

**Briefing for the Science Stakeholder Workshop
February 1-2, 2010**

The 13-member Jackson Demonstration State Forest Advisory Group (JAG) has been charged with providing a comprehensive review of the 2008 JDSF Management Plan, with a particular focus on several key issues. Our draft report to the Director of CAL FIRE and the Chair of the California State Board of Forestry is due January 2011.

In preparing for its review, JAG is soliciting input from diverse stakeholders, including a selected group of applied scientists representing specific areas of scientific expertise, who as a group can provide us with an interdisciplinary perspective. The participants include:

Name	Expertise	Affiliation
Dr. Steve Norman	Forest Ecology	U.S. Forest Service
Mr. Bruce Bingham	Forest Ecology & Monitoring	National Park Service
Dr. Kate Sullivan	Watershed Science	Humboldt Redwood Co.
Mr. Pete Cafferata	Watershed Science	CalFire
Dr. Hartwell Welsh	Wildlife Biology – Herpetology	Redwood Sciences Laboratory
Mr. Ron LeValley	Wildlife Biology – Ornithology	Mad River Biologist
Dr. Kevin O’Hara	Silviculture	U.C. Berkeley
Dr. Kim Rodrigues	Research & Partnerships	U.C. Extension
Mr. Frieder Schurr	Forest Resource Management	U.C. Berkeley Blodgett Forest

The purpose of this workshop is to provide JAG with broad perspectives that will enable JAG to better understand opportunities and directions for research and demonstration on the Forest, and how to best integrate landscape-scale forest structural allocations in support of these opportunities. To achieve this purpose, the steering committee for this workshop has identified three primary topic areas that are of keen interest to the JAG.

- 1) **Research Agenda** – what are the enduring big-picture, long-term issues and questions that should be used to direct management of JDSF, so that JDSF will become a core center for knowledge for the redwood region and beyond?
- 2) **Landscape Allocation** – provide specific ideas for allocating management zones that would underpin a strong long-term research and demonstration program. These ideas may be presented in the form of specific criteria, general objectives, and/or approaches that could deliver a preferred allocation.
- 3) **Stand & Structural Diversity** – provide input on the desirable extent of diversity of stand conditions and/or seral conditions needed to support a strong research and demonstration program and how should this be achieved.

For each of these topical areas, we intend to engage the workshop participants in a series of facilitated discussions designed to identify common themes, interesting ideas, constraints and opportunities.

Background

Jackson Demonstration State Forest (JDSF) is 48,647 acres of redwood/Douglas-fir forest situated in Mendocino County, California, between Fort Bragg and Willits. The California State Board of Forestry describes JDSF as:

"commercial timberland areas managed by professional foresters who conduct programs in timber management, recreation, demonstration, and investigation in conformance with detailed management plans".

Board policy defines the primary purpose of JDSF as follows:

- Provide a center for conducting innovative demonstrations, experiments, and education in forest management
- timber production will be the primary land use
- recreation is recognized as a secondary and compatible land use.

The 2008 JDSF Management Plan describes the desired future forest structure through the goal of maintaining over time *"a deliberate balance of successional stages on the Forest, from very young to late-seral stands and old growth ... suitable to a wide range of research investigations and demonstration opportunities, as well as a broad range of different habitats"*. The JDSF Plan also proposes that *"these forest structure conditions be cultivated through a variety of silvicultural methods, both even-aged and uneven-aged"*. The proposed future forest structure conditions described in the plan are:

Structure Class	Portion of JDSF
late-seral or old growth	15-25%
older forest structure	10-20%
mature and large trees	5-15%
mixed age and size	30-40%
regeneration and pole-sized younger trees	10-20%
no specific structure assigned	0-10%

One of the primary charges of the JAG is to review the landscape allocations proposed in the Management Plan and possibly to recommend changes to these allocations.

The JAG generally recognizes the following:

- 1) Forest management, research, and demonstration aesthetics, and recreation are sensitive public issues.
- 2) Forest management should reflect the unique silvical and ecological characteristics of the redwood/Douglas-fir ecosystem represented by JDSF by generally moving the forest towards higher stocking levels composed of larger, older trees.

- 3) Revenue generated from timber harvests on JDSF will be the primary source for sustaining all forest management activities and programs and contribute funding to research and demonstration on the forest.
- 4) There is a shared desire to position JDSF as a model forest nationally (and perhaps globally) where applied research has a direct and tangible impact on best practices, policies and regulations.

Discussions within JAG have occurred within several committees; the most pertinent to this workshop are in the 'landscape allocation' and 'research/monitoring' committees. Ideas from both groups continue to be discussed by the JAG as a whole, and will be presented in more detail during the workshop. The various ideas presented below may or may not represent an optimal solution; we welcome your best, creative thinking.

Landscape Committee Concepts

Discussions have focused on revising the proposed Management Plan allocation by extending connectivity between Reserve and Late-Seral Development areas. In total, the proposed revisions allocate ~50% of the forest to reserves, older forest zones and the extensive, restricted areas within riparian buffers. Some harvesting would be permitted within the older forest zones to enhance development of late-seral conditions (exclusive of old-growth reserves).

One current discussion regards the kinds of management approaches within the so-called 'matrix lands' (those lands outside older forest zones, old-growth reserves, and riparian buffers). One suggested approach for these matrix lands would utilize a single form of conservative, default "natural" forestry that enhances the development of late-seral conditions. The application of approved research and demonstration projects on these matrix lands would "trump" the application of default management. An alternative approach would utilize a diversity of stand conditions and allocate lands to a range of seral conditions that match the unique silvical and ecological characteristics of redwood forests. Increased structural diversity could be attained by encouraging testing of diverse silvicultural methods.

Large format maps showing land allocations in the JDSF Management Plan and the current Landscape Committee proposal will be provided at the workshop.

Research & Monitoring Committee Concepts

The JAG has already approved a recommendation for a Mission-Oriented approach to research on the forest that will focus JDSF resources on 3 primary areas:

- Sustainable Production Forestry
- Watershed Science, Restoration & Aquatic Habitat Recovery
- Redwood Ecosystem Ecology & Dynamics

The committee's goal is to create a framework for the Forests' research, demonstration and monitoring functions that utilize our best understanding and examples of integrated resource management and planning, including the use of

extended partnerships. The committee has articulated the following desirable components of an effective program, which we expect would take several years to develop.

Program Component	Description
Research Agenda	Key questions and performance measures that support effective forest management planning and stakeholders.
Experimental Basis (planning)	Harvest management activities test working hypotheses, utilize replicates, support research and demonstration.
Robust Monitoring	Supports adaptive management and utilizes consistent measurement protocols.
Landscape Ecology	Formally integrates scientific concepts from multiple disciplines and tests landscape-scale hypotheses on forest and ecosystem dynamics.
Structural Allocation Classes	Classification of forest structure to create and maintain a range of age, seral and structural conditions.
Stakeholder Input	Ensures research, demonstration and monitoring efforts support the broader needs of the community of foresters and forest landowners in the redwood region.

Additional Resources

We invite you to consider this briefing paper, as well as additional resources provided at the following website in your preparation for the workshop:

General JDSF Website Page

http://www.fire.ca.gov/resource_mgt/resource_mgt_stateforests_jackson.php

Environmental Impact Statement Page – this page includes many maps and resource-specific text (scroll down)

http://www.fire.ca.gov/resource_mgt/resource_mgt_stateforests_jackson_deir.php

[note: all spaces in the hyperlink addresses above contain underlines]

Preliminary Workshop Agenda

The agenda presented below is preliminary and subject to revision as planning for the workshop evolves.

Please plan to attend the evening session after Day 1. We intend to have ‘refreshments’ available to help facilitate some more playful ways to engage these topics in a more dynamic and interactive way.

JAG Science Stakeholder Workshop Briefing Paper

Day 1

Informal Arrival & Networking	8:30
Formal Start: Welcome and Introductions	9:00
Workshop Purpose, Outcomes & Structure	
Brief JDSF Orientation & Virtual Tour	
Break	10:30
Brainstorm Research Agenda	
Lunch (provided)	12:00 – 12:30
Brainstorm Research Agenda (cont)	
Synthesis – Critical Questions for the Research Agenda	
Break	2:15
Facilitated Discussion: Landscape Allocation for Research	
<ul style="list-style-type: none">• Possible Allocation Patterns• Traditional and Non-Tradition Silviculture• Our Goal: World Class Research & Demonstration	
Adjourn	4:30

Evening Session – 7:00 to 9:00
Activities to be determined

Day 2

Reflections from Day 1, Review Critical Questions	8:30
Overview of Landscape Allocation Proposals & Ideas	
Critique Landscape Allocation Hypotheses With Reference to Research and Demonstration Opportunities	
Break	10:30
Criteria for Landscape Allocation at JDSF from the Perspective of Research Priorities	
Lunch (provided)	12:00 – 12:30
Overview of Stand and Structural Diversity	
Criteria for Stand and Structural Diversity from the Perspective of Research Priorities	
Break	2:30ish
Synthesis – Criteria for Landscape Allocation, Stand and Structural Diversity	
Summary & Wrap-Up	
Adjourn	4:00