

## EXHIBIT A PROPOSAL COVER PAGE

**Proposal Type** 

Concept Proposal for Demonstration Projects and Processes

## Organization Name (Lead Applicant)

Forestscapes

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

Vother: Private Business

Contact Name/Title
Name: Joe Snipes
Title: <u>C.E.O.</u>
Email: Joe scyd?@gmail.com
Phone Number (include area code): <u>707-382-8702</u>
Organization Address (City, County, State, Zip Code):
2290 First Rd. Mckinleyville, Humbolet, CA. 9551
Authorized Representative (if different from the contact name)
Name:
Title:

Name:		
Title:		
Email:		
Phone Number (include area code):	- 15	

### 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

Signature J 13 do 20

Date

### NCRP Statement of Qualifications

- 1. Key personnel and their qualifications
  - a. Joe Snipes

Joe Snipes is a devoted business owner to ForestScapes and Humbots Data & Analysis. He has a degree in Forestry and Natural Resources from College of the Redwoods. He has work experience on fuels reduction and fire suppression with the National Park Service and the U.S. Forest Service. His experience is in natural resource project implementation and in safety training and implementation. He is a licensed FAA 107 certified pilot, and has training or experience in many fields of forestry management.

b. Tyler Lentz -

Tyler's goal is to provide safety first and gain the trust and respect of his crew members. Tyler has the responsibility of lead sawyer and intermediate Faller 2 or Faller B. He is responsible for the daily upkeep and maintenance of the vehicles and chainsaws. Tyler maintains the inventory of parts and supplies, fuel mix, bar oil, and safety equipment, ensures that all saws are optimized for field performance.

c. Jim Baskin -

Jim Baskin is an inholding woodlot owner of 148 acres on the South Fork of the Smith River. He has participated in many NRCS EQIP fuels reduction projects and is a certified land use planner. He has a agency background (Coastal Commission) of natural resource management and planning.

http://californiabiocharassociation.org/member-profiles/

d. Danny Kelley

Danny Kelley is a passionate business coach and leader. Owns a public benefit corporation with a specific purpose of using its business to inspire individual, social, and environmental change that improves the human condition. His experience includes a 20-year career in software development using Agile methodologies. Danny holds a BA in Cross-Cultural Studies and an AA in Business. He holds several certifications in business and executive coaching and is affiliated with the International Coaching Federation (ICF).

e. Cassie Snipes

Cassie is Joe's spouse. She has a degree in Art and has 5+ years of experience in bookkeeping, A/P, and other various clerical work. She serves as HumBots bookkeeper and maintains contact with the it's CPA.

- 2. Proposed sub contractors
  - a. Kelpie Wilson of <u>Wilson Biochar Associates</u>
  - b. Joanna Berg Dirty Business Soils Analytics

- 3. Hourly rates
  - a. Admin time = \$30/hour
  - b. Data collection = \$40/hour
  - c. Laborers = \$35-45/hour
  - d. Kelpie Wilson = \$150/hour
  - e. Dirty Business Soil Analytics \$300/hour

### 4. References

- a. Jim Baskin owner of LEMS Ridge LLC a private forestry business in Del Norte County 707.601.8392
- b. Kelpie Wilson Wilson Biochar Associates 541-218-9890
- c. Paul Savona Cal Fire Forester/Law Enforcement for Humboldt/Del Norte - 707.499.2254
- d. Jim Baskin retired Coastal Commission, owner of Lems Ridge LLC a private forestry business in Del Norte County - 707.601.8392, jim.baskin.54@gmail.com
- e. Mickey Jarvi professor of Forestry and Geomatics at Michigan Tech 906.369.4221
- f. Tim Baker Professor of Forestry at College of the Redwoods -Tim-Baker@redwoods.edu
- g. Greg Foster Executive Director for Redwood Economic Development Commision - 707.445.9651, gregg@rredc.com
- h. Peter LeCourt Lead Forester for Pacifc Union College in Napa County Ca. 707.291.8395
- 5. lists /hyperlinks to examples of relevant work that support the proposal
  - a. Lems Ridge Conservation Stewardship Plan (see attachment)
  - b. Kelpie Wilson's website (Wilson Biochar Associates) https://wilsonbiochar.com/resources
  - c. Waste to Wisdom Life Cycle Assessment of BioChar from post harvest residues

https://img1.wsimg.com/blobby/go/55a2e356-17ba-48af-b8c3-a76d3f66be 29/downloads/w2w-biochar-lca-final-report.pdf?ver=1583179362393

NCRP DEMONSTRATION PROJE	CT AND PROCESSES CONCEPT PROP	OSAL BUDGE	AND SCHEDU	JLE			
Roadside Biochar production for one ac	re of roadside fuels reduction						
Major Tasks	Task Description	NCRP Task Budget	Funding Match *	Total Task Budget	Scaled NCRP Budget **	Start Date	End Date
	In cooperation with the County of Humboldt						
	sign a sub-grantee agreement for work to be						
	completed on this project. Develop invoices						
Project Administration	with support documentation.	\$0.00	\$0.00	\$500.00	\$0.00		
	Data collection performance measures and						
Droject Departing	bata collection, performance measures, and	¢0.00	¢0.00	¢500.00	¢0.00		
		\$0.00	\$0.00	\$500.00	\$0.00	/	
Project materials	Oregon Kilns, hoses and pumps accessories.	\$0.00	\$2,500.00	\$0.00	\$0.00		
	To consult with a soil scientics to come up with	1					
	plan to monitor baseline and reoccuring soil						
Dirty Business Analytics consulting time	samples	\$0.00	\$0.00	\$1,200.00	\$0.00		
	The labor required to process one acre of						
Labor and materials	biochar	\$0.00	\$0.00	\$4,600.00	\$0.00		
		\$0.00	\$0.00	\$0.00	\$0.00		
Project Closeout		\$0.00	\$0.00	\$0.00	\$0.00		
Total NCRP 2020 Demonstration Pro	piect Request	\$0.00	\$0.00	\$6,800.00			
* List the sources and status of matchin	g funds: LEMS RIDGE LLC would like to match	funchs of hard ca	sh value of \$2.500	and to contribute	\$2.500 in equipment	1	
(6 oregon kilns, water pumps and hose	accessories (see above)						
** Is Requested Budget scalable? If yes	, indicate scaled totals; if no leave as \$0. Until	this demonstration	on proves feasible	at the given rate	I would prefer not to		
give a scaled up rate. The per acre rate	is from the NRCS CSP rates.						
Project scalability information for the re	eviewers (optional):						



## **1. Project Description**

1. Our company, Forestscapes would like to demonstrate roadside biochar production on a proposed Humboldt County roadside fuel break project. We were recently accepted as a recipient to a request for proposal from the Humboldt County Fire Safe Council to implement roadside fuels reduction and defensible space to homes in the areas of Orick and Trinidad. Our hope is to use one of these areas or any other area outlined in Humboldt Counties CWPP to demonstrate roadside biochar production.

## 2. Specific project goals/objectives

- 1. Demonstrate biochar production with a Oregon kiln, air burner or ROI machine.
- 2. To quantify amount of carbon sequestered on a per acre basis.
- 3. To spread the biochar across the landscapes.
- 4. To monitor changes in vegetation and soil fertility.

## **3.** Describe how the project or process addresses the NCRP Goals and the intent of the NCRP regional forest and fire capacity program block grant

- 1. Respect local autonomy and local knowledge in Plan and project development and implementation
  - a. We plan to collaborate with local Fire Safe Councils and other groups to gain knowledge in planning, development and implementation. We want to encourage and foster other groups to develop fuels reduction projects and innovative slash disposal methods.
- 2. Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans
  - a. Any and all tribes that are in process of restoring their forest will be contacted and encouraged to incorporate this method into their projects and planning. We would also like the input of all the tribes for best practices.
- 3. Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas.
  - a. Fuels reduction will improve the working landscapes and natural areas of the North Coast Region by making egress and ingress safer for communities and first



responders. The added benefit of biochar will bring other improvements such as increased soil fertility and sequestered carbon.

- 4. Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity.
  - a. All fuels reduction projects can enhance and restore watersheds in one way or another. This project can also bring new terrestrial habitat which will support structure and hopefully more biological diversity.
- 5. Address climate change effects, impacts, vulnerabilities, including droughts, fires, floods, and sea level rise. Develop adaptation strategies for local and regional sectors to improve air and water quality and promote public health.
  - a. The production of biochar can lead to a significant reduction in greenhouse gas emissions by not burning all the slash. This will lower the risk of infecting communities with regular "pile burning smoke" while making a useful product for our forest communities.
- 6. Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation.
  - a. Greenhouse gas reduction is the main driver behind this proposal. GHG emissions will be reduced significantly and can be quantified in the project.
- 7. Improve flood protection,\_forest and community resiliency to reduce the public safety impacts associated with floods and wildfires.
  - a. This will make forest and communities much more resilient to wildfire by reducing the fuel loads in areas with a high probability of ignition and will increase public safety by having better ingress and egress.

# 4. Describe how this project is scalable, replicable, measurable, innovative and results in outcomes that will increase the scope and scale of multibenefit forest management in the North Coast.

- a. Scalability With over 30 million acres of forest land in California, the amount of proposed fuels reduction projects and California's carbon accounting requirements, this process can be scalable as long as people/agencies continue to manage their forests. We are located near Humboldt State University that has a top notch Forestry and geospatial program that can aid our growing workforce when we are ready to scale up. We have financial ties through family and friends as well as the local lending agency, Redwood Region Economic Development Commission that can help with loans and our cash flow needs.
- b. Replicable this project is easily replicable. It can be done on any roadside fuels reduction project and in any vegetation type.



- c. Measurable tons of fuels treated, acres treated, carbon sequestered, wildlife benefit, metric around soil carbon added (hit up DBS)- aid in water retention, increase fungal/bacterial microbes, and overall health of vegetation.
- d. Innovative this method of slash disposal is a relatively new and not well quantified for implementing on a large scale. Compared to traditional methods of slash disposal (lop and scatter and piling) biochar can return a ecological and economic benefit to our communities.

## 5. Describe the need for the project and how the project addresses forest health and climate change/extreme event resiliency.

a. California is aggressively trying to reduce the amount of carbon put into the air. California is also trying to implement fuels reduction projects in every corner of the state. This process addresses forest health and climate change/extreme event resiliency by 1.) reducing fuel loads 2.)sequestering carbon 3.)improving soil quality 4.) providing a rural workforce.

## 6. Describe the location and size of the project and the communities served by this project.

a. The communities served would be Orick and Trinidad California as those are the areas that we were awarded to treat through the Humboldt County Prescribed Fire (HCFSC) Council. We would use any other CWPP recommendations and will work closely with HCFSC to facilitate the implementation on expanding this process to other areas outlined in the CWPP unit action plans. It is unclear how large the projects will be at this time but we will provide a per acre rate for this proposal.

# 7. List and describe the partnerships involved in the project and local and/or political support.

- a. One of our main partners is Lems Ridge LLC located in Del Norte County. Lems Ridge is an active forest owner who owns 148 acres on the South Fork of the Smith River. They have been actively engaged in NRCS EQIP contracts for the last decade implementing forest stand improvements projects (thinning and piling/burning), as well as entered into a CSP for biochar production. They have the following equipment we can use to demonstrate 6 Oregon Kilns, Mark 3 pump with hoses, attachments and accessories.
  - i. http://californiabiocharassociation.org/member-profiles/
- b. Wilson Biochar Associates <u>https://wilsonbiochar.com/</u>



- c. College of the Redwoods Professor Tim Baker
- d. Redwood Region Economic Development Commission
- e. Small Business Development Center
- f. Edge Caliber -
- g. Dirty Business Soil Analytics
  - i. See Statement of Qualifications for contact information.

## 8. List the estimated quantifiable, measurable, benefits expected to result from the proposed project

- 1. Amount of fuels reduced
- 2. Amount of carbon sequestered
- 3. Soil carbon

# 9. List any scientific studies, plans, designs or reports completed for the project of process.

- a. Kelpie Wilson's website (Wilson Biochar Associates) https://wilsonbiochar.com/resources
- b. Waste to Wisdom Life Cycle Assessment of BioChar from post harvest residues <u>https://img1.wsimg.com/blobby/go/55a2e356-17ba-48af-b8c3-a76d3f66be29/downloads/</u> <u>w2w-biochar-lca-final-report.pdf?ver=1583179362393</u>

# 10. Describe the approach to data collection, performance measures, and project reporting of outcomes/lessons learned.

- a. Data will be collected by
  - i. Physically measuring the amount of slash material in cubic feet.
  - ii. Physically measuring the amount of biochar produced in cubic feet.
  - iii. Hiring a soil analysis to take baseline soil metrics and annual follow up (5 years).
- b. Performance measures We always track each of the following performance measure
  - i. Amount of laborers
  - ii. Amount of time
  - iii. Number of kilns
  - iv. Number of machine operators
  - v. Burn time (per batch)
  - vi. Crew set up time
  - vii. Quenching and unloading
- c. Project reporting of outcomes/lessons learned -



i. i. We can cater to the needs of the NCRP. We can either meet in person, do a virtual meeting or have a standard report of our outcomes/lessons learned.

#### ADDENDUM

Supporting information for this project can be downloaded at the following link.

https://www.dropbox.com/s/uysl7mtb7wqi0kg/Lems%20Ridge%20Biochar%20project.pdf?dl=0