

Compiled Documents for October 22, 2010 JAG Meeting

Item/ Document #	Agenda Item
1*	8:30 Call to Order and Introductions
2»	8:35 Review and Accept Agenda and Disclosure of <i>Ex Parte</i> Communications
3»	8:45 Approve Minutes of August 27-28 and September 24, 2010 JAG Meetings
4a» 4b 4c*	8:55 Research and Monitoring Committee a) Final Draft Edits (action item) (Mike Liquori) b) Appendices: Research Planning Team Scope (action item) (Dan Porter) Research-Oriented Management Framework (action item) (Dan Porter) c) Research Governance Structure (discussion; potential action) (John Helms and Mike Liquori)
5	9:55 Economic Committee Recommendations (action item) (Jere Melo)
6*	10:30 Break
7a 7b» 7c 7d*	10:45 Landscape Committee a) Final review of Older Forest Development Area and Late Seral Development Area recommendations (action item) (Mike Jani, Linwood Gill, Dan Porter will fill in "blank box") b) Policy on Old Growth (second review; action item) (Mike Jani and Vince Taylor to provide revised statement) c) Principles Guiding JDSF Harvest Levels (action item) (Vince Taylor) d) Development of Long-Term, 40-Year Harvest Plan (action item) (Vince Taylor)
8*	11:45 Lunch Break (Please bring a lunch or plan to make a quick trip to get one.)
9	12:30 Herbicides (John Helms and Lynn Webb)
10*	1:15 Report Writing Process – Next Steps (John Helms) a) Status of work completed or in progress. b) Proposed Formats, Feedback and Next Steps
11a 11b* 11c* 11d*	2:15 Status Reports and Discussion a) Outreach Committee (action item) (John Helms and Peter Braudrick) b) Stakeholder Meetings (Russ Henly and John Helms) c) General public meeting (John Helms) d) Board of Forestry and Fire Protection Updates (John Helms and Russ Henly) --John to update full Board on status of JAG recommendations. --Board agenda item for Management Committee (11/2) and full Board (11/3) re THPs during interim between 1/9/2011 expiration of initial implementation period standards and Board action on JAG recommendations. (Potential JAG action) (John Helms and Russ Henly)
12*	2:50 Review of Concerns on Previous Consensus Vote Items: Process and Timing to Address this Issue (Steve Zuieback; John Helms; all)
13*	3:00 Break
14»	3:15 Recreation Committee Recommendations (action item) (Vince Taylor)
15*	4:15 JDSF Staff Report
16*	4:30 Public Comment
17*	4:45 Adjournment

* = No document; » = document provided separately.

Item 4b—Research Report Appendices

RESEARCH PLANNING TEAM

Purpose & Outcomes

The purpose of the Research Planning Team is to provide professional recommendations to the Jackson Advisory Group (JAG) regarding the allocation of forest structure, age and composition for the 'matrix forest' (Figure X), consistent with the guidance provided by JAG and adopted by the Board of Forestry (BoF). The allocation classes described in the management plan have been amended substantially by the JAG to increase the quantity of old forest structure and enhance habitat connectivity. These and other special status management zones (Figure X) shall remain more or less fixed; minor boundary adjustments may be made with the input and approval of JAG.

A key outcome of the research planning team's work is the presentation to JAG of at least three landscape allocation alternatives for the matrix forest that if adopted, will create, maintain or develop the forest structures needed to support three broad areas of applied research over a period of 40 years. These broad focal areas are:

- 1. Coho Salmon Recovery:** research informs efforts to restore aquatic communities, and coho salmon in particular by improving our understanding watershed process and functions as they relate to the biotic communities and forest management.
- 2. Upland Terrestrial Habitat and Forest Structural Relationships:** research informs our understanding of habitat and population processes thereby improving our ability to develop predictive models of upland animal/plant/habitat interactions for representative forest stages.
- 3. Sustainable Forest Management Practices:** research underpins the development of prevailing and novel stand development pathways that integrate sustainable timber harvesting, aesthetics, ecosystem management, timber growth and yield, forest product quality, carbon sequestration, and development of older forest conditions.

The Research Planning team shall complete its work, deliver recommendations to JAG, finalize the allocation preferred by JAG and submit its final recommendations in six months. The team will develop its detailed work plan in consultation with the Board of Forestry's Research and Science Committee, JDSF staff and to a lesser degree JAG. Once the analysis has been initiated, periodic status check-ins will be administered by the Chair of JAG and the Deputy Director of CalFire.

Scope of Responsibilities

The Research Planning Team shall accomplish the following:

- **Develop simple and conceptual allocation models:** using established and/or successful research forests allocations (e.g. H.J. Andrews Experimental Forest) as a reference point, develop conceptual allocation models for JDSF that are tailored to the

three areas of applied research *and* leverage models already established in the redwood region. The products should produce three or more (no more than five) landscape development hypotheses that can be easily understood by a non-technical audience.

- **Populate and refine the three areas of applied-research:** for the community of applied and academic scientists and environmental professionals likely to use JDSF as a research platform, describe the three areas of applied research in terms of our current scientific understanding, attainable improvements for the same and how an improved understanding may impact redwood forest management.
- **Describe and delineate allocation classes:** reconcile the landscape development hypotheses with the existing forest structure, special status management zones, growth and yield projections and harvest schedule. The goal of this analytical task is to represent management / allocation units that create, maintain or develop desired stand conditions with explicit reference to the special status management areas, forest productivity and harvest. The delineation of allocation classes should consistent with core elements of the management plan and the JAG principles articulated below.
- **Create a research agenda for the forest:** for the allocation preferred by JAG, develop a prioritized list of research questions and working hypotheses for each of the focal areas. Develop a list of qualified researchers and applied scientist, including key agency, industry and non-profit personnel potentially interested in and capable of advancing applied research topics.

Guiding Principles

The following is an excerpted list of guiding principles regarding the ultimate landscape allocation offered by the Jackson Advisory Group and a panel of scientists:

- The landscape must provide a diverse range of forest structural conditions to support the scientific mission of the forest, resulting in a wider representation of forest types along the full developmental continuum of redwood ecosystems.
- The basis for the landscape allocation will should reflect to the degree possible, a more natural temporal distribution for forest characteristics based on principles of landscape ecology. Such principles include but are not limited to (a) the integration of old forest structure and conditions into matrix forest development (b) forest gap dynamics including possibly shifting mosaics and (c) presettlement disturbance regimes.
- The landscape condition will support the needs of a well-developed, programmatic adaptive management program that clearly identifies resource objectives, performance measures, etc. and considers the economic goals of the forest.
- The landscape allocation should reflect the diverse needs of key stakeholders, including researchers, landowners, conservation groups, regulator and resource management agencies, and policy-makers.

- The resource issues having the greatest potential to drive large-scale allocations should be given highest priority (e.g. watershed analysis, terrestrial habitats, restoration, sustained productivity).
- Studies at JDSF with major commitments of land should have regional relevance; start with simple, focused hypotheses and increase the level of sophistication as knowledge develops
- Make maximal use of existing forest inventory data to test key assumptions, identify data gaps and develop working hypotheses.
- Focus recovering coho populations as quickly as possible, including active restoration focused on large woody debris augmentation, fish passage and related habitat improvements (e.g. re-establishing floodplains). Focus on limiting factors and life-cycle models as a starting point.
- In developing working hypotheses, focus on measures – anticipating the need to intensively monitor what management actions are working to achieve the goals of the forest and those that are not.
- Define riparian units using geomorphic reaches
- Considering the forest and the redwood region as a whole, answer the question – are there important research opportunities that are missed by adhering to the three focal areas?

Intended Use of Research Planning Team Products

The Jackson Advisory Group has developed and adopted Interim Silvicultural Guidelines for the forest that effectively creates one default (albeit somewhat flexible) style of management for the forest matrix. JAG members acknowledged that both the silvicultural guidelines and allocations may be modified based in part on the recommendations provided by the Research Planning Team and agree that such modifications may only take place when the necessary infrastructure and governance is established to support a financially stable and collaborative research-oriented management framework. Examples of essential milestones that enable the creation of such a framework include:

- A research plan is drafted and vetted with key stakeholders then approved by the Board of Forestry and funded annually.
- The JAG adopts a preferred allocation and develops sideboards for research based on that allocation, consistent with recommendation adopted by JAG and the BoF (e.g. how far can research-oriented silviculture deviate from the interim silvicultural guidelines).
- A governance structure is adopted that establishes the respective roles of the JAG, CalFire's newly established Research Committee, the Board of Forestry and any other organization(s) identified by CalFire as an administrative and/or governing partner.

Item 5—Economics Committee Recommendations

JDSF JAG Economics Committee

Summary of Tasks and Recommendations

August 28, 2010

Committee Members: Braudrick, Liquori, Melo, Taylor and Tilley

Staff: Jameson and Eng

Task 1: What revenue requirements are needed to meet the desired budget?

Task 2: What is the desired budget?

Recommendation: The estimate to implement the Management Plan as adopted by the BOF is \$6 million per year. The committee adopted a table that indicates the volume of timber that must be harvested to raise \$6 million per year at bid prices ranging from \$50 to \$800 per MBF. The Committee requests that the table be included as an appendix for the final JAG report.

Task 3: What is the needed budget?

Recommendation: In 2009, \$2.3 million was needed to meet the existing staff and expense levels, or about 38% of the amount needed to implement the Management Plan. In June, 2010, staff estimated that \$1.84 million would meet staff and expense levels, or about 31% anticipated for Management Plan implementation.

Task 4: Is CAL FIRE able to produce a profit-loss statement, at least quarterly, to track revenues, costs and cash flows?

Recommendations: Yes. JDSF staff presented an outline that identified cost or revenue centers for JDSF. These were timber sales, recreation, security, monitoring and research. The committee recommends adoption of these cost and revenue centers, with allocation to each based on revenue sources and time or supplies spent in the categories.

Task 5: How do we balance revenue generation and our priority goals? What can we afford?

Recommendations: (1) The committee recommends that the timber sale program will reflect the standards for silviculture consistent with landscape allocation. (2) The committee recommends that if a “Prudent Reserve” is established (see Task 6), the reserve funds could be invested in a money-market-type fund, and that interest earned should be applied to state forest programs. (3) The committee recommends a year-by-year projection of individual research project costs (to) provide a base for annual budget allocations as a line item. (4) The committee recommends that JDSF-initiated research projects use the above recommendation for annual and future budgets, and that other projects (will) be required to provide long-term projection of costs with assurance of the initiator of budget support. (5) The committee recommends that JDSF should continue to support local utilization of material produced in nearby forest and saw mill operations in order to raise net values from timber sales. (6) The committee recommends that capital support for basic infrastructure to serve all or major portions of JDSF become separate from direct operation of an individual timber sale.

Task 6: How do we leverage resources to develop the Science Agenda?

Recommendations: (1) The committee recommends that PRC Section 4799.13 may need to be amended to allow for a “Prudent Reserve”. (2) The committee recommends that a one-year reserve should be created, gradually, as market conditions allow. (3) The committee recommends that Cal Fire should obtain professional grant-writing capability as a way to gather funds (for the science program).

Additional Assignments to the Committee on August 28, 2010

1. Consider the costs and benefits of smaller timber sales.
2. Discuss with staff and provide a draft Balance Sheet format.
3. Now that landscape allocation and research programs have been further defined, investigate the revenues and costs associated with the recommendations. These need not be a definitive analysis, but an analysis on a level of magnitude.

Item 7a. Comparison of Matrix, Older Forest Development Areas and Late Seral Development Guidelines

	Matrix	OFDA	LSD
Goal	Develop a stand component of large, old trees that will be used for harvesting valuable timber. Maintain and increase timber revenues over time. Recognize and plan for aesthetic values.	Manage for structural characteristics of older forest, including large diameter trees, snags, down wood, multiple canopy, and high level of structural diversity.	Manage for structural characteristics of older, mature forest, which include large old trees (greater than 150 years), large snags, large down logs, deformed trees, multiple canopy layers, and a high level of within-stand variability and both vertical and horizontal structural diversity.
Research and Demonstration	Encourage research and demonstration throughout Matrix area	Research and demonstration which follows goals of OFDA	Research and demonstration which follows goals of LSD
Silviculture	All methods encouraged under research and demonstration. Outside of research and demonstration , single tree and group selection, commercial thinning.	Single tree and group selection, commercial thinning.	Single Tree Selection
Emphasis	Promote growth of larger and better phenotypes while maintaining diversity. Growing a component of trees to their maximum size that can be feasible harvested without undue environmental impact to the site.	Short term: Reduce competition between co-dominant crown classes. Long term: Retain trees based on structural characteristics and contribution to horizontal and vertical diversity	Accelerate growth of dominant and co-dominant trees. Retain and develop elements of late-seral conditions such as deformity and decadence. Retain trees of various degrees of vigor to maintain dead-wood elements recruitment. Develop a complex canopy structure.
Old Growth	Retain Old-growth trees as defined in the JDSF Management Plan	Retain Old-growth trees as defined in the JDSF Management Plan	Retain Old-growth trees as defined in the JDSF Management Plan
Large tree Recruitment	Where no old-growth trees are present, retain a component of dominant trees.	Retain trees over 40"dbh and half of trees over 30"dbh if less than 10-20% of basal area is comprised of trees 40"dbh or greater. (Based on site capacity, exceptions allowed.)	Add language re when harvesting can cease.....
Regeneration	Promote regeneration for future harvest. When not met through single tree selection , allows for openings up to 2 acres.	Promote regeneration for future harvest. When not met through single tree election, allows for openings up to 2 acres.	Minimize regeneration to natural levels in late-seral stands. Cutting of entire clumps to be used sparingly to mimic natural disturbance.

Item 7c—Principles Guiding JDSF Harvest Levels, Vince Taylor Proposal

DRAFT

Principles Guiding JDSF Harvest Levels

1. Calculation of sustainable Harvest Levels

- Peer review of inventory estimating process
- Review of how Option A estimates effects of constraints on harvests within special concern areas, WLPZs, other.
- Review of effects on harvest of OFDA and LS areas.
- How does favoring growing larger trees in the Matrix affect potential harvests?
- Other?

2. Policy decision on what percent of sustainable harvest level should be cut?

- Cutting all of sustainable harvest implies no growth in inventory

What should be the growth in inventory?

- Harvests in LS areas will decrease over time. How does this affect appropriate harvest levels within the Matrix?
- Other?

3. What should be the relation between JDSF budget and harvest levels?

- In the near term, should harvest levels exceed the amount needed to fund projected JDSF expenses? If so, by how much?
 - a. What are currently projected JDSF revenues and expenses for FY 2011?
 - b. If harvest levels can exceed JDSF expenses, when the expenses are below the desired level, it lessens the incentive to expand JDSF capabilities to the desired level.
- In the longer term, how should an excess of allowable harvests above JDSF revenue requirements be apportioned?
 - a. To fund other state forests
 - b. To allow shifts in forest management that reduce the level of sustainable harvests:
 - i. Lower harvests to increase stand volumes and tree ages
 - ii. Increase Late Seral and OFDA acreage
 - iii. Increase Reserves
- Other?

TIMBER SALE SIZE: Smaller vs. Larger

Forest Tilley

Disadvantages

Smaller sales take almost, if not as much, paper work as larger sales.

They take as much time in the review process as a larger sale.

Administration may take as much time depending on complexity.

May require more dispersement and therefore more conflict with recreational or other uses of the forest.

May be in conflict with other sales depending on purchaser, scheduled time of operation, road use etc.

May require more (greater number) to meet financial goals.

Advantages

May appeal to more bidders.

May allow for more flexibility.

May be less field time in preparation.

May allow for more site specificity.

May be best suited for implementation of experimental projects.

Final analysis

All of the above factors should be taken into consideration when planning and preparing timber sales. Sale size should be tailored to the site specific objectives of the sale and limited by impending conflicts with other objectives. It might be advisable to plan a range in size, where possible, with the overall goal of meeting financial and management needs with the least disturbance and conflict in relation to other approved forest uses.

Ideally there should probably be a minimum of two per year of differing size or volume the sum total designed to cover annual expenses plus any additional predicted costs of improvements or D&E projects proposed.

In addition, as we have discussed previously, it would be prudent and desirable to build a reserve fund to cover at least one, preferably two years, operating budget.

Item 9. Herbicides

From JDSF Management Plan

Page 10:

Use of Herbicides

Chapter 3 describes in detail the substantial measures that the Management Plan requires to restrict the use of herbicides. There are four management situations where herbicides have been used in the past at JDSF. The Management Plan explicitly limits two past management uses of herbicides (road maintenance related treatment of native vegetation and reforestation treatments that target native shrubs, (see Chapter 3) and significantly limits use for the remaining two management purposes (control of hardwoods to adjust conifer/hardwood stocking rations and control of invasive weed species as part of an Integrated Weed Management program). A total ban on herbicide use would compromise the research and demonstration value of the Forest and could result in adverse environmental consequences, such as expansion of the area, on and off of the Forest, occupied by invasive species. Herbicides and other vegetation control methods may be used in individual research and demonstrations that are scientifically designed.

In an operational context, herbicides will be used only when no other effective and feasible control methods are found after consideration of the scope of the problem, opportunities to effectively manage the situation, and available alternatives and their potential effectiveness, costs, and risks. JDSF staff will seek opportunities to reduce risk by selecting appropriate herbicide formulations and application techniques, as well as taking additional precautions.

Pages 28-29: from Public Concerns Regarding the Management of JDSF

Herbicides

The Draft Forest Management Plan noted that there have been requests from the public as well as the Citizens Advisory Committee that the use of herbicides on the forest be curtailed and alternatives to their use be evaluated. It also noted that a few of the people who commented requested the continuation or increase in herbicide use to control invasive weeds on the Forest. The recent comments on the December 2005 DEIR also contained a range of public concerns about herbicide use. Some individuals and some groups requested a cessation of all herbicide use. A few comments received have requested the continuation or increase in the use of herbicides to control exotic species on the Forest.

In Mendocino County, herbicides are not used for roadside vegetation control on state or county roads. County-wide, forestry use of herbicides has declined from 1.2% of total county pesticide use in 2002 to 0.4% of total pesticide use in 2004. JDSF use has declined as well from the 1990s. A variety of techniques are used on the Forest to control invasive weeds.

A total ban on herbicide use may compromise the broad research and demonstration value of the Forest and could result in environmental and economic consequences. New information on alternatives to herbicides that are relevant to the Forest has become available in the eight years since the Citizen's Advisory Committee's Report. This Management Plan adopts strict limits on the use of herbicides. These limits are detailed in Chapter 3.

Page 51: from Current Forest Management

Use of Herbicides

Herbicides have been used on JDSF for control of both native and non-native species. Very little herbicide use occurred prior to the late 1980s. After that time, herbicides were periodically utilized within even-aged harvest units to control both native and non-native species that presented a significant level of competition to conifer regeneration. This treatment was generally a hand spray application of herbicide to

control native hardwoods, native brush, and invasives such as French broom and Jubata grass. Herbicides were also utilized to control and clear roadsides of invasive species, including French broom and Jubata grass. This treatment occurred primarily during the early to mid-1990s, and involved hand spraying of herbicides directly on target plants. Some native brush species, such as ceanothus were also controlled during this treatment process.

Over the past five years, usage of herbicides has been minimal. This low level is reflective of the cautious use of herbicides on the Forest, as well as the generally low level of overall management activity on the Forest during this period.

Page 85: from Timber Sales

Adjusting imbalance in conifer/hardwood stocking levels by utilizing herbicides will be limited to specific reforestation situations on the east side of the Forest. In specific areas toward the east end of the forest, high tanoak stocking levels are capable of preventing native conifer establishment and growth. Herbicides may be used to decrease native hardwood stocking levels only when other options are prohibitively expensive, dramatically increase fuel loading, are overly damaging to conifer regeneration, or are not likely to be successful.

Pages 93-95: from Invasive Weed Species

IWM [invasive weed management] is a prevention-oriented, ecologically based approach to managing weeds cost-effectively with minimal risk to people and the environment. IWM emphasizes control of the environmental conditions that cause or promote weed infestations. IWM includes direct suppression of existing weeds as well as modifying environmental conditions to reduce their suitability for weeds by encouraging the weeds' natural enemies or increasing competition for the scarce resources they require. IWM may make use of the benefits of cultural, mechanical, chemical (herbicides), thermal (fire), biological agents, or other techniques to reduce invasive weed populations and to promote forest health. A premise of IWM is that the most effective means of controlling weeds is to prevent their expansion into new areas while removing small, isolated infestations before they become problematic...

- Staff will utilize current information pertinent to each specific weed management issue prior to selecting and implementing control methods. To the extent feasible, avoid or minimize the use of chemical (herbicides) weed management tools. See section on herbicides for more detail...

Herbicides:

CAL FIRE and the BOF recognize there is public controversy regarding herbicide use. A total ban on herbicide use would compromise research opportunities and the broad demonstration value of the Forest and could result in adverse environmental and economic consequences. JDSF staff will apply the following limitations to potential herbicide use:

- In an operational context, herbicides will be used only when no other effective and feasible control methods are found after consideration of the scope of the problem, opportunities to effectively manage the situation, and available alternatives and their potential effectiveness, costs, and risks.
- No herbicide will be used unless it is integral to long-term, ecological based management. Projects will be proactive rather than reactive. These considerations will limit and focus any herbicide use. Long-term management will often integrate a variety of treatment techniques.
- Public and environmental safety is a priority. When herbicide use is indicated, JDSF staff will reduce risk by selecting appropriate herbicide formulations and application techniques, as well as taking additional precautions.
- Recognize that some forest visitors may experience negative aesthetic reaction to dead treated plants, even if they are invasive weeds. Herbicide use will be evaluated for aesthetics where treatments could have this potential effect.

An effectiveness and feasibility analysis is required for operational use of herbicides. Herbicide use will be

limited as part of an integrated pest management program. The Department will strive for effective management and control of invasive species to protect and maintain rare native plants and a natural mix of native species and plant communities. Limited use of herbicides will be use considered with a mix of mechanical and other vegetative treatments to promote natural levels of native hardwoods.

This plan limits the types of vegetation management that would be considered for herbicide use. Herbicide use will not be permitted for purposes of treatment of native species for road maintenance purposes, unless needed for a specific fire prevention project. Further restrictions on the use of herbicides are in place when used for control of hardwoods to adjust conifer/hardwood stocking rations and control of invasive weed species as part of an Integrated Weed Management program.

Additional guidance for potential consideration of herbicides use for restoration of historic conifer/hardwood ratios or for reforestation has been discussed in this chapter under Timber Sales.

Pages 259-260: from Mitigations and Management measures

Herbicides

Management Measures for the Use of Herbicides

JDSF staff will adopt the following limitations to potential herbicide use:

In an operational context, herbicides will be used only when no other effective and feasible control methods are found after consideration of the scope of the problem, opportunities to effectively manage the situation, and available alternatives and their potential effectiveness, costs, and risks.

An effectiveness and feasibility analysis is required for operational use of herbicides.

No herbicide will be used unless it is integral to long-term, ecological based management.

Public and Environmental Safety

Public and environmental safety is a priority. When herbicide use is indicated, JDSF staff will reduce risk by selecting appropriate herbicide formulations and application techniques as well as taking additional precautions.

Aesthetic Consideration

Herbicide use will be evaluated for aesthetic effects where forest visitors could have negative aesthetic reaction to treatments.

Roadside Vegetation

Herbicides will not be used for roadside vegetation clearance to treat native vegetation, unless there are significant over-riding management concerns specific to the area, such as fire prevention.

Conifer/Hardwood Stocking Levels

Adjusting imbalance in conifer/hardwood stocking levels by utilizing herbicides will be limited to specific reforestation situations on the east side of the Forest. In specific areas toward the east end of the forest, high tanoak stocking levels are capable of preventing native conifer establishment and growth. Herbicides may be used to decrease native hardwood stocking levels only when other options: are prohibitively expensive, dramatically increase fuel loading, are overly damaging to conifer regeneration, or are not likely to be successful.

Page 285:

Mitigation Measure 17

Consult with interested Tribes to identify important traditional plant collecting areas. Minimize or avoid pesticide use in traditional collection areas where such action will reduce adverse impact on plant resources traditionally utilized by Native Americans. Develop a Native American gathering permit policy where such gathering can be permitted by the Forest Manager, and take steps to ensure that gathering does not take place in any areas that may have been treated with herbicides.

Item 11a—Outreach Committee Recommendations

Outreach Committee DRAFT Recommendations Peter and John, Sept 6, 2010

The JDSF Management Plan, in accordance with the Public Resource Code and Board policy, contains many excellent provisions to enhance outreach and education on the Forest and provide regular information to the local community. These include:

- Staff – three positions in the “research, education, and outreach program” (p. 55)
- Two demonstration areas – one on the west-side and one on the east-side of the Forest (p. 71)
- New maps, posters, and displays (p. 118)
- Educational information to help prevent human-caused fires (p. 122)
- Tours – for schools, landowners, scientists, professional groups (p. 143)
- Data bank and website – use the internet to make data, publications, and other information available to the public (p. 143-4)
- Newsletters – minimum of two per year (p. 144)
- Interpretive Center – either on Highway 20 or at the proposed Noyo Center for the Environment in Fort Bragg. The Center would provide a conference center, classrooms, library, and internet services. Volunteer docents would be supported (p. 146-7)

JAG strongly supports all these provisions.

Recommendations

In addition we wish to convey that, regardless of the quality of management, research, and demonstration on the Forest, JDSF will only gain strong public support and recognition if: a) its programs and activities are communicated through a high quality and effective outreach and education program, and b) if the public becomes active in programs on their Forest. Therefore, in addition to supporting provisions within the Plan, JAG strongly recommends:

1. Staffing, Funding, and Facilities – should be provided at the levels necessary to ensure the development of a high-quality and effective outreach and public education program. This program should enable the public at large to become actively involved in and aware of all programs related to understanding redwood forest ecosystem dynamics and the management, research, and demonstration programs on the Forest.
2. Schools and Colleges – should be encouraged through grants and technical assistance to establish study areas within existing and proposed allocation areas to enable successive classes to gather time-series data on ecosystem dynamics and management. Potentially interested local schools and colleges include: Mendocino HS, Fort Bragg HS, Sonoma State University, Humboldt State University, College of the Redwoods, and Mendocino Community College in Ukiah

3. A Collaborative Outreach Consortium – should be established among interested parties having complementary outreach and education interests, goals, and programs. This would build synergisms, leverage opportunities and overall effectiveness, and avoid duplication. Potentially interested groups include:
 - JDSF Recreation Users Task Force
 - Redwood Forest Foundation, Inc.
 - Woodlands
 - Pacific Environmental Education Program (MacKerricher State Park)
 - Parks
 - University Cooperative Extension

4. The Proposed Website – should be imaginative, high-quality, and interactive and become the “go-to” site for students and public interested in understanding the ecology, management, and policy development of redwood ecosystems as well as providing information on all programs, activities, and publications on JDSF.