

HEADWATERS FOREST ACT

HEARING
BEFORE THE
SUBCOMMITTEE ON
NATIONAL PARKS, FORESTS AND PUBLIC LANDS
OF THE
COMMITTEE ON
NATURAL RESOURCES
HOUSE OF REPRESENTATIVES
ONE HUNDRED THIRD CONGRESS

FIRST SESSION

ON

H.R 2866

TO PROVIDE FOR THE SOUND MANAGEMENT AND PROTECTION OF
REDWOOD FOREST AREAS IN HUMBOLDT COUNTY, CALIFORNIA, BY
ADDING CERTAIN LANDS AND WATERS TO THE SIX RIVERS NA-
TIONAL FOREST AND BY INCLUDING A PORTION OF SUCH LANDS IN
THE NATIONAL WILDERNESS PRESERVATION SYSTEM

HEARING HELD IN WASHINGTON, DC
OCTOBER 12, 1993

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H.R. 2866, TO PROVIDE FOR THE SOUND MANAGEMENT AND PROTECTION OF REDWOOD FOREST AREAS IN HUMBOLDT COUNTY, CA, BY ADDING CERTAIN LANDS AND WATERS TO THE SIX RIVERS NATIONAL FOREST AND BY INCLUDING A PORTION OF SUCH LANDS IN THE NATIONAL WILDERNESS PRESERVATION SYSTEM

TUESDAY, OCTOBER 12, 1993

HOUSE OF REPRESENTATIVES,
COMMITTEE ON NATURAL RESOURCES,
SUBCOMMITTEE ON NATIONAL PARKS, FORESTS
AND PUBLIC LANDS,
Washington, DC.

The subcommittee met, pursuant to call, at 10:08 a.m. in room 1324, Longworth House Office Building, Hon. Bruce F. Vento (chair of the subcommittee) presiding.

Mr. VENTO. The Subcommittee on National Parks, Forests and Public Lands will be in order. This morning we are meeting to receive testimony on H.R. 2866, the Headwaters Forest Act, introduced by Congressmen Hamburg and Stark of California, and co-sponsored by a number of other Members, including myself.

[The bill, H.R. 2866, follows:]

103D CONGRESS
1ST SESSION

H. R. 2866

To provide for the sound management and protection of Redwood forest areas in Humboldt County, California, by adding certain lands and waters to the Six Rivers National Forest and by including a portion of such lands in the national wilderness preservation system

IN THE HOUSE OF REPRESENTATIVES

AUGUST 4, 1993

Mr. HAMBURG (for himself, Mr. STARK, Mr. STUDDS, Mr. GEPHARDT, Mr. MILLER of California, Mr. WAXMAN, Mr. DEFazio, Ms. WOOLSEY, Mrs. SCHROEDER, Mr. MATSUI, Mr. MINETA, Mr. BRYANT, Mr. VENTO, Mr. RAVENEL, Mr. ABERCROMBIE, Mr. RICHARDSON, Mr. SMITH of Iowa, Ms. FURSE, Mr. EDWARDS of California, Mr. SABO, Mr. BROWN of Ohio, Mr. POSHARD, Miss COLLINS of Michigan, Mr. ACKERMAN, Mr. DELUMS, Mr. ANDREWS of Maine, Mr. OLVER, Ms. MOLINARI, Mr. MARKEY, Mr. BARRETT of Wisconsin, Mr. BEILENSON, Mr. BERMAN, Mr. BISHOP, Mrs. MINK, Mr. BLACKWELL, Mr. SERRANO, Mr. BONIOR, Mr. WASHINGTON, Mr. BROWN of California, Mr. JACOBS, Mr. COLEMAN, Mr. MFUME, Ms. WATERS, Mr. WATT, Mr. TORRES, Mrs. CLAYTON, Mr. RAHALL, Mr. CLYBURN, Mr. DIXON, Mrs. COLLINS of Illinois, Mr. KOPETSKI, Mr. LANCASTER, Mr. ENGEL, Ms. SHEPHERD, Mr. UNDERWOOD, Ms. ESHOO, Mr. INSLEE, Mr. POMEROY, Ms. ROYBAL-AL-LARD, Mr. JOHNSON of South Dakota, Mr. EVANS, Mr. LIPINSKI, Mr. FALEOMAVAEGA, Mr. MORAN, Mr. OWENS, Mr. PASTOR, Mr. FARR of California, Mr. FILNER, Mr. HINCHEY, Mr. SCHUMER, Mr. FRANK of Massachusetts, Mr. LANTOS, Mr. MARTINEZ, Mr. MCHALE, Mrs. MEEK, Ms. PELOSI, Mrs. UNSOELD, Ms. VELÁZQUEZ, Mr. ROMERO-BARCELÓ, Mr. SANDERS, and Mr. SHARP) introduced the following bill; which was referred jointly to the Committees on Natural Resources and Agriculture

A BILL

To provide for the sound management and protection of Redwood forest areas in Humboldt County, California,

by adding certain lands and waters to the Six Rivers National Forest and by including a portion of such lands in the national wilderness preservation system

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Headwaters Forest
5 Act”.

6 **SEC. 2. FINDINGS AND PURPOSE.**

7 (a) FINDINGS.—The Congress finds that:

8 (1) Redwoods are a significant national symbol
9 and a defining symbol of the State of California.

10 (2) Old growth redwood trees are a unique and
11 irreplaceable natural resource.

12 (3) Most of the Nation’s old growth forests
13 have been cut. Less than 5 percent of the original
14 2,000,000 acre Coast redwoods remain standing.
15 The groves that are left are crucial to maintain habi-
16 tat needed for survival of old-growth dependent spe-
17 cies. The Headwaters Forest, for example, is home
18 to one of California’s three largest population of
19 marbled murrelets, rare sea birds that nest only in
20 coastal old growth trees; the Northern Spotted Owl;
21 and native salmon stocks that spawn in the Forest’s
22 creeks.

1 (4) The remaining unprotected stands of old
2 growth forests and old growth redwoods are under
3 immediate threat of being harvested without regard
4 to their ecological importance and without following
5 Federal timber harvest guidelines.

6 (5) Significant amounts of old growth redwoods
7 in the proposed National Forest additions are being
8 cut at a pace that is based on paying high interest
9 rates on poor quality bonds and not at a pace that
10 is based on sound forest management practices.

11 (b) PURPOSE.—The purpose of this Act is to provide
12 for the sound management and protection of old growth
13 Redwood forest areas in Humboldt County, California,
14 and to preserve and enhance habitat for the marbled
15 murrelet, Northern Spotted owl, native salmon stocks, and
16 other old growth forest dependent species, by adding cer-
17 tain lands and waters to the Six Rivers National Forest
18 and by including a portion of such lands in the national
19 wilderness preservation system.

20 **SEC. 3. ADDITION TO SIX RIVERS NATIONAL FOREST.**

21 (a) EXTENSION OF BOUNDARIES.—The exterior
22 boundaries of the Six Rivers National Forest in the State
23 of California are hereby extended to include the area com-
24 prising approximately 44,000 acres, as generally depicted
25 on the map entitled "Six Rivers National Forest Addition

1 proposed", dated June 1993. Such area shall hereinafter
2 in this Act be referred to as the Six Rivers National Forest
3 Addition. The map shall be on file and available for public
4 inspection in the offices of the Forest Supervisor, Six Riv-
5 ers National Forest, and in the offices of the Chief of the
6 Forest Service, Department of Agriculture.

7 (b) ACQUISITION OF LAND.—(1) The Secretary shall
8 acquire lands or interests in land within the exterior
9 boundaries of the Six Rivers National Forest Addition by
10 donation, by purchase with donated or appropriated funds,
11 or by exchange for other lands owned by any department,
12 agency, or instrumentality of the United States. When any
13 tract of land is only partly within such boundaries, the
14 Secretary may acquire all or any portion of the land out-
15 side of such boundaries in order to minimize the payment
16 of severance costs. Land so acquired outside of the bound-
17 aries may be exchanged by the Secretary for non-Federal
18 lands within the boundaries, and any land so acquired and
19 not utilized for exchange shall be reported to the General
20 Services Administration for disposal under the Federal
21 Property and Administrative Services Act of 1949 (63
22 Stat. 377). Lands, and interests in lands, within the
23 boundaries of the Headwaters Forest which are owned by
24 the State of California or any political subdivision thereof,
25 may be acquired only by donation or exchange.

1 (2) The Secretary is authorized to accept from the
2 State of California funds to cover the cost of acquiring
3 lands within the Headwaters Forest, and notwithstanding
4 any other provision of law, the Secretary may retain and
5 expend such funds for purposes of such acquisition. Such
6 funds shall be available for such purposes without further
7 appropriation and without fiscal year limitation.

8 (c) LAND ACQUISITION PLAN.—The Secretary shall
9 develop and implement, within 6 months after the enact-
10 ment of this Act, a land acquisition plan which contains
11 specific provisions addressing how and when lands will be
12 acquired under subsection (b). The plan shall give priority
13 first to the acquisition of lands within the boundaries of
14 the Headwaters Forest Wilderness identified on the map
15 referred to in section 3(a). The Secretary shall submit cop-
16 ies of such plan to the Committee on Natural Resources,
17 the Committee on Agriculture, and the Committee on Ap-
18 propriations of the United States House of Representa-
19 tives and to the Committee on Energy and Commerce, the
20 Committee on Agriculture, Nutrition, and Forestry and
21 the Committee on Appropriations of the United States
22 Senate.

23 (d) AUTHORIZATION OF APPROPRIATIONS.—There
24 are hereby authorized to be appropriated such sums as
25 may be necessary to carry out the purposes of this Act.

1 **SEC. 4. WILDERNESS AREAS.**

2 (a) DESIGNATION.—In furtherance of the purposes of
3 the Wilderness Act (16 U.S.C. 1131–1136), lands in the
4 State of California acquired under section 3 of this Act
5 which are within the areas generally depicted on the map
6 referred to in section 3 as the “Headwaters Forest Wilder-
7 ness (Proposed)” shall be designated as wilderness and
8 therefore as a component of the National Wilderness Pres-
9 ervation System, effective upon acquisition under section
10 3. Such lands shall be known as the Headwaters Forest
11 Wilderness.

12 (b) MAP AND DESCRIPTION.—As soon as practicable
13 after the inclusion of any lands in the Headwaters Forest
14 Wilderness, the Secretary shall file a map and a boundary
15 description of the area so included with the Committee on
16 Natural Resources of the House of Representatives and
17 with the Committee on Energy and Natural Resources of
18 the United States Senate. The Secretary may correct cleri-
19 cal and typographical errors in such boundary description
20 and such map. Each such map and boundary description
21 shall be on file and available for public inspection in the
22 Office of the Chief of the Forest Service, United States
23 Department of Agriculture.

24 (c) BUFFER ZONES NOT INTENDED.—The Congress
25 does not intend that designation of any area as wilderness
26 under this section lead to the creation of protective perim-

1 eters or buffer zones around the wilderness area. The fact
2 that nonwilderness activities or uses can be seen or heard
3 from areas within a wilderness shall not, of itself, preclude
4 such activities or uses up to the boundary of the wilder-
5 ness area.

6 (d) STATE AUTHORITY OVER FISH AND WILDLIFE.—

7 As provided in section 4(d)(8) of the Wilderness Act, noth-
8 ing in this Act shall be construed as affecting the jurisdic-
9 tion or responsibilities of the State of California with re-
10 spect to wildlife and fish in any areas designated by this
11 Act as wilderness.

12 **SEC. 5. ADMINISTRATION.**

13 (a) MANAGEMENT PLAN.—The Secretary shall de-
14 velop, within 1 year after the enactment of this Act, a
15 comprehensive management plan detailing measures for
16 the preservation of the existing old growth redwood
17 ecosystems in the Six Rivers National Forest Addition, in-
18 cluding but not limited to each of the following:

19 (1) Prohibition of sale of timber from lands
20 within the old growth redwood groves as depicted
21 generally on the map referred to in section 3(a).
22 Timber sales in other areas shall be allowed consist-
23 ent with the purposes of this Act and other applica-
24 ble Federal laws and regulations.

1 (2) Measures to restore lands affected by pre-
2 vious timber harvests to mitigate watershed degrada-
3 tion and impairment of habitat for the marbled
4 murrelet, spotted owl, native salmon stocks, and
5 other old-growth forest dependent species (“Restora-
6 tion Measures”).

7 The Management Plan shall be reviewed and revised every
8 time the Six Rivers National Forest Land and Resource
9 Management plan is revised or more frequently as nec-
10 essary to meet the purposes of this Act.

11 (b) APPLICABLE LAWS AND POLICIES.—(1) The Sec-
12 retary, acting through the Chief of the Forest Service,
13 shall administer the lands acquired under section 3(b) in
14 accordance with the Management Plan, this Act, and with
15 the other laws, rules, and regulations applicable to such
16 national forest. In addition, subject to valid existing
17 rights, any lands acquired and designated as wilderness
18 under section 4(a) shall also be administered in accord-
19 ance with the provisions of the Wilderness Act governing
20 areas designated by that Act as wilderness, except that
21 any reference in such provisions to the effective date of
22 the Wilderness Act (or any similar reference) shall be
23 deemed to be a reference to the date of acquisition of such
24 lands under section 3 of this Act.

1 (2) To the maximum extent practicable, all work to
2 implement the management plan's Restoration Measures
3 shall be performed by unemployed forest and timber work-
4 ers, unemployed commercial fishermen, or other unem-
5 ployed persons whose livelihood depends on fishery and
6 timber resources.

7 (3) In order to facilitate management, the Secretary,
8 acting through the Chief of the Forest Service may enter
9 into agreements with the State of California for the man-
10 agement of lands owned by the State or purchased with
11 State assistance.

12 **SEC. 6. PAYMENTS TO LOCAL GOVERNMENT.**

13 (a) PILT.—Solely for purposes of payments made
14 pursuant to chapter 69 of title 31 of the United States
15 Code, all lands added to the Six Rivers National Forest
16 by this Act shall be deemed to have been acquired for the
17 purposes specified in section 6904(a) of such title 31.

18 (b) 10-YEAR PAYMENT.—(1) Subject to annual ap-
19 propriations and the provisions of subsection (c), for a pe-
20 riod of 10 years after acquisition by the United States of
21 lands added to the Six Rivers National Forest by this Act,
22 the Secretary, with respect to such acquired lands, shall
23 make annual payments to Humboldt County in the State
24 of California in an amount equal to the State of California
25 Timber Yield Tax revenues payable under the California

1 Revenue and Taxation Code (sec. 38101 et seq.) in effect
2 as of the date of enactment of this Act that would have
3 been paid with respect to such lands if the lands had not
4 been acquired by the United States, as determined by the
5 Secretary pursuant to this subsection.

6 (2) The Secretary shall determine the amounts to be
7 paid pursuant to paragraph (1) of this subsection based
8 on an assessment of a variety of factors including, but not
9 limited to—

10 (A) timber actually sold in the subject year
11 from comparable commercial forest lands of similar
12 soil type, slope and such determination of appro-
13 priate timber harvest levels,

14 (B) comparable timber size class, age, and qual-
15 ity,

16 (C) market conditions,

17 (D) all applicable Federal, State, and local laws
18 and regulations, and

19 (E) the goal of sustainable, even-flow harvest or
20 renewable timber resources.

21 (c) CALIFORNIA TIMBER YIELD TAX.—The amount
22 of State of California Timber Yield Tax payments paid
23 to Humboldt County in any year pursuant to the laws of
24 California for timber sold from lands acquired under this

1 Act shall be deducted from the sums to be paid to Hum-
2 boldt County in that year under subsection (b).

3 (d) 25-PERCENT FUND.—Amounts paid under sub-
4 section (b) with respect to any land in any year shall be
5 reduced by any amounts paid under the Act of May 23,
6 1908 (16 U.S.C. 500) which are attributable to sales from
7 the same lands in that year.

8 **SEC. 7. FOREST STUDY.**

9 The Secretary shall study the lands within the area
10 comprising approximately 13,620 acres and generally de-
11 picted as “Study Area” on the map referred to in section
12 3(a). The study shall analyze the area’s potential to be
13 added to the Headwaters Forest and shall identify the nat-
14 ural resources of the area including the location of old
15 growth forests, old growth redwood stands, threatened and
16 endangered species habitat and populations including the
17 northern spotted owl and marbled murrelet, commercial
18 timber volume, recreational opportunities, wildlife and
19 fish, watershed management, and the cost of acquiring the
20 land. Within one year of the date of enactment of this
21 Act, the Secretary shall submit a report with the findings
22 of the study to the Committees on Natural Resources, and
23 Agriculture of the United States House of Representatives
24 and the Committees on Energy and Natural Resources,

13

12

1 and Agriculture, Nutrition, and Forestry of the United
2 States Senate.

○

STATEMENT OF HON. BRUCE F. VENTO

Mr. VENTO. H.R. 2866 would add approximately 44,000 acres to the Six Rivers National Forest in northern California. The land is currently owned by the Pacific Lumber Company within the national forest addition.

It would designate within the 44,000 acres, 3,000 acres special part of the forest addition as the Headwaters Wilderness. The lands involved contain the largest remaining stands of unprotected old-growth redwoods left in the Nation. Some of these giants are up to 300 feet tall, in excess of 15 feet in diameter, and 2,000 years in age.

Furthermore, these lands provide one of the only three remaining nesting habitats in California for the Marbled Murrelet, which the U.S. Fish and Wildlife Service has listed as a threatened species under the Endangered Species Act.

Certainly, people are clearly concerned about our Nation's land policy and how these special lands are managed. Despite the unique characteristics of the old-growth redwoods as well as the old-growth Douglas fir and associated ecosystems of these forests, they are being logged at an unacceptable rate. Maxxam Corporation, which today owns this forested area, acquired such control in the mid-1980s by a hostile takeover of the Pacific Lumber Company. Maxxam financed much of its takeover activities with junk bonds, more kindly known as high-yield bonds, which have resulted in great pressure to turn this natural heritage of old-growth redwoods from a vertical to a horizontal position. Certainly, a question before the Nation and the committee is whether or not it is in our Nation's interest to liquidate a significant portion of America's remaining unprotected redwood giants to fund financial machinations of junk bond and corporate raiders.

I believe that it is important to keep in mind that our Nation once had nearly 2 million acres of old-growth redwoods, the world's tallest living and largest living organism; and now only about 95,000—less than 100,000—acres remain, less than 5 percent of the original forest. Ancient redwoods are without question a unique global heritage found nowhere else in the world. This is a uniquely American legacy.

We have within our ability and will to decide as stewards of these resources. The bill before us is patterned after a measure introduced by Mr. Stark in the last Congress, which evolved into the current version, refined and improved on by Mr. Hamburg. Mr. Stark is now an original co-sponsor, I note, of H.R. 2866.

I appreciate the witnesses traveling to Washington to share their views and expertise. Without objection, all statements of Members and witnesses will be made part of the record in their entirety.

Hearing no objection, so ordered.

All are encouraged to summarize so that we can expeditiously accommodate the long list of folks who are scheduled to participate.

Mr. Thomas.

STATEMENT OF HON. CRAIG THOMAS

Mr. THOMAS. Thank you, sir. I don't have a formal statement. I am interested in this issue, of course, and as a matter of fact, don't have my prejudices arranged as I often do.

I am interested from a policy standpoint as it affects multiple use. I am also interested in the cost standpoint, as I understand it costs a billion-and-a-half dollars. Certainly I am interested in the economic impact as well.

I must tell you I am pleased that this bill, for a change, does not affect my State of Wyoming, which has been under assault the last few months on quite a number of things that affect our economic interests. So that is a relief, and I am delighted that you all are dealing with it within your own state. That is great.

I look forward to the testimony. Thank you.

Thank you, Mr. Chairman.

Mr. VENTO. Ms. Shepherd.

Ms. SHEPHERD. I would like to welcome you here.

Thank you for sponsoring the bill and I am anxious to hear the testimony.

Mr. VENTO. Mr. Hansen.

STATEMENT OF HON. JAMES V. HANSEN

Mr. HANSEN. Thank you, Mr. Chairman. I don't know too much about this bill. I have heard a little bit about it.

I welcome our colleagues here. I look forward to the hearing, with a price tag of at least \$1.5 billion—which is unbelievable to me; which is 50 percent more than the Forest Service has spent on land acquisition for the entire Nation in the last 27 years.

Redwoods are already the most protected commercial species of trees in the world. According to the Save the Redwood League, there are over 265,000 acres of redwoods protected in Federal and State parks and preserves, and 90,000 acres of these are old-growth trees.

I am intrigued at how we can justify spending over a billion dollars for redwood tracts that are 80 percent second-growth forest. The Forest Service already has a backlog of high-priority lands for acquisition of \$660 million, and the lands in H.R. 2866 are not included as high priority lands by the agency. I will be very interested in hearing what the Forest Service has to say about that.

How this committee can consider buying lands at \$111,000 per acre—I have got a lot of lands out home I would sure like to sell for one-tenth of that. To increase this backlog at a time of record deficits is beyond my comprehension. However, I do look forward to the hearing today, and witnesses, and learning how we will pay for these lands, how many jobs will be lost in the timber industry and why the lands are more unique than 265,000 acres of redwoods already under protection.

And the local feeling of folks in California, I am interested in hearing that. But this is one of those amazing bills that comes along occasionally.

Thank you, Mr. Chairman.

Mr. VENTO. Mr. Doolittle.

STATEMENT OF HON. JOHN T. DOOLITTLE

Mr. DOOLITTLE. Mr. Chairman, I appreciate the opportunity to be here and to hear the presentation. I think others have observed on the exorbitant cost. I can't imagine what we are thinking of, bor-

rowing more money when we have got; \$4.3 trillion in national debt to acquire yet more public land. Have people lost their minds?

It is going to be interesting to hear the justification for this, especially since there are already 13 old-growth redwood groves permanently protected, which are larger than the headwaters forest proposal.

I just think, Mr. Chairman, this is a matter that deserves very serious consideration, and I look forward to hearing the testimony.

Mr. VENTO. We are pleased to welcome Congressman Dan Hamburg, from the First District of California, and Congressman Pete Stark from the 13th. And your statements have been made part of the record.

Mr. VENTO. Mr. Hamburg, please proceed, you can proceed with your statement.

PANEL CONSISTING OF HON. DAN HAMBURG, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA; AND HON. FORTNEY PETE STARK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

STATEMENT OF HON. DAN HAMBURG

Mr. HAMBURG. Thank you, Mr. Chairman, for convening this hearing on the Headwaters Forest Act. I want to especially thank my colleague and coauthor, Mr. Pete Stark, who has worked on this bill and on this entire issue for the past several years.

I am pleased to address you today about this bill, which is cosponsored by 89 of my colleagues in the House and endorsed by the Sierra Club, the Wilderness Society, the Audubon Society, Greenpeace, and the Western Ancient Forest Campaign, among others.

Few issues have galvanized the people of California's north coast more than the protection of the Headwaters Forest. Indeed, this forest has become a focal point statewide and nationally among those who believe that the last remnants of the ancient redwood forests should be preserved and protected. Of the original two million acres of these trees on the Pacific coast, only about 80,000 acres remain standing today.

The Headwaters Forest Act authorizes the Secretary of Agriculture to initiate a negotiation which, over time, will result in the transfer of approximately 44,000 acres of redwood forest in Humboldt County from private to public ownership. Eighty-eight percent of the land will be managed for multiple use, including timbering operations.

The groves of old growth, just over 5,000 acres, will be placed off limits for any logging operations. This is the largest remaining unprotected virgin redwood forest in the world. Standing 300 feet high in these groves are some of the most magnificent life forms in creation. Giant redwoods, many of which are over 1,000 years old, anchor a now rare and fragile ecosystem.

Use of bulldozers to harvest old-growth trees makes the old-growth top soils particularly vulnerable to erosion. Erosion threatens the streams that begin and run through these forests. Located in highly erosive geologic formations, any additional sedimentation

threatens the spawning grounds of the anadromous fish that return to those waters.

I wish to offer today for the record, Mr. Chairman, the testimony of Dr. Peter Moyle, Professor of Fisheries at the University of California at Davis, and the leading expert on coho salmon in the State of California. Dr. Moyle estimates that 5 to 10 percent of the remaining wild coho salmon left in California spawn in watersheds which will be protected by the Headwaters Forest Act and characterizes one population as exceptional by today's standards. The importance of his findings in light of the imminent listing of the coho salmon cannot be overemphasized.

I would also like to draw attention to the declaration by Dr. Moyle in his testimony that his knowledge of coho in the Yager Creek drainage is limited, because Pacific Lumber Company denied him access for data collection.

The Headwaters Forest Act calls for three of the most important steps necessary to arrest the collapse of coho and rebuild their stocks: low-impact logging, preservation of old-growth groves, and protection of headwaters areas to preserve downstream habitat.

These old-growth groves are critically important for a number of terrestrial species as well. In addition to providing habitat for the celebrated spotted owl and the endangered bald eagle and peregrine falcon, these forests are one of three primary nesting sites in California for the marbled murrelet.

Listed as threatened in 1992, the murrelet population in California is now estimated at 2,000, an estimated decline of 90 to 95 percent of their historic populations, a decline which is directly related to the loss of old-growth forest habitat.

I would like to offer also for the record, Mr. Chairman, the written testimony of research wildlife biologist Kim Nelson of Oregon State University, who is chair of the Marbled Murrelet Technical Committee of the Pacific Seabird Group. Ms. Nelson concludes, and I quote, "The acquisition and preservation of the Headwaters Forest is key to the survival and the recovery of the Marbled Murrelet in the State of California."

The Headwaters Forest ecosystem is far more than the sum of its parts, far more than important habitat for a number of threatened and endangered species.

A great deal has been made of Maxxam, Inc.'s aggressive harvesting of these forests since acquiring Pacific Lumber Company with junk bond revenues in a takeover nearly eight years ago. The high quality and price of lumber manufactured from old-growth redwood make it a logical target for the company. But the old-growth ecosystem is simply not a renewable resource. Can we as a society afford to forfeit it to satisfy the corporate debt obligation of an investor who practiced the art of 1980s junk bond finance? In this case, the public interest is diametrically opposed to the corporate interest in profit.

The public investment necessary to own and control this property is a matter of great debate and profound concern. An appraisal based on the stumpage value of every tree in the proposed 3,000-acre Headwaters Wilderness area and a surrounding 1,500-acre buffer valued that portion of the property at hundreds of millions

of dollars. But no one can contend that the public should pay for value that could never be realized by the current owner.

State and Federal regulations undeniably limit the harvest potential. Negotiations must establish a realistic value which is based on the actual ability to harvest.

In the final analysis, after weighing all the evidence about the impact on jobs, about the need to avoid environmental train wrecks with respect to the murrelet and the salmon fishery, about the unique ecological significance of ancient forests, we will finally have to look within ourselves and make a decision about the public interest.

We will have to make that decision without full knowledge because, in truth, we know very little about these magnificent forests. We do know, however, that there is a great deal more to learn about the hydrologic effects, the climactic effects, the whole life support system that is the ancient redwood forest of the Pacific Northwest.

Even if we are far from a thorough understanding, we can no longer plead blind ignorance. We know that these forests are finite. We know that when they are cut there will inevitably be job loss unless the industry invests in remanufacturing. The question is not whether jobs harvesting and milling old-growth redwood will be lost, but when and whether the few irreplaceable ancient forests will be standing or gone forever.

We know also that, in the largest sense, we are not separate from these forests. We, too, are part of the ecosystem. Undoubtedly, we gain when these giant trees cohabit the planet with us. We can pretend the problem just doesn't exist; or we can deal responsibly and creatively with the problem of the decline of our ancient forests, as this bill seeks to do, and be much richer for it in the long run.

Thank you, Mr. Chairman.

Mr. VENTO. Thank you.

Let's hear from your cosponsor, your major sponsor, Congressman Stark. Then we will ask questions of you both.

Mr. Stark, welcome.

STATEMENT OF HON. FORTNEY PETE STARK

Mr. STARK. Thank you, Mr. Chairman, for holding this hearing today.

Congressman Hamburg has described the legislation. I would like to just remind the subcommittee that Pacific Lumber Company was, and I emphasize was, a responsible timber company for over a hundred years. The history was altered forever by the junk bond finance buyout of Pacific Lumber by Maxxam controlled by Charles Hurwitz. Since Maxxam's takeover, the interests of the North Coast communities—sustainable timber harvests and the environment—have given way to the relentless need to make interest payments on bonds and send profits to Maxxam's Houston headquarters to keep that operation afloat.

You will likely hear testimony about the wonderful history of Pacific Lumber. What they won't provide you with is the sordid history of Charles Hurwitz and Maxxam. Hurwitz's business associates in his acquisition of Pacific Lumber are the convicted felons,

Michael Milken and Ivan Boesky and Drexel Burnham Inc. Lawsuits from former Pacific Lumber shareholders are still pending on accusations of stock fraud by Hurwitz and Maxxam.

Maxxam and Hurwitz are under investigation by the Federal Deposit Insurance Corporation for a bankrupt thrift known as United Savings Association of Texas, and estimates are that Hurwitz and Maxxam could owe the Federal Government in excess of \$500 million for, according to the Wall Street Journal, quote, "breach of fiduciary duty and wrongfully failing to maintain the net worth of a failed thrift linked to Michael Milken," not a bad place to start to get the \$500 million.

In order to show their concern for retirees from Pacific Lumber, Maxxam looted Pacific Lumber's pension fund of \$60 million for other corporate buyouts and debt reduction. Maxxam purchased annuities at the now bankrupt Executive Life Insurance Company. This action put the retirees' pensions at risk. U.S. Labor Department sued Maxxam over this action, alleging Maxxam breached their fiduciary duty to members of Pacific Lumber's pension plan. That suit is pending.

Once Maxxam owned Pacific Lumber, it immediately and significantly increased the cutting of redwoods, including virgin old-growth redwoods. Its rate of cut is double to triple the rate of harvest under the old Pacific Lumber Company. According to Newsweek, "The Redwood Raider," as he was referred to, "began mowing down California's coastal redwoods."

This level of cut was based on what is good for Maxxam's junk bond debt service, not what is good for the economic stability of California's north coast. The level of cut certainly was not based on any estimate of sustainable yield basis. There was no consideration of the pressures this cut would have on endangered species.

Indeed, Maxxam's eagerness to chain saw thousand-year-old trees for quick profit has run them afoul of Federal and Californian endangered species laws. Maxxam is currently under investigation by the U.S. Fish and Wildlife Service and the California Department of Fish and Game for two apparently illegal cuttings of significant amounts of old-growth redwood in an area known as Owl Creek, a nesting area for the endangered Marbled Murrelet. According to the Wall Street Journal, Fish and Wildlife is considering seeking criminal charges. According to James Steele, the top State biologist for Owl Creek, they basically conducted a sneak attack out there. As he said, while pretending to look for Marbled Murrelets, Maxxam has renewed requests to cut down prime habitat areas like Owl Creek.

I would like to address the issue of the cost of the legislation. It is obvious that every estimate that Maxxam will provide will obviously be inflated to scare off those of us who are concerned about the deficit. The value of the land will be determined by the court in any taking procedure; and the value of the land will be judged on what timber they are legally entitled to take, not that timber which they may illegally cut under Federal or State law.

The land also should not be judged on what the timber would bring at the sawmill, as many of these trees won't be cut. This would reduce the value of the property substantially.

Legislation introduced, such as H.R. 1422, would impose a severance tax on old-growth redwoods, further reducing their value. And on the other side of the ledger, there will be income from the land to the Federal Government as the Forest Service—which would become the manager for the taxpayers of the United States—the Forest Service will then determine what is appropriate to harvest in a sustainable fashion so that we will have yield from this land into perpetuity.

That revenue will reduce the cost of any acquisition. The U.S. Government will have an asset. And I submit to you that unlike \$6 or \$8 million a year to provide water to corporate farmers in California, or \$14 billion to build a useless aircraft carrier, we might really think of this asset as one of the few earning assets that our Federal Government might purchase.

Mr. Chairman, Maxxam simply should not have stewardship over such an important, nonrenewable natural resource as the last unprotected virgin old-growth redwoods anywhere in the world. The Forest Service can manage these lands and respond to the values other than a quick profit. And they can manage the lands to the best interests of the taxpayers and the best interests of the citizens of this country. This legislation has broad national support. More than 80 of our colleagues and the Sierra Club, the Wilderness Society, National Audubon Society, support this legislation.

Mr. Chairman, I think when people hear that thousand-year-old virgin redwoods are being chain-sawed to pay off interest on junk bonds, the support for this legislation will grow; and I appreciate the subcommittee's consideration.

Mr. VENTO. Well, thank you, thank you Mr. Stark.

[Prepared statement of Mr. Stark follows:]

FORTNEY PETE STARK
THIRTEENTH DISTRICT, CALIFORNIA

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
WASHINGTON, D.C. 20515

COMMITTEES:
WAYS AND MEANS
DISTRICT OF COLUMBIA

CONGRESSMAN PETE STARK
TESTIMONY BEFORE
SUBCOMMITTEE ON NATIONAL PARKS, FORESTS,
& PUBLIC LANDS
NATURAL RESOURCES COMMITTEE
OCTOBER 12, 1993

MR. CHAIRMAN and Members of the Committee, thank you very much for holding this important hearing today. I am pleased to join with my colleague, Mr. Hamburg in strong support for our legislation H.R. 2866, the Headwaters Forest Act. This legislation will provide protection for magnificent, virgin, old growth redwoods. These towering, living antiques deserve our protection. This legislation does that.

Congressman Hamburg has described the legislation and the areas that are authorized to be acquired by the federal government. This Committee also addressed similar legislation I introduced last Congress and many Members are familiar with the issue.

Pacific Lumber was a responsible timber company for over 100 years. That history was altered forever by the junk-bond financed buyout of Pacific Lumber by Maxxam controlled by Charles Hurwitz. Since Maxxam's takeover the interests of the North Coast communities -- sustainable timber harvests, and the environment -- have given away to the relentless need to make interest payments on bonds and send profits to Maxxam's Houston headquarters.

Maxxam will likely provide you with testimony about the wonderful history of Pacific Lumber. What they will not provide you with is the sordid history of Charles Hurwitz and Maxxam. Charles Hurwitz's business associates in his acquisition of Pacific Lumber are the convicted felons Michael Milken and Ivan Boesky and Drexel Burnham Inc.. Lawsuits from former Pacific Lumber shareholders are still pending on accusations of stock fraud by Hurwitz and Maxxam.



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Once Maxxam owned Pacific Lumber, it immediately and significantly increased the cutting of redwoods, including virgin, old growth redwoods. Maxxam's rate of cut is double to triple the rate of harvest under the old Pacific Lumber. According to Newsweek, July 27, 1993, the "Redwood Raider...began mowing down California's coastal redwoods." This level of cut was based on what is good for Maxxam's junk bond debt and interest payments, not what is good for the economic stability of California's North Coast. The level of cut certainly was not based on any kind of sustainable yield basis. There was no consideration of the pressures this level of cut would have on endangered species, such as the marble murrelet.

Maxxam's eagerness to chain-saw thousand-year-old trees for quick profit has run them afoul of federal and California endangered species laws. Maxxam is being investigated by the U.S. Fish and Wildlife Service and the California Department of Fish and Game for two apparently illegal cuttings of significant amounts of old growth redwood in an area known as Owl Creek, a nesting area for the endangered marbled murrelet. According to the Wall Street Journal "Fish and Wildlife is considering seeking criminal charges. Says James Steele, the top state biologist for Owl Creek: 'They basically conducted sneak attacks out there.'" While pretending to look for marble murrelets, Maxxam has renewed requests to cut down prime habitat areas like Owl Creek.

Lest one think the spots have changed on Hurwitz or Maxxam, one does not have to look any farther than the recent corporate refinancing conducted this year by Maxxam. Once again in the refinancing Houston corporate interests are dominant. Once again a sustainable job base and environmental concerns are sacrificed to Maxxam greed. Hurwitz and Maxxam have issued almost \$600 million in new bond debt to pay off the existing \$510 million in debt.

Where does the extra money go? Allan Sloan in the Los Angeles Times January 17, 1993:

Hurwitz is doing what they teach in junkmeister school: borrowing. Why borrow \$579 million to repay \$510 million of bonds? So he can put fees, prepayment penalties and some current interest on the tab---like paying off your Visa by mortgaging your house. Not to mention my favorite: \$25 million of the borrowing would go for Pacific Lumber to pay a dividend to Maxxam.

How can a borrowed \$25 million payment going from Scotia to Houston possibly be in the interests of the timber workers or North Coast communities? Does mortgaging redwood forests for decades to send \$25 million to the "Houdini of High Finance" provide stable jobs for timber workers?

I would like to address the issue of the cost of the legislation. Every estimate Maxxam will provide will obviously be inflated. The value of the land should not be judged on what the timber would bring at the sawmill because it is quite possible some of these trees could never be legally cut. This would reduce the value of the property substantially. Legislation I have introduced, H.R. 1422 would impose a severance tax on old growth redwoods, further reducing their value. There will be income from the land to the federal government as the Forest Service determines what is appropriate to harvest in a sustained fashion. There will be a cost, but I believe Americans are willing to make this investment in this resource.

Mr. Chairman, Maxxam simply should not have stewardship over such an important non-renewable national resource as the last unprotected, virgin old growth redwoods anywhere. The Forest Service can manage the lands with more values than just profit in mind.

This legislation has broad national support. More than 80 of our colleagues, along with the Sierra Club, the Wilderness Society, and the National Audubon Society support this legislation. Frankly, Mr. Chairman, when people hear that 1000 year old, virgin, old growth redwoods are being chain-sawed to pay interest on junk bonds support for the legislation grows.

Thank you.

Mr. VENTO. Dan, we look at you as a real contribution and a real contributor in terms of this debate.

I think all of us have been motivated by your intense interest in this matter. This is your area, your district principally; is that correct?

Mr. HAMBURG. Yes, it is, Mr. Chairman.

Mr. VENTO. One of the songs you hear on this committee all the time is that, this isn't in somebody else's district. So I think that obviously you are coming here because you see a resource in your area that is important to the American people. They—at no small risk to yourself. I think we have got to begin serving notice that it isn't going to be business as usual.

This is a problem that existed during the entire 1980s and people sat on their hands around here and didn't do anything about it. And, you know, I shouldn't say we are not doing anything about it, because as Congressman Stark knows, the laws governing timber harvest are not neutral laws with regard to tax; is that right?

Mr. STARK. Correct.

Mr. VENTO. Can you explain that to the committee Members? We are not on the esteemed Ways and Means Committee.

Mr. STARK. Can I explain why they should be getting a capital gain for ostensibly harvesting a renewable resource?

Mr. VENTO. In other words, we are actually expending tax dollars to permit the stuff to be cut down; is that right, Mr. Stark?

Mr. STARK. That has been the case for 30 years.

Mr. VENTO. And so all you are saying is, let's neutralize it, let's quit giving away the national government's money to cut down redwoods and other trees.

Mr. STARK. Makes sense to me.

Mr. VENTO. In this particular instance, you are taking a rifle shot because you are saying there is something different about these trees that are 2,000 years old, 300 feet high and 18 feet in diameter. I mean, that is big enough for almost anyone to notice as being different. But there may be some people that don't notice that. Maybe they think they are like everything else in the forest; I don't know.

Mr. STARK. The gentleman being from the State of Paul Bunyan, one of the few humane foresters in the history of our country, knows that his State would be far better today if its northern woods had this—had this kind of legislation been passed a hundred years ago.

Mr. VENTO. We would be a lot better if we didn't have the reputation of Paul Bunyan. We don't have any more old-growth white pine, red pine, Norway pine forests. They are gone. And the secondary growth that came back isn't Douglas firs or redwoods. It is aspen and poplar, which is a good crop if you want to have paper pulp or something. There are problems with that, but it is a different environment. And so I just think it is important to note the differences here.

The fact is that under the law we have said that as we deplete one resource, basically the oil and gas resources, and take in revenue to the point of almost a billion dollars a year, that we are going to invest that back in a land/water conservation fund. Of course, Congress says one thing and does something else, but I

think problems like this continue to move forward and we need to resolve them.

There may be some innovative ways. I think all of us are concerned about the deficit and what the impact would be on this; but as you pointed out, these lands need not be managed to yield no revenue to the government or to the private sector that now owns them. The problem is that the existing high-yield bonds, the junk bonds, require payments, and you are having to cut these on a changed policy basis that is, of course, causing great damage to that ecosystem and to what persists.

It is a dilemma in terms, I think. Almost everyone, including most of the owners, understands the importance of the small headwaters, the old-growth areas, and I think we will hear about that today. But our dilemma is how can we work together to protect that?

This bill started out, as I recall, as the entire area, 129,000 acres.

Mr. HAMBURG. One hundred and ninety-seven now.

Mr. VENTO. One hundred seventy thousand?

Mr. HAMBURG. One hundred ninety-seven thousand, I believe.

Mr. VENTO. We had it down to 129. Now we are down to 44 in terms of what is in it. So there is, I think, a recognition of trying to get better maps and understand whether you have the essence of what is to be protected here in terms of the associated ecosystem and the landscapes that are involved in the area.

I certainly intend to work with you on this. I am a sponsor of this. I think it really is not going to be business as usual and just stand back while the damage goes on. I think we need to move forward. But we are going to have some tough questions to answer. Running away from them, denying them, simply also answers the questions in a negative way.

So I hope to work with you in facing this issue, rather than ignoring it.

I thank you, and we will go to the other folks here that need to ask questions now.

Mr. Thomas, did you have any questions?

Mr. THOMAS. Yes, sir, thank you very much.

I guess I am seeking information. Does this area that you talk about include the sequoias, the giant sequoia?

Mr. HAMBURG. No, sir, this is a different species of redwood. There is a bill which deals with the Sequoia National Park, I believe it is George Brown's bill. It is quite a—several hundred miles south of this area.

Mr. THOMAS. You indicated toward the end of your statement that, if we just walked in, it would sound as if there has been nothing done to protect the redwoods. I understand there is, that, 250,000 to 260,000 acres are now protected. Do you dismiss that this has been done?

Mr. HAMBURG. I didn't mean to indicate that we have done nothing. Certainly, the work of the Save the Redwoods League and other organizations is very laudable. With respect to the coastal redwoods of northern California, the figures that I have used and I believe I referred to in my testimony are that there were originally two million acres of those trees on the north coast of California. There are currently 80,000 acres remaining. Of that 80,000

acres, approximately four-fifths are protected. So four-fifths of about 3.5 or 4 percent of the original forest remains standing.

This Headwaters Forest is the largest unprotected, significant stand of ancient redwoods, I think not only in the State of California, but throughout the Pacific Northwest.

Mr. THOMAS. I see. You mentioned the Save the Redwoods group.

Mr. HAMBURG. Yes.

Mr. THOMAS. Do they support your bill?

Mr. HAMBURG. Well, John DeWitt characterized this bill as fatally flawed at one point. And that was a fairly strong criticism. And I—

Mr. THOMAS. I would say it is fairly strong.

Mr. HAMBURG. Yes, I did, too. I took that as an opportunity to call Mr. DeWitt and discuss with him the concerns that he had with the bill. And we had quite a long conversation about it.

It turned out there were two main criticisms that he had. The first one had to do with the management of the land, particularly of the 88 percent of this 44,000 acres which would remain in a multiple-use category under the management of the Forest Service. Mr. DeWitt has had some bad experiences with the Forest Service over the years and felt that it would be much more conducive to the ends of this bill if the Fish and Wildlife Service or some other agency had the management of this land.

Secondly, Mr. DeWitt feels that the price tag is absolutely, you know, off the map. It is just way, way more than could ever be afforded. He himself was quoted recently in an article in the Wall Street Journal to the effect that lands of this type should be more in the category of \$100 million, rather than the \$600 million that Maxxam has indicated they want for just the core 4,500-acre area.

So we talked about that at length, and I assured Mr. DeWitt that it is not my intention that we pay Maxxam \$600 million for the 4,500 acres or a billion dollars for a larger area. I believe that the Save the Redwoods League will, over time, come to view this bill much more favorably. And we are working with them to do that.

Mr. THOMAS. I see. I believe he indicated that the money would be better used to improve the stands that now exist. What about the local government? What is their position—supervisors?

Mr. HAMBURG. Well, Humboldt County—and Supervisor Stan Dixon is here today—is opposed to the bill. Some of the cities of my district oppose the bill. There are a few that support the bill. I think that if you went from one end of my district to the other, you would generally find a mix of opinion.

And as Chairman Vento mentioned, this is a difficult proposal. This is a difficult proposal for me, representing a forest district. And it is not a bill that I proposed in anything like a cavalier state of mind. I realize that the questions we are dealing with go to the very heart of the economy of the North Coast.

I am not naive; I have been a county supervisor in a timber county. I know how important it is to have a revenue stream from the timber industry. So all I can tell you, Mr. Thomas, is, I know the difficulties, I know what a mine field this is; but I also feel very strongly that this is the best thing for my district in the long run, and that is why I am standing for it, not because I have been

pushed by environmentalists or anything else. Because I believe that this is in the long-term best interests of my district.

And if some boards of supervisors like the Humboldt board and some city councils stand against me, so be it. They have other concerns, and I appreciate and respect those concerns.

Mr. THOMAS. Thank you very much.

Thank you, Mr. Chairman.

Mr. VENTO. Yes, thank you.

Mr. Hansen, did you have any questions of our colleagues?

Mr. HANSEN. Thank you, Mr. Chairman. I freely admit that this really kind of catches me by surprise. I mean, that is an awful lot of money; and of course, I can see that the two colleagues feel very strongly about it. And I am sure there are two sides to every issue. I would be pretty stupid not to say that, and I feel very strongly that you have a perfect right to bring this up.

I guess at a time of tremendous austerity and the problems we have got, it is kind of a shock to many of us to see something like this.

Congressman Stark brings up the idea of unwanted and unused aircraft carriers and that is kind of like beauty is in the eye of the beholder, where do you feel you need it? And sitting on the Intelligence Committee and the Armed Services Committee, I have a little different feeling on some of those things. I say that very respectfully.

I think there are an awful lot of unanswered questions here that we will have to unravel and work on, and I am sure, as Chairman Vento pointed out, that is the job of the committee. We will have to start working on those.

I do have questions probably that in this brief time I can't get answers to, but it is something I intend to—as the Ranking Member of this committee, to spend a lot of time looking into and trying to be objective and trying to be honest. And on this thing, I have to feel that maybe Dixie Lee Ray on her thing, environmental overkill, maybe we are getting a little bit into that, but I don't know.

I think my friend from Wyoming asks some questions about the people there. I respect your candor, that you feel in your own heart of hearts it is the right thing to do. And even though it is probably a mine field for you to walk through, we have other people coming; and I would like to ask them about how many jobs are going to be lost, how many—do we really need, do we have enough in protection, all of those things that should come to us.

I know those of us in the Rocky Mountain West get very concerned when we see all these people coming from Oregon and Washington, who have lost their jobs, coming into Montana, Utah, Wyoming, Idaho, to cut timber where they can do it. And it is kind of hard on the Tarheels people. They feel they have just been pulled right up from their roots when they are four- and five-generation folks. They lost everything just because someone had a burning in their bosom, they like a tree.

Well, we all love trees, and I have no problem with that. But somewhere—and I think you said it right, we prioritize where we spend our money. I guess the job of 535 of us is to prioritize. And that is what we are doing here. So I really have no direct questions.

All these things I have talked about—I intend to be open-minded and fair-minded with both sides of this, as we look at it, and I appreciate your time on that, Mr. Chairman. And appreciate the two gentlemen giving the comments.

Mr. STARK. If the distinguished gentleman, Ranking Member, from Utah would yield.

Mr. HANSEN. I will be happy to yield.

Mr. STARK. The job issue is one that he rightly should be concerned about. There are two sides to it; and where the pendulum will be, if you hasten to harvest the timber in such a way that there will be no sustained yield, you can run the jobs up on the curve for a while, but then in a very short period of time, you are out of work because you are out of timber.

On the other hand, if in the best interests of the community, as some people will perceive it and, as Congressman Hamburg has indicated, that may have some differing opinions, but it would seem to me long-term, steady employment would be better economically for a community rather than a quick hit like coming in and building a huge dam or a huge nuclear reactor and then moving out of town and leaving a ghost town when we have to close it up.

So that I do think that the consideration here is that long-term economic growth of the community would probably be best served. That is probably little solace to the person who was hired on for the extra step-up in cutting now and, you are right, may lose their job. It is a tough, tough call.

Mr. HANSEN. I appreciate the gentleman's comments. Thank you.

Mr. VENTO. Without objection, Dr. Nelson's statement that our colleague, Mr. Hamburg, referred to, will be—he is the head of the Technical Committee on the Marbled Murrelet. Have you that statement with you? And you wanted it added into the record; is that correct?

Mr. HAMBURG. Yes, Mr. Chairman.

Mr. VENTO. Without objection, it will be added into the record. [Prepared statements of Prof. Moyle and Dr. Nelson follow:]

TESTIMONY OF PETER B. MOYLE
UNIVERSITY OF CALIFORNIA, DAVIS

In support of the Headwaters Forest Act (H.R. 2866)

The Headwaters Forest Act will protect about 44,000 acres of forest in Humboldt County, California, which include the headwaters of the Elk River, Salmon Creek, and Yager Creek. In this testimony, I will address the importance of these creeks for the spawning of anadromous (sea-run) fishes, especially coho salmon.

Qualifications. I am Professor of Fisheries Biology at the University of California, Davis, where I have been on the faculty since 1972. For five years, I was Chair of the Department of Wildlife and Fisheries Biology. I am author of over 110 publications, mostly dealing with the biology and ecology of California's freshwater, anadromous, and estuarine fishes. Among my publications are four books and three book-length monographs, including Inland Fishes of California (a major reference work) and two widely used textbooks in fish biology. My fisheries team recently completed (for the California Department of Fish and Game) a four year study of the fishes of the Eel River drainage (which includes Yager Creek) and, under contract with the National Marine Service, a stream-by-stream analysis of the status of coho salmon in California. A peer-reviewed paper based on the coho study has been accepted for publication in the North American Journal of Fisheries Management, published by the American Fisheries Society.

Status of anadromous fish. My research has shown that all species of anadromous fish in California are in serious decline including fall, spring and winter run chinook salmon, coho salmon, summer and winter steelhead, coastal cutthroat trout, eulachon (candlefish), longfin smelt, green sturgeon, and Pacific lamprey. While many factors have been working together to create these declines, in coastal drainages the single biggest cause has been the deterioration of watersheds, resulting in the reduction of spawning and rearing habitat for anadromous fishes. An important contributor to watershed deterioration has been logging and road-building on steep slopes in headwater areas because sediment produced in these areas affects the entire drainage below the headwaters. The Headwaters Forest Act is aimed at protecting a key region containing some of the most critical parts of three drainages important to anadromous fishes. It is not a coincidence that the drainages in this area with intact headwater forests still contain significant populations of at least five species of anadromous fishes: coho salmon, chinook salmon, cutthroat trout, steelhead, and Pacific lamprey. In this testimony, I will confine my remarks to coho salmon because this is the species in most serious decline and seemingly the most dependent of the five species on mature (late successional) forests.

Coho salmon. Coho salmon thrive in stable, well-shaded drainages because their young spend their first year of life in streams. These young salmon live primarily in deep, cold pools close to the faster flowing areas that produce many of the insects they feed upon. These pools are typically created by the action of water around large logs, boulders, or stable banks. In drainages characterized by heavy logging and road building, young coho have poor survival because large logs are less available to create pools and what pools there are fill up with sediment faster than they can be scoured out by winter flows. Stable drainages also provide better habitat for the adult fish, which use the deep pools for refuges from predators and clean, coarse gravels for spawning.

The loss of stream habitats favorable to coho salmon in the past 50 years has led to their decline in Washington, Oregon, and California. This on-going decline has resulting the Pacific Rivers Council developing a petition to list coho salmon as a threatened species, which should be filed soon to the National Marine Fisheries Service. The decline of coho is particularly severe in California, the southernmost part of their range. The study of coho status by myself, Dr. Larry R. Brown, and Dr. Ronald M. Yoshiyama indicated that 50 years ago perhaps 200,000 wild coho entered California's streams to spawn, supporting both sport and commercial fisheries. Today we estimate that less than 5,000 wild coho still enter these same streams, a 97% decline. Because the decline has been evident for many years, hatcheries were built on a number of streams in an effort to bolster coho populations; there are about 30,000 hatchery-related coho returning each year as consequence. However, even the hatchery coho are in decline and the mixing of hatchery and wild stocks in some streams has probably contributed to the decline of wild stocks.

A better measure of the status of coho in California is the number of streams that still have spawning populations. We determined from old records that at least 540 coastal streams once contained coho populations. We estimate today that only about half of these streams still support runs of coho salmon and that many of the remaining runs are so small that their extinction in the near future is highly likely. These figures demonstrate the exceptional importance of the streams in the areas protected by the Headwaters Forest Act.

Coho in Headwaters streams. The streams in the Headwaters area include the headwaters of the north and south forks of Elk River and of Salmon Creek (both flowing directly in to Humboldt Bay) and the headwaters of Yager Creek (mainly Lawrence Creek and Shaw Creek), a major tributary of the Van Duzen River, which in turn flows into the lower Eel River. In recent years, most of the creeks have been surveyed for use by anadromous fishes by the California Department of Fish and Game and/or the California Conservation Corps (CCC). Their field notes have been made available to me.

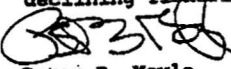
By present-day standards, the Elk River is an exceptional stream for coho salmon. This is because the channel in many areas

is in reasonably good condition, protected by having old growth redwood forest in the headwaters. Although exact numbers of spawning coho are not known for the Elk River, counts of redds, carcasses, and living fish indicate that the run probably averages at least 400 fish per year. For example, a CCC survey on 23 January 1991 (peak run time, in some of the best habitat) of 3 miles of the north fork of the Elk River counted 51 coho. A run of 400+ coho may not seem like much, but it could represent about 5% of all wild coho spawning in California!

Salmon Creek is a less productive stream of coho than the Elk River, presumably as a result of the cumulative effects of timber harvesting in the drainage. A trap set at the lower end of the drainage in recent years indicates an annual run of 15-25 fish. The persistence of this small run is most likely dependent of the protection of the headwaters, to reduce sedimentation and provide other habitat benefits.

Our knowledge of the Yager Creek drainage is limited in part because the Pacific Lumber Company denied my crew access to the drainage when we were doing our survey of the fishes of the Elk River system. Between 1988, 1991, 1992, and 1993, CCC crews did manage some cursory surveys of the drainage, particularly Lawrence Creek and Shaw Creek. Shaw Creek is a tributary to Lawrence Creek, with headwaters in old growth forest. The run size here is small, probably less than 20 coho per year, which is related both to conditions within the drainage (roads and logging) and to conditions outside the drainage (degradation of the Van Duzen and lower Elk rivers). However, the fact that the entire drainages of Lawrence and Shaw creeks, and that of much of Yager Creek, are within the proposed Headwaters Forest area means that stream restoration efforts are likely to be especially productive here - and stream restoration is the primary means by which coho populations are going to be recovered.

Conclusions. Streams in the Headwaters Forest area are important habitat for anadromous fishes, especially coho salmon. I estimate that 5-10% of the remaining wild coho salmon in California spawn in these drainages. One of the major reasons for this is seems to be that the headwaters of the streams are still mostly in reasonably good condition, especially those in old growth redwood forest. Protection of this area would have a significant positive effect on coho salmon populations, which are declining coastwide. H.R. 2866 provides an unusual opportunity protect and restore salmon and steelhead populations, and to help reverse the trend of ever-declining fisheries.



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7 October 1993

MARBLED MURRELETS AND THE HEADWATERS FOREST, HUMBOLDT
COUNTY, CALIFORNIA

TESTIMONY SUBMITTED ON HOUSE BILL HR 2866

TO
THE HOUSE AGRICULTURAL SUBCOMMITTEE ON SPECIAL
CROPS AND NATURAL RESOURCES
AND
THE HOUSE NATURAL RESOURCES SUBCOMMITTEE ON NATIONAL
PARKS, FORESTS, AND PUBLIC LANDS

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Executive Summary

The Marbled Murrelet (*Brachyramphus marmoratus*) was listed by the U.S. Fish and Wildlife Service as a threatened species in September 1992. Habitat loss, primarily from logging, was identified as the primary reason for the listing (Federal Register 50 CFR, Vol. 57:45, 328-345, 1 October 1992). In California, little old-growth and mature habitat remains within 25 miles of the coastline. Older-aged forests in close proximity to the coast are extremely important to murrelets; these forests may be their preferred nesting habitat. The Headwaters Forest in northern California is occupied by murrelets. The location and habitat characteristics of this Forest, coupled with the fact that little suitable habitat remains in the historic range of this species in California, make the acquisition and preservation of the Headwaters Forest key to the survival and recovery of the murrelet in California.

MARBLED MURRELETS AND THE HEADWATERS FOREST, HUMBOLDT
COUNTY, CALIFORNIA (H.R. 2866)

Introduction

My name is S. Kim Nelson. I am a Faculty Research Wildlife Biologist employed with the Oregon Cooperative Wildlife Research Unit at Oregon State University. A copy of my CV is attached (Exhibit A). I lead the Marbled Murrelet research program in the State of Oregon. In addition, I am Chair of the Marbled Murrelet Technical Committee of the Pacific Seabird Group, a scientific society of Pacific seabird researchers. I am familiar with all the on-going research on Marbled Murrelets and with the researchers studying murrelets in California, Washington, British Columbia, and Alaska.

Species Status

The Marbled Murrelet (*Brachyramphus marmoratus*) was listed by the U.S. Fish and Wildlife Service as a threatened species in September 1992. Habitat loss, primarily from logging, was identified as the primary reason for the listing (Federal Register 50 CFR, Vol. 57:45, 328-345, 1 October 1992).

Current population estimates include 50,000-250,000 birds in Alaska (Mendenhall 1992), 20,000-45,000 birds in British Columbia (Rodway 1990), 5,000 in Washington (Speich et al. 1992), 2,000 in Oregon (Nelson et al. 1992), and 2,000 in California (Carter and Erickson 1992). The actual numbers of breeding birds will be lower because of the presence of non-breeders, which can comprise as much as 53% of some Alcids populations in a single year (Gaston 1992).

Historically murrelets were more abundant throughout their range. Populations in California are estimated to have declined as much as 90-95% in California in association with declines of older-aged forests (Paton and Ralph 1988, 1990; Carter and Erickson 1992). In Alaska and British Columbia, declines over the last 10-15 years have been estimated from 10-15% and 20-40%, respectively (K. Kuletz, pers. comm., Kelson et al. in press). Declines in Oregon and Washington may be similar to those in California based on a 90% reduction in suitable habitat (Morrison 1988), although no estimates have been proposed.

Breeding Biology

Many of the behaviors and life history patterns of Marbled Murrelets are similar to their close relatives (see Drent 1965, Sealy 1975, Harris and Birkhead 1985, Gaston 1992). Differences

between murrelets and other alcids include their choice of nesting sites and adaptations to avoid predation.

Murrelets lay a single egg on the flat surface of large moss or duff covered coniferous tree limbs. Nesting occurs between April and September. Eggs are incubated for 30 days, and chicks fledge after an additional 28-36 days (Hirsch et al. 1981, Nelson, 1991, 1992; Nelson and Hardin 1993a). Both adults participate in incubation on a 24-hour schedule. Exchanges occur before sunrise, in the cover of darkness or dawn. Adults enter the nest silently and rapidly in order to avoid detection by predators. When the chick hatches, adults brood it for one day; after that the chick is left alone on the nest. The chicks camouflage plumage is their only protection from predators, other than cover above and near the nest site. Adults make 1 to 3 trips a day (at dawn, dusk and mid-day) between ocean feeding areas and inland nesting sites to feed the chick (Nelson 1991, 1992; Nelson and Hardin 1993a). These birds fly approximately 50 mph on their trips to and from the ocean. Chicks pluck their feathers to reveal a distinctive black and white juvenile plumage 24-48 hours before leaving the nest. Chicks fly directly to the ocean from the nest site (Hamer and Cummins 1990).

Marbled Murrelets do not nest in dense colonies, however they nest primarily in loose aggregations in forest stands. Marbled Murrelets have high site fidelity; birds return to the same forest stand year after year (Nelson, unpublished data; S. Singer, T. Hamer, pers. comm.). Occupancy of forest stands may be historical in nature with young returning to the same stand where they hatched. High site fidelity and historical occupancy are common among seabirds in the Auk Family (puffins, murrelets, murres, auklets, etc.) (Nettleship and Birkhead 1985).

Longevity, survival and mortality rates are unknown. Age of first breeding is thought to be three years (Sealy 1975b). Recruitment rates are very low because they lay only one egg, and predation at nest sites is high. In addition, murrelets may not nest or be successful in nesting during years of poor food availability (e.g. during El Niño currents). The adult/juvenile ratios from counts along the central coast (Nelson and Hardin 1993b) indicate a recruitment rate of less than 5% each year between 1989 and 1992; low numbers of juveniles (1-5%) have also been documented in California and Alaska (C.J. Ralph; K. Kuletz, pers. comm.). Of 45 tree nests found before 1993, at least 73% failed to fledge a chick (see Threats section).

Habitat Selection

All data collected to date on this species substantiate their use and selection of older-aged forests (Paton and Ralph 1988, 1990; Nelson 1989, 1990; Hamer and Cummins 1990, 1991). In Oregon, Marbled Murrelets have been found to select old-growth and mature forests with an old-growth component (Nelson 1989,

1990). Habitat variables that are thought to be most important for this species, include old-growth trees, number of nesting platforms, cover above the nest limb, cover for protection against predation, and moss and mistletoe abundance (Nelson et al. in prep.).

Murrelets are more abundant closer to the coast than farther inland (Nelson 1990). The energetic demands on the birds to fly to habitat far from the coast are unknown, but a feasible hypothesis, based on the energetic requirements of other birds, is that murrelets that nest farther from the coast could be less successful than those in areas close to the coast. The distribution of birds along the coast has also been correlated with the distribution of habitat inland (Sowls et al. 1980, Carter and Erickson 1992, Nelson et al. 1992).

These birds have not been found in managed forests because these stands lack the structure and characteristics of forests that were created naturally. Stands that have been heavily managed (clear-cuts, shelterwoods, young and mature plantations) show no murrelet use.

Forty-five tree nests have been located and described (pre-1992). These tree nests were located in Alaska (N = 18) (Quinlan and Hughes 1990, Naslund et al., in press), British Columbia (N = 5) (Manley and Nelson, in press; Jordan and Hughes, in press), Washington (N = 5) (Hamer and Cummins 1990, 1991), Oregon (N = 10) (Nelson 1991, 1992; Nelson et al., in prep.), and California (N = 7) (Singer and Verardo 1975, Singer et al. 1991, 1992, S. Kerns, pers. comm.). All the nests south of Alaska were found in old-growth trees >35 in (>88 cm) in diameter at breast height and ≥50 ft (15 m) in height. Nests were on moss or duff covered limbs near the middle to the top 1/3 of the live crown. Canopy cover above the nest cup was high, perhaps for protection against predators and weather.

Although only 45 tree nests have been located, more than 400 occupied areas have been identified and mapped. Since nests are difficult to discover, occupied sites have been defined by murrelet biologists as nesting areas based on observations of murrelets flying through the canopy and landing in trees. All of these sites are in older-aged forests (old-growth forests or mature forests with an old-growth component).

Threats to the Species Survival

There are four primary threats to this species, including habitat loss, predation, oil spills and gill-net fishing (Marshall 1988). Here I address only the threats at inland sites.

Habitat loss throughout the murrelet's range has been identified as the most significant threat to the species long-term viability. Logging of older-aged forests not only creates loss of habitat for nesting, but also initiates cumulative

impacts such as isolation of subpopulations, habitat fragmentation, and edge effects. A comparison of historical information available on murrelet populations with current data suggests a decline in numbers, especially in portions of its range where logging has been extensive (Carter and Erickson 1992, Nelson et al. 1992). The number of older-aged forests available to murrelets is declining in number and is extremely limited in certain areas of the species range (Carter and Erickson 1992, Nelson et al. 1992).

Predation of murrelet nests has been occurring at what seem to be alarming rates (Nelson, unpubl. data). Seventy-three percent of murrelet nests have failed and 54% failed because of predation. Predators of murrelet nests include the Steller's Jay (*Cyanocitta stelleri*), Common Raven (*Corvus corax*), and Great-Horned Owl (*Bubo virginianus*) (Nelson 1991, 1992, Naslund et al. in press). Predation by these species (and Great-Horned Owls) is known to increase with the fragmentation of older-aged forests (Yahner and Scott 1988), and bird nesting success is lower in small forest fragments than larger intact forests because of predation and decreased fecundity (Ambuel and Temple 1983, Andren et al. 1985, Wilcove 1985, Temple and Cary 1988). Steller's Jays, Common Ravens, and Great-Horned Owls are edge species that become increasingly concentrated as edge is increased with the fragmentation of habitat (Yahner and Scott 1988). In addition, Corvids (jays, ravens and crows) are extremely intelligent predators that have refined search images for locating prey (Kilham 1989, Goodwin 1976, Zach 1979).

Habitat Management

Retention of older-aged forests throughout the historic range of the murrelet will be imperative for the short-term viability of the species (Report of the Scientific Analysis Team 1993). No matter how small and isolated, habitat on all lands will be important for recovery of the species within its historic range. Regrowing suitable habitat in areas where it no longer exists and growing buffers around existing small stands will also be key to the long-term viability of the species (Report of the Scientific Analysis Team 1993). Exact sizes of buffers and stands required by murrelets is unknown at this time. However, predation rates on bird nests were higher in edge habitat (within 15-100 m of the forest edge) compared to interior forest (Gates and Gysel 1978, Small and Hunter 1988), and were extreme in managed stands in basins that were more than 25% fragmented (Yahner and Scott 1988). Large, intact habitat blocks in unfragmented basins will provide optimal habitat for Marbled Murrelets.

There is evidence that alcids are poor colonizers. A breeding colony of the Atlantic Puffins (*Fratercula arctica*) was extirpated from Eastern Egg-Rock, Maine, in 1887. Puffins from neighboring islands (within 20 mi) failed to re-establish the

colony despite the habitat being suitable. Re-colonization of the island only occurred with human intervention; puffins were reintroduced in 1981 by Kress and Nettleship (1988). The presence of birds at a breeding site may be important for colonization, if it is at all possible. Although young, non-breeding puffins often visited other colonies, once they reached breeding age the birds returned to their natal colony to reproduce, and visits to non-natal areas became almost nonexistent (Kress and Nettleship 1988). Similar behavior has been documented in Pigeon Guillemots (*Uria aalge*) (Halley and Harris 1992). Removing occupied murrelet habitat and expecting murrelets to move to adjacent areas is, therefore, highly unlikely given alcid site fidelity.

The effects of thinning or modifying occupied sites, or stands near occupied sites are unknown. However, the ability of murrelets to remain hidden will be the key to the successful fledging of young. Any opening of the canopy or increase in the amount of edge could have negative impacts of murrelet breeding success by increasing predator abundance (see discussion on Threats).

The complexity of older-aged forest ecosystems and the breeding biology of the murrelet will make it difficult to determine the effects of habitat modification on the species. Given their high site fidelity, they may return to a site that has been modified, but not breed successfully. In addition, birds may currently be occupying habitat that has become marginal through the cumulative impacts of fire, blowdown, and adjacent habitat modification. Their mere presence or occupancy at a site is not necessarily an indication that the site is preferred or optimal. Determination of optimal habitat can only be determined through intensive study of their reproductive success in relation to habitat characteristics (see Nelson and Hardin 1993).

The cumulative impacts of the threats to this species on the ocean and in the forest need to be considered in implementing management practices. A large number of birds in an area is not necessarily indicative of a healthy population. These birds are long lived (10-15 years) and the cumulative effects of threats on current population sizes may not be realized for 10 to 15 years. In addition, caution should be taken when interpreting and using results from studies conducted in other areas. For example, specific and detailed habitat characteristics in Oregon, such as canopy closure or stand size, may not be applicable to the redwood forest ecosystem of northern California.

The Importance of the Headwaters Forest to the California Population

The Headwaters Forest is of extreme importance to the Marbled Murrelet. Because suitable murrelet habitat has been reduced more than 90% in California (Carter and Erickson 1992),

all remaining suitable habitat in the state will be important for the survival and recovery of the species. The Headwaters Forest is occupied by murrelets and is located in close proximity to the coast. The lack of other suitable habitat in the area south and east of Eureka increase its importance. In addition, this forest, including the proposed wilderness and smaller old-growth blocks, represents one of the three remaining population centers in California. The other two include habitat in northern Humboldt County (Redwood National Park, Jedediah-Smith State Park, Humboldt-Redwoods State Park), and Santa Cruz County (Big Basin State Park). Other areas contain very few (Mendocino County) to no murrelets.

Given that populations are declining with the current amount of suitable habitat, further elimination of habitat could extirpate the species from California. No other Federal or State lands are available to this species, other than listed above. Private lands, therefore, will play a key role in the species survival and recovery in California (see the Report of the Forest Ecosystem Management Assessment Team (1993) regarding the importance of private lands to murrelets).

The preservation of this forest will also be important to other old-growth associated species, and will help to maintain a remnant of the older forest ecosystem that used to stretch across northern California.

Species should be maintained throughout their historic and natural ranges. Larger populations of murrelets in British Columbia and Alaska should not preclude preserving murrelet populations in California or elsewhere. Despite the larger numbers of murrelets in British Columbia and Alaska, evidence of population declines is evident in these areas as well (see discussion under Species Status). Currently there are no known stable populations of murrelets that could sustain the species in perpetuity.

Conclusion

The Marbled Murrelet is a threatened species. In California, little suitable habitat remains within the historic range of the species. The Headwaters Forest and other older-aged forests in northern California are important to the murrelet. The preservation of these rare forests will be key to the survival and recovery of this unique species.

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EXHIBIT A

S. KIM NELSON
 Oregon Cooperative Wildlife Research Unit
 Oregon State University
 Department of Fisheries and Wildlife
 Nash Hall 104
 Corvallis, OR 97331-3803
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RESEARCH AND PROFESSIONAL EXPERIENCE

Research Wildlife Biologist. Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, OR. 4/89-Present. Conducting research on the distribution and nest site preferences of Marbled Murrelets in the Oregon Coast Ranges.

Wildlife Biologist. Oregon Department of Fish and Wildlife Nongame Program, Portland, OR. 5/88-4/89. Developed and tested inventory techniques for Marbled Murrelets in the Oregon Coast Ranges.

Graduate Research Assistant. Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, OR. 1/85-3/89. Thesis entitled "Habitat use and densities of cavity-nesting birds in the Oregon Coast Ranges".

Faculty Research Assistant. Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, OR. 7/83-1/85. Assisted on a study of juvenile dispersal of the Northern Spotted Owl.

Biological Technician. Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, OR. 6/83-7/83 and 1/84-2/84. Variable circular-plot censuses of forest birds and arboreal mammals were conducted in the Oregon Cascade Mountains.

Biologist/Education Specialist. Oregon Museum of Science and Industry, Portland, OR. 9/80-12/81. Involved developing and implementing field and laboratory research projects with birds and marine invertebrates; teaching natural history and physical science to adults and children; public relations; development of science education materials.

EDUCATION

M.S. Wildlife Science, Oregon State University, Corvallis. June 1989.

Classes in Wildlife Science, Oregon State University, Corvallis. September 1982-June 1983.

B.A. Art History and Business Administration, Lewis and Clark College, Portland, Oregon. August 1980.

PUBLICATIONS

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MANUSCRIPTS IN PRESS OR IN PREPARATION

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- Nelson, S.K., and R.G. Anthony. In prep. Habitat use of cavity-nesting birds in the Oregon Coast Ranges.

S. Kim Nelson

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PRESENTATIONS AND SEMINARS

- Marbled Murrelet habitat associations and vocal repertoire. June 1993. Seminar, Cornell Laboratory of Ornithology, Sierra Nevada Research Station, Sattley, California.
- The Endangered Species Act: a case study on the Marbled Murrelet. May 1993. Seminar, Oregon State University, Department of Forest Science, Corvallis, Oregon.
- Inland habitat use and status of the Marbled Murrelet. March 1993. The Wildlife Society, Oregon Chapter, Annual Meeting, Newport, Oregon.
- Marbled Murrelets and habitat diversity. March 1993. Seminar, Biodiversity Panel. Environmental Law Conference, University of Oregon, Eugene, Oregon.
- Shore-based surveys of the Marbled Murrelet along the Oregon Coast, 1988-1992. February 1993. Pacific Seabird Group Annual Meeting, Seattle, Washington.
- Biology and management of the Marbled Murrelet. November 1992. Seminar, Cornell University, Laboratory of Ornithology, Ithaca, New York, and Lewis and Clark College, Portland, Oregon.
- The Marbled Murrelet: an enigma of the Pacific Northwest. October 1992. Society of American Foresters National Convention, Richmond, Virginia.
- Testimony to the U.S. Senate Environment Committee on the biology and management of the Marbled Murrelet. August 1992. U.S. Senate, Washington, D.C.
- Marbled Murrelets and oceanography. March 1992. Seminar, Department of Oceanography, Oregon State University, Corvallis, Oregon.
- The Marbled Murrelet and the endangered species act. February 1992. Seminar, Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon.
- Nest-site characteristics of the Marbled Murrelet in the Pacific Northwest. January 1992. Pacific Seabird Group Annual Meeting, Charleston, Oregon.
- A preliminary analysis of the vocal repertoire of Marbled Murrelets. January 1992. Pacific Seabird Group Annual Meeting, Charleston, Oregon.
- Nesting biology of Marbled Murrelets. November 1991. Society of American Foresters, Annual Meeting, Tillamook, Oregon.

S. Kim Nelson

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Marbled Murrelet biology and evolution. April 1991. Seminar, Evolutionary Biology Seminar Series, University of Oregon, Eugene, Oregon.

Discovery of two tree nests of the Marbled Murrelet in western Oregon. February 1991 and January 1991. The Wildlife Society, Oregon Chapter, Annual Meeting, Newport, Oregon, and Pacific Seabird Group Annual Meeting, Monterey, California.

Preferred snag characteristics of cavity-nesting birds in western Oregon. March 1990. The Wildlife Society, Oregon Chapter, Annual Meeting, Welches, Oregon.

Distribution and behavior of the Marbled Murrelet. March 1990 and February 1990. The Wildlife Society, Oregon Chapter, Annual Meeting, Welches, Oregon, and Pacific Seabird Group Annual Meeting, Victoria, B.C.

Nesting biology of Marbled Murrelets. March 1990. Seminar, Central Oregon Community College, Bend, Oregon.

PROFESSIONAL SOCIETIES

Pacific Seabird Group; Chair, Marbled Murrelet Technical Committee, 1990-Present.

The Wildlife Society- National, Western Region and Oregon member; Executive Board Member, Oregon Chapter, 1990-1993; Executive Board, Student Chapter, 1984-1986.

Society of Northwestern Vertebrate Biology
Cooper Ornithological Society
Wilson Ornithological Society
Association of Field Ornithologists
American Ornithologists Union
Society of American Foresters

PERSONAL Born 31 December 1957 in Richmond, Virginia

REFERENCES

Dr. E. Charles Meslow, Leader, Oregon Cooperative Wildlife Research Unit, Oregon State University, Nash Hall 104, Corvallis, OR 97331 (503)737-4531.

Richard Holthausen, Regional Wildlife Ecologist, USDA Forest Service, Oregon State University, Department of Fisheries and Wildlife, Nash Hall 104, Corvallis, OR 97331 (503)737-4531.

Robin F. Brown, Nongame Wildlife Biologist, Oregon Department of Fish and Wildlife, Marine Region, Marine Science Drive, Building #3, Newport, OR 97365 (503)867-4741.

Mr. VENTO. Mr. Doolittle.

Mr. DOOLITTLE. Mr. Hamburg, I understand that maybe we will hear from—I guess we will—Mr. Dixon in a while, but his statement indicates that Humboldt County has an unemployment rate of nearly 10 percent. How many jobs would be lost if this bill is enacted?

Mr. HAMBURG. Mr. Doolittle, there is really no way to calculate that because of the way the bill is structured. This bill calls for a phased buyout over a number of years. There is no way to calculate what length of time negotiations, successful negotiations, would entail to buy portions of this forest. And I am sure you have read the bill and you know that our first consideration is that large, intact Headwaters Forest—the 3,000 acres plus the 1,500-acre buffer around it.

Next, we would look at the other large intact groves.

Now, when you talk about job loss, I think we have to get into the regulatory framework in which logging now exists. As you know, the Endangered Species Act has already taken a tremendous whack out of logging in the Pacific Northwest because of the Northern Spotted Owl. We have now the Marbled Murrelet as a threatened species, listed as a threatened species in September 1992. We have the coho salmon now as a candidate species for listing, likely to be listed in northern California.

The logging of the last of these groves will hasten the downfall of these species, which will lead to further restriction on logging, not only in terms of restricting logging on this land, but on associated land as well, other land in the region. So when you talk about job loss, it is not something that we can calculate in exact terms.

One thing we do know, and we know this most recently from a competitor of Pacific Lumber, Simpson Inc., which recently laid off 55 workers, or announced the layoff of 55 workers, because they have cut all of their old-growth. And the president of that company, Dave Caney—and I will submit that article, the article from the local paper for the record—stated that. And actually I can quote—he said, it is a natural step in the progression in the transition to 100 percent young-growth timber operations.

So when the old-growth is gone, as my colleague Mr. Stark said, many of the jobs are gone.

Mr. DOOLITTLE. Do you agree with Mr. Stark that the cost is inflated for the acquisition of the lands called for in this bill?

Mr. HAMBURG. I don't believe that the calculations on the costs of the land take adequately account of the regulatory framework in which logging must go forward. And that is particularly with respect to the listing of endangered species.

Mr. DOOLITTLE. I just note that in 1978, the Interior Secretary then, Cecil Andrus, indicated to Congress that the Redwood Park expansion would cost \$359 million, and ended up costing more than four times that. So we should not be too optimistic in making these projections.

Mr. HAMBURG. As I understand it, the bill that created Redwood National Park was structured much differently than this bill. I believe that that was a condemnation, and in those condemnation proceedings, the corporations which were selling their land to the Federal Government were able to steadily adjust the price of those

lands upward, even as many of the lands were cut over prior to the transfer of ownership.

We have not structured our bill in that way. Perhaps Maxxam would prefer if we did, because perhaps then they could argue for a higher cost. Instead, what we are hoping to enter into as a result of this bill is a fair negotiation between the Agriculture Secretary and the company for acquisition over a number of years.

Mr. DOOLITTLE. We had a vote on the floor last week regarding private property rights in the National Biological Survey bill. The vote was about 300 to 100, somewhere in that range, in favor of preserving private property rights or the rights of the private property owners.

Could this be construed as legislating to strong-arm a private owner into becoming a, quote, willing seller, unquote?

Mr. STARK. If the gentleman would allow me to—

Mr. HAMBURG. I will yield to my colleague.

Mr. STARK [continuing]. Respond to that a minute, I think it was Lawrence Rockefeller who indicated that he stood firmly, as I do, for private property rights, but the one right that we have never allowed people in this country is the unfettered use of the property.

We have always had the fact that government can zone for health, safety, public interests, how it is used. The reimbursement of private property, the taking of private property, has to be done for a fair price. So while nobody questions any right to own this, the question of how the property can be used is one of governmental primacy. And that is the issue that we deal with there.

Mr. DOOLITTLE. Well, I understand the concept the gentleman is speaking of. But on the other hand, we have heard the use of taking here in the testimony, and the idea that this may get down to the point where there will be an evaluation and a formal taking procedure, which would put us, I think, where the Redwood National Park ended up being, wouldn't it?

Mr. STARK. Again, as Congressman Hamburg has indicated, it would depend I suppose on how rigorously we intend to enforce the existing environmental laws and the existing restrictions on harvesting. If we allow owners like Hurwitz and Maxxam to disregard the law, as to make the law meaningless, and continue to cut timber in opposition to the law, conceivably people would say the law is of no use and erase it.

On the other hand, if the law is rigorously and formally enforced, it very well might limit the value that reasonable people would put on the property.

Mr. DOOLITTLE. Thank you, Mr. Chairman.

Mr. VENTO. Congresswoman Shepherd, did you have a question or two of the witnesses, of our colleagues?

Ms. SHEPHERD. I do.

Thank you for coming; and my question has to do—or a series of questions, have to do with this timber as a renewable resource or not, and also with the commercial fishing industry.

Can you describe, Representative Hamburg, why this is a nonrenewable resource and you are treating it as a nonrenewable resource?

Mr. HAMBURG. Congresswoman, there is little question that trees are a renewable resource in general terms. We have been growing

and harvesting trees on the north coast of California for many generations, and I certainly hope that we will continue to do so.

Trees are an extremely important part of our land base, our economy, our values, the way we live on the north coast. However, ancient redwoods are not a renewable resource. The conditions under which they came about, the thousands of years of history during which they evolved as life forms and created the systems that sustain them and those which they sustain—the soils, the streams, the climatic conditions, the topographical conditions—those things cannot be replicated.

So I think we can fairly say that these ancient forests—and I think we have to distinguish ancient forests from old-growth forests; old-growth might be considered anything over perhaps—on the north coast maybe anything over a hundred years or so old, because of the very good growing conditions for redwood, but when we are talking about these ancient forests, we are talking about trees, some of which have been growing since—you know, we are talking a thousand years, 1,500 years in some cases even more than that. And they are unique and they are irreplaceable.

Ms. SHEPHERD. And you are also indicating that the conditions that they are interdependent with are irreplaceable; in other words, if they are cut down, then you have a set amount of soil that is lost that is nonrenewable. You have a certain number of species that are lost that are nonrenewable, none of which can be re-created.

We have a habit in this country of charging royalty for nonrenewable resource extraction. Do we do this on redwoods?

Mr. STARK. I don't believe so. It does that, but it is not yet law.

Ms. SHEPHERD. This is called the Headwaters bill, and I presume that is because there are a lot of headwaters. I am a cosponsor of this bill as well and this was my primary interest in it.

The headwaters of salmon spawning streams are crucial to the commercial fishing industry and the commercial fishing industry has of late taken some huge losses, I dare say larger losses perhaps than the timber industry because their resource is declining, they have fewer and fewer salmon to harvest from the sea.

I have often wondered whether or not what we allow timber companies to do in the interests of protecting their private property rights is somehow infringing on what we allow the commercial fishing industry to do, and they have just as much right to be in business and to have their resources replenished as the timber industry.

I would like you to explore this for me. For example, what is the relationship to this bill, if we were to cut along the headwaters of the streams that are there, what is likely to happen to the commercial fishing industry in California?

Mr. HAMBURG. I believe that there are many reasons for the decline of the salmon populations in the Pacific Northwest. In one of my committees, the Merchant Marine and Fisheries Committee, we explore those reasons in great depth. Part of it has to do with damming of rivers; part of it has to do with natural occurrences. In the Pacific Northwest, the flood of 1964 washed a lot of silt into rivers, in some areas scoured streambeds and made spawning impossible. We have had El Nino conditions, problems with marine mammals.

There are many things that have led to this decline. Clearly, one of the contributing factors has been sedimentation particularly due to upslope logging. The timber companies on the north coast, to their credit, are doing a better job. I think they are beginning to understand—not beginning; I think for at least a decade or so they have more cognizant of the interrelationship between their logging practices and the health of the fishing industry.

However, I believe that areas like the area designated in this bill—and we have submitted testimony by Peter Hoyle of U.C. Davis to give scientific backing to this—contributes tremendously to particular stocks of salmon. I believe that something over 100 stocks of salmon in the Pacific Northwest are already extinct and something over 200 runs are threatened with extinction, and maybe like the coho on a candidate list soon to be listed as threatened and endangered. I believe those listings are a tremendous threat to the economy of the region. Someone said if you thought the spotted owl was bad, wait until they start listing stocks of salmon.

In this area, Dr. Hoyle believes, and I think there is good reason to concur, that this region is particularly important for trying to preserve the last of the runs of coho salmon.

Ms. SHEPHERD. Do you have estimates on what losses have been sustained by the commercial fishing industry in the last 10 years of extreme logging?

Mr. HAMBURG. Well, again in fairness to the timber industry, I want to say that there are a multitude of reasons why this industry is imperiled, and logging is certainly one of those. I would definitely put the losses in the hundreds of millions of dollars.

One thing that is happening on the North Coast that I think is very encouraging is that those groups representing the interests of the fishing industry and those representing logging are starting to work together to improve practices, expand the careful treatment of riparian areas along streams so that streams are properly shaded and water temperatures don't get too high for proper spawning. There are some good things going on.

As I have said, particularly with respect to the coho, I think this particular area is critical and bringing back the salmon industry in the Pacific Northwest is critical to the future economic base of the region, and that will take many years and many, many different measures to achieve.

Ms. SHEPHERD. Do you have a sense that this timber company in question here is working to preserve these salmon runs with the fishing industry?

Mr. HAMBURG. I am sure that they will testify on that issue. I believe that—I am sure they have a fishery biologist on their staff. I am sure they are taking some steps.

I believe that if we do not protect these headwaters forest areas, we will destroy one of the last remaining essential spawning grounds for particular stocks of salmon. So I don't believe that even their careful work to the extent that they are doing it, I don't believe that work is consistent with logging these groves, and I do believe that it is the intention of the company to continue to log these last groves of redwoods. That was amply demonstrated Thanksgiving weekend of 1992 when in the midst of what I believe was

kind of a Keystone Cops rendition by State and Federal agencies, conflicting in the messages they were giving Pacific Lumber, the company was able to harvest about a hundred acres in the Owl Creek Grove.

So I believe that given the current regulatory confusion, that they would continue to make those kinds of incursions and further put anadromous fish stocks in danger.

Mr. VENTO. I think the point made about the dollars spent, the proposal actually provides for a variety of different ways by donation that extends an invitation to the State of California, which has no small interest in terms of the preservation of this particular area from past testimony, but the bill talks about addition by donation, by purchase with donated or appropriated funds or by exchange for other lands owned by any department, agency or instrumentality of the United States, so that would be the DOD, GSA, the land management agencies, RTC and a lot of other people that we could invite into that particular process. Because of the size of this, that would be desirable if the Congress didn't appropriate what they are supposed to appropriate next year for the Land and Water Conservation Fund, which they don't do.

In any case, the authority and the dollars are there; they are just going to the Treasury for other things like aircraft carriers. It is a matter of priorities, I guess. If you live in Utah, apparently aircraft carriers are important.

Mr. HANSEN. You never know when the great Salt Lake is coming up, do you?

Mr. VENTO. In the Great Salt Lake, that is about what they will be useful for. You will need them because you are running out of lands.

Thank you very much. I invite Congressmen Hamburg and Stark to join the committee, without objection, to participate in the questioning. We will have to break to go to the Floor and handle a bill on New Jersey, it looks like now. We will take Mr. Leonard, and hopefully get through the first panel before we have to do that about 12:30.

Mr. Leonard, you have a number of members with you: Dr. John Ralph, who we have heard from before, who works on, I think he is one of the leading scientists on the Marbled Murrelet; Mr. Philip Detrich, the Forest Species Specialist, and others. So we very much appreciate your presence and the work that you have done.

This is an issue that we did hammer away on during the last session, didn't come to a conclusion. The committee actually passed it and it went to the Committee on Agriculture and time ran out on this issue.

Your testimony has been made part of the record, so please proceed to summarize it.

STATEMENT OF GEORGE M. LEONARD, ASSOCIATE CHIEF, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE, ACCOMPANIED BY DR. C. JOHN RALPH, RESEARCH WILDLIFE BIOLOGIST AT THE FOREST SERVICE'S REDWOOD SCIENCES LABORATORY; PHILLIP DETRICH, FOREST SPECIES SPECIALIST, U.S. FISH AND WILDLIFE SERVICE, U.S. DEPARTMENT OF THE INTERIOR; AND PAUL TITTMAN, CHIEF APPRAISER, FOREST SERVICE

Mr. LEONARD. Thank you, Mr. Chairman. We appreciate the opportunity to present the views of the Department of Agriculture on the Headwaters Forest Act. As you mentioned, Dr. C. John Ralph of the Pacific Southwest Station is here with me.

The Department of Agriculture supports the goals and objectives of H.R. 2866, and is interested in working with the Congress to find ways to acquire this land. However, there are serious cost issues associated with the bill as currently drafted. The administration is willing to negotiate with the involved parties to see if the objectives of the bill can be achieved.

H.R. 2866 would adjust the boundaries of the Six Rivers National Forest to include approximately 44,000 acres of private lands belonging to Pacific Lumber Company. The timber lands are redwood forests on productive growing sites. Approximately 3,100 acres of old-growth redwoods, called the Headwaters Forest, are included in these private lands.

The area to be acquired under H.R. 2866 has excellent natural resource attributes. Habitats for a variety of sensitive, threatened and endangered wildlife species are provided by these lands. The Headwaters Forest is pristine, old-growth redwoods and contains the majority of the birds in one of three remaining populations of Marbled Murrelets in California.

Our main concern with H.R. 2866 is the cost of land acquisition. An estimate of the cost of acquisition for the approximately 4,488-acre Headwaters Forest, including the value of the standing timber, is approximately \$500 million. No appraisal has been conducted on the total 44,000-acre area identified for addition to the Six Rivers National Forest as proposed in this bill.

The bill provides for the development of a comprehensive management plan within one year of enactment. Mr. Chairman, this time is too short. Development of such a plan would require us to conduct resource inventories, public involvement and consultation on threatened and endangered species with the Fish and Wildlife Service. Accomplishing these tasks would take a minimum of three years.

Mr. Chairman, the forest lands in question would be a worthy addition to the national forest system. The Department of Agriculture supports the goals and objectives of H.R. 2866, and is interested in working with the Congress to find ways to meet these goals.

Mr. Chairman, I am prepared to respond to questions.

[Prepared statement of Mr. Leonard follows:]

STATEMENT OF
GEORGE M. LEONARD, ASSOCIATE CHIEF
FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
United States House of Representatives

Concerning H.R. 2866, Headwaters Forest Act

October 12, 1993

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to present the views of the Department of Agriculture regarding H.R. 2866, the "Headwaters Forest Act." Accompanying me today is Dr. C. John Ralph of the Pacific Southwest Research Station.

The Department of Agriculture supports the goals and objectives of H.R. 2866 and is interested in working with the Congress to see this proposal effected. However, there are serious cost issues associated with the bill as currently drafted. The Administration is willing to negotiate with the involved parties to see if the objectives of the bill can be achieved.

H.R. 2866 would adjust the boundaries of the Six Rivers National Forest to include approximately 44,000 acres of private timber lands belonging to Pacific Lumber Company. The timber lands are redwood forests on productive growing sites. The bill would direct the Secretary of Agriculture to acquire

these lands by donation, purchase with donated or appropriated funds, or exchange, and to manage them as part of the Six Rivers National Forest. Approximately 3,100 acres of old-growth redwoods, called the "Headwaters Forest" are included in these private lands and, upon acquisition by the Federal Government, would be designated as wilderness. The bill would require the Secretary to prepare: 1) a land acquisition plan within 6 months of enactment, 2) a comprehensive management plan for the lands to be acquired within 1 year of enactment, and 3) a report for a "Study Area" which analyzes the potential for additional acquisition of approximately 13,620 acres within 1 year of enactment.

The bill would also require the Secretary, subject to appropriations, to make ten annual payments to Humboldt County, California in an amount equal to the State of California Timber Yield Tax revenues which would be paid if the lands were not acquired by the United States.

The area to be acquired under H.R. 2866 has excellent natural resource attributes. Habitats for a variety of sensitive, threatened and endangered wildlife species are provided by these Pacific Lumber Company lands. These include year around habitat for the northern spotted owl (listed as threatened), foraging habitat for the peregrine falcon and bald eagle (listed as endangered), and nesting habitat for the marbled murrelet (listed as threatened). The area also includes

freshwater and anadromous salmon and steelhead fisheries and potential for a wide array of outdoor recreation opportunities. Appropriate management direction for these resources and provision of long term protection of soil and water could also be provided through the Forest Planning process with full public involvement.

The old-growth on Pacific Company lands including that in the "Headwaters Forest" are pristine, old-growth, redwood forests, and contain the majority of the birds in one of the three remaining populations of Marbled Murrelets in California. The management of Headwaters Forest, other old-growth, and the additional surrounding lands would include practices to ensure the persistence of the Marbled Murrelet in California, and reduce concerns for the species' management on National Forest System lands outside of the proposed acquisition.

Our main concern with H.R. 2866 is the cost of land acquisition. An estimate of the cost of acquisition for the approximately 4,488 acre Headwaters Forest, including the value of the standing timber, is approximately \$500 million. The appraisal on this property was completed last spring and approved for Agency use on September 13, 1993. No appraisal has yet been conducted on the 44,000 acre area identified for potential purchase and addition to the Six Rivers National Forest as proposed in H.R. 2866. The bill authorizes appropriations for planned acquisition and other costs.

However, the cost of acquiring the 4,488-acre Headwaters Forest represents more than half the total Land and Water Conservation Fund (L&WCF) dollars appropriated nationally for National Forest acquisitions during the entire history of the L&WCF. The Administration is interested in exploring a number of possible alternatives to purchasing land including conservation easements, land donations, and land exchanges to accomplish the objectives of this legislation.

It should be noted that coastal redwood is a species in high demand, with a limited supply, as nearly all of the coastal redwood harvested and sold in the world originates in Northern California. As a result, the price of redwood is increasing more rapidly than other species.

Under current management, Pacific Lumber Company annually harvests about 200 million board feet of timber from their approximately 191,000 acres of timber lands. However, this volume will decline as available old-growth is cutout over the next decade. Until the land management plans for the area are developed, we cannot estimate the volumes and revenues that might be realized if the lands were placed into public ownership as proposed.

The bill provides for the development of a comprehensive management plan within one year of enactment. Development of such a plan would require: 1) public involvement as required by

the National Forest Management Act; 2) resource inventories, including threatened and endangered species inventories; and 3) consultation with the U.S. Fish and Wildlife Service concerning threatened and endangered species. Accomplishing these tasks would take a minimum of three years. Because of the high administrative costs associated with this planning process, we would recommend that the development of management plans not proceed until the lands are acquired.

Mr. Chairman, the forest lands in question possess excellent natural resource attributes and the Headwaters Forest has important wilderness attributes, the Department of Agriculture supports the goals and objectives of H.R. 2866 and is interested in working with the Congress to meet the objectives of the bill.

This concludes my prepared statement. We would be pleased to answer the Subcommittee's questions.

Mr. VENTO. Thank you, Mr. Leonard.

I note you did an appraisal on the core area, I believe, the 44,000 acres. Can you explain in more detail to me the nature of that appraisal, or do you have someone with you that can?

Mr. LEONARD. Let me call on our chief appraiser to go over that.

Mr. VENTO. If he could come forward, maybe you could find an extra chair on the corner there.

Would you state your name for the record?

Mr. TITTMAN. My name is Paul Tittman. I am Chief Appraiser of the Forest Service.

Mr. VENTO. Good morning, Mr. Tittman, and thank you for being present.

Mr. TITTMAN. The appraisal was prepared by Jim Fleming, who is a registered professional forester out of Sacramento, California. It was based on a timber cruise that was prepared under separate contract by Hammond, Jensen and Wollen and Associates of Oakland, California.

Without getting into the details, this was a comprehensive cruise of 4,488 acres taking into account California Department of Forestry standards for environmental zones and threatened and endangered species, and was predicated on the current California standards for timber harvest in that area.

Mr. VENTO. Why did you appraise the 44,000 acres—why didn't you appraise the area we were talking about?

Mr. TITTMAN. We were not given access to the remaining properties. Pacific Lumber indicated that the remainder was not for sale and was not subject to consideration at that point in time, so we did not contract for appraisal in that area.

Mr. VENTO. So that was the extent of it. In other words, ignorance I guess is bliss here in terms of not giving the information out. I suppose then they have their own appraisals of what the value of it is. It would be nice to be able to have the information. In the sense that there is an attitude or lack of cooperation that stands in stark contrast to some of the statements made concerning this particular issue.

Mr. Leonard, does the Pacific Lumber inholdings identified in the bill have the necessary characteristics to be national forest and could they be managed efficiently?

Mr. LEONARD. Yes, sir. If we have the 44,000 acre tract envisioned by this bill, it would make it a very manageable unit.

Mr. VENTO. It has been referred to that this isn't a priority, that you have other priorities. Aren't you under marching orders not to in fact begin to expand outside forest boundaries except in rare instances?

Mr. LEONARD. That is correct. We have never considered this. Our set of priorities is based on directions that we have received from the Congress in various legislations which has identified particular tracts.

Mr. VENTO. The White Mountain National Forest of New Hampshire; was that a priority of the Forest Service?

Mr. LEONARD. No.

Mr. VENTO. It came about because of recommendations from the Congress. I don't know that this would be or could be a priority. If we were to acquire this land, could it produce revenue?

Given the strictures of this bill?

Mr. LEONARD. Certainly under the terms of this bill, there would be no harvesting of the old-growth redwoods. The bill would permit harvesting on the second-growth stands. We don't have an estimate of—we have not cruised the area—we don't have an estimate of what levels of yield could be obtained but certainly these are highly productive lands and even with set-asides for stream side protection, you would have a substantial yield off of the second-growth stands over the long term.

Mr. VENTO. Most of these lands other than the fact that there are some wilderness and some other areas that are prevented under this bill from being harvested, supposedly you would operate under stricter guidelines than the State of California and others are imposing on the Pacific Timber Company; is that correct?

Mr. LEONARD. That is correct.

Mr. VENTO. Nevertheless, there could be revenue—in other words I guess the way that they are moving means they can make some money very quickly. You would get into supposedly a sustainable yield type of policy; is that right?

Mr. LEONARD. Absolutely.

Mr. VENTO. As the premier agency in terms of managing forests on a global basis, do you think that you can handle this and do it correctly or not?

Mr. LEONARD. We think we can do an exemplary job.

Mr. VENTO. I guess if you come from the school that the government can't do anything right and that only the Pacific Lumber Company knows how to run these things correctly, it blows away the fact that the Forest Services manages 100 million acres and the fact that you follow the law, which it seems to be that most often that is a good idea or you end up in court, that probably you could handle this. And that probably it could still continue to produce some jobs; maybe not where you say this is wilderness and you can't do anything there, and the Congress gives you the instruction—we wouldn't want to equal the record of the Pacific Lumber Company to date in terms of what they are doing because that would be a repeat of destroying ecosystems and these attributes which we want to protect.

Insofar as acquiring the land, the Land and Water Conservation Fund is supposed to have \$900 million available. With land management agencies we seldom get that high. In fact we get to about three. We get to \$300 million a year usually. Understanding that we have to have that money for aircraft carriers, that we can't use it to buy forests because they are more important. The world may change, but we are still on a Cold War path, that since we can't have that, or now the deficit becomes important if we talk about buying forests, where it was apparently less important before when we were buying aircraft carriers. Setting that debate aside, I would like to actually change it.

Are there other ways to acquire this without using dollars? In other words, the bill provides for a donation. Is it reasonable to expect the State of California may do something?

Mr. LEONARD. The State of California has shown very active interest in the Headwaters Forest specifically. We think there are opportunities for traditional land exchanges. There may be also some

opportunity for the use of military bases that are being closed, some of which have very, very high real estate values. Perhaps some of the lands or properties that have been acquired through the Resolution Trust Corporation could also be used. The administration is interested in looking at the whole combination of opportunities.

Mr. VENTO. We would be trading one asset for another. Instead of ending up with land in downtown Burbank or Phoenix or Minneapolis or something, the national government would end up with this as an asset. We might know how to manage that since we are managing a couple hundred million acres of it through the Forest Service. It is obvious that we don't do too well managing some of these other properties, from my standpoint of having to be the majordomo in terms of watching the RTC in the House. So the issue becomes clear here and in terms of what is possible.

I understand the State of California is going through a lot of trauma so I don't know that we can rely on that to any great extent, except that they have shown and demonstrated a lot of interest in this area. That is all I am commenting about. But there is the opportunity to do some trading here to accomplish the goal through trading one asset for another that we have or we could actually use the real money we are supposed to use for this, but that takes a change in priorities beyond apparently where we have gone at this time.

These lands with other major considerations on them from the State of California, the Endangered Species Act, Clean Water, all these apply to these lands today even though they are private, don't they?

Mr. LEONARD. Yes, they do.

Mr. VENTO. In the sense that there has been damage, is it possible that dollars could be set aside in terms of mitigation that could be used for the purchase of other lands?

For instance, we had that with the Exxon oil spill in Alaska. That was a court decision that came out. We are now involved in a series of different court decisions dealing with old-growth forests, and they are not resolved; is that correct?

Mr. LEONARD. That is correct.

Mr. VENTO. So dollars spent in terms of mitigation could be used for instance as a resolution here if we sought a judgment along those lines; is that correct?

Mr. LEONARD. I think it is clear that if we are going to resolve this question and acquire these lands, we will have to use a combination.

Mr. VENTO. I am just trying to look at the wide range of possibilities. That is a common way to resolve issues where damage has been done. In Region 6 or other areas, we could have a tradeoff—this is Region 5?

Mr. LEONARD. That is correct. The issue in Region 6 is actually dealing with stream courses that have been damaged there and restoring them to a productive state.

Mr. VENTO. If there is damage in Region 5, in another area where there has been damage done, I don't know if there are lawsuits there, but there are ways to move forward and deal with this. I know it is breaking new ground to suggest that the West, which

has public domain States would buy or develop new forests. This is breaking new ground. This means that what was left may not embrace what was worthy and necessary as stewards to protect. So it is not too big a leap or big step forward.

I think it is a reasonable path in which to move. I understand the dollar problems and national government and where our priorities are and why they are immutable and must stay there. The fact that the world changes shouldn't bother us that much. We should just go about working as we normally do in terms of plowing money into other special interest projects.

Mr. LEONARD. The administration is interested in looking at alternative ways of getting the resources to make this happen.

Mr. VENTO. I think it can happen if we want to do it. It is a question of whether we want to do it.

Mr. Hansen.

Mr. HANSEN. Thank you, Mr. Chairman.

Mr. Leonard, good to see you again. I know all the times you have been here and been scarred. It is good to see you one more time.

On page 4 of your testimony, however, the cost of acquiring the 4,448-acre Headwaters Forest represents more than half the total Land and Water Conservation Fund. Dollars appropriated nationally for national forest acquisitions during the entire history—the administration is interested in exploring other ways I guess this is still rather nebulous and we are still trying to put this together.

If I could ask you, when we have over 265,000 acres of redwoods protected in Federal and State parks and preserves and 90,000 acres of old growth forest, how much more do you want as the Forest Service? Where do we go? It is like the idea of how many acres do we need that the Chairman keeps alluding to.

Now we have 15, and of course the government—

Mr. VENTO. If the gentleman would yield to me.

Mr. HANSEN. Just a moment. The world has changed, but some of us who have to deal with it daily find that it has maybe changed to make it even worse and we still give missions to the Navy to do. Admiral Kelso says, Stop giving us these missions, and we won't need these things. The same analogy is, how many more do you need? I'll be happy to yield.

Mr. VENTO. I just wanted to point out that in some instances, the military doesn't want the aircraft carriers. In any case, I am interested in hearing Mr. Leonard's opinion. As far as I am concerned, I think we ought to give him the direction. I appreciate his valuable opinion and that of the professionals, but we represent the people.

Mr. HANSEN. I agree. Just like we have to sit there and determine how many missions the military has to do to keep us free and safe so you can grow your family and your grandchildren in Minnesota; it still comes down to the idea that our whole job is prioritizing.

Mr. VENTO. Protect the redwoods so Horowitz can cut them down.

Mr. HANSEN. The Chairman has couched it in terms of an opinion. I wonder if there is an official opinion on that. How much do you need?

Look at the beauty of the parks in Utah. Up to the last reapportionment I had more parks in my district than any district in America. I would do anything in my power to keep them beautiful and clean. But we can't take every piece of sage brush and turn it into a national park either.

Mr. LEONARD. Certainly one of the major interests in protecting this area is its important role in protecting the vitality of the Marbled Murrelet in California. So these stands that we are talking about play a unique role, not the same role as a redwood park with a different population. The question is the role there.

Let me ask Dr. Ralph to comment on the role of this particular area with regard to the Marbled Murrelet.

Dr. RALPH. In relationship to the total population of the species, about 350,000 in North America, California has between 6,000 and 8,000 individuals of this species. Our recent research done over the last year or so shows that the area in question of southern Humboldt County has one of the three populations in California and contains about 20 percent of the State population. About 80 percent of these birds we estimate are on Pacific Lumber Company land.

According to our estimates—and I am sure Pacific Lumber has more accurate—there are about 15,000 acres of old growth and old-growth residual on Pacific Lumber Company lands, depending on how you define old growth. So roughly one of the three populations is on Pacific Lumber Company land. This represents about 20 percent of the population in the State of California.

South of Puget Sound, there are no other large populations until you get into the redwood region. This is where the majority of the population is south of Puget Sound.

Mr. HANSEN. You just mentioned, you said depending on how you define old growth. What is the definition of the term by the Forest Service?

Mr. LEONARD. We have developed separate definitions of old-growth by species and forest type. It is a structural definition not in the age class definition, and in this particular part of the world you can get old-growth structure at a relatively young age because it is a highly productive site. You can get very big trees in this area at a relatively young age. You don't get the ancient forests, the forests Mr. Hamburg was referring to in that short of a time, but you can get large trees and you can develop substantial structure in the trees within 200 years.

Mr. HANSEN. Would you submit for the committee any definitions that the Forest Service has come up with regarding old growth, especially redwoods?

Mr. LEONARD. Yes. Be glad to do that.

Mr. HANSEN. Thank you, Mr. Chairman.

Mr. VENTO. Without objection.

[EDITOR'S NOTE.—The information can be found in the archival file.]

Mr. VENTO. Mr. Hamburg.

Mr. HAMBURG. Thank you, Mr. Chairman.

Mr. Leonard, thank you very much for being here. And, Dr. Ralph and Phil, it is good to see you as well.

Mr. Leonard, if I could ask you, we have just been through a major planning process at the Federal level with respect to treat-

ment of our Forest Service lands, our Federal lands, and I would like to ask you to comment on the consistency of this proposal, the conceptual framework, if you will, behind this bill and that put forward by the FEMAT.

Mr. LEONARD. I think there is no inconsistency in the thing. When we would prepare the management plan for the area, as directed by the bill, we could be completely consistent with FEMAT to get there.

Mr. HAMBURG. So from your standpoint as a forestry professional, you understand the sense in not merely creating fragmented islands of old growth, the concept of ecosystem management which is put forth in the FEMAT report is the concept that you see in this bill?

Mr. LEONARD. Yes. Now, FEMAT of course was confined to or much of the FEMAT report was confined to the Federal lands so they did not go out and identify old-growth reserves or such patterns. So we would have to extend those concepts out to the private lands.

Certainly, what is written in the bill and my understanding of FEMAT, there is no inconsistency.

Mr. HAMBURG. OK. I am looking at this appraisal review which was dated September 13, 1993, and trying to get more at this issue of the appraised value and how we calculate that. Could you describe the assumptions about the level of harvest of the remaining old growth that were made in this appraisal in trying to estimate the value of the property?

The appraisal was only of 4,488 acres and it indicated that there is a total of roughly 610,000 million, so what is that, billion board feet? The extract notes that 18,849 million board feet of merchantable timber would not be available for harvest because it would be necessary to maintain wildlife.

I would like to ask how you determine the amount of discount that was necessary to sustain the wildlife, because what that represents is something like 3 percent of the existing timber on that 4,500 acres, and that really surprised me to see a figure that low.

Mr. Leonard or Dr. Ralph?

Mr. TITTMAN. My understanding was that the cruisers used the standards set down by the California Department of Forestry to establish the set-asides for threatened and endangered as well as the stream environments.

Mr. HAMBURG. Was there any consultation with Fish and Wildlife?

Mr. TITTMAN. Yes. I guess the discussions were with both Fish and Wildlife and the California Department of Forestry, who are the principal monitors as to what happens on private land in California.

Mr. VENTO. Would the gentleman yield? Is that actually an agreement now that is standing between the Fish and Wildlife Service to regulate logging in this area as it affects the Marbled Murrelet?

I think we have—the gentleman from California, it is his time.

Mr. HAMBURG. I would like to hear from Dr. Ralph and Mr. Detrich on the question.

Dr. Ralph, in your opinion would protection of 3 percent, which is what is referred to in this appraisal of the merchantable timber in the old-growth areas, would that be adequate for protection of Marbled Murrelets in California? Is that an adequate amount?

Dr. RALPH. That is less than the Headwaters Forest area which makes up depending on your definition substantially more. That would leave very little, as I understand it, stream-side corridors, things like this. This would not leave enough for a viable population, for this particular population.

Mr. HAMBURG. So I guess you weren't consulted with in this appraisal review?

Dr. RALPH. No, I wasn't, but it would be Fish and Game and Fish and Wildlife.

Mr. HAMBURG. Mr. Detrich, in your opinion would 3 percent of the merchantable timber being left in these old-growth areas be adequate for protection of the Marbled Murrelet lands?

Mr. DETRICH. I am Phil Detrich with the Fish and Wildlife Service in Sacramento. I supervise a group of biologists that is responsible for administration of the Endangered Species Act related to forestry activities in northern California. I believe you are referring to the appraisal package and the 3 percent within the package?

Mr. HAMBURG. Yes, a document of September 13, 1993.

Mr. DETRICH. To my knowledge the Fish and Wildlife Service has not been involved in that appraisal package. It could perhaps have proceeded at some other level.

Mr. HAMBURG. I thought I understood that you had been consulted as part of this process.

Mr. TITTMAN. It was through the California Department of Forestry and their licensing authority for harvesting timber on private land; the standards were gotten from them.

Mr. HAMBURG. So the board of the California Department of Forestry's estimate was that 3 percent would be adequate, and you don't concur with that?

Mr. TITTMAN. It was the timber cruisers and appraiser's estimate based on the standards put out by the State of California.

Mr. HAMBURG. I think these estimates are close to useless based on the current science with respect to the Marbled Murrelet. So that may be enough about that.

Mr. Leonard, do you anticipate an imminent petition to list the coho salmon and if the coho is listed, will that mean a further restriction on the estimated harvest levels in this area?

Mr. LEONARD. I understand that the Fish and Wildlife Service, and perhaps Mr. Detrich better comment, but my understanding is that a number of strains of the coho salmon are being considered for listing. I don't know whether they include the strains going up into the Headwaters Forest or not. Certainly the levels of protection that we have been providing on the Federal lands exceed those that are required by the State of California for operations on private lands.

If these lands were acquired by the Federal Government, we would be managing them differently than they have been managed in private ownerships. But I can't tell you what requirements the State of California would impose as a result of a listing decision on those coho.

Mr. HAMBURG. But you would anticipate there would be some further restriction on harvest level if the coho were a listed species?

Mr. LEONARD. Certainly based on what happened in Oregon and Washington, yes.

Mr. HAMBURG. You certainly saw that with the FEMAT. Once the overlay was put on the allowable harvest due to the decline of salmon populations, it had a tremendous effect, did it not, on the overall harvestability, if you will, of these Federal lands?

Mr. LEONARD. On Federal lands, yes.

Mr. HAMBURG. Is there reason to think it would be different on State lands? Do the fish pay that much attention to the boundaries?

Mr. LEONARD. The fish don't. From a biological standpoint, there may not be much logic, but the regulatory process is substantially different on private and Federal lands.

Mr. HAMBURG. We will hear more about that later from one of the witnesses.

Mr. VENTO. Let's recognize the other side at this time.

Mr. Doolittle.

Mr. DOOLITTLE. Thank you, Mr. Chairman.

Mr. Leonard, Mr. Hamburg and Mr. Stark believe that your appraisal is inflated because it doesn't adequately take into account the various regulatory overlays on that land. Would you comment on that, the appraisal of the approximately 4,500 acres—48 something, I don't know the exact number. Is it inflated or is it accurate?

Mr. LEONARD. We think we have a good appraisal. The issue is the level of protection. We are faced with a problem. We don't have recovery plans in place for the endangered species involved. And until you have a recovery plan in place, it is very difficult to estimate what is going to be required in terms of protection, whether it is stream protection for the salmon or the specific provisions for murrelets.

We have a proposal, we had a draft proposal for a recovery plan for the spotted owl but that has not been formally adopted. We have the option 9 coming out of the FEMAT report but that hasn't been adopted. Until you have a final plan which says the relative role of Federal lands versus private lands and what the restrictions are going to be, at best, you have to make estimates.

The appraiser in this case talked to the State of California. The State of California has obviously been working with the Fish and Wildlife Service on this issue. The State of California said these are the requirements that we would impose in this area and the appraiser said, based on those requirements, I will take this much land out of the appraisal.

So it reflects our current estimate of what the State would require as these things change. As we get recovery plans for the various species, as strategies are developed, those figures may very well change.

Mr. DOOLITTLE. It appears to be highly flexible. Would it be fair to say that this represents your best estimate as of the time the appraisal was made as to what the value of those lands would be taking everything into consideration?

Mr. LEONARD. Yes, sir.

Mr. VENTO. Mr. Doolittle, can I clarify something on your time? It is your best judgment. You weren't asked to impose any standards here; you let the State of California do it and it is a private appraiser. You are saying you understand the information they have given you, but the Forest Service judgment or other agencies have not been involved in laying down any type of criteria.

Mr. LEONARD. This doesn't reflect our judgment of what the standards should be nor the Fish and Wildlife Service judgment. It reflects what the State of California is currently imposing on these lands.

Mr. VENTO. If you were asked to do that, you would have a group that would get together and come up with a reasonable set of limitations—I am not asking you what they would be, but they would probably be different?

Mr. LEONARD. Absolutely, they would be different.

Mr. DOOLITTLE. I would be interested in knowing what that would be. Is that possible to get?

Mr. LEONARD. Our closest judgment right now is the option 9 under the FEMAT report of the President's plan for the Northwest, because that covers the Federal lands in this part of California, and assuming that that becomes final in December, then—and these lands were acquired by the Federal Government, that would govern, our plans would then be consistent with that.

Mr. DOOLITTLE. So if option 9 were to go into effect, what then would your appraisal be of that core of lands, the 48-something acres, 4,800 something, 4,400?

Mr. LEONARD. Option 9 applies to Federal lands and it wouldn't automatically change that appraisal. It would depend on how the State of California responds to the development of a final recovery plan for the owl or the murrelet and other species.

Mr. DETRICH. Perhaps I can add some clarification. Currently Fish and Wildlife Service does regulate to a degree timber harvest on that property under the prohibitions of Section 9 of the Endangered Species Act and the options under Section 10 of the Endangered Species Act. If the property were to come into Federal ownership, we would then regulate that under Section 7 of the Endangered Species Act. Whether or not the standards of FEMAT would be applied, I think that is something that is in the future, hasn't been determined.

Mr. DOOLITTLE. Could this value of 499 drop by 5 percent, 10 percent—is there a range, some sense of the range of fluctuation that could occur depending upon what the recovery plans are, et cetera? Do we have any idea? It could be 50 percent less, perhaps?

Mr. LEONARD. It could be less by some percentage, but the problem you have is that the stumpage values of redwood are increasing at 10 or 15 percent per year, so if it takes several years to accomplish that, you still may be in the ball park.

Mr. DOOLITTLE. You mentioned stumpage values. How much have the stumpage values increased since the time this appraisal was made, which I guess is January first?

Mr. LEONARD. Maybe as much as 15 percent.

Mr. DOOLITTLE. Mr. Tittman, would that mean, would it be fair to conclude that the appraisal value should be adjusted upwards by a corresponding amount to give appraisals, say at today's prices?

Mr. TITTMAN. I would say yes, the majority of the value is vested in the commercial stumpage and it would be proportional.

Mr. DOOLITTLE. So 10 percent would be \$50 million, so \$75 million extra on top of the figure that you gave?

Mr. TITTMAN. Yes, sir.

Mr. DOOLITTLE. Let me ask you gentlemen this question. Mr. Leonard, it has been quoted to me that Jack Ward Thomas said the Northern Spotted Owl should never have been listed in northern California, and that last week the California Forestry Association filed a petition for de-listing of the Northern Spotted Owl in California.

Mr. Leonard, what would be the impact of such a de-listing on the value of this land, do you think?

Mr. LEONARD. I am not sure—it seems to me that probably the limiting factors affecting this land are going to be more controlled by requirements for the Marbled Murrelet and for salmon streams than they are by the spotted owl in this situation.

Dr. Ralph?

Dr. RALPH. That is very true. I concur.

Mr. DOOLITTLE. So the effect of de-listing of the Northern Spotted Owl would be negligible at least as to this land then?

Mr. LEONARD. Yes.

Mr. DOOLITTLE. Mr. Leonard, I understand that although you do not have an appraisal of that 40,000 acres beyond the initial 4,400 acres, that you have some projected idea of the approximate worth of that; is that true?

Mr. LEONARD. No.

Mr. DOOLITTLE. You have no idea whatsoever as to what the 40,000 acres may be valued at?

Mr. LEONARD. We would have to make some real wild guesses on that.

Mr. DOOLITTLE. Such a wild guess was indeed made and tendered to staff of this committee as recently as last week, I understand.

Mr. LEONARD. Okay, if you understand that is what it is.

Mr. DOOLITTLE. What was that figure, wild as we stipulate that it may be?

Mr. TITTMAN. I prepared that as an extrapolation off the approved appraisal and some photo maps and the estimate for the 44,000 acres could approach \$1.5 billion, and it was intended to be what it could approach because we have no knowledge.

Mr. DOOLITTLE. Based on the figures that we saw with regard to what happened with acquiring the expansion of the Redwood National Forest which were four times what it was estimated to be, it would not be—Redwood National Park; is that right?

Mr. LEONARD. Yes, sir.

Mr. TITTMAN. May I respond a little bit?

Mr. DOOLITTLE. Yes.

Mr. TITTMAN. The Redwood National Park was a result of a court awarded condemnation. There are considerations in there that would not normally be found in a normal transaction.

Mr. DOOLITTLE. Since 80 percent of the lands in this bill are second-growth forests, what values can they add to the National For-

est System that are not already contained within the million-acre Six Rivers Forest?

Mr. LEONARD. I think the issue there with the surrounding lands first is their role in protecting the old-growth stands, the main Headwaters Forest, plus the other patches of old growth in there where we could manage those so that they would ultimately provide linkages and we wouldn't have the separated, fragmented old-growth stands without the connectivity that would make that good wildlife habitat.

So that, again, it is not a question of what could adapt in terms of what is not on the Six Rivers, it is a question in this situation where you have some remaining old-growth stands that provide valuable habitat for the murrelet; you can enhance that value by taking the second-growth stand and managing it to provide the old-growth characteristics so that you can have the connectivity and reduce the fragmentation that has occurred over the years.

Mr. DOOLITTLE. Are we adding new values that don't already exist?

Mr. LEONARD. Yes, I think we are adding values that don't exist in that we are improving the opportunity to recover the murrelet population.

Mr. DOOLITTLE. Which is already being assisted in other areas. I yield back.

Mr. VENTO. If there are additional questions, I ask unanimous consent that all Members be able to submit questions in writing to the witnesses and the Forest Service, and would ask witnesses to respond in a timely fashion so we have the information. I would appreciate that.

Ms. Shepherd, did you have any questions of this panel?

Ms. SHEPHERD. I guess my question would have to do with a follow-up on something that you just said. My colleague from Utah in some ways equated—he is not here to defend himself, but we have an ongoing discussion about this—in some ways equated purchasing individual aircraft carriers to purchasing plots of a redwood forest, and my understanding from the tragedy of the Northwest forest experience is that those fragments of forest don't really work for us as ecosystems that sustain wildlife or do the job they were intended to do for the environment.

I would just like you to comment on this purchase from that point of view. Is there some way that this purchase, give us more detail about the way in which this purchase ties together some of those fragments and what the outcomes might be?

Mr. LEONARD. As Dr. Ralph mentioned, our information indicates that there are probably 16,000 acres of either old growth or remnant old-growth stands within the Pacific Lumber Company holdings—that Headwaters Forest is the biggest at about 3,100 acres. The others are much smaller patches to just very small fragments. And unless we can reestablish some connectivity there, they are not going to be a very good wildlife habitat.

The fortunate thing in this part of the world is that it is a very fast-growing area and we can establish some structure in those stands at a relatively young age so that we are not talking about a thousand years to begin to improve the connectivity of that ecosystem.

Since Dr. Ralph is the expert in murrelets, he might want to amplify on that.

Dr. RALPH. The smaller stands in the 44,000 acres have murrelets in them and have remnants nearby along stream sites that could increase the population, actually increase the population and the role of this property in actually rehabilitating the species within the State of California, perhaps enabling us to take it off the endangered species list within the State of California is something that has been raised by scientists working on the murrelet. Some feel rather strongly this would be a key to perhaps de-listing the species to get this population viable and part of the entire population.

Ms. SHEPHERD. Thank you.

Mr. VENTO. Just a comment, if you would yield, Congresswoman Shepherd, on your time. Our colleague wants to yield as well.

Dr. Ralph, I very much appreciate the work you have done. We are looking at this map. I assume you are familiar with the map from Congressman Hamburg's bill. Does that pretty much embrace areas that would be key? We are not overreaching in this particular legislation in terms of protecting key riparia and/or the murrelet areas; is that correct?

Dr. RALPH. It does include most of the areas on Pacific Lumber ownership that have murrelet populations in them, yes.

Mr. VENTO. Do you think it is important, Dr. Ralph, to manage this as an ecosystem rather than on a fragmented base?

I notice that Associate Chief Leonard referred to connectivity and so forth. Would you want to comment on that?

Dr. RALPH. Right now the population in the States is in low decline with low population rates. If we were to turn that around in a meaningful fashion, it has to be management on a landscaped basis such as proposed here.

Mr. VENTO. This is the Forest Service translation, landscaped ecosystem is being used interchangeably. You are the experts, the ornithology, we have someone here on fish, on threatened and endangered species, but do these watersheds we have here, are they key salmon areas, Mr. Detrich?

Mr. DETRICH. I have to refer to Mr. Hoyle's testimony which I believe has been provided to the committee. The National Marine Fishery Service anticipates receiving listings for coho and this property would certainly be relevant in that way.

Mr. VENTO. There are more than sufficient coho in the streams, aren't there?

Mr. DETRICH. Yes. My understanding is that there are also at least in the lower reaches Chinook salmon and that Steelhead also occur.

Mr. VENTO. I just got through debating one of my colleagues on national television dealing with the Elwha Dam. It is going to cost a couple of hundred million dollars to take down, which affects six species of salmon, and six vertebrate species of freshwater fish and various trout.

Thank you for yielding, Ms. Shepherd.

Mr. Hamburg wanted you to yield for a moment.

Mr. HAMBURG. I want to take advantage of Mr. Detrich's expertise in having dealt with Pacific Lumber over a period of years.

Given the imperative of bringing back the viability of the Marbled Murrelet and these stocks of salmon, is there anything about the management of these lands by Pacific Lumber that gives you concerns about the likelihood that these species will increase their viability under Pacific Lumber management?

Mr. DETRICH. Congressman, we worked with Pacific Lumber over the last several years on a number of species. And in a number of cases, that has been a very cooperative relationship.

With respect to the Marbled Murrelet, they have submitted plans that would basically experiment with some of the smaller groves, and carry out what they call murrelet cuts, which would attempt to provide protection around murrelet habitat while continuing to take some volume from the stands. And that is essentially an experimentation.

Mr. HAMBURG. Is that how you would characterize the Owl Creek cutting in Thanksgiving of 1992? Was this an experimental cut?

Mr. DETRICH. Well, in Owl Creek, the Service believed that the harvest would reduce habitat actuality.

Mr. HAMBURG. Did you inform Pacific Lumber of that prior to their going into that grove?

Mr. DETRICH. Yes, we did. This case is one facet of our relationship in which they proceeded against the advice of the Service.

Mr. HAMBURG. Do you believe that the taking of further old-growth habitat on Pacific Lumber ownership is directly threatening to the survival of Marbled Murrelets in California?

Mr. DETRICH. Yes, we feel that the goals for murrelet conservation are to stabilize and increase the population. And that the continued experimentation, while it might have some benefit in the long term, in the short term is not in the interests of the conservation of the species.

Mr. HAMBURG. I understand that Fish and Wildlife, the Fish and Wildlife Service, went ahead with an investigation of the Owl Creek, whatever you want to call it, harvest, incursion, in 1992, but that the Service has basically decided not to prosecute for take.

My understanding is that the reason for that is that there were no, quote, "dead bodies," unquote. Is that the case?

Mr. DETRICH. Well, because that investigation has not yet been formally concluded, I am reluctant to comment on that.

Mr. HAMBURG. Do you believe that there was a—well, let me just say, when I read the letter that was sent to Pacific Lumber Company by the Fish and Wildlife Service, it was very clear to me from that letter that you were telling the company that there would be a take of habitat, and that under the Endangered Species Act the take of habitat on a threatened species is prohibited. The company chose to go ahead and cut in spite of that. You have commenced an investigation, but to this point you have chosen not to proceed with that in any kind of a civil or criminal matter; is that correct?

Mr. DETRICH. That is correct. The initial advice to the company was from our biological staff. The decisions as to whether to prosecute are made by the Law Enforcement Division, the Interior Solicitor's Office and the Department of Justice.

Mr. HAMBURG. Thank you very much, Mr. Chairman.

Mr. VENTO. Thank you. And I want to thank this panel, and comment again that there may be questions coming to you from me

and from others. We would appreciate your response in an expeditious manner. We are pleased to welcome panel one, Ms. Cecelia Lanman, from the Environmental Protection Information Center, Eureka, California; Ms. Kathy Bailey, the State Forestry Chair, Sierra Club, Philo, California; Ms. Bonnie Raitt, an activist and vocalist from Elk, California; Doctor William Stewart, the economist from Oakland, California. Let me welcome you all. I understand that Ms. Raitt has a concern that she has to leave at 12:30. Anyone else have a scheduling problem? Okay. We will then hear from Ms. Raitt first and then excuse her after we have asked a question or two and then hear from the other panelists.

The reason I wanted to do that, is because we may be interrupted by a call to the Floor to deal with the Maurice—Morris River in New Jersey. It just looks like Maurice—it is really the Morris River. So your testimony, all of your testimony has been submitted, I believe, and so without objection, it will be added to the record. So I can proceed to invite testimony of Bonnie Raitt. Pleased to have you here and to see an interest and activism in depth on an issue of importance nationwide. Welcome. And we enjoy, incidentally, your talents on other fronts, too.

PANEL CONSISTING OF BONNIE RAITT, SINGER AND ACTIVIST, ELK, CA, CECELIA LANMAN, ENVIRONMENTAL PROTECTION INFORMATION CENTER, EUREKA, CA; KATHY BAILEY, CHAIR FOR STATE FORESTRY, SIERRA CLUB, PHILO, CA; AND DR. WILLIAM STEWART, ECONOMIST, OAKLAND, CA

STATEMENT OF BONNIE RAITT

Ms. RAITT. Thank you very much, and it is nice to be here as well. Good morning to you and the members of the committee, wherever they are. I have come here today to respectfully urge your support for the Headwaters Forest Act, proposed by Congressmen Dan Hamburg and Pete Stark, from my family's district in northern California.

Time is running out for us to preserve what little remains of the ancient—growth redwoods which have been such an important part of our area's meaning and environmental survival. I have been returning to these majestic groves for spiritual and creative inspiration for as long as I can remember, and I know I speak for the millions of travelers and residents who would be as horrified as I am to find out just how many acres of their beloved forest have been sacrificed in the name of Maxxam Corporation's need for junk bond interest payments.

I have been brought to tears of fury and grief after flying over miles of mutilated clear-cut mountains where in a cruel charade only a hundred yards of trees have been left standing along the highway, so as not to alarm the tourists driving by. In the years since Maxxam's takeover of Pacific Lumber's territory in 1986, I have personally seen our community's economy and morale decline to a heartbreaking degree.

With little regard for fragile ecosystems or long-term repercussions, Maxxam's years of aggressive timber management—should I continue?

Mr. VENTO. Go ahead. Don't worry about that.

Mr. HAMBURG. Don't worry about it. It is just part of the charade around here.

Ms. RAITT. Yes, really. Maxxam's years of aggressive timber management threaten what little is left of pristine habitat. Soon the old-growth logging mills will be closed down, costing forest and surrounding businesses, including tourism, thousands of jobs. All because of the lack of a sustainable long-term policy that could have saved the counties from their current downhill plunge. More and more the environmentalists and loggers are seeing the issue from the same side, not just some symbolic preservation of a few endangered creatures and park lands, but the very survival of the region as a whole.

As today's testimony shows, so-called private stewardship of this irreplaceable national resource has been disastrous. To save 3.5 percent of the ancient forest that once was, is not, as Charles Horwitz says, enough. Once these ancient trees and the miraculous microcosm and history they represent are gone, they are gone forever. What right have we to let this magnificent and absolutely unique link to our past and future be eradicated by the short-sighted greed and mismanagement of a few? This bill is what responsible forest policy is all about. Please enact it now. Thank you.

Mr. VENTO. Thank you, Ms. Raitt. Is Elk, California, is that in the Humboldt County area?

Ms. RAITT. It is in the Mendocino County area.

Mr. VENTO. You are just adjacent from this area. How far are you from this area, your residence in Elk?

Ms. RAITT. Well, my family lives in Ukiah, and I have been a regular resident of the Mendocino County area and visitor to Humboldt County. I don't know, I believe it is an hour from Eureka. That is as close as I can do.

Mr. VENTO. So in your endeavors—obviously you travel around the country and you come back with a feeling of what people have about areas like this, even though they may never have visited them. You obviously have flown over the area and looked at it and find this unacceptable.

Ms. RAITT. I think that there could be a much more responsible approach to jobs as well as saving the environment. I think they could coexist happily if we just put our heads together and get some better management of the area. I think this bill represents that kind of thinking.

Mr. VENTO. And do you find that to be the attitude with the people that you come in contact with through your work as a performing artist?

Ms. RAITT. Well, as we all know, nature has been an incredible inspiration for those of us that do any artistic endeavor, and there has been a tremendous influx of artists in that community, as there are in all kinds of beautiful areas around the country. And when I travel around and people are aware of my work with the forest issue in northern California, when I tell them about what is going on or it gets in the press about how much has been cut down, clear-cutting is something that is part of the national awareness at the moment and they always say, I am hoping you are doing whatever you can out there and I applaud your concert benefit raising actions to try to stop any further unnecessary cuts. I mean it is

just—it is a horrific thought that these redwoods might be gone forever. And frankly, I don't think that the North Coast would be able to survive as a place where people would want to start up industry or come and live if we lost it.

Mr. VENTO. So you have been involved as a volunteer, actually helping in raising dollars by performing and doing other activities for the Save the Redwoods Group or some other environmental or conservation group?

Ms. RAITT. Yes, I have been active in that for the last 15, 20 years, as long as I have been coming up to that part of California.

Mr. VENTO. So they have done some good. I guess one of the questions people are going to say, well, how much is enough? You obviously point out here that the owner of the land or the company that owns it, that controls it, I should say, says that 3.5 percent of this, these redwoods, is enough. You obviously don't think it is enough. This would only be a small addition, wouldn't it, to the overall, if we are talking about the redwoods? We are adding 44,000 acres, but only about five or six thousand acres of that would be this mature old-growth, these ancient redwoods.

Ms. RAITT. Well, just on a public relations tactic, the fact that the public ownership of these lands could be made accessible to people that live in the Eureka area, would open up this whole territory to be able to enjoy it as a park land and as a habitat as well. And I agree with the people that have testified that said that it would be easier to protect the ecosystem if we could keep a continuum of not just fragmented sections of the old-growth, but to keep the second-growth lands continuous with it so we can manage the forest as a whole and the whole area. But I think that—I don't personally believe that we have a right to take these ancient growth redwoods down any farther than we have done.

There is no economic reason to keep them. Eventually they will be cut down. It is just a question of whether we are going to look for jobs this year or 20 years from now.

Mr. VENTO. Well, I think that the forest scientists would agree with you, Ms. Raitt, concerning the watersheds and the concern about fragmentation and connectivity in these areas. So they are very important in that sense, so it is a question of whether you want this and the associated life forms that are associated with these ancient forests.

Without objection, Mr. Hamburg, did you have any questions of Ms. Raitt?

Mr. HAMBURG. I don't have any questions. I just wanted to thank you for coming today. Ms. Raitt really is someone whose roots are very deep on the north coast of California, and they are particularly in Mendocino County, but Mendocino and Humboldt share many identical concerns in terms of having a healthy and viable forest products industry.

I also want to just mention that Ms. Raitt was in Eureka just, when was that, that was in April 1992, and had an opportunity to speak with people there and to get a sense of how people feel about this issue. And I think she knows that while this is a contentious issue, there is a tremendous amount of support for saving the last remnants of these ancient forests. And I think some of the people who showed up at the concert in Eureka were drawn there because

it was an Earth Day event, to celebrate the earth and celebrate sustainable use of our planet's resources. And Ms. Raitt has been a leader in that effort nationwide and I think it is just altogether appropriate and fitting that you should be here, and I really thank you for making a special trip to Washington, DC, to attend this hearing.

Ms. RAITT. You are very welcome. Thank you.

Mr. VENTO. I would just comment that one of the big problems is to get the information out to people. Of course, now we are trying to pass some legislation called a National Biological Survey. And there is a real effort to frustrate that, to prevent gathering of the data and the information that is necessary.

One can only wonder at the basis for that. I mean I have my suspicions as to why. And here is a case again where we even were trying to get an estimate of the forest value, that the Forest Service was refused access and others refused access to gain the information. So often I think we find in communities, and I would say living in that area, going to that area, obviously also represents you are a very courageous person. Because I am sure that some of the folks there aren't as friendly. Even though they might like country western music, they may not necessarily appreciate and they may misunderstand the idea that somebody that could have a different view than they have with regards to issues.

I get a little of that, too, and I am certain that Congressman Hamburg can tell us about a lot of it based on the type of load he is carrying. But the fact is that even people that live there do not understand the phenomena of what is going on. I think it is really sad because so often I find those that are engaged in this activity don't understand the ramifications that it really means, fewer jobs in 10 years, and really left with a devastated ecosystem that will not do some of the casual things like the esthetic life-styles and the type of environment and so forth that means so much to them that you obviously said motivates you in terms of a performing artist in terms of creativity. So getting the message out is enormously important.

You obviously have taken your status and the exposure and interest and used it for this purpose. And so for someone that works in this, lives, breathes, sleeps and eats this, we can't do it without the help of people being involved in the process, and I think if we get people involved, that is the best solution or safeguard to make certain that the right decisions are made. So in the absence of that the interested groups are the special interests. The interested groups are the special interests. And they don't have the same policy path as a design as the American public. Even those that are in places like Eureka. So I much appreciate that.

We can't do it without your help and so I appreciate the assistance and focus. And I am perfectly willing to live on the business basis of what the information is that comes out, if we can get the information. If they will let us gather the information, and, you know, we keep hearing about scientists that are part of a different culture or something, that somehow they disagree with them, which is curious. But in any case, I have no further questions of you. I know you have to leave. I have to go over to the Floor short-

ly. We will be recessing. So thank you very much, Ms. Raitt, for your testimony and effort.

Ms. RAITT. Thank you very much.

Mr. VENTO. We have three other witnesses on the panel. Let me start with Cecelia Lanman, who is with the Environmental Protection Information Group. Ms. Lanman.

STATEMENT OF CECELIA LANMAN

Ms. LANMAN. Thank you, Mr. Chairman, for the opportunity to testify today in support of the Headwaters Forest Act, H.R. 2866. I am currently the project director for the Environmental Protection Information Center and I have been a member of the board of directors since 1982. I have lived in Humboldt County since 1977. I have been involved in the restoration rehabilitation of forest lands, and my children go to school with the children of logging families whose parents used to work in the small mills that dotted every watershed in those days.

As you heard this morning, the ancient forests of northern California are unique among our Nation's forest bioregions. One thing that we really need to emphasize today, though, is unlike the Klamath and Sierra forest bioregions which are mostly within Federal jurisdiction, the coastal elevation forests of our region are predominantly on private lands and are under intensive corporate management.

Ninety-six percent of the original 2-million-acre ancient redwood ecosystem is gone. Only 76,000 acres remain in fragmented groves within the park system. Save the Redwoods League knows well that the majority of the lands in our park system are second-growth lands. There is an ecological crisis in the redwoods.

The majority of these forests have been converted to second growth and will take many years to recover the ecological processes necessary to sustain healthy and productive forests. These processes, as you well know, include water and nutrient cycling, microclimate control, the processes that occur in animal and plant communities. What is missing from the managed forest landscape throughout the majority of this bioregion are large standing and downed logs on the land and in the streams, multiple-canopied forests, lichens and fungi which appear only after hundreds of years as they evolve with their ancient forest associates, the redwoods, Douglas fir, and many other species.

Increasingly, agency biologists are becoming alarmed about the loss and impoverishment of biodiversity and the lack of these functional elements in the managed forest landscape. In this ecosystem, it is very clear that parks are not enough. The Headwaters Forest lies directly between Redwood National Park and the Humboldt Redwood State Park and will provide an essential link, a genetic link, important to the recovery of many threatened and endangered species.

In particular, as you heard, the fate of the Marbled Murrelet is closely tied to the fate of these remaining ancient forests because they are the remaining old-growth forests in the coastal zone of northern California. Murrelets do not occur on the national forests in California in any significant population. There are numerous compelling reasons why H.R. 2866 must encompass 44,000 acres to

adequately protect endangered habitat and provide restoration opportunities.

The recovery of the species entails creating biological corridors, migratory routes, and improving the existing connections between ancient forest islands. Similarly, we need the 44,000 acres to be rehabilitated so that many jobs can be created while we make the transition from the old growth to a second growth economy. During my term as President of EPIC, Maxxam took over Pacific Lumber Company and announced that they could systematically liquidate all of their old-growth holdings within 20 years. They have actually done it within a lot shorter order.

Since the takeover, they have logged off more than half of the remaining virgin forest that was part of their original holdings. Much of this was murrelet nesting habitat. Some areas were documented to be occupied in 1988 have been cut today. EPIC was forced to sue Maxxam and State and Federal agencies more than eight times since the takeover, citing their failure to consider the cumulative effects of logging on the ancient forest-dependent species and fisheries.

Under the California Forest Practices Act, the industry can go to the Board of Forestry and appeal a decision that they don't like, but the public citizen has only one recourse and that is to go to court and try to find an attorney who will work for nothing and raise a few thousand dollars to pay their expenses. This has been not an easy feat for an organization whose entire budget is less than one of Maxxam's accountants.

Citizens are forced to file suit on a piecemeal basis, looking at the effects of one logging plan at a time. This reveals clearly that the review process is inadequate to assess the negative effects that logging has had on fish and wildlife in our State. In many of these court cases, the State agencies and even the Attorney General have agreed with us and made some efforts to address the failure to adequately protect wildlife and fisheries.

Unfortunately, Pacific Lumber for many years refused to conduct the wildlife surveys that were requested by the State and now Federal biologists to determine critical habitat needs of these species. The Department of Fish and Game biologists requested this information as early as 1988 in order to design mitigation measures required by law and their own code of regulation, and were refused that information.

Fish and Game went ahead and designed the mitigations, because they knew this habitat had to contain these species of wildlife. And these mitigations were unique because they addressed these issues that are now before you on the national forests. The fact that we have to look at the cumulative effects of logging and consider that the mitigations have to be designed to include ecological processes that have to be maintained over time, we asked the courts and agencies in 1988 to consider requiring a full environmental impact review of this planned logging over 20 years, could certainly be considered a project under the California Environmental Quality Act. And unfortunately that was not done because I think at this point we would see the remaining groves would be the mitigation that would have to be left in order to protect the species.

I believe the science will bear us out. EPIC's court injunctions and stays have successfully delayed the destruction of its last few remaining unprotected groves. Yet these legal avenues only yield temporary success and as we have been in court and we await final judgment, critical biological questions have been left unanswered and thousands of acres of residual and ancient forests have been logged. To what end, we will never know what species have been impacted or how much has been lost. So under Maxxam's control, we believe Pacific Lumber has acted unscrupulously. They have aggressively worked to fragment and isolate groves in an attempt to reduce their value as a habitat for wildlife so that no further logging would be prohibited by agencies.

The worst example of bad faith occurred in the two illegal logging operations in 1992 at Owl Creek which you have heard quite a bit about this morning. Lack of action from both the Fish and Game Department, CDF and the Fish and Wildlife Service necessitated, again, quick legal action by EPIC and led us into two new lawsuits, one which is now in Federal Court, the Marbled Murrelet versus Bruce Babbitt.

In a recent ruling the judge granted the Marbled Murrelet and EPIC standing to sue Pacific Lumber in Federal Court for their blatant violation of the Endangered Species Act. Although EPIC's litigations have temporarily halted the destruction of Owl Creek, it is only an interim strategy while permanent protection is pursued through these legislative channels and I believe, as the Chairman does, that we could easily see more incursions by the Pacific Lumber Company, more illegal cutting, because of the fact that there was no action taken by the Fish and Wildlife Service and Fish and Game to stop them at the time.

It required us to stop them. In addition, if fines were levied, they would equal maybe one or two old-growth trees that Pacific Lumber was allowed to remove from the Owl Creek Grove after the injunctions were in place. The court allowed them to remove the logs. They have been able to pay for all the court fees and their attorney fees and they could probably pay off the fines, if the Fish and Wildlife Service would fine criminal and civil action against Pacific Lumber for this illegal logging.

As we have heard and we will hear more today, the increased logging by Pacific Lumber increased jobs, but it would only be temporarily. And we believe that this bill is the first step toward a sustainable transition in our region. And it will be a model for how we can begin to sustain logging and wildlife on other industrial lands in the entire north coastal region.

H.R. 2866 would require sustainable management and the rehabilitation of these log lands which is essential because they form the linkages between the ancient forest habitat across the landscape. Under the jurisdiction of the Forest Service, the management plan would be developed with full public review and input, which is not what we are getting under the California regulatory process. There are no public hearings when these logging plans are approved, and it is very difficult to get any changes made that would be beneficial to wildlife and fisheries.

So, Mr. Chairman, and members of the committee, please vote yes on H.R. 2866. This vote of confidence will give Congressman

Hamburg a chance to open negotiations with a meaningful vision and work toward solutions which will reflect the concern for the long-term health of the forest and the timber-dependent economies and communities. This will be a step toward recovery of the region, which has been hit broadside by the junk bond financed takeover of Charles Horwitz. Please vote yes on H.R. 2866. Thank you.

[Prepared statement of Ms. Lanman follows:]

STATEMENT OF CECELIA LANMAN,
ENVIRONMENTAL PROTECTION INFORMATION CENTER (EPIC)

COMMITTEE ON NATURAL RESOURCES
Sub-Committee on National Parks, Forests and Public Lands
October 12, 1993

Thank you Mr. Chairman and members of the Committee for the opportunity to testify today in support of the Headwaters Forest Act, H.R. 2866.

My name is Cecelia Lanman. I have been a small forestland owner in Humboldt County since 1977. I have done restoration work to improve timber stands and planted thousands of trees to prevent erosion and siltation of nearby streams. My children go to school with children of logging families whose parents used to work in the small mills that dotted every watershed.

I am currently the Project Director for the Environmental Protection Information Center (EPIC), a grassroots organization dedicated to protecting the health and biodiversity of our region's forests. I have served as a member of the EPIC Board of Directors since 1982. I have been active in the Ancient Forest Alliance since its inception in Portland in 1988. I am also the president and a founding member of Forests Forever. I am committed to protecting the ecological integrity of the redwood region.

The ancient forest of California's North Coast is unique among our Nation's major forest bioregions. The diverse forests of the region include redwood, hardwoods and Douglas fir and provide habitat for many endangered species including the Northern spotted owl, fisher, red tree vole, marbled murrelet, olympic salamander, tailed frog and Coho salmon. Unlike the Klamath and the Sierra forest bioregions, which are mostly within federal jurisdiction, the coastal low elevation forests are predominantly on private lands and are under intensive corporate management.

96% of the original two million acre ancient Redwood ecosystem is gone. 76,000 acres remain in fragmented groves within the park system, and the remaining unprotected ancient forests are slated for logging. The fragmentation of the ecosystem has resulted in severe degradation of water quality, soil productivity, fisheries, wildlife habitat, and other ecological processes which are critical to sustain the health of the forests and rural economies in the North Coast region. In less than a century, corporate exploitation has brought species to the brink of extinction and threatens the livelihood of our communities.

The ecological crisis in the redwoods, the takeover of Pacific Lumber by Houston-based MAXXAM corporation and the subsequent liquidation

logging are national issues. The plunder of irreplaceable ancient redwood forests continues while state and federal agencies fail to enforce the Endangered Species Act (ESA). Pacific Lumber's logging of Owl Creek, known as an occupied Marbled Murrelet nesting area, highlights the inability of the state and federal agencies to enforce laws designed to protect threatened and endangered species habitat. Habitat and species protection entails ecosystem protection on a large scale level.

There are numerous compelling reasons why the H.R. 2866 must encompass 44,000 acres to adequately protect endangered habitat and provide restoration opportunities. Recovery of threatened species entails creating biological corridors and migratory routes between existing ancient forest islands. Similarly, the needs for forest restoration and rehabilitation jobs for displaced timber workers are better served if a large acreage bill becomes law.

The Headwaters Wilderness and the associated groves contain the largest unprotected ancient redwood forests remaining in the world. It is a rare and irreplaceable national treasure. These forests deserve permanent protection through federal acquisition, wilderness designation and the rehabilitation of the biological integrity of the area. The Headwaters Forest which lies between Redwood National Park and Humboldt Redwoods state parks will provide an essential genetic link important to the recovery of threatened and endangered species.

The fate of the Marbled Murrelet, a small seabird which nests in coastal ancient forests, is tied closely to the fate of these remaining ancient forests. The murrelet is listed by the federal government as "threatened" and by the state as "endangered". The area under consideration in H.R. 2866 contains one of three significant populations of the murrelet in California. The survival of the murrelet population in the Headwaters Forest area is essential for the genetic mixing that is vital for the long-term viability of any species. The murrelet does not build a nest, but rather lays its eggs on a lichen covered branch high above the ground. Smaller and younger trees do not have branches broad enough to hold the eggs safely, and their foliage does not adequately shelter the young from predators. Biologist C.J. Ralph states, "I have seen no bird as closely tied to a forest type. They are entirely dependent on old-growth." During the past century California's marbled murrelet population dropped from 60,000 to 2,000 birds due to liquidation logging.

During my term as President of EPIC, MAXXAM took over the Pacific Lumber Company (PL) and announced a systematic plan to liquidate all of their ancient redwood forests within twenty years. MAXXAM tripled the rate of cutting to pay off their enormous junk bond debt incurred in the takeover of PL.

Since the corporate takeover, MAXXAM has logged off more than half of the virgin forest that was part of PL's forest holdings. To protect the remaining ancient groves and the species dependent on them, EPIC was forced to sue Maxxam/PL, and state and federal agencies eight times, since 1987. EPIC cited the defendants' failure to consider the cumulative effects of logging on the ancient forest dependent wildlife species.

Under the California Forest Practices Act (FPA) the industry has the right to appeal an agency decision, but the public citizen has only one recourse, to bring suit on behalf of the public interest. Citizens are forced to file suit on a piecemeal basis, one logging plan at a time. This constraint reveals that California's logging plan review process is inadequate to assess the negatives effects of industrial logging on fish and wildlife.

For many years Pacific Lumber refused to conduct requested wildlife surveys to determine critical habitat needs. Department of Fish & Game (DFG) biologists requested this information in order to design mitigation measures required by law and by DFG's own code of regulation. The DFG mitigations were unique because they were based on the cumulative effects of logging ancient forests and the ecological processes of the ecosystem.

EPIC asked the agencies and the court to require a full environmental analysis of MAXXAM's planned logging of ancient forest areas. An analysis equivalent to an Environmental Impact Statement (EIS) would have necessitated the development of mitigation measures to protect wildlife before destructive logging practices impacted habitat.

EPIC's court injunctions and stays have successfully delayed the destruction of 1500 acres of the last few remaining unprotected groves of ancient forests. These legal avenues yield temporary success, yet as we have awaited final judgment in these cases with critical biological questions left unanswered, MAXXAM has clearcut virgin forest and thousands of acres of residual groves without adequate analysis and review of the impact of logging on wildlife, fisheries, water quality, soils and the long-term health of the forest.

MAXXAM has continually showed bad faith by failing to abide by state and federal regulations designed to protect species and habitat. MAXXAM has lobbied heavily against any meaningful reforms in the state legislature, Board of Forestry and in the courts.

Under MAXXAM's control Pacific Lumber has acted unscrupulously. MAXXAM has aggressively worked to fragment and isolate the ancient groves in an attempt to reduce their value as habitat for wildlife, so that further logging would not be prohibited by the agencies. When it became obvious that the EPIC lawsuits and agency scrutiny created a de facto injunction on the most significant groves, MAXXAM switched to a new

strategy to log the residual old growth all the way around the groves, and to attempt to build roads into the groves to destroy their primitive value.

The worst example of bad faith occurred during two illegal logging operations in 1992 at Owl Creek, the second largest grove of unprotected redwoods which serves as nesting habitat for the Marbled Murrelet. Pacific Lumber cut 20 acres of the grove before completing murrelet surveys and before consulting with the DFG as required by the California Endangered Species Act.

Lack of action from these enforcement agencies necessitated quick legal action and led us into two new lawsuits, one in state court and one in federal court. EPIC's federal suit, Marbled Murrelet v. Bruce Babbitt, is the first federal suit regarding violations of the ESA on private forestlands. This suit has the potential to have a major impact on future implementation and enforcement of the Federal ESA in regard to protecting species on private lands. Although EPIC's litigation has temporarily halted destruction of Owl Creek, it is only an interim strategy while permanent protection of the ancient forests is pursued through legislative channels.

Now the final liquidation of ancient forests of the Pacific Northwest are well underway. Native forests are being converted into highly mechanized and automated forest plantations, or "fiber farms", which require fewer workers and will not support a long-term sustainable economy. The increased logging of the ancient forest by PL since the takeover, has created a temporary increase in jobs which can not be maintained once the ancient forests are gone. Current estimates, based on past cutting rates, indicate that it would only take three years for PL to complete this final liquidation. We must end the cycle of boom and bust and begin a transition to a sustainable restoration based economy.

H.R. 2866 would require sustainable management of these lands. The rehabilitation of the logged lands is essential because they form linkages of the core ancient forests across the landscape. Agency biologists are increasingly concerned about the loss and impoverishment of biodiversity and the lack of "functional elements" in the managed landscape.

Under the jurisdiction of the USFS the management plan would be developed with full public review and input. Our local communities depend on healthy farmlands, fisheries and forests. Removing MAXXAM's control over this priceless national treasure is vital to a productive long-term economy in our region, as well as to the survival of the redwood ecosystem.

Mr. Chairman and members of the committee, please vote yes on H.R. 2866. With your vote of confidence, Congressman Hamburg can open negotiations with a meaningful vision and work toward solutions which will reflect

concern for the long-term health of the forest and timber dependent economies. It will result in the first steps to recovery of the region, which has been hit broadside by the junk-bond financed takeover of an outside corporate raider.

We stand at a critical threshold. The Headwaters Forest Act offers us a last chance to protect the life-supporting vitality and richness of the Headwaters Forest Wilderness, the rare species which inhabit it, the sustainability of the timber industry so that this long-term wonderful natural heritage may be enjoyed by our children, grandchildren, and many generations to come.

Mr. VENTO. We have two other witnesses we want to hear from on this panel before we come back to questions, Ms. Lanman. The next is Kathy Bailey, who is the State Forestry Chair, Sierra Club, California. Welcome, Kathy.

STATEMENT OF KATHY BAILEY

Ms. BAILEY. Thank you very much for the opportunity to testify on behalf of the Headwaters Forest Act. My name is Kathy Bailey. I am the Chair for the Sierra Club's California State Forestry Committee. Sierra Club joins with the Wilderness Society and the National Audubon Society in supporting the Headwaters Forest Act because it provides the only foreseeable chance to maintain the significant portion of the environmental heritage of the redwood region.

We specifically support at a minimum the 44,000-acre acquisition area and the bill's focus on reestablishing the links between the virgin uncut blocks of forest which remain in order to enhance the habitat value of the area. Aside from its park land, the redwood ecosystem falls almost entirely under the jurisdiction of the California State regulatory system.

In theory, California's forest regulation system should provide reasonable protection for the redwoods. We have what many consider to be some of the strongest environmental laws in the country. However, year after year, the redwoods have relentlessly been diminished, while top policymakers turn a blind eye to the need for direction. This has left State agencies arguing between themselves about what to protect and where to protect it.

Where I live, a few hours south of Headwaters in Mendocino County, in what used to be the heart of the redwood empire, we have only a few small blocks of virgin forest left, the largest being only a few hundred acres. And while State bureaucracies send memos back and forth, we have lost most of our second-growth forest as well, the 60 to 100-year-old trees.

Along with the forests have gone a once significant fishing industry, with streams silted up and heated by shade removal beyond the tolerance of salmon and steelhead. And now that we are almost out of trees, we are almost out of timber employment in Mendocino County. I believe we are down to just four mills now. One of these is quite small and one of the larger has already announced plans to shut down for part of the winter.

We need the Headwaters Forest Act because our State government has failed to come to grips with how to maintain a sustainable forest economy, one which balances employment with protecting important public trust resources like water, wildlife and the interconnected fabric of life. The reason we believe that 44,000 acres are necessary to meet the goals of ecosystem management again is the unfortunate failure of the State's regulatory program.

If we simply create a 3,000-acre island, you can count on the surrounding area being reduced to very young forest in the next 10 to 15 years. There is nothing in State rules to prevent this from happening, and Maxxam's debt load mandates that it will happen. If you only created a 3,000-acre reserve, you will have created a very nice tree museum at Headwaters, and with luck one where murrelets will be able to survive. However, by going ahead and

buying the surrounding area, you have a reasonable chance at maintaining a viable ecosystem, where wildlife can migrate over larger areas and maintain viable genetic bases and where the water cycle and forest nutrient cycles can be maintained.

I believe that this area, which lies between existing park land, would have been considered for purchase long before now if we had realized the threat of a Maxxam takeover in the past.

I want to close with some remarks about endangered species. Although we talk about Marbled Murrelets or spotted owls, Olympic Salamanders, tailed frogs or the Red Tree Vole, all of these creatures are very important and I personally don't believe they should be allowed to die out at Headwaters or anywhere else. But beyond that, the Headwaters Forest Act is about maintaining a vital and vibrant part of our Nation's national heritage.

We are only human. We do not have the world and every little part of it figured out. Ten years ago, no one outside of forestry school had ever heard of the Pacific yew tree. Today, women are recovering from cancer because the benefit of Taxol was recognized. Maybe these forests hold nothing more for the human race than their majesty, their trees towering taller than the capitol dome, as wide across as these tables we sit at, having lived these last 70 generations. But maybe they hold even more meaning for us, and it is just waiting to be revealed. We simply don't know. But I do believe that future generations of American people will thank you for your help in maintaining this wondrous part of our world. Thank you.

Mr. VENTO. Thank you, Ms. Bailey.

[Prepared statement of Ms. Bailey follows:]

Testimony for the Subcommittee on National Parks, Forests & Public Lands
Committee on Natural Resources
The U.S. House of Representative

October 12, 1993

By Kathy Bailey
Chair for State Forestry
Sierra Club California

Thank you for the opportunity to testify on behalf of the Headwaters Forest Act, HR 2866.

My name is Kathy Bailey. I am the Chair for Sierra Club's California State Forestry Committee. Our committee's focus is the 7 million acres of California forestland owned by the timber industry and other private land holders. I have worked virtually full time as a volunteer on forestry issues since 1988 and have been active off and on since 1976. I have lived near Boonville, in west-central Mendocino County, California, for 22 years.

We are here to consider the future of the last remnant of what's known in California as the Redwood Empire. The historic range of the redwood forest was from south of San Francisco Bay, north to the Oregon border in a band no wider than 40 miles along the coast. Two hundred years ago this area was blanketed with majestic redwoods, trees eight to fourteen feet or more across, taller than the Capitol Dome, and up to 2000 years old. Today less than five percent remain uncut, including all existing park land and the proposed acquisition known as Headwaters Forest.

Sierra Club joins with the Wilderness Society and the National Audubon Society in supporting the Headwaters Forest Act because it provides the only foreseeable chance to maintain this significant portion of the environmental heritage of the redwood region. We specifically support, at a minimum, the 44,000 acre acquisition area and the bill's focus on reestablishing the links between the virgin, uncut blocks of forest which remain in order to enhance the habitat value of the area.

Although there are some beautiful stands of virgin redwoods in existing state and federal parks, there is no redwood forestland in the U.S. Forest system. Through a quirk of history the entire redwood ecosystem is held by industrial timber companies and other private holders. The land is designated "timber production zone" for tax purposes, and the primary use is, in fact, wood products production.

Although the state's Forest Practice Act mandates sustained yield and protection of water, wildlife and aesthetic values, the regulations governing logging have never set

clear, enforceable standards for any of these mandates, and the decision of how much and how fast to log the state's redwood forests are dictated purely by market conditions. How have these market forces shaped the timber economy and the redwood forest ecosystem? What can we expect in Humboldt County without the Headwaters Forest Act?

To look into the future of Humboldt County's timberland, one need only examine Mendocino County, its next door neighbor to the south, where I live. Until very recently Mendocino County was the second largest timber producing county in the state, by value. But now, on the largest industrial timber holding in the county (Louisiana-Pacific), company data supplied to the Board of Supervisors in 1992 shows that 84 percent of the company's 300,000 acres is stocked with trees 35 years old or younger, and only 4.8 percent consists of trees over 65 years old. If you wanted to cut these trees when they produce the largest possible amount of lumber you would cut them at around 100 years of age. The condition of the resource is very similar on lands owned by the county's other major industrial owner, Georgia Pacific. There is no old growth at all remaining on industrial lands, and only the tiniest of islands on other private holdings and in state parks. The largest block of old growth redwoods in the county is around 160 acres.

Louisiana-Pacific has laid off over half of their workers since 1989, has closed half their mills in the Western Division. Although industry has tried to blame reduced timber supplies from federal sources for mill closures, a senior L-P company forester testified in Mendocino County Superior Court that L-P got a maximum of about 20% of their local timber supplies from the national forest before that source was severely cut back. The unfortunate truth is we're almost out of merchantable trees in Mendocino County, once the heart of the redwood region.

What does the sorry Mendocino County timber story have to do with Headwaters? The main differences between my home county and the Headwaters area are time and ownership patterns. Mendocino's redwood forestlands were owned by national, now internationally, operating timber companies. The Headwaters area was owned until 1986 by a local company whose philosophy was sustained yield. Mendocino was also closer to the timber-using urban markets. With the ownership change at Pacific Lumber the last significant and unprotected areas of the original redwood ecosystem are now fully at the mercy of market conditions. The price of old growth redwood lumber is very, very high.

I am sure you will be told by industry that California has the strictest logging laws in the country for non-federal timberlands. This is probably correct. The question is do they provide an adequate level of environmental protection? In a rare moment of candor California's State Board of Forestry admitted in a 1991 document supporting proposed new regulations that, "Past failure to regulate industrial timberlands has resulted in long-term over harvesting, drastically reducing both the

productive capability of the land and maintenance of adequate wildlife habitat." Nevertheless, the proposed strengthening regulations were never adopted.

According to figures provided in 1989 to the Forest Advisory Committee of the Mendocino County Board of Supervisors by the state's forestry research program, industry was cutting almost three times as much wood as their lands were growing in Mendocino County.

What about local fisheries which once supported a thriving industry? According to an inventory prepared for the Department of Fish and Game, in 1965 surveyed Mendocino County rivers supported 19,000 Coho salmon and 48,000 steelhead trout, and they were concerned then because the numbers had dropped severely from previous tallies. In 1991 those same streams supported only 800 Coho salmon and 2800 steelhead. Where did the fish go? In our county there are no major agricultural diversions or huge hydroelectric dams to complicate the analysis. Logging is *the* significant factor. Fish streams have been silted up with logging runoff and overheated from lack of tree cover.

I am currently involved with attempts to modify a timber harvest plan in Del Norte County which the California Department of Forestry has approved over the objections of the Department of Fish and Game. The Forestry department, in its official response to public and agency comments, reasons that there is no need to protect the last mature trees in this watershed because it's already been so cut over there is no wildlife left to protect.

In papers filed with the Securities and Exchange Commission by the MAXXAM Corporation, owner of the Headwaters Forest area, the company provided a substantial amount of data regarding their standing inventory and outlined its plan to liquidate the mature trees on its own timberland in order to pay off the timber collateralized bonds it issued as a result of Pacific Lumber's 1993 re-organization. I am not only speaking of old growth trees but also of the 60 to 100 year old trees that make up the bulk of MAXXAM's holdings. Although each timber company has its own management style it is clear that the necessity to pay off \$385 million worth of timber collateralized notes will make it imperative for MAXXAM to log substantially all of its existing merchantable timber during the life of the bonds, the next 22 years. There is nothing in current state logging rules to prevent that liquidation although environmental groups are engaged in continuous rear-guard litigation to enforce state and federal laws which should provide some protection if they were only properly implemented.

According to public records available at the California Department of Forestry and Fire Protection, within the 44,000 acre proposed Headwaters acquisition area, MAXXAM has already logged a total of 23,348 acres since it acquired Pacific Lumber in 1986. Of those totals, 3615 acres of virgin redwood, never before entered for logging, were cut between 1986 and 1991. Litigation has since put virgin logging plans in that area on hold. In addition, within the acquisition area MAXXAM logged

18,825 acres of what's called residual old growth. These are the trees the previous management had left behind. These stands contained from four to ten old growth trees per acre with trees up to 12 feet in diameter. Because these residual stands are running out, the company has turned more and more to logging the second growth trees, ranging in age from 60 to 100 years old.

Humboldt County is the only area left in the ecosystem which still retains some of the original character of the redwood region. Headwaters lies between two areas of existing redwood park land. It provides a crucial link between them. Some will suggest that only the largest uncut, virgin island of 3000 acres should be protected. I would suggest to you that we need more than a tree museum here. We need a functioning redwood forest, one that maintains the existing old growth and also maintains the younger, but still significant 60-100 year old trees as well. It is only a matter of time until that second growth forest is also gone throughout the region, as it is already in Mendocino County.

Without the Headwaters Forest Act it is only a matter of time until the world famous redwood ecosystem will be reduced to just another landscape of short, bushy green conifers with lots of deer, raccoons and skunks, but not much else in the way of wildlife. My children, born and raised in Mendocino County's redwood country, did not believe that coast redwoods are the world's tallest trees until we drove them three hours north to Humboldt Redwoods State Park.

We can't go back, but we can make some guesses about the future. The Headwaters Forest Act may well be our last chance to maintain this part of our country's original natural heritage. I believe future generations will thank you for your help in maintaining this wondrous part of our world.

MAXXAM THP's in Headwaters Acquisition Area
(Timber Harvest Plans)
1986-1993

<i>Year</i>	<i>2nd Gr.</i>	<i>Residual Old Growth</i>	<i>Virgin</i>	<i>Total</i>
1986	317	3166	532	4015
1987		283	1266	1549
1988		4260	659	4919
1989		2218	649	2867
1990		3230	378	3608
1991		3564	131	3695
1992		1623		1623
1993	591	481		1072
TOTAL	908	18,825	3615	23,348 acres

Compiled from Timber Harvest Plans on file with the California Department of Forestry and Fire Protection

by Greg King, Charles Powell, and Kathy Bailey

THP numbers, acreage, stand type, and logging system available on request.

707-895-3716

Explanation for Following Two Pages: Addendum for Silvicultural Information

By Kathy Bailey

The Addendum for Silvicultural Information is part of a MAXXAM Timber Harvest Plan, the document which must be filed with the State of California in order to get a permit to log.

Within the text of my testimony I refer to the likelihood that the MAXXAM ownership will have substantially all of its second growth timber logged over the next twenty years, reducing the area to an ecosystem of young regeneration growth trees of a maximum of 40 years, a vastly different type of forest than either an old growth or 100 year-old second growth forest.

In the Addendum (2 pages following) item 1 describes the existing stand: second growth redwood and Douglas fir.

Item 3, 4, and 5 show that 100 acres will be selectively cut, leaving some of the older trees, and 151 acres will be clearcut, leaving an area which will be planted with eight-inch seedlings.

Item 7 shows this stand currently is 100 years old with 20 year undergrowth.

Item 6 states that future entry of the selectively logged sites will be within 10-20 years. It is at that entry that all the remaining 100 year-old trees will be logged, leaving a stand of 30-40 year old trees, with those trees in the previously clearcut area being 10-20 years old.

ADDENDUM FOR SILVICULTURAL INFORMATION
April 29, 1992

Timber Stand Data

All numbers are gross volumes estimates

1. This is a second growth stand with primarily redwood and Douglas-fir.

Current growth bd. ft./ac./yr:

474 bd. ft./ac./yr.

2. Preharvest volume bd. ft./acre:

Selection

Redwood

Douglas-fir

42,440

4,960

Clearcut

Redwood

Douglas-fir

42,440

4,960

Post harvest volume bd. ft./acre:

Selection

Redwood

Douglas-fir

20,000

2,000

Clearcut

Redwood

Douglas-fir

0

0

ADDENDUM FOR SILVICULTURAL INFORMATION - (Cont.)

April 29, 1992

Timber Stand Data

All numbers are gross volumes estimates

3. & 4. Preharvest basal area/acre:

Selection

<u>Redwood</u>	<u>Douglas-fir</u>
251	4

Clearcut

<u>Redwood</u>	<u>Douglas-fir</u>
251	4

Post harvest basal area/acre:

Selection

<u>Redwood</u>	<u>Douglas-fir</u>
100	0

Clearcut

<u>Redwood</u>	<u>Douglas-fir</u>
0	0

5. The selection will release the stand, which will maintain growth in volume. The selection area will also provide habitat beneficial to wildlife post harvest.

The clearcut area will be immediately regenerated to achieve maximum site production of quality timber products dictated by the rules.



6. Future entry in the selection area is estimated to be within 10 to 20 years. The clearcut area will be entered in 60 years.
7. The area is Site Class II redwood and Douglas-fir second growth which is 100 years old with 20 year old under growth.

Mr. VENTO. And finally, we have Dr. William Stewart, an economist from Oakland, California.

Welcome, Dr. Stewart. Please proceed with your testimony.

STATEMENT OF DR. WILLIAM STEWART

Dr. STEWART. Mr. Chairman, committee members, thank you for the opportunity to appear before this subcommittee to discuss the Headwaters Forest Act. My name is William Stewart, and I am presently a Senior Research Associate with the Pacific Institute in Oakland, California. I was requested by Representative Dan Hamburg to summarize some of the economic trends regarding forests and the local employment in the Headwaters Forest area.

I recently completed a detailed analysis of the relationship between timber harvests, timber jobs, and local economy, using county level data covering the past 20 years. The econometric models I developed for this analysis highlight two fundamental trends not captured in the standard forestry economic models built on the economies of the 1970s. Since the supporting evidence is contained in my written statement, I will summarize the main points.

The first key trend is the impact new investment had on jobs in the forest industry. Even though harvest in the late 1980s equaled those of the late 1970s, new investment has essentially replaced labor in the sawmill sector, while it has created jobs in the remanufacturing sector. The remanufacturing sector involves adding value to basic lumber to produce products such as specialty timbers, doors, windows, cabinets, and finger joints and molding.

The net loss of timber jobs on the north coast has been large, in part because the region has lagged behind other parts of the State in investing in new remanufacturing plants and product lines.

The second key trend not captured by standard models is that the forest industry no longer dominates these local economies as it once did. In the early 1970s, one out of every three dollars of economic stimulus in the north coast came from the timber industry. By 1990, the timber industry provided only one dollar out of nine. The major source of economic stimulus now comes from non-wage income of immigrants and retirees who settled there. Most evidence suggests that these new residents have moved to these regions because they value the high quality environment.

Based on the historic record, I estimate that the combination of investment in the timber industry and a correct accounting of all local income will mean that the net employment impact over 10 years of the wilderness designation of the old growth in the Headwaters Forest will be roughly half of the commonly mentioned estimates. This does not take into account the possibility that the old-growth mills would shut down before 10 years because the inventory has been completely logged.

The contraction of Humboldt's timber industry in the late 1970s coincided with a national recession, as well as the expansion of Redwood National Park, mentioned earlier. At that time, a number of estimates were made of catastrophic job losses and the destruction of the economy of Humboldt County. I compared the results of those estimates with the actual patterns for the county, for Humboldt County.

In fact, the county experienced no net loss of jobs and no increase in the unemployment rates relative to other counties in California that did not have the park expansion. Throughout the 1980s, employment growth totally unrelated to the timber industry has added jobs.

In conclusion, I think the record of Humboldt County shows that guaranteeing old-growth redwood logs for sawmills is a very weak economic strategy. Job growth within the forest industry depends on new investment in remanufacturing that can use both young and old growth. Job growth in the economy as a whole depends on the expenditure and investment patterns of the immigrants and retirees who came to this region because they value the environment there.

I will be glad to answer any questions. Thank you.

[Prepared statement of Dr. Stewart follows:]

TESTIMONY ON H.R. 2866 - HEADWATERS FOREST ACT
FOR THE SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND PUBLIC LANDS
COMMITTEE ON NATURAL RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES
OCTOBER 12, 1993

My name is William Stewart and I am presently a senior research associate with the Pacific Institute for Studies in Development, Environment, and Security of Oakland, California. I was requested by Representative Dan Hamburg to summarize some of the key trends regarding the relationship of forests to the local economy in the Headwaters region as well as suggesting how the specific impact of the Headwaters Forest Act could be calculated. As part of my doctoral dissertation at the Department of Forestry of the University of California at Berkeley, I recently completed a detailed analysis of the relationship between timber harvests, timber jobs and the local economy using county level data covering the past twenty years. The advantage of analyzing such a long period is that the confounding impact of business cycles is reduced. The econometric models I developed for this analysis proved to be considerably more accurate than approaches used by US Forest Service or industry analysts in two respects. First, they were better at tracking the historical patterns at the local level and second they captured the key trends that can explain the major changes we are witnessing in the timber industry and the economy of forested regions.

The Benefits and Costs of the Headwaters Forest Act

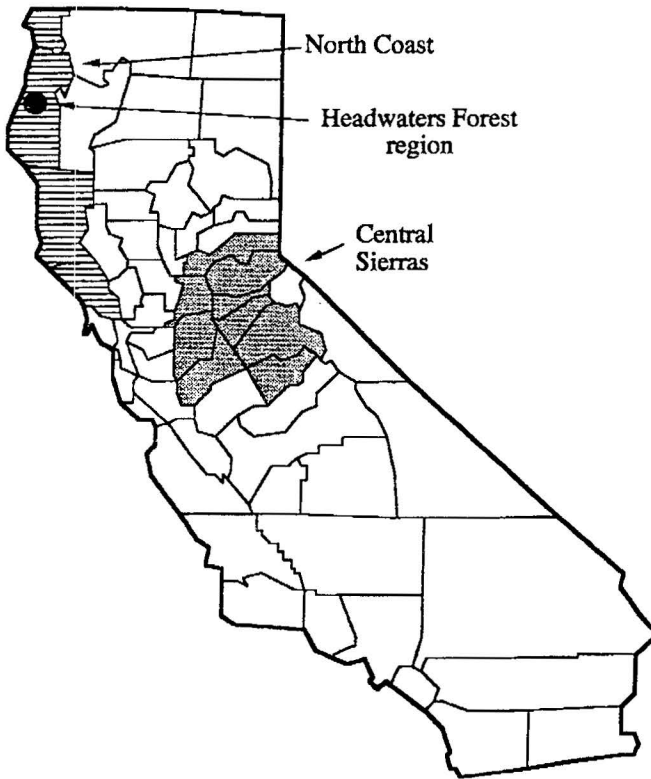
The proposed Headwaters Forest Act would create many benefits for this and future generations by protecting a number of unique old growth redwood forest ecosystems whose future is not presently ensured by private forest management. The Act also involves two very

different types of costs. The first are those born by society through federal expenditures to expand and then effectively manage public lands. Although the exact inventory levels are not yet known, the procedures for establishing and paying these costs are laid out in the Act. The second are those born by the local people and the local economy. This includes jobs lost in the timber industry as well as changes in the local economy that are specifically due to the Act. Realistic projections of these costs are necessary to assess the true cost of the legislation and what measures would be effective in ensuring local economic vitality.

The problem with most standard analyses of economic impacts is that they are based on the industry and local economies of the 1970s and not the 1990s. Two major changes must be addressed if realistic projections for the 1990s and beyond are to be developed. The first is the distribution of jobs within the timber workforce itself. The second is that the timber industry is no longer the major engine of local economic growth in the region. My analysis of the economic impact of timber harvesting in California suggests that, in some respects, a focus on commodity production may have a negative or only neutral impact on overall economic vitality.

Map of Headwaters Forest Region, North Coast and Central Sierras

California

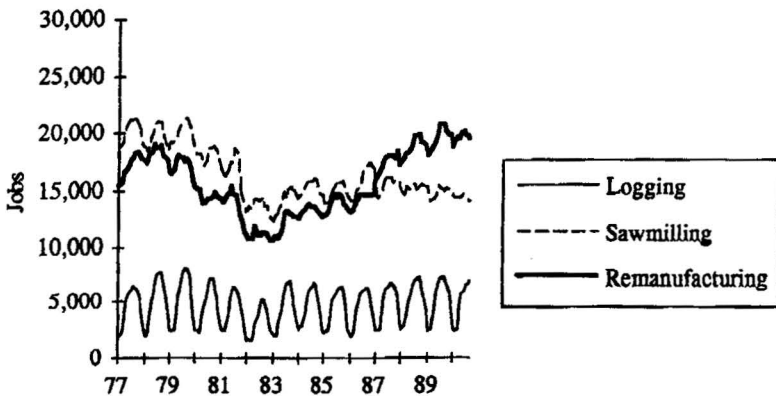


Changes in the Timber Industry Employment

The changes with California's timber industry are summarized in the figure below. In the 1970s, jobs in the sawmills constituted the largest fraction of all timber jobs in Northern California. In the mid 1980s jobs in the wood remanufacturing sector surpassed sawmills as the major employer. Wood remanufacturing includes diverse products such as specially cut and sanded lumber, doors, windows, finger-jointed molding, crates and boxes. I think the fundamental difference between the two types of employment is that capital investment in sawmills decreased the need for labor but actually increased the need for labor in the diverse remanufacturing sector by creating even more added value in the wood products.

Figure One

Timber Jobs in Northern California



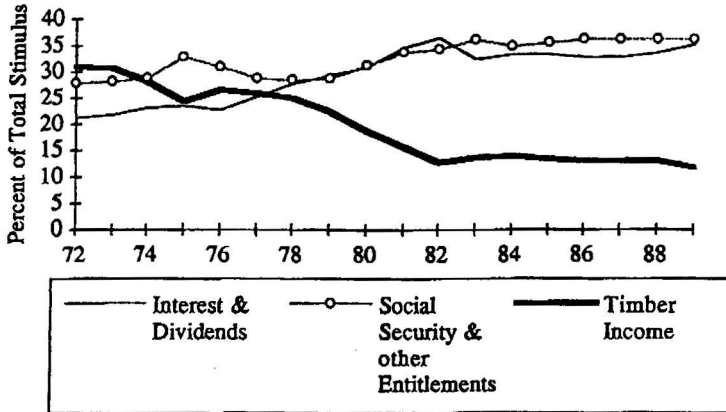
Source: California Economic Development Department. 1977-1990. The workers are categorized by SIC numbers (241,242, and 243-249). The counties covered are all those north of Los Angeles county.

Changes in local economies

The other major change is that the stimulus provided by the timber industry now takes second place to expenditures from an ever increasing number of in-migrants and retirees and who bring new capital, skills and interests. Figure two illustrates the enormous changes that have occurred in this region over the past twenty years. The growth in non-wage income is considerably more important than the relatively small increase in tourism and recreation dollars that also occurred over the same period. A very plausible reason for the ability of the region to attract new sources of economic stimulus is the environmental amenities provided by the region.

Figure Two

Sources of Local Economic Stimulus in the North Coast of California



Source: Local Area Personal Income: California, U.S. Department of Commerce, Bureau of Economic Analysis. 1978, 1984, 1990, 1991. Economic stimulus is defined as income coming from sale of exported products (mainly manufacturing and agriculture), exported services (determined by location quotient) and income transfers. It excludes most local retail, service and government employment income.

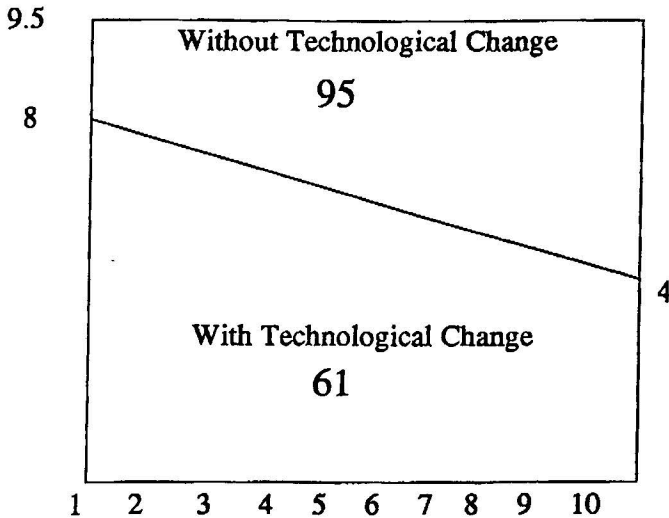
Specific Trends for Humboldt County

It is clear upon reviewing the harvest and employment statistics for Northern California that more people are required to process one million board feet of old growth than one million board feet of young growth logs. Based on data covering the period from 1978 to 1990, I estimated that processing pure old growth requires roughly 30% more labor than the current regional mix of old and young growth. Total employment involved in logging and processing one million board feet of old growth logs would include roughly one logging job, one half a tree plant job and six and a half sawmilling jobs. Beyond the first year, however, it is also necessary to account for increases in labor productivity resulting from the purchase of new mill machinery and the retiring of old machinery.

Even though the increase in labor productivity has been closely associated with the shift from a harvest dominated by old growth logs to one dominated by young growth logs, old growth processing also improves with new machinery. For example, labor requirements for an identical mix of old and young growth logs in the Central Sierras are roughly one half of that in the North Coast. In the Central Sierras, the percentage of the harvest from old growth logs had no impact on employment. This would not occur if the processing of old growth was impervious to introduction of new machinery. The diffusion of existing technology among different mills in the industry is going on now and will continue. Taking a conservative view that the diffusion of more productive technology from the industry leaders to the whole North Coast timber industry would take ten years, the number of jobs required to process one million board feet would drop from 8 to 4 workers over a decade. Based on this process of technological diffusion, 61 person years would be required to process an annual flow of one million board feet of lumber for a decade. This compares to an estimated 95 person-years that one gets by simply dividing current employment by lumber output. This back of the envelope calculation is 50% greater than the projection I would make based on an econometric analysis of the relationship of the recent historical record in California.

Figure Four

Person-Years to Process One Million Board Feet per year for a Decade



Sources: Initial and eventual labor requirements for technological change model - econometric analysis of county level harvest and employment data. Stewart (1993). Labor requirements of no technological change model - 1990 IMPLAN analysis for Northern Spotted Owl and industry estimates for old growth processing in California. The model for for estimating the rate of technological innovation by comparing average productivity to the productivity of the best one quarter of the industry was first introduced by William Miernyk in 1965 in *An Introduction to Input-Output Analysis*.

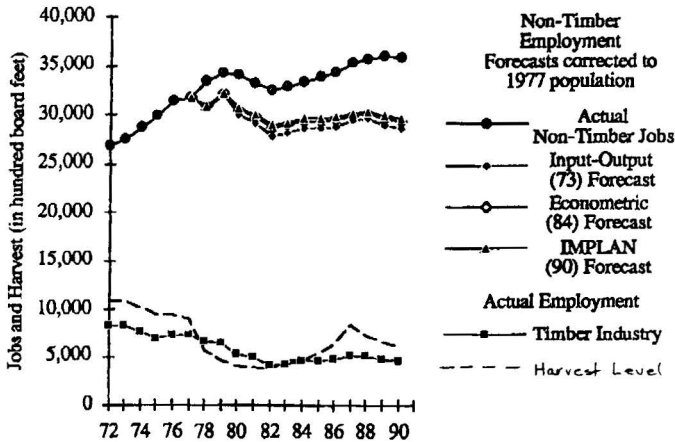
Indirect jobs

Nearly all employment analysis estimate that more indirect jobs will be lost than direct timber jobs if timber harvests drop in the western United States. The expansion of Redwood National Park in the late 1970s provides an excellent opportunity to compare the projection with the actual pattern in the same general region that we are discussing today. When we go

back and compare the accepted projections of catastrophic losses to what actually occurred, it is surprising that although direct timber job loss did occur, the total number of jobs in the county did not drop, unemployment rates did not rise relative to the state as a whole, and overall the local economy continued to grow. These results are true even after the number of jobs is reduced to account for overall population growth. Figure three below compares the projected jobs losses for Humboldt county based on the employment multipliers greater than 2.5 calculated for the economy of the 1970s with the actual trend after correcting it for population growth. As the figure illustrates, the loss of timber jobs that began in 1977 (due to both a slowdown in construction and the park expansion) did not have the expected effect of dragging the rest of the economy down. Equally significant, when harvests doubled from 1982 to 1987, the number of timber jobs increased by less than 20%. Clearly, timber employment is no longer the primary driver of the local economy.

Figure Three

Humboldt County



Sources: Employment: Annual Planning Report, Humboldt County 1992. Harvest: (the dashed line) California Board of Equalization, Employment Multipliers: Dean et. al. 1973. Structure and Projections of the Humboldt County Economy: Economic Growth versus Environmental Quality. University of California Giannini Foundation Report 318.; McGillip, 1984. Income and Employment Multipliers for the Forest Products Industry of Northern California. University of California, Berkeley Department of Forestry and Resource Management and Forest Products Laboratory; Olson 1990. Economic Impacts of the ISC Northern Spotted Owl Conservation Strategy for Washington, Oregon and Northern California. Mason, Bruce and Girard - Portland Oregon

Employment multipliers of 2.5 or greater continue to be used even though they prove to be extremely inaccurate when applied to events that have occurred. A crucial flaw in many of the regional economic models is that they do not account for growing non-wage incomes that are especially characteristic of the forested regions of California. The following table summarizes the results of an economic base analysis of the major timber producing counties of California.

Income Multipliers for Major Timber Producing Counties in California 1972-1989

Sector	Income Multiplier	Standard Error	T	p
Lumber	1.445	0.132	10.909	.000
Transfers	1.422	0.056	25.221	.000
Government	1.605	0.318	5.048	.000
Other Manufacturing	1.481	0.328	4.519	.000
Degrees of Freedom = 125; F= 86; Adjusted R ² = 0.875				

Source: Predicting Employment Impacts of Changing Forest Management in California, 1993. William Stewart, PhD, University of California at Berkeley. The results were developed from an economic base model using local income from the Local Area Personal Income publications of the Department of Commerce.

The moral is that a dollar is a dollar in terms of the multiplier effect in these forested counties. When the relatively higher wage of timber jobs is taken into account, the loss or gain of one timber job is associated with the loss or gain of 1.85 local jobs. The combination of underestimating the impact of technological change and overestimating the employment multiplier leads to a total job loss estimate that may be more than twice that which an examination of the economic record leads me to anticipate. This overestimation does not take into account the distinct possibility that the old growth jobs could suddenly come to a halt if the inventories ran out within the next decade or two.

Employment in the new forest economies

The economies of Humboldt and other forest counties in California have undergone enormous changes. Large changes in timber investment reduce the leverage of increased commodity production for producing jobs. Job growth in California's timber industry is occurring in the remanufacturing sector rather than the sawmilling sector. Interestingly, it is the Central Sierra region which illustrates the potential for job creation based on developing

new products and marketing them far and wide. Over the 1990s, more than 2,500 jobs in wood remanufacturing were created in this region as many smaller companies increased their product lines and output. Unfortunately, similar levels of new investment, market linkages and new jobs did not occur in the North Coast region.

The possibility of job growth with declining old growth harvests is illustrated by the near total transformation of one firm in the North Coast region. In the late 1970s, the firm employed 110 workers producing wide, tongue and groove planks from old growth redwood. Even though their supply of old growth redwood dried up in the 1980s, the owner did not have to lay off one person. By investing in new equipment and developing new products, she completed the transition to products made from young growth logs with no loss of jobs.

The fact that the growth of income brought by in-migrants and its impact on the economy more than overshadowed the reduction of timber jobs has other important implications. It is probable that many of these new residents were brought to the region by its environmental amenities and possess economic talents that can be tapped to create new employment growth in the region. Focussing on new employment opportunities not dependent on increased commodity production may have considerably more promise.

Key conclusions

Although old growth logs require more labor to process, new investments in sawmills are increasing labor productivity and reducing the employment needed to process a steady supply of raw material. Investment in the remanufacturing sector of the timber industry is responsible for essentially all the timber job growth in the state. The relative slowness of the timber industry in the area surrounding the proposed Headwaters Forest area to invest in these new product lines explains more of the job loss than harvest levels over the 1978 to 1990 period. Local economies are increasingly driven by income not related to the timber industry and job growth appears to be positively associated with the environmental amenities of the

region. In this respect the apparent tradeoff between wilderness and employment may not always be true.

Mr. VENTO. Yes, thank you, Dr. Stewart. You are obviously just talking about the output in terms of timber harvest and the utilization, or practical utilization, on a sustained-yield basis of timber, is that correct, and other forest-related products?

Dr. STEWART. Yes, sir.

Mr. VENTO. You didn't deal with any of the fishery impact that this would have, is that correct, in your analysis?

Dr. STEWART. No, I was just looking at the impacts within the forest sector.

Clearly, the rates of logging, if you look at the rate, what has happened to the fishery sectors of the north coast, they have been drastically reduced over this period of the final residual logging of many of the old-growth forests.

Mr. VENTO. There are, of course, a lot of intangibles in terms of quality of life and other things that Bonnie Raitt was talking about in terms of the utilization or how these areas are used. But there is also, of course, a tourism aspect and how that—whether a lot of people visit this area.

I don't know what the situation is in Humboldt County and other areas, I guess, but with some of the parks and so forth, they haven't found—they haven't exactly had their doors beat down up there. But there is that factor, is there not?

Dr. STEWART. Yes, sir. I think tourism has often been considered the replacement industry for the timber industry; and I think, looking at the historical record, that the real economic growth that comes from creating parks or putting land into preserves is that it attracts new innovators and entrepreneurs to the region that enjoy those environmental amenities. Most of them who do not work in the tourism resource and the tourism industries.

Mr. VENTO. Yes, I know. I think the utilization of old growth in terms of getting people to walk out in the forest, and so forth, it has been a problem. But sports fishing, as an example, could be very, very significant in terms of, again, the related vertebrate fish species that are impacted in the area.

There are quite a few questions here that need to be raised. Do you—you are just trying to compare.

Now, the Forest Service, of course, can get into some difficulty, but they would—excluding some of these lands would mean that they, Dr. Stewart, could in fact raise income or have income flow from some of these secondary growth areas and other areas in the forest; is that correct?

Dr. STEWART. I think one of the major problems from both the State and Federal regulatory point of view is until the status of these endangered habitats is cleared up, there has been a slow-down even in harvesting young growth. And I think clarifying the habitat requirements would allow for a more rapid development of some of these younger growth areas that are now under question.

Mr. VENTO. Well, in other words, your point is, likely some of the timber adding to the cost of these lands could never really be actually logged? As in the case of the Owl Creek situation, there may be in fact a policy violation in those instances?

Dr. STEWART. That may be true, but for the region as a whole, approximately half of the acreage is in the hands of northern industrial owners, and many of those lands are coming to age when

they will be harvestable, to replace some of the inventory that would be put into the wilderness designation.

Mr. VENTO. Do you think from a standpoint of management that it is helpful to have—obviously, this being in public ownership would be more likely to be able to set up other goals than those simply to pay off high-yield bonds?

Dr. STEWART. Yes, sir.

Mr. VENTO. That is, I think, a point worth noting, that if they are dependent only on that and some of the other esthetic questions, some of the other questions with regard—that we get into arguments about in terms of harvest, are set aside, which may be just as well.

What do you think about the dollar amounts that you have heard and the discussion today concerning that debate, the fact that the State of California got an estimate on 44,000 acres and it was only within certain criteria the State of California was relying upon; do you think that that—do you have any comments on that?

Dr. STEWART. No, the exact inventory numbers and the appraisal values are something I am not a specialist in, and I think that is a very different field.

Mr. VENTO. I see.

Ms. Lanman, can you explain the sad status of the various lawsuits that you have begun? This Owl Creek is the most recent one. Last year, of course, we in the past session had a lot of suggestions made to us that there was nothing being done, that California's land use and forestry protection laws are the most strict in the Nation, and that there wouldn't be any intrusion into—in fact, they are taking every step to avoid modification of the habitat of any species that were threatened and so forth.

And yet here we are then in Thanksgiving with this cut. You are telling me that whatever the penalty or fines are, there is still money to be made in violating whatever these rules are; is that right?

Ms. LANMAN. To date, that is correct. Since there were no fines levied, they haven't had to pay anything.

Mr. VENTO. But your concern is that that is exactly what will happen?

Ms. LANMAN. Well, in addition to the confusion, as expressed by Congressman Hamburg, that the agencies displayed when they were presented with the problem of an actual take occurring in known Marbled Murrelet nesting habitat, that left us with the only recourse to go to court again and try to get an injunction. We were fortunate to do that.

But in terms of the overall California forest practice program, it is badly in need of reform; and we have been working on that for several years. The case law that has been developed since we began this work in 1988, in particular with regard to this logging of ancient forest habitat on Pacific Lumber Company land, shows clearly that wildlife agencies are in favor of survey information being provided.

The agencies have taken a few steps administratively to try to begin to grapple with this, but they are faced consistently with an uncooperative partner in the industry; and in particular, when they

are asked to provide information that would result in a restriction on cut, they are very reluctant to do that.

Mr. VENTO. Well, it is a related problem, I think, in most of our minds, on privately owned land. It is tough enough when you have publicly owned land and you are putting together a sale, and when supposedly we should be able to control that.

You know, last week someone said they were stealing the trees off of public land.

Ms. LANMAN. Well, clearly California law recognizes that the forests hold public values, fundamental public values that need to be protected, and that includes the fisheries, the wildlife, and the future productivity of the forests to produce high-quality timber products for future generations.

If we look at what has happened in Mendocino, we can see clearly the regulations are not providing for the maximum productivity in perpetuity; and if we see what has happened in Humboldt County, we can see clearly that even endangered species can fall through the cracks and not be protected.

Mr. VENTO. I would just submit—I am not an attorney—but most States sort of define what the private property rights are. There are some provisions in our national constitution, but most States are rather unique in terms of how they define what private property rights are.

So you are really on a legal expedition here in terms of trying to define and limit this. I would suggest in most courts—I think most States, maybe even national courts, are not—are pretty leery of what the consequences are. I think there have been a number of zoning cases that came up the last few years that have not been encouraging with regards to the State being able or its delegated political subdivisions being able to deal with issues of zoning and other limitations.

That is just a fact, isn't it?

Ms. LANMAN. But it is clear, too, that as long as the company hasn't been restricted from conducting business, that a take cannot—a taking of their property cannot be found; and certainly we have not advocated that they stop logging entirely, but that they practice sustainable logging practices and that they protect wildlife values as required by law.

Mr. VENTO. Well, this is based on rules and regulations in the State of California. Is it State law, do you know? Is it State law or is it rules and regulations of the State Department of Forestry, California State Department of Forestry? What are we dealing with here?

Ms. LANMAN. Well, we are dealing with some complex layers of law.

One is the California Environmental Quality Act, which requires that you consider the cumulative effects of an action over time. And the other is the California Forest Practices Act, which implements these regulations, which—the Board of Forestry develops regulations to protect the public resource values.

Mr. VENTO. Are there cases similar to this that have been decided in California?

Ms. LANMAN. Well, we won several of these cases already. We have a major case pending in the Supreme Court which should go

directly to the heart of your question. And we feel that it won't be black and white, that they will find that the species need to be protected.

Mr. VENTO. What is the length of these court cases? How long have you been fighting these court cases? I know you have got one in the Supreme Court. What is your estimate of this?

Obviously, if Pacific Lumber comes to a settlement tomorrow, you are all set, but it doesn't sound like that might happen.

Ms. LANMAN. Well, we have been trying to address these issues in court since 1987; and we just settled a case from 1987 recently, and we have about seven cases now pending since 1988.

Mr. VENTO. Ms. Bailey, you have done a lot of work in this. I read your statement and appreciate the efforts of your organization, the Sierra Club, and the other associations, the Wilderness Society and National Audubon. I think it underlines the importance that conservation organizations place on these particular key areas.

What is your view of the State of California and the Fish and Wildlife Service, their indirect role in this? It is indirect. You note that the Forest Service and the others that were testifying here did not specify, they were not involved in, for instance, many of the decisions that were made here about these land use patterns; but is that a reliable benchmark on which we should rely in terms of protection to the headwaters? I mean, that is the bottom line.

We have got a court case going forward here. Is this likely to come back with resolution and therefore make our actions here moot or not necessary?

Ms. BAILEY. I think we are so much going out into new territory where the Federal endangered species regulations interact with the State regulations, that it is unlikely that we are going to see a clear definitive resolution in the near future.

My views are that the State of California has relatively strong laws but relatively ineffective regulations. And it is that shifting between what the law says and how the regulations implement those laws that has brought to us where we are right now.

Mr. VENTO. It sounds like the laws exist on paper, but not in reality. I can't believe it.

Ms. BAILEY. Right, sir. We have regulations that generate enormous amounts of paperwork, but sometimes what it seems like is a situation of describe and cut. So you spend a lot of time analyzing the situation, but then the guidelines are absent as to what is protection in one area, for what resource.

And it is a situation that in Mendocino County, where I am—I believe we are only a small period of time, say 15 years ahead, of what we would be looking like in Humboldt County. And we have testimony in front of the board of supervisors from our major timber holder to the effect that 85 percent of their resource is in trees in the 35-year-old age class; and as I think you probably heard somewhere else, that trees in our ecosystem yield the most wood volume for timber in the 80- to 120-year range. And so obviously if we have got a resource in the 35-year-old range, we are not sustainable at the moment.

And, in fact, the Board of Forestry did find—research arm of the Board of Forestry found that in our county, harvests were three

times the rate of growth. And we are just looking at the same thing happening in Humboldt County.

Mr. VENTO. I am sort of amused, when you hear of the reforestation or second growth and you go and look in the stream bottoms, and there you see the cedar stumps, the redwood stumps from 120 years ago, and there is nothing growing around them.

Ms. BAILEY. Yes, redwoods have wonderful regenerative properties.

Mr. VENTO. No, I know they do. Not other species, but, yes, they come from the root, they will come back.

Please proceed. Did I interrupt you?

Ms. BAILEY. No.

Mr. VENTO. The point is that you obviously feel strongly that the measure that has been introduced has 44,000 acres plus an additional 12,000 acres to study; and what we are being told here that has been considered before is why not just take the 44,000 acres, why not just take the areas that have the old-growth redwoods on them, the ancient redwoods?

Ms. BAILEY. Well, again, I think we have heard from the experts that tell us that we can enhance our investment by going into the ecosystem management approach. I think this is the direction that the Federal Government is leading us. We like to think in California that we are in the lead on things, but I think it is clear in this situation that the Federal Government has taken the lead on ecosystem management.

Mr. VENTO. Or "landscapes," as the Forest Service refers to it?

Ms. BAILEY. Yes.

Mr. VENTO. The other question, and I am sorry, but the point is that how much of the—in the area of Pacific Lumber, since the purchase by this 1980 takeover process, I note that you have put before us a list of Maxxam in the headwater acquisition area.

What is THP?

Ms. BAILEY. Timber harvest plan. And it is the document that the companies must file with a State in order to get approval.

Mr. VENTO. So they reported with the State or filed with the State that they were going to cut 3,615—that they have cut 3,615 acres of virgin old growth?

Ms. BAILEY. Yes, sir. It was pointed out to me that these were the timber harvest plans that Maxxam got approved themselves under their ownership; that when they took over the company, they also inherited, if you will, approved timber harvest plans for virgin areas that were also cut—perhaps as much as an additional 3,000 acres.

I haven't documented that yet, but I can.

Mr. VENTO. So you think there may have been actual—so the total amount here might actually be 6,000 acres?

Ms. BAILEY. Yes, sir.

Mr. VENTO. Is that what you are saying?

Ms. BAILEY. Yes, sir.

Mr. VENTO. This is in addition to what was being cut; and of course, you are concerned about the fact that much of this is now—is having superimposed over it, of course, additional information. Almost every year we are rewriting the old-growth bill in Region 6, because we keep getting new information every year. And none

of this is being considered here in terms of this particular plan, none of this new information.

Ms. BAILEY. Right, that is correct.

Mr. VENTO. The ecosystems are not a factor in terms of this plan; is that right?

Ms. BAILEY. No, no, I am afraid it is not. Right now the cumulative impact system is a checklist, where is it going to mean impact, yes, no.

Mr. VENTO. Well, I think it is tough to be in this business; it is a difficult time because there is changing information, we are on a learning curve here. And so I think that that is a factor. And plus I think trying to meld that together with the other goals that exist in terms of those that want to preserve some of these areas and the associated species—even salamanders.

Someone the other day was saying we are even trying to preserve—I think they meant insects, but they said bugs. I don't think they were just talking about insects. Actually I think they were talking about other things, maybe even arachnids. I don't know.

Mr. Hamburg.

Mr. HAMBURG. Thank you, Mr. Chairman. We hear a lot from the timber industry in northern California about the stringency of State regulation. I know you have already addressed this, but I have to just talk about it for another couple of minutes. There have been several attempts in recent years to try to strengthen the regulations under the Forest Practices Act, which many people would say is the most forward-thinking State regulation in the country, but as you have said, it is regulation that is often not enforced.

Could you just describe, Ms. Bailey, what some of those efforts have been over the last several years and what has occurred? Have we gotten any positive results out of those attempts on the State level?

Ms. BAILEY. Well, there was Proposition 130 in 1990. This was a voter initiative that was twofold. It attempted to reform forest practices on one hand, and it also contained a very large bond measure which would have—the prime target was the Headwaters area.

It also would have protected ancient forest areas throughout the State.

We came to the election, at the time, at the very edge, where people were suddenly discovering that the economy was perhaps failing; and we lost on a very narrow margin, 48 percent yes. Our election people were congratulated by the timber industry because they thought we had won, it was only when the numbers came in that we discovered that we had lost.

Two years later, after a period of negotiation, there was also an attempt at forestry reform in the legislature. However, it got bogged down in special interest maneuvering, at least partly by the Pacific Lumber Company, and to preserve a larger cut on their residual redwood forest. And unfortunately after much prolonged debate, the Sierra Club felt that they could no longer support this bill. And the bill—

Mr. HAMBURG. Was that the Sierra Accord?

Ms. BAILEY. It started out as the Sierra Accord. It went through a couple of permutations.

Mr. HAMBURG. Why did the Sierra Accord fail? It did get through the legislation; is that correct?

Ms. BAILEY. Yes, it did pass as A.B. 860 and was vetoed by Governor Wilson. It was our opinion at the time that it perhaps might have prevented a certain amount of clear-cutting of residual old-growth timber.

Mr. HAMBURG. But did the Sierra Club—Sierra Club pulled out on the subsequent bill, which was called the Grand Accord; but did the Sierra Club support the Sierra Accord?

Ms. BAILEY. The Sierra Club was neutral by the time it came to the vote on the Sierra Accord.

Mr. HAMBURG. Even though you had worked to help negotiate the agreement?

Ms. BAILEY. Yes. There were some 90 amendments, and in the final two weeks there were some extremely hostile amendments that we felt were basically poison pills, but we still felt that there was enough in the legislation that we would only go neutral on it.

However, the next iteration was—

Mr. HAMBURG. Governor Wilson vetoed the Sierra Accord?

Ms. BAILEY. That is correct.

Mr. HAMBURG. And you mentioned Pacific Lumber was involved in that.

Ms. BAILEY. Well, that was our feeling. I have no direct personal knowledge of that. But it was clear that one of the main differences between A.B. 860, which the Governor vetoed and the next iteration, the Grand Accord, there was a significant difference in the amount of old growth that Pacific Lumber could have clear cut under those two measures.

Mr. HAMBURG. And, you know—Cecelia, go ahead.

Ms. LANMAN. I was going to address the issue of regulations. In regard to the Board of Forestry regulations, one of our lawsuits emanated from a refusal on the part of Pacific Lumber to—well, they testified against any further old-growth regulations being implemented by the State of California in 1988, which has subsequently led to our having to sue them and the State agencies six or eight times.

In addition, the industry just recently in the last two years, since the Grand Accord failed, has blocked any meaningful reform as well. And this is despite the fact that the Board of Forestry's own findings and the information digest provided to the agencies, by the agencies and by other experts, show clearly there is a need for these kinds of regulations, which would identify old-growth values and attributes and do something to try to protect these processes and the wildlife.

Mr. HAMBURG. Now, in the neighboring county to Humboldt, Mendocino County, there has been an attempt to come up with some rules that will better serve the interests of long-term sustainability; and I don't know if you have been involved in that process, but could you just very briefly describe that for us, Kathy?

Ms. BAILEY. Yes, the Mendocino County Forest Advisory Committee was a board appointed by the Board of Supervisors in Mendocino County. They met over a period of, I believe, 18 months. It involved every aspect of the spectrum—environmentalists, water

course experts, timber industry people, small mill owners. And they did come with a package to the Board of Supervisors.

This package was defeated on a three-to-two vote after much discussion; and what the effect of that would have been, would have been to present a package of rules from Mendocino County to the Board of Forestry in Sacramento. They then would have had to approve them as well.

We don't know whether this is—if there will be more action from Mendocino County.

Mr. HAMBURG. I understand that the Mendocino County board plans to take up the fact recommendations again this year. However, I just bring this up because I think the entire forest advisory committee process in Mendocino County is really indicative of the failure of the State Board of Forestry to promulgate rules that are in the best interest of long-term sustained yield timber planning. And it is my understanding that there is nothing in the current rules under which the State operates that require sustained yield harvesting of timber. Is that true?

Ms. BAILEY. Well, the law again specifies that the resource should be managed for maximum production of high-quality timber product. However, the regulations have never defined what sustained production is.

The board has—under threat of lawsuit from an organization that is not represented here, has tried to grapple with this issue of just what is sustained yield. Mind you, this is 20-some-odd years after the Forest Practices Act passed. They are now trying to grapple with what it means to say "sustained yield." And they sent a regulation to the Office of Administrative Law, who bounced it back on procedural problems; and they have resubmitted it, and we will see. But as of now, there is no definition of "sustained yield."

Mr. HAMBURG. Thank you. Just a couple of other questions.

Ms. Lanman, probably the most controversial thing about this bill is that it doesn't just isolate the old-growth groves and say, Let's just purchase those and forget about the connectivity in the second grove.

I was in Fortuna over the weekend talking at a town hall meeting with many employees of Pacific Lumber Company and they definitely had a their point of view on how that second growth is being managed. What is your impression of that management?

Ms. LANMAN. It is being cut as rapidly as possible so that it doesn't become part of a national forest. And Pacific Lumber's policies became very aggressive after the takeover. Many of their plans have had flaws in terms of how they would protect over the landscape the significant values that remain on their holdings, especially the Headwaters Forest area and the species that exist there.

As we heard from the biologist this morning, it seems very clear that for the recovery of these species we need a larger acreage in order to protect those values. If they are left as isolated fragments, we will just have more park system, not a functional recovery area like the Marbled Murrelet.

I believe if it remains in their hands, they will continue to isolate and fragment these groves, which is precisely what they have done since attention has been brought to their lands. I don't believe they

would manage it in a way that would enhance the recovery of these species. That is very clear from their actions.

Mr. HAMBURG. A section of the bill talks about a restoration plan for second-growth forests which you maintain are being aggressively harvested. Can you describe the kind of jobs in restoration work that might be available on these lands, what kind of work would need to be done to restore the second-growth forest and establish an ecosystem management approach to that second-growth forest?

Ms. LANMAN. I have some ideas theoretically. There has been some assessment done by experts, Pacific Watershed Associates, many of whom were involved in national park restoration, but until actual assessment was done we wouldn't know for sure how many jobs.

Clearly, restoration-based economy in this region will be labor intensive and will be a better trend than what is in the industry now, which is to move toward fiber farm production and increasingly jobs, automation in the mills. And in order to deal with the gap that we are facing now because of the overharvesting, we feel that the restoration work would provide jobs in this transition that we are facing. Those jobs would include planning and monitoring areas that were put under restoration; it would include heavy equipment operations where roads would have to be put to bed. It would include all seasonal work.

Logging does not only have to be one season. It involves inventorying, going out on the ground and seeing what impacts occur over time. It involves surveying for wildlife. It involves tree planting as well as removal and thinning of certain areas.

If this management plan were to be developed by the Forest Service to truly enhance the old growth values, there would need to be thinning of some areas to bring those features back sooner. It is a variable that would have to be worked out after the bill was passed, and during the time the Forest Service would be looking at management and we would have to find a way to fund the restoration efforts in order to keep the jobs going out there.

In addition, there would be a lot of work in restoring fisheries. I have been involved in doing some of that kind of work in the watershed where I live. It is not necessarily only seasonal; it can be year-round because it involves surveying and monitoring, work that can only be done in the dry season, such as creating barriers to prevent erosion in places where there is gullying and a lot of erosion coming into the streams. It involves in our region a lot of hands-on work to protect the species of fish using the stream.

People in our region are catching the fish as they come upstream and hatching the eggs out by hand. They are put in incubators and they are fed. They have to have clean water and gravel. This has to be done. There is no spawning habitat in some areas, so people have to be out and monitor and be there hands-on teaching our children how to do this too.

Mr. VENTO. We have to go to the last panel. If you have other questions, you may submit them in writing.

Mr. HAMBURG. Thank you. I do have other questions.

Mr. VENTO. I thank the members of the panel. It has been very helpful.

I appreciate the last concern. There has been a lot of siltation in streams in the Western slope up and down the Cascades and in the Rockies, and that does cause special problems.

Thank you very much.

The last panel is Mr. John Campbell, President and Chief Executive Officer of the Pacific Lumber Company, Scotia, California; Mr. Gary Ryneearson, the Natural Resources Management Corporation, Eureka, California; Mr. Stan Dixon, County Supervisor, Humboldt County, California; and Mr. Robert MacMullin, MacMullin Logging and Forestry, McKinleyville, California.

Gentlemen, you have been very patient today and I appreciate it. I have all of your statements. I had your statement early, Mr. Campbell. So they will be made part of the record.

Mr. Campbell, once you are properly seated, proceed to summarize or read the relevant portions of your statement.

PANEL CONSISTING OF JOHN A. CAMPBELL, PRESIDENT AND CHIEF EXECUTIVE OFFICER, THE PACIFIC LUMBER CO., SCOTIA, CA; GARY C. RYNEARSON, PRESIDENT, NATURAL RESOURCES MANAGEMENT CORP., EUREKA, CA; STAN DIXON, COUNTY SUPERVISOR, HUMBOLDT COUNTY, CA; AND ROBERT MacMULLIN, CONSULTING FORESTER, MacMULLIN FORESTRY AND LOGGING, MCKINLEYVILLE, CA

STATEMENT OF JOHN A. CAMPBELL

Mr. CAMPBELL. Thank you, Mr. Chairman.

I am John Campbell, the President and Chief Executive Officer of the Pacific Lumber Company, and I appreciate the opportunity to testify before you today. I would like to summarize my remarks.

The Pacific Lumber Company has been in operation in Humboldt County now for 124 years of continuous operation. In February next year it will be our 125th year of operation on this same property.

It was interesting to hear testimony earlier that folks were talking about the beauty of the area and how people are moving there because of the beauty. I would suggest to you that that is because a lot of the timber companies in our area have been doing a good job. That is why the area is so beautiful.

Our company has 1,250 employees. We are the largest private employer in Humboldt County. All our lands are owned by the State for timber production and the Timber Production Act of 1982 requires that the landowner has maximum sustained production of timber products from that land. That is its only use.

The proposal which claims to be an old-growth protection bill is fatally flawed, as was stated by the Save the Redwoods League, because over 80 percent of the land that is involved in the 44,000 acres is second-growth timber or even third-growth timber. It has been harvested at least once, and in some areas twice.

I mentioned the Save the Redwoods League. Two weeks ago they enjoyed their 75th anniversary. Our company has had a 70-year relationship with that organization and many of the forest groves of redwoods in Humboldt County have been set aside working in cooperation between the Pacific Lumber Company and the Save the Redwoods League.

The reason John DeWitt said the current proposal is fatally flawed is they would like to see money of this magnitude spent on acquiring property adjacent to the current parks so that those parks will be enhanced and grow over time rather than taking isolated portions of land in other areas which would not benefit what their long-term goals are.

Three and a half years ago our company voluntarily refrained from harvesting in the headwaters area. We put on a two-year moratorium worked out with three of our local legislators, Congressman Bosco, Senator Barry Keene and Assemblyman Dan Houser from our area, and we agreed to refrain from harvesting to allow the environmental communities and the State to figure out how to come up with an appropriation to protect this particular drainage.

Proposition 130 failed and many other efforts have failed as well. But here we are three and a half years later, we have refrained from harvesting in the area, we have remained flexible in terms of what we would like to see happen with that property. All the company wants to see is that our shareholders who have a public interest in our company are protected; in other words, that we maintain our financial responsibility to those people.

We would like to see this issue worked out. You have mentioned many vehicles earlier today in testimony that could be used. We do not want to see the additional 40,000 acres taken from our productive timber lands. That is what our sustainability over time is going to be based upon, that is how we are going to be able to maintain employment in our area. Although we are willing to work on the headwaters issue itself, we do not want to see the balance of our property impacted.

I would like to correct a couple of things said in testimony earlier. One is the issue of junk bonds. Our company, like many other homeowners in the United States, have refinanced our company and taken advantage of a lower interest rate climate and the majority of our debt today has an investment grade rating so we are not today financed by junk bonds.

There was an issue brought up about our pension fund. Not one of our retired community has lost one nickel at any time during this entire episode. Everyone has been protected and will continue to be protected.

I would like to talk for a moment about Owl Creek. Owl Creek is an approved timber harvest plan, approved twice by the Board of Forestry in California. The last time by a seven to zero unanimous vote.

Last Wednesday, in the First District Court of Appeals in San Francisco, in the suit brought by EPIC, we prevailed and we have a court rule that we have a valid timber harvest plan in the Owl Creek area.

It was interesting to note that the Forest Service plan for 1993 says that no redwoods will be harvested from public lands. So I believe it is subterfuge to tell the public that the acquisition will be financed by harvesting trees in this property.

That is my testimony, Mr. Chairman.

[Prepared statement of Mr. Campbell follows:]

Testimony
by
John A. Campbell
President and Chief Executive Officer,
The Pacific Lumber Company
before the
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
U.S. House of Representatives
October 12, 1993

Mr. Chairman and Members of the Subcommittee. I am John A. Campbell, President and Chief Executive Officer of The Pacific Lumber Company, which is located in Scotia, California. I appreciate the opportunity to testify before you today on H.R. 2866.

This proposal, like the proposed legislation this Subcommittee and the Committee on Agriculture has considered in prior years, is publicly-discussed as simply authorizing the United States Government to acquire from Pacific Lumber what has been characterized as the largest old growth redwood forest still in private ownership. This old growth forest, which consists of approximately 3,000 acres, is located in Humboldt County, California, and is commonly referred to as the "Headwaters Forest" (rather than as Salmon Creek, its proper name).

In fact, however, H.R. 2866 is poorly conceived and not nearly so benign. As written, it would require the Secretary of Agriculture to acquire approximately 44,000

acres (and additional acreage exceeding 13,000 acres as a "study area") and add it to the Six Rivers National Forest. Substantially all of this acreage is owned by Pacific Lumber. If passed in its present form, H.R. 2866 would thus take away or otherwise adversely impact almost 30 percent of Pacific Lumber's nearly 195,000 acres of timberland (including some of its most valuable acreage). This would have a devastating effect on our company, its employees and on Humboldt County as a whole.

Humboldt County, where I have lived and worked for more than 24 years, still suffers from an unemployment rate that is in the double digits and still is in a period of deepening recession following numerous recent mill closings in our area. Indeed, the area's economic plight has been aptly described in the current (October 1993) issue of Smithsonian magazine in an article entitled "A new park saved the tall trees, but at a high cost to the community".

Nevertheless, my company, which is the largest private employer in Humboldt County, has steadily increased its work force and its tax payments for local schools, roads and social welfare programs. This was true before we were acquired by Maxxam Inc. in 1986 and it remains true today. Over half of our approximately 1,250 employees have been with us for more than 10 years and a fourth of those have been with us for two decades or

more. Our retirees enjoy one of the best pension programs in the timber industry, our employees have an exceptional health plan, and all of our workers' children are entitled to up to \$8,000 in scholarships for college upon graduation from high school. Since 1986, approximately \$1 million of scholarships have been awarded under this rather unique program.

Our company is the largest producer of high grade redwood lumber in the world, and our approximately 195,000 acres of timberland (including the 3,000-acre Headwaters Forest) are zoned by the State of California exclusively for timber production. Throughout our 124 year history, from 1869 to today, we have been and continue to be a responsible company. We manage our forests to ensure continuous renewal and healthy growth. Notwithstanding the inaccurate statements of some, which are often repeated by the media, the truth is that at current harvest levels and with our current land base, we can continue to harvest our trees at a sustainable level forever and at a more conservative rate than that of the timber industry as a whole.

For these and the other reasons I shall describe in the balance of my statement, we are strongly opposed to H.R. 2866. Let me first state, however, that we -- both Pacific Lumber and our corporate parent Maxxam Inc. -- recognize that our company, the United States Government,

and the State of California collectively face a dilemma with respect to the 3,000 acres comprising the Headwaters Forest. In the simplest terms, our dilemma is whether to preserve this wilderness area through public acquisition of the 3,000-acre Headwaters Forest area and a 1,500 acre buffer zone, or allow the land to be managed for its intended and authorized use and the trees selectively harvested in an environmentally responsible manner. The Nature Conservancy, Sierra Club, Wilderness Society, and other environmental organizations have in the past advocated public acquisition of the Headwaters Forest area but, to date, have expressed widely divergent views on how that should come about.

As we have previously testified, The Pacific Lumber Company would prefer to continue directly to manage and selectively harvest all of its properties, including the 3,000-acre Headwaters Forest, so as to provide continuing employment security for our workers and their families. We are, however, prepared to transfer these approximately 4,500 acres, but no more, if the government (federal, state or a combination of the two) is willing and ready to acquire the property at its fair market value. That 4,500 acres is an ecologically sound unit and the government's legitimate preservation objectives do not warrant a larger land acquisition such as that contemplated by H.R. 2866. A larger taking, such as that contemplated by H.R. 2866,

cannot be justified. While the 44,000 acre proposal encompasses most old growth redwood trees owned by Pacific Lumber (and the other impacted landowners), it also sweeps in substantial tracts of timberland that have been successfully managed on a prudent basis and selectively harvested for years.

If, however, the government decides not to acquire the 3,000 acre Headwaters Forest, then Pacific Lumber and Maxxam have a legal responsibility to their stockholders and other investors to proceed to obtain all requisite permits required for the trees to be selectively harvested and the property to be managed for its intended use.

Let me hasten to say in the strongest possible terms that we -- both Pacific Lumber and Maxxam -- are serious about our willingness to acquiesce in an acquisition of the Headwaters Forest and to work constructively toward that end. This has been our position for some time. As part of an accord reached in 1990, at the urging of key local legislators, Pacific Lumber agreed not to harvest in the 3,000-acre Headwaters Forest for two years. The purpose of that voluntary moratorium, which has now expired, was to allow environmental organizations time to raise money from government and/or private sources to acquire and preserve the property in its present form. This has not occurred, despite the efforts of many. For example, voters of the State of California rejected three

complex ballot initiatives which, in part, would have provided funds for partial or whole acquisition of the Headwaters Forest in 1990. Many observers believe this rejection was unrelated to the Headwaters Forest issue and another ballot measure with partial funding for the Headwaters acquisition is being planned for 1994 or 1995 by California state officials. Moreover, the concept of a public acquisition of the Headwaters Forest has bipartisan support in the California legislature and, unlike the so-called California Desert bill, has been publicly supported both by (Republican) Governor Pete Wilson and by (Democrat) Assembly Speaker Willie Brown.

Let me also emphasize, Mr. Chairman, that, although the voluntary moratorium has expired, we remain sincere in our professed willingness to permit an acquisition of these 4,500 acres. We are also realistic. We acknowledge the existence of a budget deficit that is so large as to make an acquisition completely for cash quite unlikely. We likewise recognize, as does the Department of Agriculture, that these 4,500 acres have such a high value that an acquisition solely through traditional land exchanges will not likely be possible. Indeed, these values alone make the 44,000 acre acquisition contemplated by H.R. 2866 wholly unrealistic.

Notwithstanding these practical constraints to an acquisition, we are prepared to continue to work

constructively toward a solution to the Headwaters dilemma that would be satisfactory to all parties. For our part, we stand ready to be creative and flexible in terms of the types of consideration we would receive in addition to a reasonable amount of cash. For example, this could include other timberland (to protect jobs), surplus Department of Defense facilities, other property, bidding certificates for future use when the government disposes of surplus property, government bonds or some combination of the foregoing. We likewise are prepared to agree to some objective mechanism to determine values. I would hope that this Subcommittee and other relevant parties would be equally flexible and creative, and equally concerned about the Constitutional requirement of justly compensating Pacific Lumber for this taking.

We are not, however, prepared to stand idly by and have our company virtually destroyed, our employees irreparably harmed and Humboldt County dealt yet another economic body blow through the enactment of H.R. 2866 in its present form. The very fabric of rural, northwestern California -- of which our company is an integral part -- is at stake.

Let me describe the extent to which government already owns forest land in northern California. If you were to look at a map, over 60 percent of the northern part of our state is forest land. Of these forest lands,

the state and federal governments already own 54 percent. Small private owners own 34 percent. Only an astonishingly low 12 percent of the forest land is owned by industrial timber companies like Pacific Lumber. Indeed, as I explain later in my testimony, over 80 percent of California's old growth coastal redwoods is already preserved in parklands.

Thus, H.R. 2866, in its present form, is both unnecessary and, given the value of the 44,000 acres, unrealistic. Moreover, it could destroy The Pacific Lumber Company and do irreparable harm to the communities, businesses, families and economy of Humboldt County and northern California.

Another irony of H.R. 2866 is that it would actually harm our ability to harvest trees on a sustained-yield basis. Let me explain. While timber companies like Pacific Lumber are thought of as being in the business of cutting down trees, most of our emphasis has to be on growing trees so as to ensure our continued viability. For example, to complement the robust natural regeneration of the forests, Pacific Lumber typically plants about 500,000 seedlings on its land each year. We engage in timber management activities (i.e., selective harvesting, habitat enhancement, replanting, etc.) only on about 5 percent of our acreage in any given year. Moreover, 95 percent of our harvesting is by selective cut, a method

that leaves many trees standing, not clear-cut as many of our detractors erroneously claim. The Pacific Lumber Company does not -- let me repeat, does not -- clear-cut virgin old growth redwoods.

In connection with old growth forests, it should be noted that most old trees have stopped growing and are in fact in decline. The young trees provide the rate of growth needed to sustain our harvest year after year. Thus, artificially curtailing the conversion of old growth to young on a large scale, or removal of large segments of our land base, actually prevents us from doing what, in the public interest, we should do; namely, engage in the production of wood products on a continual or sustained basis as required by the California Timber Productivity and Forest Practice Acts.

H.R. 2866 also fails to give due effect to the responsible record of Pacific Lumber. Since its 1986 acquisition by Maxxam, Pacific Lumber has added over 350 new employees with an annual payroll increase of \$10 million and increased local tax payments. We have modernized our lumber mills at Scotia and Fortuna, purchased a mill (which would otherwise have been idle) at nearby Carlotta and installed new dry kilns and planing facilities. We have added over 1,000 acres of timberland, some of which will not be harvested for at least 40 years and we have built an award-winning environmental

cogeneration plant at a cost of \$50 million. Altogether, more than \$100 million has been reinvested in Pacific Lumber since its acquisition by Maxxam.

Pacific Lumber and its professional foresters maintain healthy productive forests with the aid of computer models based on data developed in a comprehensive inventory of our entire property. The models embrace every aspect of the resource -- timber types, classes of trees, ages, soil and nutrient conditions, topography, wildlife, rivers and streams. By carefully monitoring and updating this data base, the company's licensed professional foresters are able to develop harvest plans that not only produce timber but also give consideration and protection to environmental and ecological sensitivities while maintaining the long-term productivity of the land.

Wildlife and fishery protection and enhancement is a key part of Pacific Lumber's culture and operational practice. Since the inception of one such program in the early 1970's, over half a million salmon and steelhead raised at Pacific Lumber-owned fish rearing ponds have been released into North Coast rivers and streams. We recently built a fish hatchery and hired a full-time fishery biologist. Pacific Lumber also employs a wildlife biologist to study and provide advice on steps to protect and continue to enhance the habitat upon which a variety

of forest creatures depend. At present, wildlife specialists are actively studying a number of species on Pacific Lumber land, including the Northern Spotted Owl and the Marbled Murrelet. In fact, Pacific Lumber has a property-wide management plan for the Northern Spotted Owl, which was developed in cooperation with the U.S. Fish and Wildlife Service. Part of the work with the Northern Spotted Owl entails the introduction of artificial nesting structures which, to date, have been used successfully to raise owl fledglings. Also, extensive Pacific Lumber studies indicate that -- contrary to popular belief in California -- the Northern Spotted Owl shows no preference for old-growth forests over second and third growth for its roosting, nesting and foraging, as the U.S. Fish and Wildlife Service recently acknowledged. You may have seen the recent NBC special report which also confirmed what I have just said.

Our commitment to responsible corporate practices is continuing, but it is not new. In past years, Pacific Lumber donated or sold at below value nearly 20,000 acres of California's most magnificent redwoods for preservation and inclusion in state and county park systems. Today, over 80 percent of California's old-growth coastal redwoods are preserved in some 255,000 acres of parkland. These parks contain almost 100,000 acres of old growth redwood. No other commercial species in the world

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has had so great a proportion of its trees set aside forever in government parks and other preserves. It is also important to note that the parks and preserves provide wonderful habitat for species of concern.

Mr. Chairman and members of the Subcommittee, the measure before you, in its present form, represents unsound economics, unsound forestry and unsound environmentalism. Jobs are rapidly disappearing in this country. In our industry and our area, small and large mills are laying off workers or have closed -- some temporarily and some permanently. In contrast, the working forests of Pacific Lumber continue to provide lumber for families and the construction industry, continue to protect and enhance the environment, and continue to provide jobs and a local, state and federal revenue stream. Our lands are some of the most productive forest-growing lands in the world. In our 124-year multi-owner history, we have proven that we can grow redwood in perpetuity. It makes no sense whatsoever to seek to destroy all this and jeopardize the future of The Pacific Lumber Company, its employees and the communities in which they live and work.

We again urge you to reject the 44,000 acre approach taken in H.R. 2866. That approach can lead only to continued gridlock. It would be much more constructive to join in a mutual and creative effort to achieve the more realistic goal of a 4,500 acre acquisition.

Thank you again for the opportunity to testify.

Mr. VENTO. I appreciate it. You had a long testimony and there has been a lot that transpired and you may want to respond. We will hopefully get back with a question or two. We are running into problems in terms of schedules, unfortunately.

Mr. Rynearson.

STATEMENT OF GARY C. RYNEARSON

Mr. RYNEARSON. Thank you, Mr. Chairman.

You have before you, I believe, a copy of my prepared testimony and I will not reiterate that but would like to briefly summarize some points.

My name is Gary Rynearson. I am president of Natural Resources Management Corporation. I was born and primarily raised in Arcadia. I am a second-generation forester. I am also a registered forester for the State of California.

I consider our firm to be a forest resources consulting firm. Besides forest inventories and appraisals, our firm provides services to landowners utilizing staff experience in professional forestry wildlife and fisheries biology, botany, geology and geographic information systems.

We have experienced surveys for threatened endangered species such as the Northern Spotted Owl and the Marbled Murrelet. Our appraisal experience is extremely varied and includes clients such as the State Park System, the U.S. Forest Service, the Bureau of Land Management, the Internal Revenue Service, Indian tribes, and corporations and industrial and non-industrial landowners.

We have appraised a portion of the area proposed in this bill. Perhaps the most relevant appraisal experience to this case is our experience with the Redwood National Park expansion in 1978. Originally, this particular government estimated at the date and time taken would be about \$360 million for the 48,000 acres. The actual costs have exceeded approximately \$1 billion.

Our firm appraised the lands and timber taken from Simpson and Arcadia redwoods for the 1978 expansion. In the Arcadia case, the Federal court found the value of the Arcadia property to be approximately 8 percent below our opinion of value and 83 percent above the government appraiser's opinion of value.

I appear before you because Congressman Hansen asked me to provide value information on old-growth and second-growth forests typical of those that may be found in Humboldt County. That information that was provided to the Congressman, and is attached, is that the average acre of old-growth redwoods in the summer of 1993 was valued at approximately \$190,000 per acre. The average acre of second-growth redwood was approximately \$53,000 per acre.

These averages cannot be applied to any particular acre, but represent a broad average. Any particular stand of timber must be appraised for its relative value, location and must be adjusted for quality considerations. For properties such as those considered by this bill, the use of an average acre must be used with caution. The only accurate determination of value is to visit the property and analyze it on an acre-by-acre basis.

In the last few years, the price of old-growth redwood and Douglas fir has escalated very rapidly. Perhaps one of the causes for this

has been the severe reduction in Forest Service timber sales over the past few years.

Mr. VENTO. I am confused—for the record, I guess whatever didn't get reproduced in your letter to Congressman Hansen, in care of attention to Kurt Christensen, didn't get attached. We will put that in the record as if it were——

Mr. RYNEARSON. I have a full copy for the record.

Mr. VENTO. I think this is Congressman Hansen's letter. Give your copy to the clerk there.

Thank you, Mr. Ryneearson.

[Prepared statement of Mr. Ryneearson follows:]

Presentation of Gary C. Rynearson for the House Natural
Resources Subcommittee on National Parks, Forests and Public
Lands on October 12, 1993

Chairman Vento, and distinguished committee members, thank you for the opportunity to appear before this committee. My name is Gary Rynearson, and I am President of Natural Resources Management Corporation, a forest resources consulting firm located in Eureka, California. Our firm has extensive experience in the north coast of California in the management, inventory, and valuation of forestland properties. As an everyday part of our business, our firm prepares timber inventories and appraisals and markets timber for our clients whose lands we manage. Our staff includes Registered Professional Foresters and experienced timber cruisers, such as myself, and appraisers accredited by the Office of Real Estate Appraisers, State of California.

Our firm also has extensive experience analyzing the biological and physical components of the forest, including the fields of forestry, wildlife biology, botany, fisheries biology, geology, and geographic information specialties. Our staff includes trained wildlife biologists and biological technicians and several foresters certified by the California Department of Fish and Game with regard to the marbled murrelet and experienced with regard to other listed, candidate or sensitive species.

Our list of past clients includes the California State Parks, Save-The-Redwoods-League, USFS, Bureau of Land Management, Internal Revenue Service, Indian tribes and corporations, and

Natural Resources Management Corporation

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numerous industrial forestland owners, including The Pacific Lumber Company and almost every other major company in this area. We also manage approximately 25,000 acres of timberlands owned by small, non-industrial landowners.

Perhaps our most notable appraisal experience regarding the determination of timber values are those related to the creation, and the subsequent 1978 Expansion, of Redwood National Park. Our firm inventoried and appraised land and timber taken from industrial forest landowners in both condemnations. We also presented these values in federal court. To a large degree, our values were accepted at both trials.

I appear before you today at the request of Congressman Hansen to provide some general information regarding the value of redwood timberlands in coastal northwestern California. On August 9, I received a letter from Congressman Hansen requesting approximate values for old-growth and second-growth timber stands typical of those that may be found in Humboldt County, California. A copy of this letter and my response is attached to my statement. To summarize my response to Congressman Hansen's request, we have estimated that an average acre of previously unentered old-growth redwood and Douglas-fir in Humboldt County had a value in the summer of 1993 of approximately \$190,000 per acre. During this same time period, the average acre of 70 year old second-growth redwood and Douglas-fir had a value of approximately \$53,000 per acre.

These numbers are averages, and cannot be applied to any specific property. Timber values are dependent upon the relative

Natural Resources Management Corporation

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location, stand age, timber and site quality, and the cost associated with the harvesting of the timber. Although I have not specially studied the entire 44,000 acres proposed in this legislation, I am generally familiar with the types of stands on Pacific Lumber's lands. The quality of those stands, and particularly the old-growth redwood and Douglas-fir found there, is generally better than that of the average stand.

Historically, redwood and Douglas-fir timber prices have exceeded the rate of inflation. In the last few years both redwood and Douglas-fir timber prices have greatly increased in value, apparently in response to both real and proposed reductions in timber supply. I have a series of charts which show what we are aware of in California.

First, I attach a chart which shows the decrease in the volume of logs sold from the Six Rivers National Forest, formerly a prime supplier of logs for our local mills. We have lost over 125 million board feet of annual supply in five years. Moreover, the recent draft plan from the Six Rivers shows no significant relief in sight. Supplies will remain tight, and prices are very likely to remain high.

Second, I attach two charts which relate to the values of the two main species of old-growth timber found on Pacific Lumber's lands. The data represent values derived by the State of California for tax purposes. For various, complex reasons, these state taxation values cannot be used directly to show true market values. However, the trends of the State's data can be used to show relative price movement.

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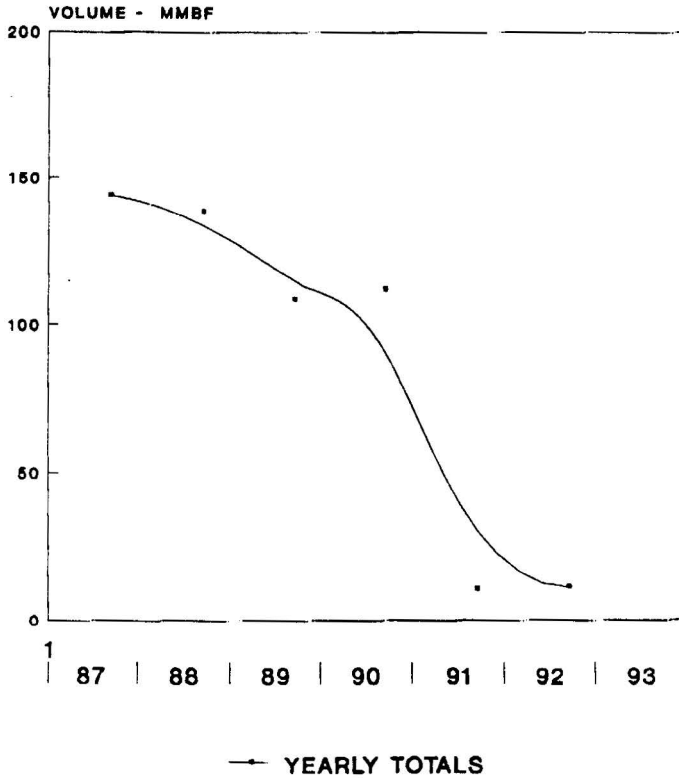
Please note the consistently upward price trends for at least the last five years. While the published yield tax data only go back to 1978, longer term trend lines would also show an upward trend, especially for redwood. Historically, redwood and Douglas-fir timber has appreciated significantly over time. This price appreciation was recognized by the courts in both park cases. Neither court supported any discount in value for size or holding period.

Again, thank you for the privilege to provide this information to the Congress of the United States. I would be happy to answer any questions the Committee members may have.

Natural Resource Management Corporation

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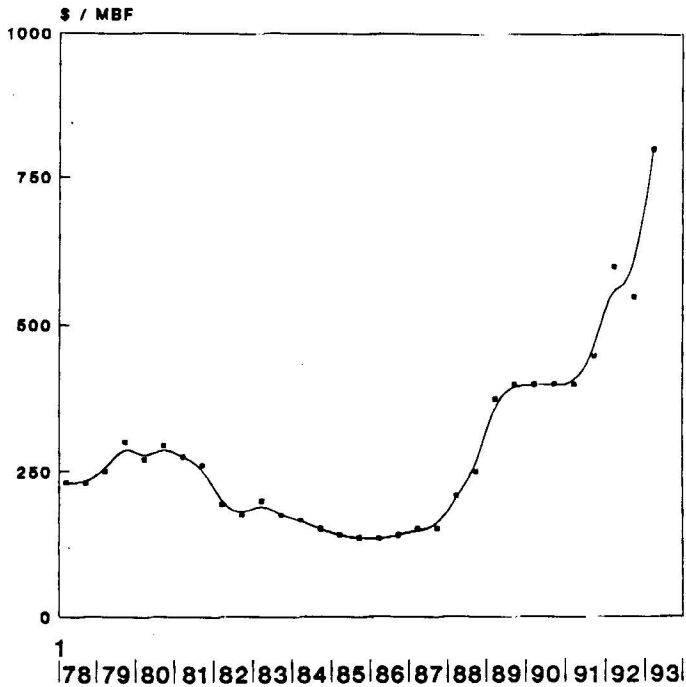
**SIX RIVERS NATIONAL FOREST
TIMBER VOLUME SOLD BY YEAR
FISCAL YEAR BASIS**



SOURCE - FOREST SERVICE RECORDS

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**OLD-GROWTH DOUGLAS-FIR
IMMEDIATE HARVEST VALUES
STATE BOARD OF EQUALIZATION**

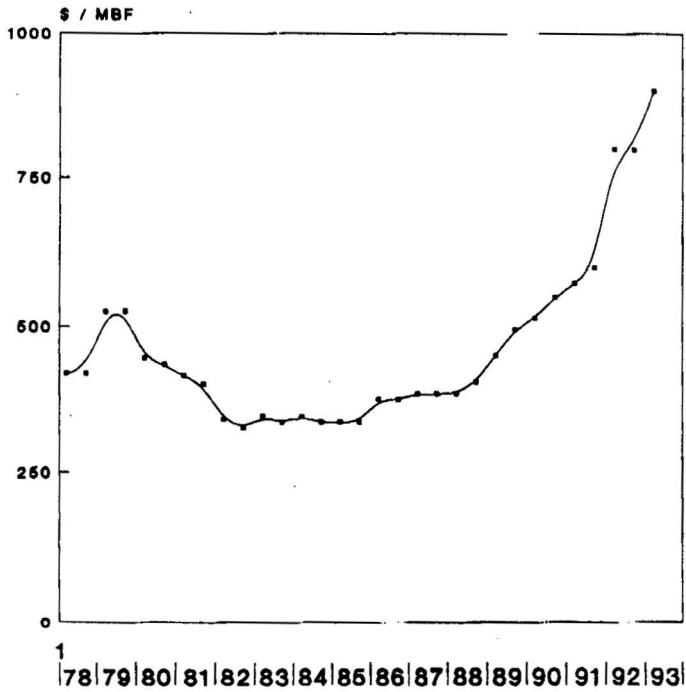


—●— SBE YIELD TAX VALUES

VALUES ARE FOR TIMBER OF AVERAGE QUALITY

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**OLD-GROWTH REDWOOD
IMMEDIATE HARVEST VALUES
STATE BOARD OF EQUALIZATION**



← SBE YIELD TAX VALUES

VALUES ARE FOR TIMBER OF AVERAGE QUALITY

Natural Resource Management Corporation

Mr. VENTO. Finally, let's move to Stan Dixon, County Supervisor from Humboldt. Welcome.

STATEMENT OF STAN DIXON

Mr. DIXON. Thank you, Mr. Chairman, Congressman Hamburg. You have a copy of my prepared statement.

Mr. VENTO. We do. We included a separate letter. We have the other testimony.

Mr. DIXON. I would reiterate several of the points that I made in that testimony.

I was privileged last April to attend the President's Forest Conference in Portland, and when we left, when I left, as did many others, there was a profound feeling that the President and members of his administration and congressional representatives had a feeling that there was in fact a need for balance as it relates to the environment and the economy.

While I understand that conference did not relate to this proposal, I think that people who attended the conference that live in resource-related communities in the Pacific Northwest were encouraged that the Federal Government was going to include in its deliberations some semblance of consideration for the human and social cost of these programs as it relates to particularly this issue that is before you today.

This particular proposal comes at a time when government at all levels, certainly at the Federal level as well as at least in our State and at the local level, where we are facing enormous budget deficits. It comes at a time when levels of government, at least in California, are downsizing and are reducing services and have reduced ability to provide those services, so that the loss of revenue to us in programs such as this proposal of taking 44,000 acres has a meaningful impact on our ability to provide services and our long-range economic plans.

The proposal that was first conceived, the 4,500 acres, would take something in the neighborhood of \$18 million from our timber tax-related resources and revenues over a several decade period, but the 44,000-acre taking jumps up considerably to the neighborhood of \$41 million. While that doesn't sound perhaps like much when you are talking about half a billion dollars for a 4,500-acre taking or a billion dollars and a half for a 44,000 acre taking, that amount of money to local government is significant, and school districts and county government and cities depend heavily on those revenues to be able to provide the services that we are expected to provide and need to provide.

I just want to make one comment about Congressman Hamburg's earlier suggestion that there is some support among elected officials in Humboldt County for his proposal. I don't find that to be true. I find almost unanimity in opposition to his proposal. There may be individuals and there may be one city that supports this proposal, but the overwhelming feeling, among locally elected officials at least, is in opposition to the 44,000-acre proposal.

I was interested also earlier in the fact that Dr. Ralph indicated on Pacific Lumber's land that is being considered in this proposal that he suspected that there might be as many as a thousand Marbled Murrelets, and I also noted, if my recollection serves me, that

Mr. Leonard indicated that their preliminary appraisals for that 44,000 acres, albeit somewhat speculative, were in the neighborhood of a billion dollars to a billion and a half dollars. My calculations would indicate that would work out to a million dollars or million and a half dollars per bird.

I think it would be important in Mr. Hamburg's district as well as elected officials across this country and citizens concerned about crime and how we deal with it, drug and alcohol abuse and prevention, programs that are provided for children, that our lack of ability to provide programs for the aged of this country, but yet we find that, this government can find the resources to provide habitat for a bird, at about a million and a half dollars per bird, but we can't find the resources to take care of our other human resources.

So that summarizes, Mr. Chairman, most of what I have to say. I would be happy to answer any questions.

[Prepared statement of Mr. Dixon follows:]

Testimony
by
Stan Dixon
Humboldt County Board of Supervisors
Representing the First District
before the
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
U.S. House of Representatives

October 12, 1993

Mr. Chairman, Distinguished Committee members, my name is Stan Dixon. I am a member of the Humboldt County Board of Supervisors representing the First District.

I am here today to urge you to not support H.R. 2866 regarding the acquisition of forest lands in Humboldt County. My reasons are many, but I will try to be brief.

This proposal, as currently written to include nearly 44,000 acres of timberland, would have a profound effect on the communities and the people of Humboldt County, as well as severely limiting the ability of County Government to provide necessary services.

As I relate these remarks, you must understand that I begin from several basic assumptions. I was privileged to attend the President's Forest Conference in Portland, Oregon last April and as did many others, I left with the assumption that this President, this Administration and this Congress clearly understood the need for balance as

it relates to the environment and the economy and that the human element individuals and communities really counted for something in this intricate equation.

Because my principal reason for addressing you here today is to inform you of the economic impact to our County, please believe that my concern, and that of an overwhelming majority of my constituents, is for the wise use of our forests and other natural resources and that we have an abiding concern for preserving these for our children and for generations far beyond them.

But we know, as you must as you consider this legislation, that the forests of California's North Coast represent if not the most productive, certainly one of the most productive, timber growing regions in this nation. Furthermore, they are regulated by the most environmentally sensitive harvest laws in the world.

You must also know, as you consider H.R. 2866, that 12,000,000 acres or 12% of California's total land base are preserved in parks, wilderness areas, and other land reserves; and that of this set aside, 255,000 acres are Coastal Redwood timberlands, 80,000 of those acres are in old growth redwood trees.

I have attached to this statement a summary of projected revenue losses to Humboldt County under the scenarios of a 4,500 acre loss and that of a 44,000 acre loss. The projected loss of timber tax revenues to all

agencies in Humboldt County for a 4,500 acre taking would be nearly \$18 million over the next fifteen years. However, that figure pales in comparison to the more than \$40 million in lost tax revenue for a 44,000 acre taking.

This proposal comes at a time when governments at all levels face enormous budget deficits. In Humboldt County because of the loss of tax revenue, we have asked our employees to defer merit increases and take deductions in salary, yet continue to do the same job. Worse than that, and because of a very sluggish economy, reduced tax revenues and federal and state mandates, we will more than likely be making significant reductions in our County work force within weeks.

This proposal in its present form will create more unemployment in our County that currently has nearly 10% unemployment. Clearly, in counties that rely as heavily on natural resources as does Humboldt County, every aspect of our existence relates directly to the success of the management of those resources. Consequently, we have been impacted first and hardest by resource allocation decisions.

In Humboldt County, the timber industry pays 30% of all property taxes in the County. Funding for roads and schools is heavily dependent on this tax base.

Massive tax revenue losses have had, and will continue to have, a devastating effect on Humboldt

County. But the direct loss of jobs associated with the reduction of timber production also places extreme burdens on county-provided services. The loss of employment not only reduces County Income from sales taxes and other sources, but high unemployment rates also over-burden county hospitals, social welfare programs, and other county, state and federally funded services.

In addition, high unemployment levels also have a direct correlation to increases in crime, spousal abuse, child abuse, alcoholism, abandonment, and other societal problems which, to a large extent, also depend upon county services for relief.

Please do not be misled by provisions in this legislation that would call for retraining of displaced timber workers as a tradeoff for taking 44,000 acres of productive and revenue producing timberland.

While retraining is an important part of any recovery program, the type of jobs created are not equal to those lost. Government created public service jobs are not a replacement for well paying industry jobs that allow the worker to support his family and educate his children. In today's complex economic world, short term public service and minimum wage jobs do not support communities. I think the statement of an old friend and retired colleague best states this premise, "We can't create an economy by selling hamburgers to each other."

Mr. Chairman, each of you represents a Congressional District whose economic backbone is more than likely some form of industry. On the North Coast of California, the timber industry is our economic backbone. If you must take timberlands from our economic base, please focus on the 4,500 acre Headwaters Forest proposal for which you have a seller that is willing to negotiate. Please do not consider the 44,000 acre proposal outlined in H.R. 2866 which would devastate a company, an industry and a county.

Thank you for allowing me these remarks.

HEADWATERS FOREST

ASSUMPTIONS (As of 10/7/93):

ACRES - 4,500
 TIMBER VOLUME - 750 MILLION BOARD FEET
 SPECIES BREAKDOWN - 80% REDWOOD; 20% WHITEWOODS

ESTIMATED ANNUAL VOLUME TO BE LOGGED: 50 MILLION BOARD FEET

YIELD TAX COMPUTATION:

ANNUAL CUT

OLD GROWTH REDWOOD 40 MILLION BD FT @ \$900 = \$36,000,000
 OLD GROWTH WHITEWOOD 10 MILLION BD FT @ \$800 = \$8,000,000

TOTAL STUMPAGE VALUE \$44,000,000
 YIELD TAX @ 2.9% 1,276,000
 LESS ADMINISTRATIVE COST (10%) (127,600)

NET YIELD TAX: \$1,158,400

TOTAL ANNUAL YIELD TAX LOSS: \$1,158,400
 (ALL AGENCIES)

TOTAL VOLUME = 750 MILLION BD FT
 ANNUAL CUT = 50 MILLION BD FT
 LIFE OF STAND = 22 YEARS

22 YEARS X \$1,158,400 = \$25,484,800 TOTAL YIELD TAX LOSS.

PROPERTY TAX COMPUTATION

TIMBER LAND

PROPERTY TAX (1993-94)

4,500 ACRES @ \$156/AC = \$702,000

TAX RATE: 1%

ANNUAL PROPERTY TAX LOSS = \$7,520
 (ALL AGENCIES)

HEADWATERS FOREST

ASSUMPTIONS (As of 10/7/93):

ACRES	-	44,000
* TIMBER VOLUME	-	1,910 MILLION BOARD FEET
SPECIES BREAKDOWN	-	63% OLD GROWTH REDWOOD
		15% OLD GROWTH DOUGLAS FIR
		18% YOUNG GROWTH REDWOOD
		4% YOUNG GROWTH DOUGLAS FIR

ESTIMATED ANNUAL VOLUME TO BE LOGGED: 87 MILLION BOARD FEET

YIELD TAX COMPUTATION:ANNUAL CUT

OLD GROWTH REDWOOD 50 MILLION BD FT @	\$900 =	\$45,000,000
OLD GROWTH WHITEWOOD 20 MILLION BD FT @	\$700 =	\$14,000,000
YOUNG GROWTH REDWOOD 15 MILLION BD FT @	\$700 =	\$10,500,000
YOUNG GROWTH WHITEWOOD 2 MILLION BD FT @	\$575 =	\$1,150,000

TOTAL STUMPAGE VALUE	\$70,650,000
YIELD TAX @ 2.9%	2,048,850
LESS ADMINISTRATIVE COST (10%)	(204,885)

NET YIELD TAX: \$ 1,843,965

ROUNDED: \$ 1,844,000

TOTAL ANNUAL YIELD TAX LOSS: \$1,844,000
(ALL AGENCIES)

TOTAL VOLUME	=	1,910 MILLION BD FT
ANNUAL CUT	=	87 MILLION BD FT
LIFE OF STAND	=	22 YEARS

22 YEARS X \$1,844,000 = \$40,568,000 TOTAL YIELD TAX LOSS.PROPERTY TAX COMPUTATIONTIMBER LAND

PROPERTY TAX (1993-94)

44,000 ACRES @ \$156/AC = \$6,864,000

TAX RATE: 1%

ANNUAL PROPERTY TAX LOSS = \$68,640
(ALL AGENCIES)

* The assumptions do not include an estimated 2% annual cost

Mr. VENTO. Maybe we can trade for an aircraft carrier.

Mr. DIXON. I would trade the aircraft carrier, but I also would ask you to consider if you must take our economic base to consider the 4,500 acres.

Mr. VENTO. I think there are a lot of questions and discussion that have not been resolved by your statement.

We will hear from the last witness. We are pleased to welcome Mr. MacMullin.

Please proceed with your testimony, Mr. MacMullin.

STATEMENT OF ROBERT MacMULLIN

Mr. MACMULLIN. Thank you, Mr. Chairman, Congressman Hamburg, distinguished committee Members.

My name is Robert MacMullin. I am a licensed professional forester. I am a licensed timber operator, and I own MacMullin Forestry and Logging.

My written testimony I hope you will accept. I will try and summarize in five minutes.

There was through the discussions earlier some items that sure would be nice to be able to address. I think there are corrections of statements and ideas talking about old growth, ancient forests, questions about the validity of the U.S. Government being in the business, Simpson Timber Company cutting all their old growth, decline of the salmon populations, CDF rules and their applicability, loss of the redwood forests. I think we have a broader spectrum I would like to discuss.

I am opposed to the H.R. 2866 legislation. I believe this is horrible legislation that totally disregards the needs of the people living in northwestern California.

Of all the private forestlands that I have ever seen, Pacific Lumber Company has the finest forest land holdings of any large company. They have over many years of operation been good stewards of land, and even though they have given and sold at low cost to the State some 20,000 acres already of the finest old growth, they still maintain a cohesive block ownership.

The company has developed and approved a habitat conservation plan for the spotted owl. The Forest Service is still mired in lawsuits. The company is developing a protection plan for Marbled Murrelets. The Forest Service hasn't even considered this yet. The location of the ownership, the general topography, the deep productive soils, the temperate climate, the good road systems, years of excellent stewardship collectively make this forest ownership twice as productive as the average forested acre in California.

Mr. Hamburg, you tell us that the Six Rivers National Forest will manage Pacific Lumber Company's confiscated redwood acreage for multiple use. The national forest just came out with their management plan stating that 2,600 acres of redwood trees found on the forest will be fully protected, no trees will be harvested.

Does anyone understand the statement? No trees will be harvested. How could anyone sign on to this bill not knowing this fact? The answer is, Mr. Hamburg, your staff is not explaining what is in the detail of making these wise decisions for this bill.

We are here to really get some facts. I would like to present some, who owns what—this is a little further away than I hoped,

but right now in California we have some 27 million acres of forestlands and the government now controls a tremendous amount of that. We see red, we have Park Service; yellow, we have the national forest makes up about 42 percent, U.S. Forest Service. In some of the pink areas we have BLM or BIA, other government-controlled forests. We have quite a sum. We are way over 50 percent. In private control, we have these green areas, which are industrial forests making up about 12 percent of the whole forest. The tan areas are private holdings called non-industrial.

Typically, an owner might never cut trees that belong to a conservation organization with other goals and objectives. But typically the small land ownership in California, which there is 100,000, there is five-acre ownerships through the Sierras on average, and the coastal is somewhere around 15 acres average. Keep that in mind as to who is actually owning our northwestern California, Park Service, private, large ownership. We think that is nice.

Let's think about how these forests are used. We have presently an area in red is all preservation, a tremendous amount of acreage in preservation, 21 percent or six million acres I show in red as of 1992, this data.

Another area, which is basically Forest Service in tan, is non-timbered multiple-use area, non-multiple use, which is about 30 percent. This is not being managed for timber whatsoever. The yellow area, incidental, 6 percent.

The blue area, Forest Service, usually called government non-industrial, they are not managing that land all the time. There might be a spot that needs some logging, but it is not sustaining a local economy. They need wood every year for those mills to continue to operate, county tax dollars.

The gray areas, 15 percent is basically in private non-industrial use, meaning that owner plans to harvest it sometime in the future but not this year because prices are low. That is not something that can sustain a local economy.

The green areas, industrial forest lands, 13 percent of all the State lands are in industrial, private industrial, meaning that somewhere on that property they will be harvesting that year. As we look at this bill in the North Coast area, we find a tremendous amount of preservation right now. The red areas along the coast are already preserved parks.

Put it in the magnitude of where we are right now, taking this green area, a quarter of the green area, Pacific Lumber Company's land is like a car going down the road with four good tires. Take one away and that car isn't going to make it.

A whole economic unit is in trouble. Very important. I can go on about the Six Rivers and Trinity and the Mendocino National Forest, in years prior to being sued by the environmental groups, generated high-quality wood chips for low-grade logs. These worthless logs provided a tremendous amount of wood chips needed to operate the two pulp mills on Humboldt Bay. These mills are closed. Over \$15 million which annually went into the economy from this hub of economic infrastructure is now gone.

Environmental lawsuits have continued to block the Forest Service from doing their job managing these forests for multiple use.

Take away 57,000 acres from this company and give it to the U.S. Forest Service, I believe this is absolute madness. These lands are not going to be managed for preservation. Not to mention the terrific costs involved. I estimate that we are looking at \$2 billion in order to put this vehicle together in order to take this land away.

Mr. VENTO. Were you able to go on the land here to make your appraisal or not?

Mr. MACMULLIN. As a forester I have planted trees on Pacific lumber lands. I have cruised timber.

Mr. VENTO. I was interested in how you came up with your appraisal. I understand you are a forester. I don't challenge that.

Mr. MACMULLIN. My experience has been in the magnitude of old growth in estimates of timber value, the estimated volumes that exist.

Mr. VENTO. You didn't do a formal appraisal?

Mr. MACMULLIN. No.

Mr. VENTO. I think it ought to be recognized that you are submitting a subjective statement on that. It isn't factual.

Basically your time has expired. The reason I want to do this is—I think it is the reason—other members of the panel took five minutes. This hearing is going to be over so unless—

Mr. MACMULLIN. I could close in 15 seconds.

As you consider this bill, I think you need to consider the people that live in the community, the horrible problems that are occurring due to removing the backbone of the economy. Seventy percent of our local economy directly comes from the forest, and by taking this last center pin out, our economy is going down the tubes, folks.

I feel strongly about this. I came a long way to be here today to talk with you. I would love to have the whole committee come to the coast and see for yourself. We have nothing to hide. It would be wonderful if you could come and see what is going on there.

Mr. VENTO. We would like to do it, too, but unfortunately we can't be everywhere on location. Usually after everyone is informed, someone that you don't agree with probably thinks you haven't done enough. We get out as often as possible in terms of making decisions and getting a better lay of the land. It is one of the better aspects of being on the committee, rather than sitting in hearing rooms.

[Prepared statement of Mr. MacMullin follows:]

Testimony
by
Robert MacMullin
Consulting Forester
MacMullin Forestry and Logging
before the
Subcommittee on National Parks, Forests and Public Lands
Committee on Natural Resources
U.S. House of Representatives

October 12, 1993

Mr. Chairman, distinguished Committee members, my name is Robert MacMullin. I am a Registered Professional Forester, a Licensed Timber Operator and owner of MacMullin Forestry and Logging. I earned a degree in Forest Management from Colorado State University, and have over 20 years of woods experience, 16 of them spent working in the Redwood forests of northwestern California.

I am here to urge you to oppose H.R. 2866. This is horrible legislation. It totally disregards the needs of the people who live in northwestern California. I am also here to answer questions about the forests in which I proudly work, nourish and protect, and the horrible inefficient effects current Forest Service policy is having on the working people of Northwest California and the forest itself.

You all should know Humboldt County has approximately 1 million acres of private forest situated

- 2 -

west of Six Rivers National Forest. These private forests are some of the most productive forests in the world. In this region the average forested acre, will grow, over a forty year period of time, approximately 40 thousand board feet. This means Humboldt County can produce, every year, forever (with the application of good forest management), over 1 Billion board feet. Currently these private lands are producing about 450 million board feet. Significant volumes of harvestable trees are being retained for wildlife values.

Since the development of the current California Forest Practice Rules in 1973, the change in best management practices on California private forest lands has been dramatic. Harvesting regulations in California are the most stringent anywhere in these United States.

As a consulting forester, my company harvests trees during summer months and plants over 200,000 new seedlings each winter. We also develop harvest plans, perform wildlife research and establish wildlife protection measures.

Of all the private forest lands that I have ever seen, Pacific Lumber Company has the finest forest land holding of any large company. They have, over the many years of operation, been good stewards of the land. And even though they have given and sold, (at low cost to the State), over 20 thousand acres of the finest original "Old Growth", they still maintain a cohesive block ownership.

The company has developed an approved Habitat Conservation Plan for the Spotted Owl. The U.S. Forest Service is still mired in lawsuits. The company has just developed a protection plan for the Marbled Murrelets. The Forest Service hasn't even considered this step yet.

In the 1920's Pacific Lumber developed a reforestation nursery.

Later, some 30 years ago the company developed fish rearing ponds and dedicated large sums to fish and wildlife development and protection. The company plants many thousands of salmon and steelhead each season. This year the north coast rivers had a banner year with a ten fold increase of returning salmon and steelhead.

Each year they reforest every acre that is harvested.

The location of the ownership, gentle topography, the deep productive soils, temperate climate, good road system and years of excellent stewardship, collectively makes this forest ownership twice as productive as the average forested acre in California.

Pacific Lumber Company is respected for their environmental record and commitment to community, donating over \$100,000 per year to charities. The company is dedicated to producing wildlife, protecting habitat, growing trees for our children and providing jobs and products we demand at the lumberyard and book store.

- 4 -

The last time Congressman Pete Stark tried to push this bill down our throat the U.S. Forest Service testified they did not have the capacity to manage any more forestland nor did they have an experienced knowledgeable staff to take on the job. They are now saying, yes they can do the job. What happened, did the Six Rivers National Forest just develop an incredible new work force, free from environmentalists lawsuits?

Congressman Dan Hamburg, you continually tell us that the Six Rivers National Forest will manage Pacific Lumber's confiscated 36,000 acres redwood forest, for multiple use.

Does anyone here know what that means? Multiple Use? On the Six Rivers National Forest only 10 percent of our 1 million acre forest is open for multiple use, meaning management for all values which include harvesting of trees. The remaining 900,000 acres is locked up in single use designation. Harvesting is forbidden.

Six Rivers National Forest just came out with its management plan for our public forest. It is stated that the 2,600 acres of redwood trees found on the forest is to be fully protected. NO TREES are to be harvested!

Does anyone know what the statement, "No Trees Will Be Harvested" means? Over 70 co-sponsors to this bill surely don't. How could any one possibly sign on to this bill without knowing this fact?

The answer is, you do not have all the needed information to make wise decisions.

I am told that is why you are all here. For you to learn the facts and make the best decision that will positively effect the families, the children, the economy and the health of the forest.

If this bill passes, the families, the children, the economy and the health of the forest will be drastically damaged.

Lets talk facts.

Each year the Six Rivers National Forest has had a net gain of over 250 million board feet more timber than the year before. This net gain includes the annual harvesting figures. Yet the sales program has declined to an average annual cut of about 10 million feet.

Due the many drought years there is an annual loss of approximately 60 million of board feet of timber land that is insect infested and dying. Very little of it will be harvested. Is this good stewardship? No, it certainly is not.

The Six Rivers, Trinity and Mendocino National Forests, in the years prior to being sued by the radical environmental groups, generated high-quality wood chips from low-grade logs. These worthless logs provided over 50 percent of the wood chips needed to operate the two pulp mills on Humboldt Bay. Today both of these mills are

closed. Over 50 million dollars which annually went into the local economy from this hub of economic infrastructure is now gone. Environmental lawsuits have and continue to block the Forest Service from doing their job.

In 1987 our northern forests had a series of lightning fires ignited by over 1,000 lightning strikes in one big storm. 578,806 official Forest Service acres burned. More than 1.9 billion board feet of timber was torched. 1.5 billion feet was located outside of wilderness and protected areas. 1.2 billion feet of dead burned trees were put up for sale. Environmentalists effectively cost the U.S. Forest so much time and expensive legal fees trying to stop the salvage operations that only 896 million board feet was removed. Approximately 600 million board feet was left standing to rot. An even greater disaster, was that reforestation only occurred on harvested accessible burn areas. Due to the delays caused by the environmentalists, so much brush grew in, seedlings could not be planted and the forests continue to be mismanaged and desiccated.

When Redwood National Park expanded in 1977, George Meany, AFL-CIO, got Congress to recognize, that many working people who lost their jobs due to that taking of private land, should be helped. Part of that deal was that the Six Rivers National Forest would increase their harvest levels to compensate the taking of the private

forest land. The harvest on the 1 million acre Six River National Forest was promised to go up to 200 million board feet. Never did our harvest average rise anywhere close to that level. In 1991 less than 1 million board feet was harvested on the Six Rivers National Forest.

Plain and simple the authors of that bill never intended to help the people.

Congressmen Hamburg and Stark write, that the USFS will manage for multiple use. Who is kidding who?

This land grab bill is dressed in the guise of protecting wildlife and never documents THE NEED for exactly what needs to be protected.

Pacific Lumber is not a willing seller.

In a moment, I will show you colored detailed maps of forests already within the control of the Government.

To take ultimately 57,000 acres from this company and give it to the U.S. Forest Service is MADNESS. Not to mention the terrific cost involved. I estimate the total cost is somewhere near 2 billion dollars.

Where will all of the money come from? I ask you who is going to pay for Headwaters Forest? Does Congressman Hamburg have a Swiss Bank account? Does he have a rich uncle?

I know my rich uncle, the one I have always counted on to provide me with just the basics like police protection, public schools, safe roads and social

security, and he has gone broke. He doesn't have the money to buy any more land. His days of grabbing land are over.

When you don't have money to pay the bills you already have, you quit shopping! You pay your bills and you try to save money for the future. You look at what you already have and try to decide if you really need something before you buy it.

Do we really need the Headwaters Forest. We already have 255,000 acres of Redwoods set aside. Do we really need to put the Pacific Lumber Company out of business? The largest employer in Humboldt County! Are we going to lay off thousands more people?

And if we do, how are we going to pay for it? Are we going to drive another nail into the coffin of the children of this country? This bill drastically effects not just the children of the forest families but all the children in Humboldt County every time private land is taken off the tax rolls.

The futures of our great, great grandchildren have already been mortgaged. How can anyone of the sponsors of this bill justify it? My God, our children are killing each other. Why? Because they see no future. They see no rising sun on the horizon. They are bleeding and crying out for help, and this is what the people in Washington are spending their future on. Why aren't we

trying to get a couple of billion dollars for education, for police protection or for AIDS research?

You people are not listening. You are letting all of the country down, not just the people of Humboldt County.

I beg of you, do not drive another nail into the coffin of our children's future. If you have \$2 billion to spend. Spend it on saving children. Fight drugs, crime, street wars. Do anything but hurt innocent hard working people.

Please look at the maps which I have brought. Let me show you the vastness of the government lands.

Mr. VENTO. Mr. Dixon and Mr. MacMullin, you both tend to make the assumption that if this land were picked up by the Forest Service, that there would be no further utilization, any land prepared for sales. Where do you get that assumption from? Is there something in this legislation that you can point to?

Obviously, there is an area that is wilderness and other areas that are indicated on the map that I have that is referenced in the legislation, 3(a) which indicates small groves that are out there, but I would say probably 80 percent of the land in that area, 85 percent would be subject to a management plan, which anticipates in the law, it says timber sales and other areas shall be allowed consistent with the purposes of this Act and other applicable Federal laws and regulations.

So how in contrast to page 7 in the clear language of the bill, which you said that some of the Members that are co-sponsors didn't read, like me—and so I would suggest to you, Mr. MacMullin, have you read this bill? Mr. Dixon, have you read this bill?

Mr. DIXON. Mr. Chairman, there is a statement in the draft environmental impact statement for the Six Rivers National Forest that says—well, I will read it. There are approximately 2,600 acres where redwood is a component of the stand. However, all groves of redwood are protected from harvest on the forest. You are proposing this to be within the boundaries.

Mr. VENTO. I am looking at page 7—I am talking about legislation, this bill. This sets up a management plan. This is law. This is the regulation. This isn't some policy statement; this is what the intention of this bill is. I am not referring to some document that was prepared independently of this for other purposes.

Mr. DIXON. I understand that this was prepared by the Department of Agriculture and the U.S. Forest Service.

Mr. VENTO. This bill was prepared by Mr. Hamburg and Mr. Stark and others who sponsored it. It may come as a novel notion to you that laws do override the actions of the Department of Agriculture and the National Forest Service.

Mr. HAMBURG. If you will yield, what Supervisor Dixon is referring to is the draft EIS for the Six Rivers National Forest which, as we know, does not currently include many of this 44,000 acres. So I think to some extent we are extrapolating based on management for 2,600 acres of existing redwood on the the current Six Rivers National Forest and saying, therefore, we can expect that on the 88 percent of this 44,000 acres, there will not be any allowed timber management.

Mr. Chairman, I certainly concur with what you are saying. It was not my intent as a drafter of this legislation, or I don't believe of any of the 89 co-sponsors, that timber harvest be precluded on the 30,000 acres which are not old growth.

Mr. VENTO. Certainly I think hearings can be useful. We are listening to what you are saying. I hope you are listening to what I am saying in terms of other ways to get around this, in terms of enhancing this.

Obviously, when you begin to talk about human impact, one of the problems we have had, Mr. Campbell, is all the information that is coming out with regard to old-growth forests in Region 6,

and to some extent in Region 5, and of course the private lands are equally affected by that.

Do you in fact bid on any type of sales on public lands right now, Mr. Campbell?

Mr. CAMPBELL. All the saw logs that we consume come off of our property or from other private lands in our area. We do not use any public timber.

Mr. VENTO. There is nothing that precludes you.

I feared we would have to leave, because I have to go to the Floor. I apologize to you for that, but we will have to submit the other questions in writing. I can't do anything about it.

Mr. VENTO. With that said, I regret that that is the case, but we must go. So the meeting will stand adjourned.

I thank you for your trip and your input into the process. Thank you.

The meeting stands adjourned.

[Whereupon, at 1:35 p.m., the subcommittee was adjourned.]

APPENDIX

OCTOBER 12, 1993

ADDITIONAL MATERIAL SUBMITTED FOR THE HEARING RECORD

DAN HAMBURG
1ST DISTRICT, CALIFORNIA

WASHINGTON OFFICE
114 CANNON BUILDING
WASHINGTON, DC 20515
(202) 225-3311

Congress of the United States
House of Representatives
Washington, DC 20515

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FISHERIES MANAGEMENT

October 25, 1993

The Honorable Bruce F. Vento
Chairman
Subcommittee on National Parks, Forests, and Public Lands
H1-812
O'Neill House Office Building

Dear Chairman Vento:

I want to thank you once again for convening and conducting the hearing on H.R. 2866, The Headwaters Forest Act. Your knowledge of the details of the proposal were critical in developing a complete record, and I can not over state my appreciation for your personal attention to this legislation.

After further reflection, I believe that clarification by the Forest Service and the Fish and Wildlife Service could contribute significantly to resolving the question of the cost of acquiring the property.

The Forest Service referred to an appraisal of 4,488 acres included in the area proposed for acquisition by H.R. 2866. The appraiser valued the property primarily based on timber volume. Although the merchantable volume was determined by subtracting volume ostensibly necessary for protection of streamside zones and wildlife protection, Forest Service representatives indicated they had not consulted with the Fish and Wildlife Service or its own murrelet biologist to determine the amount of old growth necessary for the murrelet.

I would like to ask that the Forest Service biologist and the Fish and Wildlife biologists submit for the record their best estimate of the per centage of old growth which must be retained for habitat in the area to be acquired by H.R. 2866, in light of the requirements of the Endangered Species Act.

Thank you for your continued assistance.

Best regards,


Dan Hamburg
Member of Congress

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LEWIS, CA 95482
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U.S. House of Representatives
Committee on
Natural Resources
Washington, DC 20515-6201

November 5, 1993

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The Honorable Dan Hamburg
 U.S. House of Representatives
 114 Cannon House Office Building
 Washington, DC 20515

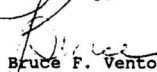
Dear Dan:

Thank you for your letter requesting my help to get the Forest Service and the U.S. Fish and Wildlife Service to submit some additional information for the hearing record on H.R. 2866, the Headwater Forest Act.

I agree with you that it would be useful to know how much old growth timber in the area needs to be retained for the marbled murrelet and to analyze how this information might affect the appraised price of the property.

I have instructed the Subcommittee staff to work with your staff to obtain this information.

Sincerely,


 Bruce F. Vento
 Chairman, Subcommittee on
 National Parks, Forests, and
 Public Lands

BFV:tm

Natural Resources Management Corporation

1434 THIRD STREET • P.O. DRAWER 1247 • EUREKA, CALIFORNIA 95501 • (707) 442-1735

August 25, 1993

Honorable James V. Hansen
Member of Congress
House of Representatives
Room 2466, Rayburn House Office Building
Washington, D.C. 20515-4401

Attn: Kurt Christensen

RE: Request for Humboldt County Timber Values

Dear Congressman Hansen:

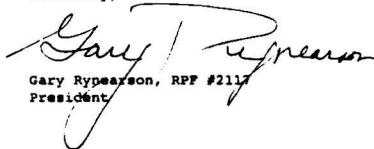
Thank you for your request regarding average values for old-growth and young-growth redwood timber types for Humboldt County, California. Our firm has extensive experience valuing timberland properties, especially those found in the redwood region of northwestern California. We are honored to provide timber value information to the House Natural Resources Committee.

In response to your request, please find attachments "A" and "B" which develop value estimates for an "average acre" respectively of old-growth and young-growth timber stands. These values represent our estimate of average timber stumpage values for the summer of 1993. Stumpage values are defined as the value of timber as it stands in the forest, considering all costs associated with planning, harvest, and administration.

The values found on attachments "A" and "B" are average values, and do not reflect timber values for any particular property. The actual timber values for a specific property may differ substantially from the attached estimates due to varying timber and site quality, location, stand age, and associated costs.

Please let me know if I can provide any additional information. Thank you for the opportunity to provide information regarding timber values for Humboldt County to the Congress of the United States.

Sincerely,



Gary Ryperson, RPF #2117
President

GR/jp
Att.

FACSIMILE • (707) 442-8823

ATTACHMENT "A"

Average Humboldt County Acre of
Old-Growth Redwood Forest Type

Assumptions:

1,000 board feet = 1 MBF

Average timber volume per acre: 200 MBF

Average growing site quality: Site Class II

Estimated conifer species mix:

Redwood	70%
Douglas-fir	25%
Other whitewoods	5%

Valuation date: Summer 1993

Estimated Average Values:

Weighted average value of timber in \$/MBF: \$947.50/MBF

Total timber value: \$947.50/MBF (200 MBF/Acre) = \$189,500/acre

Bare land value: \$600/acre

Total timber and land value per acre = \$189,500 + \$600 = \$190,100/acre

ATTACHMENT "B"

Average Humboldt County Acre of
Young-Growth Redwood Forest Type

Assumptions:

1,000 board feet = 1 MBF

Age: 70 years

Growing site quality: Site Class II

Average timber volume per acre: 75 MBF

Estimated conifer species mix:

Redwood	65%
Douglas-fir	30%
Other whitewoods	5%

Valuation date: Summer 1993

Estimated Average Values:

Weighted average timber value in \$/MBF: \$697.50/MBF

Total timber value: \$697.50/MBF (75 MBF/Acre) = \$52,312/acre

Bare land value: \$600/acre

Total timber and land value per acre = \$52,312 + \$600 = \$52,912/acre

JAMES V. HANSEN
1ST DISTRICT, UTAH

COMMITTEES
ARMED SERVICES
NATURAL RESOURCES
SELECT COMMITTEE ON
INTELLIGENCE
WASHINGTON OFFICE
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RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-4401
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Congress of the United States
House of Representatives
Washington, DC 20515-4401

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SUITE 301
ST. GEORGE, UT 84770
(801) 628-1071

August 9, 1993

Mr. Gary Ryneanson
Natural Resources Management, Inc.
Post Office Drawer 1247
Eureka, CA 95501

Dear Mr. Ryneanson:

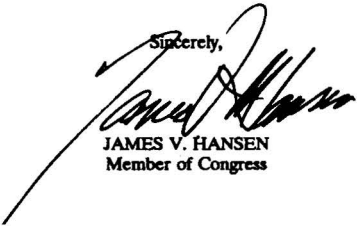
As you may know, legislation was introduced in the House (H.R. 2866) last week that would authorize federal acquisition of 44,000 acres of industrial timberlands in northern California.

I understand that your firm is familiar with the values of these lands - both the old growth and second growth stands. In fact, I am told that appraisals done by your firm were reviewed by the courts during the legislative takings associated with the Redwood National Park bills in 1968 and 1978.

The Subcommittee on National Parks, Forests and Public Lands, where I am the Ranking Republican Member, will likely have a hearing on H.R. 2866 this fall. As a result, I would like to determine, without reference to any particular property, approximate values for the types of old growth and second growth stands found in Humboldt County. I would appreciate any assistance you could provide regarding these details.

Thank you for your assistance on this matter. If you have any questions, please Kurt Christensen of the Committee Staff at (202) 226-2311. I look forward to hearing from you.

Sincerely,


JAMES V. HANSEN
Member of Congress

National Audubon Society



666 Pennsylvania Avenue, SE
Washington, DC 20003
(202) 547-9009
(202) 547-9022 fax

October 12, 1993

Dear Representatives Stark and Hamburg:

The National Audubon Society enthusiastically supports the passage of H.R. 2866, the "Headwaters Forest Act," as proposed by Congressmen Dan Hamburg and Pete Stark. This legislation will authorize the acquisition of our nation's largest privately owned stand of centuries-old redwoods and will prevent the harvest of one of the most significant fragments of our remaining ancient forests.

The ancient forests of the Pacific northwest and Northern California have been logged to the point of near ecological collapse. The 44,000 acre Headwaters forest is unique in its ecological value as a home to the threatened Northern Spotted Owl, marbled murrelet and other ancient forest dependent species. Harvesting this ecological treasure would hasten the unraveling of the northwest's ancient forest ecosystem and eliminate economic gains provided by recreational use and commercial and sport fishing.

On behalf of the National Audubon Society's 550,000 members, we commend Congressmen Hamburg and Stark for their efforts to protect our country's threatened redwood forests and pledge our unequivocal support for the Headwaters Forest Act.

Sincerely,

Brock Evans
Vice President for
National Issues



Working for the Nature of Tomorrow.

NATIONAL WILDLIFE FEDERATION, 1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266 (202) 797-6800

Office of the President

October 12, 1993

The Honorable Dan Hamburg
United States House of Representatives
114 Cannon House Office Building
Washington, D.C. 20515

Dear Representative Hamburg:

I would like to take this opportunity to communicate the National Wildlife Federation's support for your bill, H.R. 2866, the Headwaters Forest Wilderness Act.

As you know, NWF has made protection of the ancient forests of California and the Pacific Northwest one of our top public land priorities. The old growth and other redwood forests which will be protected by this bill are a priceless part of our Nation's natural heritage; indeed, they are unique in all the world. Yet these magnificent and once expansive forests have been devastated by excessive and shortsighted logging.

The Headwaters richly deserves the protection which your bill affords. We thank you for your efforts on behalf of this forest and its fish and wildlife resources.

Sincerely,

JAY D. HAIR

JDH:fah

AMERICAN FISHING TACKLE MANUFACTURERS ASSOCIATION
SPORT FISHING INSTITUTE
TROUT UNLIMITED

October 26, 1993

The Honorable Dan Hamburg
U.S. House of Representatives
114 Cannon Building
Washington, DC 20515

Re: Support for H.R. 2866, The Headwaters Forest Act of 1993

Dear Representative Hamburg:

On behalf of the sport fishing industry and thousands of trout and salmon anglers, we are writing to support the bill you recently introduced, H.R. 2866, The Headwaters Forest Act of 1993. The bill would authorize the Forest Service to acquire and conserve 44,000 acres of prime headwater forest habitat in northern California, and to study an additional 13,620 acres for possible future acquisition and management. We commend you for your leadership in developing and introducing this legislation.

Our organizations are committed to protecting and restoring west coast Pacific salmon resources. These runs were once the finest salmon resources in the world. Now, according to the Clinton Administration's Forest Ecosystem Management Assessment Team (FEMAT) Report, over 100 stocks have been extirpated and 314 are at risk of extinction. Despite dramatic declines in Pacific salmon stocks, these fish still support a one billion dollar annual sport and commercial fishing industry. These valuable industries are threatened directly by continuing loss of salmon habitat. Conversely, if the region takes strong actions now, the entire nation stands to gain tremendous new ecological and economic benefits from restored salmon runs.


In that light, your bill is an important element in the foundation of Pacific salmon recovery. If enacted and implemented, it will protect some of the best remaining salmon habitat in California, and in the case of coho salmon, some of the most critical habitat on the entire west coast. Dr. Peter Moyle, renowned salmon scientist from University of California at Davis, has testified before two House Committees that H.R. 2866 would protect 5 to 10% of the remaining coho spawning habitat in California. Such a management action is essential in view of the 97% decline in wild coho in California.

Again, we commend you for your work on this bill, and we look forward to its early enactment.

Sincerely,


Steve Moyer
Director
Government Affairs
Trout Unlimited


Norville Prosser
Vice President
Sport Fishing Institute


Michael Nussman
Vice President for
Government Affairs
American Fishing Tackle
Manufacturers Association

October 20, 1993

The Honorable Bruce Vento, Chairman
Subcommittee on National Parks,
Forests and Public Lands
U.S House of Representatives
Washington, D.C. 20515

Dear Chairman Vento,

The Western Ancient Forest Campaign would like to submit the enclosed testimony for the record in support of the Headwaters Forest Act H.R. 2866 sponsored by Rep. Dan Hamburg. WAFC presented this statement before the Subcommittee on Forests, Family Farms and Energy on September 10th last year in favor of the National Forest Redwoods Act. The testimony has been updated to reflect the changed bill number, sponsor and minor differences between the two bills.

We appreciate your committee's effort to resolve the ancient forest issue and look forward to working with you to protect the Headwaters forest.

Sincerely,



Jim Owens
Executive Director



**WESTERN
Ancient Forest
CAMPAIGN**

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Jim Owens,
Executive Director
Hon. Jim Jontz,
Senior Advisor
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Tim McKay
Arcata, California
Bonnie Phillips-Howard
Stanwood, Washington

STATEMENT OF JIM OWENS
CAMPAIGN DIRECTOR, WESTERN ANCIENT FOREST CAMPAIGN
ON H.R. 2866, THE HEADWATERS FOREST ACT
SUBCOMMITTEE ON FORESTS, FAMILY FARMS, AND ENERGY
COMMITTEE ON AGRICULTURE
UNITED STATES HOUSE OF REPRESENTATIVES

SEPTEMBER 10, 1992

Chairman Volkmer and Members of the Committee:

My name is Jim Owens, I am the Campaign Director for the Western Ancient Forest Campaign, a grassroots organization representing thousands of forest activists in the states of Washington, Oregon and California.

I recently moved to Washington, D.C., from northern California, where I was actively involved as a volunteer in forest management reform for most of the past decade. Two years ago, as the Conservation Coordinator for the Smith River Alliance, I assisted Congressman Doug Bosco in his successful legislative effort to create the Smith River National Recreation Area in northern California. Mr. Bosco's Smith River National Recreation Area Act both protected several thousand acres of redwoods in Del Norte county, and created a series of zones in the National Recreation Area in which forest management is based upon the highest use of the zone, such as fisheries protection, recreation or timber production.

As a resident of Arcata, California, I participated as a volunteer in many attempts during the past four years to protect the Headwaters



**WESTERN
Ancient Forest
CAMPAIGN**

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Arcata, California
Bonnie Phillips-Howard
Stanwood, Washington

Statement of Jim Owens
Forests, Family Farms, and Energy Subcommittee
September 10, 1992
Page 2

Forest in Humboldt County. I've had the opportunity to work with Congressman Bosco, Congressman Frank Riggs, Congressman Pete Stark and a number of local and state legislators and officials towards a resolution of the conflict surrounding the Headwaters Forest.

Mr. Chairman, this is an issue which must be resolved soon as I have testified in the past. In Humboldt County, the tensions within the small communities which have developed in the region during the past hundred-plus years have never been more divisive than they are today. Neighbors are pitted against neighbors, brothers argue with sisters, and school children draw lines in the sand over timber issues. As an environmental leader in Humboldt County I was constantly threatened by timber workers, and other environmental activists suffered serious injuries in an as yet unsolved car-bombing during a tense summer when timber issues were being hotly debated on California's northcoast.

During the past several years this Committee has been at the forefront in Congressional efforts to understand and resolve the ancient forest crisis. I have been a frequent spectator while all of you have posed serious questions to land managers, scientists and representatives of interest-groups, and I've been impressed with the

Statement of Jim Owens
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sense of responsibility and resolve with which you have pursued this issue.

Your efforts to develop a scientifically based legislative approach to the ancient forest issue resulted in the recommendations by the Scientific Panel on Late-Successional Forest Ecosystems, a landmark study which has completely altered the course of the ancient forest debate, and which will ultimately be the basis for any legislation dealing with the ancient forest issue. Many people recognize the significance of the study, and of your efforts to go beyond the usual political approach to public land management problems.

The Headwaters Forest issue requires a similar effort by this Committee to deal with the merits of the issue, rather than the politics of the moment. Once again you are being asked to don Solomon's robes; I have no doubt you will answer this challenge with vigor and resolve. And I know that you will treat the parties in this case with fairness and respect.

Let me move to the facts of this matter. The Headwaters Forest is the largest unprotected block of virgin redwoods in the northern hemisphere. This forest, and the connected tracts of virgin and second growth redwoods comprising the core of the area recommended in

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H.R. 2866 for acquisition by the Six Rivers National Forest, are found in what scientists call the Klamath Province, a distinct bioregion which encompasses northwestern California and southwestern Oregon.

The forests of the Klamath Province are ecologically diverse and unique and contain more than 20 species of conifers, including coast redwoods. Scientists believe that these forests were central to the evolution of forests in the Western United States following the last ice age, when the region was a refugia for many of the tree species eliminated by ice sheets elsewhere.

In addition to the northern spotted owl and the marbled murrelet, these coniferous forests comprise critical habitat for hundreds of vertebrate species, rare plants and thousands of little-studied invertebrates. The ancient forests of this region contain more biomass than any other on Earth and as such store more carbon than any other terrestrial ecosystem.

A primary attribute of these forests is high quality water. Undisturbed forests of this type function like a sponge, intercepting precipitation, absorbing it and regulating its release while preventing the overland flow of water and erosion. The waters of this region's ancient forests historically supported abundant runs of anadromous

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fish, such as salmon and steelhead. After a century of intensive logging, all of these unique forest attributes are in jeopardy.

The area known as the Headwaters Forest, named for its location at the highest reaches of two tributaries to Humboldt Bay, covers approximately 44,000 acres of land, providing vital plant and wildlife habitat as well as virtually the only unpolluted fresh water to Humboldt Bay. The stand contains approximately 70 percent Coast Redwood (*Sequoia sempervirens*), 20 percent Douglas fir, grand fir and other softwoods, and 10 percent hardwoods. The watersheds affected by this bill rise from sea level to almost 3500 feet, and cover 112 square miles.

This is a region in which logging has ruled the landscape for over 130 years. These forests were first cut for fuel and to supply building materials for early mining ventures in northern California before statehood was enacted, and later helped rebuild San Francisco after the 1906 Earthquake.

This continuous harvest, greatly accelerated in the past few decades, has not been without cost to the landscape. Humboldt Bay, which once covered over 27,000 acres, has lost 10,000 acres to sedimentation caused by logging, roadbuilding and to reclamation for

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ranch land since the turn of the century. The sediment from upstream logging and roadbuilding which has filled in the Bay has eliminated salmon and steelhead runs in many of the creeks emptying into the estuary. Indeed, the world-famous anadromous fisheries which once were taken for granted in northern California are almost extinct, as is the fishing industry which until the last decade thrived in this area.

Salmon Creek and Little South Fork Elk River, whose waters originate in the Headwaters Forest, have not been untouched by the destructive effects of logging and roadbuilding. Both of these creeks have suffered considerable sedimentation from logging operations; the main channel of Little South Fork Elk River was clogged with over 30 cm. of silt following the completion by Pacific Lumber in 1989 of a 1.5 mile road cutting into the eastern bank of the Little South Fork. Subsequent logging operations by the Company removed nearly every large tree 100 feet above and below the road bed, some of which were taken from the streambed itself.

Trees in the Headwaters Forest are often over 300 feet tall, though 250 feet is a more average height. The largest tree found thus far in Headwaters Forest is over 2,000 years old and measures 18 feet in diameter, while trees 10 feet in diameter are not uncommon along

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the streams which sometimes run as far as 15 feet below the forest floor, covered and hidden by giant redwoods which have fallen during the past several hundred years.

The virgin redwood forests which H.R. 2866 would protect are separated from other ancient forest groves by over 25 miles in any direction. These forests and their riparian zones offer critical habitat and biological corridors for the rich and abundant wildlife and plantlife which thrives in these remaining core areas. They also offer the anchor for a unique watershed which stretches from the crest of the lower ridges of the Coast Range to the mouth of Salmon Creek, which is protected in its lower reaches by the Humboldt Bay National Wildlife Refuge.

Others today will tell you about the history of the redwood forests which were once owned by Pacific Lumber Company, and which were bought by the Maxxam Corporation. You will hear of junk-bonds, leveraged buyouts, doubled and tripled logging rates, sacrificed pensions, and communities whose economies and futures have been placed at risk by a company which has brought more strife than peace to a region where the timber-wars are a daily reality.

I'd like to quickly address the redwood resource which once

Statement of Jim Owens
Forests, Family Farms, and Energy Subcommittee
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Page 8

covered over two million acres of the coastal landscapes between Southern Oregon and San Francisco Bay. These forests have been cut-over since white settlers first set foot in northern California. Of the original two million acres, less than five percent, or approximately 95,000 acres, remain uncut and unentered.

Redwood National Park and California State Parks contain approximately 76,000 acres of oldgrowth redwood forests, and the U.S. Forest Service controls approximately 6,000 acres of oldgrowth redwoods. Thus, 82,000 acres of ancient redwoods remain protected in public lands, a scant four percent of the original forest cover of this region.

I've had the privilege of frequently flying over northern California's forests, particularly over the redwood forests of the Northcoast. From 5,000 feet above the breakers of the Pacific Ocean, one can look into California's interior and see the region's heritage of logging - vast vistas of logged slopes, with a thin band of protected redwoods hugging the Coastal Highway between the Oregon Border and the Eel River. Little else remains of the vast virgin forests which once defined this region.

The Headwaters Forest, over which I have also flown, is one of

Statement of Jim Owens
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the sole remaining viable ancient forest elements in the redwood belt which is both unentered, and unprotected. A timber cruise conducted by a registered professional forester and Humboldt State University students determined in 1990 that the monetary value of Headwaters Forest was under \$200 million. Biologists claim that as a watershed and habitat corridor, it is priceless.

The Headwaters Forest is the among California's four remaining habitats for the marbled murrelet, a rare sea bird which nests only in oldgrowth trees, and which has been proposed by the U.S. Fish and Wildlife Service for listing as a threatened species. The murrelet requires large, undisturbed coastal watersheds to evade predators, as well as dense canopied forests for nesting. Murrelets in the Headwaters Forest depend upon Humboldt Bay and the adjacent ocean coast for food, and are frequently found just offshore in large colonies.

According to U.S. Forest Service biologist C.J. Ralph, up to half of California's murrelet population might perish if Headwaters Forest is logged. Repeatedly the California State Board of Forestry has cited the need to retain murrelet habitat as its principal reason for denying Pacific Lumber timber harvest plans which proposed logging in the Headwaters Forest.

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Page 10

I endorse Rep. Dan Hamburg's bill, and commend it to this Committee for favorable consideration. As it stands before this Committee, the bill would add all of Pacific Lumber Company's holdings to the nearby Six Rivers National Forest. Logging would continue on most of these lands, but would be controlled by a public agency governed by national environmental laws which do not affect private timber operators.

I am aware that the costs of acquiring Pacific Lumber's holdings are excessive in the present national economy, and have reviewed the compromise Headwaters legislation recently developed by Rep. Hamburg. The revised proposal, which sharply curtails the original legislation to a 44,000 acre ancient redwood ecological reserve along watershed boundaries, has value as a compromise, but needs further refinement in order to pass the high standards of biological credibility which this Committee has set for itself, and for Congress.

If this bill is to adequately take an ecosystem approach to forest management, this Committee would be wise to consider an extension of the Headwaters Forest downstream along Salmon Creek to the Humboldt Bay National Wildlife Refuge. This addition of 11,260 acres, currently held by four major landowners, would create a biological

Statement of Jim Owens
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corridor running from the mountains to the sea. It would provide habitat for Roosevelt elk, black brant, replacement habitat for the marbled murrelet, and the opportunity to develop a wild salmon reserve.

Restoration activities in the Salmon Creek watershed would provide job opportunities for the hard-working communities adjacent to Humboldt Bay, and a renewed fishery in lower Humboldt Bay could bolster a fishing fleet and recreational fishery which is now scattered north and south, since commercial salmon fishing is banned along the Northcoast due to the scarcity of this once abundant resource.

Logging in the proposed Headwaters Forest will not stop with this bill. In fact, the people of Humboldt Bay will be well served by timber-managers who do not ship over 10 percent of their logs overseas, exporting jobs and livelihoods along with the raw materials of the region. Local communities will benefit from the receipts sent to the U.S. Treasury, and returned to the communities in payments for schools and county roads.

Finally, this is an opportunity for Congress to enact legislation which provides a win-win situation for the forests, and for the people living with the forests. Protecting these last few groves of privately

Statement of Jim Owens
Forests, Family Farms, and Energy Subcommittee
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Page 12

held redwood forests has been a goal of the State of California and of local legislators since 1990. Governor Pete Wilson has repeatedly acknowledged the need to purchase these groves, and Senator Barry Keene and Assemblyman Dan Hauser have worked assiduously to develop a workable plan to pay market price for these lands before Maxxam destroys them for the corporation's next interest payment.

There are problems to overcome before this legislation is perfected, and prime among those problems is the compensation of the landowners, and the recognition of inholder rights. I have worked with the Six Rivers National Forest before, on many of these same issues, and know that this is an issue which Congress, and the agencies, will address before this bill is considered by the full House.



THE WILDERNESS SOCIETY

CALIFORNIA/NEVADA REGIONAL OFFICE

**STATEMENT OF LOUIS BLUMBERG, ASSISTANT REGIONAL DIRECTOR,
CALIFORNIA/NEVADA OFFICE, THE WILDERNESS SOCIETY, ON HR 2866, THE
HEADWATERS FOREST ACT SUBMITTED TO THE SUBCOMMITTEE ON
NATIONAL PARKS, FORESTS AND PUBLIC LANDS OF THE U.S. HOUSE OF
REPRESENTATIVES COMMITTEE ON NATURAL RESOURCES**

OCTOBER 22, 1993

Mr. Chairman and members of the Committee, The Wilderness Society (TWS) submits these comments for inclusion in the record of your hearing of October 12, 1993 on HR 2866, the Headwaters Forest Act. The Wilderness Society supports HR 2866, the Headwaters Forest Act. As this Committee is well aware, The Wilderness Society has a long-standing interest in our nation's forests and supported similar legislation in the last Congress. Passage of HR 2866 is important for the protection and persistence of the redwood forest ecosystem in northwestern California. Enactment of HR 2866 will authorize Federal acquisition of important redwood forest lands and create the Headwaters Forest Wilderness. Public ownership and federal management of the proposed 44,000 acres acquisition is in the best, long term interests of the American public.

HR 2866 would add The Headwaters Forest and other redwood forest to the Six Rivers National Forest. The bill would also create a 44,000 acre ancient redwood ecological reserve along watershed boundaries that will help preserve this unique ecosystem for future generations.

These redwood forests have unmatched ecological, aesthetic, and recreational values, and are a unique part of our national heritage. Federal acquisition of these lands will insure that this important biological legacy will be passed on, in tact, to future generations of Americans.

The Headwaters Forest is 4,000 to 5,000 acres of virgin, redwood (*Sequoia sempervirens*) forest and is the largest, unprotected, block of virgin redwoods in the northern hemisphere. This is truly a pristine, unique, forest ecosystem worthy of protection as part of the National Wilderness Preservation System.

116 NEW MONTGOMERY, SUITE 526, SAN FRANCISCO, CA 94105

(415) 541-9144

The Headwaters Forest and the other connected tracts of virgin and second growth redwoods comprising approximately 44,000 acres are proposed for addition to the Six Rivers National forest. These lands are a critical reservoir of genetic material for a rapidly diminishing redwood forest ecosystem. The Wilderness Society urges that all ecologically significant virgin redwood groves be preserved in perpetuity to insure the existence of this unique ecosystem. In particular, the entire headwaters of Salmon Creek should be included in the Headwaters Forest Wilderness.

The lands proposed for acquisition in HR 2866 are found in what scientists call the Klamath Province, a distinct bioregion which encompasses northwestern California and southwestern Oregon. They include pristine, ancient redwood forest and provide important habitat for a myriad of wildlife species including the northern spotted owl and the marbled murrelet. Last year, the U.S. Fish and Wildlife Service listed the marble murrelet as a threatened species under the Endangered Species Act. Passage of HR 2866 will help protect not only these two species, but many others who also depend on ancient forest for their habitat.

The Klamath Province is recognized by scientists and others to possess unparalleled biological diversity. The region has been described as a "floristic and vegetational 'center' for the forests of the United States" (Whitaker 1961). It is "... a center of biodiversity worldwide. Such a place deserves special care" (Noss 1989). HR 2866 offers an opportunity to provide such care.

Today, many conservation biologists agree that society should protect large, intact, natural ecosystems wherever possible to provides sites for evolutionary processes to unfold, unaffected by humans, as the temperature of the planet rises due to global warming. Passage of this legislation will provide such a site.

Mr. Chairman, many efforts are currently underway in California to create an integrated, scientific based, land management scheme for the Klamath Province. One interagency effort under the auspices of the Executive Council on Biological Diversity involves representatives from federal, state and local agencies as well as public representatives, including the U.S. Forests Service, the U.S. Fish and Wildlife Service, the National Park Service, the Bureau of Land Management, the California Resources Agency, the California Department of Forestry, and the California Department of Fish and Game. The goal of this undertaking is to insure that all land use decisions in the region promote the maintenance of the biological diversity of the Klamath province. Federal acquisition of the Headwaters Forest and the other lands in HR 2866 is critical if this effort is to succeed.

Acreage added to the Six Rivers National Forest will provide opportunities for the American public to participate in decisions affecting the management of these lands. Today, the Six Rivers National Forest is in the process of receiving comment on its much

belated, draft land and resource management plan. Speedy passage of HR 2866 will mean that the newly acquired lands will benefit from the resource inventories and management decisions that are part of the forest planning process. This process will identify important, new multiple use opportunities.

One particular value of the acquisition will be the new opportunities for public access to these lands. New recreational opportunities stimulate tourism and can contribute significantly to local economies. In addition to unequaled primitive recreational opportunities in the Headwaters Wilderness, passage of this legislation and subsequent funding could provide access for new fishing, white water rafting, mountain biking sites, and other activities. Because public access is so important, we recommend that the legislation be amended to require the land owner to provide appropriate easements and rights-of-way.

The population of California is expected to increase by 21 per cent over the next decade to exceed 30 million people. The demand for wilderness recreation will only increase as our population grows and our urban areas expand. Federal ownership will help meet this growing demand.

The Wilderness Society is concerned that the appraisal by the Forest Service overestimates the cost of acquisition of the Headwaters Forest. Apparently, the Forest Service assumed that all of the parcel could be logged. Given that the Headwaters forest and much of the other land provides critical habitat for the northern spotted owl and marbled murrelet, both listed under the Endangered Species Act, this assumption is unfounded. Current logging plans approved by the California Department of Forestry are held up in species-related court challenge. Chances are good that much of this land would not be logged. Thus, the Forest Service cost estimate is unrealistically high.

Much of these lands possess mature second growth forest that would be subject to the forest planning process. After acquisition of the entire 44,000 acre parcel and completion of the planning process, these second growth forest lands might be added to the suitable timber base of the Six Rivers National Forest, providing a sustainable supply of timber to local communities and dollars to the U.S. Treasury.

If managed at a sustainable level, the second growth forest on these lands could potentially produce up to 50 million board feet of timber annually. (In fact, the previous owner of the land logged 200 million board feet annually.) Should the federal government acquire all 44,000 acres, this addition to the Six Rivers National Forest could generate about 10 to \$15,000,000 annually. The legislation could specifically earmark this revenue to pay for the acquisition. At this rate, the entire parcel could be paid for in twenty to thirty years while simultaneously generating funds for local counties through the Forest Service Revenue Sharing program.

Mr. Chairman, the Clinton Administration and California Governor Pete Wilson have both publicly expressed their support for the acquisition of Headwaters Forest. In 1991, the Governor proposed a \$300 million bond act to acquire these important forest lands. In addition, in a recent letter to the House Agriculture Committee, Jim Lyons, the Assistant Secretary of Agriculture for Natural Resources and the Environment expressed the Administration's "strong support for the ... legislation."

Mr. Chairman, members of the Committee, on behalf of our 300,000 members, 50,000 of whom reside in California, The Wilderness Society urges you to act quickly and report HR 2866 out of your committee. Future generations of Americans will applaud your farsighted action.

HR2866.wr/fth-21

**SIERRA
CLUB**



730 Polk Street San Francisco, CA 94109 415-776-2211 Fax: 415-776-0350

Carl Pope
Executive Director

June 25, 1993

The Honorable Dan Hamburg
United States House of Representatives
Washington, DC 20515

Dear Congressman Hamburg:

Sierra Club is pleased to support passage of the Headwaters
Redwood Forest Act.

The redwood forest is one of the defining natural wonders of California and the United States both for our own citizens and for people around the world. This legislation's protection for these remaining pristine groves and the provision for restoring the connection between them is the only way to ensure that this heritage forest will continue to exist as a living environment in perpetuity.

On behalf of 175,000 members in California and the 377,600 additional members nationwide Sierra Club congratulates and applauds Congressman Dan Hamburg and Congressman Fourtney "Pete" Stark for sponsoring the Headwaters Redwood Forest Act. We look forward to working for its passage.

Sincerely,

A handwritten signature in dark ink, appearing to read "Carl Pope".

Carl Pope
Executive Director

CP:dpn


B.A.S.S. Inc.
Serving Anglers — Advancing Environmental Awareness

October 14, 1993

AL MILLS
 ENVIRONMENTAL DIRECTOR

 The Honorable Dan Hamburg
 House of Representatives
 114 Cannon Building
 Washington, DC 20515

6661 61 130

Dear Representative Hamburg,

The Bass Anglers Sportsman Society (B.A.S.S., Inc.) and its membership approaching 600,000 is fully supportive of H.R. 2866, the "Headwaters Forest Act," sponsored by Representative Hamburg et al. Although B.A.S.S. members are primarily interested in angling for and supporting the future well being of black bass, we all have an understanding and respect for healthy watersheds and the role they play in the future of our fisheries resources. Healthy streams and watersheds are particularly important where migratory (anadromous) species like coho salmon are involved.

We have a powerful testimony for the economics involved and the importance of protecting habitat for the future of our fisheries resources. Gamefish species like salmon and black bass are particularly sensitive. The public readily identifies with them and their "indicator role" in alerting us to the health of our watersheds and public waters. The fact that increasing numbers of species are threatened with extinction, or are often so contaminated with chemicals they can not be safely consumed by the public, is a national embarrassment.

We are only beginning to comprehend the long term costs the public will bear when species appear on endangered and threatened lists in the numbers we are beginning to see. H.R. 2866 provides an unusual opportunity to begin reversing the trend of mortgaging our future for the extremely short sighted motives so evident in timber and fisheries resource decisions we have witnessed over the past century.

Best wishes,

 Alvin D. Mills
 Environmental Director

AM/mc

 cc: Paul Brouha
 Stan Moberly



October 25, 1993

The Honorable Dan Hamburg
U.S. House of Representatives
Washington, DC 20515

Dear Mr. Hamburg:

On behalf of World Wildlife Fund (WWF) and our 1.25 million members nationwide, I am writing in support of H.R. 2866, the Headwaters Forest Act.

During the past decade, WWF has invested a great deal of effort protecting forest ecosystems throughout the world. Here in the United States, our old-growth redwood forest ecosystems have been reduced to five percent of their original acreage, and we strongly advocate protection of the remaining fractions of these truly unique forests. We support the provisions of H.R. 2866 which designate 44,000 acres as an addition to the Six Rivers National Forest. This acreage is vital to the maintenance of intact watersheds in the Humboldt region. Given that most redwood forests have been substantially fragmented, maintaining the integrity of the remaining intact redwood ecosystems needs to become a priority for U.S. forest policy.

The proposed addition of redwood forest to the Six Rivers National forest contains critical intact watersheds for threatened salmonids, the marbled murrelet, and the northern spotted owl. The dire status of these species is a reflection of the health of many of our northern temperate forests, which we need to take strong steps to improve. Old-growth redwood forests also generate millions of dollars for local tourism industries yearly in California; hence these systems are vital to the economic health of the state.

It is clear that the long-term costs outweigh the short-term profits generated by current timber practices in the United States. H.R. 2866 will protect vital redwood forest habitat which we can no longer afford to degrade and dissipate. I congratulate you on this important piece of legislation and look forward to working with you in the future.

Sincerely,

Michael Sutton
Acting Vice President
U.S. Land and Wildlife Program

World Wildlife Fund
1250 Twenty-Fourth St., NW Washington, DC 20037-1175 USA
Tel: (202) 293-4800 Telex: 64505 PANDA FAX: (202) 293-9211
Incorporating The Conservation Foundation. Affiliated with World Wide Fund for Nature.





THE PACIFIC RIVERS COUNCIL

formerly THE OREGON RIVERS COUNCIL

605 Prince • Alexandria, Virginia 22314
(703) 836-3420 • Fax (703) 739-9481

October 20, 1993

The Honorable Dan Hamburg
114 Cannon House Office Building
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Hamburg:

The Pacific Rivers Council would like to offer our support for the protection of the Headwaters Forest in Northern California. This magnificent stand of ancient redwood forest is a vital, functioning old growth ecosystem, offering habitat and sustenance for a number of increasingly rare and endangered species. The streams of the Headwaters forest still has some of the only remaining high quality spawning and rearing habitat for coho salmon in California, a species which is at risk throughout its range.

The importance of the Headwaters forest will become increasingly apparent in the next year as data is gathered in response to Pacific Rivers Council's action today. Today we have filed a petition to list the coho as an endangered species throughout its range under the authority of the Endangered Species Act.

The market value of this privately held forest is quite high, placing this fragile ecosystem in grave jeopardy from the very real potential of harvest. We cannot stand by and let the trees fall. The Pacific Rivers Council supports your effort to raise the protection of the Headwaters forest in Congress. As with others, we also have reservations about the anticipated cost of outright purchase of the land. For the same amount of money we could secure and restore every key watershed harboring the best remaining salmon spawning and rearing habitat that is left on federal lands. But, we understand your commitment to work with the agencies, the owners of the land, and others to seek innovative methods, through donation or trade, to acquire the Headwaters forest. We think this approach is fair and appropriate and fully support you in that effort.

We wish you well in your endeavor to save the Headwaters forest for the fish and for future generations of Americans. Please feel free to enter this statement in the hearing records for those hearings held recently on this issue.

Sincerely,

Bob Doppelt
Executive Director

New Visions to Restore America's Rivers and Watersheds

October 19 1993

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL MARINE FISHERIES SERVICE

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PETITION TO THE NATIONAL MARINE FISHERIES SERVICE
FOR A RULE TO LIST, FOR DESIGNATION OF CRITICAL HABITAT, AND FOR A STATUS
REVIEW OF COHO SALMON (*Oncorhynchus kisutch*) THROUGHOUT ITS RANGE IN
WASHINGTON, OREGON, IDAHO, AND CALIFORNIA UNDER THE ENDANGERED SPECIES
ACT

Pacific Rivers Council, Inc.)	PETITION FOR A RULE TO LIST,
Western Division, American Fisheries Society (AFS))	FOR DESIGNATION OF CRITICAL
The Wilderness Society)	HABITAT, AND FOR A STATUS
Sierra Club)	REVIEW OF COHO SALMON
National Audubon Society)	THROUGHOUT ITS RANGE UNDER
Leo Cronin, The California Council)	THE ENDANGERED SPECIES ACT
for Trout Unlimited)	
National Wildlife Federation)	
Siskiyou Regional Education Project)	
Tennile Creek Association)	
Oregon Natural Resources Council)	
Western Ancient Forest Campaign)	
Northcoast Environmental Center)	
Coast Range Association)	
Siskiyou Audubon Society)	
Pilchuck Audubon Society)	
Mt. Shasta Area Audubon Society)	
Friends of the River)	
Coast Action Group)	
Marble Mountain Audubon)	
Klamath Forest Alliance)	
Friends of the Garcia River)	
Mendocino Environmental Center)	
Friends of the Navarro Watershed)	

The Pacific Rivers Council, Inc., Western Division of the American Fisheries Society (AFS), The Wilderness Society, Sierra Club, National Audubon Society, Leo Cronin of The California Council for Trout Unlimited, National Wildlife Federation, Siskiyou Regional Education Project, Tennile Creek Association, Oregon Natural Resources Council, Western Ancient Forest Campaign, Northcoast Environmental Center, Coast Range Association, Siskiyou Audubon Society, Pilchuck Audubon Society, Mt. Shasta Area Audubon Society, Friends of the River, Coast Action Group, Marble Mountain Audubon, Klamath Forest Alliance, Friends of the Garcia River, Mendocino Environmental Center, and Friends of the Navarro Watershed hereby petition for listing as threatened or endangered, for designation of critical habitat, and for a status review of coho salmon throughout its range under

**SUMMARY AND HIGHLIGHTS: ENDANGERED SPECIES PETITION FOR COHO SALMON
PACIFIC RIVERS COUNCIL**

SUMMARY: A number of factors, most notably the destruction of habitat and mismanagement of fisheries, has put the coho (silver) salmon at risk of extinction throughout its range in the lower 48 states. This is not just an ecological tragedy -- in addition it represents billions of dollars of lost revenue to the people of the Pacific Northwest, and creates significant social and cultural losses. As such, the steps required for the recovery of the region's once abundant and famous coho salmon runs do not involve issues of "jobs vs. the environment," but rather some short-term sacrifices for long-term economic gain. Some localized economic impacts may occur in order to recover the coho, but much more has already been lost economically and much more is at stake unless recovery actions are rapidly put into place. Since past efforts to protect or recover coho have failed, and since current regulation and conservation efforts remain inadequate, the last viable option to stop the hemorrhaging, so that a process to recover the coho salmon and their ecosystems can begin, is to secure protection under the Endangered Species Act.

Nehlsen et al., in the seminal article entitled Pacific Salmon at the Crossroads (1991), identified 35 stocks of coho salmon at risk of near-term extinction in Washington, Oregon, and California. The authors identified habitat loss and adverse interactions with hatchery production as important contributors to these declines. An additional 15 stocks of coho from California, southern Oregon, and the Columbia Basin were documented to be already extinct. Frisell (1993) mapped coho salmon and estimated that the species is extinct in the eastern half of its range, and imperiled throughout the southern two-thirds of its range in the lower 48 states. By other similar estimates coho salmon populations are extinct in about 55.5% of their historic range in the lower 48 states, endangered in about 13% of their range, threatened in about 20%, and of special concern in 5% of their historic range. Coho populations not known to be extinct, declining, depressed, or facing imminent threat comprise just 6.5% of this historic range, all located in northwest Washington.

As recently as the 1970s, coho salmon supported a direct income stream to commercial fishermen of \$60 to \$70 million dollars a year. This is the direct value, with no multipliers, indirect or induced effects. The indirect economic importance of the coho salmon commercial fishery on the coastal economy was even larger, in all the gear, boats, supplies, fuel, housing, and all the other infrastructure required in the salmon fishery. As with other salmon species, the value in the recreational fishery adds a significantly larger amount. The recreational angler is willing to spend a great deal more per fish than the commercial angler, and in that sense, each coho salmon caught recreationally contributes more to the regional economy than the commercial fish. The recreational fishery and associated tourism industry is highly significant.

It is only reasonable to conclude -- very conservatively -- that efforts to return the coho fishery to even 1970 levels in Northern California, Oregon and Washington would produce a direct income stream to the region averaging well in excess of \$100 million a year.

The economic loss to many parts of the coast has been substantial. In poor years the income stream to the troll fishery has been reduced to less than \$200,000 for California or Oregon, and, under current conditions, the commercial catch over wide reaches is zero. The net economic impact of the demise of coho salmon has been substantial and persistent -- roughly \$1 billion a decade. As the loss of the coho is primarily attributed to habitat destruction, the region has essentially been favoring one kind of economic activity -- extractive industries -- over another involving the fishery. As such, the issue is not "jobs vs. the environment," but jobs vs. jobs, or, said

differently, short-term profits versus the long-term sustainable economic benefits that the coho fishery could provide.

LOSS OF HABITAT

The long-term decline of coho salmon populations is highly correlated with deterioration of freshwater habitat caused by human disturbances. Coho are especially vulnerable to loss or degradation of spawning, summer rearing, and winter rearing habitats. Loss of woody debris and habitat complexity in estuaries may reduce survival of outmigrating smolts and winter migrants. Coho habitat is lost when large woody debris and the stable, complex channels and wetlands associated with floodplain forests are damaged or destroyed by logging, grazing, channelization, cropland agriculture, or urbanization. Flow diversion for irrigation and hydropower generation pose serious problems for coho salmon in many areas. Sedimentation, debris flows, and increases in stream temperature often result from disturbance of headwater areas by logging roads and timber harvest, and these impacts alone may be sufficient to damage or destroy coho populations even where riparian buffer zones are left along fish-bearing streams. Habitat loss and the simplification of river ecosystems appears to be the most fundamental and universal factor underlying coho depletions regionwide.

HATCHERIES

In general, there are very few (if any) examples of hatchery programs that led to successful re-building of wild populations of Pacific salmon within their native range. When successful in terms of producing hatchery fish, hatchery breeding tends to reduce, rather than increase, diversity of wild populations. The capture of fish for breeding purposes can be destructive of small or declining wild populations. Due to small broodstock populations, pre-spawning mortality during capture or transport, unnatural mating combinations, disease, or artificial selection, wild brood stock typically contribute little genetic diversity to subsequent generations of hatchery fish. The taking of larger numbers of wild fish for broodstock in an attempt to overcome these problems in hatchery stocks merely increases the risks for wild populations.

Large or repeated introductions of hatchery fish pose additional risks for wild fish. Introduction of hatchery fish can adversely affect wild fish through competition for food and space, disease transfer, attracting predators, competition for mates, interbreeding, and other processes. Poorly adapted characteristics may persist in the population, particularly where wild population densities are low or habitat has been altered.

ADVERSE OCEAN CONDITIONS

Ocean conditions have generally been deteriorating for coho in the lower 48 states during the past two decades, and there is little indication this situation will reverse. Most variation in ocean mortality apparently occurs during the first few weeks of life so that near-shore conditions during late spring and early summer along the coasts of Washington, Oregon, and California dramatically affect the number of young coho of that year that survive the first few weeks. Coho along the Oregon and California coasts may be especially sensitive to the upwelling of cold nutrient rich currents from the deep ocean, because these regions lack extensive bays, straits, and estuaries to buffer oceanographic effects.

OVERFISHING

Overfishing is often cited as a principle factor causing decline of salmon runs. However, there are few historical or recent records to indicate that curtailment of fishing has lead to increased spawning abundance of coho salmon. For example, curtailment of fishing seasons has been thought to have reduced harvest-related mortality rates on Oregon coastal coho substantially during the past decade. However, there has been no evidence of increased spawner escapement during this period, suggesting that fishing curtailment is at best merely keeping pace with rapid habitat deterioration and declining productivity of coho populations. In other words, environmental change is driving sustainable harvest rates downward as fast as, or perhaps faster, than catch has been reduced.

Current methods of forecasting and in-season adjustment of fishing are insufficient to ensure sustainable harvest rates and wild fish escapement. Greater factors of safety for escapement targets and improved indicators of freshwater and marine survival will be necessary.

THE NEED FOR ESA PROTECTION

The only sustained regulatory attempt to protect coho salmon has been increasing restriction of the fishery. This approach has failed. Indeed, the historical record shows a dismal pattern of failure -- and the situation is no better today. Wild coho salmon are poorly protected by existing regulatory mechanisms because coho:

- 1) are managed in a complex and most often conflicting and ineffective regulatory landscape of local, state and federal laws that govern this fish's freshwater and marine habitats separately;
- 2) represent an economic resource to the commercial fishing industry, native American tribes and the recreation industry and management is frequently driven by attempts to maximize short-term economic return, and;
- 3) are not as visible or widely monitored or studied as terrestrial species or marine mammals and, as a result, do not receive the attention required to gain protection under a variety of federal and state water and environmental quality laws.

Furthermore, hatchery production of coho salmon exacerbates each of these problems by:

- 1) temporarily masking the decline in wild coho and the degradation of their freshwater habitats;
- 2) increasing competition for potentially limited freshwater and ocean resources, and;
- 3) contributing to the genetic dilution and loss of naturally occurring, wild coho.

A few attempts have been made to mobilize efforts for recovery, again with little effect. The Northwest Power Planning Council was created in 1980, in part to recover all salmonids within the Columbia basin. However, as the recent listings of sockeye salmon and others indicates, to date this attempt has failed. Oregon Governor Barbara Roberts held a coastal summit in December 1992 that eventually led to some general conceptual agreements and movement towards some funding in the state legislature, but as of yet nothing has actually hit the ground in terms of specific recovery actions.

President Clinton has proposed a strategy that could provide protection and possibly restoration for coho habitat on federal lands. However, the future of the so-called "Option 9" proposal remains uncertain, and, if implemented, it would not address private land river ecosystems or coho habitat. It could provide the basic federal land habitat protection and restoration strategy required for coho, however.



*Natural Resources
Defense Council*

71 Stevenson Street
San Francisco, CA 94105
415 777-0220
Fax 415 495-5996

October 22, 1993

The Honorable Dan Hamburg
U.S. House of Representatives
114 Cannon House Office Building
Washington, D.C. 20515

Dear Representative Hamburg:

I am writing on behalf of the 170,000 members of the Natural Resources Defense Council (NRDC) to express our strong support for the Headwaters Forest Act of 1993, H.R. 2866. We appreciate your leadership in this important legislative effort.

The Headwaters Forest and its associated old growth redwood ecosystem is an unique natural resource worthy of public acquisition. Only by the adequate protection and proper management provided by H.R. 2866 can we be certain that this ecosystem will persist over time and that future generations of Americans will be able to visit and enjoy this priceless treasure. In addition, we support the addition of the Headwaters Forest into the National Wilderness Preservation System as Section Four of your bill provides.

Thank you again for your commitment to sound stewardship and environmental protection demonstrated by the introduction of this important piece of legislation. The NRDC looks forward to working with you to secure passage of H.R. 2866 in this Congress.

Very truly yours,

Sami Yassa
Senior Project Scientist

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 Washington, DC 20009
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October 26, 1993

The Honorable Dan Hamburg
 United States House of Representatives
 114 Cannon House Office Building
 Washington, D.C. 20515

Dear Representative Hamburg:

The Environmental Defense Fund, on behalf of its more than 200,000 members, is pleased to support H.R. 2866, the Headwaters Forest Act. The bill represents a responsible effort to secure protection for nationally important natural resources, including endangered species, salmon, and other old growth forest resources. Without the public acquisition of the lands that are the subject of this bill, it is likely that these declining and ecologically important resources will be lost.

Sincerely,

A handwritten signature in dark ink, appearing to read "Michael J. Bean". The signature is fluid and cursive, with the first name "Michael" and last name "Bean" clearly distinguishable.

Michael J. Bean
 Chairman, Wildlife Program

National Headquarters

257 Park Avenue South
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PACIFIC STATES MARINE FISHERIES COMMISSION

45 S.E. 82ND DRIVE, SUITE 100, GLADSTONE, OREGON 97027-2522
PHONE (503) 650-5400 FAX (503) 650-5426

October 21, 1993

Honorable Dan Hamburg
U.S. House of Representatives
114 CHOB
Washington, DC 20515-0501

Dear Congressman Hamburg:

I am writing on behalf of the Pacific States Marine Fisheries Commission in support of H.R. 2866.

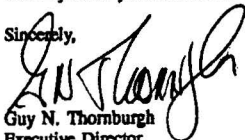
The Commission is a compact of five western states (Washington, Oregon, California, Alaska and Idaho) established by Congress in 1947 to coordinate interjurisdictional fisheries.

The anadromous resources of the Pacific ocean are a national heritage threatened by the continued loss and degradation of their spawning grounds — the forested watersheds.

We fully recognize the significant value of ancient forests in contributing to the production of salmon and steelhead. We, therefore, applaud H.R. 2866 as the vehicle to protect and manage redwood forests of Humboldt County. Without H.R. 2866 we will surely see further declines in coho salmon, with corresponding negative impacts on sport, tribal and commercial fisheries (and the coastal communities who depend on fishery-related industries and lifestyles).

Thank you for your attention to this critical issue.

Sincerely,


Guy N. Thornburgh
Executive Director

Guy.N.Thornburgh@hawaii.gov

"To promote the conservation, development and management of Pacific coast
fishery resources through coordinated regional research, monitoring and utilization"

PALCO**THE PACIFIC LUMBER COMPANY** SCOTIA, CALIFORNIA 95665 • (707) 764-3222

October 26, 1993

The Honorable John T. Doolittle
United States House of Representatives
1524 Longworth House Office Building
Washington, D.C. 20515

RE: HR 2866

Dear Congressman Doolittle:

First, let me express my great appreciation for your support during the committee hearings on October 12th and 13th. Your vision of the constitution and private property rights is so correct, and on behalf of all of the men and women of The Pacific Lumber Company, we want to thank you for speaking out on our behalf.

With reference to your recent letter asking for a response to several questions, I am pleased to submit the following:

Q -- When did The Pacific Lumber Company's total timber harvest begin to increase significantly and how did this coincide with the takeover by MAXXAM?

A -- Overall harvest levels were increased in 1986, after an intensive independent survey by Hammon, Jensen, Wallen & Associates (the same consulting firm which earlier had surveyed the Redwood National Park) showed that The Pacific Lumber Company's above-average inventory and growth made it one of the few lumber companies in California that could increase its harvesting without adversely impacting the company's long-range timber supply or the local economy. The consultants further said that by increasing the harvest without jeopardizing continuous flow, PL could play an important role in bolstering the depressed California North Coast economy.

Q -- How much of this increase was in old growth vs. young growth?

A -- The increase in harvest volumes from pre-1986 levels was principally in young growth, residuals, and other species. The initial increase in virgin old growth redwoods was approximately 30 percent and is substantially less today.

Congressman John Doolittle
October 26, 1993
Page 3

Q -- There was considerable discussion at our hearing regarding your logging at Owl Creek last November. Please describe the reasons why you believe this was a legally authorized timber harvest.

A -- To put it very simply, our harvest activity in our privately owned Owl Creek area was done in full compliance with all applicable state and federal statutes and regulations -- and under the authority of a Timber Harvest Plan (THP) that was unanimously approved by the State of California. Having obtained all of the required approvals, we began our selective harvest only to learn that yet another state agency, which did not have jurisdiction over the THP, had raised an objection. No additional approval was required and so we commenced harvesting consistent with the law in the approved THP.

To put the matter in perspective, one needs to know that the THP for Owl Creek is perhaps the most carefully reviewed THP in the history of California. It was first submitted in 1990 and has been approved and reapproved by the California Board of Forestry. In conjunction with the plan, wildlife biologists and foresters conducted over 300 hours of surveys and found no evidence of marbled murrelets nesting in or occupying the area. Further, one needs to keep in mind that the THP calls for selective harvest on only 136 acres while wholly reserving 101 acres for mitigation habitat.

Q -- What evidence is there to refute testimony stating that these lands (the 44,000 acres in H.R. 2866) are needed to ensure the survival of the murrelet in California? And what evidence or educated skepticism is there that murrelets can nest in second growth stands?

A -- Testimony on various species was presented by supporters of Congressman Hamburg's bill. These are NOT correct and are scientifically flawed.

I have taken the liberty of enclosing statements which strongly refute those given by Congressman Hamburg's witnesses.

THE PACIFIC LUMBER COMPANY

Congressman John Doolittle
October 26, 1993
Page 2

Q -- What factors and methods did The Pacific Lumber Company use to determine that higher harvest levels were prudent?

A -- As stated above, the independent consultant's report showed that The Pacific Lumber Company could selectively increase its harvesting without adverse impact on timber supply or the local economy. This outside report coincided with our own internally developed information. Additionally, one must remember that we predominantly harvest by the selective method and do absolutely NO clearcutting in virgin old growth redwoods.

Q -- It is my understanding that the MAXXAM high-yield junk bonds used to finance The Pacific Lumber Company takeover have been replaced with low interest bonds. When was this debt reamortized and will your timber harvest remain relatively constant even with these lower financing costs?

A -- The Pacific Lumber Company's remaining debt was refinanced in March of 1993 at significantly lower interest rates and much longer maturities. The largest portion of the debt now carries an investment grade rating. At present, our harvest level is running at an annual rate of approximately 220 million board feet per year. Harvest levels fluctuate according to market conditions, weather, and environmental conditions. At the present level, our harvest rate equals growth. In addition, we have acquired additional forestland since 1985-86 and intend to seek additional forest acquisitions.

Q -- Some have alleged that although The Pacific Lumber Company has increased employment to process increased timber harvests, many of those workers will lose their jobs eventually because the current timber harvest is not sustainable over time. Could you elaborate on those allegations.

A -- With the improvements and innovations in our production facilities -- and the expansion of our product lines -- our workforce should remain constant. Even though harvest levels fluctuate, our shipments should remain high because we have become more efficient at getting more product from each log, and we need the workforce we have to manufacture this increased volume and variety of wood products. For example, we have a relatively new end-and-edge glue plant to manufacture wood products from the kinds of boards that were formerly scrapped. That has generated jobs where formerly there were none. Also, as mentioned above, we have acquired and will seek to acquire additional forestland.

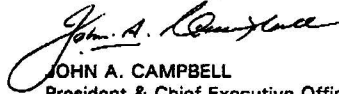
THE PACIFIC LUMBER COMPANY

Congressman John Doolittle
October 26, 1993
Page 4

We are very proud of the stewardship of our forestlands and would be pleased and privileged to provide you and a guest with a tour of our facilities.

Sincerely,

THE PACIFIC LUMBER COMPANY

A handwritten signature in dark ink, appearing to read "John A. Campbell", is written over the printed name.

JOHN A. CAMPBELL
President & Chief Executive Officer

JAC:sp
Enclosures

THE PACIFIC LUMBER COMPANY

**Watershed Conditions in the Headwaters Forest Act
(HR 2866)**

**Testimony Submitted on HR 2866
to
The House Agriculture Subcommittee
on Special Crops and Natural Resources
and
The House Natural Resources Subcommittee
on National Parks, Forests, and Public Lands**

**By
Thomas M. Herman, Resource Manager
The Pacific Lumber Company**

October 26, 1993

I have had the opportunity to review the testimony of Peter B. Moyle in support of HR 2866 submitted into the record at hearings on the subject legislation.

While Mr. Moyle has an impressive background in fisheries biology, it is patently obvious from his testimony that he is mostly ignorant as to the history and conditions of the watersheds he addresses.

Mr. Moyle states that, "Elk River is an exceptional stream for coho salmon . . . because the channel in many areas is in reasonably good condition, protected by having old growth redwood forests in the headwaters." The fact is that the Elk River watershed is one of the most heavily logged drainages on the north coast. During the 1920's and 1930's, virtually the entire drainage was systematically clearcut and burned utilizing railroad logging techniques without any regard for protection of fisheries resources or reforestation. Moyle would have one believe that most of the headwaters are pristine first growth forests. The fact is that less than 6% of the watershed supports such timber stands. It is ironic that a watershed that was intensively harvested utilizing some of the most destructive logging techniques before concerns for other resources, is "exceptional" with regard to fisheries. The drainage now supports healthy and productive 60 to 70 year old young growth redwood stands on managed industrial timberlands. The conditions today are the product of private timber management.

The Salmon Creek watershed is "less productive . . . presumably as a result of cumulative effects of timber harvesting in the drainage," according to Moyle. Moyle believes the meager runs are dependent upon protection of the headwaters. Again, Salmon Creek was intensively logged prior to adoption of any consideration for watercourse protection and less than 10% of the watershed supports old growth timber. What Mr. Moyle neglects to mention is that, until recent years, flood gates

have been maintained on the mouth of Salmon Creek for an extended period of years preventing passage of virtually all anadromous fish. If the productivity of Elk River is so exceptional following a similar land management regime, then it would be expected that Salmon Creek is similar, but for intentional man-caused blockage.

With respect to Yager Creek, Mr. Moyle pleads ignorance because The Pacific Lumber Company (PL) denied he and his crews access. PL has no knowledge of any request and denial of access, but what is interesting is his ability to comment on Elk River and Salmon Creek without any compunctions despite his lack of ever having been there. Mr. Moyle eludes to some "cursory surveys" of Yager Creek and that federal ownership will likely result in restoration efforts. The fact is that PL works cooperatively with California Department of Fish & Game and California Conservation Corps in a comprehensive watershed management and fisheries restoration program for all of its lands. Yager Creek and its tributaries have been the focus of the program efforts to date. The drainage is probably the most intensively surveyed and monitored watershed in the state and has had more in-stream and up-slope restoration projects completed than probably any other watershed in the state. PL maintains a fish hatchery on Yager Creek raising natal stocks including coho to jumpstart the recovery of the fishery as habitat is made accessible and improved. Additionally, the company allows no fishing on its lands, that they may serve as a sanctuary for anadromous fish. All this is being done voluntarily under private ownership. Mr. Moyle again tries to portray the headwaters of Yager Creek and its tributaries as protected with old growth forests. The fact is that the majority of the headwaters areas of this drainage are natural grasslands use for cattle grazing. Studies commissioned by PL by independent consulting hydrologists concluded that the vast majority of sediment entering the drainage system originates from the more unstable grassland soils that are not on PL land and not included in HR 2866. Additionally, very little of the drainage supports old growth, estimated at less than 2%.

Mr. Moyle's testimony is very disappointing coming from a so-called "scientist." Testimony of this nature is symbolic of the erosion of scientific credibility we are experiencing today. Here is a man of impeccable credentials reporting the status of streams of which he has little knowledge in his effort to advocate condemnation and preservation of productive private lands. This testimony is not science, but pure conjecture masquerading as science by the nature of its source. The political leaders of this country must recognize this ploy and insist upon facts in their deliberations.

Marbled Murrelets on Pacific Lumber Company Lands

Comments on House Bill HR 2866

To

The House Agricultural Subcommittee on Special Crops and
Natural Resources
And
The House Natural Resources Subcommittee on National Parks,
Forests and Public Lands

By

Steven J. Kerns
Certified Wildlife Biologist
Principal Biologist/Owner, Wildland Resource Managers

October 26, 1993

Committee Members,

I am writing you in regard to House Bill 2866 and the proposal for the United States Government to purchase the so call "Headwaters Forest" for the protection of the marbled murrelet and other threatened wildlife species.

By way of introduction, I am a certified wildlife biologist with the Wildlife Society holding degrees in biology and anthropology. Since 1970 I have worked as a field biologist, first for the California Department of Fish and Game, then for the USDA Forest Service. Presently I am the owner and principal research biologist for the consultant and management firm of Wildland Resource Managers. My firm specializes in working with private landowners in the agricultural and timber industries to find ways to manage the natural resources occurring on their property concurrently with producing a resource commodity. This is accomplished through intensive on-site studies of the wildlife species in question and their life cycles and habitat needs, and then working with the land manager to develop a management plan which will retain the habitat quality through the management process. Through this process I, and members of my staff have written management plans for deer, antelope, upland game, waterfowl, spotted owls, fisher, marten and marbled murrelets.

My firm has been under contract with The Pacific Lumber Company since 1988 to study the habitat requirements of the northern spotted owl, the marbled murrelet, the goshawk, the red tree vole, the fisher and marten, and other forest related wildlife. Since 1988 Pacific Lumber has spent hundreds of thousands of dollars studying wildlife and developing management plans that integrate timber operations with the retention of wildlife habitats. They have been successful in this process. An example:

In 1988 my firm was contracted by Pacific Lumber to study the northern spotted owls which government scientists reported as requiring old growth habitats. The scientists further reported that the population was in decline and fixed the blame on loss of habitat primarily through timber cutting. These studies resulted in the listing of the spotted owls as an endangered species and the subsequent ISC report.

Over the next several years we located, banded, and tracked spotted owls through the use of radio telemetry. What we found was that northern spotted owls are not only in the old growth habitats but also in the managed forests as well. In fact, in northwest California, the highest densities of owls have been found in the managed forests types (ie, harvested). With the information gained through our research, we wrote a northern spotted owl management plan for the entire ownership of Pacific Lumber. This management plan outlines the steps to take in order to retain spotted owl habitats concurrently with harvesting a commercial timber product (logging). The plan was reviewed and approved by both the California Department of Fish and Game and the U.S. Fish and Wildlife Service. The result is that Pacific Lumber Company can manage its land, and spotted owl habitats are retained.

During this process there were those in and out of government who said that the only way to retain spotted owl habitat was to preserve the forest as is. Their answer was, and still is, to use the Endangered Species Act to acquire land for the preservation of wildlife habitat. There are of course situations where this approach is appropriate, but not, I believe as a rule of thumb. The taking of land out of production in the long run is damaging not only to the resource but to society. Far better to learn to manage the natural resource for the benefit of mankind, both maintaining wildlife habitats and extracting commercial products.

The question now centers on the marbled murrelet. Can marbled murrelet habitat be maintained while a commercial timber product is harvested? As with the owl, there are

those who say "no", that there is no known way to accomplish this. Yet that is exactly what was said about the owl. In 1988 the governmental and university researchers stated that the northern spotted owl was old growth dependent. Neither owls or marbled murrelets know if a forest is old growth or not. They only know whether or not their habitat requirements are present within the forest structure. For the owl, numerous types of managed forests contain suitable habitat. Said another way, forests have been managed to produce owl habitat.

For the marbled murrelet, its 1988 all over again. Governmental and university researchers are saying that murrelets must have the old growth, i.e. the "Headwaters Forest." Murrelets only know that the habitat is present.

Since 1988 our firm, inconjunction with foresters and biologists with The Pacific Lumber Company, have been studying what constitutes suitable murrelet nesting habitat on Pacific Lumber Company lands. We have spent thousands of hours monitoring the flight and nesting behavior of murrelets on the property. This past summer (1993) we supervised over thirty field personnel who were collecting information on marbled murrelet nesting behavior and habitat structure. We have traveled to other murrelet nest sites in California, Oregon, and Washington to gain information on the forest structural attributes that constitute marbled murrelet habitat.

This intensive effort has culminated in a draft Habitat Conservation Plan for the marbled murrelet on Pacific Lumber Company Lands. Under this comprehensive plan, marbled murrelet habitat is identified and management practices are implemented to retain that habitat through time. For this plan to be implemented it will, like the owl plan, have to be approved by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. Until such time of approval, the bird, and its habitat are protected by the Endangered Species Act, the California Endangered Species Act, and the California Forest Practices Act.

so the question before you is not one of will the habitat of the marble murrelet be retained, but rather under what management authority. HR 2866 would, as I understand it, authorize the federal government to purchase the "Headwaters Forest" and portions of surrounding property, thus placing the land in governmental ownership, at a tremendous cost to the taxpayer. The result will be a hands off management approach of the forest. The result of that will be in time a major fire, and a loss of the habitat the tax payer bought. It will also result in the loss of jobs and tax revenue, both of which our north state economy can ill afford.

I have read the notes and testimony of governmental and university researchers that support this bill. Their support is to be expected for two reasons. First, they are not faced with the economic reality of having to make a living from the production of a natural resource as are those whose livelihood is directly tied to the land. The governmental and university researcher salary will remain the same whether timber is logged or not. Therefore it is easy to say that the proper management is to "preserve" the forest as is. For those whose livelihood is dependent on production, the question is two fold, how to retain marbled murrelet habitat and how to produce a crop. The timber industry in California has learned to do that with the northern spotted owls (currently 5 companies have spotted owl management plans in California). Given the opportunity they will do the same for the murrelet.

The second reason is that seeing the land in the private sector does not serve the interest of the governmental or university researcher, for all too often they are not given the opportunity to work there. This is not without just cause, for simply put, when it comes to issues such as the spotted owl and the marbled murrelet governmental researchers have not been very helpful in answering the question of how to manage for a species concurrently with harvesting a product. All too often their answer is "lock it up."

Thus I want to encourage you to do two things:

First, reject this bill as a costly, irresponsible approach to a complex management question that revolves around good biology, forestry, economics and politics. In doing so you will save taxpayers millions of dollars, leave the management to those who do it best (PL has been managing its property for over 120 years) and help retain jobs and the economy in the north state.

Second, send a strong message to governmental researchers to work toward the questions of real management; production of a real commodity while, in this case, retention of suitable wildlife habitat.

Thank you for the opportunity to comment.

Steven J. Kerne

Steven J. Kerne
Round Mountain, CA
October 26, 1993

TESTIMONY OF VICTOR W. KACKYNSKI, Ph.D.

RELATIVE TO THE HEADWATERS FOREST ACT AND TESTIMONY OF PETER B. MOYLE (H.R. 2866)

Qualifications: I am a practicing fisheries scientist with 24 years of professional experience with salmonid issues in the Pacific Northwest. I have been a senior author on three major reports that have analyzed and described the reasons for salmonid declines in northern California, Oregon and Washington States. I began my professional career as an Assistant Professor at the University of Washington, working with the feeding behavior and ecology of salmon in Puget Sound. I have been a consultant and applied researcher since 1972. In northern California, I was the project manager of the Klamath Basin fisheries management and restoration plan which became federal law with a 20 year funded recovery plan (for the U.S. Department of the Interior, 1985). I was also a consultant to Simpson Timber Company, Miller Redwood Company, Louisiana Pacific, Sierra Pacific Industries, the California Forest Protective Association, the City of Redding, and the Glen Colusa Irrigation District in the region. All of these projects involved salmonid problems evaluation and most involved the development of solutions to these problems. I was also a consultant to the United States Fish and Wildlife Service on the identification and mapping of all major wetlands in Northern California.

This testimony comments and expands on the testimony of Professor Peter B. Moyle dated 7 October, 1993.

The essence of Professor Moyle's testimony can be boiled down to four main points:

1. Relatively good remaining salmonid habitat is on forest lands. The rest is relatively degraded.
2. Relatively very good salmonid habitat occurs in old growth forest.
3. Drainages where heavy logging occurred in the past are relatively less good than undisturbed forest stream habitat.
4. Logging and roading in headwater areas will create excess sediment. This will impact all downstream habitats.

Comments follow on the above points:

- 1a. Forest stream habitat today is in the best relative condition. Downstream habitat has been badly damaged. This is true. No comparable best management practices exist to protect agricultural or urban stream areas as in forested areas. This is the reason preservation groups are strongly pushing to "save" what is left. However, the potential for restoration and benefit is

much greater below the forest. This will be expanded upon below.

- 1b. Primary chinook and coho salmon habitat historically was below the present day forest. Chinook salmon habitat was and is in the floodplain, most of which is below the forest. Primary coho salmon habitat was and is just below and somewhat into the forest (below the 3 percent landscape gradient). Important summer and critical overwintering coho salmon habitat is in the floodplain, mostly below the forest, in large deep pools and in off channel areas that flood in winter. These critical winter areas are also important for steelhead and sea-run cutthroat trout for refuges from winter storm runoff conditions. Local flood control projects, agricultural land reclamation, and urban growth have very much impacted these important summer rearing and critical winter refuge habitats. Downstream human activity has contributed much more sediment on a unit acreage basis and has seriously aggravated flood runoff conditions than has forest activities. Water diversions have seriously reduced summer flows.
2. Salmonid habitat in old growth area streams generally is in relatively very good condition. The quality of specific streams varies with natural conditions and events. This is the standard by which we evaluate other forest stream habitats. However, old growth area headwater streams have a limited productivity potential for salmonids. Stream area is low, stream gradients are high, deep large pools are scarce, summer flows are often low, and biological food chain production is relatively low. Headwater streams are primarily habitat for resident cutthroat trout and to a lesser degree steelhead trout. Some coho salmon do use headwater stream areas but this really is secondary habitat with limited potential for them.
3. Heavy logging practices in the past did damage fish habitat. Fishery and land management agencies required the removal of large woody debris from and along streams in the late 1960s, 1970s and even into the early 1980s. Equipment operated in and adjacent to streams and streamside trees were harvested. Road construction and maintenance standards were not prescribed or were not generally routinely engineered. Present practices reflect the lessons of the past and the knowledge we have gained with time and experience. Present stream and soil protection measures are designed to protect and even restore stream habitats. One needs to carefully separate past practices and

their impacts from present practices which continue to evolve.

4. Headwater logging and roading will not necessarily create excess sediment in streams. Natural events cause slope failures and such failures are important in the ecology of salmonid habitat development and use. They replenish stream gravels and nutrients and we would have serious productivity problems without them. I am not advocating slope failures, but I am pointing out that they are part of the natural process. The important point is not to increase the frequency of slope failures through human activity. Soil losses are not in the best interest of landowners who need these soils to maintain forest productivity. Soil conservation for forestry and for fisheries are compatible goals.

Some direct and miscellaneous points by Professor Moyle should also be addressed:

Page 2, 2nd paragraph. *"The decline of coho salmon is particularly severe in California, the southernmost part of their range. ...even the hatchery coho are in decline and the mixing of hatchery and wild stocks in some streams has probably contributed to the decline of wild stocks."*

Professor Moyle has neglected estuaries and particularly the importance of ocean factors in his comments. Estuary losses and degradations are severe in Oregon as revealed in our recent studies. From my work on the USFWS wetland status mapping project in northern California, one could imply serious estuary losses in northern California and related serious wetland losses nearby. Estuaries and marshes are critical components of chinook salmon and sea-run cutthroat trout habitat, and are important components for coho salmon and steelhead trout habitat. These fish grow rapidly in these habitats if they are not limited in their acreage and quality, and they use the estuary habitat to transition to salt water. If food becomes limited in the estuary, the salmonids must enter the ocean prematurely. The larger the smolt upon ocean entry, the higher its survival probability will be. In coastal Oregon and Washington, 90 percent of estuary losses were from land reclamation for agriculture and 10 percent were from dredge and fill activities to create municipal and industrial areas. These percentage losses are probably similar for northern California.

In 1976, there was a major current change that has seriously affected coastal coho and northern California and southern Oregon chinook salmon growth and survival.

California and Oregon coho salmon populations are depressed.

Chinook salmon populations from the Rogue River in southern Oregon are depressed, while populations north of the Rogue River, except for the Snake River and possibly the mid-Columbia summer (fall type) chinook run, are satisfactory and in fact are exploitable. Population status (except Columbia-Snake populations) corresponds primarily to migration behavior and ocean conditions. California and Oregon coastal coho and southern chinook stocks are "stay-at-home" fish in the nearshore ocean. In contrast, all chinook salmon stocks north of the Rogue River are north migrating to Alaska area marine waters.

Ocean coho salmon catches in Oregon steadily decreased to 1960 except for a temporary rise after World War II, then increased significantly through 1976 to a record high, and then decreased to the present. The increase from 1960 to 1976 reflected growing successful hatchery production plus good ocean conditions nearshore from Washington south to northern California. This is the ocean range of Oregon and northern California coho salmon. Hatchery production has not declined since 1976 and hatchery production methods, disease control procedures, etc. have improved if anything.

The coho salmon catch decline since 1976 reflects changes in the California/Alaska Currents which split from the eastward flowing North Pacific Drift as it approaches North America. In recent history through 1975, the main current flow split was south as the California Current. During that period, the Alaska Current was relatively weaker. The strong California Current brought cool, nutrient rich waters along Washington, Oregon and California. Related weather patterns were beneficial to local coastal salmon populations. Good precipitation occurred inland and strong winds out of the northwest resulted in relatively strong effective upwelling. These upwelling events enhanced the cool surface temperature of the water mass and made nutrients even more available in surface waters for phytoplankton. Biological production was good and local salmon survival and growth were good during this period (through 1975).

Biological production and salmon survival in Alaskan waters were less good through 1975. Since 1976, the Alaska Current flow has predominated and the California Current has been weaker. Biological and salmon production (growth and survival) in Alaska waters has been excellent since 1976.

In the weaker California Current since 1976, temperature has been warmer (less optimal for salmonids) and the water mass has had less nutrient. Biological production has definitely been nutrient limited in the weaker California Current since 1976. Related weather patterns have been relatively detrimental to local salmonid fish. Precipitation inland has been lower with several record drought years. Coastal upwelling events have been less frequent and, because of lowered nutrient concentration and

warmer water mass to start with, the upwellings have been less effective. The end result has been significantly lowered salmon productivity since 1976. Other related fish community changes have occurred. Herring and anchovy standing stock is noticeably down and, by contrast, the more normally warm water associated mackerel predator has not been uncommon.

Ocean survival for Oregon coastal coho salmon was about 8 percent during the dominant California Current flow years (pre 1976) and individual adult fish were large. This situation was similar for California coho salmon. Since then, ocean survival has been 2 to 3 percent and fresh water survival may have been less because of deleterious weather related effects inland. Adult fish have been noticeably small. Ocean harvest rates were not significantly adjusted for this definite drop in ocean (and possibly freshwater) survival, 5 to 6 percent, until 1992.

Hatchery production accounted for about 75 percent of the coho salmon in local nearshore waters in the mid 1970s. Socioeconomic pressures to harvest the relatively abundant hatchery fish resulted in a harvest rate of about 70 percent in a mixed stock fishery. This harvest rate was actually too low for hatchery stocks and with hindsight far too high for wild stocks. This caused a progressive decline in wild stock abundance and escapement which has reached a crisis level.

The mixed stock overharvest problem was progressive in its effect on wild coho salmon stocks. A similar ocean productivity shift and subsequent overharvest impact occurred to the relatively non-migratory southern chinook salmon stocks. These ocean current and overharvest problems were aggravated by growing marine mammal predation. Salmon is not a major prey item for marine mammals, but on an annual basis, it is a significant item, perhaps 3 to 15 percent of the annual diet varying by location. The decline in the herring and anchovy fisheries may well have caused a prey shift to salmonid prey since 1976. Simple first order dietary estimates of salmon consumption by marine mammals suggest that it was equal to double the Oregon commercial salmon catch in 1990. An independent data set, Columbia and Snake River fish counting station counts of marine mammal bite and scratch wounds, definitely indicate that marine mammal impact is indeed significant and growing.

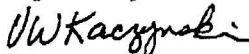
The mention of lamprey decline problems by Professor Moyle is significant. Lamprey populations are in decline throughout the Pacific Northwest. Lamprey are a preferred prey of seals and sea lions and their decline is highly circumstantial. Lamprey abundance was not an apparent problem in the Klamath Basin in 1985 based on 1983 data. In fact, we concluded that marine mammal predation was not serious in 1985 on salmonids, a conclusion that has changed in 1993 based on 1990 data. The only apparent significant change that could have affected lamprey is

the growing seal and sea lion populations. Forestry best management practices have significantly improved since then. Habitat conditions in freshwater for lamprey have improved if anything since 1983.

Professor Moyle's comments on the differences in coho salmon production of the Elk River, Salmon Creek, and Yager Creek are not scientifically unexpected. It is not unusual to observe basin to basin differences in coho salmon productivity. Basin areas differ, stream miles differ, geology differs, and perhaps, most significantly, stream size and gradients differ. As noted earlier, primary coho salmon habitat is below the 3 percent gradient and most important juvenile rearing habitat and critical winter habitat are in the flood plains, most of which is below the forest. Headwaters are not primary habitat for coho salmon and chinook salmon habitat is virtually all below the forest.

I sincerely hope that these comments assist you in your deliberations on this potential bill.

Respectively submitted,



V.W. Kaczynski, Ph.D.
Certified Fisheries Scientist, AFS
35022 Oliver Heights Court
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October 26, 1993

FOR HEADWATERS FOREST ACT (H.R. 2866)

**COMMENTS SUBMITTED FOR CONSIDERATION
RELATIVE TO
MARBLED MURRELET POPULATIONS IN NORTHERN CALIFORNIA**

TO

**THE HOUSE AGRICULTURE SUBCOMMITTEE ON SPECIAL
CROPS AND NATURAL RESOURCES**

AND

**THE HOUSE NATURAL RESOURCE SUBCOMMITTEE ON NATIONAL PARKS,
FORESTS, AND PUBLIC LANDS**

BY

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26 OCTOBER 1993

BACKGROUND AND EXPERIENCE

I am a research ecologist who has studied and published on marine bird populations along the Pacific Ocean Coast of North America for the past 25 years. During this period, I have been fortunate to have the opportunity to work directly with Marbled Murrelet populations. In addition, I have been associated with the Marbled Murrelet Technical Committee of the Pacific Seabird Group since the formation of that committee. I have been actively involved with the conservation issues surrounding the Marbled Murrelet and have interacted with Marbled Murrelet researchers. For the past few years, I have worked as a consultant to the wood products industry in the Pacific Northwest, and Southwest as well, advising them of environmental concerns, trying to develop solutions to resource utilization-environmental concerns conflicts.

Please see my attached Curriculum Vitae and Publications list for further details of background and experience.

OVERVIEW

The resolution of conflicts, perceived or real, as relates to the Marbled Murrelet, has been and continues to be particularly challenging and interesting. This is the role that I continue to pursue as a consultant to The Pacific Lumber Company. This role is now focused on the development and writing of a Marbled Murrelet Habitat Conservation Plan (HCP) for The Pacific Lumber Company. The primary goal of the Marbled Murrelet HCP is to develop and implement forestry techniques that, when implemented, retain Marbled Murrelet nesting habitat requirements within treated forest areas and thus the retention of associated nesting Marbled Murrelets. The Marbled Murrelet HCP is a process that utilizes Adaptive Management concepts and processes to learn how to manage commercially viable forests while maintaining Marbled Murrelet populations. Ultimately, this process will lead to silviculture techniques for the creation of "new" Marbled Murrelet nesting habitat. The Marbled Murrelet HCP, and the Adaptive Management process contained within, constantly assimilate all new information into the process, continuously evolving and refining silviculture techniques. Please note that the Adaptive Management process is central to the Recovery Plan for the Northern Spotted Owl (draft, 1992) and the recently released report, Forest Ecosystem Management: An Ecological, Economic, and Social Assessment (1993). Please also note that The Pacific Lumber Company has already implemented elements of the Adaptive Management process relative to nesting Marbled Murrelets on the lands of The Pacific Lumber Company.

TECHNICAL COMMENTS

I have reviewed the written comments of Ms. S. Kim Nelson, presented to the subcommittees, dated 12 October 1993, and notes of the comments of Dr. C. John Ralph, presented to the House Natural Resources Subcommittee on Parks and Insular Affairs, 12 October 1993. There are a few, but important, specific elements of their testimony that deserve comment at this time, and such follow. The testimony of Ms. S. Kim Nelson is well prepared, documented and thought out, and requires a similar response, that I will submit to Congress in the near future.

Population Decline in California

The statement that Marbled Murrelets have declined by 90 to 95 percent in California is often made. However, despite this often-made statement, and belief in its accuracy, the statement is only a hypothesis, and there is no direct evidence that the current Marbled Murrelet population in California is now smaller or larger than in the past. The hypothesis assumes that Marbled Murrelets occupied all former old growth forests in the coastal zone of California, at densities now seen in California forests. In addition, the hypothesis assumes that nearshore marine areas along the coast of California are uniform and equally able to support foraging Marbled Murrelets. Both these assumptions are insupportable. Please note that there are a few locations within the range of the Marbled Murrelet in California where birds are now absent from inland areas formerly "occupied" and marine "foraging" areas, but these are limited (see the comprehensive reviews of Carter and Erickson 1988, 1992). In short, in the northwest coast area of northern California, the area where the lands of The Pacific Lumber Company are located, there is no direct evidence to suggest that the regional Marbled Murrelet population now present is smaller or larger than the past regional population.

I must point out that throughout the listing process in California, and at the federal level, there has been a general lack of attention to the capacity, or lack thereof, of coastal marine waters to support Marbled Murrelet populations. Unfortunately, this lack of attention of the importance of the marine carrying capacity generally continues. Indeed, there are many reasons to expect marine environments to differentially limit Marbled Murrelet populations, as the coastal marine areas are both temporally and spatially dynamic, with some more productive than others, and some more predictable than others.

Inland Nesting Distribution of the Northern California Population

The work by researchers at the Redwood Science Laboratory in Arcata, California, a team lead by Dr. C. John Ralph, has had considerable success of determining the broad at sea distribution and abundance of the Marbled Murrelet in Northern California coastal waters. In addition, they have been actively engaged in forest surveys for Marbled Murrelets throughout the region, and have established, in broad and general terms, the forest distribution of the species in the area, including the identification of areas where Marbled Murrelets are apparently more abundant.

However, the current state of Marbled Murrelet survey technology (Ralph et al. 1993) and knowledge of Marbled Murrelet social behavior at inland forest areas does not allow for the accurate estimation of numbers of Marbled Murrelets at particular forest areas. Indeed, I do not believe that it is possible to determine the proportion of the regional Marbled Murrelet population that is associated with and nests in forest areas on the lands of The Pacific Lumber Company. Dr. Ralph's estimate that 20 percent of the regional Marbled Murrelet population nests on the lands of The Pacific Lumber Company is a hypothesis, and nothing more.

The Pacific Lumber Company is aware that there are nesting Marbled Murrelets on its lands, and the Company has found areas where Marbled Murrelet flight and social activity is focused, and has even found a few Marbled Murrelet nests. This knowledge was gained through an extensive, and expensive, Marbled Murrelet survey program on its lands, conducted according to protocol and often incorporating comments from federal and state agencies. However, even with this database at hand, it is not possible to establish the overall numbers of Marbled Murrelets on the lands of the Company nor to estimate what portion of the regional population nests in Company forest areas.

Of the utmost importance, the goal of the Marbled Murrelet HCP is to maintain Marbled Murrelet habitat, and associated Marbled Murrelet populations, on the lands within treatment areas. Not the total number of Marbled Murrelets present and nesting on the lands of The Pacific Lumber Company, nor the portion of the regional population that represents are significant. Every effort to maintain them with an active and responsible silviculture systems is important and significant. In addition, the implementation of the Adaptive Management Process takes time, and is a progressive process, the speed of which is determined by the success of the Adaptive Management Process cycles.

Squawfish infest all parts of Eel, river study says

By David Anderson
The Times Standard

RIO DELL — Salmon-eating squawfish now infest all parts of the lower Eel River system, student researchers have discovered.

Students from South Fork, Fortuna Union and Eureka high schools and California Conservation Corps members joined Humboldt State University graduate students and professional biologists recently to track how far the predators have spread since their accidental introduction in 1986.

"We found over 200,000 squawfish, including 6,000 sexually mature females," said graduate student John Clancy, who designed the study. "They were in the Van Duzen, the South Fork and the main stem of the river as far as Fort Seward."

Squawfish, a member of the minnow family that can grow as large as 14 pounds, are voracious predators on all smaller fish, including their own young. Native to the Sacramento River system, they were apparently introduced to the Eel by fishermen using small ones as live bait.

The Eel River, which was once deep, clear and cold, is now mud-

dy, shallow and warm, biologist Patrick Higgins noted. It once supported spawning salmon and steelhead, but has become more suitable habitat for squawfish.

A few surviving salmon still spawn in upper tributaries, but young fish must run a gantlet of waiting squawfish to reach the sea. Higgins said chinook suffer more than coho because they return to the ocean earlier in their life cycle, when they are smaller.

He said squawfish predation is almost certainly one factor in the reduction of the Eel River fall chinook run from at least 8,000 fish in 1987 to only a few hundred in recent years.

Clancy said about 75 students and other volunteers participated in the Sept. 25 survey, which was intended as a "snapshot" of the squawfish population in the river, rather than a complete census.

The squawfish were not evenly distributed, he said, but tended to concentrate in deep holes.

Data gathered by the student volunteers will be used by scientists trying to devise squawfish control programs. Possible control methods include gill netting and explosives in deep holes.

**TESTIMONY FOR THE RECORD OF THE HEARING OF OCTOBER 12,
1993 ON H. R. 2866—HEADWATERS FOREST ACT
SUBCOMMITTEE ON NATIONAL PARKS, FORESTS AND PUBLIC LANDS
COMMITTEE ON NATURAL RESOURCES
U. S. HOUSE OF REPRESENTATIVES**

**John Henry Grobey
Professor of Economics
Humboldt State University
Arcata, California**

My name is John Henry Grobey. I am a professor of economics at Humboldt State University where I am now in my twenty-seventh year of teaching. I arrived in Humboldt in time to witness the opening shots in the timber wars as the establishment of Redwood National Park was being debated. Since then I have conducted extensive studies of the local economy and the role played in it by the forest products industry. I was a 1954 graduate in forestry at the University of Washington with later advanced degrees in both forestry and economics. I chaired the department of economics for more than ten years until just this last year. I remain an active researcher and teaching professor of economics. I have testified on numerous occasions on matters relating to the forest products industry in Humboldt County, including testimony before Phil Burton's subcommittee in the spring of 1977 related to the then proposed expansion of Redwood National Park. I relate all these things in order to establish my bona fides to present expert testimony in the present case.

My statement is submitted in response to a request made by Congressman John Doolittle after witness William Stewart stated that my figures relating to the role of the forest products industry in the Humboldt County economy showed that 70 percent of income is directly derived from the industry. His own estimate was about eleven percent. When asked about this sizable discrepancy Mr. Stewart claimed that my figure is based on only wage income while his is based on all income coming into the County. I was asked to examine Mr. Stewart's testimony and compare his data with my own studies of the Humboldt County

economy. I am grateful for the opportunity to set the record straight, and while I am at it, to render a full account of my views on this calamitous piece of proposed legislation.

Let me quickly dispose of the discrepancy first and then go on to state my views on the bill. Mr. Stewart's statement attributing such an absurd claim to me proves the hazard of making a quick-draw-shot from the hip. The first thing I did upon receiving the request was to try to identify anything I had ever stated either in writing or orally that might be construed in that way. I might have stated orally at some time that 70 percent of manufacturing sector employment is accounted for by the forest products industry, (since that figure is embedded in the data included in one of the tables in one of my studies) but I have never made such a claim for total wage and salary income. I am attaching herewith copies of several of my publications or parts of publications that bear on the role of the forest products industry in the county's economy, and I ask Congressman Doolittle to submit them for inclusion in the record or not as he sees fit, due to their length.

Documents submitted include copies of the following publications

1. Grobey, John H. et al. April, 1987. The Impact of Timber harvest levels on the Economies of Del Norte, Humboldt, and Trinity Counties, California. Economic Research Institute, Humboldt State University Foundation. ERI/SR87-1.
2. Grobey, John H. et al. December, 1987. The Contribution of the Pulp Industry to the Humboldt County Economy. Economic Research Institute, Humboldt State University Foundation. ERI/SR87-2.
3. Grobey, John H. March, 1991. The Destiny of the California Timber Industry in the Nineties. A paper presented at the 53rd annual Redwood Region Logging Conference, Ukiah, California.
4. Grobey, John H. June, 1991. The Forest Products Industry and the California Economy. Economic Research Institute, Humboldt State University Foundation.
5. Grobey, John H. 1985. "Politics Versus Bioeconomics: Salmon Fishery and Forestry Values in Conflict." in Forestlands: Public and Private. Pacific Institute for Public Policy Research, San Francisco, California.
6. Grobey, John H. Fall, 1993. Excerpts from a study titled, "The Humboldt Bay Harbor and the Humboldt County Economy: Economic Impacts of Harbor Deepening and Port Development." This study is nearing completion under contract between the U. S. Army Corps of Engineers and the Humboldt State University Foundation.

The last of the above documents constitute an Appendix to this statement. It includes charts and tables relating to Humboldt County personal income, employment and unemployment and unemployment, wage and salary income by industry sector, and Chapter V of the

referenced study titled "Analysis of the Export-Base Sectors of the Humboldt County Economy." This chapter deals with the forest products industry, the tourist industry, the fishing industry, and the agricultural sector. I offer these materials without comment since the data presented speak largely for themselves, except to note that they reveal a regional economy that is experiencing considerable distress.

I note with some interest that there are now apparently two different *Pacific Institutes* in the San Francisco Bay area. The one in San Francisco noted in item 5 above has been in existence for many years. The one in Oakland with which Mr. Stewart is affiliated is apparently as new as his new Ph. D. One wonders if the choice of its name is coincidental or designed to confuse people into accepting its legitimacy. I do have several specific comments on Mr. Stewart's testimony.

First, Mr. Stewart is correct in stating that the forest products industry has declined in both relative and absolute terms, but he has presented data which understate its importance and present a distorted picture. For example, in 1990, total wage and salary income in the county was \$1,041,778,000 of which approximately \$142,460 came from the forest products industry when logging, sawmills, remanufacturing, and estimated pulp mill wages are added. This constitutes 13.7 percent of total wage and salary income and 82 percent of manufacturing sector total W&S income of \$173,817,000. Note also that while the forest products industry had 70 percent of the manufacturing employment, it paid 82 percent of the wages, reflecting the fact that average wages are higher in the forest products industry than in the rest of the manufacturing sector.

Second, Mr. Stewart apparently does not include pulp mill wages and employment in his forest products industry totals. While these latter data are often not reported in official statistics in order to prevent disclosure, the data were readily provided to me for the study of the local pulp mills I conducted several years ago. But the problems with Mr. Stewart's data

do not stop there. Part of property income accruing in Humboldt County, reported by Mr. Stewart in his Figure Two as "Interest and Dividends" are attributable to the forest products industry. For example, in 1985, rent, dividends and interest directly earned by the forest products industry amounted to \$63,845,000 which constituted more than twenty-five percent of the total of \$253,006,000 for that year. It is also the case that a part of the remainder is indirectly attributable to the industry, as is a part of personal income coming from social security payments to timber industry retirees.

I have not had time to review (indeed I have not seen) Mr. Stewart's Ph. D. dissertation from which he has apparently drawn his figures on the relationships between timber harvest and employment for the county, and I do not therefore wish to quibble over his figures. However, it would appear that he did not make a couple of adjustments needed if they are going to be applied to the problem of estimating the impacts of curtailed timber harvest specifically in Humboldt County. First, head-count employment data from the California Employment Development Department must be adjusted to "full-time-equivalent workers", and second, the net flows of logs across county boundaries must be accounted for in the regression model estimating equations. These factors could help to account for his reported differences in labor productivity between the north coast and the central Sierra region.

Mr. Stewart is also correct to note that some of the employment and population losses predicted by various models did not materialize. But he misinterprets the very nature of the application of various income and employment multipliers. These multipliers are derived by applying the principle of *ceteris paribus* (holding other things equal) to the estimating equations by taking their partial derivatives. In other words, had it not been for the influx of refugees from southern and central California and in-migration of others driven by transfer payments, larger impacts would have been experienced. I personally have never used employment multipliers as large as 2.5. But beyond that, part of the offsetting influx of

people, and trade and service-sector activity has without question been driven by concealed segments of the economic base. Mr. Stewart seems to be suggesting that these offsetting effects are themselves the result of reduced timber harvest that need to be accounted for in the timber-industry-employment estimating equations. Such a suggestion is simply nonsense, since these effects must be regarded as independent events. The same analysis that can be used to predict job losses can also be used to show how much larger and more prosperous the community would have been had it not been for the offsets.

Mr. Stewart is apparently part of the movement that has worked diligently for the past twenty-five years to try and shut down the forest products industry on the north coast. That movement has been successful beyond the early expectations of its leadership. It doesn't appear that the movement is going to quit as long as it is winning the political rent-seeking battles. But it takes some chutzpah to first cut off the legs of the timber industry and then point out how short and crippled it has become. Mr. Stewart and his associates seem to be saying that since the industry is so small now, nobody should mind if they finish the job of killing it off.

As Yogi Berra used to say, it is deja vu all over again! Once again we are hearing the same lies about tourist bonanzas that we were told when Redwood National Park was first created and again when it was expanded. The buyout of the headwaters forest and the timberlands surrounding it are going to produce a tourist bonanza that will more than offset the loss of timber industry jobs. That claim for the original RNP and its subsequent expansion, were never substantiated by subsequent experience. Even Mr. Stewart seems to understand that when he states, "The growth in non-wage income is considerably more important than the relatively small increase in tourism and recreation dollars that also occurred over the same period."

Ostensibly, Congressman Hamburg justifies the buyout of more lands than are needed in order to preserve the Headwaters forest on the grounds that placing the additional lands in the national forest is needed in order to prevent Pacific Lumber Company from "overharvesting" timber on these lands. This argument is much more revealing about the true environmental agenda of the current administration than is perhaps intended. If that argument can be made for Pacific Lumber (and I reject such a suggestion) then it would presumably apply with equal force to all private timberland ownership. The environmental movement has become a stalking horse for the installation of soviet-style central planning under the guise of "industrial policy." Similar appeals are of course the dominant theme in the emerging debate over the socialization of the medical services industry. Sometimes I fear that the American people are going to have to learn the hard way that it is easy to walk into the socialist swamp, but not so easy to find the way out again after it becomes obvious (which it surely will) that it doesn't work.

The argument that those lands over and above the 3000 acres of the headwaters grove and the 1500 acre buffer around it would be managed responsibly by the U. S. Forest Service under the multiple use concept is patently false. Multiple use on the national forests has gone beyond being a mere joke to become a cruel hoax. The national forest system has become little more than a museum of dead and dying timber all the while that the same people who succeeded in locking it up complain about the absence of low-cost housing for the rising homeless population. But the multiple-use promise is not new either. When RNP was expanded promises were made to increase the harvest of timber off the Six Rivers National Forest for a period of fifteen years in order to mitigate some of the job losses, but key Congressmen were careful not to codify their oral promises. Instead, they merely required the Forest Service to STUDY the feasibility of doing so. The required study was duly performed, known as, "Timber Harvest Scheduling Study: Six Rivers National Forest." It was prepared in accordance with Section 102.(C) of Public Law 95-250, the act expanding the Redwood National Park. But once the study was done the harvest was reduced rather

than increased, under the successful political pressure applied by the same people who pushed the park expansion, many of whom are back for more in this case. Once again the cry is that we must save the last redwoods. How many more times after this one?

It has been apparent to me for a long time now that difficult problems of coexistence were going to emerge between private-sector ownership of forestlands and the socialist planned national forest system. But we have consistently moved in the wrong direction in recent years, and nobody seems to get it! The spectacle of President Clinton going to the Portland timber summit on one day to deal with problems arising essentially with a socialist institution in the U. S. , and the next day to go to Vancouver to try and advise President Yeltsin on how to extract the Russian economy from its socialist quagmire is simply too much irony for me to take. Mr Yeltsin is doing the best he can to privatize state assets including land, over the objections of the hard-line apparatchiks while the U. S. continues apace to add more and more land to federal ownership.

The proposed taking under this bill is, however, somewhat different from either one of the RNP takings. In those cases noone doubted that fair market value would be paid for the land and severance on mills closed as a result. The Redwood Employee Protection Program (REPP) was the same sort of political bribery to call off labor opposition that the so-called option 9 program offers today. But now the claim is being made that the timber has already been effectively taken through confiscatory regulations imposed at the state level and therefore eminent domain payments need not provide full market-value compensation. This cynical strategy has become the norm in today's environmental movement.

The "science" behind the drive for more and more stringent regulation of forestlands, public and private, is also highly suspect. One need only to consider the self-interest of those who get major grants of federal money to study threatened or endangered species to realize that there is a fundamental conflict of interest involved. Ronald Bailey in his new

book, "Eco-Scam: The False Prophets [Profits?] of Ecological Apocalypses", points out the biased character of much of the current doomsday preachers. The spotted owl provides a perfect example. After the federal scientific committee found that the owl is "old-growth dependent" many timber companies hired their own wildlife biologists or contracted-out consultants to document that the owl thrives in young-growth forests. They succeeded in so proving only to find that this result not only foreclosed the harvest of old-growth timber but private stands of young-growth timber containing owl nests as well! While even the liberal media have now conceded that the spotted owl flap was a farce, federal regulators haven't budged from maintaining the owl as a threatened species.

I must say that I have no illusions about members of the committee taking the time to examine even a small fraction of the supporting materials I have provided with this statement, but that says more about the tendency for Congress to act with undue haste rather than as the world's greatest deliberative body that it is supposed to be. I urge the members of the committee to oppose this unwise bill.

The table below contains various multipliers for forest products industry sectors. These were drawn from item 6 on the list of supporting materials given above. Type I multipliers indicate the direct and indirect impacts on the community of changes in the output levels of these sectors. Type III multipliers add in the impacts induced when changes in household income generated by the direct and indirect effects are taken into account.

MULTIPLIERS FOR HUMBOLDT COUNTY FOREST PRODUCTS INDUSTRY										
SECTOR	OUTPUT MULTIPLIERS		WAGE & SALARY INC.		TOTAL INCOME		VALUE ADDED		EMPLOYMENT	
	TYPE I	TYPE II	TYPE I	TYPE II	TYPE I	TYPE II	TYPE I	TYPE II	TYPE I	TYPE II
FORESTRY	1.8088	1.2848	2.8464	4.3888	1.3681	1.8888	1.8878	1.8848	1.8788	2.2474
LOGGING	1.0848	1.2148	1.0801	1.3018	1.0888	1.2878	1.0888	1.2874	1.1441	1.5848
SAWMILLS	1.5888	1.7018	1.4805	1.788	1.4888	1.8788	1.5148	1.8711	1.6187	1.8888
PERMANENT	1.4118	1.7464	1.8888	2.1882	1.5181	2.0874	1.8478	2.1181	1.8888	1.8788
PULP MILLS	1.6888	1.8818	1.8888	1.8888	1.8888	1.7888	1.8812	1.8888	1.8888	2.5118

The harbor study that I have been working on as noted above shows that the economic feasibility of prospective improvements to the harbor and its ancillary facilities is linked to the maintenance of a viable railroad. The railroad, now operated by a public rail authority, has been just barely holding its own after having survived chapter 11 bankruptcy proceedings by "going public". The precarious survival of the railroad has been in jeopardy in the past ten years mostly because operating revenue needed to cover the high cost of maintaining the grade through the unstable slopes of the Eel River gorge dropped along with the reductions in the volume of lumber shipped due to curtailed timber harvest levels. The Headwaters Forest Act as currently drawn might well be the straw that broke the camel's back on the railroad since the transfer of 44,000 acres to the national forest would again reduce timber harvest perhaps by as much as 40 million board feet per year, hence reducing the volume of freight carried by the railroad with an attendant loss of operating revenue. Such an event would cast the viability of harbor improvements and federal interest in that impending project in doubt.

Let me add a note about what I have called a problem of coexistence between the management of private forestlands and the national forests. First the national forest system, was created supposedly to prevent timber famine. This was done on the basis of the demonstrably false historical error that the private sector would not direct adequate investment capital into the production of standing timber. It is now obvious that the national forest system has become the cause rather than the prevention of timber famine in the U. S. But the way that the national forests are managed goes beyond this problem. Management is not subjected to the discipline of the bottom line as it is in the private sector. Thus, revenues flow from timber sales into the federal treasury, and the costs associated with the national forest program are derived from the treasury rather than from timber sales revenues. There is no connection between revenues and costs. As a consequence, the attempt by forest service bureaucrats to maximize their budgets is commonly replete with gold plated provisions involving costs that exceed benefits and revenues. But then the gold-

piated practices are held up as models that ought to be emulated in the regulation of private forestlands where managers cannot escape the realities of the bottom line. This has led to calls for eliminating private ownership of forestlands altogether so that all forests can become a comparable budget black hole. To me the alternative answer seems obvious—privatize the national forests as the only way to introduce efficiency and the discipline of the marketplace into the situation.

It could be argued that the publication of allowable cuts on the national forests in years past amounted to an implied contract. To reduce those allowable harvest levels summarily and unilaterally is tantamount to a contract violation. After all, investments in processing capacity and worker investments in homes were made in good faith on the basis of those published promises. The private collateral in these facilities have been drastically when federal agencies renege on previous commitments. All of these issues are a part of what I have called the coexistence problem. But I am far from the first person to note these difficulties. Members of the committee are urged to explore the philosophical issues involved in this matter. They could hardly do better in doing so to read two or so of Friedrich Hayek's books; The Road To Serfdom, published in England in 1944, and The Fatal Conceit: The Errors of Socialism, published by the University of Chicago Press in 1988.

One final point on the value of the proposed buyout, especially the Headwaters Grove of old-growth redwoods: From an economic perspective the buyout makes sense only if its value as parklands exceeds its value for the perpetual production of timber which market forces would provide for. If it doesn't, then it ought to be left for timber production in the private sector where it will be efficiently managed. If it does, then buying it out at the value of the asset in continuous timber production is a bargain. But one cannot have it both ways.

On closing let me quote from a Rudyard Kipling poem, "Pagett, M. P.":

The toad beneath the harrow knows
 Exactly where each tooth-point goes;
 The butterfly upon the road
 Preaches contentment to that toad.

Pagett, M. P., was a liar, and a fluent
 liar therewith,—

WOOD REGION LOGGING CONFERENCE

THE DESTINY OF THE CALIFORNIA TIMBER INDUSTRY IN THE NINETIES

By John H. Grobey, Ph.D. /
Humboldt State University

I recently completed a study entitled, *The Forest Products Industry and The California Economy*. This paper is extracted in part from a brief epilogue to that study, but here I carry the issues addressed there considerably further. The purpose of the study was to develop estimates of the economic impacts of imposing additional regulatory restrictions on forest land management that would result in reduced levels of timber harvest in California. This effort involved the development of improvements to an existing input-output model with respect to inter-industry linkages, and its adaptation to focus specifically on California's forest products economy.

Suffice it to say that the current and impending additions to timber harvest restrictions will have disastrous economic impacts on regions of the state that are heavily oriented toward the forest products industry. But instead of focusing on these impact estimates it is the purpose of this paper to deal with related matters of political economy which I believe are at least as significant, if not more so.

The economic impact estimates developed in the study represent costs. Reductions in employment, income, wealth, and tax revenues financing public sector activities that would follow from new restrictions. The benefits would be environmental enhancement, sometimes loosely defined, from which value accruing to the public would flow directly rather than through markets, as in the case of the costs. Developing estimates of the magnitudes of these benefits was beyond the scope of my study. However, some brief remarks about this omission may be helpful to those who have occasion to use the economic impact estimates.

Environmental benefits are largely personal and psychological in nature and they vary widely among people of different income levels. Estimates of their magnitudes are, therefore, at least partially arbitrary and partially reflective of the personal preferences of those who prepare them, rather than being based on observable and objective measures. In many cases environmental policy decisions are, by law, foreclosed from even considering economic consequences. Thus enormous costs may result from decisions taken for the sake of dubious environmental values.

Policy-makers generally recognize that disparities exist between the accuracy of estimates of economic costs on the one hand, and the more difficult-to-measure benefits of environmental regulations on the other. Moreover, environmental issues are by no means unique in this regard. A responsibility of policy-makers is to make decisions even though faced with such circumstances. It can only be hoped that some weighing of benefits and costs will be undertaken in reaching policy decisions.

An additional point needs to be raised about any benefit-cost framework used in appraising the desirability of environmental policies. Trade-offs between economic costs and anticipated environmental benefits that are apparent when a new regulation is adopted may be quite different from those that actually develop in the longer run. In other words, unanticipated economic and perhaps environmental effects may well occur.

At least since Adam Smith published his classical work on the wealth of nations, the central focus of economic analysis has been on a comparison of the social performance of various policies and their interaction with the institutional arrangements within which economic activity takes place. The explicit or implicit changes in the institutional arrangements under which forestry is practiced is an important trade-off in addition to that between the measurable economic impacts and the much more difficult-to-measure environmental benefits involved in more restrictive forest policy.

More regulation is almost certainly attended by more bureaucracy and

there may be unanticipated and undefined costs and other unintended and undesirable consequences of such changes. For example, more restrictive regulations in California may only succeed in "exporting" environmental problems to other regions that will be tapped as alternative sources of wood simply to meet the high levels of demand for forest products in California.

Forest policy governing private land management has been subject to policy failures that have poorly served their stated purposes. One example is confiscatory property tax policies during the 1930's, intended to raise revenues, that instead led to extensive land abandonment and removal of forest lands from tax rolls. These events are now largely forgotten, especially by the general public, and tax reforms have apparently corrected errant tax policy failures. But this lesson is worth reviewing in the deliberation of environmental regulations currently being proposed because these regulations may have similar results. Indeed, abandonment of private forest lands to public ownership may well be a central objective of the political opponents of logging. David Pearson, the Director of the California Department of Forestry in Governor Jerry Brown's administration made this point explicit during a symposium at Humboldt State University in 1979. One can well wonder whether things have changed.

Timber production requires the maintenance of investments in large, fixed capital assets. Trees take a long time to reach harvestable age. Consequently, tax burdens or elevated costs of environmental regulations might make private ownership impractical and uneconomical. Elevated costs may be tolerable until harvest if stands are already well-established. But it may be the case that even mature timber would be abandoned if the combination of outright cutting bans, higher logging costs, the costs of immediate reforestation required by law that may well occur naturally given a longer period of time, and timber taxes, result in zero or negative asset values.

An illustration of what might happen in this respect is the recent proposal by State Senator Barry Keene to place a bond measure on the ballot to purchase the headwaters forest. While he declared that the purchase price would probably be in the hundreds of millions of dollars, he also stated:

"Putting a price tag on Headwaters is tricky business, because the traditional measure of a forest's value is the lumber it can produce. If political, public and regulatory forces combine to prevent PL (Pacific Lumber Company) from logging Headwaters, the forest has no value as lumber." (Eureka Times-Standard, February 4, 1991.)

In other words, and followed to its logical conclusion, Senator Keene is saying that the state may not be obliged to pay anything for assuming fee title in the land by the power of eminent domain because it has already confiscated the land through regulations without paying a cent! He goes on to propose the negotiation of a selling price with PL officials presumably on some other, lesser basis for evaluation, perhaps offering token compensation.

Regulations which in the short run do not appear to have strongly adverse effects may in the long run prove to have serious consequences for the viability of private timber production. Short-run impacts on employment, income, wealth and tax revenues would therefore prove to be much larger over the long run.

Private timberlands that are rendered valueless for wood production by high-cost regulations will gradually revert to public ownership for reasons of tax delinquency. (The ad-valorem "bare-land-value tax" is sufficient to induce this effect.) This means that the collectivized, centrally-planned sector of forest-based economies will grow. Evidence from

March 1991. A paper presented to the 53rd annual Redwood Region Logging Conference, Ukiah, California.

Eastern Europe and the Soviet Union should convince us that public ownership is not an efficient institutional arrangement for the production of material goods and services, including wood. The Eastern European example also should convince us that centralized bureaucratic planning is not a useful means of promoting environmental quality. These countries are the most highly polluted in the world.

The National Forest system is an example of government ownership of the means of production of timber which is demonstrably inefficient as well as being highly vulnerable to political intervention. The costs of administering timber sales on the National Forests are orders of magnitude higher than in the case of similar operations on private lands, and sometimes exceed revenues. The bottomless pocket of the federal treasury enables this to happen. The discipline of the bottom line prevents it from happening on private lands. Legislatively-produced controversy and bureaucratic paralysis surrounding the administration of the National Forest system comes too close to the problems of the central-planning paradigm to be lightly dismissed.

Political debates over proposed policies tend to be relatively short-sighted. The imperative of elected officials is their next election campaign, and the electorate may not be able to associate adverse consequences appearing much later with earlier policies adopted for the sake of short-run political expediences. The electorate also appears often to be vulnerable to slick political propaganda. One needs only to count the number of times "the last redwood" has been "saved" to make the point.

Estimates of the short-run costs of policy changes derived from the input-output method of estimating economic impacts are obviously useful in the policy debates. Forest land owners who will bear many, but not all, of the costs of more restrictive environment regulations are understandably interested in responding to specific requests for impact estimates in defending their interest. But analysts that ignore possible longer-term consequences including those associated with changing institutional arrangements should be labeled clearly with the Marxist adage: warning.

A basic and unstated premise underlying forest policy in California (as well as elsewhere) is that the free, private market does not work efficiently in forestry and must therefore be replaced by comprehensive government planning. Policy-makers need to consider carefully whether government intervention predicated on this basic assumption is correct, namely: That alleged "market failures" readily can be corrected by substituting bureaucratic planning for the decentralized planning implicit in the market mechanism.

The citizens of the state have a strong interest in the preservation of private property rights. Opposing positions taken on the desirability of policies affecting private property rights often turn on a case-by-case determination of the incidence of the costs and the benefits, rather than on questions of economic efficiency (that is, whether the benefits outweigh the costs) or constitutional principles relating to uncompensated, *de facto* confiscation of private property. Redistributive consequences of more restrictive policies are examples of regulations that Richard Posner has called "the theory of indirect taxation." Legal precedents established denying the property rights of timberland owners might well be applied to other classes of property. The efficiency with which the market economy operates is seriously eroded if the suspension of private property rights through regulation is carried too far and might well become a double-edged sword.

Policy analysis that focuses on private property rights, their abuse through comprehensive regulation, and the implications for the economic system of doing so ought properly to be carried out in formulating policy changes. The rationale for public policy intervention into the operation of the timber industry and the conditions under which intervention can be expected to operate efficiently and in the public interest, need to be addressed. The prospect for a worsening of the situation rather than an improvement is a distinct possibility that cannot be ignored.

The set of social institutions for making economic decisions, (relating to the allocation of resources) is basically exhausted at two, namely: Either politics and its central planning mechanism, or the decentralized private planning mechanism inherent in the market. This is not to say that the market economy cannot bear some admixture of political regulation. But there is a level of regulation beyond which the essence of market mechanism is supplanted by state central planning rather than merely being adjusted or augmented for furtherance of some extra-market goal.

It is sometimes alleged that the preference for one or the other of these polar alternatives is purely "political," and thus is not a legitimate subject for for analysis. However, recent events still unfolding in centrally-planned economies around the world have provided evidence on the performance of political-economic planning relative to that of the market that can lead to only one clear and objective conclusion: Socialism doesn't work. Of course, government regulation of the economy in the

U. S. and California generally is nowhere near as intrusive as it is in the collapsing centrally-planned economies, but policy-makers should take heed of the dangers this collapse illustrates. A comparison of the incentives inherent in each system and the implications of the choice for efficiency and distributive equity is badly needed.

Flaws in the market mechanism are well-known to economists, having been exhaustively studied for more than two hundred years. In some cases the free market has been mis-identified as the culprit responsible for problems of economic performance when the true cause is really political failure. But often it has been assumed that political intervention is sufficiently justified by the mere identification of market flaws without pausing to compare them with flaws that inhere in the political substitutes for market mechanisms. Careful comparative analysis of political economizing mechanisms is relatively new, but it is clear that the choice between the two is not a choice between a deeply flawed market and a flawless political process. The choice is subject to objective comparison of their relative efficiencies on the basis of real evidence. Proper analysis also enables the implementation of public policy decisions so as to take forms which can minimize bureaucratic flaws which otherwise produce problems worse than the market flaws that intervention seeks to correct.

The attempt has been made in centrally-planned "command" economies to use input-output models or other sophisticated mathematical systems as a basic framework for comprehensive coordination of the activities of separate, linked sectors. But these attempts have generally failed precisely because the information and signalling functions performed by market prices cannot be simulated and accommodated within the IO framework, or for that matter by any model. Input-output analysis is useful in forecasting the impact of independent events, such as the impact of a change in final demand for the output of one or more "export-base" sectors, on the entire economic structure where the stakes in the robustness of the forecast are not too high and where approximations are sufficient. But neither this nor any other model can perform the task of central economic planning efficiently because the information requirements and the mathematics become unmanageably complicated long before they are sufficiently comprehensive to allow for its use in directing all economic activity. The collapse of the Soviet system bears witness to this point.

The irony of these recent events is that the experience of the world's centrally-planned economies do not seem to have registered in the United States. Milton Friedman recently observed that despite the evidence that central planning does not work and that the free market is a necessary (but perhaps not sufficient) condition for a free society, many in the U. S. assert the need for "industrial policy" that involves more government intrusion and the very mechanisms that the people of central and eastern Europe are now trying to abandon. It is not yet clear whether they will succeed against a deeply-entrenched bureaucracy and a truculent political elite. The appropriate level of government involvement in the economy and the full range of consequences flowing from more intervention is an issue that needs to be faced squarely by policy-makers. Economic impact analysis can serve as a starting point for the examination of these larger trade-offs involved in the direction that forest policy seems to be taking in California. But analysts also must address the political consequences of more government intrusion in a situation where regulation of forest practices is already among the most stringent in the world.

The political implications of more restrictive regulation of forest practices are well-illustrated by some recent comments made in a broader political context by economist Friedman, whose position on these matters is well-known and which has been thoroughly vindicated by the events in the "Soviet block" and elsewhere around the world. Writing for the University of Colorado, he said: "Conventional wisdom these days can be summarized in the form of a syllogism.

Major premise: Socialism is a failure. Even lifelong Communists now accept this proposition...

Minor premise: Capitalism is a success. Economies that have used capitalism — free private markets — as their principal means of organizing economic activity have proved capable of combining widely shared prosperity and a high measure of human freedom. A private market system has proved to be a necessary though not a sufficient condition for prosperity and freedom.

Conclusion: The U. S. needs more socialism. An obvious non sequitur, yet there is no denying that many apparently reasonable people... accept all three propositions simultaneously." Immediate economic impacts of current policy directions are important, but they may not be as important as the other social costs of the comprehensive changes in the system of political economy inherent in recent proposals for quantum changes in forest policy directed toward undermining free markets. We also have to face the irony that the National Forest system which was originally created to provide a reserve supply of wood needed because of allegations that the market would fail to do so, will in all likelihood (given recent trends) be totally unavailable for wood production.

But while the locking up of the National Forests against the production of timber for which they were intended will oblige dependence on the private sector for the supply of forest products, public policy will have so crippled private forestry that it may not be able to perform effectively. Such is the apparent destiny of the forest products industry in California in the Nineties, barring a change in the current political landscape.



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Sawmill jobs to be cut

Simpson to lay off 55 at Korbel facility

By Rowena Coates
The Times-Standard

ARCATA — About 55 people will lose their jobs in January, Simpson Timber Co. officials said Tuesday.

The Seattle-based company will not need so many workers after it scales back production at its Korbel sawmill and remanufacturing plant, General Manager David Kaney said.

Scheduled to be laid off are about 13 percent of 465 people on the company payroll.

"It's a natural step in the progression ... in the transition to its present long growth (timber)," Kaney said.

Simpson Timber Co. has been shifting from large, old-growth redwood to smaller, second-growth trees since it started operations in California in 1948, he said.

Now that the transition is almost

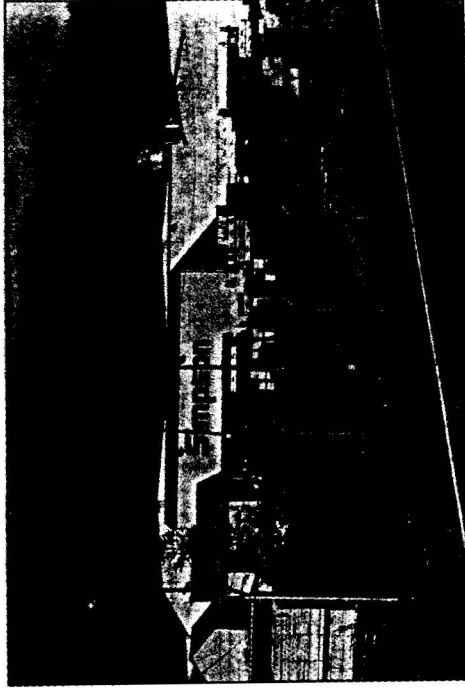
complete, he said, it is no longer cost-effective for the Korbel mill to operate its Heading, a saw designed specifically to cut larger logs.

Kaney said a shortage of timber is also a factor in the layoffs. Simpson Timber Co. owns about 380,000 acres of timberland in Humboldt and Del Norte counties. It supplements what it harvests on its own property with timber from other sources.

Logging restrictions have diminished the supply, Kaney said, making it difficult for the sawmill to operate at full capacity.

Located about 10 miles east of Arcata, the Korbel facility is the only sawmill owned by Simpson Timber Co. still operates in California. Kaney said it will continue operating at its current capacity until December, when it will close for regular maintenance.

■ See S400 Back of Section



Simpson's sawmill and remanufacturing plant at Korbel is the company's only sawmill in California. Cheryl Eager/The Times-Standard

SIMPSON: To lay off 55

FROM A1

In January, he said, the sawmill's annual production will drop from just more than 190 million board feet to slightly less than 160 million board feet.

The last major layoff that Simpson Timber Co. had was when its Arcata remanufacturing plant closed in 1988 following the shut-down of its Klamath sawmill, Kaney said.

Simpson Paper Co. — a sister company of Simpson Timber Co. — laid off 262 employees when its Fairhaven pulp mill closed at the end of February.

Kaney said employees were not happy when management broke the news to them Thursday, but that they understand the company has no choice.

"We certainly didn't have any outward hostility," he said.

Kaney noted that Simpson Timber Co. is growing about 40 percent more timber than it is harvesting, and said it should be able to step up production — and possibly start hiring again —



David Kaney

Natural transition step

shortly after the turn of the century.

Tougher laws on fishing sought by report