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16 UNITED STATES DISTRICT COURT
17 FOR THE EASTERN DISTRICT OF CALIFORNIA
18 SACRAMENTO DIVISION

19 SIERRA NEVADA FOREST PROTECTION)
20 CAMPAIGN, *et al.*,)

21 Plaintiffs,)

22 vs.)

23 UNITED STATES FOREST SERVICE, *et al.*,)

24 Defendants,)

25 and)

26 QUINCY LIBRARY GROUP, an)
27 unincorporated citizens group; and)
28 PLUMAS COUNTY,)

Intervenors/Defendants.)

Case No. Civ. S-04-2023 LKK/PAN

DECLARATION OF DON C.ERMAN IN
SUPPORT OF PLAINTIFFS' MOTION FOR
SUMMARY JUDGMENT

Date: April 5, 2005

Time: 1:30 p.m.

Judge: Hon. Lawrence K. Karlton

1 I, Don C. Erman, declare as follows:
2

3 1. My name is Don C. Erman, Professor Emeritus of the University of California.
4 My academic background includes a B.A. from DePauw University in zoology, an M.S. from
5 Purdue University in wildlife management and a Ph.D. in freshwater ecology from Utah State
6 University. I was on the faculty (Assistant, Associate and Full Professor) of the Department of
7 Forestry and Resource Management at UC Berkeley from 1969 to 1993 at which time I
8 transferred to U.C. Davis and the Department of Wildlife, Fish, and Conservation Biology. I was
9 Director of the U.C. Centers for Water and Wildland Resources from 1993 until retirement in
10 1998. During this same period I also served on the Sierra Nevada Ecosystem Project including
11 service as the Science Team Leader. I have published in several ecological areas, primarily
12 freshwater ecology with emphasis on the effects of land use on aquatic systems.
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14

15 2. I am writing in regard to the Meadow Valley group selection and DFPZ project on
16 the Plumas National Forest. The Forest Service contends in their Response Brief that the Sierra
17 Nevada Ecosystem Project Report "unambiguously" states that historic stand structure is restored
18 by group selection logging, citing the Weatherspoon (1996) article in Volume II of SNEP. The
19 Forest Service also asserts that group selection logging is a scientifically-based tool to achieve a
20 more fire-resistant and fire-resilient forest. Some clarification of this is in order. First, as
21 described in the introductory sections of SNEP, Volumes II and III of the SNEP report included
22 articles representing diverse and sometimes opposing views on forest management and ecology.
23 Some of these articles were policy-oriented and some were empirical scientific studies.
24 Weatherspoon's 1996 article in Volume II of SNEP is an example of the former category.
25 Among other things, Weatherspoon (1996) advocated group selection logging as a tool to mimic
26 the role of fire in pre-settlement forests. The consensus scientific conclusions of SNEP are found
27
28

1 in the Summary, the overview chapter preceding the various chapters on fire and Volume I.

2 These include the following consensus conclusions: a) logging has increased fire severity more
3 than any other recent human activity; and b) there is no scientific evidence that logging (group
4 selection or other methods) mimics the natural process of fire.

5
6 3. The basis for small group selection as an approach to making the forest more fire-
7 resilient has no foundation in research. It was a hypothesis. The density of group selection units
8 proposed in this project (743 acres of group selection interspersed in 4,000 to 5,000 acres of
9 thinning units) suggests very close spacing and a goal of maximizing timber yield. The current
10 condition of the many of the stands (low surface fuels, little undergrowth/ladder fuels) suggests
11 that the driving force for the stand treatment is timber volume and diameter--not fuels
12 management or reducing fire hazards.

13
14 4. In stands that have already been fire-treated through prescribed fire or thinning of
15 undergrowth, leaving the slash on the ground largely cancels the benefits of earlier fire treatment.
16 The rationale for leaving large quantities of timber-harvest generated fuel for decomposition or
17 "later" treatment is surely misguided.

18
19 5. The creation of small holes, or gaps, in the forest have been argued as a method of
20 returning to "more natural" conditions. This is based on the idea that fire restrictions over the
21 past (and large scale logging) have tended to create larger areas of more uniform structure. It's a
22 nice generality but the pride of foresters used to be in examining the reality of on-the-ground
23 conditions rather than applying general theory. The "holes" could also be created through
24 reintroduction of fire--managed or prescribed. The advantages of using fire, of course, are that
25 the size of holes is quite variable, the residual stand structure is variable, and combustion is the
26 driving force rather than tractors. Creating holes by hand does nothing in terms of restoring fire
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1 and its substantial long-term benefits. By not even requiring the prompt treatment of slash, the
2 Forest Service seems to be once again denying its understanding of the past.

3 6. Among the consensus scientific findings of SNEP was the conclusion that
4 retaining the larger fire-resistant trees that comprise the overstory was wise, and that thinning
5 should be directed toward dense pockets of small diameter trees. I do not think that group
6 selection is a scientifically-defensible tactic for reducing fire risk, or creating more fire-resistant
7 or fire-resilient forests. This is especially true in places like the Meadow Valley area, where
8 there are very few trees over 30 inches in diameter. In such areas, group selection with a 30-inch
9 diameter limit is nothing more than an overstory removal, and few if any trees will remain in
10 groups. This is contrary to SNEP's recommendation to retain the overstory structure.

11 7. Finally, the Weatherspoon (1996) article itself did not recommend removal of
12 overstory structure and, in fact, noted that such removal could increase potential for severe fire in
13 the future. In addition, Weatherspoon (1996) did not recommend group selection for higher
14 elevation mixed conifer forests naturally dominated by white fir, or for red fir forests, which are
15 believed to have had more varied fire regimes historically. Thus, group selection units located
16 on upper-elevation slopes in the Meadow Valley project are inconsistent with this view.

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20
21 Pursuant to 28 U.S.C. §1746, I declare under penalty of perjury that the foregoing is true
22 and correct to the best of my knowledge. Dated this _____ day of February, 2005.

23
24
25 _____
26 DON C. ERMAN

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25 DON C. ERMAN
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DECLARATION OF DON C. ERMAN—Civ. S-04-2023 LKK/PAN

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