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STATE WATER ISSUE

New CVP Water Guidelines

Feds tie 800,000 AF of CVP water to fish doubling plan and Bay-Delta Accord.

In September, the Bureau of Reclamation and the U.S. Fish and Wildlife Service released their "white paper" for managing the 800,000 acre-feet of Central Valley Project water set aside for fish and wildlife under the CVP Improvement Act. Though the agencies have solicited comments on the white paper's guidelines, it's expected they will be issued in final form about the first of November, as is.

While the new guidelines clear up some past confusions regarding the 800,000 AF, except in the wettest of years, CVP contractors can expect little relief from the uncertain year-to-year fluctuations that have plagued CVP deliveries ever since the CVPIA became law.

Management of the 800,000 AF will primarily support the goals of the Anadromous Fish Restoration Program (AFRP) — a provision of the CVPIA that requires doubling

the average populations of anadromous fish in Central Valley streams from those levels during the period 1967-1991.

The approach to achieving the doubling goal as described in the plan is to combine all water movement of the CVP with the 800,000 AF and to acquire additional needed water so as to create a higher level of "fish friendly" water flows in Central Valley streams.

According to the plan this will involve:

- 1) Reoperation of the CVP to provide fishery flows at minimum or no risk to project contract deliveries.
- 2) Dedication of the 800,000 AF specifically to support the doubling goals.
- 3) Acquisition, including purchase, of water at times when the doubling goals cannot be met

see CVP Water Plan page 8

Poll Shows Public Supports More Dams & Reservoirs

A recent survey by Charlton Research of San Francisco reveals Californians overwhelmingly support new construction of dams and reservoirs to expand the state's water supply and don't understand why such improvements have not already been made.

Three-quarters of those polled say California's long-term water supply is a serious problem, while 79% favor improving the state's water storage and delivery system so more water can be captured, stored and delivered.

Also, 90% believe California needs a sufficient, reliable and affordable water supply to maintain a strong economy — 80% see a link between a healthy environment and California's water supply.

The survey revealed that residents believe a chronic water shortage might occur in the next 20 years, and expressed overwhelming support for new facilities to head it off.

While Californians have a general interest and concern about water issues, they are less knowledgeable about specific topics.

For example, just 3% say they have read or heard anything about the Sacramento-San Joaquin Delta. Asked what percentage of Californians receive their water from the Delta, half the respondents say they do not know — of those who have an opinion, the response is 39% of the state receives its water from the Delta. The actual number is approximately two-thirds of California's 32 million people.

Nearly 60% agreed that new urban development or construction should be approved only if the project has an existing and reliable water supply.

Preferences for new construction was stronger in Southern California and the Central Valley. However, even the San Francisco Bay Area responded with 75% in favor of new facilities.

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Congress to Raise Hetch Hetchy Fees

The House Natural Resources Committee has approved legislation that would dramatically raise the fee San Francisco pays the U.S. government for the right to operate its Hetch Hetchy water and power operations on federal land in Yosemite National Park.

The provision is part of the huge GOP deficit-cutting reconciliation bill which aims to balance the federal budget by 2002. The seven-year bill was approved in committee by a vote of 25-12 and would reconcile current federal law with new budget targets that seek savings in nearly every government program.

If passed, the House proposal would raise San Francisco's bill for operating Hetch Hetchy from the \$30,000 the city has been paying since 1913 to \$8 million each year.

Republicans contend San Francisco has been enjoying a huge subsidy for its water and power and that it should end. In a move to get environmentalists and California Democrats to support the bill, language was added that would place the funds in a separate account to be used primarily for the operation of Yosemite National Park and to fund other national parks in California.

A competing bill, introduced by the Senate Energy and Natural Resources Committee, would charge the city only \$597,000 a year.

The Senate proposal is based on a formula used under the Federal Power Act. Under the act, most municipalities and private companies that operate hydroelectric facilities on federal land must pay a fee to the federal government. Because the deal between San Francisco and the federal government was created by an act of Congress that predated the Federal Power Act, San Francisco has not been subject to the FPA formula. According to the formula, which is administered by the Federal Energy Regulatory Commission (FERC), the annual fee for Hetch Hetchy would be about \$597,000.

In a recent fact sheet, San Francisco has come out in support of the Senate fee. Although the \$597,000 is a 1,900% increase from what they're now paying, it's far less than the 26,000% increase proposed by the House.

Background on Hetch Hetchy

In 1913, Congress passed the Raker Act which allowed San Francisco to develop water storage and power generation facilities on the Tuolumne River in Yosemite National Park for an annual fee of \$30,000.

Hetch Hetchy Water & Power is operated by the San Francisco Public Utilities Commission which also operates the San Francisco Water Department. HHW&P supplies drinking water to more than 770,000 San Francisco residents and wholesales water to 30 Bay Area suburban water districts that serve an additional 1.6 million residents.

HHW&P also provides electric power for all S.F. municipal uses, the Muni Railway and S.F. International Airport. Remaining power is sold at cost to the Modesto and Turlock Irrigation Districts under long-term contracts.

Impact on the Bay Area

S.F. Mayor Frank Jordan and city representatives are lobbying in favor of the Senate proposal saying the \$8 million House proposal will result in millions of dollars in power and water rate increases for their customers.

Turlock and Modesto Irrigation districts reported the fee increase wouldn't have much affect on the cost of power they get from Hetch Hetchy.

The city argues that in addition to the \$30,000 for rent for Hetch Hetchy, San Francisco contributes over \$1 million a year to Yosemite National Park for maintenance. Also, they're currently paying over \$3 million to rebuild the sewer system that serves the Tuolumne Meadows area of the Park.

S.F. is an upstream junior water rights holder on the Tuolumne River and, under the Raker Act, is required to recognize prior water rights of Modesto and Turlock Irrigation districts. According to the fact sheet, as a result of recent FERC led mitigation, S.F. anticipates paying at least \$3.5 million each year for environmental mitigations on the Tuolumne River.

A spokesman for the mayor said, "The city is doing everything we can right now to avoid what we feel is essentially punishment for being San Francisco." An article in the Chronicle claimed the House proposal is in part sweet revenge by the Republicans against political opponents, such as Rep. George Miller, who have historically attacked federal water use by Central Valley farmers.

Both the House and the Senate must first pass their reconciliation bills, which will then go to the House-Senate conference committee to work out the differences. It's been suggested the annual Hetch Hetchy fees will ultimately land somewhere between \$3 million and \$8 million.

Senate Introduces SDWA Bill

The long-awaited Senate version of a bill to amend the Safe Drinking Water Act was introduced by Sen. Dirk Kempthorne (R-Idaho) this month. The bill has bipartisan support from Republican John Chafee, chairman of the Senate Environment and Public Works Committee, and ranking Democrat on the committee Max Baucus.

The bill, S 1316, is endorsed by the American Water Works Association, Association of Metropolitan Water Agencies, Association of Safe Drinking Water Administrators National Governors Association, U.S. Conference of Mayors, National Association of Counties and National League of Cities.

Highlights of the Senate bill are:

- **Risk Assessment.** Requires the EPA to conduct benefit-cost analysis before proposing drinking water regulations for maximum contaminant levels (MCL) or treatment standards.

- **Contaminant List.** Like the House bill, repeals the current mandate that EPA name 25 new contaminants every three years whether or not they pose a health risk. Directs EPA to compile a list of contaminants based on risk and occurrence by July 1, 1996 and develop a research plan for each. Allows EPA to complete regulations for 12 disinfectants and disinfectant-byproducts, the Enhanced Surface Water Treatment Rule and Cryptosporidium.

- **Standard Setting.** Except for disinfectants, disinfectant-byproducts and Cryptosporidium, allows EPA to set standards at levels less than technologically and economically possible if benefits would not justify the costs of systems to comply.

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Allows EPA to set an MCL goal at a level higher than zero if there is a threshold below which cancer risk is unlikely. Promotes peer-reviewed science in EPA standards setting.

- **State Revolving Fund.** Creates new SRF for drinking water and provides \$1 billion per year through 2003 to help public water systems comply with the SDWA. SRF funds are provided to states which are then authorized to make loans to public water systems for capital improvements.

Arsenic & Radon. Delays the deadline for revising the MCL for arsenic until 2001. Establishes an MCL for radon at 3,000 picoCuris/liter.

The bill is supported by a coalition of Republicans and Democrats on the Senate Drinking Water, Fisheries and Wildlife subcommittee as well as the Clinton Administration. EPA Administrator Carol Browner said, "The way we guarantee safe water for Americans is broken and needs to be fixed. Well this bill fixes it, ensuring that when every American turns on the tap, they won't get sick from their water."

Former Reclamation Chief Turns Lobbyist

In case you're wondering what Dan Beard is up to since he left his job as commissioner of the Bureau of Reclamation, he's now a lobbyist.

The controversial Beard who took over the Bureau 2 1/2 years ago with the goal to change it from the nation's premiere water resources development agency to a water resources management agency, now co-leads a firm whose clients have included customers of the Central Valley Project.

As commissioner since 1993, Beard supervised the agency he once said should be abolished and wrote the 1992 CVP Improvement Act which changed forever how the federal government manages water in California.

"I'm sort of testing the waters," Beard said. "I'll be doing lobbying work and consulting, working and seeing what possibilities are out there." Beard left his job at the Bureau in order spend more time with his family.

His new partner, John Freshman, has previously represented Sacramento on

Wilson Signs Water Supply Law

For the first time in California history, developers of large projects will have to assure an ample supply of water is around before they can start building.

Gov. Pete Wilson has signed into law SB 901, the bill by Sen. Jim Costa (D-Fresno), that integrates water-supply planning into the land-use planning process.

Until the most recent amendments, the bill was opposed by the California Chamber of Commerce, the California Business Industry Association, the California Business Properties Owners and the California Supervisors Association.

Principal backing for SB 901 came from the California Farm Bureau. Supporting the legislation were the League of California Cities, the Association of California Water Agencies, the Western Growers Association and the California Cattleman's Association. Also supporting it were the East Bay Municipal Utility District and the Metropolitan Water District of Southern California.

The law imposes a new requirement on any city or county approving a new development of 500 or more houses or hotel rooms or business employing more than 1,000 people. As part of the environmental impact report (EIR), officials would have to ask the local water supplier to identify sources of water for the new project — plus existing customers — for the next 20 years. It would not prevent cities from approving developments, only force them to confront

the water issue.

The law will not apply to all developments. Three criteria have to be met before the law kicks in:

- The project, when finished, would have to consume water equivalent to that used by residents of 500 single-family homes.

- The proposed project would have to be large enough to require an environmental impact report.

- The project would have to require an amendment to a general plan or a specific plan.

Around the state, 110 new towns or large subdivisions — as well as 44 golf courses — are currently on the planning maps. These would add over 2 million people, increasing the state's urban population by nearly 10 percent. Of these, the 80 that have already been approved will house about 1.5 million residents who will require an estimated 486,000 acre-feet of water per year.

At the same time, the Department of Water Resources is predicting severe water shortages over the next 20 years.

The new law is intended to help slow down what state planners have called California's out-of-control sprawl, but some are questioning whether or not it will be effective. The state legislature may have more work to do — already there's talk that developers are making plans for submitting plans for 499 units or less at a time for new projects.

California Fluoridates

Gov. Pete Wilson has signed Assembly Bill 733 by Assembly Member Jackie Speier (D-Burlingame) that mandates fluoridation of drinking water systems with 10,000 or more service connections.

"Fluoridation of drinking water is recognized as a safe, effective method of reducing tooth decay on a community scale," Wilson said at the signing.

The new law, administered by the Department of Health Services, will take effect January 1. DHS is to develop a regulation for minimum and maximum levels of fluoride for drinking water by January 1, 1997.

Water systems of 10,000 or more service connections are to provide DHS with an estimate of the cost to install fluoridation treatment by July 1, 1996. Currently, 17 percent of Californians receive fluoridated water. San Francisco, the East Bay Municipal Utility District and Long Beach have

been fluoridating their water for years. Major cities in California without fluoridation include San Diego, Los Angeles, San Jose and Sacramento.

Systems will not be able to use funds from ratepayers, shareholders, local taxpayers or bondholders to pay for installing fluoridation equipment or ongoing fluoridation treatment. These funds must come from donations or federal grants. The program is estimated to cost about \$45 million statewide to start up and \$5 million for operations each year. In any year a system is not provided funding for operation and maintenance costs from sources other than its own usual funding sources, that system does not have to continue to fluoridate.

The California Dental Association and other medical groups praised the new law as an important first step in preventing cavities in California children.

IID and SDCWA Sign Water Pact

The Imperial Irrigation District and the San Diego County Water Authority have signed a memorandum of understanding (MOU) under which IID would allow growers in the district to sell their excess water to SDWCA.

The San Diego region uses about 500,000 acre-feet of water per year, nearly 90 percent of which is purchased from the Metropolitan Water District of Southern California. SDWCA is MWD's largest wholesale customer, using about 20 percent of MWD's annual exports.

San Diego users are attracted to IID water because it could cost them much less than the \$400 to \$600 an acre-foot they currently pay for MWD water.

IID, one of the state's oldest water agencies, has a permanent entitlement dating from 1911 to about 3.85 million acre-feet of water from the Colorado River. IID estimates that about 500,000 acre-feet of that water could be transferred out of the district.

Earlier this year, IID issued their basic policies on how landowners could conserve and transfer water and protect Imperial Valley water rights. All transfers are to be voluntary and all title and ownership of water rights to marketed water will remain with the district.

IID uses about 2.85 million acre-feet of their river entitlement per year, thus has additional water rights in reserve. The largest portion of IID's Colorado River rights are senior rights, called Present Perfected Rights, amounting to about 2.6 million acre-feet a year. These are ahead of most other rights in the Lower Basin States including the rights held by MWD, Coachella Water District, Nevada and most of Arizona.

State and federal laws and agreements, including a decision by the U.S. Supreme Court, protect IID's senior rights and according to the district, the rights will not be jeopardized if water is sold outside the district.

Reaction to Deal

Although transfers of IID water are still in the far off future, concerns have been raised by some of the valley's growers as well as from MWD.

To describe some of the grower's reaction to the idea of selling valley farm water to urban users in San Diego as a high-stakes, high-emotion drama might understate the situation.

Some are comparing it to the Owens Valley in the early part of this century where landowners were persuaded to sell their water so it could be pumped

off to Los Angeles. Farms in Owens Valley eventually dried up so that Los Angeles might grow.

At the center of the controversy are the four Bass brothers from Fort Worth, Texas who have purchased 30,000 acres in the Imperial Valley.

The brothers are publicity-shy reclusives and are known for quickly becoming major players in high-stake ventures. They have major holdings in farming, oil, cattle, hotels, real estate, the stock market and the savings and loan industry. Among their ventures was a takeover bid for Marathon Oil in which they ended up with a \$160 million profit. To prevent the takeover, Texaco had to buy them out for \$450 million. In another, one brother is credited with saving Walt Disney Co. and installing Michael Eisner as boss.

A spokesman for the brothers has been telling residents of Imperial Valley that the Bass brothers did not start buying land in the valley to turn a quick profit through water sales. He says they want to farm and raise cattle, as well as participate in any water-marketing plan that the IID board devises.

Growers worry that water sales will incite some to follow their fields in order to make big profits on water. Details of how water sales will work have not been determined but one idea is that only landowners who voluntarily agree to be part of the marketing plan would be asked to cut back on their water use and would split their profits with IID.

One issue yet to be resolved is whether IID has the power to block a landowner — such as the Bass brothers — from following part of their land to get a split of the water-sales profits.

MWD is concerned it could lose its biggest customer. With 500,000 acre-feet of excess water available, IID could easily supply more water than what San Diego currently buys from MWD.

MWD staff cautioned San Diego delegates that much of MWD's current \$4.7 billion capital improvement program, part of it to benefit San Diego, might have to be cut back if they start importing water from the Imperial Valley. These projects include the \$2 billion Domenigoni Reservoir in Riverside and a \$900 million pipeline to the State Water Project.

MWD has halted a \$6 million contract to design a new pipeline into San Diego until SDCWA decides whether to proceed with the IID water transfers.

flood control issues, the Contra Costa Water District, Anheuser Busch and the Los Angeles County Sanitation District. The firm has been renamed Freshman Beard Inc.

Federal ethics laws prohibit Beard from trying to influence his old agency for two years. He said that's not the only reason why he'll be staying away from Bureau business.

This is Beard's third time around the lobbying track. After a stint in the Carter Administration's Interior Department, he became a lobbyist in the early 1980s. In the mid 1980s he joined another lobbying firm before being hired by Rep. George Miller.

EPA Blasts Auburn Dam Proposal

In a report to the U.S. Army Corps of Engineers, the Environmental Protection Agency contends that construction of the Auburn Dam is "environmentally unacceptable" because it could destroy up to 1,369 acres of the American River canyon and affect whitewater rafting on 39 miles of the north and middle forks of the American River.

While EPA does not have veto authority over the project, its opinion could be a factor in the local decision of whether or not to build the dam and could affect future civil lawsuits to block construction if it is approved.

The EPA report urged the Corps and the Sacramento Area Flood Control Agency to select one of the other two alternatives to protect the Sacramento area from potential floods. The two other alternatives involve enlarging Folsom Dam, reoperating Folsom Dam to reserve more space for floodwater and raising levees along the lower American River. The EPA report also criticized these proposals.

The Corps disagrees with the EPA's findings. The Corps has not made a recommendation on one of the three options yet, but says that environmental damages from the proposed dam can be offset by purchasing and managing a similar ecosystem further upstream.

SAFCA, which will share the decision with the Corps and the state flood agency, has delayed its recommendation until sometime in November.

Grasslands Bypass Project to Reopen San Luis Drain

Bureau of Reclamation will test a new drainage program for two to five years.

The U.S. Bureau of Reclamation has plans for reopening of a 28-mile section of the San Luis Drain in order to improve the drainage of salt and selenium laden water from farms on the west side of the San Joaquin Valley into the San Joaquin River.

The uncompleted San Luis Drain was closed in June 1986 after selenium in agricultural drainage water was linked to dead and deformed birds at Kesterson wildlife refuge. Construction of the drain began in 1968, but was halted in 1975 when funds ran out and environmental concerns over the Delta surfaced. The drain would have transported the used agricultural water from the west side to the western Delta, then flow out to San Francisco Bay and, ultimately, the Pacific Ocean. When halted, only 85 miles of the planned 290-mile drain was completed, terminating at Kesterson.

Late last year, a federal court ruled that failure of the Bureau to provide drainage for west side farmers as originally planned was a violation of the San Luis Act and ordered the Bureau to proceed with its application for a permit to discharge the tainted water in the Delta.

The Grasslands Bypass Channel Project is a five-year pilot program being conducted by the Bureau, San Luis Delta-Mendota Water Authority and Grassland Water District.

Currently, agricultural-drainage water is disposed of by transporting it to the San Joaquin River via one of two canals that run through state and federal refuge areas. When one canal is carrying drainage water to the river, the other is carrying fresh water for the wetlands. The system is then switched around so the wetlands along the other channel can get fresh water.

The Grassland Water District has had to managed this switching program since 1985 when drainage water could no longer be used as a wetlands water supply. But it's now feared that residual selenium could be moving up through the soil in the wetlands. Up to 25% of the selenium is somehow lost in the wetlands. The use of the San Luis Drain will allow the drainage water to bypass the wetlands and flow directly into the San

Joaquin River.

According to the Bureau, the bypass will provide a temporary experiment station for scientists to evaluate selenium changes and also see if a single regional drainage channel will help improve water quality in the San Joaquin River.

The use of the bypass channel would be on a two-year use agreement that could be extended an additional three years if certain environmental conditions are met.

The project includes a system of selenium load targets and penalties for exceeding the targets to be administered by six water districts within the San Luis Delta-Mendota Water Authority. A committee made up from state and federal agencies will monitor and oversee the project.

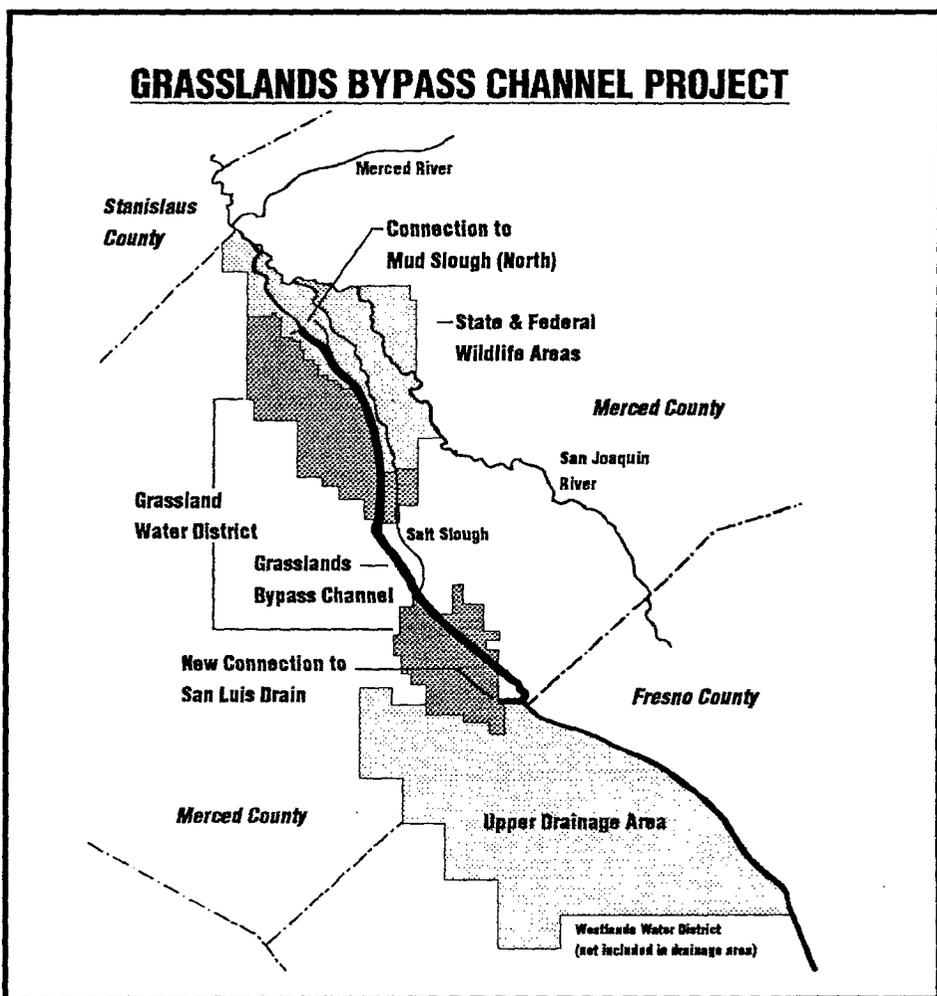
The districts must make sure the

drainage stays within recent average selenium load levels in the first two years (6,660 pounds per year) and then make reductions of 5% annually over the following three years. If limits are exceeded, the committee can charge the districts monthly fees of \$700 to \$20,800 and annual fees of \$25,000 to \$250,000.

Grasslands Water District supplies water to private, state and federal wildlife wetlands that annually host almost a million waterfowl and migratory birds.

According to General Manager Don Marciochi, the current drainage system interferes with Grassland's ability to provide clean water to the Los Banos and Volta state wildlife areas and the Kesterson National Wildlife Refuge.

"We've been trying for 10 years to manage this drain water," Mariochi said.



House Panel Approves ESA Amendments

House Resources Committee Chairman Don Young (R-Alaska) and Endangered Species Task Force Chairman Richard Pombo (R-California) won approval this month for legislation to reform the federal Endangered Species Act. The Resources Committee voted 27-17 to pass HR 2275, which will now go to the House Agriculture Committee before reaching the House floor.

The vote took place after eight hours of verbal exchanges which ended with five Democrats and all but three Republicans on the committee voting in favor of the bill. Several amendments were offered that would have watered down the Pombo bill but most were defeated, leaving the bill intact.

A Democrat-sponsored substitute bill which would have retained many of the measures in the current ESA was defeated by 28-17.

Supporters of HR 2275 say it will do away with unnecessary government regulation and protect the rights of property owners. An important provision of the Pombo bill is a requirement that the federal government compensate property owners if species protection deprives them of 20 percent or more of the economic use of their property.

It would also redefine "take" to mean only those actions that directly harm a protected species. Currently, landowners can be prosecuted if they destroy habitat suspected of or known to be housing protected species.

In order for a species to be listed, the data backing up the listing would be reviewed by an independent scientific panel. Critics of the current law, including Gov. Pete Wilson, have accused federal agencies of using "poor science" in past decisions to list a species.

The House bill could greatly affect California, however some of its provisions could get changed in negotiations with the Senate. One provision in the bill important to California would prohibit federal agencies from reallocating water for endangered species.

It would also give Congress the first-ever right to vote on ending protections for "population segments" of species like the Sacramento River's winter-run chinook salmon. Although the winter-run is protected under the ESA, there's plenty of fall-run chinook salmon. In fact, right

now, the Sacramento fall-run provides one of the largest commercial salmon fisheries on the Pacific coast.

HR 2275 Faces Obstacles

HR 2275 appears to have strong support among House Republicans, but it's not clear how well it will do in the Senate. A good test will be when Sen. Dirk Kempthorne (R-Idaho) introduces a similar reform bill in the Senate.

However, both the Senate and House could get bogged down in a fight with the Clinton Administration over the budget, causing ESA reform to be set aside. Supporters of reforming the ESA are hoping ESA reform will be voted on before the end of this year. It will depend on how fast Congress can move on budget bills which have a higher priority. If ESA reform gets delayed until next year, an election year, because the issue is so controversial, it's possible nothing will happen. This would be very disappointing for many in California.

California's Endangered Species

More than any other state, California has a lot at stake in reforming the ESA. As shown in the chart at the right, California leads the nation in protecting species and it seems only fitting and proper that Congress has picked Richard Pombo, a Californian, to head the task force charged with reforming the law.

Moreover, a close look at the chart should convince even the most ardent supporter of the current ESA that some kind of changes are needed. For some reason, California, which takes up only 4.4% of the real estate in the United States and only 12% of the nation's population, looks to have a disproportionate share of protected, proposed and candidate species listed under the ESA.

In the number of species already listed, no other state comes even close to California. Although Hawaii's 224 listings outnumber California's 161 listings, there's really no comparison. Only 37 of Hawaii's listed species are animals, as compared to California with over 80 listed animal species. About 83% of the listed species in Hawaii, 187 out of 224, are exotic plants and flowers with some listed numerous times because they're found on several islands or island locations. The only states that come close to California's 161 listed species are Flor-

ida at 97 and Alabama at 89.

With less than 5% of the nation's land area, California houses over 20% of the nation's animals under federal protection classified as endangered. This includes 50% of the endangered reptiles, 50% of the insects, 43% of the amphibians, 43% of the crustaceans, 20% of the mammals, 20% of the fish and 19% of the birds.

But it's in the proposed listings category where California stands out the most. In the latest count from the Fish and Wildlife Service, there are 119 California species waiting to be listed as compared to only 65 such listings in all other states combined. These numbers don't represent just mere suggestions to list a species but are formal petitions waiting to be evaluated by federal wildlife agencies.

California also has 47 Candidate 1 species, three times that of Texas. These could soon be added to the current list bringing the state's total to 208. In the Total Listings column it's much the same story, California, with 327 total listings, outnumbers the second state Florida by more than 3:1. The 935 species in the Of Concern column also outnumber the next closest state by 3:1.

ESA Due for Amendment

With these sort of disparities, it's no wonder Californians are suspicious of the federal ESA. Pombo says that requiring peer reviews and eliminating population segments, both features of his bill, could help reduce the number of future listings in California while still protecting species with legitimate needs.

Pombo claims his bill is not intended to gut the ESA as critics claim, but to make it better. Even Interior Secretary Bruce Babbitt agrees the 22-year-old law needs updated and has agreed to implement some of the features in the Pombo bill administratively if Congress fails to amend the act.

Note: As shown in the ESA Box-score, the rest of the world doesn't seem to share America's concern for protecting species. Of the 1,524 species on the world list, 960 are located in the United States with only 564, including just three plants, to be divided up among Canada, Mexico, Central and South America, Europe, Africa, Asia, Australia, Polynesia, Micronesia and Antarctica.

ESA BOX SCORE

Protected Species as of
September 30, 1995

	Endangered	Threatened
U.S. Animals		
Mammals	55	9
Birds	74	16
Reptiles	14	19
Amphibians	7	5
Fishes	65	40
Snails	15	7
Clams	51	6
Crustaceans	14	3
Insects	20	9
Arachnids	5	0
Subtotal	320	114
U.S. Plants		
Flowers	406	90
Conifers	2	0
Ferns Etc.	26	2
Subtotal	434	92
U.S. Total	754	206
U.S. Listings:		
Animals Endangered	320	
Animals Threatened	114	
Animals Total	434	
Plants Endangered	434	
Plants Threatened	92	
Plants Total	526	
U.S. Grand Total	960	
Foreign Listings:		
Animals Endangered	521	
Animals Threatened	40	
Animals Total	561	
Plants Endangered	1	
Plants Threatened	2	
Plants Total	3	
Foreign Grand Total	564	
World Grand Total	1,524	

Summary of Endangered and Threatened Species in the U.S. Listed by State

	Protected Species	Proposed Listings	Candidate 1 Listings	Total Listings	Of Concern
CALIFORNIA	161	119	47	327	935
Florida	97	7	2	106	278
Alabama	89	8	0	97	269
Texas	72	7	17	96	301
Tennessee	79	0	3	82	191
Arizona	46	9	16	71	204
Georgia	55	6	2	63	186
North Carolina	58	0	2	60	206
Virginia	52	4	3	59	152
Utah	38	2	14	54	197
New Mexico	37	3	13	53	127
Kentucky	38	6	2	46	105
Oregon	32	1	12	45	223
South Carolina	38	0	2	40	115
Mississippi	38	0	2	40	77
Nevada	33	2	4	39	250
Colorado	29	1	8	38	92
Louisiana	27	1	2	30	65
Arkansas	25	1	3	29	94
Washington	22	1	5	28	94
Illinois	24	1	3	28	79
Missouri	22	0	5	27	81
Maryland	24	0	2	26	61
New York	22	0	1	23	72
Massachusetts	22	0	1	23	38
New Jersey	19	0	3	22	51
Idaho	18	0	3	21	98
Indiana	20	1	0	21	72
Oklahoma	17	1	3	21	59
Ohio	18	2	0	20	61
Kansas	14	0	6	20	48
Michigan	18	1	0	19	55
Connecticut	17	0	1	18	27
Delaware	17	0	1	18	22
Iowa	14	0	3	17	47
Rhode Island	16	0	1	17	17
Wyoming	11	0	6	17	91
West Virginia	16	0	0	16	97
Wisconsin	16	0	0	16	61
South Dakota	10	0	5	15	36
North Dakota	10	0	4	14	30
Nebraska	11	0	2	13	38
Maine	12	0	1	13	31
Montana	12	0	0	12	58
Minnesota	11	0	1	12	55
Pennsylvania	10	0	1	11	83
New Hampshire	10	0	0	10	26
Alaska	8	1	0	9	34
Vermont	7	0	0	7	20
District of Columbia	3	0	0	3	6
Hawaii	224	5	39	268	465
Territories (VI & PR)	85	1	3	89	91

CVP Water Plan from page 1

through reoperation or use of the dedicated water.

How much water will be available to CVP users will, of course, depend on water conditions. However, as required in the CVPIA, the entire 800,000 AF will almost always be set aside for fish and wildlife and only during the very wettest years, such as this year, will the 800,000 AF pose no risk to CVP contract deliveries. On the other hand, in drought years, such as in 1992, the impact can be quite dramatic.

Affects of Bay-Delta Accord

While the guidelines guarantee that a portion of CVP yield will always be set aside for fish and wildlife, for the first time, the Bureau and FWS have assured water users it will never exceed 800,000 AF. This can be credited, in part, to the work and influence of CVP agricultural and urban water users on the December 15, 1994 Principles For Agreement on Bay-Delta Standards between the State of California and the federal government.

Prior to the agreement, water users were concerned the federal government intended to double dip into the CVP water supply. This came about when the Bureau and the U.S. Fish and Wildlife Service suggested they did not want CVP water needed to fulfill bay-delta standards to interfere with water to be used for fish doubling and other environmental provisions of the CVPIA. They made it known that CVP water required by the EPA to meet bay-delta standards would be in addition to the 800,000 AF required by the CVPIA.

However, that possibility was eliminated by language in the December agreement that states all CVP water provided to meet bay-delta water quality standards will be credited toward the 800,000 AF called for in the CVPIA. While the Principles For Agreement is intended to be in force for a three-year period, the State Water Resources Control Board made that condition long-term by including similar language in its Bay-Delta Water Quality Control Plan, which has since been

approved by the EPA.

Streamflow Targets Under the AFRP

Specifics on how the 800,000 AF will be used for doubling anadromous fish populations in the Central Valley won't be available until the Bureau and FWS finalize their plan for the Anadromous Fish Restoration Program (AFRP).

The first draft plan of the AFRP was released several months ago and generated considerable controversy among CVP users. As reported in the June 1995 issue of the *CWJ*, the plan detailed over 280 action items that must take place on Central Valley rivers and streams in order to fulfill the goals of the AFRP. The focus of the plan was on increasing natural

Once the AFRP is finalized and in place, operation of the CVP will be much different than in the past. Decisions on operations and water allocations will be as much a responsibility of the FWS as they are of the Bureau.

flows on about 30 Central Valley rivers and streams as well as higher outflows through the delta. Also included were actions to modify and remove dams, install fish screens and repair spawning grounds on most of the CVP controlled streams in the Central Valley.

One problem with the plan was that it called for more water to flow down streams, through the delta and into San Francisco Bay than Mother Nature has the ability in most years to deliver.

A spokesman for FWS told the *CWJ* that's all water under the bridge now. He explained that at the onset of developing the AFRP, the objective given to the AFRP technical teams was to develop a plan to double fish populations and not to consider "reasonableness" or economic consequences in their plan. He said a

final draft of the AFRP with reasonableness applied is due in November and FWS plans to conduct public hearings throughout the Central Valley on the draft around mid-January. They hope to issue a final AFRP in March or April 1996.

CVP Operations Criteria

Once the AFRP is finalized and in place, operation of the CVP will be much different than in the past. Decisions on operations and water allocations will be as much a responsibility of the FWS as they are of the Bureau.

Following is a synopsis from the white paper of how the agencies plan to operate the project:

Each year the hydrologic conditions in the Central Valley varies with snow and rainfall. Flows in rivers and streams also vary depending on runoff and the carryover storage conditions from the prior year. These factors are all reflected in the annual operational plan of the CVP which will be subject to continual updating as the dynamics of the water year change. Therefore, in order to better provide fish and wildlife habitat restoration benefits the operational flexibility of the CVP, the need for the 800,000 AF, and the acquisition of additional water will vary as hydrologic conditions and project operational circumstances change.

To allow for the variability in stream flow objectives, biological data for each CVP controlled river and stream will be developed for corresponding hydrologic and operational conditions as identified in the AFRP.

The hydrologic conditions are referred to as "water year types" and are represented by 5 types: critically dry, dry, below normal, above normal, and wet. Further definition of the operational conditions of the CVP will be characterized by the carryover storage levels in CVP reservoirs and will be classified as low, medium low, medium high, and high.

In April of each year, the water year type will be identified. A set of flow objectives will be developed that cover the range and combination

of hydrologic and operational conditions possible in the CVP.

The basic approach is to provide higher flows and better conditions for fish in wet years and assure a protective flow pattern in dry years to buffer fish populations against unacceptable adverse conditions during drought.

The highest efficiency of water can be achieved through a combined use of reoperation of the CVP, the use of the 800,000 AF and acquired water under Section (b)(3) of the CVPIA."

Note: In meeting the goals of the AFRP, the Bureau is authorized by the CVPIA to acquire water. Such water will be utilized as needed to achieve the goals of the AFRP by supplementing the reoperation of the CVP and 800,000 AF. One way of acquiring additional water is for the Bureau to purchase it with funds from the CVPIA Restoration Fund. After fulfilling its primary purpose of meeting the needs of the AFRP, the Bureau will explore opportunities to utilize the water in a manner that would provide additional funding to the restoration fund.

Limits on the 800,000 AF

In developing flow objectives to meet the goals of the AFRP, reductions of water deliveries to CVP users will never be more than 800,000 AF in a single year. Also, management of the 800,000 AF applies only to CVP controlled rivers and streams.

However, there are two conditions that could cause less than 800,000 AF to be deducted from the CVP yield. Both occur only under extreme hydrologic conditions.

One is during above normal and wet year conditions. During these years the CVP yield may meet flow objectives for fish and wildlife purposes while still providing 100 percent of project contract deliveries. In this scenario the 800,000 AF dedicated to fish and wildlife becomes moot. This occurred this year (1995 water year), the third wettest year on record. Not all above normal or wet year conditions will erase the need for dedicated all or pa

Such a year occurred this year — the third wettest year on record.

The other condition is during severe drought years. The CVPIA uses the drought period 1928-1930, the worst drought on record in California, as the benchmark to determine whether or not the full 800,000 AF is to be deducted from the CVP yield.

Specifically, the CVPIA defines the "firm yield" of the project to be the water deliveries during the 1928-1934 period under conditions of the applicable permits, licenses, and agreements in place at the time the CVPIA was enacted.

The CVPIA states further: In all types of hydrologic conditions some amount of water may be dedicated from the annual supplies without reducing CVP deliveries and without impacting the firm 1928-1934 yield of the project.

In other words, CVP yield is defined as the amount of water that would have been delivered if the CVP had existed during the 1928-1934 — minus the amount of water that would have been subtracted because of state and federal regulations that existed in 1992 (when the CVPIA was enacted).

Impact of 800,000 AF

In a normal year, the CVP delivers approximately 6.8 million acre-feet of water, which makes the 800,000 AF dedicated to fish and wildlife appear to be not much of a sacrifice.

But in dry years, CVP deliveries could be seriously impacted. For example in 1992, a dry year — and coincidentally the same year the CVPIA became law but not yet in effect — CVP deliveries totalled 3.6 million acre-feet. Of that, about 2.4 MAF was delivered to CVP settlement and exchange contractors whose allocations must come first and can only be reduced by 25 percent when the CVP runs short of water.

If the CVPIA had been in effect in 1992, 600,000 AF for fish and wildlife would have been deducted from the remaining 1.2 MAF, leaving only 600,000 AF for all other CVP contractors. (Because of the extreme dry

conditions in 1992, the amount dedicated under the CVPIA would have been reduced from 800,000 AF to 600,000 AF.)

Evaluation of AFRP

According to the Bureau and FWS, only after all management actions have taken place will the evaluation of the effectiveness of the AFRP be able to be made and by how much the use of the 800,000 AF has reduced the delivery capability of the CVP. The agencies expect that the drier the year, the more important the 800,000 AF will become and the higher the likelihood the full 800,000 AF will be dedicated to fish and wildlife, thus reducing the delivery capability of the project.

Computer modeling analysis is expected to play a major role in the future short- and long-term operation of the CVP. Each year, computer modeling will evaluate the movement of water in the CVP and how the CVP can be managed to achieve the AFRP flow targets of project controlled rivers and streams with the least amount of risk to water contract deliveries.

Actions Affecting the 800,000 AF

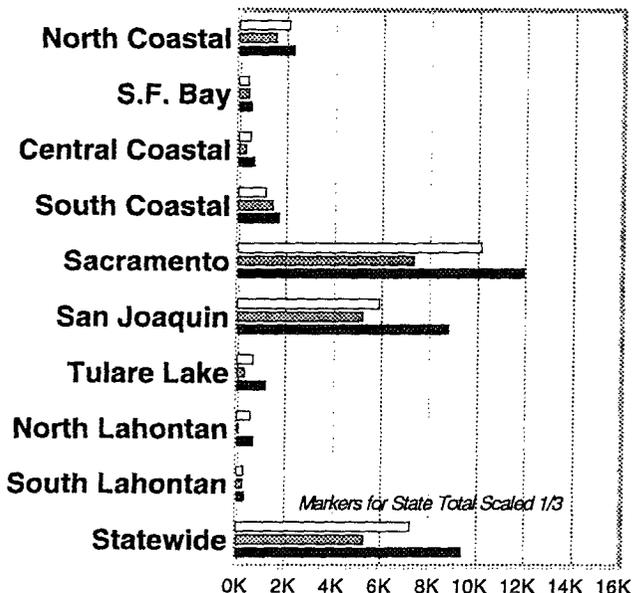
The recently introduced CVP Reform Act (HR 1906) by Rep. John Doolittle, R-Rocklin, could affect the planned use of the 800,000 AF. For one, it would write into federal law that any CVP water used to meet bay-delta water quality standards must be counted as part of the 800,000 AF dedicated by the CVPIA. Even though that requirement is part the Bay-Delta Accord and in the state's bay-delta water quality control plan, supporters of HR 1906 say it is part of their effort to clean up and clarify the CVPIA.

Another provision of the CVP Reform Act that could effect the 800,000 AF is the requirement that the CVPIA anadromous fish doubling program be integrated with a similar state-sponsored program.

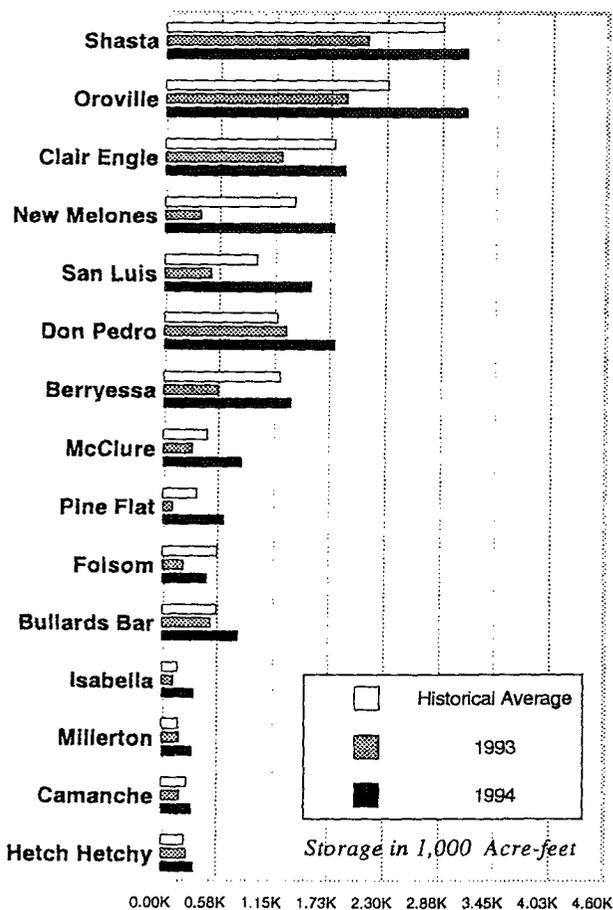
This would require major modifications to the federal AFRP, the blueprint for the use of the CVP's 800,000 AF, so it could be integrated with the state's fish and wildlife program.

Reservoir Storage October 1995

STORAGE IN 155 STATEWIDE RESERVOIRS



STORAGE IN 15 MAJOR RESERVOIRS



Reservoirs	Total Capacity	Historic Average	1994	1995	% of Avg	% of Cap
Summary of 155 Statewide Reservoirs - 1,000 AF						
North Coastal	3,148	2,086	1,546	2,284	109	78
San Francisco	696	397	417	525	132	75
Central Coastal	947	521	300	665	128	70
South Coastal	1,989	1,122	1,432	1,703	152	86
Sacramento Valley	16,009	10,135	7,325	11,928	118	75
San Joaquin Valley	11,347	5,914	5,211	8,793	149	77
Tulare Lake	2,045	672	312	1,194	178	58
North Lahontan	1,072	559	85	689	123	64
South Lahontan	403	293	257	333	114	83
Statewide (155)	37,656	21,699	15,885	28,114	130	75
Summary of 15 Major Reservoirs - 1,000 AF						
1 Shasta	4,552	2,874	2,102	3,136	109	69
2 Oroville	3,538	2,313	1,883	2,897	125	82
3 Clair Engle	2,448	1,760	1,215	1,873	106	77
4 New Melones	2,420	1,351	379	1,763	130	73
5 San Luis	2,039	959	491	1,524	159	75
6 New Don Pedro	2,030	1,176	1,271	1,772	151	87
7 Berryessa	1,600	1,205	568	1,319	109	82
8 McClure	1,025	464	308	813	175	79
9 Pine Flat	1,000	359	103	638	178	64
10 Folsom	977	572	217	466	81	48
11 Bullards Bar	966	564	507	791	140	82
12 Isabella	568	165	118	337	204	59
13 Millerton	520	174	184	319	183	61
14 Camanche	417	265	189	316	119	76
15 Hetch Hetchy	360	243	266	341	140	95

Reservoir Chart Explanations

Reservoir levels in the above table are shown as percent of historical average and total capacity. Reservoirs levels in the bar graphs to the left are shown as percent of historical average only. The maximum allowable storage in a reservoir is unique to each reservoir and is a function of location, upstream snowpack, and other factors. As a safeguard for flood protection, reservoirs are not allowed to fill to their full capacity at certain times of the year. During months when flooding is possible, a safe margin of capacity is maintained to capture flood waters.

The 15 major reservoirs shown here represent 65% of the state's total reservoir capacity.

The numbers 1 thru 15: Refer to the location of the reservoir on the California Hydrologic map shown on the facing page.

Averages: Reservoir averages are based on the most recent 50 years, or in the case of younger reservoirs, since the reservoir began operation.

Source: California Department of Water Resources

State Hydrology October 1995



Water Conditions in California 1995 - Second Wettest Year on Record

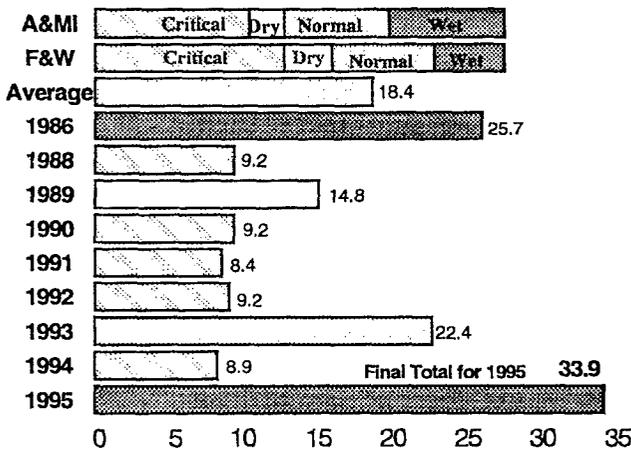
Last month we reported that 1995 was the second wettest year on record. We were right about that but our charts did not show the official final totals. In the latest update from the Department of Water Resources, the final total of unimpaired runoff for the Sacramento River (as shown in the Sacramento River Index chart) was 33.9 MAF. This is the second wettest year since the record began in 1906, and exceeded only by 1983.

The final tally for Northern Sierra 8-Station Precipitation for 1995 was 85.4 inches. This is the second wettest year since the record began in 1922, and again, exceeded only by 1983. The 8-Stations are a wetness index of the north and northeastern mountains (the Northern Sierra and the Southern Cascades) of the Sacramento River hydrologic region — the source of much of California's water supply. The eight stations are designed to give a representative sample of the region's major watersheds: the upper Sacramento, Feather, Yuba and American rivers, which provide inflow to some of California's largest reservoirs.

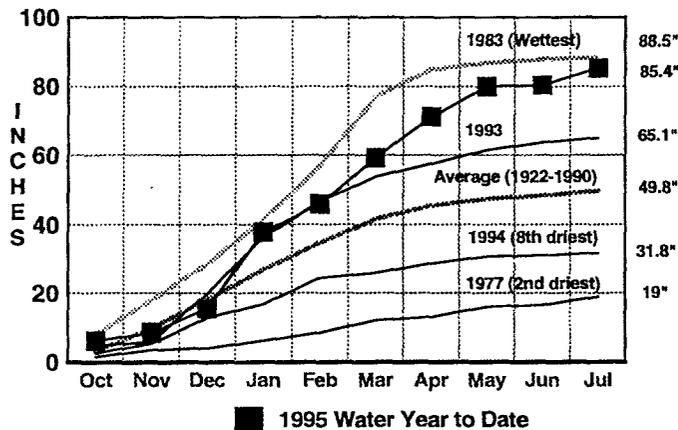
Reservoir storage on September 30, the last day of the 1995 water year, in California's 155 major intrastate reservoirs was 28.1 million acre-feet, 75% of capacity and 130% of average for that date. This is about 12.2 MAF more than last year and the most since 1983, the wettest year on record, when 32.5 MAF was stored.

Statewide precipitation for 1995 was 165% of normal and April 1 Snowpack for 1995 was 175% of normal.

SACRAMENTO RIVER INDEX Million Acre-feet



NORTHERN SIERRA PRECIPITATION Eight Station Index



About the Sacramento River Index

The Sacramento River is the single largest contributor of water to the Sacramento/San Joaquin Delta. The Sacramento River Index is the sum of estimated unimpaired runoff for the Sacramento River measured at four locations:

- 1) Sacramento River at Bend Bridge.
- 2) Feather River inflow to Oroville.
- 3) Yuba River at Smartville.
- 4) American River inflow to Folsom.

The two top bars show the possible classification of a water-year. These are defined by the State Water Resources Control Board and is used to determine Delta outflow requirements and other water uses. The third bar shows the average for 1941-90. Past years are shown for comparative purposes. Water regulations vary depending on whether the use of the water is for A&MI (agriculture and municipal/industrial) or F&W (fish and wildlife) purposes.

Northern Sierra Precipitation - As of Sept. 30, 1995

1995 Water Year Total to Date = 85.4"
 Average Water Year Total to Date = 48.1"
 Percent of Average to Date = 171%
 Average Water Year Total = 49.8"

The Eight Station Index is the most important indicator of the precipitation that contributes to the state's river systems. It's the average measured at:

- 1) Mt. Shasta City - north of Shasta Lake.
- 2) Shasta Dam.
- 3) Mineral - near Mt. Lassen.
- 4) Brush Creek - near Lake Oroville.
- 5) Quincy - near Middle Fork Feather River.
- 6) Sierraville Ranger Station - near Feather River.
- 7) Blue Canyon - near American River.
- 8) Pacific House - Near South Fork American River.

Water Weird at Lake Tahoe

On a sunny afternoon about six years ago, Phil Intorf watched something dark, almost sinister, break the crystal surface of Lake Tahoe. The Kings Beach contractor stopped and stared. Whatever it was, it surfaced in two places, one following the other by 50 to 60 feet. A V-shaped wake rippled out behind the smooth, dark humps. Convinced he had spotted some "serpentine" lake dweller, Intorf later called a local radio station and recounted the story.

And so Intorf's experience is added to a long list of "Tahoe Tessie" stories that have even scientists wondering if the could be merit to the possibility of a giant creature living in Lake Tahoe.

The monster was reportedly caught on film once in the mid 1980s, but paranoid tourism promoters are said to have destroyed the footage. One man who swears that he has a picture refuses to show it to anyone.

And now Intorf, confesses to creeping doubts about his own story. In recounting his sighting, he seems to move back and forth between certainty about what he'd seen and the uncomfortable realization that he is a grown man telling monster stories.

It certainly had looked like a living creature . . . but it could have been an elaborate trick of light. He just can't be sure anymore . . .

And there aren't a lot of people rushing to back him up. Compared to those touting Scotland's world-famous Loch Ness Monster, Tahoe's promoters haven't paid a whole lot of attention to the

possibility that something lurks in the lake's incredible depths.

Sure, there's the fuzzy green critter created by local publisher Bob McCormick, the man who coined — and even trademarked — the term "Tahoe Tessie" in the early 80s. Toy Tessies have sold well, and they keep money coming into a small gift shop McCormick owns in Kings Beach.

But the sheer number of reported sightings have many convinced there's something down there:

○ The first traces of Tessie's legend are found in ancient stories from the Washoe Indians who told tales of two powerful types of creature that inhabit the lake and were feared for their power.

○ Enter the settlers. Throughout this century, there have been reported creature sightings in Lake Tahoe, spurred on by sensational news stories and rural lore. In the 1930s the Tahoe Tattler promoted the existence of a sea serpent called Lizzie Ann.

○ Covering the story of a fishing boat sinking, one reporter explained that when a boat putts over his deep-watered sleeping grounds, the serpent, angered by the noise, rises to the surface, swallows the the boat in one or two quick gulps and returns to the depths.

○ A diver venturing into some underwater caves reported seeing a huge creature that drove him back to the surface for fear of his life.

○ In the early 1980s, a Reno police officer, said he was treading water in the

lake when he looked over his shoulder and saw the monster. He hollered to his friend in their boat, but the other man was so frightened he just gaped dumbly into the water.

○ Ten postal workers, driven from their Tahoe City office by a smoking heater, watched in awe as two wakes materialized out of the calm lake, one trailing the other. Their description of the monster closely resembles Intorf's.

Rush Wickmire, a Department of Fish and Game biologist who has worked in the area for 25 years, is convinced that there's something huge in the lake, and suspects it could be a large sturgeon. Wickmire says a sturgeon is likely because they grow to incredible size and live for upward of 100 years. If one were in the lake, it certainly would inhabit the top spot on Tahoe's food chain. And being a bottom dweller, it would surface only occasionally.

Larry Schuelke, captain of the Kingfish, also believes there's something big out there. One time something latched onto his bait and took off at such blinding speed that even with the boat at full power, line was still spinning off the reel. After reeling in his line, all he had was a bare hook without a trace of bait.

Still, even the sturgeon theory has its holes. Most of those who have reported sightings agree that the creature was smooth and dark. Almost none refer to a fin or any other markings that would denote a sturgeon. And they believe it rolls lazily at the water's surface, more like a snake than a fish.

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