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United States  
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# Draft Environmental Impact Statement

1985—2030

Resources Planning Act  
Program

# RPA 1985

ROSS,

KELLY -

BRIEFING

# Alaska State Legislature

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## Senate

### Committee on Resources

#### MEMORANDUM

TO: Senate Resources Committee Members

FROM: Senate Resources Committee Staff

RE: Committee Meeting, February 8, 1984

DATE: February 7, 1984

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At the request of the Resources Development Council, the Senate Resources Committee has invited Kelly Ross, a former aide to Mark Hatfield and now a county commissioner in Curry County, Oregon, to share his views on land management with committee members. Mr. Ross has had extensive experience with the Oregon Land Conservation and Development Commission, an entity charged with developing statewide goals and guidelines for land use planning. Based on this experience, he will brief the Senate Resources Committee and the Senate Special Agriculture Committee on agriculture and land planning issues. The meeting will be held on Wednesday, February 8, at 3:00 pm in the Beltz Room. Attached are two articles written by Mr. Ross.

Prior to the briefing by Kelly Ross, the Committee will consider HJR 56, which commends and encourages the Alaska-Yukon Trail Association as it stages the Yukon Quest. The first annual Yukon Quest, a 1000 mile sled dog race over the Gold Rush Era route from Fairbanks to Whitehorse, will begin February 25, 1984.

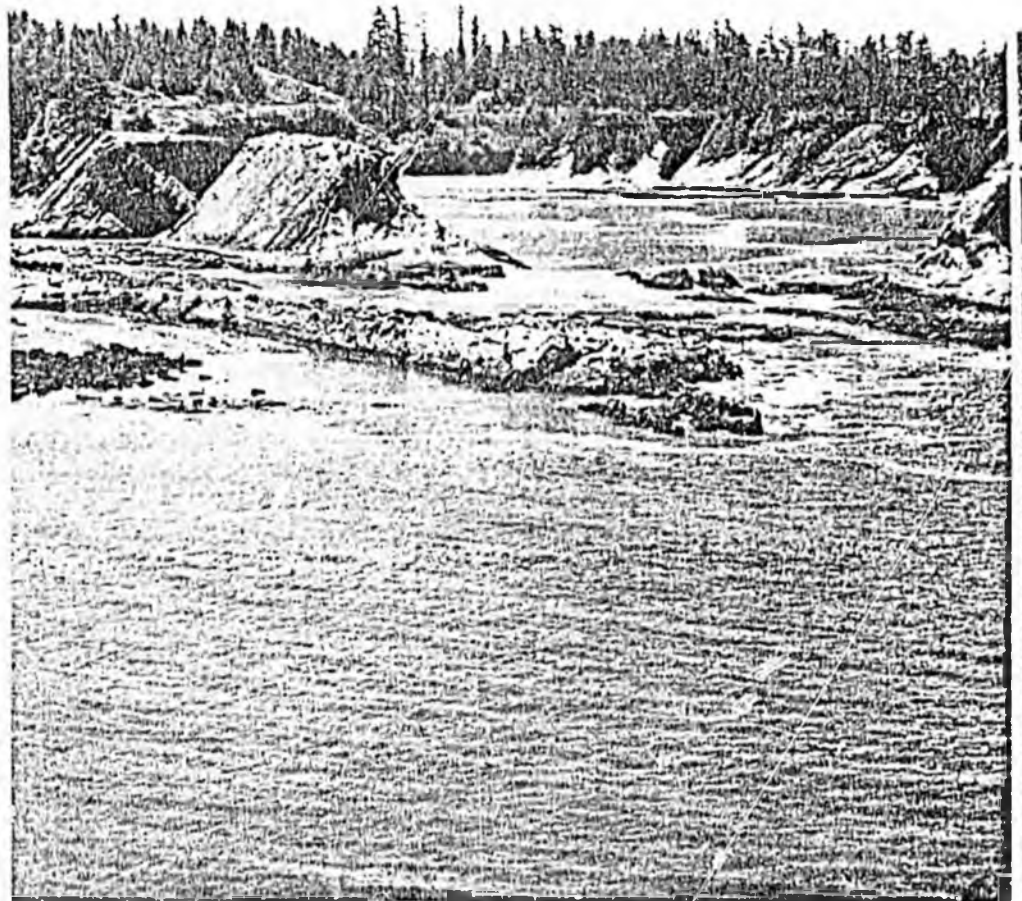
## BY KELLY ROSS

"GOING TO OREGON is almost like traveling to English-speaking Canada," observes the *1982 Almanac of American Politics*: "the society is clearly similar, but everything is arranged in a slightly different way and the assumptions that guide public policy are noticeably different." In no area have those assumptions been more different than in the state's policies concerning private property. Beginning with the Oregon Beach Bill of 1967, under which the state declared its ownership of the entire shoreline from extreme low tide up to the 16-foot elevation, a series of legislative acts has aimed at preserving the countryside but has evidenced little regard for those who might own a part of it.

When Oregon's census figures grew by 18 percent during the 1960s and 25 percent during the '70s, many long-time residents displayed a strong xenophobic reaction. Automobiles sprouted bumper stickers reading "Don't Californicate Oregon." The James G. Blaine Society was chartered, dedicated to "various graceful, poetical, vague, and sinister means of discouraging overpopulation of Oregon." And, in a nation that has long equated population growth with prosperity and success, then-Governor Tom McCall publicly urged people to come visit but not stay.

These high feelings reached a crescendo in 1973, when the legislature passed Senate Bill 100, establishing a statewide system of land-use planning. An innocuously named Land Conservation and Development Commission (LCDC)—seven appointed members and their staff—was given considerable power over all land, air, and water resources. The commission was charged with developing what were to be known as "statewide planning goals" and with identifying "areas of critical state concern and activities of statewide significance." These would become the standards for approving or rejecting comprehensive plans that each city and county was required to develop and submit to the LCDC.

The first 14 "goals" were adopted in December 1974, and 5 more were added over the next two years. So vague and general were they that few except the LCDC could fully understand what was required to meet them. Goal 5 for example, is to "conserve open space and protect natural and scenic resources." It requires that "programs be provided that will: (1) increase open space, (2) protect scenic and historic areas and natural resources for future generations, and (3)



# Losing Ground

*Despite widespread dissatisfaction with it, the nation's toughest land-use control law keeps surviving challenges.*

promote healthy and visually attractive environments in harmony with the natural landscape character."

The guiding idea of these goals was to make sure that most future growth was within established urban areas, leaving the more pastoral areas in their pristine state. This aim is clearly expressed in Goal 14, which is "to provide for an orderly and efficient transition from rural to urban land use." To implement this goal, the commission stipulated that "urban growth boundaries shall be estab-

lished to identify and separate urbanizable land from rural land."

As one might guess, the value of land outside these "urban growth boundaries" dropped dramatically once its use was so limited. Coos County Commissioner Ed Stevenson estimates that the 1973 law has translated into a \$50-million loss in property value in mostly rural Coos County.

It is interesting to note that in passing Senate Bill 100, the legislature recognized that there could be an adverse in-



# N Oregon

pact on some private property owners. One provision of the bill established a committee to study and make recommendations "on the implementation of a program for compensation by the public to owners of lands for the value of any loss of use resulting directly from the imposition of any zoning, subdivision or other ordinance regulating or restricting the use of such lands." Oregonians felt a sense of foreboding when the committee reported back in 1976 that an adequate compensatory program would exhaust the resources of the state treasury. But instead of pausing to ask, Why devalue so much property if we can't pay for it? the legislature blissfully ignored the issue. Since compensation was impossible, it was no longer of concern.

Under the law, comprehensive plans by each city and county were to be completed and approved by the end of 1975, but as of September 1982, only 151 of a total 281 plans had gained the endorsement of the LCDC. Those involved in the system continually found themselves having to revise procedures in response to new law created by court decisions or bureaucratic whim, then revising the revised procedures in response to the next directive. Between 1973 and 1981, \$29.4 million of state and federal taxpayers' money was spent in administering the program. Counties expended an additional \$10-\$15 million and landowners millions more in trying to work within the law.

The complexity of the law gave birth to an army of "planning consultants" whose job it was to generate the mountain of paperwork required for even the most simple project, since every proposal for change had to address every statewide planning goal. A 1972 Oregon Supreme Court decision made things even more difficult by upholding a requirement that applicants for a zone change or subdivision prove not only that the development was legal but that it was *needed* and that *other* suitable property was not available!

Land-use economists were called to testify in public hearings that there was demand for a given project and that the demand constituted a public need. Realtors were asked to testify that they had unsuccessfully searched the marketplace for other available property or, if other property was available, why it was unsuitable. Befuddled property owners wondered what earthly difference it made whether there was other property available when they were interested in the property they owned. In the event that approval was given at the local level, the system almost encouraged appeals to higher bodies. Opponents of change didn't even need to show that they were specifically being affected, since legal standing to file an appeal was granted to any individual or group interested enough merely to testify at the local hearing.

The path of one case could take years to complete, and throughout, the burden of proof was always on the property owner. A former vice-chairman of the LCDC was forced to conclude, writing in the *Willamette Law Review*, that "only the rich, the extremely tenacious or those paid annual salaries to advocate can afford to persevere in such a system."

By 1976, RANCOR against the program was such that enough signatures were gathered to put the entire matter on the ballot for voters to decide. The LCDC survived by a 57-to-43 percent margin. Two years later, in 1978, the issue was once more on the ballot and again was supported, this time by an even wider margin of 60 to 40 percent. After the 1978 defeat, LCDC opponents were becoming resigned to control of private property resting in the hands of a capricious state bureaucracy. But in 1979 a new development markedly changed Oregon's way of life: national interest rates rose to levels that in years past had been prohibited by usury laws.

To fully appreciate the implications of such a shift, one must understand the extent to which the state is dependent on the timber industry. It has been accurately said that when the housing market cools, Oregon freezes. When national housing starts cooled from 2 million units in 1978 to 1.1 million in 1981, three-quarters of Oregon's approximately 28,000 lumber mill workers were frozen out of work or were working less than a full shift. By July 1982, of the 197 lumber mills usually in full production, 73 had closed and 54 were running at less-than-normal capacity. Statewide unemployment rose from 6 percent in 1978 to 12.5 percent in 1982.

The ripple effect was startling. State income tax revenues declined so rapidly that the legislature had to be called into special session three times in 1981 to deal with projected budget deficits. Stores desperate to move merchandise ran continuous clearance sales, even during the usually busy Christmas season. Real estate foreclosures in one county hit 250 per month. And by 1981 the no-growth advocates saw their goal met: figures from Portland State University's Center for Population Growth showed that, not only had Oregon's population growth stopped, but more people were now leaving the state than were arriving.

In the midst of such turbulence, people were beginning to ask why, in this era of high technology, Oregon was still at the mercy of national demand for its forest products. Conferences were held, consultants retained, and studies made, all to determine how best to deal with the economic problems.

With near unanimity, the experts announced that Oregon suffered from an antibusiness image. Frank Cappiello, a panelist on the PBS television series *Wall Street Week*, summed up the situation quite well when he told an economic

development conference, "The perception we have of Oregon in the East is that it really doesn't want industry. Oregon is perceived as wanting a nice, clean, self-contained environment. Investors look around... and go to Arizona, where people are perceived to be more concerned about jobs. One day people who worry about the clear environment will be able to see the Cascade Mountains, but they won't be able to eat."

To confirm this view, an annual study of business climates in the 48 contiguous states by the accounting firm of Alexander Grant Co. ranked Oregon 36th in 1982. As an example of the indifference shown to industry, Allen E. Wood, director of real estate and plant siting for the \$10-billion-a-year Westinghouse Electric Corp., told a reporter for the Portland *Oregonian* how he contacted the Oregon Department of Economic Development for information on industrial land in the state. The material he finally received, after sending in \$15 for handling costs, consisted of brochures detailing campground opportunities. But the coup de grâce was a scorecard published by *National Industrialist* magazine showing how many new industries each state had attracted during the first half of 1981: North Carolina, 179; Texas, 303; Florida, 191; and Oregon, only 4.

Hurting from such rejection, public officials and civic groups suddenly scrambled to find ways to change the state's image. Early attempts bordered on the bizarre. Gov. Victor Atiyeh at one point proposed dynamiting one of the signs along the Oregon-California border welcoming visitors to the state. Because the sign read "Hope You Enjoy Your Visit," Atiyeh felt there was the inference that Oregon would take tourist dollars but still didn't want anyone to move in for good. Plans for the publicity stunt were dropped when someone pointed out that the massive carved wooden sign was worth over \$15,000.

More rational thinkers, however, were increasingly pointing to the state's land-use laws and the LCDC as the main culprit in Oregon's bad business reputation. Since 1978, when the issue was last on the ballot, the planning bureaucracy had made many enemies. Becoming impatient with local governments to conform to its edicts, the commission began exercising its broad enforcement powers. Curry County suffered for two years under a total building moratorium because it had not taken the demanded steps to protect agricultural lands. Ignored was the fact that 94 percent of the county consisted of federal or corporate timber lands, and the only cash crops

were cranberries and Easter lilies. At the other end of the spectrum, the small town of Happy Valley was ordered to speed up development and achieve greater density, even though the 1,440 residents indicated a strong desire to stay small.

Counties and cities were finding that after going through the laborious process to develop a comprehensive plan, nearly 86 percent were rejected on first submission as unsatisfactory. A comment by one former LCDC member to a reporter typified the state of affairs: "We're still struggling with how much freedom should be allowed," she said.

THOUGH MOST LOCAL OFFICIALS bowed to the commission's intimidation and arrogance, their constituents were not so accommodating. One county commissioner



was recalled from office for being too sympathetic to the LCDC; voters in three counties threw out commission-approved plans; and bumpers around the state began to carry a new sticker saying, "Poland has martial law, Oregon has LCDC." The time seemed right for a petition drive to place the issue on the ballot again.

Other avenues for dealing with the planning bureaucracy, such as legislative modifications or court cases, had already been pursued, but without success. In every session of the legislature, strong attempts were made to gain relief, but the environmental lobby was always too powerful. A lawsuit challenging the constitutionality of the program was brought in 1977 by 21 local jurisdictions, only to bounce around the court system for five years. (In July 1982, all appeals were exhausted.)

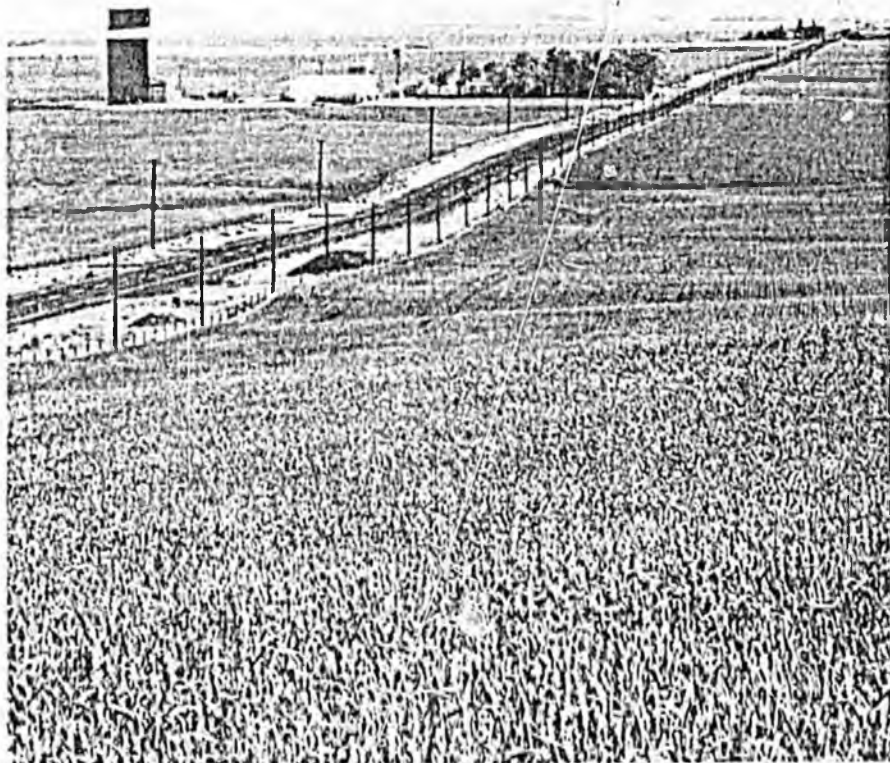
So on November 14, 1981, groups from around the state came together in a Portland suburb to evaluate the feasibility of another initiative campaign. In what may have been an omen of things to come, hurricane winds buffeted the area the day before, causing those in attendance to make their plans without the comfort of heat or electricity. Despite such inconvenience, a coalition was formed under the name Oregon Citizens for Fair Land Planning, and they decided to seek for a third time to overthrow the oppressive planning laws. By the end of June, petitions had been printed and distributed and 65,700 signatures gathered (only 56,000 were required), forcing the secretary of state to certify Ballot Measure 6 for the November general election. Relatively moderate in nature, Measure 6 called for elimination of the state's authority in land use planning but still required local elected officials to maintain master land plans.

It did not take long for the opponents of Measure 6 to make themselves known. While small in number, the list included many of Oregon's most prominent citizens. Both gubernatorial candidates, for example, seemed to disagree on everything except the inadvisability of 6.

Cochairman of Citizens to Defend Your Land—the group formed to defeat the measure—was John Gray. Gray was one of the state's most successful land developers and the chairman of the board of Omark Industries, the world's largest manufacturer of cutting chain for chain saws. He had built two of Oregon's largest luxury resorts in the days before the LCDC would prevent anything on a similar scale from getting off the ground.

Another member of the opposition was Bill Bowerman, cofounder of the Nike

## Television ads against the reform measure showed developers' bulldozers plowing up beaches and wheat fields.



shoe company. In his 24 years as head track coach at the University of Oregon, Bowerman had trained 28 Olympians, 12 American record holders, 24 NCAA champions, and in the process, had become something of a guru to thousands of long-distance runners. Another Nike executive publicly declaring his abhorrence of the measure was Neil Goldschmidt, former mayor of Portland and secretary of the Transportation Department under Jimmy Carter.

No one had a greater impact on the outcome of Measure 6, though, than the man most instrumental in the passage of Senate Bill 100 in 1973—the late ex-Governor Tom McCall. With an unorthodox style and strong environmentalism, McCall had become something of an Oregon legend during his two terms in office. He was unsuccessful in a 1973 comeback bid for governor, but he still wielded considerable influence as an elder statesman and as a regular political commentator for a large Portland television station.

In 1973 McCall was found to have cancer, and despite surgery, the cancer appeared again in 1981, spreading throughout his body. Always one for theatrics, on October 7, 1982, McCall gave one of his best performances. Speaking for a gathering sponsored by two environmental groups, the ex-governor acknowledged that he had only a short time to live and pleaded with Oregonians not to repudiate the land-use planning system and "Oregon mystique" that were hallmarks of his administration. Asking the audience to bear with him for some personal remarks, McCall said: "I'm not embarrassed, I haven't got much time left. This is my last to talk to you about this. You all know I have terminal cancer—and I have a lot of it.

"But what many of you might not know," he continued, "is that stress induces its spread and induces its activity. Stress may even bring it on. Yet stress is the fuel of the activist. This activist loves Oregon more than he loves life. I know I can't have both very long, but the trade-

off's all right with me." McCall concluded by declaring, "But if the legacy we helped give Oregon and which made it twinkle afar—if it goes, then I guess I wouldn't want to live in Oregon anyhow."

Oregon's news media gobbled up the maudlin exhibition. The Salem *Statesman-Journal* wrote in an editorial, "Oregon owes Tom McCall something better than the repudiation of his dream for the state." The largest daily, the Portland *Oregonian*, followed suit when it melodramatically said, "Respect for the man, the former governor, left no eye without a shine among the many business and professional persons who heard him, but their understanding of his message went much deeper." Even network television devoted time to the story. CBS News ran a lengthy segment dealing with McCall on the October 22 evening broadcast, and NBC's *Today* show carried a similar report a week later.

Only one newspaper in the state, the Grants Pass *Courier*, had the temerity to note that McCall's "pending death cannot offset the fact that many of the state's 2 million individuals feel oppressed, stifled and indeed hurt by the iron hand of the LCDC and even the plea of this dying man cannot alter the fact." In an attempt to gain similar sympathy for their own position, Oregon Citizens for Fair Land Planning organized a press conference in which a widow told how her husband had also been a victim of cancer, leaving her with \$100,000 in medical bills. LCDC regulations prevented her from selling part of her 21 acres to raise needed cash or to give a parcel to each of her two children—because the land was classified as agricultural, the property had to remain in farm use and couldn't be divided into pieces smaller than 20 acres. This story was almost completely ignored by the media.

THE EMOTIONS GENERATED by McCall's remarks were heightened by strong editorial support from the *Oregonian*. No less than 12 editorials and columns warned that a host of evils would result if the state's authority in land use were ended. Citizens could expect "condomania on the coast," where "beaches could be behind fences and walls... screened by buildings, never to be ours again." Measure 6 would subject "Oregon's rich farm and forest lands and coastal areas to the same type of private, greedy or unthinking trampling of natural areas that existed before LCDC." Oregon's "model state land use planning

program" would be replaced with "chaos, sprawl, and disorderly growth." Residents would find "local politicians acceding to special interests rather than those of most residents and future citizens."

Television ads against the reform measure showed developers' bulldozers plowing up beaches and wheat fields while a narrator cautioned that this would be the result if Measure 6 passed. A radio spot featured a hysterical-sounding farmer saying that the only thing standing between his field and a lay of asphalt was LCDC. His plea: "Stop them! Please stop the land grabbers!" (The protection of farmland against urban development was one of the major objectives of the LCDC program. The commission proceeded to adopt a definition of agricultural land that included not only land currently in production but virtually any parcel that could possibly ever grow anything. Eventually in Oregon, 17 million acres will be in Exclusive Farm Use Zoning—more acreage under such tight restrictions than in the 49 other states combined, according to the 1981 National Agricultural Land Study.)

In contrast, the advertising in support of Measure 6 tried to rely on facts and reason. The dean of the University of Oregon School of Business talked about a Stanford Research Institute study showing that it took 3-5 times longer to prepare a new plant site in Portland, Oregon, than across the river in Vancouver, Washington, and 10-15 times longer than in Austin, Texas. Another ad featured the master of the Oregon State Grange telling why his agricultural organization was supporting Measure 6: farmland had been growing at a faster rate before the LCDC was created than afterward; regulations were denying farmers the flexibility to sell acreage when times were hard; and young people were prevented from breaking into farming because they could not afford the large initial investment required to purchase even the smallest allowable parcel.

Most major business organizations and chambers of commerce in the state endorsed the measure, as did the Association of Oregon Loggers, the Oregon Association of Realtors, the Association of Oregon Counties, the Oregon Cattlemen's Association, the Oregon Forest Industry Council, and many others. But it wasn't enough. The constant barrage of misinformation and scare stories had a devastating effect. Polls showing the percentage of those who would cast a yes vote went from 57 percent on September 24, to 52 percent on October 15, and finally down to 48 percent on October 30, dead even with those who would vote no.

The downward trend continued three days later when Ballot Measure 6 was defeated 55-to-45 percent. Although a majority in 21 of Oregon's 36 counties voted in favor of the proposal, the larger numbers of the Portland metropolitan area, where 40 percent of the state's population lives, were too much to overcome. As might be expected, the heaviest voting against the LCDC came from the areas the agency is most interested in preserving. Of the seven counties where 50 percent or more of the land is in farms, five showed voters casting their ballots decisively for abolishing the laws limiting the use of their property.

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IT IS DIFFICULT to find a bright spot in the face of such a defeat. But perhaps the Oregon situation will serve to remind others that the right to own and enjoy private property, one of the most basic rights guaranteed by the Constitution, is probably also the most vulnerable to government encroachment. Because of the double standard in this country regarding political rights and economic rights, governments can quite easily impose an array of restrictions on a person's use of his property but not on something like speech, of which the late Supreme Court Justice Hugo Black once said, "Only the gravest abuses endangering paramount interests give occasion for permissible limitation."

University of San Diego law professor Bernard Siegan has written extensively on this subject and describes the situation quite well when he laments: "Few have better understanding of government abuses than the many organizations in the country dedicated to protecting civil and political rights. However, they never seem to apply this knowledge and prefer to look the other way when governmental agencies effectively deprive people of property, the fruit of their labor, savings, energy, and knowledge. They strenuously fight against the imposition of a minimal fine when political liberties are involved, and stand absolutely mute when the most arbitrary zoning and environmental restrictions reduce by hundreds or thousands of dollars the values of property owned by people of average means."

Let others take heed of what Oregonians have painfully learned: Once ground is lost, it is nearly impossible to regain. [E]

*Kelly Ross is a former aide to Sen. Mark Hatfield and is a member of the Curry County, Oregon, Board of Commissioners. He was active in Oregon Citizens for Fair Land Planning.*

## Arabian War

(Continued from p. 34)

have sternly refused to let us base conventional forces in their nations.

We do not know whether the Soviets will fight for the Gulf, though the risk is clear. Given the Iranian invasion of Iraq, the threat that the Holy War in Iran will spread to the Gulf is much greater. Do we have the forces on hand to stop such a war? Very likely, if we are willing to see many thousands of our sons killed and to spend hundreds of billions that we could spend on alternative energy supplies with no loss of life.

Besides, the Iranians today are in fact steadily *increasing* the supply of oil to the West. The OPEC Arabs of the Gulf are trying to decrease their supply to keep prices up. The Iranians are bitterly anti-Soviet and are systematically executing some pro-Soviet Iranian leftists and curtailing the operations of the Iranian Communist Tudeh party. A union of Gulf nations led by Iran *might* be immensely more effective as a bulwark against Soviet expansion and a supplier of more and cheaper oil to the West. Little wonder the Soviets are opposing the Iranian invasion of their ally, Iraq, with greatly increased arms shipments. A divided Gulf is far better for them than one powerful foe.

**T**here is little chance the American public will support any enforcement of this doctrine. But there is a serious danger that our leaders, increasingly isolated in their bunkers of power on the Potomac and misled by general public support of rearmament, may make the same fatal miscalculations of the popular will that the Johnson administration did. In some future crisis situation, this could combine with their desire to save face by not reneging on their pledge to produce some rapid deployment of our forces in the Gulf. By the time public outrage was organized, we might already be faced with another Vietnam-style debacle—or even a major war with the Soviets from which we could not back down.

The American people want rearmament to *protect them* and the country's vital interests, not the OPEC cartel. Our leaders must recognize the fact—"We Will Not Go!"—and exorcise the national nightmare threatened by the Carter-Reagan Doctrine and our almost secret military build-up in the region. [E]

*Jack Douglas teaches sociology at the University of California, San Diego.*

# Oregon Land Use Laws and Cost of Residential Lots

by Kelly Ross, former aide to Senator Mark Hatfield and now a member of the Board of Commissioners in Curry County, Oregon

Many people in Oregon were not surprised when the August 1981 issue of *Land Review* showed that between 1976 and 1980 the state experienced the nation's fastest price increase (127%) in finished residential lots. Such a trend was predicted two years before by Dr. Anthony Downs, a senior fellow at the Washington, D.C., Brookings Institution. The culprit is Oregon's land use laws, generally recognized as the most comprehensive and complex in all the 50 states.

Passed in 1976 by the state legislature, Senate Bill 100 had the admirable aims of assuring "the highest possible level of liveability in Oregon" and assisting in "attainment of the optimum living environment for the state's citizenry." The bill created the Land Conservation and Development Commission (LCDC) and charged it with developing statewide goals and guidelines for land use planning. In addition, it required all cities and counties to comply with the goals and guidelines by formulating comprehensive plans.

According to Downs, the price increases stem from the requirement that future development be channeled away from rural areas into defined urban growth boundaries. He states that while "this reduces the costs of new infrastructure systems like sewer and water and highway systems, it also confers a quasi-monopoly position on the owners of vacant land within the boundaries." Hence, that land becomes much more valuable, both to developers and eventually to consumers of new housing.

Downs also pointed out that an additional cost of such comprehensive planning is the failure of government officials to grasp the money-cost of time. "Since officials are motivated by the desire not to stir up controversy, they want to create consensus and act cautiously, which takes time," he explained. Today, with interest rates ranging between 15% and 18%, any type of delay can be very expensive, and the program in Oregon has been one long series of delays. Originally, it was believed that only one year would be required for all jurisdictions to have their comprehensive plans ready for review and approval. But as 1982 began, seven years after the 19 goals and guidelines were finally adopted, only eight of the state's 36 counties and 117 of the 241 cities had their plans "acknowledged."

The reasons for the delays were brought out in a 1980 survey of 52 persons who are active and knowledgeable in the land use field. The general perception of those interviewed was that Goal 3, the agricultural goal, receives more attention than the others. Interviewees conceded the intent—and perhaps the driving force behind the entire LCDC program, was the preservation of agricultural land, but the need for such preservation and the methods used are in serious question. Such statutes define agricultural land as "land of predominately Class I, II, III, and IV soils as identified in the Soil Capability Classification System of the U.S. Soil Conservation Service." These classes were originally established in the 1930's to

assist farmers in managing their land to control erosion; they were not intended to determine whether the land can or should be farmed. Local governments, aware that a better definition is needed, have attempted different approaches, only to see them overturned in court or rejected by LCDC.

Interestingly, there is mounting evidence that the Goal 3 requirements actually tend to destabilize the agricultural economy. In the past when conditions produced a bad crop, farmers could sell a few acres to satisfy creditors. Today, however, with strict regulations prohibiting parcelization of arable land, farmers are often forced to sell their entire farm to avoid bankruptcy. Also, with such restrictions placed on its use, lending institutions are becoming reluctant to use land as collateral for capital improvements.

Another area of consensus among those interviewed was the perception that the LCDC staff is inexperienced and difficult to deal with. There was a universal feeling that the staff has very little experience in local government or planning, is theoretical in its bias, and impractical in its applications. Two staff members in particular have been the subject of controversy: one is the chairman of Oregon's chapter of the Sierra Club and another was hired directly from the strong environmentalist group, "1000 Friends of Oregon." With this type of orientation it may not be surprising that the LCDC has rejected 86% of the plans on their first submission, returning them for time-consuming corrections or additional information.

Time may be running out, however, for Oregon's experiment in statewide land use planning. Recently, State Senator L.B. Day, one of the authors of the original law and the first director of the agency, was quoted as saying, "Staunch defender or not, I'm not sure we can afford LCDC any longer." Frank Cappelletto, a panelist on the PBS television series "Wall Street Week," told an economic development conference, "The perception we have of Oregon in the East is that it really doesn't want industry. Oregon is perceived as wanting a nice, clean, self-contained environment, so investors look around and go to Arizona, where people are perceived to be more concerned with jobs."

With Oregon now suffering under the nation's second highest unemployment rate (after Michigan), jobs are rapidly becoming more of a concern than saving farmland. There is currently a grass-roots effort to place an initiative on the November ballot that would abolish the LCDC and return planning functions to the local level.

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Editor *Land Review*

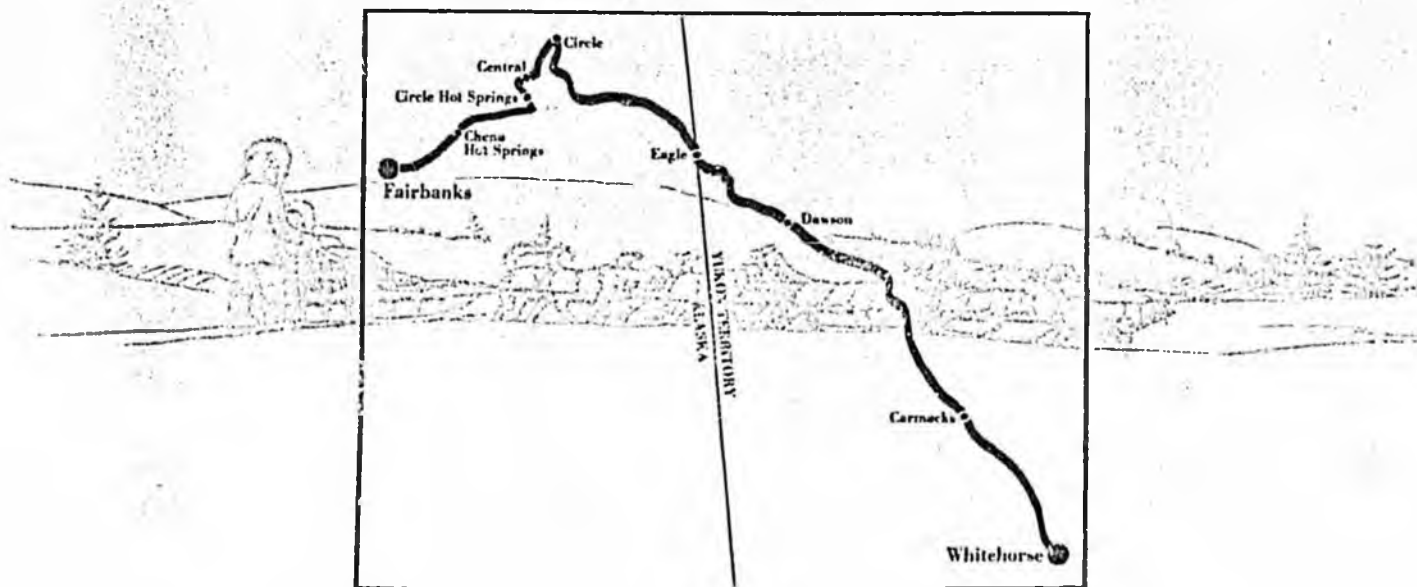
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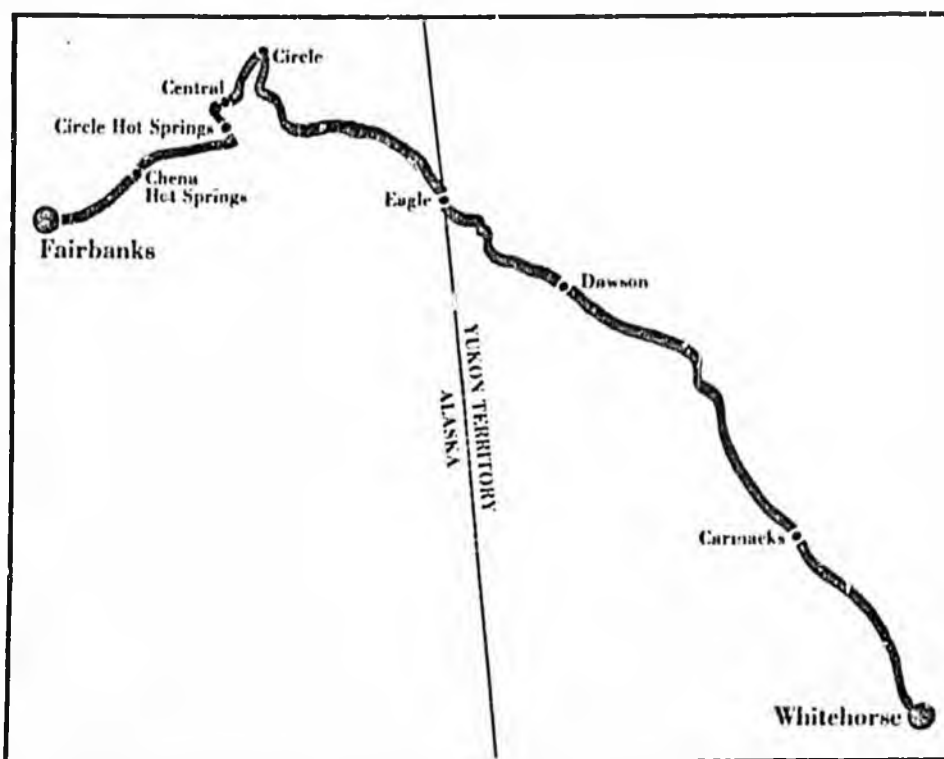
### POTENTIAL

This event can become the richest, most internationally famous yearly spectacle for Fairbanks, Dawson, Whitehorse and other towns between. A decade of long distance sled dog racing has dramatically demonstrated the wealth of dollars and attention that such a happening can bring to involved communities. It has become a multi-million dollar industry upon which the eyes of the world focus each winter. Newspapers, magazines, radio and television networks from around the globe vie to cover the one existing race. This feeds community pride. It also provides what amounts to fabulous, free advertising for the community and event the like of which no money could buy.

The value of tourism to Interior Alaska and the Yukon hardly needs comment. The Fairbanks to Whitehorse Race could give the towns a vital economic boost during normally slow winter months. But to realize this economic potential a turn-about from the normal limits of thinking and involvement concerning sled dog races is required. Thought and action must now take on a grand dimension to fit the event and its unquestioned possibilities.

The Iditarod became a success in spite of Anchorage apathy and skepticism, not because of its support. It took ten years to really come of age. However, this Fairbanks to Whitehorse Race can enjoy success immediately if the towns will push it from the outset. There must be investment to gain return. The pump must be prime.

No less valuable than economic gain are the following: 1) enhancement of community pride, spirit and energy; 2) rejuvenation of winter moral during race festivities and competition; 3) creation of local folk heroes with whom one may identify and follow during the contest; 4) strengthening of the fraternal spirit that has always bound the people of Interior Alaska and those of the Yukon Territory.



## THE RACE

The route shown on the map on the previous page will start in Fairbanks and Whitehorse on alternate years. Established long distance rules will be followed in general. However, a few important differences do exist both within the rules and with the course which makes this race interesting and unique.

- ★ Teams are limited to twelve dogs starting maximum.
- ★ No more than three dogs may be dropped per team.
- ★ A mandatory 36 hour layover will be taken by all teams at Dawson.
- ★ The same sled must be driven from start to finish.
- ★ Food pickups and dog drops at only six points along the route, four of which are well over 100 miles apart, one being over 200. (This could enhance the chances of a driver long on bush skills but short on space age equipment and technology.)
- ★ A small load of promotional freight will be mandatory.

## WHAT IS NEEDED

Mushers and teams are poised and ready. What is needed in addition for the Fairbanks to Whitehorse Race to become a recognized major sporting spectacle and a revenue producer is the following:

- 1) Fairbanks and Whitehorse government officials and businesses must make the start and finish of the race not only well run but as colorful and big time as possible. Show the towns off to best advantage for visitors and media.
- 2) A budget must be acquired sufficient to fund the organizing, officiating, trail work, checkpoints, logistics, transportation, communications, promotion and advertising, fuel, supplies and equipment, veterinarians, drawing and awards banquets, start and finish lines organizations, wages and fees, etc.
- 3) Prize money equal to the magnitude of the race must be available in order to give the contest prestige necessary to attract top name teams.
- 4) Talent from the communities must step forward to give of their time and energy to serve in various positions and committees below.

Executive Director

Race Manager

Race Marshall

Trail Managers, trail workers, checkers for Alaska and Yukon

Food Drops Managers for Alaska and Yukon

Dog Drops Managers for Alaska and Yukon

Fairbanks Banquet and Drawing Chairman/Whitehorse Banquet and Awards Chairman

Fairbanks Race Start Manager/Whitehorse Race Finish Manager

Race Communications Headquarters Managers for Alaska and Yukon

Race Central Office Managers for Alaska and Yukon year round offices

Hams for Alaska and Yukon

Publicity and Promotions Managers for Alaska and Yukon

Finance Managers for Alaska and Yukon

Veterinarians for Alaska and Yukon

Musher housing pre and post race for Alaska and Yukon

Typing and Printing for Alaska and Yukon

## THE MECHANISM

Limited stock is being sold which entitles the stockholder to vote for the board of directors. Inquiries are welcomed. General corporation meetings and board meetings are held as needed (which is often nowadays).

For more information call LeRoy Shank at 488-9763.

# Alaska State Legislature

BETTYE FAHRENKAMP, Chairman  
ROBERT H. ZIEGLER, SR., Vice Chairman  
DICK ELIASON  
PAUL FISCHER  
VIC FISCHER  
BOB MULCAHY  
ARLIS STURGULEWSKI



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## Senate

### Committee on Resources

#### MINUTES

February 8, 1984  
3:05 pm

Beltz Room  
Room 211, Capitol

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#### MEMBERS PRESENT

Senator Fahrenkamp, Chairman  
Senator Ziegler, Vice Chair  
Senator Eliason  
Senator P. Fischer  
Senator V. Fischer  
Senator Mulcahy  
Senator Sturgulewski

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#### CALENDAR

HJR 56, Relating to the 1984 Yukon Quest sled dog race.  
Briefing by Kelly Ross on land management and planning.

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#### HJR 56

Representative Mike Davis, sponsor of the resolution, spoke in support, explaining that it commends and encourages this 1000 mile sled dog race from Fairbanks to Whitehorse that begins February 24, 1984.

Senator Sturgulewski moved that the resolution be passed out with individual recommendations. There was no objection.

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James Jenks, Deputy Director, Resource Development Council, introduced Kelly Ross.

Kelly Ross, County Commissioner, Curry County, Oregon, compared Oregon's comprehensive land use plan to the proposed Bristol Bay Cooperative Management Plan. He cautioned that the Bristol Bay plan be made flexible enough to allow development of other resources in the event that the fish and wildlife resources are naturally depleted.

The meeting adjourned at 3:35 pm.

COMMENTS  
ON THE  
BRISTOL BAY COOPERATIVE MANAGEMENT PLAN  
BY  
KELLY ROSS  
BEFORE  
THE  
ALASKA SENATE RESOURCES COMMITTEE  
February 8, 1984  
Juneau, Alaska

Chairman Bettye Fahrenkamp: Today we have with us James Jinks, who is here with us from the Resource Development Council. We welcome him here and it is my understanding that he will introduce our guest from Oregon. Would you proceed.

Jim Jinks: Some months ago, we became aware of a county commissioner in the state of Oregon who had expressed concerns over land management and land planning problems that had surfaced over the past decade in Oregon.

The commissioner is Kelly Ross who is here on our request to speak before you and speak to some of the problems Alaska is currently facing in land planning and management. I'd like to introduce Kelly Ross.

Fahrenkamp: Mr. Jinks, you are welcome to pull up a chair and sit there at the desk with Mr. Ross. Mr. Ross, welcome aboard.

Ross: Madame Chairman and members of the Committee. Thank you very much for the opportunity to speak to you today. I want to emphasize from the beginning that I know very little about Alaska and am certainly not here to tell you how to run your affairs. There are enough people already trying to do that anyway. But I do know about land planning. As Jim said, for the last decade we in Oregon have been working and struggling under one of the most comprehensive and stringent land use planning programs in the nation. It was conceived by Gov. McCall in 1973 shortly after he made his statement about people coming to visit but please don't stay. It was intended to protect the resources of Oregon, particularly timber and agricultural resources; basically the same program for resources Alaska is trying to protect.

The intent in 1973 was to provide security, certainty and protection and for the future; but, during the ten years it has been in place, many in the state have begun to question these goals and have come to the conclusion that instead it has caused uncertainty, chaos and stagnation.

It is important to emphasize the differences between our planning program and the Bristol Bay Cooperative Management

Program that I have reviewed. Oregon's system is concerned only with private property while Bristol Bay's deals with publicly owned property.

After thoroughly reviewing the Bristol Bay Plan I have come to the conclusion that there are some very significant characteristics that it shares with the Oregon system. I was very interested to read in the Bristol Bay Plan that the area there involved is the most productive salmon fishery in the world. And so I found it very logical and appropriate that the fishery take a high priority in land planning.

I want to caution that the same mistake we made in Oregon not be repeated in Bristol Bay. Like the Bristol Bay Plan, Oregon devoted hundreds of pages to every conceivable act of man that could have a detrimental effect on fisheries; and then along came Mother Nature in the form of the El Nino current which devastated the Oregon fisheries and to a certain extent the Washington fisheries.

It has had widespread effect on the state of Oregon with numerous commercial fishermen going out of business, and as a result, defaulting on loans to banks and actually several banks have gone out of business in the state. (The Governor recently declared the fisheries an economic disaster area to the Small Business Administration.)

So, all the land use planning documents we have in Oregon didn't stop a natural disaster; something that should be considered and flexibility included in the plan in the event such a disaster should occur. There should be flexibility included to accommodate such a disaster and a plan for certain contingencies.

After reviewing the Bristol Bay Plan I would say that it does not have that flexibility. The Plan locks that area into one option and doesn't allow for any other options to be considered in the event something does happen to the fisheries.

While minerals and oil and gas leasing share a primary use designation with fish and wildlife in some areas, the language of the plan places an almost impossible burden of proof on anyone desiring to develop those uses.

We found in Oregon that it's ultimately the courts that shape a land use planning program. Shortly after the bill was passed in Oregon to create our program, a private interest group calling itself "Thousand Friends of Oregon" organized and started challenging and taking into courts local groups, and decisions of land use boards and that was where policies affecting land use in Oregon were developed. Mainly they have been against any kind of development or use of resources because the language used in the original bill and in the

original plans were skewed toward that end.

The Bristol Bay Plan has the same type of language that's in the Oregon regulations. Using this language it takes very little effort to show that a certain requirement or criteria was not met; but to defend against that takes thousands of dollars and thousands of hours of research to show that the criteria has been met. It has reached such a point in Oregon that the Governor created in 1982 a special task force to study the entire program and take testimony from around the state. I think certain excerpts from that are very appropriate. A report was prepared for the task force by a land use study group: I quote -- "It is a complex system of legal rules and procedures, a system with a face that only a lawyer could love." A former vice chairman of the state agency said that "the path of a decision may take years to complete. Only the rich, the extremely tenacious or those paid annual salaries to advocate can afford to persevere in such a system. The courts and the lawyers have lost the program in the procedural woods."

So, I would certainly caution that if the intent is for a balanced approach to the resource, balanced in terms of development as well as conservation, then that intent is spelled out very clearly. It shouldn't be assumed that intent is known because courts looking at what was generated in writing will interpret only what was written.

In Oregon we found that the primary goal was to protect our timber and agricultural resources, but when no one wanted to build houses during our recession we were left at a loss. It was a mad scramble to find other means of employment for the people. But the land use planning regulations serve as an almost impenetrable barrier for new businesses locating in the state.

A study by the Stanford Research Institute found that it took five times as long to locate a business in Portland than it did to locate across the Columbia River in Vancouver, Washington. Fifteen times as long in Portland as in Austin, Texas. So as a result, many businesses didn't even look at Oregon and went elsewhere.

Some more revealing statistics in National Industrial Magazine kind of keeps a scorecard on how many businesses states have attracted. During the first half of 1981 they found that North Carolina had attracted 179, Texas 303, Florida 191, and Oregon 4. So, we are suffering now under effects of this land use program that should have been foreseen in 1973 when it was conceived. A little more balance and flexibility should have been put into the plan.

In talking with some of the people while I've been here in Alaska, I find that one of the reasons for adopting a plan such as Bristol Bay is the feeling that it will give local

control to that area. In Oregon we heard the same kind of stories when we developed our plan. We found in the decade that has passed that, if anything, it has greatly diminished local control over the entire land use planning process for several reasons.

The first is that you have a very complex document that was produced by geologists, biologists, all sorts of experts. It is very hard for the average layman in the local area to understand it so they defer to the judgments of those living outside the area and oftentimes pass the authority of those judgments to outside the area.

As a locally elected official, I've been in office for a little over three years, and I'd say that 80% of the local land use decisions that we've made have been overturned through the courts by the special interest groups appeal or by the state agencies involved. Because again, of the complexity of the document and the requirements and the findings required to justify any decisions, you almost have to be a land use expert to do that. The average locally elected official simply doesn't have the time to develop that expertise.

If the myth of local control was shattered, it was shattered in 1982 when Oregon had an initiative on the ballot in the general election to do away with the entire program. At the polls, the initiative was unsuccessful, but it passed in 21 of Oregon's 36 counties, and was defeated only as a result of a heavy vote in the urban areas around Portland. But the outlying rural areas which are very similar, I think, in many respects to the Bristol Bay region, they no longer had any control, it had passed on to others.

In conclusion, I think it is recognized that a good comprehensive plan is one that realistically works to insure stability in the future and has a flexibility to adapt to whatever the future brings. I don't feel, that in my review of the Bristol Bay Plan, that it has that flexibility.

Now, I realize that the legislature at this point does not have an active role in the Bristol Bay Plan, but as one elected official to another, I know that always doesn't mean a lot. When you're an elected official you take the blame whether you take an active role or not. I think you need to know what to expect in the future and some of the consequences that can arise from adoption of such a plan. I'd be happy to answer any question that you have or provide any further information you may need.

Senator Fahrenkamp:

Mr. Ross, I don't know if you know that we have had a briefing on the plan and we do plan on having more hearings on the Bristol Bay Plan.

There are some areas we are very concerned about. I wonder if you have any specifics as to the type of language that you feel is very restrictive and would not allow for adjustment for disaster or whatever in the future. Or if you could supply us with some of that because it would be very helpful to us.

Mr. Ross:

I can do that. Briefly, the thing that struck me immediately as I read through the plan is that in all the alternatives that were presented, fish and wildlife was the primary use for the entire area. When you look at the definitions for primary use, it says that for a management unit that has two or more primary uses that could conflict, the guidelines of the plan and existing regulations and procedures will direct how those conflicting primary uses are to be managed.

When looking at the guidelines, I find that the criteria you have to satisfy are so restrictive for any conflicting primary uses that it's almost out of the question that any uses outside fish and wildlife would be permitted. Now, I don't know, perhaps that's the intent of Alaska. But I think you should be aware of the consequences of that.

Senator Vic Fischer:

Did you look at the economic values of the fisheries that are involved as against all other uses in the area? I think you'll find that the fisheries are so significant overall that that may well be why the plan gave it such special treatment.

Mr. Ross:

Right. Right. I understand that. But as was spelled out in the plan, there really is no information available on what the mineral resources of the area are and as I said before, we have found in Oregon how fragile that fishery resource is. There should be flexibility and other options for that sort of thing.

Senator Fahrenkamp:

As I understand the plan, Senator Fischer, if you remember the maps we had, there are certain areas not related to fisheries. I don't know, in any management plan of that nature that's been negotiated as long and hard as that one has, it's my understanding the Governor is very close to signing that as it comes before the Council at its next meeting. But it does behoove us to look into the plan to make sure that we haven't closed all of our options.

Mr. Ross:

But of course hindsight is always the best sight and we in Oregon are now regretting that we didn't build into our plan some aggressive measures for enhancement of that fisheries resource.

That we didn't take it for granted that they would always be there. Reading through the Bristol Bay Plan I see only two paragraphs that talk about the enhancement of the fisheries. It would seem wise, certainly in the light of our experience, to take aggressive measures to enhance the fisheries to ensure that they are protected against natural disasters.

Senator Eliason:

I was wondering what mechanism or device you have for bringing those closed options back for consideration again.

Mr. Ross:

It's a very complicated process and easily manipulated by politics. It has to go through the legislature. We found in each legislature that because most of our legislators are from the urban areas of the state and are not really acquainted with the problems of the coastal area or the fisheries, they are unwilling to change what has been put into the law and allow for further options. That sort of thing.

Senator Eliason:

If you put those flexibilities into the plan than you really don't have a plan, is that what you're saying?

Mr. Ross:

No. First of all you need to have all the available information available to you. The Bristol Bay Plan admits that it doesn't have any information on mineral resources of the area. In the event that something happened to the fisheries either a private mining firm or the state would have to come in and develop that type of information to develop the resource.

Also, we have found in our state as in this plan that where it conflicts with existing regulations, it also closes off some of that flexibility. You should strive as much as possible to bring this into consistency with any existing state and federal regulations so that the process can be streamlined and it won't be held up in any phase for arbitration and mediation to iron out the inconsistencies.

Senator Sturgulewski:

I'm interested, Mr. Ross, in Oregon. I'm somewhat familiar

with your economy there, with what happened. You talked about no businesses coming in and you're very dependent on extractive industries and so on. What kind of things were turned down and why were they? Who was seeking to come in and couldn't?

Mr. Ross:

Mr. Jinks showed me an article in the Anchorage Daily News, middle of January, about a new mining venture that had made a commitment to the state of Oregon but was held up because of the land use laws. One county where the mining venture wanted to locate had come into conflict with the state land use planning agency and as a result the state agency had placed a moratorium on the county for any new building permits so that the mining venture was stopped.

Similar things have happened all around the state. It just takes so long to get anything, to clear all the necessary hurdles to get something located there, that most people just don't want to attempt to deal with it.

Senator Fahrenkamp:

Are there any other questions or comments? Mr. Ross, we truly appreciate your bringing to us the problems that are being faced by Oregon, and we appreciate your concern as well, Mr. Jinks.

WATER  
RESOURCE  
BOARD

# Alaska State Legislature

BETTYE FAHRENKAMP, Chairman  
ROBERT H. ZIEGLER, SR., Vice Chairman  
DICK ELIASON  
PAUL FISCHER  
VIC FISCHER  
BOB MULCAHY  
ARLISS STURGULEWSKI



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JUNEAU, ALASKA 99811  
(907) 465-3834  
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## Senate

### Committee on Resources

#### MINUTES

March 14, 1984  
3:06 pm

Beltz Room  
Room 211, Capitol

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#### MEMBERS PRESENT

Senator Fahrenkamp, Chairman  
Senator Ziegler, Vice Chairman  
Senator Eliason  
Senator Paul Fischer  
Senator Vic Fischer  
Senator Mulcahy  
Senator Sturgulewski

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#### CALENDAR

SB 301, An Act establishing a furbearer management fund; and providing for an effective date.

Presentation by Alaska Water Resources Board.

SB 399, An Act relating to trespassing and posting of land.

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#### SB 301

Senator Sturgulewski moved SB 301 from committee with individual recommendations. There was no objection.

#### Alaska Water Resources Board

Esther Wunnicke, Commissioner, Department of Natural Resources, introduced members of the Board.

David Vanderbrink, Alaska Water Resources Board, explained that the Board consists of six public representatives and the Commissioners of the Departments of Environmental Conservation and Natural Resources.

Tom Meachum, Water Resources Board, discussed the need for legislation that would outline methods for adjudicating federally reserved water rights.

Peg Tileston, Water Resources Board, informed the Committee of the funding needs of the oil spill contingency fund and of the Water Board itself.

Randy Wanamaker, Water Resources Board, encouraged the State to join the Western States Water Council.

Larry Dutton, Water Policies and Procedures Section, Division of Land and Water Management, Department of Natural Resources clarified that the Western States Water Council is an arm of the Western States Governor's Association and discussed the fees for membership.

Bill Bivins, Federal Energy Management Agency, Dam Safety Division, recommended that the State establish a dam safety program to become eligible for federal funds and to reduce insurance costs.

Esther Wunnicke, Commissioner, explained that DNR has responsibility for dam safety. An inventory funded in FY 84 found at least 10 high hazard dams that need attention.

#### SB 399

Senator Faiks explained that the bill addresses the problems of unwitting trespassers on unposted land by requiring that land be posted with signs containing specific information signs to have certain information.

Gayle Horetski, Assistant Attorney General, answered questions on the State's liability under existing law.

The meeting adjourned at 4:04 pm.

NOTE REGARDING THE FOLLOWING FRAME(S) ON MICROFILM:  
COMPLETE DOCUMENT IS AVAILABLE IN ORIGINAL FILES.  
TITLE PAGE ONLY HAS BEEN FILMED.

## Calendar No. 625

98TH CONGRESS  
1ST SESSION**S. 1739**

[Report No. 98-340]

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

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 IN THE SENATE OF THE UNITED STATES

AUGUST 3 (legislative day, AUGUST 1) 1983

Mr. ABDNOR (for himself and Mr. MOYNIHAN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

NOVEMBER 17 (legislative day, NOVEMBER 14), 1983

Reported by Mr. ABDNOR, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

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**A BILL**

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
 2 *tives of the United States of America in Congress assembled,*  
 3 That this Act may be cited as the "~~Water Resources Devel-~~  
 4 ~~opment Act of 1983~~".

# MEMORANDUM

# State of Alaska

TO: The Honorable Bill Sheffield  
Governor

DATE: April 2, 1984

FILE NO:

TELEPHONE NO:

465-2400

FROM: Esther C. Wunnicke  
Commissioner  
Department of Natural Resources

SUBJECT: Water Board

The Alaska Water Resources Board, of which I am statutorily designated Secretary, has forwarded to me the texts of three of seven resolutions that were passed in the March meeting. I have attached these complete resolutions, with a synopsis of them and the four that are yet to be received.

The Board's major steps, in my view, were to recommend an increase in dam safety funding (as proposed in your FY 85 operating budget) and to recommend that the State join the Western States Water Council as a full member, to better protect State interests in dealing with the federal government on water issues. The Board met with the Senate Resources Committee and held an open, thorough discussion of water issues in Alaska. Partly in response to legislators' concerns, the Board has tentatively planned to focus on water quality/stream reclassification issues at its next meeting, scheduled for October in Fairbanks.

I know the members of the Board were very appreciative of your taking time to meet with them during their meeting here in Juneau. Your attention to water issues is a milestone in Alaska resource management. As you know, water issues are increasingly significant to Alaskans, and planning and preparation at this stage will prevent future problems.

Attachments

*Red*  
*D-...*  
*hearing file*

SUMMARY  
ALASKA WATER RESOURCES BOARD  
RESOLUTIONS PASSED AT MARCH, 1984 MEETING

The Water Resources Board, meeting in Juneau, passed seven resolutions in March, 1984. The major theme of the meeting was the State's dam safety program. Guest speakers included William Bivins, dam safety chief for the Federal Emergency Management Agency. The resolutions are summarized below.

At its next meeting (October 1984 in Fairbanks) the Board will be focusing on the issues in water quality standards and stream reclassification in Alaska.

Resolution 84-1: Dam Safety (text attached)

Alaska's dams, valuable for a variety of uses and resource management considerations, can pose a threat to safety, health, and property. The Board recommends that the Legislature increase funding for dam safety and restore \$200,000 cut by the House Finance Committee from the Governor's proposed budget for FY 85.

Resolution 84-2: Oil Spill Contingency Fund (text attached)

To protect its resources, the State must take an active role in cleaning up oil spills in Alaska. Funds in the Contingency Fund are dwindling. The Board recommends replenishment of the Fund and annual appropriations to keep it at its original level of \$1 million.

Resolution 84-3: Western States Water Council (text attached)

Alaska's concerns, and involvement, with the federal government's management and constraints in water issues compel the State to improve its understanding of federal policies and increase its presence in the national policy forum. The Board recommends that the State join the Western States Water Council as a full member.

Resolution to put dam safety program in statute (not yet conveyed)

The Board recommends that DNR draft legislation to provide for a dam safety program, in the context of the State's dam safety responsibility under AS 46.15.080(2).

Resolution on proposed water permit fees (not yet conveyed)

The Board asks the Commissioner to consider the potential negative impacts of assessing a \$50 fee for water rights applications.

Resolution on Potter Marsh sewer line (not yet conveyed)

The Board recommends that the Anchorage Assembly receive full briefings and information before funding a sewer line project above Potter Marsh.

Resolution on basinwide adjudication legislation (not yet conveyed)

The Board asks the Commissioner of DNR to prepare legislation for a basinwide water rights adjudication process.

Esther C. Wunnicke,  
Executive Secretary  
March 30, 1984

Resolution No. 84-1

**FUNDING DAM SAFETY**

Dams contribute to the efficient management and conservation of Alaska's water resources and enhance the economic well-being of our citizens. However, inadequately constructed, operated, or maintained non-federal dams, many of which are decades old, can pose a serious threat to public and private property and the health and safety of our citizens.

Dam safety is a subject of state and national interest. State responsibility for the adequacy of the construction of water diversions (dams) rests in AS 46.15.080(2). The administration, in recognition of the importance of Alaska's dam safety program, requested \$416,300 in the Department of Natural Resources' budget for Fiscal Year 1985. It has been brought to our attention that the House Finance Committee has reduced the department funding for this program \$200,000.

**THE ALASKA WATER RESOURCES BOARD** believes that the importance of this program warrants the restoration of necessary funds (\$200,000) to achieve the level of funding requested by the administration in Fiscal Year '85 for dam safety program purposes.

ADOPTED this 14th day of March, 1984

ALASKA WATER RESOURCES BOARD

181 *David Vanderbrink*

David Vanderbrink, Chairman

**OIL SPILL CONTINGENCY FUND**

HB 205, Prevention and Control of Oil Pollution, was passed in 1980 to protect Alaska from the damage which could result from an oil spill.

An oil spill may cause both long and short term damage to the environment, the beauty of the state, and to owners and users of affected property.

To the maximum extent possible, prompt and adequate containment and clean-up of oil spills is the responsibility of the discharger; however, due to weather conditions, logistic constraints, lack of equipment, and experienced labor; prompt containment is not always possible. Therefore, it was imperative that the state take an active role in this program to guarantee prompt clean-up of oil spills and to assure repayment of costs incurred as a result of the oil spills.

As a result of HB 205, the Oil Spill Contingency Fund was created in 1980 and funded for one million dollars. This fund enables the Department of Environmental Conservation (DEC) to facilitate coordinated and effective oil spill response in the state. The Contingency Fund was replenished with \$250,000 in 1981, but since that time, no new money has been added to the fund.

Due to numerous oil spills throughout the state since 1980, and subsequent expenditures incurred from cleaning up the spills, the balance of the fund is dangerously low. By the end of this Fiscal Year, barring any new spills, the balance of the fund will be approximately \$263,000. The total expenditures by DEC through the Contingency Fund by the end of Fiscal Year 1984 will be approximately \$987,000. Through fines, penalties and federal reimbursement programs, DEC has collected \$469,623 and has a pending reimbursement for \$563,397 for a total of \$1,033,021. All monies collected, however, go into the General Fund of the State of Alaska.

**THE ALASKA WATER RESOURCES BOARD** urges the Governor and the Legislature to replenish the Oil Spill Contingency Fund back up to the original amount of one million dollars and provide provisions in the budgeting process to replenish the Oil Spill Contingency Fund on an annual basis.

ADOPTED this 14th day of March, 1984

ALASKA WATER RESOURCES BOARD

1s/ *David Vanderbrink*

David Vanderbrink, Chairman

**WESTERN STATES WATER COUNCIL**

The Western States Water Council was formed in 1965 under the Western Governors' Conference to accomplish effective cooperation among western states. The functions of the Council include preparing criteria for regional development planning of water resources, undertaking continuing review of large-scale interstate and interbasin water development projects, investigating and reviewing water related matters, and protecting and furthering state and local interests concerning water resources of the western states.

The Council; as a collective voice for the 12 western states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming; has a significant and powerful influence on congressional legislation and on the operations of various federal agencies in dealing with the western states on water related issues.

Alaska has been involved as an observer at Council meetings since 1978 and as an associate member since 1980.

Full membership on the council is needed to give Alaska the right to vote on issues before the council. But possibly even more important is the opportunity to influence what issues the Council will address, the direction the Council will take in pursuing those issues, and the Council's final position on a particular issue through the right of representation of the Council's standing committees.

Operations of the Western States Water Council are carried out by four standing committees: the executive committee, the legal committee, the water quality committee, and the water resources committee. Each full-member state is entitled to three representatives, appointed by the governor, to the legal, water quality, and water resources committees. These representatives would logically and respectively come from the Departments of Law, Environmental Conservation, and Natural Resources. Membership of the executive committee consists of one of the regular representatives from each state, who decide amongst themselves which one of them will serve on this committee.

Full membership for Alaska on the Council is becoming increasingly critical as development and growth result in ever greater demands on Alaska's water resources and in the associated problems of local water shortages, contamination, and conflicting water rights. Problems continually being addressed by the Western States Water Council involving legislation or issues such as the Clean Water Act, the Safe Drinking Water Act, federal reserve water rights, placer mining water use, and hydroelectric development are likewise being addressed by Alaska. For example, membership on the Council may be the best means to effect changes in EPA water quality standards that have recently become more stringent and are an immediate concern of Alaska's placer mining industry. These problems represent major issues facing Alaska today. Alaska would benefit from full membership on the Council through being able to influence the Council's efforts in dealing with these issues and by adding its voice to those of the other western states.

Each state contributes a one time initial membership fee of \$15,000, payable over three years; and an annual membership fee (assessed at \$19,500 for Fiscal Year 1984-85) which is expended to influence local, regional, and national water policies and legislation.

**THE ALASKA WATER RESOURCES BOARD** believes that benefits to Alaska from full membership on the Western States Water Council would far outweigh the cost of dues and, therefore, recommends:

- a. The Governor request a special appropriation in the amount of \$24,500 in Fiscal Year 1985, which includes one-third of the initial membership fee (\$5,000) and annual dues (\$19,500) for 1985.
- b. The Legislature, through its House and Senate Resources and Finance Committees, support Alaska's membership on the Western States Water Council and approve a special appropriation of \$24,500 in Fiscal Year 1985, which includes one-third of the initial membership fee (\$5,000) and annual dues (\$19,500) for 1985.

ADOPTED this 14th day of March, 1984

ALASKA WATER RESOURCES BOARD

181 *David Vanderbrink*

David Vanderbrink, Chairman

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

POUCH M  
JUNEAU, ALASKA 99811  
PHONE: 907-465-2400

March 12, 1984

The Honorable Bettye Fahrenkamp  
Alaska State Senate  
Pouch V  
Juneau, Alaska 99811

Dear Senator Fahrenkamp:

As Executive Secretary to the Alaska Water Resources Board, which will meet with the Senate Resources Committee on Wednesday, March 14, I am enclosing information about the Board, its membership, and its activities. The Board is holding a formal meeting in Juneau this week that Legislators may wish to attend; an agenda for the meeting is also enclosed.

The broad range of water policy issues facing western states, including Alaska, demands the close attention of policymakers. In Alaska, we have a model Water Use Act, and strong instream flow laws for which the Department has recently promulgated regulations. We are soon to begin conducting basinwide adjudication of water rights in areas where new user demands have grown beyond our expectations, and I expect that we will see many more water resource policy challenges in coming years as Alaska's population continues to grow rapidly.

I hope that you and other members of the Committee will contact me if further information would be useful. Thank you for providing time to meet with the Water Board.

Sincerely,



Esther C. Wunnicke  
Commissioner

ALASKA WATER RESOURCES BOARD  
MARCH 13 & 14, 1984  
JUNEAU, ALASKA  
CENTENNIAL HALL - HAMMOND ROOM

AGENDA

Tuesday, March 13

- 8:00 - 8:30 Mug Up!
- 8:30 - 8:45 Call to Order and remarks  
David Vanderbrink, Chairman
- 8:45 - 9:00 Opening Remarks  
Esther Wummicke, Commissioner, DNR
- 9:00 - 10:30 Federal Dam Safety Overview  
William S. Bivins, Federal Emergency Management Agency  
- Federal Legislation on Dam Safety  
- Federal Dam Safety Programs and Funding  
- Federal-State Interaction  
- Other State Dam Safety Programs  
- Alaska's Dam Safety Program Critique
- 10:30 - 10:50 Break
- 10:50 - 11:15 Corps of Engineers  
Harlen Moore  
- Historical Perspective of Dam Safety in Alaska  
- Present Involvement of Corps in Alaskan Dam Safety
- 11:15 - 12:00 Alaska Power Authority  
- Hydroelectric Power Projects Update  
- Dam Safety in APA Projects  
- Bonding and Insurance
- 12:00 - 1:30 Lunch - Buffet at the Prospector
- 2:00 - 2:15 Meeting with Governor Sheffield, Governor's Office
- 2:45 - 3:00 DLWM - Water Management Update  
L.A. Lutton, Chief, Water Section  
- Western States Water Council Meeting  
- Accomplishments
- 3:00 - 3:15 Break
- 3:15 - 3:45 Permit Reform  
James K. Barnett, Deputy Commissioner
- 3:45 - 5:30 DGGS - USGS Program Update  
- AWARE Revised  
Bill Long, Ray George

(continued)

3:45 - 5:30 DGGG - USGS Program Update (continued)  
 - Big Lake Study  
     George McCoy  
 - Delta Creek Hydrologic Study  
     Steve Mack  
 - Potter Marsh Hydrologic Study  
     Jim Munter

5:30 - 7:00 Dinner Break

7:30 - 9:00 Public Comment Session

\* \* \* \* \*

Wednesday, March 14, 1984

8:00 - 8:30 Mug Up!

8:30 - 10:30 DEC - Agency Update  
     Dan Easton  
     - 205(j) Projects  
     - Changes to the Water Quality Standards  
     - Nolan Creek Reclassification  
     - Other

10:30 - 10:45 Break

10:45 - 12:00 Basinwide Adjudication - Federal Reserve Rights  
     - Indian River Summary  
         Andy Pekovich - SEDO  
     - Evaluation and Status of Existing Statutes  
     - Proposed Basinwide Legislation  
         Mike Frank, Assistant Attorney General

12:00 - 1:30 Lunch

1:30 - 2:00 Kenai River Task Force Report  
     Neil Johannsen, Director of Parks

2:00 - 2:15 Break

2:15 - 2:45 Planning Session for Joint Meeting

3:00 - 3:45 Joint Meeting with Senate & House Resource  
     Sub-committees

4:00 - Work Session

# STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

## WATER RESOURCES BOARD

555 Cordova Street  
Pouch 7-005  
Anchorage, AK 99510  
(907) 276-2653

### Alaska Water Resources Board

Established pursuant to AS 46.15.190-240

#### Addresses of Appointees and Officials January 1984

Ms. Peg Tileston  
4780 Cambridge Way  
Anchorage, Alaska 99503  
Home: 561-0540  
Term ends: 2/21/84  
Occupation: Researcher and Writer

Mr. Cyril (Randy) Wanamaker  
Sealaska Corporation  
One Sealaska Plaza  
Juneau, Alaska 99801  
Office: 586-1512  
Term ends: 2/21/85  
Occupation: Geologist

Mr. Tom Meacham  
810 N Street  
Anchorage, Alaska 99501  
Phone: 276-6100  
Term ends: 2/21/86  
Occupation: Attorney

Commissioner (or his designee)  
Department of Environmental  
Conservation  
Pouch O  
Juneau, Alaska 99811  
Office: 465-2600  
(ex-officio member)

Mr. David Vanderbrink  
P.O. Box 1236  
Homer, Alaska 99603  
Office: 235-8835  
Home: 235-8784  
Term ends: 2/21/85  
Occupation: Commercial Fisherman

Commissioner (or his designee)  
Dept. of Natural Resources  
Pouch M  
Juneau, Alaska 99811  
Office: 465-2400  
(executive secretary)

Mr. Wayne Westberg  
Star Route A, Box 1559  
Anchorage, Alaska 99502  
Office: 349-8535  
Term ends: 2/21/85  
Occupation: Well Driller

Mr. Ralph Stemp, Esq.  
SRA Box 1436G  
Home: 276-4404  
Anchorage, Alaska 99502  
Term ends: 2/21/86  
Occupation: Attorney

Alaska Water Resources Board  
Summary of Activities

The Alaska Water Resources Board was created by Article 3 of AS 46.15, the Water Use Act of 1966. The Board serves as an advisory group to the Governor on all matters relating to the use and appropriation of water in the State of Alaska.

The Board covers a wide range of topics at its meetings. In general, a presentation on a topic is given by an agency, industry or interest group representative, or member of the public. Action taken by the Board is usually in the form of a resolution to the governor, but may occasionally be a letter sent to an appropriate agency. The Board may also informally discuss problems with agency representatives.

Currently the Board is meeting two times per year. The required annual Juneau meeting is held in the Spring when a principle activity of the Board has been to review pending or proposed legislation affecting water resources. The Board attempts to hold the other meetings in different parts of the state in order to be better in touch with the regional water problems and to afford residents of all areas of the state an opportunity to voice their water resources concerns to the Board.

Accomplishments:

- The Board was instrumental through a resolution in establishing a permits clearinghouse. This was done under the Department of Environmental Conservation.
- Fourteen of the 30 resolutions passed in the last five years either supported or opposed legislation that was reviewed by the Board.
- In two resolutions and several letters the Board has continued to urge the Division of Land and Water Management to advertise throughout the state the need for individuals to file for water rights.
- The Board has strongly urged the governor to join the Western States Water Council as a full voting member. As a result we have attained associate member status but Alaska still cannot have significant influence or vote on any critical issues brought before the Council.
- In one resolution and several letters the Board has urged action on the basinwide adjudication of the Ship Creek drainage. A basinwide adjudication such as Ship Creek which involves federal reserve rights is a major task that involves expertise and a great deal of involvement from the Department of Law. Federal reserved water rights must be adjudicated in court. Without adequate funding and personnel a basinwide adjudication cannot be accomplished.

Alaska Water Resources Board  
Summary of Activities  
Page Two

- Through resolution and follow-up letters the Board urged a job series for Hydrologists and Water Resource Specialists be created. The Hydrologist series has been implemented and the Water Resource Specialist has been incorporated into the revamping of the land management officer series which is now the Natural Resource Management series. This new series has a number of speciality categories including water resource management. This will enable DNR to fill vacancies with qualified people having water resource experience. All of the Divisions of the Department of Natural Resources have benefited by using these specialty categories in the Natural Resource Management series.
- The Board has addressed itself to matters relating to administrative efficiency on the part of agencies dealing with the public and to policy matters that often cut across agency lines.

## Alaska Water Management Issues

### DAM SAFETY

The State of Alaska began developing a dam safety program in the mid-seventies in anticipation of the Corps of Engineers turning over dam inspection responsibility for non-federal dams to the state.

In 1979 the Department of Natural Resources (DNR) assumed responsibility for the Non-Federal Dam Inventory. The dam inventory was completed in 1981 classifying 175 dams according to the downstream hazard. Of these 175 dams, 122 are 10' or more in height or store 50 or more acre feet. The inventory identified 26 high hazard dams, 18 significant hazard dams, and 78 low hazard dams, of the 122 dams mentioned above.

Upon completion of the Dam Inventory, DNR assumed the responsibility of inspecting non-federal dams in Alaska.

DNR's Dam Safety Program is concerned with reviewing and permitting of new dams construction or modification and evaluating the operation, maintenance, and condition of the dams on a periodic basis.

The purpose of the program is to protect life, health, and property of the people and the State's natural resources.

This fledgling state program has received new impetus from the state legislature through an increase in appropriation from less than \$20,000 in Fiscal Year '83 to more than \$130,000 in Fiscal Year '84.

Most of the dams identified on the inventory have not had a formal inspection in the last four years and their condition is unknown. Some of the structures in the highest hazard category will be inspected this upcoming field season.

## FEDERAL RESERVE RIGHTS/BASIN WIDE ADJUDICATION

The federal government is vested with reserved water rights on numerous federal land withdrawals in Alaska. Federal legislation establishing the reserves specifies the purposes of the reserved water rights and the enacting date establishes their priority date. These water rights include both diversionary and instream uses.

Of the 367.7 million acres in Alaska, federal reserve water rights exist on almost 60 percent of the land mass or over 215 million acres. From a miniscule 2.5 million acres of military land, to 50 and 75 million acres of land for national parks and fish and wildlife refuges respectively, certainly federal reserve water rights issues and problems have the potential to be large as well as complex.

In order for DNR to adequately manage the state's water and adjudicate water rights, it is desirable to have the federal reserved water rights in the state inventoried, then quantified by appropriate federal management agencies. The state can then integrate federal water rights with state administratively adjudicated water rights. The federal government has indicated it will await requests from the states before initiating quantification of federal reserved water rights. To date, no quantification nor adjudication of these water rights has occurred, however, the State of Alaska is preparing to undertake the first basin wide adjudication at Sitka's Indian River involving federal reserve water rights. Adjudication of claimed federal reserved water rights will involve court adjudications.

DNR has requested the Attorney General to review existing statutes to determine their adequacy to initiate a basin wide adjudication. Based on the findings of the Attorney General, DNR will if necessary, request enabling legislation to conduct basin wide adjudications in the near future.

### INSTREAM FLOW

Three main problem areas have developed since initial passage of the Water Use Act in 1966 which lead to passage of instream flow amendments to the Water Use Act in 1980. These problem areas include: (1) the need for a clear state administrative process for state adjudication of any claimed federal reserved instream water rights that might be asserted by the federal government, (2) the fishing industry and fishery management agencies expressed concern that there was no mechanism to legally establish water rights to maintain stream flows for fish habitat and production other than by establishing conditions on numerous DNR water rights permits, and (3) there was concern that depletions in water flow might affect water quality discharges from municipal treatment plants and mining operations.

Instream flow amendments were passed in 1980 and DNR began drafting implementing regulations in 1981. These regulations became effective in September 1983.

Uniquely, the Alaska statutes and regulations provide that both private individuals as well as governmental agencies can apply for, and be granted, water rights for instream purposes.

Alaska instream flow water rights may be obtained for:

1. fish and wildlife purposes,
2. recreation and park purposes,
3. navigation and transportation purposes, and
4. sanitary and water quality purposes.

#### Western States Water Council

The Western States Water Council (WSWC) was created in 1965 by the Governors at a Western Governor's Conference with the purpose of accomplishing effective cooperation among the participating states in planning for programs leading to integrated development by state, federal, and other agencies of their water resources. The Governors of 12 states; Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Texas, Utah, Washington, and Wyoming; are represented on the council and provisions are made in its Rules of Organization to permit the addition of Alaska and Hawaii to its membership.

The State of Alaska has participated as observers at WSWC quarterly meetings since 1978 by various officials, including former Lt. Governor Terry Miller and staffs of the Departments of Natural Resources and Law. The July 1979 quarterly meeting was hosted by Alaska in Sitka. In Fiscal Year 1982, the State of Alaska joined WSWC as an associate member through funding by DNR. This allows Alaskan state officials to attend and observe meetings and receive Council literature, however, the State has no vote.

The WSWC is effective in researching, preparing, and communicating western state's positions on water related issues particularly as they involve Federal/State relations and disputes; such as federal reserve water rights, instream flows, water quality, water use and dam safety. Many court decisions and policy decisions are being made in the Lower 48 which will set a precedent for Federal-State roles in Alaskan water management. The WSWC has a full time staff that works on policy alternatives, presents Western States positions at congressional hearings and other meetings, and is available to provide assistance to member states. It may be more efficient to utilize the services available through the Council rather than developing staff in Alaska's government on some of these matters. A litigation repository of state court cases involving State-Federal water cases on reserved and non-reserved water rights is available to member states as well as a cost sharing program for water resource projects.

Representation through full, voting membership on this Council would formalize the inclusion of Alaska into this broad western power base representing better than one-fourth of the states. The council provides an important and much needed forum for establishing unified positions on federal water legislation and for bringing out the water problems of the western states and Alaska in particular. Each state may select three

representatives for membership on the Council in addition to the Governor who is an ex-officio member. This membership could be of great benefit to several state agencies including the Departments of Natural Resources, Environmental Conservation, and Law.

Each state contributes a one time initial membership fee of \$15,000, payable over three years, and an annual membership fee (assessed at \$19,500 for Fiscal Year 1984-85) which is expended to influence local, regional, and national water policies and legislation. Noting that approximately one-third of the nation's freshwater supply is located within Alaska, direct participation on the Council by Alaska can further serve as a vehicle to insure that Alaska maintains its stewardship over its vast water resources.

STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF LAND AND WATER MANAGEMENT

DAM FACTS

**Inventory and Classification**

How many Dams?.....175<sup>1/</sup>  
 How many are 10' or more high  
 or can store 50 or more acre feet?.....122

The hazard classification<sup>2/</sup>breakdown for the 122 dams is:

High Hazard 26  
 Significant Hazard 18  
 Low Hazard 78

New dams under construction:

Dam Name	Appl'n Date	Height (Feet)	Storage (Acre-Feet)	Hazard Class
Terror Lake	4/8/82	156	94,000	Low
Rolling Rock	4/8/82	25	1	Low
Shotgun Creek	4/8/82	40	480	Low
Falls	4/8/82	20	40	Low

**Budgets and Accomplishments**

FY '84 Budget — Dam Safety Total \$133,700

<u>100</u> 77.5	<u>200</u> 19.5	<u>300</u> 36.2	<u>400</u> 0.5	<u>500</u> -0-	<u>Total</u> 133.7
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FY '84 Dam Safety Staff:

Engineering Assistant II, Range 16

Technical Engineer, Range 21<sup>3/</sup>

1. The State's dam inventory has accounted for 175 dams in the Southcentral and Southeastern regions of the state. We anticipate finding as many as 40 additional dams as remaining areas of the state are included in the inventory.

2. Hazard classification pertains to the potential for loss of human life and property damage downstream of a dam in the event of failure.

3. As of March 7, 1984, we are awaiting delivery of the register through DOT. The position description has been approved, and classified.

FY '84 Accomplishments to Date:

Dam inspections . . . . . 3

Lowell Creek Diversion\*  
Solomon Gulch\*  
Lake-of-the-Hills

Dam application review and approval . . . . . 5

Neets Creek  
Bluff Lake Diversion  
Lekanoff  
City of Craig

February 7, 1984 authority to negotiate for Professional Service Contract approved for \$40,000 in FY '84 and \$60,000 in FY '85.

FY '84 Planned Accomplishments:

February 15, 1984 draft Dam Safety Information Fact Sheet completed March 9, 1984, awaits printing by Central Duplicating. Final draft RFP (Request for Proposal) for the inspection of 3 to 7 dams in FY '84.

FY '85 Budget -- Dam Safety Total \$416,300

<u>100</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>Total</u>
115.6	20.0	279.7	1.0	-0-	416.3

FY '85 Dam Safety Staff:

Same as FY '84 plus one Clerk Typist II

FY '85 Planned Accomplishments: Using approximately \$200,000 of "300" monies earmarked for professional services, equipment rental, and judicial expenses:

Dam inspections for safety evaluation..... 15-25  
Dam inspections for construction certification..... 3-6  
Inventory dams in interior Alaska.....  
Hazard Classification (to be completed by staff)..... 20  
available staff.

\* Jointly inspected with either the U.S. Department of Corps of Engineers or the Federal Energy Regulatory Commission

Of the 122 dams falling within the limits of Alaska's dam safety regulations; the following 10 dams have been identified as most in need of inspection.

Dam Name	Nearest Town	Dist.	Height (Feet)	Storage (Acre-Feet)	Hazard Class.	Last Inspect	Phase I <sup>4/</sup> Completed
Lake Connell	Ketchikan	0	96	10,700	High	6/13/78	Yes
Caralana	Ketchikan	0	31	600	High	6/13/78	Yes
Whitman Lake	Ketchikan	0	56	7,200	High	6/14, /8	Yes
Lowell Creek Diversion	Seward	0	--	(5,600) <sup>5/</sup>	High	6/18/78	Yes
Switzer Cr.#1	Juneau	0	40	5/	High	5/79	No
Switzer Cr.#2	Juneau	0	15	3.5	High	6/80	No
Douglas Is. Dam	Juneau	1mi.	27	5	High	6/80	No
Alitak Cannery Dam	Kodiak	150mi.	9	62	Signi- ficant	6/23/81	Yes
Isatkoak Dam	Barrow	0	16	1,140	Signi- ficant	6/26/81	Yes
Squaw Harbor	Sand Point	10mi.	46	88	Signi- ficant	8/12/81	Yes
APW	Cordova	0	27	40	Signi- ficant	6/26/78	Yes

4. Phase I is an investigative inspection program of the Corps of Engineers for identifying dams posing hazards to human life and property.

5. Cubic feet per second (CFS)

L. A. Dutton, 2/17/84

Bruce - F.Y.I.

Calendar No. 625

98TH CONGRESS  
1st Session

SENATE

REPORT  
No. 98-340

WATER RESOURCES DEVELOPMENT ACT  
OF 1983

*See p. 11,  
pp 41-44*  
*DAM SAFETY*

REPORT

OF THE

COMMITTEE ON  
ENVIRONMENT AND PUBLIC WORKS  
UNITED STATES SENATE

TO ACCOMPANY

S. 1739

together with

ADDITIONAL AND MINORITY VIEWS



NOVEMBER 17 (legislative day, NOVEMBER 14), 1983.—Ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

27-255 O

WASHINGTON : 1983

*3/7/84*

tually used for water supply purposes. This would render the contract consistent with the provisions of the Water Supply Act of 1958, which permits the maintenance and operation costs for water supply to be based on the actual volume of water used from reservoir storage.

*Section 332*

The Illinois and Mississippi Canal, also known as the Hennepin Canal, was built by the Corps of Engineers early in this century. The canal runs from the Mississippi River near the mouth of the Rock River to the Illinois River, a distance of about 50 miles. It also includes a side Canal.

The canal was closed to commercial navigation in 1951, then turned over to the State of Illinois for recreational use in 1970. Under the terms of the transfer, the Corps was required to redevelop the Canal; Congress provided an authorization of \$8,500,000 for this purpose. Much of that money was used in the initial rehabilitation work of the Corps.

But due to the need to satisfy a judgment resulting from a litigation involving highway bridges over the Canal, the rehabilitation work was never completed. It is estimated that the completion of rehabilitation of the Canal will cost \$15,000,000. This section authorizes repairs to a dam and embankment.

*Section 333*

This section designates the Lowndesville Recreation Area, located within the Richard B. Russell Dam and Lake Project, S.C. and Ga., as the Jim Rampey Recreation Area. The late Mr. Rampey was the owner of most of the land which is now part of the recreation area.

TITLE IV—DAM SAFETY

Title IV contains provisions which are designed to assist and encourage programs to increase the safety of non-Federal dams. This title amends the National Dam Inspection Act (Public Law 92-367) to encourage and assist state dam safety programs, establish a Federal Dam Safety Review Board, and authorizes a program of research into innovative dam safety inspection techniques.

*Section 401(a)*

This section requires that dams having certain safety-related characteristics, and those exceeding the minimum size requirements set forth in Public Law 92-367, be included in the National Inventory of Dams and come under the effect of the amendments in this Title.

One of the most significant Federal actions with regard to non-Federal dam safety problems has been the establishment of the National Inventory of Dams. The inventory has proven valuable for both Federal and State Dam safety efforts.

*Section 401(b)*

This section amends Public Law 92-367 by adding eight new sections to that law as follows:

*Section 7.*—Authorizes the Corps of Engineers to administer a \$15,000,000 a year grant program for five years, beginning in fiscal year 1985, with the money to be allocated on a matching basis to States that have or develop dam safety programs meeting the requirements of the new Section 8, created in this title. One-third of this money be equally divided among those States and two-thirds is to be distributed according to the number of dams on the National Inventory in those States.

*Section 8.*—Establishes criteria that a State's dam safety program must meet to be eligible for funding under the preceding section.

To determine if a State is eligible for section 7 funds, the Corps of Engineers must establish that a State has adequate procedures to review dam construction plans, to assure the safe construction and operation of dams, and to perform dam inspections. The State must also have authority to require modifications necessary to assure the safety of any non-Federal dam, emergency plans and procedures with respect to dams, assure that necessary safety repairs will be undertaken by the party responsible for a dam, and also must have emergency funds available to take immediate measures to protect human life and property in dam related emergency situations.

These criteria are modeled after provisions of the "Model State Dam Safety Law" developed by the United States Committee on Large Dams.

Any State program submitted for section 7 funds is automatically approved within 120 days unless the Chief of Engineers determines that it does not meet the criteria of section 8. In such cases, the Corps shall immediately notify the State of the decision, in writing.

The Chief is also required to review, with the assistance of the Federal Safety Review Board created in section 10, the implementation and effectiveness of approved State dam safety programs. The Corps shall revoke a State's funding under section 7 if that State's program is shown to be inadequate. Funds may only be renewed when the State's program has been reapproved.

*Section 9.*—Requires the Federal Emergency Management Agency to perform a study of the cost, the need for, and the effects of a federally sponsored reinsurance program for dam owners. The results of this study are to be transmitted to Congress within 18 months after the enactment of this section.

Dam failures have resulted in billions of dollars of property damage since 1972, and the dam owners find it difficult to purchase liability insurance. Thus, the Federal Government, in the event of a non-Federal dam failure, faces high costs for disaster relief, costs well beyond what the dam owner may be able to pay.

A Federal program of reinsurance might make liability insurance more available to dam owners, and result in eventual savings to the Federal Government. Study of this question is needed to identify the shape and scope of such a program, if justified.

*Section 10.*—Because of the importance of dam safety, a need exists for a central authority to provide oversight, coordination, and information exchange on dam safety.

This section establishes a nine-Member Federal Dam Safety Review Board consisting of one representative each from the Corps of Engineers, the Bureau of Reclamation, the Tennessee Valley Authority, the Soil Conservation Service, and the Federal Emergency Management Agency. In addition, four Presidentially appointed members who are not employees of the Federal Government are to be members, with two of these to represent States having dam safety programs approved under section 8.

The Board is required to perform three major functions: to review the procedures and standards utilized in the design and safety analysis of Federally constructed and operated dams, to review State implementation of dam safety programs approved pursuant to this Act, and to study the need for a Federal loan-program to assist in the repair of non-Federal dams.

*Section 11.*—Requires that any Federal Agency that owns, operates, or plans to construct a dam consult with the appropriate State or States on the design and safety of the dam and allow State officials to participate in any safety inspections of that dam.

While this section confers no actual decision-making role on the States regarding Federal dam construction or design, the Federal agencies should give full consideration to the views of the State on the safety related features of a Federal dam.

*Section 12.*—A serious problem for many States in establishing and maintaining effective dam safety programs is a lack of adequately trained personnel. The Corps of Engineers possesses a great deal of expertise in all aspects of dam safety. It conducted training sessions for state personnel pursuant to expired authority in Public Law 92-367.

Therefore, this section authorizes the Chief of Engineers to provide training for dam safety inspectors of States either having or developing a dam safety program approved under section 8. One million dollars is authorized for this purpose in fiscal year 1985, and \$500,000 is authorized for each of the next four fiscal years.

*Section 13.*—The present methods for dam inspection have, for the most part, remained unchanged for many years. Thorough inspections of most dams and evaluations of their structural integrity involve many man-hours and can be quite expensive. There is a need to develop new instruments and methods to evaluate dams. Because even the most thorough inspections by present day techniques cannot fully evaluate a dam's condition, there is a need to develop tools and techniques to reveal more about the structural integrity of dams.

To date, much work applicable to dam safety evaluation has been done in other fields, such as mineral exploration and construction technology. These evaluation involve the use of acoustic, thermal, microwave, or mechanical techniques to examine subsurface phenomena. The National Bureau of standards has expertise in the development and evaluation of this type of instrumentation.

This section authorizes \$1,000,000 annually for five years for the Corps of Engineers, in cooperation with the National Bureau of Standards, to undertake research and development on improved techniques and equipment for dam safety inspections and monitoring.

The Corps is also instructed to provide for State participation in this research, and is required to report periodically to the States and Congress on its progress.

*Section 14.*—Authorizes, for each of fiscal years 1985-1989, \$500,000 to the Corps of Engineers for the purpose of maintaining the National Inventory of Dams.

The Inventory of Dams catalogs the location, size, owner, condition, and other information on over 67,000 dams that could present a hazard in the event of their failure. Authorization to keep this important information tool current has expired and should be renewed.

*Section 402*

This section requires that any water resources study report submitted to the Senate Committee on Environment and Public Works and House Committee on Public Works and Transportation by the Corps of Engineers and the Soil Conservation Service that proposes the construction of a dam must include information on the consequences of its failure and factors which might contribute to that failure.

The risk associated with properly designed, constructed, and maintained dams is minimal, but the science of predicting the probability of any particular dam's failure is undeveloped. However, since the consequences of a dam's failure, however unlikely or unpredictable, could be catastrophic, it is reasonable to expect that such information be included in project reports.

*Section 403*

This section designates this title as the Dam Safety Act of 1983.

TITLE V

Section 501 sets a limitation on obligations for the construction, rehabilitation, operation, and maintenance of the commercial inland navigation system. The limitation is set at \$646,000,000 in each of 14 fiscal years, beginning in fiscal year 1986 and ending fiscal year 1999.

The \$646 million figure is based on actual expenditures for this function during fiscal year 1983. Thus, Title V freezes Federal obligations for commercial inland waterways activities—both from general revenues and from the Waterways Trust Fund—at current levels.

This limitation covers all expenditures by the Army Corps of Engineers on the commercial navigation components of the inland system.

Section 502 authorizes the Secretary of the Army to impose and collect use charges on commercial users of the inland system so that additional monies will be available, if needed, in excess of the obligation limits set in section 501. These additional funds would be raised and made available only if the Inland Waterway Users Board (established in the succeeding section) recommended them. Any such funds must be spent solely on commercial navigation components of the system.

The Corps is also instructed to provide for State participation in this research, and is required to report periodically to the States and Congress on its progress.

*Section 14.*—Authorizes, for each of fiscal years 1985-1989, \$500,000 to the Corps of Engineers for the purpose of maintaining the National Inventory of Dams.

The Inventory of Dams catalogs the location, size, owner, condition, and other information on over 67,000 dams that could present a hazard in the event of their failure. Authorization to keep this important information tool current has expired and should be renewed.

*Section 402*

This section requires that any water resources study report submitted to the Senate Committee on Environment and Public Works and House Committee on Public Works and Transportation by the Corps of Engineers and the Soil Conservation Service that proposes the construction of a dam must include information on the consequences of its failure and factors which might contribute to that failure.

The risk associated with properly designed, constructed, and maintained dams is minimal, but the science of predicting the probability of any particular dam's failure is undeveloped. However, since the consequences of a dam's failure, however unlikely or unpredictable, could be catastrophic, it is reasonable to expect that such information be included in project reports.

*Section 403*

This section designates this title as the Dam Safety Act of 1983.

TITLE V

Section 501 sets a limitation on obligations for the construction, rehabilitation, operation, and maintenance of the commercial inland navigation system. The limitation is set at \$646,000,000 in each of 14 fiscal years, beginning in fiscal year 1986 and ending fiscal year 1999.

The \$646 million figure is based on actual expenditures for this function during fiscal year 1983. Thus, Title V freezes Federal obligations for commercial inland waterways activities—both from general revenues and from the Waterways Trust Fund—at current levels.

This limitation covers all expenditures by the Army Corps of Engineers on the commercial navigation components of the inland system.

Section 502 authorizes the Secretary of the Army to impose and collect use charges on commercial users of the inland system so that additional monies will be available, if needed, in excess of the obligation limits set in section 501. These additional funds would be raised and made available only if the Inland Waterway Users Board (established in the succeeding section) recommended them. Any such funds must be spent solely on commercial navigation components of the system.

## Calendar No. 625

98TH CONGRESS  
1ST SESSION

S. 1739

[Report No. 98-340]

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

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 IN THE SENATE OF THE UNITED STATES

AUGUST 3 (legislative day, AUGUST 1), 1983

Mr. ABDNOR (for himself and Mr. MOYNIHAN) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

NOVEMBER 17 (legislative day, NOVEMBER 14), 1983

Reported by Mr. ABDNOR, with an amendment

[Strike out all after the enacting clause and insert the part printed in italic]

---

 A BILL

To authorize the United States Army Corps of Engineers to construct various projects for improvements to rivers and harbors of the United States, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
 2 *tives of the United States of America in Congress assembled,*  
 3 That this Act may be cited as the "Water Resources Devel-  
 4 opment Act of 1983".

1 500), until such time and in such proportion as the storage is  
2 used for water supply purposes.

3       *SEC. 332. In addition to amounts authorized to be ap-*  
4 *propriated to carry out agreements entered into by the Secre-*  
5 *tary with the State of Illinois pursuant to Section 110 of the*  
6 *River and Harbor Act of 1958 relating to the repair and*  
7 *modification of the Illinois and Mississippi Canal (Henne-*  
8 *pin Canal), there is authorized to be appropriated to the Sec-*  
9 *retary not to exceed \$15,000,000 to carry out such agree-*  
10 *ments.*

11       *SEC. 333. The Lowndesville Recreation Area, located*  
12 *within the Richard B. Russell Dam and Lake project, South*  
13 *Carolina and Georgia, shall hereafter be known and desig-*  
14 *nated as the "Jim Rampey Recreation Area". Any reference*  
15 *in any law, map, regulation, document, record, or other paper*  
16 *of the United States to such recreation area shall be deemed*  
17 *to be a reference to such areas as the "Jim Rampey Recrea-*  
18 *tion Area".*

#### 19                                   *TITLE IV—DAM SAFETY*

20       *SEC. 401. (a) Section 1 of Public Law 92-367 (86*  
21 *Stat. 596) is amended by replacing the final period with a*  
22 *comma and inserting the following after the comma: "unless*  
23 *such barrier, due to its location or other physical characteris-*  
24 *tics, is likely to pose a significant threat to human life or*  
25 *property in the event of its failure."*

1       (b) Public Law 92-367 is further amended by inserting  
2 after section 6 the following sections:

3       “SEC. 7. There is authorized to be appropriated to the  
4 Secretary of the Army, acting through the Chief of Engi-  
5 ners (hereafter in this Act referred to as the ‘Secretary’),  
6 \$15,000,000 for each of the fiscal years ending September  
7 30, 1985, through September 30, 1989. Sums appropriated  
8 under this section shall be distributed annually among those  
9 States on the following basis: One-third equally among those  
10 States that have established dam safety programs approved  
11 under the terms of section 8 of this Act, and two-thirds in  
12 proportion to the number of dams located in each State that  
13 has an established dam safety program under the terms of  
14 section 8 of this Act to the number of dams in all States with  
15 such approved programs. In no event shall funds distributed  
16 to any State under this section exceed 50 per centum of the  
17 reasonable cost of implementing an approved dam safety pro-  
18 gram in such State.

19       “SEC. 8. (a) In order to encourage the establishment  
20 and maintenance of effective programs intended to assure  
21 dam safety to protect human life and property, the Secretary  
22 shall provide assistance under the terms of section 7 of this  
23 Act to any State that establishes and maintains a dam safety  
24 program which is approved under this section. In evaluating  
25 a State’s dam safety program, under the terms of subsections

1 (b) and (c) of this section, the Secretary shall determine that  
2 such program includes the following:

3           “(1) a procedure, whereby, prior to any construc-  
4           tion, the plans for any dam will be reviewed to provide  
5           reasonable assurance of the safety and integrity of such  
6           dam over its intended life;

7           “(2) a procedure to determine, during and follow-  
8           ing construction and prior to operation of each dam  
9           built in the State, that such dam has been constructed  
10          and will be operated in a safe and reasonable manner;

11          “(3) a procedure to inspect every dam within such  
12          State at least once every five years, except that such  
13          inspections shall be required at least every three years  
14          for any dam the failure of which is likely to result in  
15          the loss of human life;

16          “(4) a procedure for more detailed and frequent  
17          safety inspections, when warranted;

18          “(5) the State has or can be expected to have au-  
19          thority to require those changes or modifications in a  
20          dam, or its operation, necessary to assure the dam's  
21          safety;

22          “(6) the State has or can be expected to develop a  
23          system of emergency procedures that would be utilized  
24          in the event a dam fails or for which failure is immi-  
25          nent together with an identification for those dams

1        *where failure could be reasonably expected to endanger*  
2        *human life, of the maximum area that could be inun-*  
3        *dated in the event of the failure of such dam, as well*  
4        *as identification of those necessary public facilities that*  
5        *would be affected by such inundation;*

6                *“(7) the State has or can be expected to have the*  
7        *authority to assure that any repairs or other changes*  
8        *needed to maintain the integrity of any dam will be*  
9        *undertaken by the dam’s owner, or other responsible*  
10       *party; and*

11               *“(8) the State has or can be expected to have au-*  
12       *thority and necessary emergency funds to make imme-*  
13       *diate repairs or other changes to, or removal of, a dam*  
14       *in order to protect human life and property, and if the*  
15       *owner does not take action, to take appropriate action*  
16       *as expeditiously as possible.*

17               *“(b) Any program which is submitted to the Secretary*  
18       *under the authority of this section shall be deemed approved*  
19       *one hundred and twenty days following its receipt by the*  
20       *Secretary unless the Secretary determines that such program*  
21       *fails to reasonably meet the requirements of subsection (a) of*  
22       *this section. If the Secretary determines such a program*  
23       *cannot be approved, he shall immediately notify such State*  
24       *in writing, together with his reasons and those changes*  
25       *needed to enable such plan to be approved.*

1       “(c) Utilizing the expertise of the Board established  
2 under section 10 of this Act, the Secretary shall review peri-  
3 odically the implementation and effectiveness of approved  
4 State dam safety programs. In the event the Board finds that  
5 a State program under this Act has proven inadequate to  
6 reasonably protect human life and property, and the Secre-  
7 tary agrees, the Secretary shall revoke approval of such State  
8 program and withhold assistance under the terms of section 7  
9 of this Act until such State program has been reapproved.

10       “SEC. 9. Not later than eighteen months after enact-  
11 ment of the Dam Safety Act of 1983, the Director of the  
12 Federal Emergency Management Agency shall report to the  
13 Congress on the need for and possible effects of a Federally  
14 sponsored program of reinsurance or guarantees of insurance  
15 for owners of dams. This report shall include information on  
16 a variety of possible Federal reinsurance or guarantees pro-  
17 grams and their cost, possible effects such a program or pro-  
18 grams might have on the private reinsurance business, and  
19 the number of dam owners possibly affected by such a pro-  
20 gram.

21       “SEC. 10. (a) There is authorized to be established a  
22 Federal Dam Safety Review Board (hereinafter in this Act  
23 referred to as the ‘Board’), which shall be responsible for re-  
24 viewing the procedures and standards utilized in the design  
25 and safety analysis of dams constructed and operated under

1 authority of the United States, and to monitor State imple-  
2 mentation of this Act. The Board is authorized to hire neces-  
3 sary staff and shall review as expeditiously as possible the  
4 plans and specifications on all dams specifically authorized  
5 by Congress prior to initiation of construction of such dam,  
6 and file an advisory report on the safety of such dam with the  
7 appropriate agency, the appropriate State, and the Congress.  
8 The Board is authorized to utilize the expertise of other agen-  
9 cies of the United States and to enter into contracts for neces-  
10 sary studies to carry out the requirements for this section.  
11 There is authorized to be appropriated to the Board such  
12 sums as may be necessary to carry out this section.

13       “(b) The Board shall also study the need for a Federal  
14 loan program to assist the owners of non-Federal dams in  
15 rehabilitating such structures for safety deficiencies. This  
16 study shall include a quantitative assessment of the availabil-  
17 ity of funds from existing Federal programs and all other  
18 sources for dam rehabilitation, a quantitative assessment of  
19 the need for such funds, and an analysis of any impediments  
20 which are found to the utilization of existing Federal sources  
21 of funds for this purpose.

22       “(c) The Board shall consist of nine members selected  
23 for their expertise in dam safety, including one representative  
24 each from the Department of the Army, the Department of the  
25 Interior, the Tennessee Valley Authority, the Federal Emer-

1 *gency Management Agency, and the Department of Agricul-*  
2 *ture, plus four members, appointed by the President for peri-*  
3 *ods of four years, on a rotating basis, who are not employees*  
4 *of the United States. At least two members of the Board shall*  
5 *be employees of the States having an approved program*  
6 *under section 8 of this Act. The Chairman of the Board shall*  
7 *be selected from among those members who are not employees*  
8 *of the United States.*

9       *"SEC. 11. The head of any agency of the United States*  
10 *that owns or operates a dam, or proposes to construct a dam*  
11 *in any State, shall, when requested by such State, consult*  
12 *fully with such State on the design and safety of such dam*  
13 *and allow officials of such State to participate with officials*  
14 *of such agency in all safety inspections of such dam.*

15       *"SEC. 12. The Secretary shall, at the request of any*  
16 *State that has or intends to develop a dam safety program*  
17 *under section 8 of this Act, provide training for State dam*  
18 *safety inspectors. There is authorized to be appropriated to*  
19 *carry out this section \$1,000,000 for the fiscal year ending*  
20 *September 30, 1985, and \$500,000 during each of fiscal*  
21 *years ending September 30, 1986, through September 30,*  
22 *1989.*

23       *"SEC. 13. The Secretary, in cooperation with the Na-*  
24 *tional Bureau of Standards, shall undertake a program of*  
25 *research in order to develop improved techniques and equip-*

1 ment for rapid and effective dam inspection, together with  
2 devices for the continued monitoring of dams for safety pur-  
3 poses. The Secretary shall provide for State participation in  
4 such research and periodically advise all States and the Con-  
5 gress of the results of such research. There is authorized to be  
6 appropriated to carry out this section \$1,000,000 for each of  
7 the fiscal years ending September 30, 1985, through Septem-  
8 ber 30, 1989.

9       “SEC. 14. The Secretary is authorized to maintain and  
10 periodically publish updated information on the inventory of  
11 dams authorized in section 5 of this Act. For the purpose of  
12 carrying out this section, there is authorized to be appropri-  
13 ated to the Secretary \$500,000 for each of the fiscal years  
14 ending September 30, 1985, through September 30, 1989.”.

15       SEC. 402. Any report that is submitted to the Commit-  
16 tee on Environment and Public Works of the Senate or the  
17 Committee on Public Works and Transportation of the  
18 House of Representatives by the Secretary, or the Secretary  
19 of Agriculture acting under Public Law 83-566, as amend-  
20 ed, which proposes construction of a water impoundment fa-  
21 cility, shall include information on the consequences of fail-  
22 ure and geologic or design factors which could contribute to  
23 the possible failure of such facility.

24       SEC. 403. This title shall be known as the “Dam  
25 Safety Act of 1983”.

## INTRODUCTION

The United States Committee on Large Dams  
of the  
International Commission on Large Dams

has prepared as a public service for consideration of the Governors and Legislatures of the fifty States of the United States this Model Law for State Supervision of Safety of Dams and Reservoirs.

The objective of the Model Law is safety; protection of areas below a dam from the consequences of a failure of a dam and/or untimely release of its reservoir contents. Design and construction of a dam requires the highest degree of professional engineering performance. The foundation of the dam must be stable under all conditions and capable of carrying the weight of the structure. The dam must impound its reservoir water without undue strain and be safe under the application of external forces such as those resulting from earthquakes. The reservoir area must be water-retentive and free of the possibilities of dangerous slides. Dams and associated facilities must be maintained in excellent condition throughout their life. Operation and surveillance through the year must be conducted in such a manner that any change in the structure of the dam, including its foundation, can be detected promptly and corrections made. If abandoned at any time the dam must be removed or breached to eliminate any hazard to downstream areas. This Model Law provides a guide for states who wish to provide regulations to supervise these elements essential to safe dams and reservoirs.

In developing this Model Law advantage was taken of the forty years of experience with the California statutes enacted in

1929 following the failure of the St. Francis Dam with a heavy loss of life and major property damage. The original draft was prepared by a distinguished nationwide committee of professional engineers, experts in the design, construction and management of safe dams and reservoirs. It was submitted in draft form to the Governors of all fifty States for comment. Their comments and those of their staffs are reflected in this Model Law.

This Model Law has not been prepared with the expectation that it would be adopted without change by any state. Changes to meet constitutional and legal requirements, the organizational structure, and the financial system of the several states is to be expected. Supervision of dams in Federal ownership have been omitted from jurisdiction as the consent of Congress would be necessary to such supervision. In this connection see *Arizona v. California*, 283 U.S. 423.

Some states may prefer to put some of the requirements into administrative or technical rules or regulations rather than into the statute itself to provide more flexibility. Experience has shown that incorporation in the basic law removes the requirements from possible frequent changes by a succession of administrators. The definition of a dam subject to jurisdiction (Sect. 1002) is expected to vary, state by state, to meet each state's individual need. The fee schedule requirement (Chapter 6) likewise is optional by states. It is not intended to be of such magnitude as to make the supervision program self-supporting.

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MODEL LAW  
FOR  
STATE SUPERVISION OF SAFETY OF DAMS AND RESERVOIRS

Chapter 1. Definitions

1000. Unless the context otherwise requires, the definitions in this chapter govern the construction of this Act.

1001. "Agency" means that Agency, Department, Office, or other unit of State Government designated by State law to be responsible for implementation or direction of this Act. (This section to be replaced in enactment of the law by a reference to the State unit created or selected to implement and direct the Act which may be regular State employees or specialists and consultants, including consulting engineering firms or organizations, for any or all of the provisions of this Act.)

1002. Jurisdiction applies to any artificial barrier, herein called a "dam", including appurtenant works, which does or will impound or divert water, and which (a) is or will be 25 feet or more in height from the natural bed of the stream or watercourse measured at the downstream toe of the dam, or from the lowest elevation of the outside limit of the dam, if it is not across a stream channel or watercourse, to the maximum water storage elevation or (b) has or will have an impounding capacity at maximum water storage elevation of 50 acre-feet or more.

1003. No obstruction in a canal used to raise or lower water therein shall be considered a dam. A fill or structure for highway or railroad use or for any other purpose, which does or may impound water, shall be subject to review by the Agency

and shall be considered a dam if the criteria of Section 1002 are found applicable.

1004. "Reservoir" means any basin which contains or will contain impounded water.

1005. "Owner" includes any of the following who own, control, operate, maintain, manage, or propose to construct a dam or reservoir:

(a) The State and its Departments, institutions, agencies, and political subdivisions.

(b) Every municipal or quasi-municipal corporation.

(c) Every public utility.

(d) Every district.

(e) Every person.

(f) The duly authorized agents, lessees, or trustees of any of the foregoing.

(g) Receivers or trustees appointed by any court for any of the foregoing.

"Owner" does not include any agency of the United States Government, including those who operate and maintain dams owned by the United States.

"Person" means any person, firm, association, organization, partnership, business trust, corporation, or company.

1006. "Alterations", "repairs", or either of them, mean only such alterations or repairs as may directly affect the safety of the dam or reservoir, as determined by the Agency.

1007. "Enlargement" means any change in or addition to

an existing dam or reservoir, which raises or may raise the water storage elevation of the water impounded by the dam.

1008. "Water storage elevation" means the maximum elevation of water surface which can be obtained by the dam or reservoir without encroaching on the approved freeboard at maximum design flood.

1009. "Days" used in establishing deadlines, means calendar days, including Sundays and holidays.

1010. "Appurtenant works" include, but are not limited to, such structures as spillways, either in the dam or separate therefrom; the reservoir and its rim; low level outlet works; and water conduits such as tunnels, pipelines or penstocks, either through the dam or its abutments.

## Chapter 2. General Provisions

1025. It is the intent of the Legislature by this Act to provide for the regulation and supervision of all dams and reservoirs exclusively by the State to the extent required for the protection of public safety.

1026. No city or county has authority, by ordinance enacted by the legislative body thereof or adopted by the people under the initiative power, or otherwise, to regulate, supervise, or provide for the regulation or supervision of any dams or reservoirs in this State, or the construction, maintenance, operation, or removal or abandonment thereof, nor to limit the size of dam or reservoir or the amount of water which may be stored therein, where such authority would conflict with the

powers and authority vested in the Agency by this Act. This Act shall not prevent a city or county from adopting ordinances regulating, supervising, or providing for the regulation or supervision of dams and reservoirs that (a) are not within the State's jurisdiction, (b) are not subject to regulation by another public agency or body, or apply only to appurtenances such as roads and fences not germane to the safety of the structure.

1027. All plans and specifications for initial construction, enlargement, alteration, repair or removal of dams and supervision of construction shall be in charge of a civil engineer, licensed by this State, experienced in dam design and construction, assisted by qualified engineering geologists and other specialists when necessary.

1028. No action shall be brought against the State or the Agency or its agents or employees for the recovery of damages caused by the partial or total failure of any dam or reservoir or through the operation of any dam or reservoir upon the ground that such defendant is liable by virtue of any of the following:

(a) The approval of the dam or reservoir, or approval of flood handling plans during construction.

(b) The issuance or enforcement of orders relative to maintenance or operation of the dam or reservoir.

(c) Control and regulation of the dam or reservoir.

(d) Measures taken to protect against failure during an emergency.

1029. Nothing in this Act shall be construed to relieve an owner or operator of a dam or reservoir of the legal duties,

obligations, or liabilities incident to the ownership or operation of the dam or reservoir.

1030. The findings and orders of the Agency and the certificate of approval of any dam or reservoir issued by the State are final and conclusive and binding upon all owners, and State agencies, regulatory or otherwise, as to the safety of design, construction, maintenance, and operation of any dam or reservoir.

1031. Nothing in this Act shall be construed to deprive any owner of such recourse to the courts as he may be entitled to under the laws of this State.

1032. All records of official actions of the Agency and its correspondence pertaining to the supervision of dams and reservoirs are public documents.

1033. All owners shall notify the Agency of any change in ownership of any dam or reservoir subject to this Act at the time the transfer of ownership occurs.

### Chapter 3. Administrative Provisions

1050. The Agency shall be administered and directed by a civil engineer, licensed by this State, experienced in the design and construction of dams and reservoirs, and it shall employ such clerical, engineering, and other assistants as are necessary for carrying on the work of dam and reservoir supervision in accordance with this Act.

1051. When the safety considerations pertaining to a certificate of approval, dam, reservoir, or plans and specifications require it, or when requested in writing to do so by the

owner, the Agency may appoint a consulting board of two or more consultants not previously associated with the structure, to report to the Agency on its proposed action with respect to these considerations.

1052. The cost and expense of a consulting board if appointed on the request of an owner shall be paid by the owner.

#### Chapter 4. Powers of the Agency

##### Article I. Powers in General

1075. The Agency, under the police power of the State, shall review and approve the design, construction, enlargement, alteration, repair, maintenance, operation, and removal of dams and reservoirs for the protection of life and property as provided in this Act.

1076. All dams and reservoirs in the State are under the jurisdiction of the Agency, except those dams which are Federally owned.

1077. It is unlawful to construct, enlarge, repair, alter, remove, maintain, operate or abandon any dam or reservoir coming within the purview of this Act except upon approval of the Agency, provided that this section shall not be deemed to apply to routine maintenance and operation not affecting the safety of the structure.

1078. The Agency shall adopt and revise from time to time such rules and regulations and issue such general orders as may be necessary for carrying out, but not inconsistent with, the provisions of this Act.

1079. In making any investigation or inspection necessary to enforce or implement this Act, the Agency or its

representatives may enter upon such private property of the dam owner as may be necessary.

1080. In determining whether a dam or reservoir or proposed dam or reservoir constitutes or would constitute a danger to life or property, the Agency shall take into consideration the following conditions, not necessarily all inclusive: the possibility that the dam or reservoir might be endangered by overtopping, seepage, settlement, erosion, cracking, earth movement, earthquakes, failure of bulkheads, flashboard, gates and conduits, which exist or which might occur in any area in the vicinity of the dam or reservoir. Whenever the Agency deems that any conditions endanger a dam or reservoir, it shall order the owner to take such action as necessary to the satisfaction of the Agency to remove the resultant danger to life and property.

#### Article 2. Investigations and Studies

1081. For the purpose of enabling it to make decisions as compatible with public safety and economy as possible, the Agency shall make or cause to be made such investigations and shall gather or cause to be gathered such data including advances made in safety practices elsewhere, as may be needed for a proper review and study of the various features of the design, construction, repair and enlargement of dams, reservoir, and appurtenances.

1082. The Agency shall also make or cause to be made from time to time such watershed investigations and studies as may be necessary to keep abreast of developments affecting stream run-off and as required to facilitate its decisions.

Article 3. Action and Procedure to  
Restrain Violations

1083. The Agency may take any legal action proper and necessary for the enforcement of this Act.

1084. An action or proceeding under this article may be commenced whenever any owner or any person acting as a director, officer, agent, or employee of any owner, or any contractor or agent or employee of such contractor is:

(a) Failing or omitting or about to fail or omit to do anything required of him by this Act or by any approval, order, rule, regulation, or requirement of the Agency under the authority of this Act, or

(b) Doing or permitting anything or about to do or permit anything to be done in violation of or contrary to this Act or any approval, order, rule, regulation, or requirement of the Agency under this Act.

1085. Any action or proceeding under this article shall be commenced in a court of appropriate jurisdiction in which (a) the cause or some part thereof arose, (b) the owner or person complained of has its principal place of business, or (c) the person complained of resides.

Chapter 5. Applications

Article 1. New Dams and Reservoirs or Enlargements  
of Dams and Reservoirs

1100. Construction of any new dam or reservoir or the enlargement of any dam or reservoir shall not be commenced until the owner has applied for and obtained from the Agency written approval of plans and specifications.

1101. A separate application for each reservoir and its dams shall be filed with the Agency upon forms to be provided by it.

1102. The application shall give the following information:

(a) The name and address of the owner.

(b) The location, type, size, and height of the proposed dam and reservoir and appurtenant works.

(c) The storage capacity and reservoir surface areas for normal pool and maximum high water.

(d) Plans for proposed permanent instrument installations in the dam.

(e) As accurately as may be readily obtained, the area of the drainage basin, rainfall and streamflow records and flood-flow records and estimates.

(f) Maps and general design drawings showing plans, elevations, and sections of all principal structures and appurtenant works or other features of the project in sufficient detail, including design analyses, to determine safety, adequacy and suitability of design.

(g) Such other pertinent information as the Agency requires, such as proposed time for commencement and completion of construction.

1103. The Agency shall, when in its judgment it is necessary, also require the following:

(a) Data concerning subsoil and rock foundation conditions and the materials entering into construction of the dam or reservoir.

(b) Investigations of, and reports on, subsurface conditions, involving such matters as exploratory pits, trenches and adits, drilling, coring, geophysical surveys, tests to determine leakage rates, and physical tests to measure in place and in the laboratory the properties and behavior of foundation materials at the dam or reservoir site.

(c) Investigations of, and reports on, the geology of the dam or reservoir site and its vicinity, possible geologic hazards, including seismic activity, faults, weak seams and joints, availability and quality of construction materials, and other pertinent features.

(d) Such other appropriate information as may be necessary in a given instance.

1104. In instances wherein the physical conditions involved and the size of the dam or reservoir are such as to render the above requirements as to drainage areas, rainfall, streamflow, floodflow, and drilling or prospecting of site unnecessary, the Agency may waive the requirements.

1105. The application shall set forth the purpose or purposes for which the impounded or diverted water is to be used.

## Article 2. Repairs, Alterations, or Removals

1106. Before commencing the repair, alteration or removal of a dam or reservoir, including the alteration or removal of a dam or reservoir so that it no longer constitutes a dam or reservoir as defined in this Act, the owner shall file an application and secure the written approval of the Agency, except as provided in this article. Repairs shall not be deemed to

apply to routine maintenance and operation not affecting the safety of the structure.

1107. The application shall give such pertinent information or data concerning the dam or reservoir, or both, as may be required by the Agency and such information as to other matters appropriate to a thorough consideration of the safety of such a change as may be required by the Agency.

1108. The application shall state the proposed time of commencement and of completion of remedial construction.

1109. The application shall give the name and address of applicant, shall adequately detail, with appropriate references to the existing dam or reservoir, the changes which it is proposed to effect, and shall be accompanied by maps and plans and specifications which shall be a part of the application and which shall be of such character and size and set forth such pertinent details and dimensions as the Agency may require. The Agency may waive any of the requirements of this section if found by it unnecessary.

1110. In case of an emergency where the Agency declares repairs or breaching of the dam are immediately necessary to safeguard life and property repairs or breaching shall be started immediately by the owner, or by the Agency at the owner's expense, if he fails to do so. The Agency shall be notified at once of proposed emergency repairs or breaching and of work under way when instituted by the owner.

1111. The proposed repairs, breaching and work shall be made to conform to such orders as the Agency issues.

### Article 3. Approval of Applications

1112. Upon receipt of an application the Agency shall give its consideration thereto and shall approve or disapprove the same within the time provided in Section 1114.

1113. If an application is defective, it shall be returned to the applicant for such action as necessary to correct the defects, endorsed so that in order to retain its validity, it must be corrected and returned to the Agency within 30 days or such further time as may be given by the Agency. If the application is not so returned, it shall be rejected.

1114. No applications shall be approved or disapproved in less than 30 days after the receipt of the fee required by Section 1125, but all applications shall be approved or disapproved as soon as practicable thereafter. At the discretion of the Agency hearings may be held on each application.

1115. Approvals shall be granted under terms, conditions, and limitations necessary to safeguard life and property.

1116. Actual construction shall be commenced within one year after date of approval; otherwise the approval becomes void.

1117. The Agency may, upon written application and for good cause shown, extend the time for commencing construction.

1118. Notice shall be given to the Agency at least ten days before construction is to be commenced and such other notices shall be given to the Agency as it may require.

## Chapter 6. Fees

1125. The application for a new dam and reservoir or enlargement shall set forth the estimated net cost, as defined in this chapter, of the dam and reservoir or enlargement and shall be accompanied by a filing fee based upon the estimated cost and according to the following schedule: (Schedule below will of necessity vary in each State.)

(a) For the first one hundred thousand dollars (\$100,000) a fee of 2 percent of the estimated cost.

(b) For the next four hundred thousand dollars (\$400,000) a fee of  $1\frac{1}{2}$  percent.

(c) For the next five hundred thousand dollars (\$500,000) a fee of 1 percent.

(d) For all costs in excess of one million dollars (\$1,000,000) a fee of one-half of 1 percent.

In no case, however, shall the fee be less than one hundred dollars (\$100) or more than fifty thousand dollars (\$50,000).

1126. One fee only shall be collected for an enlargement to be effected by flashboards, sandbags, earthen levees, gates, or other works, devices, or obstructions which are, from time to time, to be removed and replaced or opened and shut and thereby operated so as to vary the surface elevation of the impounded water.

1127. For the purposes of this Act, the estimated net cost of the dam and reservoir or enlargement involved shall include the following:

(a) The cost of all labor and materials entering into the construction of the dam and appurtenant works or reservoir, including right of way.

(b) The cost of preliminary investigations and surveys.

(c) The cost of the construction plant properly chargeable to the cost of the dam or reservoir.

(d) Any and all other items entering directly into the cost of the dam or reservoir.

1128. Excluded from the cost listed in Section 1127 shall be:

(a) Costs of right of way for other than the dam and reservoir.

(b) Detached or underground powerplants, including switchyards and substations.

(c) Electrical generating, or pump-generating machinery.

(d) Roads, railroads, heliports and landing strips affording access to the dam or reservoir.

1129. An application shall not be considered by the Agency until the filing fee is received. All or part of the filing fee may be returned to the applicant only if he withdraws or cancels the application any time prior to the start of construction. The amount of the refund will be determined by the Agency with due regard to funds actually expended by the Agency in consideration of the application.

1130. As soon as possible after giving the notice of completion required in Section 1150, the owner shall file an

affidavit with the Agency stating the actual cost of the dam and reservoir or enlargement thereof in such detail as the Agency requires to determine whether a further fee is due. In the event the owner of a new or enlarged dam or reservoir, because of loss of records, recent change of ownership, or other causes beyond his control, is unable to report the actual cost of construction or enlargement, he shall file an affidavit to this effect, stating the reasons therefor, within thirty days after receiving a written request therefor from the Agency. The Agency shall then make its own appraisal of the cost of construction or enlargement and determine what further fee, if any, is required.

1131. In the event the actual cost exceeds the estimated net cost by more than 15 percent, a further fee shall be required by the Agency computed under the schedule set forth in Section 1125 upon the actual cost, plus a penalty of 15 percent of the actual cost. No further fee shall be required, however, if such fee is to be computed at less than twenty dollars (\$20). Upon making a determination that a further fee is required, the Agency shall notify the owner by certified mail of the amount of such fee and shall notify the owner that he may appear within sixty days thereafter before an authorized representative of the Agency to protest the amount of the fee, in whole or in part, determined by the Agency to be required, and the sufficiency of the appraisal upon which such determination was based.

1132. All filing fees and other charges collected under the provisions of this Act shall be paid into a special fund in the State Treasury immediately after the Agency has certified

as to the correctness of the amounts received, to be available to the Agency for expenditure for the purposes authorized by this Act.

1133. The fees provided for in this article shall be required of all enumerated in the definition of owner in Chapter 1 of this Act.

## Chapter 7. Inspection and Approval

### Article 1. New or Enlarged Dams and Reservoirs

1150. Immediately upon completion of a new dam and reservoir or enlargement of a dam and reservoir the owner shall give a notice of completion to the Agency, and as soon thereafter as possible shall file with the Agency a certificate signed by the responsible engineer supervising construction for the owner, certifying that the project was constructed in conformance with approved plans and specifications, accompanied by supplementary drawings or descriptive matter showing or describing the dam or reservoir as actually constructed, which shall include but not be limited to the following:

(a) A record of all geological boreholes and grout holes and grouting.

(b) A record of permanent location points, benchmarks and instruments embedded in the structure.

(c) A record of tests of concrete or other material used in the construction of the dam and reservoir.

(d) A record of seepage flows and embedded instrument readings.

1151. In connection with the enlargement of a dam and reservoir, the supplementary drawings and descriptive matter need apply only to the new work.

1152. A certificate of approval shall be issued by the Agency upon a finding by the Agency that the dam and reservoir are safe to impound water within the limitations prescribed in the certificate. No water shall be impounded by the structure prior to issuance of the certificate.

#### Article 2. Certificates of Approval

1153. Each certificate of approval issued by the Agency under this Act may contain such terms and conditions as the Agency may prescribe.

1154. The Agency may revoke or suspend any certificate of approval whenever it determines that the dam or reservoir constitutes a danger to life and property. Whenever it deems such action necessary to safeguard life and property, the Agency may also amend the terms and conditions of any such certificate by issuing a new certificate containing the revised terms and conditions.

1155. Before any certificate of approval is revoked by the Agency, the Agency shall hold a hearing. Written notice of the time and place of the hearing shall be mailed, at least twenty days prior to the date set for the hearing, to the holder of the certificate. Any interested persons may appear at the hearing and present their views and objections to the proposed action. Any petition to a court of appropriate jurisdiction to

inquire into the validity of action of the Agency revoking a certificate of approval shall be commenced within thirty days after service of notice of the revocation on the holder of the certificate.

Article 3. Repaired or Altered  
Dams and Reservoirs

1156. Immediately upon completion of the repair or alteration of any dam or reservoir, the owner shall give notice of completion to the Agency and as soon thereafter as possible shall file with the Agency a certificate signed by the responsible engineer supervising the work for the owner that the repairs or alterations were completed in accordance with the approved plans and specifications, accompanied by supplementary drawings or descriptive matter showing or describing the dam or reservoir as actually repaired or altered together with such maps, data, records, and information pertaining to the dam or reservoir as repaired or altered as the Agency requires.

1157. A certificate of approval shall be issued by the Agency upon a finding by the Agency that the dam and reservoir are safe to impound water within the limitations prescribed in the certificate. Pending issuance of a new certificate of approval, the owner of the dam or reservoir shall not, through action or inaction, cause the dam or reservoir to impound water beyond the limitations prescribed in the existing certificate.

1158. The certificate of approval shall supersede any previous certificate of approval issued for the dam or reservoir so repaired or altered.

#### Article 4. Removal of Dams and Reservoirs

1159. Upon completion of the removal of a dam or complete drawdown of a reservoir such evidence as to the manner in which the work was performed and as to the conditions obtaining after the removal as the Agency requires shall be filed with the Agency.

1160. This evidence shall show that a sufficient portion of the dam has been removed to permit the safe passage of floods down the watercourse across which the dam was located, within flooding criteria required by the Agency, and that adequate provision has been made by the owner to prevent damage downstream from the remaining portion of the dam by subsequent flooding of downstream areas under such criteria.

1161. Before final approval of the removal of a dam or reservoir is issued, the Agency shall inspect the site of the work and determine that all danger to life and property as a result thereof has been eliminated.

#### Article 5. Complaints as to Unsafe Conditions

1162. Upon receipt of a written complaint alleging that the person or property of the complainant is endangered by the construction, enlargement, repairs, alterations, maintenance, or operation of any dam or reservoir the Agency shall cause an inspection to be made unless the data, records, and inspection reports on file with it are found adequate to make a determination whether the complaint is valid.

1163. If the Agency authorizes an inspection the complainant shall deposit with the Agency a sum estimated by it

to be sufficient to cover costs of the inspection. The Agency may utilize independent consultants of its selection to make the inspection and a report to the Agency.

1164. If it is found that an unsafe condition exists, the Agency shall notify the owner to take such action as is necessary to render or cause the condition to be rendered safe, including breaching or removal of any dam found beyond repair, and any money deposited to secure an inspection shall be returned.

1165. If, after an inspection is made on account of a complaint, the complaint is found by the Agency to have been without merit, the cost therefor shall be payable into the Special Fund in State Treasury from the money deposited, with any excess returned to the complainant. The complainant will be provided with a copy of the official report of the inspection.

Article 6. Inspection During  
Progress of Work

1166. During the construction, enlargement, repair, alteration, or removal of any dam or reservoir the Agency shall make either with its own engineers or by consulting engineers or engineering organizations, periodic inspections at State expense for the purpose of ascertaining compliance with the approved plans and specifications. The Agency shall require the owner to perform at his expense such work or tests as necessary, provide adequate supervision during construction by a civil engineer registered or licensed by the laws of this State, and to disclose information sufficient to enable the Agency to determine that conformity with the approved plans and specifications is being secured.

1167. If, after any inspections, investigations, or examinations, or at any time as the work progresses, or at any time prior to issuance of a certificate of approval it is found by the Agency that amendments, modifications, or changes are necessary to ensure safety, the Agency may order the owner to revise his plans and specifications, provided, however, the owner may, pursuant to Section 1051, request an independent consulting board to review the order of the Agency.

1168. If conditions are revealed which will not permit the construction of a safe dam or reservoir the Agency's approval shall be revoked.

1169. In the event that conditions imposed may be waived or made less burdensome in its judgment without sacrificing safety, the Agency may authorize an owner to revise the plans and specifications accordingly.

1170. If at any time during construction, enlargement, repair, or alterations of any dam or reservoir the Agency finds that the work is not being done in accordance with the provisions of the original approved plans and specifications or in accordance with the approved revised plans and specifications, it shall give a written notice thereof and order compliance by registered mail or by personal service to the owner.

1171. The notice and order shall state the particulars in which the original approved plans and specifications or the approved revised plans and specifications are not being or have not been complied with and shall order the immediate compliance with the original approved plans and specifications or with the