
 GPA: 3.71  
 51 Semester hours

*Bachelor of Science in Environmental Science*  
 Geography minor  
 Humboldt State University  
 Arcata, CA  
 December 2002  
 GPA: 3.17  
 167 Semester hours

### **Continuing Education and Training**

Designing Collaborative Processes for Communities and Organizations: Solving Tough Problems, Planning for the Future and Creating Changes. 32 hours of classroom training. Extended Education, Humboldt State University. October 2016.

Foundations of Meeting Mastery, 16 hours of classroom training. Extended Education, Humboldt State University. April 2016

Environmental Negotiation, 24 hours of classroom training. Jim Nelson Consulting, Inc., February 2016.

Cascadia Leadership Training, 80 hours of classroom training in facilitative leadership. January to April 2015.

Forest Plan Implementation Toolbox, Module 1 & 2, Streamline Enterprises, April 2011.

Certified Associate in Project Management (CaPM), Project Management Institute (PMI). June 2009.

Forest Plan Implementation (NEPA), 1900-01. Streamline Enterprises, December, 2007.

Economic Impact Analysis. USDA Forest Service, October 2007.

Social Impact Analysis. USDA Forest Service, October 2006.

## ***Language Skills***

French – Novice

Gilbertese (Pacific Islands)– Novice

## ***Affiliations***

Microsoft Project Users Group (MPUG)

Cooper Gulch Community Grounds - Project Lead and Community Advocate

Cooper Gulch Trail Stewards – Volunteer

## ***Professional Publications***

Prescott, Christy. 2010. Dual economies or dueling economies? An analysis of the intersection of the cash and subsistence economies. VDM Publishing.

## ***Professional References***

*Theresa Corless*

Regional Objection Coordinator

Forest Service, Region 5

[tcorless@fs.fed.us](mailto:tcorless@fs.fed.us)

707-562-8768

*Jeff Jones*

Vegetation Program Manager

Six Rivers National Forest

[jkjones@fs.fed.us](mailto:jkjones@fs.fed.us)

707-441-3553

*Linda West*

Retired Environmental Coordinator

Six Rivers National Forest

[ziggywest@gmail.com](mailto:ziggywest@gmail.com)

707-227-9962

*Rob Holmlund*

Development Services Director

City of Eureka

[rhojmlund@ci.eureka.gov](mailto:rhojmlund@ci.eureka.gov)

707-441-4160

*Sally Sheridan*

Outdoor Recreation Planner

Rivers, Trails, and Conservation Program

National Park Service

[sally\\_sheridan@nps.gov](mailto:sally_sheridan@nps.gov)

805-845-9887

*Bob McConnell*

Executive Director

Cultural Fire Management Council

Retired Yurok Tribal Heritage Preservation Officer

[bob@culturalfire.org](mailto:bob@culturalfire.org)

707-498-2503

## ***Additional Information***

Principal Researcher, Graduate Studies Field Research, Abemama Island, Republic of Kiribati, 2005.

Food Drive Coordinator, the Six Rivers National Forest. Consistently increased donations. 2012 – 2015.

Committee Chair, LTBMU Employee Association. Increased membership by 15% and revenue to support employee functions. 2006-2008.

## Resume

Jeff K. Jones  
707-441-3553 (work phone)  
[Jeff.jones4@usda.gov](mailto:Jeff.jones4@usda.gov) (work email)

### Education

**Master of Science in Natural Resources – Forestry Emphasis** May 2006

*Humboldt State University, Arcata, CA*

**Bachelor of Arts - Psychology** May 1992

*Humboldt State University, Arcata, CA*

**Associate of Arts with a certificate in Micro-computer Electronics** June 1986

*College of the Redwoods, Eureka, CA*

### Work Experience

**Vegetation Program Manager/Forest Silviculturist** 2011 - present

*Six Rivers National Forest* Eureka, CA

- Manage vegetation program areas on forest, which include timber, botany and range. This includes providing guidance for forest to meet yearly timber target, ensuring required botany surveys are completed in timely manner for project success and providing oversight to manage permitted cattle use for forest range program.
- As forest silviculturist, write and/or review prescriptions for timber projects in order to comply with forest plan standards and guides for vegetation management.
- Provide guidance to external partners in the development of silviculture practices that meet forest land management plan objectives while providing partnership buy-in for cooperative projects
- Plan, review and implement project designs for vegetative management activities.
- Work with natural resource specialists to resolve timber project issues in order to meet silviculture prescriptions, logging feasibility and forest land management plans.
- Work with external partners in preparing stewardship and timber sale contracts, and oversee management of stewardship contracts.

- Provide guidance and advice in forest pathology issues that arise from time to time, such as Sudden Oak Death, bark beetle infestations, and other insect and disease vectors effecting forest health.
- Provide advice to forest staff and upper management in all aspects of timber management focusing on integration between program areas.
- Work with Regional and Washington office natural resource personnel as needed to meet timely request concerning program oversight and budgetary issues
- Serve from time to time Acting Natural Resource Staff officer
- Review timber sale documents to assess economic viability based on available timber volume, logging system, road system and other relevant concerns that may lead to a no-bid and make recommendation for change, if necessary.
- Act in the capacity as district forester (when district position is vacant) to maintain timber sale program on district, when asked by District Ranger, by providing appropriate skillset necessary, such as identify stands for treatment, write timber cutting prescriptions, assist with layout, help with marking trees and cruising for estimated volume and appraising timber sale package for contract.

**District Forester/Silviculturist**

2006 - 2011

*Six Rivers National Forest – Mad River Ranger District*

Mad River, CA

- Performing all duties of district forester, which includes identifying stand treatment areas, assessing stands by collecting, analyzing and synthesizing stand exam data to write cutting prescriptions that comply with forest land management plan and environmental documents.
- Evaluate economic feasibility of timber sales based on logging system, landscape characteristics, access capability, local equipment availability and timber volume
- Other associated timber related work such as helping mark timber, cruising timber, evaluating stand health and recommending treatment type, and reforestation.
- Work with natural resource specialist on interdisciplinary team to eliminate or mitigate natural resource concerns for a successful timber sale project
- Updating district vegetation map
- Included 4-month detail position on Gasquet Ranger District as Timber Management Officer

**Acting Forest Ecologist**

2005 - 2006

*Six Rivers National Forest*

Eureka, CA

- Providing ecological expertise for ecosystem management projects both on forest and to other land management agency staff
- Overseeing vegetation mapping program
- Working with Regional Ecologist in describing Biophysical setting models to predict vegetation stand attributes for various fire regimes and working on integrating Terrestrial Ecological Units to existing landscape parameters

**Assistant Forest Ecologist**

2003 - 2005

*Six Rivers National Forest*

Eureka, CA

- Assisting Province forest ecologist in vegetation analysis and classification program
- Working with other land management agencies to provide ecological expertise
- Training and overseeing ecology program staff in field data collection, air photo interpretation skills and GIS mapping

**Biology Technician (plants)**

1992 – 2003

- Collecting vegetation field data for forest ecology vegetation classification and mapping program
- Creating vegetation mapping attributes and geospatial databases that included identifying vegetation types, seral stage and structural characteristics based on air photo and digital imagery interpretation and transferring to Geographic Information Systems (GIS)
- Modeling spatial relationships of vegetation types to landscape and climatic variables via a GIS to predict vegetation characteristics in remote areas.
- Teaching vegetation mapping and GIS skill to other land management agency staff

**Forestry Technician**

1991 – 1992

*Environmental Resource Division, City of Arcata*

Arcata, CA

- Forest inventory, tree stocking surveys, and other various forestry tasks
- trail maintenance, air photo interpretation for change detection

**Publications**

1995. A Field Guide to Serpentine Plant Associations and Sensitive Plants in Northwestern California. R5-ECOL-TP-006. USDA Forest Service, Pacific Southwest Region. Contributor.

1996. Vegetation analysis of Late Successional Reserve-305. USDA Forest Service, Eureka, CA. Co-author

1996. A field guide to the Tanoak and the Douglas-fir plant associations in Northwest California. R5-ECOL-TP-009. USDA Forest Service, Pacific Southwest Region. Contributor.

1999. Port-Orford-cedar plant association mapping in California. USDA Forest Service, Eureka, CA. Contributor.

1999. Vegetation classification and mapping of the Headwaters Forest Reserve. USDA Forest Service, Pacific Southwest Region, Eureka, CA. Co-author.

1999. A field guide to Port-Orford-Cedar plant associations in Northwest California. R5-ECOL-TP-002. USDA Forest Service, Pacific Southwest Region. Contributor.

2000. A Range-wide Assessment of for Port-Orford-cedar (*Chamaecyparis lawsoniana*). USDA Forest Service and USDI Bureau of Land Management. Contributor.

2000. Draft vegetation classification: Annual grasslands and oak woodlands in Northwest California. USDA Forest Service, Pacific Southwest Region, San Francisco, CA. Contributor.

2001. A Field Guide to Rangeland Vegetation Types in the Northern Province: Annual Grasslands. R5-ECOL-TP-014. USDA Forest Service, Pacific Southwest Region. Vallejo, CA. Contributor.

2002. A Landscape Level Roads Risk Assessment of Port-Orford-cedar Plant Association on the Six Rivers National Forest. USDA Forest Service, Eureka, CA. Co-author.

2003. Series, sub-series and plant association codes for northwest California. USDA, Eureka, CA. Co-author.

2004. A Landscape Level Risk Analysis of Port-Orford-cedar Plant Associations in the Elk Valley Area. USDA Forest Service, Eureka, CA. Co-author.

2004. Mendocino National Forest Vegetation Mapping Procedures. USDA Forest Service, Eureka, CA. Co-author.

2004. Accuracy Assessment of the Mapped Vegetation Attributes on the Mendocino National Forest. USDA Forest Service, Eureka, CA. Author.