River. To protect the diminutive run of salmon, the Commission approved closures on the Sacramento River between Deschutes Bridge in Shasta County and the Red Bluff Diversion Dam from January 1 through June 30 and from the Red Bluff Dam to Knights Landing from January 1 through June 1.

Additionally, the Commission adopted provisions prohibiting salmon fishing in the Calaveras River and restricting recreational ocean salmon anglers to the use of single barbless hooks.

FUTURE MEETINGS:
To be announced.

BOARD OF FORESTRY
Executive Officer: Dean Cromwell
(916) 443-2921

The Board of Forestry is a nine-member Board appointed to administer the Z'berg-Nejedly Forest Practice Act of 1973. The Board serves to protect California's timber resources and to promote responsible timber harvesting. Also, the Board writes forest practice rules and provides the Department of Forestry with policymaking guidance. Additionally, the Board oversees the administration of California's forest system and wildland fire protection system. The Board members are:

Public: Jean Atkisson, Harold Walt (chair), Carlton Yee, Clyde Small, and Franklin L. “Woody” Barnes.

Forest Products Industry: Roy D. Barridge, Clarence Rose and Joseph Russ, IV.

Range Livestock Industry: Jack Shannon.

The Forest Practice Act requires careful planning of every timber harvesting operation by a registered professional forester (RPF). Before logging operations begin, each logging company must retain an RPF to prepare a timber harvesting plan (THP). Each THP must describe the land upon which work is proposed, silvicultural methods to be applied, erosion controls to be used and other environmental protections required by the Forest Practice Rules. All THPs must be inspected by a forester on the staff of the Department of Forestry and, where appropriate, by experts from the Department of Fish and Game and/or the Regional Water Quality Control Boards.

For the purpose of promulgating Forest Practice Rules, the state is divided into three geographic districts: southern, northern, and coastal. In each of these districts, a District Technical Advisory Committee (DTAC) is appointed. The various DTACs consult with the Board in the establishment and revision of district forest practice rules. Each DTAC is in turn required to consult with and evaluate the recommendations of the Department of Forestry, federal, state and local agencies, educational institutions, public interest organizations and private individuals. DTAC members are appointed by the Board and receive no compensation for their service.

MAJOR PROJECTS:

Hardwood Resources. Two Board-commissioned reports on California hardwood resources were recently completed and presented to the Board. These reports are entitled Status of the Hardwood Resource of California and Policy Options for California’s Hardwoods.

Since 1981, the Board has attempted to determine the extent of information available on hardwood resources within the state in an effort to analyze the impact of conversion of the hardwood forests to other uses. Earlier studies found that hardwoods are often seen as unwanted vegetation in the way of urbanization and agricultural and range improvements. As with any resource, hardwoods can tolerate only so much use and conversion before detrimental effects on the species are observable. Questions raised by previous studies about the loss of wildlife habitat, degradation of soil and water quality, and regeneration problems in the species led to the Board's request for these two latest reports.

Status of the Hardwood Resource of California is an analysis of current knowledge of the extent and condition of the hardwood resource, and the various practices and attitudes concerning resource utilization. This report was compiled with the cooperation of the Departments of Forestry and Fish and Game, the University of California and the State University systems, and the U.S. Forest Service (USFS). Five factors are brought to the Board's attention in this report:

1. Hardwood rangeland is primarily being converted for intensive agriculture and residential/commercial development. County governments bear responsibility for land use decisions, but treatment of the effects of conversion is not uniform, and the extent of this conversion remains unknown.

2. Range modification continues but at a much slower rate than in the past, due to the depressed state of the livestock industry. Livestock producers generally value their hardwoods as a resource which aids in livestock production and enhances property values. However, firewood cutting on hardwood rangeland is believed to be on the rise, though the extent is unknown.

3. Conversion of hardwoods to conifers continues with concerns being raised about the effects on wildlife habitat. No monitoring method exists to analyze the regional effects of these conversions. Hardwoods are viewed as a substantial obstacle to full utilization of conifer lands for softwood production. Because it is more profitable to clear hardwoods and plant conifers, no significant hardwood saw timber or furniture grade lumber industries have emerged in California. California's furniture industry, the nation's second largest, relies on imports for its lumber. Research is needed to determine the feasibility of utilizing the state's own hardwoods for wood products.

4. With the exception of deer, changes in wildlife populations remain insufficiently documented to enable quantification of the loss of wildlife related to the removal of hardwoods on conifer or hardwood rangelands. Evidence is available, however, which indicates a strong relationship between available hardwood habitat and the number of wildlife species and their productivity. There is no doubt that continued conversion of the hardwood range resource will increase the pressure on numerous wildlife species, especially deer.

5. While the factors in the success or failure of hardwood regeneration are complex, it is clear that the valley oak, Engelmann oak, and blue oak species are not regenerating well. The causes of this decline in regeneration are not sufficiently understood. Studies on overall hardwood regeneration are warranted.

The Status report contains comprehensive information on the five factors, and recommendations for future Board action. One of the first actions suggested is that the Board declare hardwoods to be a commercial species, thus bringing them under the jurisdiction of the Forest Practice Act.

The Policy Options report, prepared by Board staff, draws upon information supplied in the Status report to make policy recommendations to the Board. From a policy perspective, two points emerge from this analysis. First, enough information has been obtained since 1983 to identify trends warranting Board attention. Secondly, much is still un-
known about the hardwood resource and its use.

According to this report, the two most significant forces at work on the hardwood resource are the continuing pressure of urbanization and the troubled economic state of the timber and livestock industries. If these trends continue, the hardwood resource will continue to diminish.

The following general recommendations are suggested by the staff for Board consideration:

1. The hardwood resource should be protected and enhanced on both conifer and hardwood rangelands, including preservation of soil and water quality, achievement of sufficient habitat diversity statewide to protect critical wildlife species, and regeneration of all hardwood species.

2. Range and timber stand improvement can continue, but should be sensitive to environmental considerations. Additional sources of income should be made available to landowners through improved utilization, development of new markets for products from species that are regenerating well, and programs to compensate landowners for leaving hardwoods.

3. Conversion to intensive agriculture and residential/commercial development can continue, but should be directed away from environmentally sensitive areas, should avoid serious damage to wildlife, and should not interfere with the ability of landowners to manage their land economically.

4. Governmental involvement in land management decisions of private landowners should be minimized, and insofar as possible, supportive of their needs. Governmental agencies on all levels should coordinate with each other and with private landowners in their management goals and practices.

Basically, the staff report firmly recommends the establishment of the Board as the agency with primary jurisdiction over harvesting of hardwoods. Counties would be prohibited from regulating hardwood removal without Board approval. A regulatory scheme should be adopted to establish a framework from which to monitor harvesting. Requiring conversion permits would lead to regional analysis of changes in land use. Additional specific regulations are outlined in the text of the report.

**Forest and Rangeland Research.** Previously, the Board asked its Advisory Committee on Research Programs to develop recommendations to help the Board meet its responsibility to determine state needs for forest management research. Recently, the Committee presented its findings to the Board.

Major concerns identified by the Committee include the lack of current forest and rangeland research, inadequate funding to conduct the necessary research, and insufficient coordination among research organizations and users. The legislature and the Governor have provided the Board with broad authority to promote and monitor research activities. The Committee makes the following recommendations to aid the Board in meeting its responsibilities:

1. The Board should establish an ongoing Research Inventory Program to provide complete and timely information on current forest and rangeland research projects. Funding for this program should be provided by the major research organizations and the Board. The Committee recommends that the UC Wildlands Resources Center be considered to conduct the program.

2. The Board should develop a Needs and Priorities Process, whereby periodic reviews of statewide research needs are repeated at set intervals. The process should consist of research inventories, trends analysis, and identification and prioritization of needs based on user workshops, expert panels, Committee review, and Board approval.

3. A procedure which directs an active flow of information between and among researchers on current and planned research must be implemented by the Board. Program Advisory Committees should be charged with following the progress of research activities in broad program areas where the Board has regulatory powers. These Committees would also make direct contributions of funds or establish the framework through which funds are made available.

Communication would be further enhanced by expanding the USFS/UC WESTFORNET database computer system to increase public access to computerized and printed publication lists. Board promotion of the publication of periodic summaries of recent research findings in comprehensible language, and identification of user audiences with conjunctive programs to reach that audience is recommended. The addition of a communications professional to the Board or Department of Forestry staff to improve the communication and reporting of Board and Department activities, and to produce a professionally-styled, quarterly publication is also suggested.

4. The Board should establish a Forest and Rangeland Research Account to support high priority projects which do not qualify for funding from existing accounts. Those who benefit from research should take a more pronounced role in the funding. Thus, this account should include contributions from existing state resource-based income, such as tidelands oil royalties, geothermal leases, and state forest receipts. New timber yield or severance taxes should be employed along with solicitation for contributions from forest industries, environmental groups, and private foundations.

**Disciplinary Guidelines Adopted.** In October the Board adopted regulations changing the language of sections 1611.1 and 1611.2, Title 14 of the California Administrative Code. The new regulations deal with disciplinary guidelines to be used in the suspension or revocation of a Registered Professional Forester's (RPF) license. The new language clarifies requirements regarding the Board's notification of clients or employers of disciplinary action of RPFs, and the respondent's reporting of changes to the Board during the period of a stayed disciplinary order. The sections are to be renumbered to 1612.1 and 1612.2.

The regulations specify penalties to be applied to those convicted of a felony as defined in Public Resources Code sections 778(a) and 778.5, and to those found guilty by the Board of fraud, deceit, misrepresentation, or gross negligence in his/her practice. These penalties range from revocation of the license (maximum for felony conviction) to suspension or revocation stayed on specified conditions.

Newly-adopted section 1612.2 deals with the Board's responsibility to provide public notice of the suspension or revocation of a registration or certification. It requires the respondent to provide to the Board a complete list of all business and/or client names, addresses, and phone numbers with whom a current contractual or employment relationship exists. The regulation requires the respondent to continue to submit any new names over the duration of the stayed order. The Board will then notify each business and/or client submitted, or at its discretion require respondent to notify them, with Board-approved language and proof of notification, of the offense(s), findings, and discipline imposed.

**LITIGATION:**

Five lawsuits aimed at stopping timber operations and the processing of timber...
harvesting plans (THP) in Santa Cruz, Santa Clara and Mendocino Counties were recently decided. The suits alleged that the Forest Practice Act and rules are unconstitutional and that the Department of Forestry's THP review process is not in compliance with the California Environmental Quality Act (CEQA). The constitutional issues involve the public's right to appeal a THP, adequate public notice, and adequate review procedures. The non-compliance issues involve allegations of improper consideration of cumulative effects.

The trial courts in County of Santa Cruz v. Partain, Lexington Hills Association v. State of California, Libeu v. Johnson, Laupheimer v. State of California, and Environmental Protection Center, Inc. (EPIC) v. Johnson found that the Forest Practice Act and the challenged rules of the Board are constitutional, and are in compliance with CEQA. Appeals have been filed in all of these cases.

RECENT MEETINGS:
At its October 8 meeting in Monterey, Dr. Yee presented the Research Advisory Committee's report on forest and rangeland research in California. Board Chair Walt commented that discussions to arrange for schools involved in forestryletto coordinate and integrate their programs are ongoing. These discussions may lead to the creation of a School of Forestry or major Department of Forestry Studies at one institution. Presently, forestry studies are included as part of the school's agriculture departments. Establishing a School of Forestry would allow for concentration of research funds and coordination of all state forestry education. Chairperson Walt further stated that two professors at UC Davis specialize in logging engineering. Walt believes that this type of research must be supported, and that forest engineering education and research should be recognized as important to the industry, the Department of Forestry, and the Board.

The Board also appointed Roberta K. Smith-Evernden to fill the public member vacancy on the Southern District Technical Advisory Committee (DTAC). Ms. Smith-Evernden was recommended by the nominating committee because of her experience and expertise in geology. Board member Atkinson questioned whether DTAC members should reside in the districts they represent. No Board rule requires such residency, but Ms. Atkinson suggested that the nominating committee keep residency in mind in future considerations.

The Board's November 15 meeting was held in conjunction with Cal Poly State University's symposium on "Multiple-Use Management of California's Hardwood Resources" in San Luis Obispo. Extensive time was dedicated to hearing public comments on the two hardwood reports (see supra MAJOR PROJECTS). The Department of Forestry reported to the Board that 1986 proved to be a very safe year for fire control. Through November 3, the Department attacked 7,920 fires which burned a total of 44,817 acres. This sets a new ten-year record low. The previous low year for the ten-year period was 1982, when 80,000 acres were burned by 7,936 fires.

FUTURE MEETINGS:
To be announced.

WATER RESOURCES CONTROL BOARD
Executive Director: James L. Easton
Chairperson: W. Don Maughan
(916) 445-3085

The Water Resources Control Board, established in 1967 by the Porter-Cologne Water Quality Control Act, implements and coordinates regulatory action concerning California water quality and water rights. The Board consists of five full-time members appointed for four-year terms. The statutory appointment categories for the five positions ensure that the Board collectively has experience in fields which include water quality and rights, civil and sanitary engineering, agricultural irrigation and law.

Board activity in California operates at regional and state levels. The state is divided into nine regions, each with a regional board composed of nine members appointed for four-year terms. Each regional board adopts Water Quality Control Plans (Basin Plans) for its area and performs any other function concerning the water resources of its respective region. All regional board action is subject to state Board review or approval.

Water quality regulatory action includes issuance of waste discharge orders, surveillance and monitoring of discharges and enforcement of effluent limitations. The Board and its staff of approximately 450 provide technical assistance ranging from agricultural pollution control and waste water reclama-

tion to discharge impacts on the marine environment. Construction grants from state and federal sources are allocated for projects such as waste water treatment facilities.

The Board administers California's water rights laws through licensing appropriative rights and adjudicating disputed rights. The Board may exercise its investigative and enforcement powers to prevent illegal diversions, wasteful use of water and violations of license terms. Furthermore, the Board is authorized to represent state or local agencies in any matters involving the federal government which are within the scope of its power and duties.

LEGISLATION:
AB 3500 (Hayden), which has been signed and chaptered, requires the Water Resources Control Board (WRCB) to formulate, adopt, and periodically review a water quality control plan for ocean waters to be known as the California Ocean Plan. The bill requires the Board to develop and adopt bioassay protocols and complimentary chemical testing methods to be used by specified entities in the monitoring of complex effluent ocean discharges.

AB 3506 (Hayden), signed by the Governor on September 30, requires any person causing or permitting the discharge of sewage or a hazardous substance to notify the WRCB or the appropriate regional water board in addition to the Office of Emergency Services.

AB 3823 (Leonard), which has been signed and chaptered, provides that guidelines adopted by regional water boards aimed at prevention and abatement of water pollution are ineffective until approved by the WRCB. Under previous law, each regional board was required to submit a regional water quality control plan to the WRCB, and the guidelines were effective prior to approval by the Board.

SB 1817 (Morgan). Existing law requires every person who digs, bores, or drills a water well or cathodic protection well, or abandons, destroys, or deepens any well to file with the Department of Water Resources a notice of intent to engage in such activity, and to file a report of completion. SB 1817, which was signed by the Governor on September 29, adds monitoring wells to the list of wells for which notices and reports are required.

LITIGATION:
In the Matter of Hallett Creek Stream Systems, 86 D.A.R. 4001, No. 3 Civ. 24355 (December 5, 1986). In December,