

**Recommendations from the Wild Rivers Coast Forest Collaborative
for the Shasta Agness Project
January 2016**

Statement of project purpose:

The Wild Rivers Coast Forest Collaborative (WRCFC) is a diverse group of stakeholders who work together to create and implement a shared vision to protect and improve the resilience and well-being of watersheds, the forests they contain, and communities in and around National Forest system lands in Southwestern Oregon.

WRCFC projects are based upon three primary principles that the collaborative members have chosen as the main priorities:

- Unique ecosystem restoration
- Aquatic restoration including road sediment reduction and fish passage culvert replacement
- Quality access and facilities for roads, trails, and campgrounds

Other principles that the group has deemed important in project planning are; managed stands, non-native forest pathogens, hazardous fuels reduction and invasive species.

Overall project objectives:

WRCFC is proposing that the United States Forest Service (USFS) restore oak savannah environments in the Shasta/Agness planning area (the Shasta Costa watershed and portions of the lower Illinois River watershed) to: restore, maintain, and enhance ecological diversity; to restore watershed processes and functions and to enhance aquatic and riparian habitats; to enhance recreational opportunities, and to protect the overall forest/watershed health in this area.

Categorical recommendations:

Below are recommendations from WRCFC for the Shasta Agness Planning Area of the Gold Beach Ranger District of the Rogue River Siskiyou National Forest for the following categories:

1. White and Black Oak Restoration
2. Stream Restoration and Enhancement and Riparian Area Management
3. Recreation
4. Roads
5. Wildlife
6. Plantation thinning
7. Contracting
8. Monitoring

1. White and Black Oak Restoration. Objective: Restore the entire suite of ecological services, functions, and processes in the white oak/pine woodland/oak savannah ecosystem including herbaceous plants, shrubs and trees in this project area. Our recommendations are as follows:
 - a) Silvicultural treatments:
 - Remove encroaching Douglas fir from oak savannah areas. Avoid thinning of broadleaf trees.
 - b) Snags and downed wood:

- Remove encroaching Douglas fir to restore the oak ecosystems
 - IF removal of Douglas fir is not logistically/economically feasible, create snags or downed wood
- c) Burn piles:
- Minimize burn piles by lopping and scattering all boles <3”
 - Leave some brush piles for wildlife habitat and sustenance
 - Remove plastic prior to burning
 - Establish maximum diameter for burn piles according to site-specific requirements
 - Mitigate impact by inoculating burned area with dirt from adjacent area
 - Maximize the benefit of burn piles through creation of and use of biochar
- d) Planting trees, shrubs and grasses:
- Trees: areas near existing oaks will be priority for planting trees due to need for associated mycorrhizal fungi. Barren areas will be planted with nursery stock or from seed (e.g. low elevation Shasta Costa foot hills near the creek, barren area near Agness forest service buildings). Some planted seedlings should be protected with cages to prevent animal browsing.
 - Shrubs: barren meadow areas will need some native shrubs.
 - Herbaceous plants: plant seeds of native species in addition to native grass species in disturbed areas.
- e) Protecting oak seedlings:
- Most oak seedlings need caging to reduce grazing by animals (including cattle).
- f) Prescribed fire:
- We recommend fall burning to restore and protect native herbaceous plants. Monitor and adaptively manage post-fire to insure that intended desired future conditions or a trajectory toward those conditions are achieved.
2. Stream Restoration and Enhancement and Riparian Area Management. Goals: To provide an abundance of clear, cold, clean water to maximize fish and wildlife habitat, to maintain and improve water quality for downstream residents, and to maintain and improve fishing opportunities for future generations. Streams that are suitable habitat for coho salmon will get priority in actions that result in stream restoration and enhancement. Remove non-native and invasive plants such as blackberry, knotweed, ivy, etc., from riparian areas.
- Objectives (desired future conditions):
- There should be no channel-spanning man-made structures that stop sediment flow or fish movement in streams and rivers
 - Recognizing existing water rights, minimize water withdrawals to maintain abundant, cold water flows, and make all diversion structures and pipes fish-friendly.
 - Minimize surfaces that reduce the exchange between surface, hyporheic, and ground water flows

- Riparian areas that are well-stocked with native plant species and that exhibit both horizontal and vertical plant diversity.
- Streams and rivers that are free to meander
- Streams that support historic levels of invertebrates, fish, and wildlife
- Maintain abundant and functioning wetlands
- Minimize chronic road sediment runoff
- Work towards delisting of stream and river sections listed on the ODEQ 303d list of water quality impaired water bodies

Strategies for achieving Objectives:

- a) Treat riparian reserves to achieve overall project objectives consistent with the Aquatic Conservation Strategy.
 - b) Large wood or boulder placement: Place large wood (trees with branches and root wads) or boulders into fish-bearing streams in the project area without anchors. Large wood will be tipped or cut and cable yarded into streams from adjacent upland areas and keyed into existing riparian vegetation and structures. Monitoring will ensure that desirable results are maintained through large flood events.
 - c) Fish and sediment passage: Identify and remove fish and sediment passage barriers and replace culverts where necessary.
 - d) Restore riparian areas: plant native trees, shrubs and ground cover
 - e) Road sediment reduction: substantially reduce hydraulic connectivity between roads and aquatic systems, maintain roads to US Forest Service road standards, consider decommissioning abandoned or unmaintained roads
 - f) Remove terrestrial, riparian, and aquatic invasive and non-native species using mechanical removal methods wherever and whenever possible, and work with landowners in the Shasta-Agness planning area to remove and control non-native and invasive species. Replace non-native and invasive species by planting of native hardwoods, grasses, shrubs and other native plants.
 - g) Work with landowners to minimize water withdrawal and nutrient laden surface water runoff into streams and rivers.
 - h) Restore stream overflow channels, work to maintain or restore stream connection to its' floodplain, and create backwater alcoves as cold water refuges for fish and other aquatic organisms.
 - i) Use prescribed fire in riparian areas where acceptable (i.e., look at geology first)
 - j) Limit soil disturbance in riparian areas
3. Recreation. The Wild Rivers Coast Forest Collaborative (WRCFC) would like to provide high quality experiences in nature and outdoor recreation opportunities in, adjacent to, or near the Shasta-Agness Planning Area of the Gold Beach Ranger District. These include, but are not limited to camping, water-based recreation, hunting, foraging, exploring botanical diversity (including rare and endemic plants) and wildlife and their habitats, day-use/picnicking, and trail development. We desire to encourage outdoor recreation by improving existing access roads to allow low clearance vehicle access to recreational sites and maintaining, improving, and developing infrastructure such as toilets, potable water, fire rings and camping sites, parking areas, and horse corrals. We are committed to repairing erosion from roads and other uses, and reducing the impacts of soil disturbance on water quality by planting suitable native grasses, shrubs and trees. In addition to maintaining existing

infrastructure, the WRCFC supports the development of additional recreation and interpretive trails and the supporting infrastructure for multiple user groups. Where resources are available, we will work to both develop and maintain recreational facilities, trails, and their associated infrastructure, and provide services such as trail and campground hosts at the most heavily used recreational sites and camping locations.

Specifically, we propose the following recreational projects (in no particular order):

1) Oak Flat

- improve trails in the Oak Flat area
- insure that toilets are cleaned and garbage is picked-up regularly
- signage
- restoration of erosion areas
- slash, brush, and debris removal
- drinking water well development
- a campground manager
- enforcement of camping regulations
- improvement of horse corrals
- add paddocks, a manure bunker, picnic tables and fire rings

2) Shasta Costa Creek

- improve FS road 23-990 from Bear Camp Road to Shasta Costa Creek
- fence the road with pole fencing to restrict motorized vehicle use to the road
- create a campground with a toilet, fire rings, picnic tables, and camping spaces on Shasta Costa Creek where the existing road goes down to the creek
- reconstruct the trail along Shasta Costa Creek
- plant disturbed sites
- install interpretive signs

3) Rogue River Trailhead

- install a new vault toilet at the Big Bend/Rogue River Trail parking area

4) Trails Park Recreation Facility

- build a multiple trail bicycle recreation facility for beginner through advanced bicyclists with a campground, vault toilets, parking area, and potable water at the trailhead (specific location not yet identified)

5) Shasta Costa Overlook–

- build a 1.9 mile loop old-growth trail from the Shasta Costa Overlook off Bear Camp Road
- improve the parking area
- add restroom facilities

6) Wildlife and Plant Viewing Area

- build a handicapped accessible hiking trail with viewing decks in the Big Bend area and from Foster Creek (requires a bridge) to Brewery Hole along the Rogue River

7) Signage and enforcement for motorized trails

- properly sign trails any place where motorized use trails are published
- provide USFS enforcement to make sure people play by the rules

8) Pine Grove Trail Re-route

- rebuild/re-route the 2 lower steep sections of the Pine Grove trail
- install signage needed to alleviate landowner conflict and improve trail usability
- a bridge over Tom Fry Creek may need to be installed on this trail

9) Big Bend Project

- research and create an interpretive trail in the Big Bend area with signs outlining battles and strategy in the last great Indian war.

10) River Access hiking trails from trail 1168

- engineer and develop hiking access trails to the Rogue River from 1168
- add fire rings and a composting toilet if use improves

11) Adams Prairie pole fencing and improved access

- improve the road through Adams Prairie, connecting the existing road with the Lower Rogue River trail
- add pole fencing along the road to restrict vehicle use on the prairie

4. Roads. Objective: Minimize impact of road construction and use best practices to control erosion and discourage off-road motorized vehicle use. Our recommendations are as follows:

- a) Discourage new temporary road construction except where the benefits of restoration treatment allowed by the road outweigh the environmental and economic costs of road construction. Temporary roads will be reconstructed on existing abandoned road prisms wherever possible, and will be minor in length. Temporary roads will be fully restored following their use.
- b) Long skid trails will be utilized to take out commercial logs, and skid trails will be restored at the conclusion of project activities.
- c) Runoff from active roads will be hydrologically disconnected from the stream system using best management practices (berms, culverts, out sloping etc...).
- d) Post-project, appropriate temporary roads will be converted to recreational trails for use by hikers, bikers, and equestrian uses while others will be designated for off-road motorized vehicle use.

5. Wildlife. Goal: Restore unique oak habitat and species that use it, while minimizing effects on Threatened and Endangered species. Objective: To improve/maintain native wildlife populations while minimizing non-native and invasive species populations. We recommend the following:

- a) Northern spotted owl:
 - Minimize or avoid effects to nesting, roosting and foraging habitat for management activities.
 - Concentrate management in “non-habitat” or dispersal habitat.
 - In areas of better owl habitat, we recommend treatments in one acre openings or less that are beneficial to owls.

6. Plantation thinning. Objective: Use mechanical thinning to hasten the development of old growth characteristics in Late Successional Reserve (LSR) and to make the forest more resilient to fire. The development of a thinning prescription for LSR should:

- Retain larger trees.
- Maintain biodiversity

- Keep pines, deciduous oaks and other priority species on the landscape
- Create openings and gaps in the canopy and create clumping of trees on the landscape through variable density thinning

7. Contracting. Objective: Maximize the amount of work to be performed while maintaining a reasonable and realistic budget. We recommend:

- Utilizing stewardship contracting to help pay for services needed in the project area such as:
 - non-commercial thinning
 - planting and caging trees, shrubs and grasses
 - prescribed burning
 - placement of wood in streams
 - culvert repair/replacement
 - improvement to recreation sites or additional facility needs

8. Monitoring. Objective: To assess the progress and results of project and to adapt goals and actions accordingly, keeping the overall objective in mind. We recommend:

- Implementation monitoring:
 - Joint site visits (WRCFC and USFS) during project progress to recommend changes in implementation.
 - Joint site visits post-project to establish, goals, objectives, and actions to be undertaken in subsequent projects.
- Effectiveness monitoring: Establish monitoring plots to assess effectiveness of treatments. Possible questions to be explored could include :
 - Did treatments result in a decrease in firs and an increase in oaks over time?
 - Did acorn production increase? (suggest five years of data collection, may take longer)
 - Is there an increase in the amount of pools in a segment of creek?
 - Is there suitable substrate for spawning/rearing habitat?
 - Did the turbidity levels decrease?
 - Did temperatures decrease?
 - Are there fewer invasive plant species?
 - How many planted trees/shrubs survived?