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Harvey O. Banks

CALIFORNIA WATER PROJECT, 1955 - 1961

An interview conducted
by
Gardner M. Brown, Jr.

Edited by Gerald J. Giefer

Statewide Water Resources Center, University of California
in cooperation with the
Regional Oral History Office, Bancroft Library, Berkeley

Berkeley, 1967



Harvey O. Banks

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PREFACE

The following interview is one of a series on "The Oral History of California Water Resources Development" sponsored by the Water Resources Center of the University of California and conducted at the Los Angeles and Berkeley campuses of the University during 1965, 1966, and 1967. In setting up the project, the nature and scope of the work was described as follows:

The basic purpose of this program will be to document historical developments in California's water resources by means of tape recorded interviews with men who have played a prominent role in this field. Much of the published material on California's water resources describes engineering and economic studies of specific water projects. Little, however, is devoted to the concepts, evolution of plans, and areas of authority exercised by various interested Federal, State and local agencies.

For example, there is little reference material with regard to the transition of administration of the Central Valley Project from the State of California to the U.S. Bureau of Reclamation in the early 1930's. Similarly, the negotiations leading to contracts for water between the State of California and the Metropolitan Water District of Southern California are not documented. Yet, both of these agreements had profound effects on water resources policy in California. Recorded interviews can piece together these important links in California's water resources history. The resulting material will provide a valuable fund of information for researchers in the years to come.

The Berkeley project is under the faculty direction of J.W. Johnson, Director, Hydraulics Engineering Laboratory;

Professor, Hydraulic Engineering, and David K. Todd, Ph.D., Professor of Civil Engineering. Gerald J. Giefer, Librarian, Water Resources Center Archives, is responsible for the interviewing and processing of the manuscripts which are being handled in co-operation with the Regional Oral History Office of the Bancroft Library. Final manuscripts are available for research at the Water Resources Center, UCLA; Department of Special Collections, Library, UCLA; Department of Special Collections, Library, UC Davis; Water Resources Center Archives, UC Berkeley; The Bancroft Library, UC Berkeley; and the Regional Oral History Office, UC Berkeley.

Included in the series at this date are Harvey O. Banks, Sam Leedom, and Sidney T. Harding. The researcher is also referred to oral history interviews on California water development done previously by the Regional Oral History Office with Frank Adams, Louis Bartlett, Stephen Downey, William Durbrow, Herbert Jones, Charles Lambert, and J. Rupert Mason.

Willa Klug Baum, Head
Regional Oral History Office

15 September 1967

Regional Oral History Office
Room 486 The Bancroft Library
University of California
Berkeley, California

INTRODUCTION

The following interview with Harvey O. Banks was conducted by Gardner M. Brown, Jr. in August, 1965. The interview was tape recorded at the San Francisco offices of Leeds, Hill and Jewett, Inc., Consulting Engineers, where Mr. Banks is a Vice-President. The interview was held in two sessions, a week apart.

Dr. Brown received his Ph.D. in Agricultural Economics in 1964 at the University of California, Berkeley. His thesis topic was titled, "Distribution of benefits and costs from water development: a case study of the San Joaquin Valley -- Southern California Aqueduct." Dr. Brown joined the faculty of the University of Washington at Seattle in September, 1965.

An early draft of the transcript of this interview was checked for accuracy by Dr. Brown before final copy was typed. Mr. Banks, however, did not have the opportunity to read the transcript.

Funds supporting the recording and transcription of this interview were provided by the Water Resources Center of the University of California (Project 1-442496-19900, 1965-66). The project was under the immediate direction of the Water Resources Center Archives, University of California, Berkeley.

Gerald J. Giefer, Librarian
Water Resources Center Archives

Harvey Banks, water pioneer

By Steve Gibson
Bee Staff Writer

Harvey O. Banks, an internationally known water engineer who played a key role in developing the State Water Project, died of leukemia Sunday in Austin, Texas, where he had resided the past few years.

He was 86.

Mr. Banks, a former director of the California Department of Water Resources, was perhaps best known for his efforts to get the State Water Project built.

"I'd say that was his biggest contribution," said William Ginnelli, a former director of the Department of Water Resources.

Mr. Banks worked tirelessly to promote the legislation that created the gigantic system of dams, reservoirs and viaducts to transport surplus Northern California water to the San Joaquin Valley and Southern California.

The water project's pumping plant at the south end of the Delta — at the head of the 444-mile California Aqueduct — is named after Mr. Banks.

He was appointed director of what was then a new agency, the Department of Water Resources, in 1956 by Gov. Goodwin Knight. He was reappointed in 1958 by Knight's successor, Edmund G. "Pat" Brown.

He was graduated from Syracuse University with a bachelor's degree in civil engineering in 1930. At Stanford University, where he later earned a master's degree in hydraulic and sanitary engineering, he also taught math.

During World War II, he served with the Army Corps of Engineers in the Pacific. By the time he returned to civilian life, he had reached the rank of lieutenant colonel. He did a stint as a consulting engineer, and then went to work for what was then called the California Division of Water Resources.

After leaving state service in 1961, he worked as a consulting engineer, helped Texas develop its water plan and served on the governing board of the Water Education Foundation, a Sacramento-based nonprofit group.

"He had his own opinions, but

he tried to see all points of view," said Rita Schmidt Sudman, executive director of the foundation.

Though his background was in engineering, "he respected the emerging ideas that the environment needed protection," Sudman said. "He didn't live in the past. He was proud of what he had accomplished with the water project, and felt the pluses outweighed the minuses. But he also recognized the need to return water to the environment."

After leaving Sacramento, he resided in Belmont for more than 25 years.

He was preceded in death by his first wife, Mary Morgan Banks. He is survived by his second wife, Jean Ott Williams of Austin. Other survivors include his three sons from his first marriage — Robert, Philip and Kimball.

The family suggests that any contributions be made to the Water Education Foundation, 717 K St., Sacramento, 95814.

Services were held Thursday at First United Methodist Church in Austin.

Water pioneer Harvey Banks dies

Harvey Oren Banks, who played a key role in breaking through the emotionalism and legislative deadlock surrounding California water issues in the late 1950s and helped craft the marvel that would become the State Water Project, died of leukemia this past September. He was 86.

Banks began state service as a young civil engineer in 1938, was named director of the just-formed state Department of Water Resources by Gov. Goodwin Knight in 1956, stepped down from DWR in 1961, and then ran a busy engineering consulting firm into his 80s.

Banks was already a respected engineer when he came to DWR. He had a bachelor's degree in civil engineering from Syracuse University and a master's degree in hydraulic and sanitary engineering from Stanford, as well as stints with the Army Corps of Engineers, the California Division of Water Resources and as a consulting engineer. But he also brought to DWR something most engineers didn't have—the ability to work with politicians. Much of his previous work was, in fact, in the political arena, and his skill in forging compromise played a major role in keeping the State Water Project moving.

When Edmund G. "Pat" Brown, came to the governorship in 1958, he reappointed Banks as director of DWR. Besides helping to build bipartisan support for the project—Banks was a registered Republican—the reappointment allowed Banks to proceed with a strategy that would soon be embodied in the Burns-Porter Act.

That strategy was a bond measure for financing the project—at that time called the Feather River Project—whereby \$1.75 billion in general obligation bonds would be repaid from the sale of power produced by the project and from contracts for water service.

With Brown's political muscle and Banks savior faire as chief negotiator, the Burns-Porter Act—later to become Proposition 1—passed the Legislature by a 25-12 vote.

At the polls, it would be much closer. A total of 5.8 million Californians cast their ballots on November 8, 1960, and at one point Proposition 1 was trailing by 200,000 votes. Only one Northern California county, Butte, where Oroville Dam was to be built, voted for the bonds. Then the heavy Southern California votes began to come in and, with San Diego County voting 4-10-1, Proposition 1 passed by a slim 173,944 votes.

The State Water Project provides water to 6 out of 10 Californians, and this past November, 36 years after Proposition 1's original passage, California water was again the focus of a major ballot measure. This time another successful bond initiative, Proposition 204, provides funds to repair the ailing San Francisco Bay/Sacramento-San Joaquin Delta Estuary, the source of water to the State Water Project.

Banks stepped down from public office a year after Proposition 1 passed and went on to have a remarkable career in the private sector until his retirement earlier this year. The internationally renown water engineer once was asked about his decision to leave DWR just after he had scored such a success.

"I always believed you should quit while you're ahead," he joked.

A glance at his lifetime full of accomplishments and it's apparent that Harvey Banks was never behind.



TABLE OF CONTENTS

Introduction	111
Professional background	1
Water quality activities of the State	3
Water-rights activities of the State	4
California water plan	5
Flood Control Act of 1944	6
California Water Project	
Metropolitan Water District and Colorado River	9
Water-based recreation	11
Development of Project plans	14
Areas of origin	17
Pricing policy	20
Land values, unjust enrichment issue	21
Bond Issue	24
Allocation of cost	26
Uses of water (agriculture vs. municipal and industrial)	27
California Water Fund	34
Salt water demineralization	36
Department of Water Resources and policy-making	41
Project power sales	44
Agricultural water and surcharge	46
Pricing policy	48
Reorganization of water agencies, 1956	50
Davis - Grunsky Act	54
Burns - Porter Act	56
San Luis Act	63
Department of Water Resources, contracting, policy development	67
State Legislature and Project policy	71
State and role in multi-purpose water development	73
Index	81

INTERVIEW WITH HARVEY BANKS
AUGUST 17, 1965

Brown: This is an interview with Mr. Harvey Banks of Leeds, Hill and Jewett on August 17, 1965. The interview is conducted on behalf of the Water Resources Center Archives at the University of California. The interviewer is Gardner Brown. Mr. Banks, let's start off by having you give some of your professional background prior to your coming to the Department and the kinds of activities that you are involved in. When did you come to the California Dept. of Water Resources?

Banks: My undergraduate work was taken at Syracuse University from which I was graduated in June of 1930, with a degree of Bachelor of Sciences in Civil Engineering. Upon completion of undergraduate work I attended Stanford University for three years with a half time instructorship in Civil Engineering and taking graduate work in Hydraulic and Sanitary Engineering the other half of the time. I received a Master of Science Degree from Stanford. After leaving Stanford in 1933, I worked with the City of Palo Alto on sanitary work of one kind and another and went with the U.S. Soil Conservation Service in May of 1935 and spent nearly three years with the federal government in that particular agency. In 1938 I went with the then Division of Water Resources at the end of the State in its L.A. Office, working on ground water investigations and ground-water adjudications. In 1942, along with a few million others, I went into the Armed Services and served a little more than three years with the Corps of Engineers, from

Banks: which I was released in Oct. 1945, having spent some two years in overseas duty in the Solomon Islands. After military service I went back with the Division of Water Resources for a short time, and in 1946 I entered into private practice in Los Angeles as a partner in the firm Harold Conkling, Consulting Engineer. In 1950, Bob Edmonston, then State Engineer, asked me to come back to the Division of Water Resources to take charge of the newly activated Water Quality Program of the Division which was authorized by the Dickey Water Pollution Act of 1949. I continued to have charge of that activity until June of 1953 when I was made Assistant State Engineer, in charge of the administration of water rights and the water quality activities of the Division. In November of 1955, on the retirement of the State Engineer Bob Edmonston, I became State Engineer, and when the Department of Water Resources was formed in July of 1956, I was appointed by Governor Knight as Director of the Department of Water Resources. I was reappointed as Director when Gov. Brown succeeded Gov. Knight.

Brown: That's very complete and quite specific. You've had a long record of involvement with the State.

Banks: My total years of service including credit for military service amounts to about 19 and one half years.

Brown: This makes you as intimately qualified as anyone. Lots of water problems. Two things interest me. The kinds of work you did when you were associated with the water quality

Brown: investigations, and also the type of work you did when you were working in the area of water rights adjudication. This seems to be something distinct from engineering training.

Banks: The water quality activities of the then Division of Water Resources and now of the Department Water Resources are probably unique in the world. The water quality investigation program that was delegated to the Division by the Dickey Water Pollution Control Act is very comprehensive. Of course it does not encompass administration of the pollution control laws themselves, but it does form a program for not only extensive but intensive studies of the quality of the water resources of the State, both surface and ground water, and of the saline waters of our bays and off-shore with respect to impairment of the quality of water, not only due to sewage and industrial waste, but all other sources in addition to investigations of quality and causes of variations in quality. The program also encompassed the investigations of feasibility of reclamation and reuse of waste waters and the formulation of well drilling standards to protect the quality of ground waters from the adverse effects of improperly constructed wells and that sort of thing.

Brown: How does California's involvement in water quality problems, in its magnitude and extent compare with the concern of other states and also perhaps with the federal program? Is it in the avant-garde?

Banks: It is far ahead of the other states. Far ahead actually of the federal programs. I would say that in most instances when people think of quality they think solely in terms of the effects of sewage and industrial waste whether treated or not. The water quality program of California not only considers those deleterious effects, but also such matters as salt balance in ground water basins, the inflow of natural saline waters, sea water intrusion into ground water basins, and effects of return agriculture flows. The whole gamut of quality problems.

Brown: That's very broad, far reaching.

Banks: Very broad.

Brown: And what about a remark or two on the period around 1953 when you were concerned with water rights? What kind of things were you doing then?

Banks: Well, of course, at that time the Division of Water Resources-- and we must make the distinction between the Division and the Department because while the Department grew out of the Division, the Department didn't succeed to all of the powers and duties of the Division--but at the time the Division of Water Resources in its administration of water rights, had three principal functions:

- 1). Action on applications to appropriated and unappropriated waters and granting of permits and licences in connection with such application.

- 2). Adjudication of water rights

3). Provision of watermaster service where water rights had been determined either by court action or agreement.

Brown: Let's come a little closer to the present and maybe you'd talk about the setting in the mid 50's out of which the blueprint for the first stage of the California Water Plan emerged, and indeed the California Water Plan itself, although it does have predecessors dating back to the 20's.

Banks: We should be clear. Are we speaking of the California Water Plan as it is expressed in Bulletin 3* as a Master Plan or are we speaking of the California State Water Project?

Brown: Let's talk about both. More generally about the plan as expressed in Bulletin 3, and more specifically about the precise projects which are called the State Water Facilities.

Banks: As far as the Calif. Water Plan is concerned we have to go back to 1945 when the State Water Resources Board was created by the legislature. Initially the State Water Resources Board was principally concerned with flood control in California and the reallocation of State funds for flood control purposes (reallocation to local agencies). Then in 1947 the powers and responsibilities of the State Water Resources Board were broadened into the whole field of water planning, water conservation and water utilization, as well as flood control.

Brown: Let me interject a question. Do you know off-hand, in this allocation of funds for flood control over various regions within the State, what kinds of rules, specified or ad-hoc,

*The California water plan. California State Water Resources Board, May, 1957.

Brown: were applied? This is around the time the Watershed Protection Act was applied.

Banks: It wasn't the Watershed Protection Act. The small Watershed Protection and Flood Prevention Act was in 1954.

Brown: I'm sorry, yes.

Banks: But if you recall in the Flood Control Act of 1944, Congress caught up on authorizations of flood control projects. In other words, because of the war years, there had been little or no activity in flood control for some period of time and the Congress, looking to the future and the probable end of the War in the need to reinstitute activity in the public sector of water development, authorized a large block of projects throughout the Nation, principally for flood control although others were for other purposes. There were a considerable number of those authorized in California. And there was some concern over whether or not local agencies would be able to bear the non-federal costs of those. So the legislature provided that the State would reimburse the local agencies for their costs for lands easements, rights of way and relocation of utilities, in connection with federal flood control projects where those costs were specified to be borne by non-federal interests.

Brown: Once again was California leading in development of policy along these lines?

Banks: As far as I know, no other state had that provision and very few of them have it at the present time.

Brown: And so, it was this agency in California that ranked proposed flood control projects as they saw it and agreed, in some cases, and agreed not to in other cases, to provide reimburseable funds.

Banks: Well, in effect the State Water Resources Board, which was created by the Water Resources Act of 1945, was given jurisdiction over flood control activities as far as the State is concerned and in fact, the Water Resources Board developed a policy along the lines that you suggest--of ranking proposed flood control projects in the order of importance as they saw it and presenting that to the Congress in support of flood control appropriations. Now, as far as this reallocation of State funds, they had little discretion in that, other than to review the amounts to make sure that the money was properly expended.

Brown: What kinds of rules did they use in ranking? Or what kinds of notions did they have? Were they well formalized?

Banks: Well, in the early days of the game they weren't too well formalized.

Brown: This was before the "Green Book".

Banks: Yes. Well, normally in federal flood control projects the Corps of Engineers, or Agriculture, as the case may be, specifies that certain costs must be borne by a non-federal interest, and on level and channel projects particularly those non-federal costs include the cost of land easements, rights of way, and relocation of utilities.

Brown: Channel improvements are more expensive locally than reservoirs.

Banks: That is correct.

Brown: O.K. When I interrupted we were distinguishing between the water plan and the California Water Project as we know it today, and you were saying it had, for your purposes, roots dating back to 1945.

Banks: At least. To reiterate, in 1947 the scope of authority and responsibility of the Water Resources Board was broadened by the legislature and the Board was directed to develop plans for the country and hence the development of water resources of the State. Now this was in rather broad terms, but the Board, in conjunction and cooperation with the State Engineer, who was designed by law as Secretary to the Board, decided that there should be a master plan developed for all of the water resources of the State. That gave rise to what we now call the California Water Plan.

Brown: Was the decision not to buy the Central Valley Water Project an important inducement to work at a more rapid rate towards development of what we now know as Bulletin 3.

Banks: So far as I'm aware, the decision, or rather lack of action toward buying the Federal Central Valley Project had relatively little impact on the whole thing in spite of the allegations of some of the, to put it bluntly, some of the acreage limitation proponents.

Brown: What was the status of a couple of things at this time:
1st--Were there any rumblings about attention to the Colorado

Brown: River Controversy? and 2nd--Was there--I'm thinking in the mid 50's again--a realized or perceived need for increased water-based recreational facilities?

Banks: As far as the Colorado River water controversy is concerned-- that started in 1951, as I recall it--the last action. Now, whether or not this had an impact depends on the viewpoint that you're interested in. As far as the Metropolitan Water District is concerned, up until 1960, that District refused to admit even to themselves, so far as I'm aware, that they possibly could be cut down on the Colorado River supply. I can remember distinctly in 1957 and 1958 being told by members of the Board of Directors of the Metropolitan Water District that there was no possibility of their being short on water, and the fact that they did have ample water supply for foreseeable future needs, at least as far as 1975, and that they saw no reason to be interested in a state water plan.

Brown: In your estimation this wasn't a bargaining tactic?

Banks: In my estimation, no. The reason of course that many people wouldn't acknowledge the possibility of loss of the Colorado River suit, or loss of part of the supply then considered to be available from the Colorado, was simply legal tactics; but I am sure that many members of the Metropolitan Water District Board of Directors were convinced that they couldn't possibly lose that suit. Now, on the other hand, many of us, including myself, had no such conviction at all. In fact, I

Banks: personally was much worried that the supply from the Colorado might be cut down. And furthermore, I was also much more certain that even if it were not cut down, that by 1970 or 1975, Southern California would need more water than they had available to them on a firm basis, even were the Colorado River supply to be maintained intact.

Brown: This raises an interesting problem of differences in the way two public units view an uncertain event and gives a possible explanation for necessity of state water planning.

Banks: Well, I think that it should be made clear that as far as I'm aware the Metropolitan Water District had done no planning for future water supply at that time for that District. At least, if they had, they never showed any such plans to me.

Brown: Were there any important developing national or local trends which might have accelerated the design of this blueprint, both the grand conception in Bulletin 3 and a more specific conception, say in Bulletin 78?*

Banks: It should be made clear the Bulletin 3 is not a project proposal. Bulletin 3 is, in effect, a physical plan for conserving and redistributing the water resources of the State to meet projected needs as such needs may arise in the future in the various areas of the State and for the several purposes concerned. It never was envisioned as being a specific project proposal, in any way, shape or manner. Now...

Brown: This question is misinterpreted in the professional literature.

*Bulletin 3 is: The California water plan. California State Water Resources Board, May, 1957; Bulletin 78 is: Investigation of alternative aqueduct systems to serve Southern California, Dept. of Water Resources, 1959-60.

11

Banks: Yes, very much so and it continues to be misinterpreted... We tried our best of course in writing it to make it clear as to what its intent was, its objective, and its limitations, but unfortunately, too few people read it. The California Water Plan as proposed in Bulletin 3 doesn't in any way imply that this is to be a state constructed system or a locally constructed system or a federally constructed system.

Brown: Or that any of the facilities they talk about should actually be constructed.

Banks: That's right. This is the way it can be done, when, as, and if it becomes necessary and economic to serve this particular need in this particular area. Now you asked a question about recreation. I think possibly the State itself was the leader in pointing up the importance of recreation. In the mid 50's, water based recreation was a nice thing, but no one really paid too much attention to it and did relatively little planning for it until such time as the reservoirs were constructed, as at Folsom, and then everyone flocked to it, and in the late 50's, it was realized that this was a tremendous social benefit as well as a economic benefit, and that it should be planned for rather than allowed to happen.

Brown: When you say nobody, are you thinking of people within the State or people also outside the State?

Banks: I'm thinking of both. If you'll recall, federal projects--

Banks: up until very recently--the maximum Congress would go for was minimum basic recreation facilities. It has only been in the last four years that Congress has recognized the overall importance of recreation.

Brown: When you were describing Bulletin 3 briefly, you talked in a very general way about the kinds of objectives that were implicit in it, or explicit in some cases. I wonder if you could be more specific about the thinking of the department along these lines. What real kinds of objectives were they considering?

Banks: Well, of course, as an engineer I define objectives a little differently than you do as an economist. I think we could see at that time the fact that there would be a scramble for water, that overall, there would be competition among users for the available water resources and particularly, the cheaper water resources.

Brown: Could you be more precise about who the competition would be between?

Banks: Well, fundamentally, of course, the competition is both on an areal basis and on a use basis. On an areal basis, we have the competition between the primarily agricultural demands and of course parenthetically, it should be pointed out that the areal basis and use overlap here; but on an areal basis you have the competition between the San Joaquin Valley and the Sacramento Valley which are almost a unit for the surplus waters of the Sierras versus Southern Cali-

Banks: fornia and the Bay Area. On a use basis, of course, you have the competition between agriculture on the one hand and municipal-industrial use in the other direction. Plus recreation and enhancement of fish and wildlife.

Brown: Power?

Banks: And power. Although by-and-large the competition for power is not as severe in this state as other places, simply because water used for developing power by-and-large is available for other uses. This may not be the case, for instance, on the Colorado River in Texas, where the Lower Colorado River Authority, which is primarily a power developing agency, is determinedly hanging onto its water rights for power development, even though the water is needed upstream for other developments--what we conventionally term as "higher uses". But that conflict between power and consumptive uses has never been as significant in this state as it is other-places.

Brown: There was competition in the 30's between the representatives of power and the representatives of other uses.

Banks: Yes, competition has been not so much over the water itself as over who should develop the power.

Brown: Yes.

Banks: That has been, of course, an acrimonious and, at times, almost a violent controversy.

Brown: So the State felt there would be increasing competition between areas and uses in the future for water. But in

Brown: constructing and writing Bulletin 3, they were thinking about the actual facilities for a State Water Project. What sort of objectives were they designing these projects for?

Banks: You speak now of the State Water Project.

Brown: Yes. Let's look only at the Water Project because that's a definite plan.

Banks: Well, at that time, and this was in the early 50's, we could see a substantial need for supplemental water in the Bay Area, Alameda County, Santa Clara County, in the west and south...

Brown: In the area served by the North Bay Aqueduct too?

Banks: In time, yes (to some extent), although in our planning it was not of high priority. That came about, of course, because of the Abshire-Kelly Salinity Control Bill and the directive to plan for a full water supply for the entire Bay Area.

Brown: It was a reaction to a legislative...

Banks: Yes.

Brown: I see. And if the Department had had its own way, it might not have included the North Bay and its plans initially?

Banks: It might well have considered it as a later development.

Brown: Along with the development of the Eel or something.

Banks: Yes, but we could see also a very large demand for agricultural water in the west side of the San Joaquin Valley, Western Fresno County on south, and in Kern County. Those portions of Kern County not projected for service under the Central Valley Project. And of course we could see a very

Banks: substantial need for additional water in Southern California.

Brown: And you said that in part, Southern California "couldn't see"; but how about the San Joaquin Valley?

Banks: I didn't say Southern California. I said the Metropolitan Water District. There has always been in Southern California a rather deep schism in thinking between some of the member agencies of the Metropolitan Water District, such as the Department of Water and Power of the City of Los Angeles, and San Diego County people, as to their viewpoints as to the future and the viewpoint of the Board of Directors of the Metropolitan Water District as formally expressed. Now, there was this schism within the Board of Directors of Metropolitan, but I'm speaking of their official policy and official statements as adopted by the Board, and of course its voting strengths, shall we say.

Brown: Well, my reason for asking the question is I'm trying to determine whether it was Sacramento on its own initiative or if the Department of Water Resources was receiving pressure from local groups to be concerned.

Banks: Initially, the major pressure came from the San Joaquin Valley. There were, it is true, some land-owners in the San Joaquin Valley who turned to the State for additional water in the hope that by going that route, even though it would be far more costly-- and they recognized that it would be more costly -- that they would be able to escape the acreage limitations of the federal reclamation law, even though

Banks: under federal reclamation law their water would be far cheaper than contemplated under the State Water Project.

Brown: In planning for the present Water Project, was there any objective that all geographic areas should receive some benefit, or all uses should receive some benefit?

Banks: If you were referring to the Burns-Porter Act the State water facilities set up under the Burns-Porter Act--then "yes". There was, in formulating the entire program, as distinguished from the State Water Project, and here again we must make a clear distinction--the State Water Project as we are using the term here means now these facilities that are actually being constructed and will be operated by the State or which the State, in the case of the San Luis Joint Facilities, the State is paying its share. Now, the total project, the total programs authorized and funded by the Burns-Porter Act and corollary acts includes not only these facilities to be constructed by the State, but it includes basin development. There is a provision in there that the State is authorized to build projects for local needs in the basins of origin. The Davis-Grunsky program is a part of the total program funded by the Burns-Porter Act; and in setting up that total program which is authorized and funded by the Porter Act, yes, there was the deliberate and definite thought of making this a program of as broad geographic and user benefit as possible.

Brown: Were there any political reasons for doing this? Is it a

Brown: kind of compensation for "robbing the North" of its waters.

Banks: Well, "Robbing the North of its water" is a fallacious concept. The North could not possibly develop its water without the assistance of the rest of the State. I mean the North needed and still needs money. It could not possibly without assistance, either through the federal government or the state government, not develop its water. Now, you ask about political considerations. I will answer that directly and say that you have to have a certain amount of votes in the legislature to get a bill through. We were not unaware of that necessity.

Brown: What were the forces and concerns which played a significant role in the evolution of the area of origin doctrine.

Banks: Well, the concept of protection of the areas of origin originated in the early 30's. In 1929, as I recall the date, the State Engineer presented the State Water Plan in a formal report to the legislature. That particular plan generally is what we now know as the Central Valley Project being constructed by the Bureau of Reclamation. The concept in that plan of transporting northern water, that is Sacramento Valley water, to the San Joaquin Valley brought home to the members of the legislature particularly, as well as to their constituents, the fact that massive inter-regional transfers of water inevitably would take place, and it aroused the fears of the counties of origin, particularly the mountain counties, that once works for such transfers were built, that

Banks: they might well lose any possibility of ever acquiring any water rights for their needs. Of course, at that point, the State was operating under the strict appropriative doctrine: the developer first in time is first in right. And as a result of that concern on the part of the mountain counties, as I read history, the Feigelbaum Act was passed which set up what we know now as the County of Origin Act.

Brown: When was this passed:

Banks: 1931, I believe was the date. Now essentially, the County of Origin Act is of limited protection in that it only applies where State filings have been made pursuant to the provisions of Section 10500 of the Water Code. But it does accord in those instances water users within the counties of origin a prior right to water originating in that county of origin. Or, to put it in another context, the county of origin estops an exporter who is proceeding under one of these so-called State filings, from protesting a subsequent development for use within the county of origin. In 1933, the so-called Watershed Protection Act was passed which applies to the builder and operator of the Central Valley Project, as such Project is authorized under the article. It is not a prior right to water in the conventional sense of a water right, but it is a prior right to Project water. There is a very definite distinction here which was brought out of course by the Attorney General in his opinions in interpreting these acts which I believe were handed down in 1958.

Brown: I don't know.

Banks: The Attorney General was asked to study the implications

Banks: of both of these laws--County of Origin Act and the Watershed Protection Law and I believe his opinions were published in 1958.

Brown: Do you recall if there was much controversy at the time of the passage of the Area of Origin Act?

Banks: I was not present. That was before my time with the State, so I can't really answer that question in any specific terms.

Brown: Would you think it a good idea that the other states in the Northwest or Southwest pass area of origin laws?

Banks: The State of Texas in the last session of its legislature passed an act which is even more specific than the California laws in this regard. The protection of the basis of origin is a little more general term. It's implicit, I think, in nearly every state and federal act that has been passed in recent years. This is implicit even in the Water Resources Planning Act of 1965 which has been recently signed by the President, whereby the River Basin Commissions which are authorized under that act, are forbidden to make any plans for the export of water from another watershed not under their jurisdiction.

Brown: As you look into the future, do you think there's going to be any conflict between the states' area of origin or basin acts, and the plans of the federal government?

Banks: Definitely, there will come a conflict particularly if there should be a series of water-short years. You see, in this State, neither the County of Origin Act or the Watershed

Banks: Protection Act have actually caused any difficulty to anyone. Now, the lawyers have worried greatly about the implications of these acts as far as the firmness of contracts and that sort of thing, but there has been no case to my knowledge, yet, where there has been any difficulty in that regard. Now, this will not be the case if we should get an extended drought period where water available, say for the Central Valley Water Project, becomes short. Then, I think, there will may be an assertion on the part of the Department of Justice that it doesn't have to abide by these acts anyway.

Brown: If the conflict does develop, would you care to speculate what the resolution would include?

Banks: Well, I have a considerable sum of money that I would be willing to bet that if any state law pertaining to water resources is ever contested in federal courts, and carried through to the Supreme Court, that the state law would be held ineffective and unenforceable as against the federal agencies. This is implicit in all of the Supreme Court decisions in the last 10 to 12 years.

Brown: Going back to the original question of objectives, was there any thinking on the part of the policy planners in the Department that there should be no windfalls, no speculative gains. Was this a concern in designing the policies and projects?

Banks: Definitely. It wasn't a concern in the design of projects, it was a concern when we came to formulating pricing policy.

Banks: There were very significant political overtones about this matter which demanded a pricing policy which would, at least, minimize the political objections to--should we say--unjust enrichment.

Brown: So far, are there policies having to do with the ownership of lands around a reservoir? Are these such that there is not likely to be unusual, unjust enrichment, wind-fall, speculative gains?

Banks: Oh, I think there will be some speculative gains. In fact, I'm sure there will be from land surrounding reservoirs.

Brown: You once testified about the kinds of increase in land values as a result of substantial increases. And I'm wondering what are the State policies to prevent such a recurrence.

Banks: Only to the extent that the taking of land around a reservoir can be justified in connection with public recreational development. I think it should be made clear that, illogical though it actually was, the concern with unjust enrichment had only to do with the large owners of agricultural land. There are many subdividers, and as you mention, land-owners around reservoirs: This was not of concern with those who raised the political issue of unjust enrichment.

Brown: Except perhaps Senator Cobey.

Banks: Yes, I'm sure Cobey was slightly concerned with this because the Senator was trying to broaden the concept of this. Remember, the Senator comes from an agricultural county, and

22

Banks: he saw the fact that all blame, or theories of unjust enrichment, as the thinking then went, would fall upon his constituents, the agriculturalists. And he also foresaw and correctly that many other classes of landowners would achieve a very large unjust enrichment, and Senator Cobey was trying to point this out.

Brown: That is a very good insight that one doesn't get explicitly from reading the public record. What were the principle hurdles which the Department thought could impede the actualization of the State Water Project?

Banks: First and foremost was the problem of financing. Then there was the public relations problem of convincing the people of California that they had no justification for expecting that the U.S. would solve all of their problems. One of the fundamental reasons that I supported the State Water Project when I became State Engineer and Director was that I could see no prospect, whatsoever, and events, I think, have proven that I was right. I saw no prospect of Congress taking on the job of developing all of the water resources in the State of California for all purposes and for all areas of the State. Now if you will examine the history of federal appropriations and reduce those to constant value dollars in terms of construction, you will find that the rate of development of the water resources of California by the federal agencies has not greatly accelerated even in recent years. The dollar appropriations have gone up, but this has

Banks: been negated by the value and the decline of the dollar as it relates to the volume of construction actually achieved. In the last two or three years there has been somewhat of an upsurge. But again, the backlog of federal projects even to serve the areas which are under federal service is very large.

Brown: Do you have any offhand reason for this in view of the fact that the State of California is as large?

Banks: Well, California has actually always got what people in some states regard as an undue proportion of the federal appropriations for water development. Congress does not, frankly, look at this in terms of total relative need. Congress thinks more in terms of spreading its benefit over as wide an area...its "largesse" if I may use the term...over as wide an area as possible. And the fact that it authorizes a large project in California in a given year acts to prevent any subsequent authorization until a few other states have been taken care of, irrespective of the relative urgency of need. Unless some disaster happens. Given a tremendous flood, or a disaster such as is threatened in the East at the moment, then Congress does look at the urgency of need. But in the normal course of events where there is no real critical situation involved, if California gets a major project authorized in the year 1965-- and it looks like we might get Auburn authorized this year, then it may be several years before another project is

Banks: authorized of significant size.

Brown: If the passing of the bond issue was as important as you indicate, what sorts of things did the Department do to influence its passage?

Banks: There is a State law which prohibits the use of State monies to influence bond elections.

Brown: What I was referring to...

Banks: Our actions were limited solely to setting the facts before the voters of California as to resources, needs, and ways of statisfying those needs.

Brown: Was there any attempt on the part of the Department to how the public concensus was going over the State and in any one region? Did it have sensors out?

Barks: No, it did not have sensors out as far as the Department is concerned. Of course, there were public relations firms engaged; not by the Department, but by others, who did conduct polls and that sort of thing. On the other hand, I think I and my staff had a fairly good series of contacts, shall we say, throughout the more critical areas of the State.

Brown: Would you care to mention the kinds of contacts?

Banks: Well, we always, even before the bond issue was proposed, maintained close contact with various and sundry water-user organizations throughout the State as well as the State-wide organizations which are interestad in such matters, such as the County Supervisors Association, Irrigation Districts Association, the League of California Cities, and others.

Brown: Were there any other non-direct water organizations whose opinion you were interested in? Banks or the League of Women Voters? Labor unions?

Banks: We're very much interested in the opinions and works of the League of Women Voters. We cooperated with the League in their studies; furnished them with help; assistance and data and that sort of thing, and we were very much interested in their opinions. And I kept rather careful check on the opinions, statements and policies of the AFL-CIO Federation.

Brown: As the referendum of the election was coming closer, did you, or did the Department predict how it might go? Were there any times when the Department felt it might not have a majority?

Banks: There were numerous occasions when we had butterflies in our stomachs.

Brown: As it was, it only passed by 2 per cent margin?

Banks: Less than that I think.

Brown: 1.5 per cent.

Banks: Yes, very, very close. No, we were never positive at any time that it would go over.

Brown: The Federal Government in the very recent past has allocated project cost by the method of separable cost remaining benefits. This was the procedure adopted by the Department for the allocation of the costs of the conservation facilities. But the proportionate use of facilities method was used for the

Brown: transportation features. What were the reasons for this choice?

Banks: Well, remember that in the allocation of the conservation features, the reservoirs such as the Oroville, San Luis and the other storage facilities, we did not allocate as between consumptive uses. There has been an allocation to power, an allocation to flood control, an allocation to recreation, an allocation to the enhancement of fish and wildlife, and an allocation to water conservation. We did not at anytime, ever make a distinction between the use of water for irrigation vs. the use of water for municipal-industrial purposes in the cost-allocation process. So that fundamentally, the problem of allocation of cost of the transportation facilities was not among uses but as among users. This is the basic reason for the distinction.

Brown: I see, but one might have used separable cost remaining benefits to allocate over users.

Banks: Then we would have had a tremendous job of trying to quantify benefits between contractors, and this would have been almost insurmountable in point of difficulty. For instance, what proportion will be used by Metropolitan Water District for agriculture versus municipal-industrial purposes within Metropolitan as contrasted to Kern County Water Agency, where in the order of 90 per cent will be irrigation, and only 10 per cent for municipal and industrial uses. It would run into tremendous difficulties in trying to project the

21

Banks: relative amounts of water used by any one contractor for various types of uses within its service area.

Brown: But, of course, the first approximation towards defining these benefits was made in Bulletin 78.

Banks: There was an attempt there, yes.

Brown: In which favorable benefit-cost ratios were shown.

Banks: On an areal basis, but not among contractors.

Brown: Yes.

Banks: See, the purpose of a cost allocation on the transportation facilities is among contractors--not among areas.

Brown: But, it turns out to be among contractors...

Banks: In Southern California, yes, although now you have a considerable number more contractors in Southern Calif. than we had originally envisioned.

Brown: Was it only the technical difficulty of estimating benefits or was it thought that any publication of the benefit to some use or to some region might evoke a great deal of controversy?

Banks: It was entirely on the basis of the technical difficulty of trying to do it.

Brown: In a television program a number of years ago, there was some discussion of what the use factor should be in a cost allocation method --whether it would be capacity or quantity. I think on this program, you said that negotiation took place between the Met and the Department of Water Resources, but that the Department wanted quantity use rates

Brown: to be used and the Met wanted, of course, capacity. And so the two groups slit down the middle.

Banks: Remember that the Feather River Project, or more properly as the report title gives it, the Feather River Diversions Projects, were formulated long before any pricing policies were dealt with or ever established. The Project was formulated as far as yield was concerned on the conventional basis that no deficiency would be allowable in municipal and industrial supply, but that for agricultural purposes a deficiency of up to say 50 per cent could be allowed in any one year of a critical period with a total deficiency in a critical period of one year's total supply. Then when we came to formulate the...

Brown: ...the essence of this remark has been specified in the contract itself.

Banks: Yes, that's true, but when we began to formulate pricing policy and a policy which did not distinguish between types of use, then we ran into the anomaly: that in the formulation of the project, there was a distinction between types of use in the firmness of supply. Furthermore, for agricultural purposes, the aqueduct system had to be able to deliver about 18 per cent of the total years supply in the maximum month, which requires a larger relative capacity as contrasted to the municipal and industrial supply, where the design criteria was the delivery of, as I recall it, of about 11 or 12 per cent of the years supply in the maximum month.

Banks: Now, had we gone to allocation of aqueduct cost strictly on the basis of design capacity, then we would have put the agricultural user at a disadvantage, because he, under the formulation of the project, had to take the first cut in the event of shortage. It was my position in the beginning of negotiations with Met that inequitable treatment as between the agricultural users in Kern County, recognizing that the project was so formulated that they had to take the first cut, that equity would demand a little more favorable cost allocation to the agricultural user versus the municipal and industrial user, in view of this mandatory requirement that agriculture take the first cut in the event of shortage. So I proposed that the cost allocation be based not on design capacity but on total annual delivery. Metropolitan was not willing to go along with that. They felt that irrespective of the fact that agriculture would have to take the first cut in event of shortage that the cost allocation should be on the basis of design capacity. Well, we finally compromised by using the average of the two. That's about what it amounts to.

Brown: What if the Metropolitan had said, "We won't compromise," and given the requirement that the State needed the Metropolitan before it could construct its program because of the legislation?

Banks: We probably couldn't have had a program.

30

Brown: You wouldn't have?

Banks: We would not have because it would have gone on beyond the payment capacity of agriculture.

Brown: ...perhaps the Metropolitan knew this too?

Banks: In the latter stages of negotiations, I'm sure they knew this.

Brown: So it was in their own interest too?

Banks: Well, certainly, it was in their own interest. Had I been Metropolitan, I would have taken the same position for negotiating purposes.

Brown: Sure.

Banks: I'm not blaming them; after all, we were dealing with considerable numbers--millions of dollars and a considerable volume of water.

Brown: Did the Metropolitan know how many millions of dollars you were dealing with?

Banks: Oh, yes, I don't remember the exact figures, but they were available and were freely discussed.

Brown: Let me ask another question. Did you want agriculture to receive a break in its cost allocation? In the cost allocation method to determine prices in order that all the water could be sold to facilitate the actualization of the plan, or only because of the equity reason which you mentioned. Was there a pragmatic reason?

Banks: Well, there are pragmatic as well as idealistic considerations involved. I certainly did not want to see the resultant

Banks: cost to agriculture be beyond their ability to pay with the result of ruling out any agricultural sales.

Brown: But, had the prices been a little bit higher, it would have meant that they would have taken...

Banks: ...a lot less water, if any.

Brown: So was there some objective then, that the San Joaquin Valley should receive a certain amount of water at least?

Banks: There was a philosophic objective in that my concept of the reasons for the State ever getting into this field of water development, in the first place, was to insure a fairly wide spread areal distribution of the benefits of water development. If all of the water were going to Southern California, there would be really no reason for the State to have ever proposed the project. Metropolitan could have financially built the projects to serve their needs.

Brown: And it was cheaper for them to have a State project than their own project?

Banks: Yes, on a multiple purpose basis. I think we must remember though that at the time we were negotiating this in 1960 there had begun to percolate through to at least some members of the Metropolitan Water District, the possibility that they might need more water than they had originally contemplated because of the probability of an adverse Supreme Court decision in the Colorado River case.

Brown: And so they were trying to press for a lower...

Banks: They were trying to press for as much water as they could possibly get out of this thing.



Signing of new Hogan contract between Department of
Water Resources and the U.S. Bureau of Reclamation
left to right: Col. H.A. Morris, Army Engineers;
Senator Alan Short, Stockton; Councilman Harvey Stull,
Stockton; Irving Newmiller, Stockton; Governor "Pat"
Brown; Assemblyman William Biddick, Stockton; H.P.
Duggan, Bureau of Reclamation; seated, Harvey O. Banke

Brown: Did the legislature, whatever that means, hold the same philosophic position? Or was it something that you had to argue strongly for with important members of the legislature?

Banks: I think the legislature would have been extremely critical had we agreed to something which would have ruled out any substantial sale for use of water in the San Joaquin Valley.

Brown: When you say substantial, can you think of a number?

Banks: I'm thinking of anything less than 1/2 million acre-feet per year. Something in that order.

Brown: In 1959, you presented a paper to the Subcommittee on Financing in Economic Policy for the State Water Project. It was my impression that the tone of the paper implied the implicit belief on your part, or on the Department's part, that agricultural uses, and municipal and industrial districts should be offered different repayment policies and that other things being equal, agriculture should pay a lower price for its water.

Banks: Well...

Brown: It seems that there was a change--a shift in policy--between August of '59 and December or January of '60 when the Governor's contracting principles came out.

Banks: Well, remember that we had, at the time...as I recall it, at the time that that statement was made, I don't think that the Burns-Porter Act had been finalized.

Brown: I think that's right.

Banks: So that we did not at that time have any real basis for

Banks: judging the repayment requirements. With the passage of the Burns-Porter Act and the financing of the Project by general obligation bonds, which of course could become a charge upon the general taxpayer, and in due consideration of the total financial needs of the State, it became apparent that we had to have a pricing policy which would guarantee that these bonds would never become a charge upon the State.

Brown: So it was a change that the Department made on its own and not as a result of pressure from the legislature that there should be no discrimination between uses?

Banks: Well, there were certain...

Brown: I think it's true...

Banks: The final policy was not the result of any specific pressure from the legislature or direction from the legislature although there were some members of the legislature who were, as the record clearly shows, adverse to any distinction in price. But fundamentally, the pricing policy has...

Brown: They were by-and-large all urban representatives, so it was along use that the legislature...

Banks: But by-and-large the final pricing policy was developed in recognition of two factors. Principally one factor. And that is setting up a pricing policy that would assure the State of sufficient revenue to meet its obligations on time.

Brown: Yes, the time.

Banks: Now this was the basic consideration. There were other considerations that entered in the demand that there be no

Banks: unjust enrichment of agricultural lands and that sort of thing, and it was well known that very large blocks of the lands in the areas proposed to be served were, and are, owned by the Kern County Land Company and the Standard Oil Company and Southern Pacific, et al, so that these political demands had to be taken into account in the final policies that evolved from the Governor's contracting principles of January 1960 and on through the contract negotiations with Metropolitan.

Brown: If the concern for developing a pricing policy was very much determined by a need to meet certain fixed revenue obligations, why did the Department of Water Resources argue that the California water fund should be returned, indeed, the payments returned with interest. Because, if they hadn't argued for this, then repayment obligations could have been lowered?

Banks: There was a time when I think we might have agreed to some differential as between repayment of bond funds versus repayment of California water funds. On the other hand, the Metropolitan, when we got to contracting a negotiation with Metropolitan, Metropolitan was very insistent that the California water fund be fully repaid with interest. This was their position because they wanted to create there-by additional monies to assure the construction of additional projects to offset possible depletions to the County of Origin Act and the Watershed Protection Act.

Brown: Actually, you're arguing that it wasn't the **Department's**

Brown: desire to aggrandize in the sense of getting earmarked funds for the future but it was pressure from...

Banks: This was a significant element. Now, we also recognize that there would by convention be some non-reimbursable costs involved in this and that we wanted the flexibility of repayment of the California water fund with interest in order to have some money to cover these non-reimbursable allocations.

Brown: Now, what about the advocacy on the part of the Department for the repayment of the water fund plus interest. This advocacy was made prior to public negotiations. It was made in 1959, I believe.

Banks: Again it comes back to the matter of being able to say that there was no subsidy in this.

Brown: The Department felt this was important?

Banks: The Department felt this was a necessity to sell the program.

Brown: To the voters?

Banks: Yes.

Brown: And the fact that it was only simple interest and not compound interest wasn't felt to be subsidy and felt to be important.

Banks: There is compound interest.

Brown: There is compound interest on the general fund?

Banks: Well, now, there is simple interest charged on any advances made out of the general fund to meet the bond. The mechanics of the Burns-Porter Act is that the bond payment obligations,

Banks: both capital and interest, are an automatic charge on the general fund. This is an automatic appropriation to meet those in any one year. Now, if there isn't sufficient revenue to repay that general fund obligation in that year, then any balance carries simple interest, but the repayment schedules are so designed so there will be no carry-over of this automatic general fund appropriation.

Brown: But I'm thinking specifically of that part of the California water funds contributed by the tidelands oil and gas royalties.

Banks: Well, you get two different things here. The California water fund monies do not go to pay anything on the bonds.

Brown: Yes, I see.

Banks: They do not go to pay any bond charges.

Brown: But if there were no tidelands oil royalties, perhaps a higher bond issue would have to have been made.

Banks: Yes, there would have had to have been about little more than a two billion bond issue instead of a 3/4 billion.

Brown: Why did they fix it at a billion and 3/4 instead of two or one?

Banks: The answer for the record is that we added up what we thought the projects would cost and subtracted what we thought we would get from the oil revenues and the answer was one and 3/4 billion.

Brown: In the mid 1950's only a very few experts believed that the price of desalinated water would become competitive with State Water Project water in, say Southern California, during

Brown: the next three decades. Now many more scientists and technicians believe water can be desalinated in the 1980's for around 20 cents a thousand gallons or less. What was the Department's thinking on this matter around the time Bulletin 78 was prepared? And in view of recent plant performance and research developments, should and could the Department make any changes in its present plans?

Banks: Well, if you will recall, Bulletin 78 proposes the aqueduct be designed to meet the projected 2020 demands.

Brown: And it also estimates that the cost of desalination and uses will be around \$150.00 an acre-foot and uses that figure for putting a value on benefits in that period.

Banks: Yes. At that point of time, that was a good value. But now, as an administrative matter, after Bulletin 78 was issued and accepted by the legislature, or at least acknowledged by the legislature, I cut the design period for the aqueduct back to the projected needs for 1990 rather than the year 2020. And one of the principal reasons for doing that was to be able to take advantage of sea water conversion or desalination, if it became economically competitive. In other words, it seemed to me that it would be justified to build a system to supply 1990 needs without too much over-investment in case water could, at sometime in the 1980's, be developed at competitive prices by desalination. In other words, we would not have committed ourselves as to source of water supply so far in the future that we could not take advantage of what

Banks: might develop in the way of a cheaper desalination cost. I think that this may well prove out to be the case. We could not have waited, of course, for desalination. Southern California could begin to use today if it were available, the additional water to be made available by the State Water Project. It is interesting to note that Bechtel's recent report for Metropolitan projects a possible cost that may be reached for its desalinized water, obtained from a multipurpose plant, at about 22 cents per thousand gallons, and a plant producing 150 million gallons a day. This would be about close to \$70 an acre-foot which is still somewhat more than the average equivalent cost of State water. That is for the overall. It'll be somewhat less than the cost of the first few million acre-feet delivered, but considering over the design period.

Brown: But they do have some design studies that show lower than 22, one that even does 19 cents.

Banks: Larger sizes, yes. My own personal view is that in view of the advances in technology and the possibility of combining desalination with power generation, as far as Southern California is concerned this may well be the next source to which they should look for water

Brown: But if the price becomes competitive, the price of the desalinated water becomes competitive in the '80's, suppose that were true, should the Department, if it had no constraints, should the Department make any changes in its planning?

Banks: Oh, I think so, yes. If it does it certainly might not be necessary. I emphasize "might" because we're getting into variable costs, here, instead of total costs. The figures we've been tossing around here have been total costs. It might not be necessary to install additional pumps on the aqueduct. It probably would delay the construction or even possibly make unnecessary construction of additional conservation facilities. So it would, assuming desalination costs to come down to competitive values in the '80's, it would certainly necessitate a major change in the Department planning, and I might say, this would be true in all agencies planning for water development.

Brown: Is there a way in which, if the Department had its way, it could better organize itself to handle elements of uncertainty such as this, technological uncertainty? I suppose another uncertainty would be demand uncertainty?

Banks: Well, the only way that this can be handled is maintaining an attitude of flexibility. Water is not, and this is where I disagree with economists, water cannot be considered wholly in the same light as we consider an industrial commodity. In part, because of its essential nature to certain human activities, and secondly, even with sea water conversion plants, it takes time to build the plants and get them in operation. And in our present attitudes towards water supply, the water has to be there when the people want it. It doesn't matter that we can buy a new car or don't need to buy

Banks: a new car; as long as you have wheels, you can get along.

But our present attitudes demand that the water be there when the tap is opened.

Brown: You feel this is a public attitude.

Banks: This is a public attitude.

Brown: To wit, the New York Crisis.

Banks: Well, in fact, yes. The people in New York have long since made the decision that they would rather spend more money and have lots of water available at a flat rate, and this has cost them money; it has cost them money not only from the standpoint of building structures and distribution systems and all the rest, but it has cost them more money for sewage treatment. But they have made the decision that they would much prefer to do it that way than to ration themselves by the installation of meters. Now we can argue about the logic of that attitude, but nevertheless, this has been their decision to-date.

Brown: Of course, someone else who is much more optimistic of desalination capacities or desalination technology might have not only cut back the planned aqueduct capacity from the year 2020 to 1990, but also had built one aqueduct of a smaller size anticipating building a second, if it turned out that the desalination cost didn't come down. I realize that at the time when engineering studies were being made, in the late '50's, even in the early '60's, there was very little evidence that the desalination cost would come down as much

Brown: as researchers now believe it will.

Banks: Well, remember that actually the aqueduct capacity in view of the probable impact of the Supreme Court decision on the Colorado, the present aqueduct capacity could not, may not be adequate even to 1990. The whole project was designed...

Brown: It might be right for the wrong reasons.

Banks: This is possible. On the other hand, the degree to which one is justified in taking a risk in this business is a matter of complete subjective judgment as of the moment. There is no rational basis of determining the degree of risk that is justified.

Brown: Might there be any other, or any organizational rearrangements which could insulate the Department from forces outside it, which would better enable it to adjust to risk? In the back of my mind, I guess I'm thinking of, at the present time it seems to me that it's necessary for the Department of Water Resources to go through with its promise, but under another situation where it didn't have to feel the pressures, if it were insulated from pressures from the outside; but then, of course, there are costs of insulation too.

Banks: Well, here you enter the whole field of the philosophy of government. Personally, I don't think that any agency should be insulated. I think this is a matter of personal philosophy, of course, but I think the political forces, varied as they are, tend to force compromises which are probably better in the public interest than some arbitrary administrative decision

42

Banks: which is made more or less in a vacuum and without consideration by political forces.

Brown: And these political forces that would also impinge on water resources agencies at the federal level, is it your judgment also that the solutions that are brought about, as a result of these forces, are also pretty good too?

Banks: By-and-large, yes, I think they're pretty good. We made some misinvestments; we build projects before they're actually needed; this has been true in some instances. But if one considers it from a standpoint of the philosophy of a democratic government, it may be better to do it this way and incur some economic costs than to turn the decision-making power completely over to administrative discretion.

Brown: If you had a free-hand at a redesign of the Water Resources Agency of California, what kinds of changes would you make, and for what kinds of reasons.

Banks: Well, you're asking a question there which I hesitate to answer because whatever I say could and might well be construed as criticism of the present setup. I do believe, frankly, that there is a place in this for a policy making board or commission. In other words, I believe that the California Water Commission, which is a representative board of water interest through the State, should have some greater role than that merely of an advisory agency.

Brown: What sorts of results might the implementation of this proposal provide in the future that could possibly not be

Brown: provided if the institution continues?

Banks: It's a matter of making the whole action a little bit more responsive to overall needs on a State-wide basis, and in this I have no intention of directly, indirectly, or impliedly or other of criticizing any actions that have been or are being taken. But I do believe that there is a place for policies to be developed on a board or commission basis rather than strictly as a line function in the executive branch.

Brown: It's my understanding that there are some plans for decentralization in the Agency today. Would it not be possible for these decentralized units to serve as a vehicle for reaching a regional consensus and then these consensus...

Banks: Well, remember the branch managers or district engineers, whatever you want to call them are in fact, line positions. They are, in effect, administrative positions and the branch managers, apart from advising the Directors, are not a policy making activity. Now, they will bring, of course, to the Director, presumably, the views and attitudes and needs of the particular areas which a specific branch represents.

Brown: But you feel that the commission that you mention might be able to do this just as well.

Banks: Perhaps, I think, a little better. You're getting into sensitive areas now.

Brown: I know. Let's switch to what I think of as a problem today-- I've observed a continued reluctance of Pacific Gas and

Brown: Electric or other energy retailing agencies within the State to enter into contract for over 600 thousand kilowatts of Oroville power and other power from facilities. This appears to be a classic case of monopolies bargaining. At the present time, the Department, representing the State, does not appear to be doing as well as it hoped.

Banks: Well, remember that the reluctance is over price, and the hydroelectric power and energy simply is not worth as much today as five years ago.

Brown: For what reasons?

Banks: Two reasons: The increased size and the increased efficiency of thermal-generating units, and the decreased cost of thermal-generating units. In other words, you can produce energy cheaper, far cheaper today, by thermal-generation than you could five years ago. And as I say, this is due partly to increased efficiency which go together, and has caused a general decrease in cost of thermal-generating units.

Brown: And has the unit-cost decrease been a trend through time? Has it continued to decrease?

Banks: There's been a rather marked and sharp decrease in the last four years. We used to consider that somewhere in the order of 120-130 dollars per kilowatt of installed capacity was not a bad price for even large size thermal-generating units. Today, that's down in the order of 80-85 dollars and this decrease has occurred in the last four years.

Brown: Will this threaten the ability of the plan to repay all its

4)

Brown: costs, in your estimation?

Banks: It means that there isn't going to be as much surplus of power revenue from Oroville, if any, to go toward payment for conservation features--conservation allocation. I'm sure that the...

Brown: And local projects?

Banks: And local projects, too

Brown: Will this be viewed as a piece of bad faith on the part of the Department by the Northern counties who believed that they were going to get some of this local project...

Banks: I doubt it.

Brown: Is there any way that the Department could have enhanced its bargaining position? Any way that comes to your mind?

Banks: Well, even as late as 1961, I think that Oroville power and energy could have been contracted for at substantially greater prices than is the case now.

Brown: What kind of reasons might there have been for their not being contracted?

Banks: I think the basic, I'm guessing now frankly, and let's make it very clear that I'm guessing because I have had no contact with this aspect of the Department, but I'll guess that there was a sincere desire to explore the possibilities of other markets.

Brown; You mean outside the State or....

Banks: No, other than the private utilities.

Brown: We have time for just a few more questions. In the interview

Brown: there has been mention at a couple of points of the federal policy of acreage limitations. This policy was rejected by the Department of Water Resources and by the majority of the legislature as a feasible policy for the California State Project. To whom would you trace the notion of the surcharge which was thought to be useful and an important substitute for the acreage limitations policy?

Banks: Well, I think that it should be made clear that the acreage limitations policy or reclamation law is accompanied by a very great subsidy to agriculture.

Brown: Over \$10.00 an acre-foot, it's been estimated.

Banks: Well, it's something in that order, and in some cases it amounts to something much more than that. Actually in the Central Valley under the federal reclamation laws the true cost of agricultural water delivered in the Valley is possibly in the order of three to four times what the farmer actually pays for. So that acreage limitation under reclamation law is accompanied by a very large subsidy. The State obviously cannot afford that type of subsidy--it doesn't have any sort of revenue to pay the subsidy. Now, as far as the surcharge is concerned, remember that there was a widespread demand that there be no opportunity for unjust enrichment. The basic cost of water, of course, to the water users under the pricing policy adopted by the State takes advantage of any excess revenue from power generation to decrease the cost of water. In other words, if there is \$2.00 an acre-foot excess revenues,

Banks: why that goes into paying part of the conservation charge or to decrease the Delta water charge. Now this can be construed as a subsidy by the poweruser to the water user. And in order to assure that there would be no subsidy in any way, shape or manner to the large land owner, whether he uses it for agricultural purposes or whatever, it was decided that he should not get the benefit of this power credit for the water used on the excess lands.

Brown: Where did this idea originate? Was it in the legislature or in the Department?

Banks: No, the idea originated with the Governor and myself and Ralph Brody.

Brown: Very good. What were some of the most difficult problems with which you were confronted as Director of the Department?

Banks: Well, in the early stages of the game, of course, one of the most difficult problems was to convince the legislature that there was a necessity for the State to get into the water development business--if you want to put it that way. There never was any question, of course, as to the propriety and necessity of the State doing planning work, but there was some question on the part of a good many legislators as to whether it was really necessary and proper for the State to actually build and operate water projects. That was the initial hurdle that had to be gotten over. The second most difficult aspect of the whole thing, of course, was the development of a basic body of policy going beyond the very

Banks: broad and very generalized policies in the law.

Brown: The law was...

Banks: If you have examined our basic laws relating to water development by the State, the basic policies in this regard are not at all specific.

Brown: The Department has virtually infinite degrees of freedom in setting policy.

Banks: That's right, so that the basic concepts and the basic policies had to be developed at the executive level, and very largely through the mechanism of contract negotiation, which, I may add, is a rather difficult way to formulate policy.

Brown: Did the Department make any mistakes?

Banks: Oh, sure, we made lots of mistakes.

Brown: Were they of a reversible nature or...?

Banks: Unfortunately, what I considered to be some of our most serious mistakes were not reversible. I'm not at all sure that the present pricing policy is the best policy that could be evolved. But it is formalized and contracts made and as such is irreversible for quite a few years.

Brown: And maybe this is tied in with your recommendation or your view that it would be useful to have a policy-making board.

Banks: Unfortunately some of the work that has been done in recent years by the University of California as to the economics of water development was not available to us at the time that we had to make decisions.

Brown: And it would have been helpful had it been more timely?

Banks: It would have been extremely helpful had we had some of the more recent studies of the economics of water development, the inputs and outputs, the McGaughey-Erlich study, the data on economic farm sizes, that sort of thing. This would have been extremely helpful.

Brown: Thank you, Mr. Banks for allowing me to interview you today.

Banks: Well, its been my pleasure and I hope I haven't confused the issues too much.



Harvey O. Banks, November 1958

30

INTERVIEW WITH HARVEY BANKS
AUGUST 24, 1965

Brown: In our last interview, Mr. Banks, you mentioned that there was an important reorganization of the State water agencies in 1956. Would you elaborate on what this meant for the State? What kinds of changes were made? What changes in decision-making powers did this imply?

Banks: Well, prior to 1956, of course, the agencies at the State level of the Water Resources Board were the Division of Water Resources which was a separate division of the State Department of Public Works. The Division of Water Resources was headed by the State Engineer whose duties were defined by law, but who was a civil service appointee. The other agencies were the State Water Resources Board which had certain policy-making functions and certain functions with respect to the allocation of funds, like allocation of funds to the local agencies. There was, of course, the State Water Pollution Control Board of which the State Engineer was a member. Then there were the nine regional Water Pollution Control Boards. The State Division of Water Resources under the State Engineer handled all water planning for the State under the overall direction of State Water Resources Board. The State Engineer administered water rights, provided water-master service, handling adjudications of water rights, and the like.

There was a considerable area of uncertainty as to the

Banks: specific delineation of the duties and responsibilities of the State Water Resources Board as contrasted to the State Engineer and the Division of Water Resources. There was another agency which I should have mentioned--the State Water Project Authority which had been set up in 1933, I believe, under the Central Valley Project to provide principally for the handling of the financial details of construction of the Central Valley Project as it was then planned, that is in 1933. The Water Resources Board was composed entirely of ex-officio members, the State Attorney General, the Director of Finance, and three or four others. This information can be found in the old Central Valley Project Act. I have forgotten the exact details of the thing, but suffice it to say that the Water Project Authority was composed entirely of ex-officio members, that is other State officials.

Here again there was some considerable uncertainty as to where the authority of the Water Project Authority ended and the authority of the State Water Resources Board began and ended, and where the authority of the State Engineer or the Division of Water Resources started and stopped. It was in recognition of that, and the fact that the job of water development was becoming so important that it needed a completely separate and straight-line agency to Governor Knight that certain members of the legislature decided to reorganize the whole set-up.

Brown: Who were these members of the legislature? Do you recall?

Banks: Principally Senator Williams was in favor of it. Caspar Weinberger was another. He is now local head of the Republican Party here in San Francisco. There was general concurrence in the legislature that there should be a reorganization, there should be a straight-line set-up reporting directly to the governor rather than through another department as was the case with the Division of Water Resources, which was under the Department of Public Works. There was practically no dissension concerning the need for reorganization. However, there was considerable dissension as to whether or not there should be any commission formed. Governor Knight was quite adamant in his belief that he wanted a completely straight-line department with no boards or commissions. On the other hand, certain of the water organizations, such as the Irrigation Districts Association and others, felt that there should be a policy-making board or commission appointed to work with the new department.

Brown: Do you know why Knight wanted it to be completely straight-line?

Banks: The Governor was a strong believer in the straight-line type of government; he was not a believer in the board or commission form of government.

The compromise, of course, was that the Water Resources Board became the California Water Commission and given advisory powers only, except in some very minor respects.

Brown: Who drew up the reorganization?

Banks: Primarily, Weinberger was the leader in the Reorganization Bill.

Brown: Were there alternatives which were seriously considered? Alternatives to those which were ultimately enacted?

Banks: Not too many. The only alternatives, as I said, were the incorporation of a policy-making commission.

Brown: Would you elaborate on what the important differences would be had a policy-making board been adopted? What differences were entailed in this choice?

Banks: As the reorganization actually was enacted, the Director of Water Resources had, at that time, the full authority to make all the decisions on his own initiative subject only to the governor's approval. Of course, his decisions had to be within the framework of the enabling legislation. Once the legislation was passed, the decisions as far as implementation of it were concerned, the decision-making power rested solely with the Director of the Department of Water Resources. Had there been a commission with policy-making powers, these matters would have been referred to the commission for decision, with a recommendation, but the decision in many cases would have been made by the commission. The commission would have taken the responsibility for it.

Brown: Under the new arrangement would the California Water Commission have had to be constituted in any different way?

Banks: Not necessarily. As I recall it, it never got as far in the legislature as going into details as to how the policy-making

Banks: commission should be composed, that is geographic representation or professional representation, etc.

Brown: Would you discuss the evolution of the Davis-Grunsky Act? Who wanted it? Why?

Banks: Well, the Davis-Grunsky Act, I suppose I would have to take as much responsibility for that as anyone. It grew out of my conviction that if we were to have comprehensive water development, multi-purpose water development, then some way had to be found whereby the State could stimulate the local agencies to broaden the purposes and perhaps the scope and size of the projects. The only way this can be done really is by putting some money into it. We must remember that say a city enclosing a reservoir has little or no interest in providing recreation around that reservoir in general. In general, the city regards its reservoir as a single purpose project. The same is true of many irrigation systems. Furthermore, it seemed to me that in the northern part of the State some of the smaller districts could, if given some financial assistance, proceed on their own; but they simply did not have the financial capability to go it alone so to speak and needed financial assistance. So the big purpose of the Davis-Grunsky Act was to encourage the expansion of local participation in the job of water development and at the same time enable their projects to be enlarged in some cases, or in other cases to broaden their functions in the State-wide interest. It evolved from

Banks: that initial beginning.

Brown: How did this proposal go through the legislature? Were there any difficulties? Was there any opposition? Who were the principal advocates in the Senate and in the Assembly? Did it have an easy road?

Banks: In its initial phases, as I recall it, it had no particular difficulty. Of course, initially the legislature would have had to appropriate the money in any event so that the legislature still retained some considerable control over it. Also at the time, Southern California regarded the Davis-Grunsky Act to some extent as a good will gesture toward the Northern counties. So initially there was not a great deal of opposition to it. There was really no great amount of money involved to start with.

Brown: When you or other members of the Department felt that it was important to have a piece of legislation introduced, discussed and eventually passed, what was the route that this proposal took? What happened between the conception of the idea and its ultimate passage in the legislature? I am really thinking of informal lines.

Banks: Assuming that the proposal had the approval of the governor, the first step would be to just chat with members of the legislature interested to see what their reaction would be.

Brown: But the idea would first go up to the governor?

Banks: Oh, yes.

Brown: Then changes would be made on the basis of these informal

Brown: conversations. Turning to another important policy decision, the Burns-Porter Act passed in 1959, can you discuss its evolution and the kinds of forces that were brought to bear on its passage?

Banks: The Burns-Porter Act evolved during the entire 1959 session of the legislature. When Governor Brown went into office on the first of January 1959, he went in with the concept that to solve the stalemate which had developed over water development in the State we should forget about the problems which had caused the stalemate and concentrate solely on financing. So in the 1959 session the only real issue before the legislature was should money be provided for water development or shouldn't it.

Brown: Could you just tell briefly what the causes of this stalemate were?

Banks: Primarily they had evolved from very simple issues. For example, whether or not the County of Origin Act would be fully applicable to the water projects constructed by the State. Southern California had been seeking for about two years what it termed a constitutional amendment to protect its rights in and to the waters that might be developed by the State to supply them. They had not succeeded in even drafting an acceptable constitutional amendment. They had not even succeeded in drafting one that would be acceptable to all the people in Southern California.

Brown: Did they take this position because they believed that the

Brown: right to a particular source of water might mean that there would be a consequent lower cost?

Banks: Basically this is right. The real reason for Southern California and more particularly the Metropolitan Water District's desire to acquire a firm right in a particular water source was their realization that as time goes on water source are going to get increasingly expensive to develop. Therefore, they wanted a firm right in their particular source so that they would not have to bear the cost of any additional development. By the first of 1959 a complete stalemate had developed on that score. Governor Brown said, "Let's develop water instead of argument." So his whole platform was the providing of funds to build water projects.

Brown: Was it believed that once there was a certain very substantial sum of money made available, then these other issues would decrease in importance?

Banks: That was the Governor's fundamental concept that once water was actually made available, all of these other issues would become a small concern.

Brown: What was the behavior of the members of the legislature from the South during the time of this discussion over the formulation of the Burns-Porter Act?

Banks: The Southern California people still hoped to get into the Burns-Porter Act amendments which would accomplish substantially what they would hope for all along, which is, in effect,

Banks: negating the County of Origin Act in order to give them more protection.

Brown: Who was it that fought to prevent these amendments?

Banks: Quite often the Northern California Senators, with some help from other people. I was frankly never wholly sympathetic to Southern California's demands that they be accorded a firm right to a specific amount of water from each specific source so that further future demands by others would have to rely on the more expensive sources. I think I can say that I never gave them too much heed and comfort in their desires. Frankly recognizing the complexion of the Senate, that was before reapportionment, it was obvious that the South did not have the power in the Senate to pass any legislation which would be adverse to Northern California.

Brown: Were there any joint discussions about this issue between the Assembly and the Senate during 1959?

Banks: There was quite a bit of joint action. I have forgotten the exact date but I would guess that it was in February or March of 1959, there was an evening conference held for the members of the legislature where the Department put on a series of discussions of the water problems of the state. They provided them with factual information on where the water is, where the needs were, how they proposed to solve them, and that sort of thing.

Brown: Did the Governor at any time bring pressure to bear on the

- Brown: Southern legislators to conform with the Department's view and perhaps with his view?
- Banks: Yes, he held many discussions with the Southern California legislators. After all, remember that Assemblyman Porter was from Southern California.
- Brown: How did he feel about the potential of introducing amendments, which as you said would mitigate the original act?
- Banks: Assemblyman Porter had never been anything but sympathetic to the needs of Northern California. I think it can be fairly and accurately stated that Carley has held consistently to a State-wide viewpoint as contrasted to a narrow need of his own district. He has always adopted a very broad-gauge approach to the water problem.
- Brown: What enabled him to do this? Was his constituency passive as to his role, or what?
- Banks: In his particular area water was not a great issue. I believe he was from Compton. In that area it has never been a major issue. There was also the fact that he was always very popular with respect to other issues anyway.
- Brown: Could you highlight any particular skirmish that took place in the legislature at this period in which you could describe particularly the Department's role, the Governor's role, and the role of a few of the Senators?
- Banks: I suppose one of the best instances was the day the Burns-Porter Act passed the Senate. We had held, in the earlier part of the day, particularly in the morning, a conference with

80

Banks: Senators who had amendments to offer. Some of them had agreed to accept certain amendments when they were offered on the floor of the Senate. During the debate on the bill, Ralph Brody and myself (Brody was at that time the Deputy Director of the Department of Water Resources), sat with Senator Burns at his desk. As amendments were offered, we advised the Senator whether they could be accepted or weren't accepted in the House. Amendments came from both the North and the South. Some of the Northern Senators offered amendments by which they desired to protect their interests which would have hamstrung the whole project. It would have made things so tight that nothing could have happened.

Brown: Could you give an illustration of one such amendment? Also the consequences that you foresaw if that amendment had been introduced and passed?

Banks: I think the outstanding example of an amendment which has consistently cropped up is one that Senator Christensen has offered every year since 1959 which would have in effect prohibited almost any export of water out of Northern California. He has been consistent; it has been offered every year.

Brown: Even now?

Banks: Yes.

Brown: What was the alignment, if any, of the interest groups with regard to the passage of the Burns-Porter Act? The Irrigation Districts Association, the Chamber of Commerce?

Banks: Most of the organizations were in favor of it. The AFL-CIO was not. They never had been.

Brown: Had they worked hard for its defeat or was it just that they went on record as being against it?

Banks: No, their representatives had actually opposed it.

Brown: Why? Do you recall?

Banks: Primarily because there were no acreage limitations for regions. This was the announced reason. What other reasons they had I don't know.

Brown: Why were they against acreage limitations?

Banks: They were not against it. They were consistently in favor of it.

Brown: But their membership was in the urban area, not in the rural area really.

Banks: One can only speculate as to what really motivates the AFL-CIO. Their pitch, of course, had always been for preventing unjust enrichment, the necessity of breaking up the large land holdings and that sort of thing.

Brown: But were they concerned with the enrichment if there was any accruing to large manufacturers that hired..?

Banks: No one has ever to the best of my knowledge worried about the unjust enrichment of land subdividers.

Brown: Were there any other major interest groups that come to mind as opposed to the Burns-Porter Act?

Banks: The State Grange consistently opposed it very largely for much the same reasons as the AFL-CIO, plus the additional

Banks: reason, which also applies to the AFL-CIO, of the necessity of having land for farm families.

Brown: How did urban representatives regard the AFL-CIO's claims?

Banks: I don't think that the AFL-CIO itself had very much influence. Many member local unions of the AFL-CIO state organization were in favor of the Burns-Porter Act. Many local machinists' unions and that sort of thing. On the other hand, I found that this worry about unjust enrichment of the large agricultural land-holder and the desirability of breaking up the large land holdings was a great concern of many urban residents. This was a matter of great concern to the League of Women Voters, for instance, for a long time--why acreage limitations would not be desirable.

Brown: Did they ever change their position at all, moderate it with time?

Banks: The League of Women's position on that was moderated; the League did support the project, supported the Burns-Porter Act and Proposition 1. Actually, as far as I know, the League has never actively taken a position on acreage limitation; however, my contact with members of the League indicated that this was a question of great concern. When I pointed out what acreage limitation would mean to the State project, that it would necessitate extensive subsidies to farmers, then they began to see that from the State's standpoint at least that this was an impossibility. I think it should be borne in mind always that when you are speaking

Banks: of acreage limitation you are speaking of the acreage limitations provisions of the Reclamation Law. Now in the Reclamation Law there is a tremendous subsidy to the farmer.

Brown: There was another important policy decision which I am sure California played a role in, but it took place outside of California. That was the San Luis Act. I wonder if you would talk about the underlying forces here?

Banks: Well, the principal problems with respect to the San Luis Act was convincing both the Department of the Interior and the Congress that California was, in fact, sincere in its desire for a joint project. If enabling legislation was passed then, in fact, it would be able to fulfill its part. You must remember that there had never been anything proposed before similar to the joint undertaking which is now being implemented in the San Luis construction...

Brown: Do you mean that the State of California had never before...

Banks: Never before in the nation had there been a situation where the state had come forward and said, "Let's participate. We are ready to pay a share of this provided we own a portion of it when it is completed." This was a unique concept which had never come before Congress before.

Brown: So it came at the behest of California Senators and Representatives?

Banks: No, again this concept was very largely my responsibility. You see, the history of the San Luis Project is this: the Bureau of Reclamation had been requested by the land-owners

Banks: in western Fresno County, those that now form the Westlands Water District, to prepare or to formulate a project for their benefit. This is about 1952 or 1953, I believe. Late in 1955 the Bureau came up with its report on the feasibility of the San Luis unit as a unit of the federal Central Valley Project. They proposed a million acre-feet of storage, I believe, there. It would be supplied by pumping from the Delta into the canal. In turn water would be released down into the San Luis Canal to about Kettleman City to serve the western Fresno County area.

Brown: What was the distribution of land ownership in that region? Was it highly small ownership units, large ownership units?

Banks: The major landowner in that area was the Southern Pacific Company. It was a very large land owner.

Now that report of the Bureau's was submitted to the State for review, in accordance with the provisions of the Flood Control Act of 1944. About that time, too, the State had reformulated--or shortly before that, the State had reformulated what was originally the Feather River and Delta Diversion Project, and had itself proposed off-stream storage at the San Luis site. In my review of the federal report on the San Luis site, I made the first proposal for a joint undertaking at that site, sharing the available source capacity. It took from then until 1960 to arrive at agreements with the federal Interior Department. Finally, as I say, we convinced Congress that we were serious about

- Banks: this matter. Actually, the legislation was very largely drafted by Pat Conner and myself in Washington with the officials of the Bureau of Reclamation. So I suppose you could say that we bear whatever blame or praise can be attached.
- Brown: What was the view of the California legislature through this proposal period with regard to the San Luis Act?
- Banks: As I recall it, the legislature was wholly in favor. There was no dissension in the legislature over the desirability.
- Brown: When you worked on this arrangement, did you have any fear that men like Douglas or Senator Morse would introduce crippling amendments?
- Banks: We knew that they would try but we felt pretty confident that it could be overpowered.
- Brown: What was achieved by this joint arrangement? What were the benefits to be gained, benefits incident upon the State?
- Banks: Primarily benefits of scale.
- Brown: Do you have in mind any kind of number that would express this?
- Banks: I don't recall the numbers but they are available in various statements given in the 1959 and 1960 support of the San Luis legislation as to the relative benefits accruing to both the State and the United States through joint financing of a large project. I don't recall, but the benefits were substantial to both parties. This is not a case where the United States pays the base cost and the State only pays the increment. They pay a portion of the cost. As a matter of

- Banks: fact, the actual proportion is 55% state and 45% federal. The figure of \$60,000,000 savings to the United States comes to mind, but I do not guarantee that it is the correct value. There were a good many millions in savings on both parts. Plus the fact that there is no other site, that is, as good a site. There is another site the State could have developed to the south, but it would certainly have involved more pumping.
- Brown: Why did it take so long to get the San Luis Act formalized?
- Banks: The principal reason was that we had to convince Interior that we really meant business, reach an agreement, and various sundry provisions.
- Brown: They felt that you might renege at a later point? Does this have anything to do with the State authorization of what is now the Central Valley Project in the 1930's?
- Banks: No, I don't think that entered into it. It is just that it was a new concept. It was something that Interior foresaw as being difficult to sell Congress. It might delay their project. Remember, they had not had a major project authorized in California for quite a while.
- Brown: When did they plan to build their facilities in the absence of State participation?
- Banks: I suppose if it had not been for the State participation, the Bureau might have gotten the San Luis unit authorized one year sooner, something in that order.
- Brown: Authorized sooner than 1960, but when had they expected that

Brown: there would be appropriations? That is, when, in their minds, would the project have been completed as compared to when it will now be completed?

Banks: I would guess maybe two years, not much difference. We also had some opposition to the concept of a joint development from people in the Westlands Water District area, particularly Jack O'Neal who is a leader of the Westlands Water District. He is a man who in fact really sold the Federal San Luis Project to people in his area. Jack was likewise convinced that this was just a stalling tactic on the part of the State, that the State had no real intention of ever going ahead with it; the State was merely trying to stall the San Luis Project.

Brown: Were there good reasons why he thought the State would want to stall? What kinds of reasons did he have?

Banks: In the early days, say in the early 1950's, there was some considerable antagonism between the State and the Bureau of Reclamation. They weren't always friendly.

Brown: In response to one of my questions in the last interview about difficult problems you encountered, you said that it was necessary to develop policies at the executive level and through contract negotiations, and that this was difficult. I wonder if you would talk a bit about what other ways would have been better. If there are other ways, why weren't they adopted?

Banks: Well, remember that I said when Brown came in as the governor,

Banks: his concept of the solution of the water problem was to appropriate money for the projects; the policy questions, pricing policy and all that sort of thing, should be put aside in favor of the single objective of getting a funding bill through the legislature. In fact this was what was done in the 1959 sessions. There were practically no policy bills at all. The whole focus of attention was in getting the Burns-Porter Act passed, which is not in any way a policy bill except in the negative sense because it says that there are certain things which can not be done. Other policies already in the law apply to this. But such matters as pricing policy, sale of hydroelectric power and all that sort of thing, no consideration was given to those and the governor did not want such bills in the legislature. Matters of agricultural subsidy, differential pricing between agricultural water and municipal-industrial water, and that sort of thing, there was and still is no law on that subject. With no policy bills having been enacted in the 1959 session, the 1960 session was a budget session so there were no bills enacted then either, so that meant that in the process of negotiation in getting that contract, all of these questions had to be resolved by administrative decision within the very broad framework that was already a part of the law. It was extremely broad.

Brown: As the Director of the Department for Water Resources, were you aware of any necessary conditions, certain policies or

Brown: changes which the governor or the legislature specified implicitly to the Department? That is, while you were given a great deal of freedom in reaching certain pricing policies, coming to agreements on the contract negotiations, were you guided by any limitations that you felt?

Banks: We were guided by certain financial constraints stemming from the State's financial condition and from the fact that in support of the Burns-Porter Act before the Congress there were certain commitments made so that this program would not be allowed to become a charge or a burden on the general taxpayer.

Brown: For example, one of the solutions was to contract with large units who would then subcontract. The Department did not have to make this decision, but did. It had an alternative. It could have contracted with every small irrigation district. For example...

Banks: It could have, but this had both a practical and a political significance. The practical significance is that, say in Southern California, if we attempted to contract with a multiplicity of the smaller units and cities, it would have meant that our distribution system would have to be much more extensive. We would not have been able to take advantage of the existing distribution system which the Metropolitan Water District owned. From a political standpoint, remember that the Metropolitan Water District, very largely in broad water matters, speaks for Southern California. There would

Banks: have been political hazards involved shall we say. But fundamentally, the decision to contract with the large agencies such as Met. where it is available, was made mostly on practical considerations, plus just the concept that for good public administration, as long as there is a large over-riding agency, why go down below that?

Brown: But in Kern County there was none until 1961 or later.

Banks: Well, the Kern County Water Agency was created not for the purpose that you imply, but to have an agency with sufficient powers and sufficient breadth to bring the full financial resources of Kern County to bear. That is, the Kern County Water Agency has taxing powers, and has an areal extent far greater than any of these member agencies of the Kern County Water Agency with which contracts might have been initiated.

Brown: Were there irrigation districts within Kern County that did not want to have a master agency contracting for them? Was this a difficulty?

Banks: No, with the possible exception of, I do believe, that some of the municipal water districts around the Bakersfield area have on occasion voiced the thought that they might better contract with the State. However, by and large, the agricultural agencies such as Semitropic Water Storage District, Wheeler Ridge-Maricopa Districts I and II and the others know and realize full well that they have to have the financial support of the rest of the area before they can make it.

Brown: I am interested in the role of the legislature in determining

Brown: water policy. You said that the pricing policy, for example, had to be largely determined by administrative action. Apart from the passage of the very important Burns-Porter Act specifying the financing arrangement, could the legislature be criticized for its failure to act in this very important area of decision?

Banks: Oh, I think one could level a mild charge of criticism against the legislature for not being concerned with these problems. The principal area of concern of the legislature seemed to me not to be so much with regard to pricing as it was with respect to economic evaluation. If you will read some of the reports of the legislative analyst, for instance, he was more concerned with how you justify projects--whether you use the benefit-cost ratio or a revenue-cost ratio, so he was much more concerned with "pays how much".

Brown: Why do you think that he had this concern and not the concern of who pays how much?

Banks: I think this is very largely a personal idiosyncrasy of the people involved.

Brown: What people were involved?

Banks: This again refers to people that are living, and some at least are nominal friends of mine. Well, Don Benedict,* for instance, has always been concerned with the economics of projects. I have never known Don to be overly concerned about pricing policy. As far as pricing is concerned, his principal area of interest is whether or not the total revenue is sufficient;

*Legislative Budget Committee.

Banks: prices between agriculture on the one hand, and municipal and industrial uses on the other, and that sort of thing. He took a great deal of interest in it.

Brown: And he was the legislative analyst?

Banks: I mention that as one governmental entity concerned with the problems of the economics of the project.

Brown: Was he the analyst for the Senate and the Assembly both?

Banks: No, Don's work has been mostly with the Senate.

Brown: What was the Senate's position?

Banks: The Senate never took much interest in this.

Brown: How would you explain their lack of concern for a multi-billion dollar project, or for some of the policies?

Banks: I can't really. You will find that the Senate Water Committee did issue some reports. However, they never acted on them. Why, I don't know. At that point the Senate depended largely on Senator J. Howard Williams, of course, for its leadership in water matters. I don't think J. Howard was concerned too much about these matters. He was concerned with getting the project going.

Brown: Did Williams and others realize the connection between getting the project built and paying for it?

Banks: Well, no. I don't think they did. As a matter of fact, I doubt there are very many people who understand the implications of economic theory, economic evaluation, and pricing policies as they relate to the project formulations. Very few people worry about these things.

Brown: Would it have made the Department's task any simpler if the legislature had played a stronger role, or would it have hampered the Department in actualizing their planned movement?

Banks: Oh, yes! Assuming that the legislature would have adopted sound policies, it would have simplified things. On the other hand, the legislature could have adopted policies which would have been greatly restrictive. I remember, on an analogous subject, one legislator from a mountainous county, one time introduced a bill which would have reserved water in quantitative amounts for the area's watershed. It actually came out to be an average of about four feet over a whole mountainous county that would have been reserved. Well, there is not that kind of water.

Brown: In the last interview you made a distinction between the role of the Department as the provider of information vs. the Department playing a more active role in the planning and actual development of water resources. Why was there this difference in views and who held these different views?

Banks: I don't recall exactly the question that gave rise to that distinction. If the question is "Why do I feel that the State has to take a greater role?" the answers are manifold, of course. I think it is necessary to understand that the demands for water are rather rapidly expanding. Fifteen years ago you could generally categorize water demands as power generation, irrigation, domestic municipal supply,

Banks: industrial supply, and there you stopped. Then gradually there have been built up a number of other demands. The demand of water for recreation is new; the demand of water for fish and fishery enhancement; and now, what is very important, water for water quality control. These are relatively newly recognized demands shall we say. All of these newer demands have a much broader base of interest than the earlier ones. If we were only concerned with providing water for irrigation, an irrigation district could well handle them, or a city could well handle its regional water by building, say a Hetch Hetchy Project as San Francisco has done on the Tuolumne, or Pardee Dam, as the East Bay District did on the Mokelumne. With these newer demands however, and the increasing scarcity of water to meet the demands, it becomes more and more necessary that multi-purpose development be encouraged and, in fact, accomplished. This necessarily implies a much broader base of interest in a given water resource than any one particular district or particular locality can handle. Now, that is one aspect of the problem: The broadening base of interest in the whole field of water development, the broadening base of benefits and the broadening base of demands, all these things necessitated that the higher levels of government take an interest in this field and act to see that all of this broad base of interest and demand was satisfied to the extent that it can be. In general, as I say, it cannot and will not be satisfied fully by a local agency without some participation by the higher levels of government because their interests are restricting.

Brown: Is it far more difficult, in your view, to design legislation which would enable local agencies to construct and manage projects in a way which would be in the best interests of this broad sector?

Banks: You also have to consider the question of money. Why should an irrigation district, say, which is solely interested in the irrigation of lands within its district, and where the source of revenue is in the land, why should it build storage in its reservoir at its expense to provide water for the fishery down-stream which will perhaps be enjoyed by a few of its land owners, but mainly will be a benefit to many people from San Francisco and other places who come there to fish? Or why should a city building a project on this river for its benefit, why should it at its expense build storage in that reservoir to release down-stream to dilute wastes from other cities and industries not within its boundaries? Do I make the distinction clear?

Now turning to another spectrum and going to the higher levels of the government, namely the federal government, it is important to recognize that the Congress has never stated that it has any responsibility. It has set up certain programs and certain policies--the reclamation program, the flood control program and a few others, and it has authorized specific projects within those programs. It has never said though, that this area of water development is our responsibility, and we will fulfill it.

Banks: With one or two exceptions, Congress has never said that it will take on the full job of developing the water resources of any given river basin or any given area. It has authorized specific projects. Now, in connection with the Colorado, Congress may say, "Now this is our job and we are going to do it." On the other hand, it may take them a long time to do it because Congress does not necessarily make appropriations on the basis of relative needs, or even with proper consideration of economy, taking into account the time of construction of that sort of thing.

It seemed to me, considering the history of the federal appropriation, the difficulty of getting federal appropriations and the fact that actually from 1951 until about 1962 the actual level of federal construction in water development had gone down, considering that aspect of it, looking at the federal picture and the limited objective of local development in most cases, it seemed to me that here was an area where if we are to develop the state's water resources effectively with the broadest possible benefit, then there is no other way in which the State should move.

Brown: You say, "It seemed to you!" Do you mean that the California legislature felt that should a problem of water need develop that the federal government could be relied upon to fulfill it?

Banks: Some of the members of the legislature felt that way, but not all or not even the majority. There were, and there are still people who feel that the federal government has all the

Banks: answers. I might point out something that I learned last Friday in a discussion with the officials of the State of New Jersey who are dealing with the so-called water crisis in New Jersey. The State officials through their public relations had succeeded in driving the water consumption in New Jersey down this year to about half of its 1964 value by urging conservation. The day after President Johnson and Secretary Udall made their pronouncements about the solving of the State's water crisis, the water consumption went up about 50%. There is no other apparent reason for it other than the fact that people felt that the United States is moving in so we have no more problems. There is nothing in the world they can do except perhaps provide money to drill a few little wells. They cannot alleviate the crisis at all.

Brown: So while you held this view privately and, I am sure, more publically than privately, how did you go about educating the people of the State, the important people, that the Department of Water Resources should get involved more actively in water planning and development than it had been up to that time?

Banks: Primarily by telling them that there was a problem which had to be solved. This was going to be a future problem. There were no great crises which had to be resolved such as now occurs in the East; there was no such crisis. The floods in 1955, of course, gave an impetus to the construction of

Banks: the Oroville Dam. Since the State at that time had proposed to build it itself, well that particular crisis, regrettable and tragic though it was, helped the program, if you want to look at it realistically. Basically though, it was a matter of convincing the people, organizations, the legislature, that there is a need for the State to get into this picture. Basically, that is the ground which I mentioned. There is no reason to expect on the one hand the local agencies to spend their money in the **statewide** interest. On the other hand, there is no justification whatsoever for the people to expect "the Great White Father" in Washington to solve all their problems. It just is not in the cards; you haven't got that kind of money; you never have had it and you are not going to get it.

Brown: Were there other people in the legislature who had this, I would call it, vision?

Banks: I think people like Carley Porter, J. Howard Williams, Weinberger, Frances Lindsey, to mention a few, Bruce Allen, Nick Richards from Los Angeles recognized these problems.

Brown: Can you recall any important legal decisions which were made and were not well documented, and also which we have not discussed? A legal decision which facilitated the actualization of a plan?

Banks: I suppose that the series of Supreme Court decisions, such as the Pelton Dam decision, had some influence with water organizations throughout the State in convincing them that if

Banks: the State was to protect its interests in water resources, then it had to take a more active role. Otherwise they could look to increasing federal domination in water developing.

Brown: When was this decision made?

Banks: The decision came down in 1955 or 1956, somewhere in there.

Brown: How did it come about? Was it a push or a pull? Who was instrumental in bringing about this decision?

Banks: Of course, this had nothing to do with California directly. It was a decision involving the power development in the Deschutes River in Oregon. The State had denied the right and permit to the power company to build the dam on the grounds that the State legislature had said that no dam should be built on the Deschute because of the possible interference with the salmon run. On the other hand, the F.P.C. had granted the power company a license to build the dam. The State appealed the Federal Power Commission's license. The State was defeated. The court upheld the federal license on the ground that the federal government had jurisdiction. One end of the dam rested on federal reserve land and the other site was on some other federal reserve. The State had no jurisdiction.

This has given rise to a philosophy which if fully tested will probably be held by the Supreme Court that the federal government does, in fact, own and control any and all water arising on or flowing across federally withdrawn or reserved land. It is subject to rights only which accrued thereto only

Banks: prior to the time of withdrawal or reservation.

INDEX

- Abshire-Kelly Salinity Control Bill, 14
 Acreage limitation, 15, 46, 61 ff.
 Allen, Bruce, 78
 AFL - CIO, 61

 Bechtel Corporation, 38
 Benedict, Donald W., 71
 Brody, Ralph, 47, 60
 Brown, Governor Edmund, 56 ff.
 Burns - Porter Act, 16, 32, 33, 56 ff., 59

 California Department of Water Resources, 50 ff., 69
 California State Grange, 61
 California Water Commission, 42, 52
 California water plan (Bulletin 3), 5, 8, 10-11
 California State Water Resources Board, 5, 7
 California Water Fund, 34 ff.
 Central Valley Project, 8, 18
 Christensen, Senator Carl L., 60
 Cobey, Senator James A., 21
 Colorado River, 9, 31
 Conner, Pat, 65
 "County of origin", 17 ff., 56

 Davis - Grunsky Act, 16, 54 ff.
 Dickey Water Pollution Control Act, 3

 Flood Control Act of 1944, 6

 Irrigation Districts Association, 52

 Kern County Land Company, 34
 Kern County Water Agency, 26, 70
 Knight, Governor Goodwin J., 52

 League of Women Voters, 25, 62
 Lindsey, Frances, 78
 Los Angeles Department of Water and Power, 15

 Metropolitan Water District of Southern California, 9 ff., 15, 26, 29, 38, 69

 North Bay Aqueduct, 14

 O'Neal, Jack, 67

 Pacific Gas and Electric Company, 43
 Pelton Dam Decision, 78 ff.
 Porter, Senator Carley, 59, 78

Richards, Nick, 78

San Luis Project, 63

San Joaquin Valley, 15

Semitropic Water Storage District, 70

Southern Pacific RR Company, 34, 64

Standard Oil Company, 34

Texas, 13

University of California, 48

Water Resources Planning Act of 1965, 19

Watershed Protection Act, 18

Weinberger, Caspar, 52, 53, 78

Westlands Water District, 64

Wheeler Ridge - Maricopa Districts, 70

Williams, Senator J. Howard, 52, 72, 78



Frenchman Dam groundbreaking ceremonies

STATE DEPARTMENT OF WATER RESOURCES
1120 N Street
Sacramento, California

PRESS RELEASE
FOR IMMEDIATE RELEASE
March 2, 1959

(photo caption)

266

GROUNDBREAKING -- Governor Edmund G. Brown officiated today (Monday, March 2) at the groundbreaking ceremony for the Whale Rock Dam Project in San Luis Obispo County, marking the start of construction on the \$7 million earthfill dam near the community of Cayucos, 18 miles northwest of San Luis Obispo. The project is a joint venture between the City of San Luis Obispo and the State of California for the purpose of supplying water for the City and two nearby State institutions -- California State Polytechnic College and the California Men's Colony. Construction of the dam, which will store 40,000 acre-feet of water, will be completed in 1960. Governor Brown is pictured here at the controls of a large bulldozer, and is being assisted by an engineer for the construction company.

(Department of Water Resources Photo)

Whale Rock Dam





KLAMATH RIVER COMMISSION

Seated left to right

Bert A. Phillips, Chairman - California Klamath River Commission

Nelson Reed, Chairman - Oregon Klamath River Commission

Robert B. Bond, Executive Assistant - California Klamath River Commission

Standing left to right

F. L. Lathrop, Consultant - California Klamath River Commission

Ellis Louie, Member - California Klamath River Commission

Ralph Koozer, Member - Oregon Klamath River Commission

James Kerns, Jr., Member - Oregon Klamath River Commission

Harvey O. Banks, Member - California Klamath River Commission

and Director, California Dept. of Water Resources

James G. Stearns, Vice-Chairman, California Klamath River Commission

George Stevenson, Member - Oregon Klamath River Commission

Harry Pearson, Member - Oregon Klamath River Commission

Adolph Moskovitz, Deputy Attorney General, State of California





Harvey O. Banks

