

TRANSCRIPT OF PROCEEDINGS

UNITED STATES ARMY  
LOS ANGELES DISTRICT  
CORPS OF ENGINEERS

PUBLIC MEETING

FOR THE PRESENTATION OF ALTERNATIVE PROPOSALS  
FOR FLOOD CONTROL AND ASSOCIATED RECREATIONAL  
DEVELOPMENT IN THE PHOENIX METROPOLITAN AREA.

MARICOPA COUNTY AUDITORIUM  
PHOENIX, ARIZONA

Thursday, April 25th 1974  
at: 7:00 p.m.

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PHOENIX, ARIZONA 85004

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228 Luhrs Central Building  
Phoenix, Arizona 85004

By: Charles L. Emmons, Field Reporter

PRESENT ON THE PANEL

1  
2 Major Henry W. Worthington  
3 Special Assistant to Arizona for the District  
4 Engineer of the Los Angeles District,  
5 U. S. Army Corps of Engineers  
6 PRESIDING OFFICER

7  
8 Clifford Ford  
9 Project Manager, Los Angeles District,  
10 U. S. Army Corps of Engineers  
11 PANEL MEMBER

12  
13 Robert Joe  
14 Chief of Environmental Resources Branch,  
15 Los Angeles District,  
16 U. S. Army Corps of Engineers  
17 PANEL MEMBER

18  
19 Garth A. Fuquay  
20 Chief of the Engineering Division,  
21 Los Angeles District,  
22 U. S. Army Corps of Engineers  
23 PANEL MEMBER

PRESENT AT THIS PUBLIC MEETING

24  
25 John W. W. <sup>B</sup>ogue, Chief, Economics Section,  
Los Angeles District, Corps of Engineers

26  
27 Robert L. <sup>H</sup>all, Chief, Hydrology Engineering Section,  
28 Los Angeles District, Corps of Engineers

29  
30 Vance L. Carson, Project Leader,  
31 Los Angeles District, Corps of Engineers

32  
33 Jack Wong, Civil Engineer, Dam Section,  
34 Los Angeles District, Corps of Engineers

35  
36 James Y. Ueda, Landscape Architect, Environmental  
37 Resources Branch, L.A. District, Corps of Engineers

38  
39 Joseph Dixon, Civil Engineer,  
40 Los Angeles District, Corps of Engineers

41  
42 Nancy H. Austere, Visual Presentations,  
43 Los Angeles District, Corps of Engineers

44  
45 Edward D. King, Civil Engineer,  
Los Angeles District, Corps of Engineers

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Able Nuanes, Civil Engineer,  
Los Angeles District, Corps of Engineers

Richard K. Yamamoto, South Pacific Division,  
Los Angeles District, Corps of Engineers

Raymond L. Coker, Phoenix Resident Engineer,  
Los Angeles District, Corps of Engineers

Lt. Col. Wilfred E. Gelinas,  
Los Angeles District, Corps of Engineers



I N D E X

Thursday,  
April 25, 1974

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(7:00 P.M.)

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It's 7:00 o'clock. Why don't we get the meeting going if everybody's ready here.

Good evening, ladies and gentlemen. I am Bob Corbin, I am Chairman of the Maricopa County Board of Supervisors. I have lost my voice. I came down with the flu last week and I still haven't got it back. This title carries with it the additional duty of Chairman of the Board of Directors of the Flood Control District. On behalf of the members of the Board of Supervisors I welcome you here this evening.

This public meeting was scheduled by the County at the request of the Los Angeles Engineering District, Corps of Engineers. As most of you know, in recent years the Los Angeles District, Corps of Engineers have been conducting studies and planning for flood protection for Central Maricopa County. This is the part of the County where the major flood damage occurs and where the majority of our citizens reside. Many possible solutions to the flood problem have been studied and several have now been determined to be feasible.

The basic purpose of our meeting this evening is to review these proposed solutions or alternatives and to determine which one, or combination of two or more, is the

1 most desired by the citizens of this part of the County. In  
2 addition to provide flood protection -- in addition to  
3 providing flood protection excellent opportunities are possible  
4 for development of many recreational facilities. The Arizona  
5 Parks Board and Maricopa County Board of Supervisors have  
6 recently passed resolutions indicating that permanent lakes  
7 be planned for the reservoir area, the proposed Cave Buttes  
8 Adobe and New River dams for recreational purposes. The  
9 State Water Commission has indicated that adequate water could  
10 be made available. It is the hope of the County and the Corps  
11 of Engineers that we have active participation and firm  
12 recommendations from those of you that are presently with us  
13 tonight.

14 I wish to turn this meeting over to the Corps of  
15 Engineers. We regret the illness has prevented the District  
16 Engineer, Colonel Foley, from attending. However, Major  
17 Worthington has able assistants for the State of Arizona --  
18 his able assistants for the State of Arizona -- and  
19 representatives from the Los Angeles District Office are here  
20 to present details of the proposed alternatives. So I will  
21 now turn the agenda over to Major Worthington who is sitting  
22 on my right here. Major Worthington?

23 PRESIDING OFFICER MAJOR WILLIAM WORTHINGTON: Thank  
24 you, Mr. Corbin. Good evening ladies and gentlemen. I am  
25 Major Will Worthington. I am Special Assistant to Arizona

1 for the District Engineer of the Los Angeles District, U.S.  
2 Army Corps of Engineers. The District Engineer, Colonel  
3 Foley, would have liked very much to have been here with you  
4 himself this evening. Unfortunately, he is not well. He is  
5 still recovering from a recent stay in the hospital and he is  
6 not permitted to fly or to travel any great distance. So he  
7 has asked that I represent him here tonight and I am very  
8 pleased to have the opportunity.

9 We have asked you here this evening to discuss the  
10 alternative proposals that we have studied for flood control,  
11 and associated recreational development, in the Phoenix  
12 Metropolitan area. I hope that the information we will give  
13 you this evening will permit you to understand the various  
14 proposals and decide which of them best meets your needs and  
15 desires. You will be hearing from me and from other members  
16 of our District staff. After you have heard from us, we will  
17 be anxious to hear from you. We want to listen to your  
18 comments and suggestions and to answer any questions you may  
19 have.

20 Before we get into the meat of our discussion, I  
21 believe some introductions are in order, and then there are a  
22 couple of administrative matters to cover.

23 I would like to introduce a number of the people  
24 from our Los Angeles staff who have been key to the study that  
25 has taken place thus far. Mr. Garth Fuquay, the Chief of the

1 Engineering Division. Mr. Bob Joe, the Chief of our  
2 Environmental Resources Branch, on my extreme left, and you  
3 will be hearing more from Bob in the course of the evening.  
4 Mr. Cliff Ford on my right, who is the Project Manager for  
5 this project, and he too will participate in the presentation  
6 to you this evening. Mr. Dick Yamamoto, who is from the  
7 South Pacific Division Staff. Mr. John <sup>B</sup>Yogue, the Chief of  
8 our Economics Section. Mr. Bob <sup>H</sup>all, the Chief of the  
9 Hydrology Section. Mr. Vance Carson, who is the Project  
10 Engineer on this project. Mr. Jack Wong, a Civil Engineer  
11 from our Dam Section. Mr. Jim <sup>U</sup>eda from the Environmental  
12 Resources Branch. Mr. Joe Dixon who has been key to the  
13 environmental studies thus far. And Miss Nancy Austere who  
14 is running the projector.

15           Attendance cards were handed to you as you came  
16 into the auditorium. If you have not filled one out, please  
17 do so now and pass the cards to the center aisle where they  
18 will be collected by members of my staff. These cards are  
19 important because they serve a dual purpose. They give us a  
20 record of attendance, and also allow us an indication -- also  
21 give us an indication of who and how many would like to speak  
22 later in the evening. However, if you do not indicate on the  
23 card that you would like to be heard, and later decide that  
24 you do have something to say, you will be given that  
25 opportunity. Everyone who wants to be heard this evening

1 will be heard.

2           The notice and information brochure for this  
3 meeting were mailed on April the 11th, 1974 to all interested  
4 parties whom we could identify. If any of you failed to  
5 receive a copy, or missed receiving one as you came in and  
6 would like one now, please raise your hand and we will get a  
7 copy to you.

8           We earnestly desire that all pertinent information  
9 will be brought out at this meeting so that it can become a  
10 matter of record. Full weight and consideration will be given  
11 to all evidence and recommendations presented, whether they  
12 be orally or in writing.

13           We would appreciate it if you would hold any  
14 questions or comments until the completion of our presentation.  
15 At that time we will listen to your questions and comments  
16 and try to provide appropriate answers.

17           A complete transcript is being kept of this meeting,  
18 and anyone who wants copies may purchase them from the address  
19 which is here on the right, Allied Stenotype Reporters, 228  
20 Luhrs Building, Phoenix, Arizona 85004.

21           In order that each speaker may be identified for  
22 the record, as well as for the audience, may I ask that when  
23 your turn comes to speak you come forward to the microphone  
24 which we will set up on the right, and state your name and  
25 affiliation at the beginning of your presentation. I also ask

1 that those who have come with written statements for the  
2 record, let us know at the beginning of your oral presentation  
3 for the benefit of the Recorder. If the written material is  
4 lengthy, may I suggest that you restrict your oral presentation  
5 to a summary of the prepared material and to any new material  
6 not contained in the written statement. This will help the  
7 meeting run more smoothly.

8           Again, we are here tonight to explain the most  
9 feasible alternative plans for flood control, along with  
10 project oriented recreational development which we have studied  
11 to explain why the field has been narrowed to five (5) basic  
12 alternatives, and to give you the opportunity to accept or  
13 reject any or all of the alternatives, and to propose other  
14 for study that we may have missed.

15           First, some background is in order. A serious  
16 flood problem exists along Dreamy Draw, Cave and Skunk Creeks,  
17 and along the New and Agua Fria Rivers, Until relatively  
18 recent times floods along Dreamy Draw and Cave Creek rarely  
19 caused large damages because of the predominantly agricultural  
20 developments in the overflow area. However, with the rapid  
21 population increase in the Phoenix Metropolitan area, especially  
22 since 1950, the flood damage potential has increased tremendously.  
23 Cave Creek virtually disappears at the Arizona Canal. The area  
24 below the Canal has been subdivided and intensively developed.  
25 Many people who occupy this urban area are not aware of the

1 potential flood danger. Floods along Skunk Creek, New River  
2 and Agua Fria River could cause damage, mainly to agricultural  
3 type property, and in fact, have caused considerable damage  
4 in the past.

5 Large floods occurred along Cave Creek in 1905 and  
6 in 1921. As a result of the 1921 flood when the State Capitol  
7 was flooded, the City of Phoenix, Maricopa County and the  
8 State of Arizona, in cooperation with private interests, con-  
9 structed the existing Cave Creek Dam in 1923. Large floods  
10 in 1943 and 1967 and several small to medium floods, have  
11 occurred on Cave Creek since that time. Major floods have  
12 occurred in surrounding areas.

13 In August of 1951 a major flood occurred in the  
14 Trilby Wash drainage area, which is tributary to the Agua Fria  
15 River on the west.

16 In August of 1963 a cloudburst occurred over the  
17 City of Glendale. The high intensity rainfall caused con-  
18 siderable damage in Glendale and in the Maryvale section of  
19 Phoenix. Flooding also occurred above the Arizona Canal near  
20 19th Avenue, as can be seen on the slide.

21 In September of 1969 a cloudburst storm occurred  
22 over South Tempe releasing 3.5 inches of rain in less than an  
23 hour, causing severe flash flooding.

24 Three (3) more recent storms, with which many of  
25 you are familiar, occurred in 1967, 1970 and in 1972. The

1 September 1970 flood caused more loss of human life than any  
2 other in Arizona's recent history. Heavy rainfall on the  
3 mountainous areas of Central Arizona resulted in sudden large  
4 floodflows in Tonto, Sycamore, Oak and Beaver Creeks, and on  
5 the East Verde and Hassayampa Rivers. The floods claimed the  
6 lives of twenty-three (23) persons and caused millions of  
7 dollars in property damage. This storm was not centered over  
8 the Phoenix area. However, it is meteorologically possible  
9 that a storm of similar or greater magnitude could occur here.

10           The storm of 21 and 22 June, 1972 was the latest  
11 storm to cause extensive damages to the Phoenix Metropolitan  
12 area. This flood resulted in Maricopa County being declared  
13 a major disaster by the President.

14           With knowledge of the early history of flooding,  
15 and with the knowledge that the threat becomes greater and  
16 greater as development occurs, the Corps of Engineers was  
17 requested to make an investigation toward flood control in  
18 the Phoenix Metropolitan area.

19           As a result of those studies, a comprehensive five  
20 phase flood control plan for the Phoenix Metropolitan area, and  
21 Phase B of the comprehensive plan, were developed. The  
22 comprehensive plan was designed to serve as a framework for  
23 future flood control work in the area. Phase B was to protect  
24 the area of most dense development.

25           In our studies, consideration was given to control

1 of the standard project flood. The term "standard project  
 2 flood" is used by the Corps of Engineers to define a large  
 3 hypothetical flood that could reasonably be expected to occur  
 4 in the area. Such a flood could occur in the area under  
 5 consideration if a storm equivalent in magnitude to the  
 6 largest storm on record in the general region, were to center  
 7 over the drainage area when ground conditions were conducive  
 8 to a high rate of runoff. The estimated flood from such a  
 9 storm serves as a reasonable yardstick for determining the  
 10 flood producing potential of that part of the basin. Two (2)  
 11 storms were used as a basis for determining the standard  
 12 project flood in the particular project under consideration  
 13 tonight. They are the Trilby Wash storm of August 1951,  
 14 mentioned previously, which centered on the Agua Fria water  
 15 shed about fifty (50) miles north of Phoenix. And secondly,  
 16 the Queen Creek storm of August 1954 which occurred over the  
 17 Queen Creek area, about fifty (50) miles southeast of Phoenix.  
 18 The Trilby Wash storm was a general storm which produced a  
 19 large volume of runoff, while the Queen Creek storm was a  
 20 local thunderstorm, which has a high peak runoff but a low  
 21 volume. Meteorological studies show that either storm could  
 22 occur in the Phoenix area.

23 A standard project flood occurring in the Cave  
 24 Creek, New River area would flood one of the most intensively  
 25 developed sections of the Phoenix area. Along with the New

1 and Agua Fria Rivers, the overflow would flood predominantly  
2 agricultural property, except at the communities of Peoria  
3 and Avondale.

4 Phase B of the comprehensive plan was first  
5 presented in a public meeting held in October 1963. There was  
6 general concurrence with the proposed plan and it was formally  
7 approved by Maricopa County. Subsequently, Phase B was  
8 authorized by the Congress for final planning and ultimate  
9 construction in the Flood Control Act of 1965.

10 The authorized plan consists of four (4) dams,  
11 fifteen (15) miles of diversion channels, and thirty-nine (39)  
12 miles of channelization of existing streams. The dams were  
13 designed to control a standard project flood, whereas the  
14 channel improvements were designed to carry a 100 year flood.  
15 In most cases, the channels were planned to be excavated so  
16 that in the event of a flood exceeding the capacity of the  
17 channel, overflow would be at shallow depths and at modest  
18 velocities.

19 This project would provide excellent protection to  
20 the developed areas along Dreamy Draw, Cave Creek, Skunk Creek,  
21 New River and Agua Fria River, and to property subject to  
22 flooding from sheet flow originating in the Lower Deer Valley  
23 area. Flood flows originating upstream from the proposed  
24 Arizona Canal Diversion channel and upstream from the proposed  
25 Union Hills Diversion channel would be controlled and conveyed

1 to the Gila River. About eighty-five (85%) per cent of the  
2 potential flood damages in the area would be prevented.

3 However, I emphasize that a storm can occur downstream from  
4 the authorized works and unless these storm waters are  
5 controlled, substantial storm drainage -- storm damage can  
6 occur. It is, therefore, essential that affected communities  
7 construct storm drain improvements to control local flooding.  
8 The facilities that we will describe this evening could serve  
9 as outlets for some of the required local storm drains.

10 Corps of Engineers' analysis of the flood control  
11 problems and our recommendations for or against Federal  
12 construction of any flood control works must rely heavily on  
13 economic factors. That is, for a favorable recommendation  
14 we must generally show that the benefits resulting from  
15 construction of a project would be greater than the cost of  
16 constructing, maintaining and operating that project. We are  
17 also required to consider non-structural solutions to the  
18 flood problem. And of course, non-structural solutions would  
19 be solutions which don't require the construction of structures,  
20 but rather, would rely on zoning and building restrictions in  
21 the area which is flood prone.

22 New Federal laws and policies require that we  
23 re-evaluate these projects which were previously authorized.  
24 I said "previously" -- this project was authorized in 1965  
25 and legislation by the Congress since that time will require

1 us to go back and re-evaluate some of the aspects of this  
2 authorized project. Therefore, in order that our re-study  
3 would be responsive to the needs and desires of the  
4 communities involved and reflect any changed conditions, we  
5 returned here in April 1972 and held another public meeting  
6 to solicit your opinions of the authorized plan, and your  
7 ideas for alternative solutions to the flood problem.

8 At that meeting it was said that there appear to  
9 be five (5) basic alternative solutions which are, No. 1,  
10 no further action. No. 2, a combinations of dams and channels  
11 such as the authorized plan. 3, a solution to the flood  
12 problem consisting of dams only. 4, a solution consisting  
13 of channels only. And 5, a combination of the structural  
14 and non-structural measures. There are many possible variations  
15 or combinations of these themes.

16 Also mentioned, was the possibility for development  
17 of a recreation plan. We had considered alternatives ranging  
18 from minimum facilities to optimum development of recreational  
19 areas. Recreational development, however, must be limited  
20 to that scale for which local interests are willing to share  
21 in the cost of the development for all recreational areas and  
22 facilities. Generally on a fifty-fifty (50-50) interest.  
23 Local interests must also agree to operate and maintain these  
24 facilities after construction.

25 Our current studies will be published as a design

1 memorandum, which has a full discussion of a proposed project.

2 A major consideration for our plan formulation  
3 has been the environmental impact that the project could have  
4 on the area. We are in the process of preparing a draft  
5 environmental impact statement.

6 The National Environmental Policy Act of 1969  
7 requires that these environmental statements, consider five  
8 (5) prime points. And these points are:

9 The environmental impact of any proposed action.

10 The adverse environmental effects which cannot be  
11 avoided, should the project be implemented.

12 Alternatives to the proposed project.

13 The relationship between local and short term use  
14 of man's environment and the maintenance and enhancement of  
15 long-term productivity.

16 And finally, the irreversible and irretrievable  
17 commitments of resources which would be involved in the  
18 proposed action, should it be implemented.

19 When we had completed our draft environmental  
20 impact statement, which is in fact a comprehensive and  
21 detailed study of the area, it is submitted for review and  
22 comment by other Federal agencies, the State of Arizona, local  
23 agencies, and all known interested civic and conservation  
24 groups and concerned individuals. When these comments have  
25 been returned to us, we will revise the statement and take

1 them into full consideration before we forward this statement  
2 along with the design memorandum through our channels to the  
3 Secretary of the Army. He in turn, sends it to the President's  
4 Council on Environmental Quality.

5 We look forward to your comments and suggestions  
6 toward this environmental study, and I assure you that all  
7 such comments will receive full consideration as it is being  
8 prepared. It is only by such assistance from concerned  
9 groups and persons who are intimately acquainted with the  
10 project, that we can produce a well-rounded environmental  
11 study.

12 I might add at this point, that extensive  
13 coordination has continued throughout the study with  
14 environmental groups such as the Arizona Conservation Council,  
15 Arizona Game and Fish Department, and the Friends of the  
16 Earth, along with City, County and State and Federal agencies,  
17 as well as with many individuals that have expressed an  
18 interest in the project formulation. This coordination will  
19 continue.

20 Although the impact statements are a requirement  
21 of law, so we would have to do them under any circumstances,  
22 it has been our experience that they are extremely valuable  
23 to our project studies and I am convinced that they go far  
24 toward helping us come up with better projects.

25 I am going to turn to my staff to continue this

1 presentation. I will call on Cliff Ford, who is the Project  
2 Manager for the study of this Phase B project, and on Bob  
3 Joe, who is the Chief of our Environmental Resources Branch.  
4 Bob has the responsibility for conducting and coordinating  
5 this environmental impact statement and the study throughout  
6 the planning process, and planning the recreational features  
7 of the alternative plans. Together they will describe the  
8 various features of the alternative plans. They will also  
9 highlight the potential beneficial and adverse effects we  
10 believe could occur with construction of each alternative.

11 CLIFFORD FORD: Thank you, Major Worthington.

12 I'll start out by giving a little background  
13 information that applies to all of the alternatives.

14 The current studies include a review of the  
15 authorized plan and development of alternative plans. The  
16 major considerations in these studies, in addition to  
17 providing flood protection, are the environmental and social  
18 impacts, the impacts of the new State law passed on May 3rd,  
19 1973, which requires flood plain management along watercourses,  
20 and also the National Flood Disaster Protection Act of 1973,  
21 current and projected urbanization trends, the potential for  
22 project associated recreation development, and economic  
23 justification.

24 As Major Worthington stated earlier, economic  
25 justification is normally a requirement for Federal participation

1 in construction of flood control works. That is, the benefits  
2 must exceed the costs. Since the derivation of flood control  
3 benefits may be a mystery to some of you, I will briefly state  
4 how we develop the primary ones. The major benefit is the  
5 prevention or reduction of flood damages through construction  
6 of a flood control project. We look at the present development  
7 and the future development within the standard project flood  
8 overflow area, taking into account any laws which control  
9 development within the flood plains. We then calculate the  
10 damage potential over the life of the project, which is  
11 normally considered to be 100 years.

12 Flood control features are then figured into the  
13 analysis, thereby reducing the potential for damages. The  
14 flood damages that are prevented by the project are what we  
15 call flood damages prevented and they are a project benefit.

16 Where extensive development exists in the flood  
17 prone area, the flood damage potential is high, so the benefits  
18 are high. If, on the other hand, there is little existing  
19 development and the future development will be restricted by  
20 flood plain zoning or other land use restrictions, the benefits  
21 would be low.

22 Another potential benefit is land enhancement.  
23 That is, if a flood control feature were built, the flood plain  
24 that could not now be developed because of regulatory laws,  
25 could then be developed. The increased value of land is

1 credited as a project benefit. When benefits from land  
2 enhancement accrue however, a cash contribution toward the  
3 project costs, somewhat proportional to the land enhancement  
4 benefits, is required from local interests.

5 Flood control projects usually will not provide  
6 complete protection. With completion of a project, it is  
7 possible for storms to occur within the project area and  
8 still cause considerable damage. This is why, as Major  
9 Worthington emphasized earlier, it is essential that local  
10 government continue to construct storm drain facilities to  
11 control local flooding.

12 Some of the alternative plans that we will be  
13 describing tonight could serve as outlets for a local storm  
14 drainage system which will still be required even with the  
15 comprehensive plan.

16 These damages are what we call non-prevented  
17 damages. You will see them displayed later when I am  
18 describing the alternative plans. So much for the benefits  
19 and non-prevented damages. Now let's move on to describing  
20 some of the alternatives.

21 We looked at many alternatives before selecting  
22 the ones which we will present this evening. We considered  
23 combining features of the Central Arizona Project with  
24 features of the Phase B plan, and also we considered  
25 channelizing Cave Creek through the City of Phoenix to the

1 Salt River. Both plans were rejected for several reasons.  
 2 Finally, we settled on the five (5) basic alternatives which  
 3 you can see on the screen to your right. They are: no  
 4 further action, a combination of dams and channels, a dams  
 5 only plan, a channels only plan, and a combination of  
 6 structural and non-structural measures.

7 As I discuss each alternative, a color coded map,  
 8 somewhat similar to those that are in the brochure, and also  
 9 a table summarizing first costs, benefit to cost ratio, and  
 10 non-prevented damages will be projected on the two screens.

11 Before describing alternative one, let me explain  
 12 the table, which is summarized in more detail on the last page  
 13 of the brochure. The table on the screen is a summary of the  
 14 number that's on the last page and the first three columns  
 15 summarize the first costs, or the initial investment in  
 16 thousands of dollars. The Federal costs include the con-  
 17 struction of the dam and channels and railroad bridges, and  
 18 also half of the first costs attributable to recreational  
 19 development. The non-Federal first costs, which you're  
 20 probably most interested in, includes the cost of right-of-way,  
 21 relocation of streets and utilities, construction of street  
 22 and highway bridges, and a cash contribution of 2.3% of the  
 23 construction cost due to land enhancement. Also included in  
 24 the non-Federal cost is the other half of the recreation  
 25 costs. The total column -- third column over -- represents

1 the total initial investment to the taxpayer. The benefit  
2 to cost ratio is a measure of economic justification. For  
3 example, on alternative 1 shown on the screen here, for every  
4 dollar spent there would be four point six (\$4.6) dollars re-  
5 turned in benefits.

6 The last column is a little difficult to comprehend  
7 unless you are an economist. As stated earlier, non-prevented  
8 damages are a measure of potential damages that would not be  
9 prevented by the project. They are stated as equivalent annual  
10 damages in that they are a summation of a total potential  
11 damages distributed over the 100 year life of the project.  
12 They are very high, but are reasonable if you consider the  
13 great potential for damage if a standard project flood were  
14 to flow several feet deep through the heart of Phoenix, and  
15 that over a period of years there could be a great -- there  
16 could be many floods here of various magnitudes.

17 In alternative 1, is basically a do-nothing  
18 alternative or no further action by the Corps under this  
19 authorization. Dreamy Draw Dam was completed last year as  
20 a part of this authorization, except for landscaping, which  
21 will be completed this next fiscal year, and under this  
22 alternative would be the only feature constructed.

23 Some flood protection would be provided by the  
24 Paradise Valley Detention Dike proposed by the Bureau of  
25 Reclamation as a part of the Central Arizona Project.

1 Development within the flood plain would be managed by local  
 2 government through implementation of the new State Flood  
 3 Plain Management law and other pertinent laws and regulations.  
 4 Development would be regulated within the estimated 100-year  
 5 flood line. However, existing development within these flood  
 6 plains would still be subject to flooding.

7 Potential environmental and social impacts include  
 8 continued flood threat, no disruption of vegetation and wildlife  
 9 habitat, and no destruction of archeological sites as a result  
 10 of a Federal construction project. No joint development of  
 11 recreation facilities was considered in this alternative.  
 12 However, local agencies could develop parks and trails in the  
 13 flood plains.

14 Alternative 2 is a combination of dams and channels  
 15 very similar to the authorized plan. Because of changed  
 16 conditions the authorized plan was modified in several areas.  
 17 The Union Hills Diversion Channel, east of Cave Creek and  
 18 north of Bell Road is no longer recommended because of the  
 19 effect of the proposed Central Arizona Project, or the C.A.P.'s  
 20 Paradise Valley Detention Dike. Cave Creek Channel and the  
 21 Union Hills Diversion Channel west of Cave Creek are combined  
 22 and re-aligned north of Beardsley Road to become Cave Creek  
 23 Diversion Channel. The Arizona Canal Diversion Channel is  
 24 extended 4.6 miles from 40th Street to Dreamy Draw. The  
 25 terminus of the Agua Fria River Channel was extended to the

1 Gila River. The recommended site of Adobe Dam is four (4)  
2 miles south of the authorized site, crossing Deer Valley  
3 Drive about one and a half (1-1/2) miles west of the Black  
4 Canyon Highway. The recommended site of Cave Buttes Dam is  
5 about one half (1/2) mile south of the existing Cave Creek  
6 Dam, or approximately one and a half (1-1/2) miles north of  
7 the authorized site. And also recreational development is  
8 included as a project purpose.

9 So those are the major changes that we made in  
10 alternative 2, which are different than the authorized plan.

11 The location of the dams described in this  
12 alternative are the same for the alternatives which call for  
13 dams. Also, the types of channels described here will be  
14 the same for other alternatives that utilize channels.

15 All of the dams that we are talking about here  
16 this evening would be earthfill with a rock facing. Cave  
17 Buttes Dam, which would be a hundred and five (105') feet  
18 high and about a quarter of a mile (1/4) long, would have a  
19 gated outlet. This kind of outlet permits water to be re-  
20 leased through the dam in varying amounts of flow. The dam  
21 was moved upstream of the authorized site because of  
22 approximately a six million dollar savings in cost. Existing  
23 Cave Creek Dam would be removed for safety reasons after  
24 constructin of Cave Buttes Dam.

25 Adobe Dam, which would be fifty-eight (58') feet

1 high and about two (2) miles long, was moved downstream of  
2 the authorized site because of a larger drain -- because a  
3 larger drainage area would be controlled, and also the site  
4 is closer to the Metroplitan area, thus affording greater  
5 protection to the area downstream.

6 The New River Dam would be ninety-one (91') feet  
7 high and about a half a mile (1/2) long. Both the Adobe and  
8 New River dams would have ungated outlets. A maximum dis-  
9 charge of nineteen hundred cubic feet per second is figured  
10 for Adobe Dam, and twenty-six hundred cubic feet per second  
11 for New River Dam.

12 Cave Creek Diversion and Skunk Creek Channels  
13 would be concrete lined, requiring ninety (90') to a hundred  
14 and sixty (160') feet of right-of-way. The New and Agua  
15 Fria River Channels would be earth-bottom with revetted  
16 side slopes, requiring from five hundred (500') to six hundred  
17 (600') feet of right-of-way. The Arizona Canal Diversion  
18 Channel would be a concrete rectangular channel from 40th  
19 Street to 51st Avenue, and a concrete lined trapezoidal channel  
20 from 51st Avenue to Skunk Creek. The right-of-way requirements  
21 range from fifty-five (55') feet at 40th Street to two  
22 hundred (200') feet at Skunk Creek.

23 Cave Creek would be channelized upstream to the  
24 new Peoria Avenue Bridge to intercept flows which would pass  
25 under the bridge. Excess flows would flow overland and be

1 intercepted over the side of the Arizona Canal Diversion  
2 Channel.

3           Several types of channel cross-sections were  
4 considered for each channel reach. Along the Arizona Canal  
5 the narrower concrete channel was used in developing our  
6 cost estimates because of the lesser social impact of relocating  
7 homes and businesses, and also because of the high land costs.

8           Very serious consideration was given to the  
9 possibility of combining the Arizona Canal with the Diversion  
10 channel to reduce the right-of-way requirements. However,  
11 no plan compatible to both irrigation and flood control  
12 operations could be found.

13           I will now ask Bob Joe to describe the recreational  
14 development and potential environmental impacts for this --  
15 for alternative 2.

16           Bob?

17           BOB JOE: Thanks, Cliff.

18           First, I would like to cover a couple of general  
19 points dealing with recreational facilities related to flood  
20 control projects.

21           As Major Worthington has pointed out, development  
22 of recreational facilities are paid for by equal split of the  
23 cost between the Federal and local government. Local govern-  
24 ment is also responsible for the operation and maintenance of  
25 the facilities.

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In September of 1973 a recreation task force was formed in the Phoenix area to study possible recreational opportunities associated with flood control. The task force is made up of representatives of City, County and State government agencies, and the Corps of Engineers. The group determined that recreational lakes would be desirable behind each of the dams proposed in the flood control system, and that a trail system should be provided along the channel reaches.

To retain a permanent lake behind a flood control dam requires considerable alteration to the dam. The dam must be higher, to allow for flood control storage on top of the existing recreational lake. Gates must be provided to drain the recreational lake. Additional lands must be acquired to allow for the extra storage space. There are other associated problems, such as, water supply, water quality, the water retaining capacity of the reservoir, and costs. All of these factors have been explored, except the question of water quality, which is currently under study. The water for the recreational lakes in the Phoenix area would have to come from C.A.P. Without C.A.P. water for the recreational lakes would be infeasible. The dams beyond the basic costs for flood control would be chargeable to recreation and shared between the Federal and local governments. Local government would be responsible for the full costs of operation and maintenance.

1           Beached with bathhouse facilities could be provided  
2 along the shores of the lakes. Other facilities could in-  
3 clude shaded picnic sites, day camp installations, walking  
4 trails through areas of natural habitat, and bicycle and  
5 equestrian trails that could tie in with existing County  
6 trails. Landscaping with desert plant materials would provide  
7 shade and wildlife cover.

8           The recreational lakes behind Cave Buttes Dam could  
9 have three hundred and eighty (380) acres. At Adobe Dam,  
10 five hundred (500) acres. And at New River Dam, six hundred  
11 and twenty (620) acres. The recreational facilities that each  
12 of these dams could be generally the same, except that at  
13 Adobe site there is a large petroglyph site which, with  
14 appropriate protection and identification could offer park  
15 visitors and unusual glimpse of the Hohokam civilizations  
16 which once occupied this area.

17           The proposed Adobe site is ~~bordered~~ on the west  
18 by Thunderbird Park. Regional parks on the north and east are  
19 proposed. A water oriented recreational development at the dam  
20 could tie in to these existing parks to enhance the protected  
21 open space in the path of urban development.

22           In addition to the lakes, alternative 2 could also  
23 include a trail system and a system of linear parks along the  
24 channels. Trails could be built for hikers, joggers, bicyclists  
25 and horsement. And the system could be planned to coordinate

1 with the existing Sun Circle .Trail. Crossings could be  
2 provided at road intersections and rest stops. Comfort  
3 stations and picnic facilities could be located along the  
4 trails.

5 Along the Arizona Diversion Channel a trail system  
6 could be coordinated with proposed bikeways.

7 Construction of Alternative 2 and its associated  
8 recreational facilities would have many environmental and  
9 social impacts. Some of them favorable, some of them not  
10 favorable. Some of them, in fact, might appear to be  
11 favorable impacts to some of you and not favorable to others.

12 First, of course, is flood protection. Any flood  
13 protection plan would prevent possible human death and would  
14 prevent flood related health hazard and discomfort, as well  
15 as social and economic upheaval associated with floods. They  
16 would also prevent destruction or damage to public and private  
17 development and investments.

18 In other areas, the three (3) dams would have  
19 several impacts in common. Most noticeable would be alteration  
20 of the landscaping by the dam embankments, spillways, the  
21 access roads, borrow pits, recreation development, and  
22 associated landscaping.

23 The impoundment of water, both for recreational  
24 lakes and to a greater degree, the temporary impoundment of  
25 flood waters, would inundate wildlife habitat behind the dams.

27

1           The visual impact of Adobe Dam would be significant  
2 because it would have a long embankment readily visible from  
3 the Black Canyon Highway. Further, the dam structure would  
4 be located very close to a mobile home site, and although no  
5 relocation of mobile homes would be required, the dam structure  
6 might cause some social impact.

7           There's an archeological site near Adobe site --  
8 near Adobe Dam that could be incorporated into the visitor  
9 attraction at the Adobe Dam Park. In the New River site  
10 dam area many archeological sites have been identified which  
11 would require additional study and possible excavation before  
12 construction could begin. This work is being coordinated with  
13 the National Parks Service and Arizona State University.

14           At New River the existing vegetation that would  
15 be inundated by a reservoir, is probably the finest natural  
16 wildlife habitat to be found at any of the proposed dam sites.  
17 This habitat would be partially inundated by a flood control  
18 project incorporating the New River dam.

19           Social impacts of construction of the Arizona  
20 Canal Diversion channel would include the necessary relocation  
21 of about two hundred (200) homes and businesses, and elimination  
22 of all of one city park and part of another. Portions of  
23 the athletic field and parking lots of Sunnyslope High School  
24 and part of the Biltmore Hotel would be removed. The problems  
25 of relocation are presently being studied.

1 Channelization of the Agua Fria and New River  
2 would remove much of the natural vegetation in and along the  
3 rivers and would also have an effect on groundwater recharge.  
4 Channelization would speed up floodflows so that the period  
5 of time available for recharge would be reduced. However,  
6 the slow discharge of impound floodwaters from behind the  
7 dams would increase the recharge period. The concrete lined  
8 channels, of course, would deny all recharge, whereas  
9 earthbound channels would allow groundwater recharge.

10 Thus, as you can see, there are both pluses and  
11 minuses in the environmental impacts of Alternative 2.

12 MR. CLIFFORD FORD: Under Alternative 3, only  
13 Cave Buttes Dam would be constructed in addition to the already  
14 existing Dreamy Draw Dam. The dam would have a gated outlet  
15 and the outflow would follow the natural Cave Creek Channel  
16 to the Arizona Canal. Management of the flood plains would  
17 be accomplished in the same manner as in Alternative 1. This  
18 would be because there would be no structural channelization  
19 of any watercourse. Under this alternative, Adobe and New  
20 River dams would not be constructed because they are not  
21 economically justified. Although this alternative would  
22 reduce floodflows below Cave Buttes dam, non-prevented damages  
23 would be great because of a large residual floodflows.

24 MR. BOB JOE: Alternative 3 would have the impact  
25 described in Alternative 2 for Cave Buttes Dam. This

1 alternative would not, however, require any relocation of  
 2 businesses or homes, nor would it disrupt any natural  
 3 vegetation, except for that vegetation located at the damsite.  
 4 Like alternative 1, it would not guarantee the preservation  
 5 of either open space or natural wildlife habitat. The dip  
 6 crossing along Cave Creek would be impassable during the  
 7 draining of the floodpool.

8 There would be only one area of recreational  
 9 development in this alternative - Cave Buttes. No additional  
 10 trails would be constructed as a project feature in the urban  
 11 area, nor along the Agua Fria and New River.

12 This slide here (indicating) shows a cross-section  
 13 of the dam. The dark blue shows the recreational pool and  
 14 the light blue shows the flood control pool level.

15 MR. CLIFFORD FORD: Alternative 4, as I mentioned  
 16 earlier, is a channel zoning plan. It would consist of the  
 17 same channels described under alternative 2. They would,  
 18 however, be much wider to convey greater peak discharges  
 19 because no dams would be constructed. This would be primarily  
 20 along the Skunk Creek, Agua Fria and New River reaches.  
 21 Nearly the same degree of flood protection as in alternative  
 22 2 would be provided, however.

23 Bob?

24 MR. BOB JOE: This alternative would have similar  
 25 impacts to those mentioned for channels in alternative 2.

1 The channels would remove natural vegetation and wildlife  
2 habitat along the Skunk Creek and Agua Fria and New Rivers.  
3 The flood waters would be rapidly carried to the Gila River  
4 so that the period of time that the dip crossings would be  
5 impassable would be much shorter.

6 Recreation alternative 4 would only consist of  
7 trail systems along the channel, as described in alternative 2.

8 MR. CLIFFORD FORD: Alternative 5 combines a  
9 structural and non-structural measures to provide flood  
10 protection to the urbanized areas along Cave Creek and south  
11 of the Arizona Canal, while at the same time it maintains a  
12 natural floodway along Skunk Creek, New River and the Agua  
13 Fria River. Under this alternative, local interests would  
14 acquire flowage easements along the watercourses downstream  
15 of diversion channels. They would also be required to provide  
16 assurances that the floodways would be maintained.

17 We divided alternative 5 into two (2) parts, 5A  
18 and 5B. The difference is the Cave Creek Diversion channel.  
19 Under alternative 5A, the channel would divert discharges  
20 from Cave Buttes Dam to Skunk Creek. While under alternative  
21 5B, it would not be constructed and Cave Creek flows would  
22 follow the natural watercourse to the Arizona Canal Diversion  
23 channel. Structural measures common to both alternatives 5A  
24 and 5B are Cave Buttes, Adobe and New River dams, and the  
25 Arizona Canal Diversion channel. Because of the diversion

1 of Cave Creek floodflows to Skunk Creek under alternative 5A,  
 2 acquisition of flowage easement is required along Skunk Creek,  
 3 in addition to that required along the New and Agua Fria  
 4 Rivers, which would be below the Arizona Canal Diversion  
 5 channel.

6           The Cave Creek Diversion channel also would  
 7 intercept sheet flow from above, although no significant  
 8 benefits were credited to it because generally speaking it's  
 9 overland type flow.

10           Alternative 5B appears to be the most attractive  
 11 alternative based on economic consideration and environmental  
 12 impacts. Adobe dam would reduce the 100 year peak discharge  
 13 along Skunk Creek from about forty thousand -- forty-five  
 14 thousand c.f.s. to two thousand c.f.s., or cubic feet per  
 15 second. This would be at the Arizona Canal Diversion channel.  
 16 The Diversion channel would discharge about thirty-six  
 17 thousand cubic feet per second into Skunk Creek for a combined  
 18 total of thirty-eight thousand C.F.S. In other words, the  
 19 net effect of the dam and the Diversion channel at Skunk  
 20 Creek is about a fifteen (15%) per cent reduction in the peak  
 21 discharge over what it would be under the conditions of today  
 22 with no diversion channels and no dams. Granted, there would  
 23 be occasions when a storm centering below any of the flood  
 24 control structures would cause flooding along the New and  
 25 Agua Fria Rivers. As an example, the June 1972 flood was

1 caused by such a storm. This one, as you recall, was  
2 centered more in the Dreamy Draw of Indian Bend Wash area  
3 and there was considerable flooding along the Arizona Canal.  
4 This water could have been diverted into the Agua Fria and  
5 New River in this plan. This water did not reach the river  
6 under the existing conditions.

7 In any case, any diversion of this type, it would  
8 be within the flowage easement that we would require. Some  
9 structural measures, such as bank protection adjacent to  
10 existing development and dikes where a concentration of  
11 development exists in the flood plain, would be recommended  
12 as a project feature within the flowage easement reach --  
13 reaches.

14 Before asking Bob to outline the impacts of  
15 alternative 5, I wish to apologize for losing a hundred  
16 thousand (\$100,000.00) dollars. The average annual non-  
17 prevented damages on alternative 5 should be six point three  
18 million, rather than six point two million. The hundred  
19 thousand (\$100,000.00) dollars was lost in rounding when  
20 we were preparing the pamphlet -- the brochure. I guess what  
21 it really says is that only limited development presently  
22 exists along the New and Agua Fria Rivers. That is,  
23 development that would be subject to damages under flood  
24 conditions.

25 Bob?

1 MR. BOB JOE: Alternative 5A and 5B would have all  
2 of the impacts I have previously mentioned for the dams and  
3 the Arizona Diversion channel. Quickly in review, they are  
4 an alteration of landscape, the removal of wildlife habitat,  
5 and natural vegetation, the construction of several  
6 archeological sites, increased traffic density at the  
7 recreational sites, and the relocation of businesses and  
8 homes within the area of construction.

9 As a result of the flood control reservoirs being  
10 drained, the dip crossings that traverse the rivers below  
11 the proposed dams would be impassable for periods up to two  
12 (2) months. This inconvenience would increase the traffic  
13 density on the existing bridges. We are working closely with  
14 the Maricopa County Flood Control District to assess this  
15 impact on the transportational system and to determine what  
16 dip crossings would be improved under today's condition of  
17 development.

18 The application of local flood plain regulations  
19 and the introduction of flowage easements along Skunk Creek  
20 and the New River and Agua Fria Rivers would help preserve  
21 the natural vegetation and wildlife habitat. However, again,  
22 the easements would not guarantee the preservation of the  
23 natural vegetation. Natural channels in combination with the  
24 controlled release of floodwaters from the dams would aid  
25 groundwater recharge.

1           Recreation would, of course, also be an important  
2 part of alternative 5A and 5B. To recap some of the features,  
3 there would be a three hundred and eighty (380) acre lake at  
4 Cave Buttes Dam, a five hundred (500) acre lake at Adobe Dam,  
5 and a six hundred and twenty (620) acre lake at New River Dam.  
6 The lakes could be used for fishing, swimming, and non-power  
7 boating. Beaches, picknicking, day camping and trail  
8 facilities would also be provided. Some archeological sites  
9 could be incorporated into the recreation plans. A bikeway  
10 and a hikeway, jogging and equestrian trails would be  
11 provided along the Arizona Canal Diversion Channel.

12           PRESIDING OFFICER: Thank you Bob and Cliff.

13           Ladies and gentlemen, this has been a rather long  
14 discussion but we think it was necessary so that you could  
15 have a full understanding of the various alternatives  
16 available to provide flood protection in the Phoenix area.  
17 As Cliff indicated, they are not the only alternatives which  
18 we have covered in our study. But some of the potential plans  
19 we studied were ruled out because of economic, environmental  
20 or social reasons, engineering problems, or a combination.  
21 The recreational plans which we have studied -- which we have  
22 suggested tonight we feel are also important and can be of  
23 great value to the community.

24           We're going to take a break in a minute to give  
25 you a chance to stretch and discuss the alternatives among

1 yourselves. Then we're looking forward to hearing what you  
2 have to say and to answer any questions you may have. But  
3 there are a couple of points I believe I should make first.

4           It's only fair to tell you that professionally,  
5 we in the Corps of Engineers feel that Alternative 5B is the  
6 best plan, based on engineering, economics and environmental  
7 considerations. The ultimate decision rests with you. As I  
8 have said, we have worked closely with the County Flood  
9 Control District, Representatives of the various agencies  
10 involved, other government agencies on all levels, and many  
11 citizens organizations and individuals. We will continue  
12 this close coordination.

13           But the time must come when an ultimate decision  
14 must be made as to which flood control plan we're going to  
15 pursue to completion. All Federal flood control projects  
16 are partnerships between the Federal and local governments,  
17 and in Phoenix and vicinity our local sponsor -- our local  
18 partner is the Maricopa County Flood Control District. And  
19 through it, the County Board of Supervisors. We will look to  
20 the Board for the final definitive word on which plan is the  
21 one chosen by the community. In the meantime, if you have  
22 questions, ideas, recommendations, or any other input towards  
23 this planning, we would be happy to have you direct them  
24 either to us or to the County Flood Control District. My  
25 office is here in Phoenix and is available any time and we'll

1 receive your suggestions or comments as we have been doing  
2 for the past several years. If you have written comments,  
3 and many of you have indicated that you would not make a  
4 presentation tonight but that you would make a written  
5 presentation, we would ask that you make those as soon as  
6 possible. While we wouldn't give you a deadline, I think  
7 it's fair to say that we're looking towards the wrapup of  
8 this study by the end of June and we need your comments right  
9 away if we're going to make that target date.

10           Tonight, of course, we're looking forward to  
11 hearing directly from you and we will do that right away.  
12 But first, let's take that ten minute break that I promised  
13 you and we will start again at five minutes after the hour.  
14 And if there are anyone -- if there are any of you who have  
15 not passed in your cards, please do so.

16           Thank you.

17           (Ten minute recess)

18           PRESIDING OFFICER: We will now proceed with the  
19 second part of this hearing.

20           I'm going to be calling on those people who have  
21 expressed an interest in making a presentation here this  
22 evening. I will start first with the individuals not  
23 affiliated with any organization, asking them to make a  
24 presentation first, and then we will proceed through the  
25 private organizations, City, County and State governments.

1           The first name that I have that is an individual  
2 who has asked to make a presentation is Mr. Ralph Baskett, Jr.

3           MR. RALPH BASKETT, JR.: My name is Ralph Baskett.  
4 I live in the Peoria area. We've had -- my family has had  
5 farm and ranch land along New River for -- since 1928. I've  
6 stood on that bank of our land and watched acres cave in to  
7 the water. And believe me, it makes you very well aware of  
8 what a flood is, and talk about environmental impact, when  
9 that land goes down that waterstream, you've really made an  
10 impact on the environmental deal. So I hope you'll excuse  
11 me if I get a little emotional about this because I'm really  
12 definitely opposed to 5B. I think it's impossible to bring  
13 in, divert new water into that channel until we have  
14 channelization.

15           I sort of feel like I'm on a wheel. You know we  
16 started having hearings and get-togethers on this flood  
17 control back about ten (10) years ago. And our problem was  
18 the same then as it is now. The development of the east side  
19 of the City with causing flood problems. And the idea was,  
20 let's dig a ditch over ~~the~~ New River and let's dump it in  
21 there. We were all concerned about this, the people lives  
22 on the west side of the valley, and we pointed out that we  
23 had flood problems of our own and that we had all we could  
24 handle without diverting new water in there.

25           Well, the next idea was, let's take a bulldozer

1 and go out and build two or three dams up above here and  
2 we'll stop that water. And we pointed out at that time that  
3 sometimes these rainstorms come right below those dams,  
4 which as you pointed out, it did in 1970. In a situation  
5 like that we'd be back with more water than what we've had  
6 before, and we've had some pretty bad floods along New River.

7 About that time we come up with the idea -- or  
8 somebody did -- that we better get the Corps of Engineers  
9 involved here and let's engineer this thing right and get the  
10 job done. And we've had a series of hearings on it, in fact  
11 last year over at the City Auditorium, the Colonel, to whom  
12 we voiced our fears about bringing in new water without taking  
13 care of that channel, pointed out that any engineer knows  
14 that the proper way to handle a flood is to start at the  
15 bottom and work up. Because if you start any other way, if  
16 you start at the bottom and start putting water in, you got  
17 problems, particularly bad ones down towards the end. And he  
18 assured me that they had competent engineers that understood  
19 this situation, that this was going to be adequately engineered  
20 and taken care of.

21 I feel like that we have a problem here and the  
22 environmental problem is worrying them more than the  
23 engineering problem. And to me the way that this 5B is, is  
24 it's just something for the east side of the City and it's  
25 going to do the west side considerable amount of damage, not

1 only with the people that live along the channel, but also  
2 the people who have to cross the channel going to work, and  
3 that's a considerable amount of people. And they have a very  
4 big problem getting back and forth on just an ordinary flood.  
5 And so, as far as I'm concerned, I would prefer to go either  
6 the 2 if possible, or if economically you can't afford it,  
7 let's just do nothing.

8 PRESIDING OFFICER: Thank you, Mr. Baskett.

9 Mr. Warren Senseman.

10 MR. WARREN SENSEMAN: Ladies and gentlemen, I've  
11 come here tonight because I'm very interested in the flood  
12 control and -- of which I've seen floods here for many years.  
13 I came -- we came here in 1910 and settled northwest of  
14 Glendale. And since that time, which was at least sixty-three  
15 (63) years ago, I was about fifteen years old then and went  
16 to school over at Cave Creek and Belle Road, and I've seen  
17 what the floods were from here to Paradise Valley and so on.  
18 Well, now first, the big floods were down Cave Creek, which  
19 you got down before the canal was built, which was built by  
20 W. J. Murphy, I think 1895 or such, and the water spread out  
21 for several miles across Phoenix here. It even went to the  
22 Capitol -- went into Capitol grounds and went west a long  
23 distance. People put up big mounds there to be safe from  
24 the floods.

25 Now, living over in our district there, this --

1 after the canal was constructed -- then of course, they had  
2 the bank on the north side of the canal of which waters on  
3 the desert would come down and hit this embankment and it  
4 would run along it until it got -- added up -- and so much  
5 water until it'd break through the canal. Now I've seen  
6 four or five or six places along the canal where the canal  
7 did break, not being large enough to hold the amount of water  
8 that came to it from different parts of the valley above.

9           So, to this -- I think the main reason for the  
10 trouble that we've had, one of them is that the water users --  
11 and I'm a member of the Waters Users Association -- and live  
12 on Lateral 20 -- we had twenty (20) laterals ready and usable  
13 to take the floodwaters down to the Grande and down to the  
14 Salt River. And if it hadn't of been for the fact that the  
15 canal was too small to hold the amount of floodwater that it  
16 should have, in addition to the irrigation water, we'd have  
17 had -- there wouldn't have been any breaks in the canals.  
18 Now they've closed up practically all of the laterals.  
19 Lateral 19 is running part of the ways, and Lateral 20, and  
20 naturally the floodwater is being shifted to Skunk Creek.

21           Now, if you will look back at which I think our  
22 attorneys have done, in some years back the Honorable Judge  
23 Kent of the Supreme Court of Arizona made a decree by which  
24 no one could change the course of a stream to the detriment  
25 of others. And I was told by very eminent lawyers recently

1 that that law had been found and dug up and it still holds.  
2 Now, in case anyone is flooded by the damming of these  
3 streams or by the diverting of streams at Cave Creek or  
4 Moon Valley, or somebody over there in Paradise Valley over  
5 to New River, they - I believe -- they are -- well, should  
6 be well paid for their damages. I think I've seen a flood  
7 over at Cave Creek above the canal, maybe a mile to two miles  
8 wide. I went to school there and I've seen it. And then at  
9 different places in the valley they'd have a cloudburst and  
10 the water would come down in, maybe in the mountains on the  
11 east side of Cave Creek or maybe the -- you'd have a big  
12 pour down of water between Cave Creek and Skunk Creek. Then  
13 the water would flow there in great amounts.

14 All right. Now, what -- these little dams which,  
15 if they're put up safe, what I call mud dams because I've  
16 heard of these dams over in California breaking and washing  
17 out big areas of property. I think in one valley it was very  
18 destructive. But I don't think that it is a good, reasonable  
19 way of controlling the floodwaters of this section of land  
20 because it's just shifting it from one man's place over to  
21 somebody else's place. I don't think they've got the right  
22 to do it.

23 Now, we think in terms of what will be safe for us  
24 all. That should be one of our main thoughts. I believe we  
25 should follow the natural flow of the water in the country

1 around -- through the valley. And Cave Creek was our big  
2 problem until the dam was erected. Now I think it's going to  
3 take a lot of money to actually make it safe for everyone  
4 and that I firmly believe that if we had a open -- a channel  
5 along the east side of the Freeway from Paradise Valley down  
6 to South Phoenix, oh, say of twenty-five (25') to thirty  
7 (30') feet wide, and that deep, would carry the waters from  
8 that place east. It could be diverted into it.

9 Now, I would -- several years ago the Corps of  
10 Engineers from the United States Reclamation Service was here.  
11 I went down and I interviewed one or more, and this one man  
12 told me that the waters could be channeled down along the  
13 Freeway and it could be taken to the Salt River, by which it  
14 was its natural course, and on the west side of the Freeway  
15 another channel can be constructed, which he said could draw  
16 the waters from about 59th Avenue down to this Freeway and  
17 down that channel.

18 Well, we think then of what we will we do with  
19 the channel after the storm. Very few times have we had a  
20 storm that a big flow of water was twenty-four (24) hours,  
21 or say, thirty-six (36) hours, but is most times it was less  
22 than that. It would be a big flush of water and then it'd  
23 go down. Well, now it seems reasonable that water flowing in  
24 its natural way would have less resistance than one dammed  
25 up and forced to go the other way. Now I live on 75th Avenue

1 and I have a ranch there at Skunk Creek and 75th Avenue. I've  
2 had it since World War I. I went to war and I came back and  
3 I bought that and had it ever since.

4 Now, at this point -- 75th Avenue and Arizona  
5 Canal, we will think of it in these terms, that it's one half  
6 of a mile south of Belle Road at that point. We'll go back  
7 over to Cave Creek where Cave Creek hits the Arizona Canal  
8 and then we'll take a distance from that point up to the  
9 Belle Road, which Belle Road goes east and west, and you'll  
10 have over two (2) miles of distance. So the Arizona Canal  
11 climbs up two (2) miles by the time it gets from the critical  
12 place up here. See -- and in order to back your water up and  
13 force it uphill, it's just like when we was irrigating it all.  
14 We'd have to put dams in there to force the water over into  
15 higher spots in order to irrigate it.

16 But it's -- all this preparation of bringing water  
17 here and bringing the water here, there, and all like that --  
18 I don't believe is very wise plan because we have Skunk Creek,  
19 we have New River, if they are channeled out, cleaned out, we  
20 used to take teams of mules up on New River above the railroad  
21 and clean it out and dam places where it'd break and overflow,  
22 and we stopped it many, many times. R. P. Davey used to be  
23 a big promoter and real estate man here in Arizona, and he  
24 was -- he put in this Goodyear, Litchfield and Marionette,  
25 and all like that, for which he would bear part of the expense

1 of these implements of doing this work. Now, when the channel  
2 was clean we had no trouble with it.

3 And another thing is that the Arizona Canal was  
4 put there to irrigate the Salt River Project and when it got  
5 out to 75th Avenue they called that there the "waste ditch",  
6 from where Lateral 20 enters the canal, from there to Skunk  
7 Creek, which is a little over a quarter of a mile, they named  
8 that the "waste ditch". This waste ditch was used only -- it  
9 was very small, and it would be in case of over -- water --  
10 amounts of water that was put in the canal, they couldn't  
11 give it away or didn't have places to put it, they put it in  
12 the waste ditch and take it into Skunk Creek.

13 Now, in 19 -- about 24 -- I got a number of  
14 farmers together. We down to meet the Board of -- in the  
15 Waters Users Association, and they told us then that we don't  
16 intend to make the Arizona Canal or Skunk Creek a place for  
17 floodwater. We were assured that, and that they would not  
18 enlarge it to run the water down to us. Because they knew  
19 that it was against the law to do it, and they have said that.  
20 And we want -- there's -- most of the people in the valley,  
21 I guess, have come here since World War II and they don't  
22 know the dangers of these floods. And they -- anything to --  
23 it seemed to me, to fill up their little portion of it, let  
24 it go down to somebody else. Very nice, you know. But the  
25 main thought is, let the water take its course and you won't

1 have any trouble damming it up to put it on somebody else.

2 PRESIDING OFFICER: Thank you, Mr. Senseman.

3 Mr. Hans Krussman.

4 MR. HANS KRUSSMAN: I'll try to be brief. The  
5 reason for my being here is that I happen to live at 75th  
6 just north of Bell and I have an investment there, namely,  
7 my home, my family lives there. And for that reason we  
8 prefer to see the Alternative 2 take place, although I  
9 realize it's a little more expensive. In reading the report  
10 in depth I find that the whole area would be better served,  
11 perhaps even though it's a little more expensive, through  
12 Alternative 2.

13 Thank you.

14 PRESIDING OFFICER: Thank you, Mr. Krussman.

15 Mr. Oscar Recker.

16 MR. OSCAR RECKER: I happen to live on New River.  
17 I have a place about four hundred and seventy-five (475) acres  
18 where Skunk Creek meets New River. And I've witnessed -- I  
19 moved out there in '51 and been in the valley a considerable  
20 length of time before that -- and I have seen considerable  
21 water come down Skunk Creek and New River. And as I remember,  
22 the first meeting we had with the Corps of Engineers, they  
23 were going to dump the water into Skunk Creek and foreget  
24 about it. And after thinking about it, why, they did change  
25 it. But to think about all that water coming over on to us

1 without adequate ways to take care of it, seems like a  
2 calamity to us, Anybody from Skunk Creek down -- on the west  
3 side of the valley along Skunk Creek or New River -- I know  
4 would be very unhappy to have all that water come on to us  
5 without any -- without any reason to do it, except to please  
6 somebody on the east side.

7 I'm for the dams over there because I think the  
8 dam on Cave Creek is a necessity. It certainly helped in the  
9 early days and I remember when the Capitol was flooded and  
10 they had water up to the dining room tables in some of those  
11 houses around the Capitol. But what I feel about it is, that  
12 there is no reason to dump water on someone and ruin them  
13 when it's against the law to do it. I don't know why -- every  
14 attorney I've talked to say they can't do it without compen-  
15 sation. But here they just take it for granted, well, what  
16 is it worth, just a lot of farms over there. Well, the west  
17 side is growing. It's going to be a big part of the State.  
18 I think it's growing faster than any other part as a whole,  
19 and it will grow. It'll grow regardless of what's done unless  
20 they dump a lot of water on us, and then I think we're in  
21 trouble.

22 So I think they ought to take a good look at this  
23 and any time they say that that thing dumped thirty-eight  
24 thousand cubic feet per second on the west side without any  
25 harm, I don't know what they're thinking about.

1           PRESIDING OFFICER: Thank you, Mr. Recker.

2           Mr. William H. Goettl.

3           MR. NATHAN HOLT: If you will pass me. I will  
4 speak in his stead.

5           PRESIDING OFFICER: Yes, sir.

6           MR. NATHAN HOLT: I'm Nathan Holt. I'm employed  
7 by William Goettl and I'm appearing on his behalf at this  
8 time.

9           I would -- if it's okay, Major -- like to have a  
10 few questions answered, if I could, which perhaps was  
11 covered here but I missed it.

12           The permanent lake that you anticipate behind the  
13 proposed site, not the authorized but the proposed site of  
14 the Cave Buttes Dam -- how far north of the dam site would  
15 that extend?

16           PRESIDING OFFICER: How far north of the existing  
17 dam site?

18           MR. HOLT: No. How far north of the proposed  
19 Cave Buttes dam site?

20           PRESIDING OFFICER: O.K. Let's see if we can  
21 answer that.

22           MR. CLIFFORD FORD: I'm not sure I understand.  
23 You're talking about the proposed --

24           PRESIDING OFFICER: How far is the distance from  
25 here to the top of the --

1 MR. CLIFFORD FORD: I don't know offhand. I'd  
2 say that it's approximately, oh, half to three quarters of a  
3 mile north of the existing Cave Creek Dam would be the  
4 recreation pool would extend.

5 PRESIDING OFFICER: Let me say that, and also say,  
6 Mr. Holt, I do have maps in my office that show exactly where  
7 this would go. Although that's one figure we didn't come  
8 here armed with.

9 MR. NATHAN HOLT: I tried to get hold of you the  
10 last couple of days. You been busy and your girl couldn't  
11 find them.

12 I missed it. I'm sure it appeared up here on  
13 the board a moment ago. It is my understanding that the  
14 proposed dam will be a hundred and five (105') feet high.  
15 Is that correct? From -- (interrupted)

16 PRESIDING OFFICER: Yes.

17 MR. HOLT: -- from the creek bed. How long will  
18 it be?

19 PRESIDING OFFICER: About a half mile.

20 MR. HOLT: And what will be the elevation of the  
21 top of the proposed dam?

22 PRESIDING OFFICER: If I may? Do you know offhand,  
23 Jack?

24 MR. JACK HONG: It would be sixteen eighty (1680).

25 MR. HOLT: Sixteen eighty (1680)? What will be

1 the -- are you checking to verify that?

2 PRESIDING OFFICER: Yes.

3 MR. JACK WONG: 16 -- I think it's been changed --  
4 about sixteen eighty (1680).

5 MR. HOLT: About sixteen eighty (1680)?

6 MR. CLIFFORD: The recreation pool added about  
7 five (5') feet more to the dam height.

8 MR. HOLT: And what would the height of the spillway,  
9 or the gate, come to?

10 MR. WONG: The crest of the spillway?

11 MR. HOLT: Yes.

12 MR. WONG: Sixteen sixty (1660).

13 MR. HOLT: Now that is the crest of the gate on  
14 the dam, is that correct?

15 MR. WONG: No. It would be the crest of the  
16 spillway. If I understand your question correctly.

17 MR. HOLT: Well, maybe I don't have the degree of  
18 expertise I need in your terminology.

19 MR. WONG: Would you repeat your question again,  
20 please?

21 MR. HOLT: Yeah. What I -- is there a spillway  
22 around or through the proposed Cave Buttes dam? To relieve  
23 the pressure -- a gate to let the water out.

24 MR. WONG: No, no.

25 MR. CLIFFORD FORD: There would be a gate.

1           PRESIDING OFFICER: Let me answer that. Yes,  
2 there is a spillway. Yes, there is a gate. The spillway---  
3 the bottom of the spillway, the point of which water would  
4 begin to come through the spillway, is sixteen sixty (1660)?

5           MR. WONG: Right.

6           MR. CLIFFORD FORD: And the gate would be down at  
7 the bottom below a stream point.

8           MR. HOLT: Great. In your studies somewhere do  
9 you know if you determined the capacity of the existing Cave  
10 Creek Reservoir?

11           VOICE FROM AUDIENCE: Twelve thousand (12,000)  
12 acre feet.

13           MR. HOLT: What is the elevation of the permanent  
14 lake behind -- or that portion of the permanent lake behind  
15 the existing Cave Creek Dam? In other words, the Cave Buttes  
16 Dam as constructed, or as proposed, as you now propose it,  
17 would have a permanent lake behind it. What would be the  
18 maximum elevation of that permanent lake in the area north  
19 of the existing Cave Creek Dam?

20           MR. CLIFFORD FORD: The lake would extend from --  
21 the same elevation from the proposed dam on upstream of the  
22 existing dam. Do you know the elevation of that?

23           MR. WONG: Yes. For three hundred (300) acre  
24 feet the elevation would be sixteen twenty (1620).

25           MR. HOLT: That would be the permanent lake?

1 MR. WONG: Right.

2 MR. HOLT: Now, what would be the elevation of  
3 the maximum that you would anticipate to be encompassed  
4 within that lake in a flood situation, in that area north of  
5 the existing Cave Creek Dam? In other words, what I'm getting  
6 at, is how much more will it encroach above the sixteen  
7 hundred and twenty (1620') feet of the permanent lake?

8 PRESIDING OFFICER: It would go up to the spillway  
9 crest. That's the largest - that's the standard project  
10 flood, and that's the largest flood we would expect.

11 MR. HOLT: Which would be sixteen hundred and  
12 sixty (1660') feet, is that correct?

13 PRESIDING OFFICER: Yes.

14 MR. HOLT: The reason I particularly ask this,  
15 in the display out there in the lobby I undoubtedly read the  
16 thing wrong 'cause I lack the expertise to understand it.  
17 It looked like the maximum out there was, I think, sixteen  
18 thirty (1630). I probably read it wrong. That's a problem  
19 of mine.

20 MR. CLIFFORD FORD: Were you looking at the Cave  
21 Creek cross-section?

22 MR. HOLT: Not the cross-section. It showed --  
23 Now, in regard to the recreational area proposed behind the  
24 Cave Buttes Dam, do I read your exhibit out there correct,

25

1 that that recreation area would be to the east side of the  
2 permanent lake and north of the area of the existing Cave  
3 Creek Dam?

4 MR. CLIFFORD FORD: Pretty close to that, right.

5 MR. HOLT: You anticipate no such development on  
6 the west of that permanent lake, am I correct then?

7 Do you, in your records there, have anything to  
8 indicate the elevation at the top of the existing Cave Creek  
9 Dam?

10 MR. WONG: If I remember, the top -- the elevation  
11 is sixteen forty-two (1642). But there's a two (2') foot  
12 cut at the wall on top of the dam. Therefore, the dam is  
13 actually -- the top elevation is sixteen forty (1640).

14 MR. HOLT: So in a standard project flood then,  
15 we would anticipate that there would be twenty (20') foot over  
16 the top of that dam?

17 MR. WONG: Right.

18 MR. HOLT: As it now exists?

19 MR. WONG: Right.

20 MR. HOLT: Thank you, gentlemen. I needed some  
21 of that information. As I indicated, I am appearing here  
22 today as an employee of Bill Goettl. Bill owns and has for  
23 quite some time the eighty (80) acres immediately north of  
24 the existing Cave Creek Dam, and a hundred and sixty (160)  
25 acres immediately to the west of that eighty (80) acres. I

1 have a written statement here that I will submit on behalf of  
2 Mr. Goettl with attached exhibits reflecting the effect that  
3 the establishment of the proposed site as opposed to the  
4 authorized site of the Cave Buttes Dam will have on that  
5 property, rendering it essentially untenable. There are  
6 numerous improvements on that property, wells which will be  
7 obviously flooded out.

8 It would appear to me that serious consideration  
9 should be given to leaving the Cave Buttes at its authorized  
10 site. Sort of like old time religion. It was good enough  
11 for my father and it's good enough for me. That authorized  
12 site was good enough for us not too long ago. I think it's  
13 still good enough for us. The combined capacities of the  
14 lake behind the authorized site of the Cave Buttes, together  
15 with the capacity of the existing Cave Creek Dam, I am sure  
16 would serve very adequately to control the discharge of  
17 floodwater.

18 MR. GARTH FUQUAY: We know that we're going to  
19 have to breach the existing Cave Butte Creek Dam if we go  
20 ahead with this project. Our indication today is that it's --  
21 it could fail under a full head of water.

22 MR. HOLT: Well, I would submit that at least  
23 worthy of consideration and examination of the map would  
24 reflect that a spillway could quite readily control a danger  
25 of that nature. And I'm sure that that spillway would be

1 readily obtainable, the rights to construct such a thing.  
2 The -- it is my understanding that either all or the vast  
3 majority of the rights necessary to be obtained for the  
4 construction of the authorized Cave Buttes Dam have already  
5 been obtained. And to change it to the proposed site and --  
6 and, in addition, remove the Cave Creek Dam, will necessitate  
7 obviously much more acquisition of, not only fee title, but  
8 rights which, I submit that no one has at the present time to  
9 flood property which never has been, within the context of what  
10 is planned.

11 I submit the feasibility of a spillway, if there is  
12 a danger, which apparently a couple of years ago in discussions  
13 with the engineers, there was no danger of a problem with the  
14 Cave Creek, that has reared its ugly head since that time.  
15 But a study of those feasibilities of a spillway -- the Cave  
16 Creek Dam and the authorized site of the Cave Buttes, I think  
17 would provide you with all the benefits of the re-charge of  
18 the ground water supply. You would have then a settling basin,  
19 if you will, for the authorized Cave Buttes Dam. You have the  
20 alternatives of discharge, as you would presently have under  
21 your proposal into the Arizona Canal Diversion Channel, and  
22 possibly even through some tie-up with the C.A.P. Aquaduct.  
23 When that happens the diversion over in -- behind Orea<sup>me</sup> (phonetic)  
24 Dam for future use. It would appear that there are a lot of  
25 benefits to be derived. And on behalf of Mr. Goettl I would

1 say that Bill has cooperated with all flood control projects,  
2 with Colonel Lowry before McDonald, or knows of Bill's  
3 cooperation, but give Bill some consideration too.

4 Thank you.

5 PRESIDING OFFICER: Thank you, Mr. Holt. And  
6 thank you, Mr. Goettl.

7 One point I think that hasn't been made -- of course,  
8 we did point out that the change had been made from the  
9 authorized site to the higher site because of economics, and  
10 there was a question of about six million dollars difference  
11 in cost. One of the items contributing to that cost would be  
12 the required relocation of the high voltage power line, should  
13 we build at the lower site, and the estimate ranges up to a  
14 million dollars to make that one relocation.

15 Thank you for your comments.

16 Mr. Paul Rossman.

17 MR. PAUL ROSSMAN: I live in Phoenix down near  
18 20th and Indian School and I did get some of the floods in  
19 '72. Luckily I didn't get any in the house. But there -- I  
20 do recommend a -- 5B, that they have -- talking about the  
21 alternatives. I been over the tour with them. I think they  
22 had some good proposals. A couple of things I'd like to add  
23 on it. They spoke of day camping. I'd like to see in the  
24 recreation areas, overnight camping. We have very little as  
25 far as overnight camping in the Phoenix area -- immediate area.

1 Another thing we discussed on the tour is a bike  
2 use -- a diversion canal was to cross roads and underpasses  
3 and your street obstacles when they are dry. And also I'd  
4 like to see recreation use of the canal and channels when  
5 they're dry along there, both in hiking, horse trails, any  
6 type recreation along there to be utilized. Thank you.

7 PRESIDING OFFICER: Thank you, Mr. Rossman.

8 That concludes the list of individuals not  
9 associated with a firm or organization that have expressed an  
10 interest in making a presentation. Are there any other  
11 individuals at this time in that capacity who would like to  
12 make such a presentation?

13 Yes, sir?

14 MR. ARTHUR BURROUGHS: I just put myself down as  
15 a private individual. I'm not --

16 PRESIDING OFFICER: Fine. We'll be glad to hear  
17 you at this time.

18 MR. ARTHUR BURROUGHS: My name is Arthur Burroughs.  
19 I live in Glendale. I have some property out near Cave Creek  
20 Dam area and a lot of the questions that I really had has  
21 been answered by Mr. Goettl's lawyer. But there are a few  
22 other ones that I have. And I'd like to know exactly how I  
23 stand specifically. Because I called after the original  
24 proposal -- I called Colonel Lowry at that time and he said  
25 quote, "We do not want any more property in that area." So

1 I felt very, very happy about that and I started making plans  
2 on developing the property that I had out there -- building a  
3 home and things like that. Now I know -- I find out that we  
4 have different plans.

5 O.K. Basically, there was one statement made that  
6 there aren't any homes in that area. I know of five (5) homes  
7 in that area. And I got one more question to ask and I would  
8 like to know how much private property would be re -- must be  
9 purchased from this?

10 MR. CLIFFORD FORD: In terms of flowage easement?

11 MR. BURROUGHS: Maximum flood.

12 MR. CLIFFORD FORD: I mean you're talking about  
13 alternative 5B, for instance?

14 MR. BURROUGHS: Yes.

15 PRESIDING OFFICER: For the entire alternative or  
16 for the Cave Buttes Dam?

17 MR. BURROUGHS: For the Cave Buttes -- Cave Creek  
18 Buttes.

19 PRESIDING OFFICER: For the Cave Buttes Dam?

20 MR. BURROUGHS: Right.

21 PRESIDING OFFICER: Do you happen to have that,  
22 Jack?

23 MR. JACK WONG: Offhand I don't know the area that  
24 you're talking about. Are you talking about behind Cave  
25 Butte Dam?

1 MR. BURROUGHS: Where the maximum flood height  
2 will be you have to purchase private property -- make new  
3 purchases to property owners in that area there.

4 MR. GARTH FUQUAY: What's the right-of-way  
5 requirement for Cave Buttes Dam -- twenty-two Hundred?

6 MR. BURROUGHS: What elevation?

7 MR. WONG: Well, elevation would be sixteen sixty  
8 (1660). I don't know what elevation your property lies on.

9 MR. BURROUGHS: It's from there up to seventeen  
10 hundred (1700), so I'll be effected. But another thing, I  
11 understand that - is there a representative from the County  
12 here that can answer a question?

13 PRESIDING OFFICER: Yes. There are representatives  
14 from the County and the County Flood Control District with us  
15 here tonight.

16 MR. GARTH FUQUAY: I'm worried about the sixteen  
17 sixty (1660). If we have recreation -- we'll have a pool for  
18 recreation and probably the land will be acquired in fee,  
19 and some area above it will be acquired -- an easement. So,  
20 I don't know that we have that computed out yet. I think --  
21 I think we're trying to give you an answer that we're really  
22 not settled on yet for sure. I believe you're going to have  
23 to give us a little time to work some of these out. We simply  
24 don't have the answer to that. If you'll keep in touch with

25

01  
1 the Major, as soon as we get them worked out we will furnish  
2 you the information. But we don't have that information cold  
3 as of right now.

4 MR. BURROUGHS: In order for me to make a decision  
5 I have to know these answers, you know, for elevation and  
6 things like that, how it effects me.

7 MR. FUQUAY: We'll give them to you as soon as we  
8 can. I understand the pressures you're under and for you to  
9 say, well, we're going to acquire land in fee to sixteen sixty  
10 (1660) right now is premature. I wouldn't want to proceed on  
11 that basis.

12 MR. BURROUGHS: Thank you very much.

13 PRESIDING OFFICER: Thank you, Mr. Burroughs.

14 Mr. Frank Welsh.

15 MR. FRANK WELSH: My name is Frank Welsh. I live  
16 in Phoenix around 16th Street and Camelback. First I'd like  
17 to congratulate the Corps of Engineers on listening to the  
18 public input. And I find the plan 5B much superior to the  
19 authorized plan, especially referenced to the non-structural  
20 means of flood control -- the flood plain concept.

21 So I put my vote in for 5B. I do have two questions  
22 which I discussed at the break with several gentlemen.

23 One is, if under plan 3 the New River and Skunk  
24 Creek Dams are not justified, why then are they justified under  
25 plan 5B? And has the differential justification been looked

1 into?

2           And two, why must we buy the expensive Central  
3 Arizona Project water at fifteen (\$15.00) to forty-five  
4 (\$45.00) dollars an acre foot when we could just pump the  
5 groundwater from right beside the dams?

6           Just wanted to get that on the record. Thank you.

7           PRESIDING OFFICER: O.K. First, let me address  
8 your first question. Why are the two (2) dams justified on  
9 Agua Fria, or Skunk Creek and Agua Fria River, under Alternatives  
10 2 or 5A or B, whereas they are not justifiable under Alternative  
11 3? In Alternative 3 there are no floodwaters diverted out  
12 of Cave Creek. The dams, by themselves, on Skunk Creek and  
13 on the Agua Fria River, are not -- on, New River -- are not  
14 in themselves economically justified. We mentioned previously  
15 that we must show where we're going to get a dollar's benefit  
16 for every dollar spent. Considering just those those  
17 tributaries, there are not enough flood damages which stand  
18 to be sustained to support these multi-million dollar dams  
19 that we're going to construct up there. However, we realize  
20 that there is a legal and a moral obligation to minimize  
21 damages to those people. If we're going to divert water from  
22 one water shed to another, as has been previously pointed out,  
23 this is illegal. Now, if we compensate these people by actually  
24 reducing the net amount of water that's going to flow down  
25 there, it is a viable project. And legally, we feel it's right.

1           That is why these projects are justified. They're  
2 justified as a means of diverting this water and not in  
3 themselves economically.

4           Secondly, your second question was, why can we  
5 not pump the water out of the ground instead of relying a  
6 hundred (100%) per cent on the Central Arizona Project water.  
7 I think that the Central Arizona Project water is not  
8 forthcoming. We would consider this alternative before the  
9 possibility of recreation were dropped altogether. On the  
10 surface, it appears that it would be very difficult to pump  
11 that quantity of water and to maintain a water quality with  
12 pumped water. This would stand to be explored further before  
13 a conclusion reached.

14           Did I answer both of them?

15           MR. WELSH: Yes. You're going to explore the  
16 second one further then?

17           PRESIDING OFFICER: Yes.

18           MR. WELSH: O.K. Thank you very much.

19           PRESIDING OFFICER: Are there other individuals?

20           MR. CHUCK LAKIN: Major, I filled out a card and  
21 I put my company name as an organization, and I really speak  
22 only for myself.

23           PRESIDING OFFICER: Fine, sir. Please come forward.

24           MR. LAKIN: Major Worthington, Ladies and Gentlemen,  
25 my name's Chuck Lakin. I farm in the area of the confluence

1 of the Agua Fria and Gila Rivers. And when I look at some  
2 of these alternative plans I get the feeling -- that sort of  
3 creepy feeling that we folks who live and farm down in that  
4 area are expendable. Because any of these plans that would  
5 include channelization of the New River and Agua Fria without  
6 downstream channelization out into the Gila River and below  
7 is really an invitation for widespread flooding of thousands  
8 of acres in that area.

9           Secondly, if you look at the map in this booklet  
10 on page 5 showing -- which hasn't been discussed here tonight --  
11 showing a proposed channelization of the Salt and Gila -- or  
12 the Salt River, rather, down to the -- where the Gila River  
13 joins it, with no further downstream channeling, I submit,  
14 ladies and gentlemen, that this is an invitation for disaster.  
15 If you want real flooding, this is the way to buy it.

16           Now, why we haven't -- well, I understand why we  
17 haven't talked about channelizing further downstream, because  
18 I guess the ducks are more important than the people are down  
19 there. But, those projects of channelization that stop in  
20 that area are absolutely unworkable. Now, I believe I have  
21 to disagree with my friend, Ralph Baskett. Alternatives 5A  
22 and 5B in our instance would be far more suitable because it  
23 would control the input of water at the upper ends and give it  
24 a chance to percolate and protect us downstream.

25           Thank you very much.

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PRESIDING OFFICER: Thank you, Mr. Lakin.

Yes, sir.

MR. ART BODINE: Major, Ladies and Gentlemen, my name is Art Bodine. I farm north of Bell Road on 83rd Avenue and probably in one of the most flood-prone areas that there is. We are very much interested -- and I am speaking for probably, an amount of acreage we have around fifteen hundred (1,500) acres and we have other acreage that is around close to us, that is all in citrus, is probably in the neighborhood of another five thousand (5,000) acres.

It looks like to me, and I'm speaking for myself personally, and I think I can speak for quite a few of the other people that are in the citrus business, we have spent millions and millions of our dollars just the same as anyone else has improving their property and trying to keep from being flooded. We have spent thousands and thousands of dollars of channeling our river, as we own two (2) miles of it. And I think that we have done a pretty good job of channeling that river.

There has been some very good questions brought up here today -- or tonight -- but I think if we look at a proposition made -- that could be made between No. 2 and 5B, I think this could answer a lot of our questions. We are not going to be able to be channelized where we are because we're out of the channelization. But with a dam on New River and a

1 dam on Skunk Creek, is going to alleviate ninety (90%) per cent  
2 of our problems and get the water down under the ground where  
3 it's supposed to be and not just have flash flooding and run  
4 on down into -- down into the Gila and wash out those people  
5 down there.

6 I would like to see some interest shown, not bring  
7 in foreign water from the Cave Creek Dam, but to alleviate  
8 that part of channelization from Cave Creek over to Skunk Creek,  
9 and take from Skunk Creek on down through New River as far as  
10 they can, or to spend that money that they're going to bring  
11 foreign water from Cave Creek on over to where it would come  
12 into the Skunk Creek and give it to the benefit below the  
13 people, New River, and channelize a little bit further down  
14 in New River.

15 Oscar Recker, my neighbor, and I know that he has  
16 an awful terrific problem. I know all the money that I have  
17 spent on the southside of Bell Road, next to Sun City, we  
18 have tried in every way to keep from having the water break  
19 over and going into his property. I think with one major  
20 flood it is gone, but I do not think that we have done an  
21 awful lot of damage.

22 I think if we could get the gravel pits out of there  
23 and move the gravel pits out of there, that we are seeing now  
24 that is poisoning the City of Phoenix, and let them dig holes  
25 all over and maybe they're doing some good and maybe they

1 aren't -- but I think these three (3) dams are a must. For  
2 us people that is above Bell Road and between the Skunk Creek  
3 Dam and the New River there's a tremendous amount of valuable  
4 land in there that has got a -- millions of dollars invested  
5 in citrus. Our wells are going down, there's only one way  
6 to get the water back in and that is the best way that we  
7 know is to dam up the water and let it settle and let it  
8 percolate in back down in through the ground.

9           Whether you're going to go into wildlife and  
10 whether you're going to go into other trails and try to keep  
11 these dams full, by buying Colorado River water, if we ever get  
12 it in here and I've been one of the advocates of fighting to  
13 bring it in because we need to get some kind of water up there  
14 to keep our trees alive because our wells are going down. But  
15 I certainly would like to see, not foreign water from Cave  
16 Creek, but let it -- and I doubt very much whether there would  
17 ever be much discharge out of Cave Creek if there was an  
18 adequate dam built up there and if there's adequate space up  
19 there that could take care of that, without releasing it into  
20 a channel being -- crossing the channel over into Skunk Creek  
21 and bringing it down into with the New River, without the  
22 channelization of the New River down below. I can readily  
23 understand the people with -- for not wanting all of that  
24 water coming down to the -- below the Skunk Creek deal, of  
25 bringing all that water in there without some channelization.

1 I think that it is very, very imperative.

2 But I think that that area up in through there is  
3 getting to be very valuable to the -- in the Maricopa County.  
4 I think that you're going to see that it's one of the most  
5 productive areas that there is and we are needing productive  
6 areas to stay in for the -- the economy for the State of  
7 Arizona, for the economy of Maricopa County.

8 And, gentlemen, I would definitely would like to  
9 see some consideration given to that. But not to bring the  
10 Cave Creek water over and bring all of that down and bring  
11 foreign water. But I do think that with the dams up above  
12 there, this is the benefit that we are going to get out of it,  
13 north of Bell, and this would be the benefit for us in  
14 agriculture to help on our land. And I think that with the  
15 big floods that would come, if there would ever be some big  
16 floods, we've seen some big floods out there, but I don't  
17 think we have seen any floods that dams up there would not  
18 have taken care of and prevented the washing of all of the --  
19 of the way of the land that we have seen eroded away from  
20 the banks of the river.

21 Thank you very much.

22 PRESIDING OFFICER: Thank you, Mr. Bodine.

23 MR. BOB SCHULKE: Major, I made the same mistake.

24 PRESIDING OFFICER: Yes, sir. Please come forward.

25 MR. BOB SCHULKE: Gentlemen, my name is Bob Schulke

1 of West Side Farm and a long time flood control advocate.  
2 I think that Mr. Bodine had a good point there in the sand  
3 and gravel pits. If you would look from Van Buren all the  
4 way north on the project, the Agua Fria River is being  
5 hacked and mined and stripped of all vegetation by sand and  
6 gravel companies. And I would submit to you that if the  
7 reason for leaving the Agua Fria unchanneled for environmental  
8 purposes, there is no environment left on the Agua Fria now.

9 Also, I don't think you took in consideration the  
10 Lake Pleasant Dam. I've seen just in recent years water  
11 spill during a high intensity flood out of that dam. And  
12 also I would also submit that urbanization has come to the  
13 Agua Fria already. And if plan -- frankly I'm very surprised  
14 that you would support 5B because it endangers Sun City,  
15 Via De Paz, Avondale, Goodyear, Richfield Park, through the  
16 watershed off of the White Mountains -- I mean, White Tank  
17 Mountain. And the Agua Fria River is no longer natural habitat  
18 for wildlife and I do not think you should take this into  
19 consideration.

20 PRESIDING OFFICER: All right, sir. Thank you  
21 for your comments.

22 Others? Yes, sir.

23 MR. HOWARD LYDICK: I realize I made the same  
24 mistake. My name is Howard Lydick. I live at 14121 North  
25 83rd Avenue. I came to this country in 1918. We've lived on

1 the banks of the New River and Skunk Creek most of that time.  
2 And I still live there. I realize all together what floods  
3 what can do. I saw what this flood did in 1921. It came  
4 down the normal channel from Cave Creek, crossed the canal,  
5 came down through Phoenix, which wasn't too big at that time,  
6 we drove a horse and buggy down to see that, I remember that.  
7 But that was the normal channel. And now we're proposing to  
8 take that west, which we have to do because you can't run that  
9 down through all the people. Even I can realize that that's  
10 not feasible.

11 But we're on the west side, opposed to diverting  
12 this east side water to the west side if you don't provide  
13 some place for this water to go. And we have no place for it  
14 to go unless we have it channeled. We're real happy about  
15 these dams. I'm like Art Bodine, I think they're going to  
16 do us some good and they're going to do good for the people  
17 who like to boat and like recreation, and I'm for that. I  
18 used to go fishing before I got so busy and poor I couldn't.  
19 But we do feel that adequate channelization of New River is  
20 absolutely necessary and that's the only way to get that  
21 water out of there. As Ralph said in his earlier presentation,  
22 that he one time asked about this channelization, they told  
23 him that they knew exactly what they were doing and we hope  
24 that that's -- that they do know exactly what they're doing.  
25 That they will clean this river out and we think that the one

1 up there that would do us the most good is No. 2 and we think  
2 that 5B is definitely against anything that would help the  
3 west side. We think that is strictly an east side proposition.

4 Thank you.

5 PRESIDING OFFICER: Thank you, Mr. Lydick.

6 Others? Yes, sir.

7 MR. CARON BEARD: Major Worthington, Ladies and  
8 Gentlemen, my name is Caron Beard, Landscape Architect. I  
9 live in Phoenix at 5730 North 39th Avenue. I am speaking  
10 for myself tonight and later we will prepare a written  
11 statement from the American Society of Landscape Architects.

12 I appreciate the opportunity for the numerous  
13 times that I have been provided to review the various proposals  
14 being considered by the Corps of Engineers, and also I  
15 appreciate the consideration that has been given to some of  
16 my suggestions in the earlier reviews. One of them that is  
17 shown in the brochure on page 21 is a concrete wall with the  
18 grass slopes. Unfortunately, according to the data analysis,  
19 it appears to be the most expensive proposal of the ones  
20 considered. This is primarily due to the high cost of  
21 right-of-way.

22 I have made some preliminary cost analysis on a  
23 covered channel which does not appear in any of this data,  
24 with two (2') foot of earth over the top of the channel for  
25 landscaping. According to the structural engineers that I

1 consulted it would cost approximately twenty-six million  
2 dollars more to cover a sixty (60') foot channel with a  
3 single span from Dreamy Draw to 51st Avenue. This is about  
4 five hundred (\$500.00) dollars per running foot, or about  
5 eight (\$8.00) dollars per square foot, with the two (2') foot  
6 of soil for landscaping. Now, this cost could be reduced if  
7 a center support were used in the channel so that it didn't  
8 have to span the full sixty (60') foot. This sixty (60') foot  
9 is an average figure I used for the cost analysis.

10 If you would care to look at the table on page 20,  
11 the section from Dreamy Draw to 51st Avenue, the concrete  
12 rectangular structure as I interpret the figures here would  
13 cost thirty-three million Federal funds and twenty-five  
14 million for State funds. The earth-bottom trapazoidal with  
15 the reveta side slope is seventeen million Federal and  
16 sixty-six million six hundred for the non-Federal aid. With  
17 the covered structure, if my figures are correct, it would  
18 cost about fifty-nine million Federal money and twenty-five  
19 million non-Federal, which the non-Federal would be the same  
20 as the present proposal -- the trapazoidal or the rectangular  
21 concrete box, since no additional right-of-way would be  
22 required.

23 I'm not sure if additional Federal funds would be  
24 available, but at least this would be a consideration on the  
25 local level wouldn't cost any more.

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I believe that positive steps to protect the visual aspects of the land should be taken since this land is extremely valuable according to this data. One of the access roads could be eliminated with the covered channel since there would be no need to have access to both sides of the open channel. With a covered channel a beautifully -- a beautiful open space recreation area could be developed on top of the channel and an open channel, as proposed -- the open channel as proposed would be ugly and could be compared to the Black Canyon Freeway with vertical walls. The actual width of the channel at the lower end would be about the same as the Black Canyon Freeway. So that'll give you an idea of the size of the structure you're think -- you're looking at.

The nice meandering curvalinear alignment for a trail could be developed on the right-of-way if the channel were covered, rather than a straight gut-shot alignment along the open concrete sewer.

Park lands at Fort Berger Park should be covered in the environmental impact statement. I could only find one picture in this book that showed the Park, and according to the National Environmental Protection Act, Chapter 49, U.S. Code -- 1653(a)(1), F, it requires that special mitigation be given to park lands and they should be covered extensively in the environmental statement. This is also covered in

1 Title 23, U.S. Code, Section 138. I suggest that these  
2 requirements be complied with.

3 In summary, I would support Alternative 5B or 5A  
4 if the channels were covered to allow park development over  
5 the top, or if the concrete walls, grass slopes with trees  
6 were used, or a combination of both. A covered channel would  
7 have the least amount of maintenance. The concrete channel  
8 as proposed is visually unacceptable, especially when you're  
9 talking about going through properties like Biltmore. If  
10 land is available -- if land is as valuable as your cost data  
11 indicates then I feel the extra cost for covering the channel  
12 is justified to preserve the aesthetic values of the community.  
13 If an aesthetic treatment of a channel is not possible, then  
14 I support Alternative 3, Dams Only.

15 Thank you.

16 PRESIDING OFFICER: Thank you, Mr. Beard.

17 Others? Yes, sir.

18 MR. RUDOLPH JOHNSON: My name is Rudolph Johnson.  
19 I live on West Glendale Avenue. I've lived out in the area  
20 all my life. My father homesteaded on the New River between  
21 Olive Avenue and Glendale Avenue. I wish to really reaffirm  
22 some of the remarks that I've heard already, mainly that the  
23 most important thing in my mind is the channelization of  
24 New River and channelization of New River first before any  
25 additional new water is put into it. As I say, I live on the

1 river and it's only by virtue of my selling gravel out of the  
 2 river that I've maintained the river in the banks for, you  
 3 might say, ever since the flood of '43. I would like to say --  
 4 and try to impress upon you most firmly that the only thing  
 5 that you could possibly do to salvage the land or hold the  
 6 land together in that area is to channel the New River first.  
 7 And by the mere fact that the channel that you propose to  
 8 bring into New River, the size of them that I read in your  
 9 folder, from fifty-five (55') feet to up to a hundred and  
 10 thirty (130') feet, I could take you to Northern Avenue right  
 11 now and show you places where New River is not wider than  
 12 a hundred (100') feet. And how you could expect it to carry  
 13 any more water -- any new water -- is beyond any comprehension  
 14 of mine.

15 I thank you and I would like to send a written  
 16 statement to enlarge on some other ideas that I have.

17 Thank you.

18 PRESIDING OFFICER: Thank you, Mr. Johnson.

19 Other individuals?

20 (No response)

21 If not, there's a statement that I have to make  
 22 at this point. Time and again we have heard the comment  
 23 made that we're going to divert water from one waterhead into  
 24 another, and it's as though we're leaving those people at  
 25 the mercy of the Federal Government with absolutely no

1 compensation at all. And this is not the case. And I'd like  
2 to go up to this map here -- and point out that this is the  
3 diversion that we're talking about. (indicating) We're going  
4 to take water out of this Cave Creek, that nobody wants to go  
5 south into the river, and we're going to divert it, at this  
6 point, or at this point, in some of the other plans (indicating).  
7 In either case from Cave Creek over into Skunk Creek. Now,  
8 the point I tried to make earlier was that the sole justification  
9 for these two (2) dams is to compensate for this diversion.  
10 In other words, we don't feel it's right. We agree with you,  
11 it would not be right to take this water and put it on these  
12 people without some kind of compensation. The net effect of  
13 this diversion and these two (2) dams across the board, is  
14 about a fifteen (15%) per cent net reduction in the amount  
15 of water that these people are going to have. And we've got  
16 experts who have predicted this, have forecasted this, and  
17 this is why we say that if we're going to divert water, we  
18 must have those two (2) dams.

19           Furthermore, alternatives 5A and B show a pink  
20 section in there which we have called an "easement" section.  
21 Just to insure against the possibility that the storm would  
22 fall in this area and they would have water over there under  
23 circumstances that they would have no water without this  
24 diversion, we would propose to provide a flowage easement.  
25 This would be pre-compensation for this possibility, that they

1 could be flooded if the storm fell over here. (indicating)  
2 This, in spite of the fact that across the board, year in and  
3 year out, the net amount of water over there would be fifteen  
4 (15%) per cent less.

5 So, I just had to make that point.

6 Now, if there are no other individuals whose --  
7 yes, there is another. Please come forward.

8 MR. WAYNE SUNDSTROM: My name is Wayne Sundstrom  
9 and I think that the thing that's been overlooked in this is --  
10 I was born and raised in Peoria. We were flooded out many  
11 times there. And I moved to Scottsdale, we've been flooded  
12 out many times there. So I got involved in the project in  
13 Montana and they built a dam up there that was set on a  
14 hundred year plan. We had a flood in 1966 and it killed a  
15 hundred people because the water wasn't diverted properly.  
16 And their answer to that was that it was -- it was just --  
17 that only happens once in two thousand years. We got hit in  
18 1966. And that's the same thing that could happen here.  
19 Who knows where it's going to rain. When they start diverting  
20 water from the east side to the west side, they're calculation  
21 might say fifteen (15%) per cent less, but that there is -- if  
22 it happens to hit the way they plan the rains to hit, but they  
23 don't hit that way.

24 So, I just wanted to put that comment in there.

25 PRESIDING OFFICER: Thank you, sir. Are there

1 other individuals?

2 (No response)

3 MR. GARTH FUQUAY: Well, in partial reply, at  
4 least an initial reply to this last comment, I just want to  
5 reiterate that the dams are designed on the basis of the  
6 standard project flood and the channels are a hundred year.  
7 Meaning that if the rainfall occurs upstream of the dams, why  
8 we have greater protection than in the channel area. So, to  
9 that extent, I have to reply to the comment.

10 PRESIDING OFFICER: O.K., sir. Mr. Jim Carter?

11 VOICE FROM AUDIENCE: He had to leave.

12 PRESIDING OFFICER: O.K. Mr. Tom Stigsell?

13 MR. TOM STIGSELL: My name is Tom Stigsell. I am  
14 President of the Secluded Acres, Secluded Estates Homeowners  
15 Association. We live out at 75th Avenue, just north of Bell  
16 Road. We lie within the area between Skunk Creek and the New  
17 River. We represent a hundred and seventy-eight (178) homes  
18 that are built out there. These houses range in price from  
19 forty-five (\$45,000.00) to eighty-five (\$85,000.00) thousand  
20 dollars.

21 We feel that Plan 2 would be the best thing for us.  
22 We don't quite understand as to why the water has to be  
23 diverted or channeled from the Cave Buttes Dam over to the  
24 Skunk Creek area. Plan 2 and Plan 5B are basically the same,  
25 with the exception of that channel, as well as the channel

1 that goes and continues on south down through Avondale. We  
2 feel that by leaving out this piece of channel between Cave  
3 Buttes and Skunk Creek, but still putting in the channel that  
4 runs from Skunk Creek down to Avondale would be beneficial to  
5 us and everybody else concerned.

6 Thank you.

7 PRESIDING OFFICER: Thank you, Mr. Stigsell.

8 Mr. Robert Norton?

9 MR. ROBERT NORTON: My name is Robert Norton and I  
10 represent the Maricopa Audubon Society. I have a short  
11 statement to read that was drawn up by our President, Dr.  
12 Weitzman and myself. I'm the Vice President. Our Board of  
13 Directors has discussed this at some length and we have passed  
14 a resolution favoring 5B. Of course, we are viewing this from  
15 the standpoint of the wildlife.

16 We wish to thank the Army Corps of Engineers for  
17 soliciting our views on the proposed project and for keeping  
18 us informed as the project has been developed. Flood control  
19 dams -- we feel that the three (3) proposed dams will provide  
20 effective flood control with minimal unfavorable impact upon  
21 wildlife.

22 Recreational lakes in conjunction with the dams --  
23 these would have a favorable effect, as far as wildlife is  
24 concerned, if they are stocked with fish, power boats are not  
25 allowed, and maybe vegetation is encouraged within the flood

1 basins. Arizona Canal Diversion Channel -- we see no alternative  
 2 to this ugly and expensive ditch. Mr. Beard's alternative  
 3 sounds good. We didn't have that imagination. Also,  
 4 expensive. We would hope that the existing trail right-of-way  
 5 will be maintained and some mitigating landscaping can be done.

6 Channelization of Skunk Creek, New River and the  
 7 Agua Fria River -- we strongly oppose channelization of these  
 8 stream beds, feeling that this would have a very adverse effect  
 9 on wildlife. The alternative of using flood plain zoning to-  
 10 gether with flood easements for compensation for diverted  
 11 Cave Creek waters is strongly supported for the following  
 12 reasons:

- 13 1. Channelization would destroy all existing  
 14 natural vegetation along these channels, which is so attractive  
 15 to wildlife. And I might say here that although the gravel  
 16 pits along the Agua Fria are certainly not beneficial to  
 17 wildlife and they are certainly not beautiful, there still is  
 18 a great deal of vegetation along there and especially as far  
 19 as birds, which is my particular interest, we have a tremendous  
 20 variety of birds along in that area which is part of the Christmas  
 21 Count Census which we maintain each year in a fifteen (15)  
 22 mile circle. And there are over a thousand of these circles.  
 23 Phoenix happens to have the largest number of species of birds  
 24 of any inland area in the United States away from salt water.  
 25 And a large part of it is because of the vegetation along

1 those particular streams.

2 Flood plain zoning would provide attractive open  
3 space through the metropolitan area which is rapidly developing  
4 out there. And we feel that purchase of flood easements should  
5 be far less expensive than channelization.

6 Thank you.

7 PRESIDING OFFICER: Thank you, Mr. Norton.

8 We've been in session here this time well over an  
9 hour and I would suggest at this point another ten minute  
10 break and we'll start again at twenty minutes 'til ten.

11 (Ten minute recess)

12 PRESIDING OFFICER: The meeting will come to order.

13 The next statement -- the next presentation will  
14 be by Mr. J. Peattie from the County Manager's Office.

15 MR. J. J. PEATTIE: Ladies and Gentlemen, many  
16 people here are justly concerned with these alternatives that  
17 are being outlined very briefly to you by the Corps of  
18 Engineers representatives. I'm addressing my remarks to those  
19 of you amongst us, like myself, are not engineers but are  
20 taxpayers and may not have expertise in hydrology but are,  
21 of course, concerned about their family, their homes, their  
22 farms, ranches and other improvements on lands that we're  
23 discussing.

24 Let me get down to some very raw basics so perhaps  
25 you can better achieve what questions we're attempting to

1 answer, what response the Corps would like to have from the  
2 public, before they decide which alternative to recommend  
3 based upon your responses.

4           Basically, let me point out, there are four  
5 thousand (4,000) counties in the United States and every  
6 homeowner in all of those counties would like to know that  
7 his home or his farmlands or his business is better protected  
8 by some flood control or flood protective device. That's human  
9 psychology. But because we are all Federal, State and County  
10 taxpayers across this land, the Corps of Engineers has  
11 undertaken for many years studying this area in particular  
12 because of the peculiar traits of runoff to desert topography  
13 and to the fact -- and I think this is what is most overlooked --  
14 is the rapid growth of the City of Phoenix creates more volume  
15 of runoff than has been experienced in past storms because when  
16 you build a facility such as the forty (40) acre parking lot  
17 for the Metro Center and have roofed buildings many acres in  
18 size, where before they were desert or farmlands, when the  
19 rains fall there's no saturation or absorption of the rain.

20           Now, when it rains upon the hard pans, the roofs,  
21 the parking areas, the runoff is accelerated. True, in the  
22 drainage systems, but nevertheless they have to recede ultimately  
23 down and go or be diverted into natural water courses. What  
24 we're saying is that with greater density in urbanization we  
25 are creating more volume of water which ultimately must be

1 fed down southwesterly down the Salt and the Gila River.

2 I would also like to point out that as County  
3 taxpayers and as Federal taxpayers we have a flood control  
4 levy in existence in this County. Our State Legislature last  
5 year and again this year is appropriating more money to assist  
6 this County in participating in flood control projects. What  
7 do you and I pay as County and State taxpayers toward this  
8 plan? We pay our levy. Now, the Corps is asking us just how  
9 far do you want us to go to provide flood protection for the  
10 Central Maricopa County area. Your booklet indicates that  
11 the Valley Of The Sun area can be protected under one of six  
12 alternate plans. These have been covered, of course, very well  
13 by the representatives. Some of you would probably be best  
14 served after hearing this presentation, return to your homes  
15 or businesses, rereview this booklet and then, of course,  
16 with the address which is on the front page and also reverse  
17 side of this pamphlet, address your remarks to the Corps. The  
18 Corps is very anxious to hear your comments.

19 I would like to propose though that if as taxpayers  
20 Federal, State and County, you, for whatever reasons, do not  
21 want a certain degree of flood protection or Federal expenditures  
22 in this area, be mindful that other counties which are  
23 similarly flood-prone will gladly take the Valley Of The Sun's  
24 priority - take our place. Let's consider what as County  
25 taxpayers we pay for flood control protection. Through the

1 flood control Director and his advisory board, we pay for the  
2 partial planning of certain flood projects -- flood control  
3 projects -- we pay for the land acquisition of those projects  
4 which you and the Corps recommend for approval. Now the Corps --  
5 the Corps of Engineers -- provides, in our annual Federal  
6 budget, the construction funds. They pay through our Federal  
7 income taxes and other Federal taxes, the costs of the  
8 construction of these dams, dikes and channels to protect our  
9 lands.

10           Now, if we do not want that protection in Maricopa  
11 County, other Corps and districts around the country, which  
12 next come in the line of priority may have a more forthright  
13 showing or positive showing that they do want flood control  
14 protection in their area. So I think what we must consider  
15 here is, which of the six (6) alternatives -- and basically  
16 that's what this exercise is -- Major Worthington and the  
17 District Staff are asking, to what degree do you want to be  
18 expendable, as Mr. Lincoln, I believe, just pointed out. Just  
19 how expendable are we, your business, your home, your farm  
20 or ranchlands? So, the County will buy the lands for these  
21 flood control sites. Our income -- Federal income tax and our  
22 other Federal and State taxes -- will basically pay for the  
23 construction of the facilities. After they were completed,  
24 as Dreamy Draw recently was, that completed facility will be  
25 turned over to your Flood Control District and they will

1 operate and maintain in good state of repair those dams,  
2 channels, dikes, whatever device we're talking of.

3 I hope my brief, few remarks here will bring to you  
4 the real point of this exercise, to what degree are we  
5 expendable, to what degree we want flood protection in our  
6 valley.

7 Thank you.

8 PRESIDING OFFICER: Thank you, Mr. Peattie.

9 Mr. Wilmer Schuh?

10 MR. WILMER SCHUH: My name is Wilmer Schuh. I'm  
11 F r West Regional Director of National Campers and Hikers  
12 Association. A little family camping organization -- seventy  
13 thousand (70,000) families from coast to coast and Canada.

14 Our primary interest in this project is the  
15 recreation offered. We're very, very much interested in  
16 having recreation facilities at all of these dam sites where  
17 they had lakes, and the provision should be made that some  
18 of this land that's available out there be made available to  
19 non-profit organizations such as ours, and there are others  
20 in the valley, so that they can lease ten (10), fifteen (15)  
21 or twenty (20) acres along the sites for a ten (10) year  
22 period with the option for renewal if the Government wants to  
23 renew it and if we want to renew it. And that we would  
24 develop these sites to take the load off of the taxpayer  
25 because there is not enough money available to develop the

1 site necessary for the number of campers. We don't push  
 2 camping any more. It's growing so fast that you don't have  
 3 to push it. And there are probably fifteen (15,000) to  
 4 twenty thousand (20,000) citizens -- senior citizens who are  
 5 looking for places that they can go where they don't have to  
 6 drive a hundred (100) or a hundred and fifty (150) miles,  
 7 especially during the winter time, that they could get in  
 8 close.

9           So on behalf of our organization we'd like the  
 10 Corps to take this into consideration in all projects in the  
 11 Far West. And I'd like to make a few remarks about the  
 12 attitude of some people, and there are some of you not going  
 13 to like me for this, but if there's one thing I am it's honest  
 14 in this respect that I say what I think and I mean what I say.  
 15 And if I were to build a forty (\$40,000.00) to eighty thousand  
 16 (\$80,000.00) dollar home in the flood plain I don't deserve  
 17 any consideration or any sympathy. Now we went through that  
 18 in the Middle West. I've been out here fifteen (15) years,  
 19 but we went through that. Where the people wouldn't listen  
 20 and they built in the flood plains and they were flooded every  
 21 damn year or every two years. Now, let's build this and build  
 22 that and do that, but don't send anyone in my way. I don't  
 23 know what the hell they want people to do it, put it in wash  
 24 buckets and carry it over there. I just hope the Corps uses  
 25 common sense and remembers that although it is human nature

1 to look at a thing only the way it affects me, I think somebody  
2 along the line ought to be big enough to look at the general  
3 picture. And if they build all three (3) dams, that means  
4 we got to take something in return. Now if I had an orchard  
5 I wouldn't want it flooded, but who can control a rainstorm  
6 like we had a couple of years ago? Nobody. As far as building  
7 the channels along the Freeway, God, the money that would cost --  
8 two hundred million dollars just to buy that property. It's  
9 not feasible. You got to be practical about this. You got  
10 to do it the best way you can with harming the fewest number  
11 of people and what will benefit the most number of people.  
12 And I -- in my work, I used to find fault with engineers until  
13 I asked them why they did something, and they had an answer  
14 that surprised me and I shut up, I didn't find fault with them  
15 any more. And I've got a great deal of confidence in the Major --  
16 I almost promoted him to Colonel -- in the Major and the people  
17 that are working on this, and I know that they're not going to  
18 channel the river that will destroy all of the wildlife and I  
19 know they're not going to hurt anybody that they possible can  
20 avoid it. And I'll lay my feeling, and I live in the flood  
21 plain, the Cave Creek flood plain, I'll lay my future, what  
22 short time it is, with them.

23 Thank you.

24 (Applause)

25 PRESIDING OFFICER: Thank you, Mr. Schuh. I

1 appreciate the promotion too. I'd like you to talk to my  
2 boss.

3 (Laughter)

4 Mr. Lyndon Keefer.

5 MR. LYNDON KEEFER: Major Worthington, Mr. Corbin,  
6 Ladies and Gentlemen, I would like to again express my  
7 appreciation. My name is Lyndon Keefer and I'm here tonight  
8 representing the Arizona Conservation Council. I'd like to  
9 again express my appreciation to the Army Corps of Engineers  
10 and to the Board -- to the County Board of Supervisors for  
11 the tremendous assistance that they've lent the Conservation  
12 Council in the last several years in making a study of the flood  
13 control plan in the Phoenix area.

14 And I would also like to present as a matter of  
15 record -- the record -- a letter of February 9th, 1974 that I  
16 wrote to Major Worthington in response to some of the studies  
17 that we have done on the flood control in the Phoenix area  
18 and enlarge upon that slightly in my remarks tonight, if I may.

19 The Arizona Conservation Council is an organization  
20 that's made up of organizations, such as the Arizona  
21 Education Association, the Sierra Club, and others. Eighteen  
22 (18) organizations representing roughly forty thousand (40,000)  
23 people. By and large most of the people in the Arizona  
24 Conservation Council do not live in the flood plain of a  
25 river, and probably by and large most of them are not affected

1 by the flood spillovers that would be caused with or without  
 2 the flood control. The one thing that is common to all the  
 3 people that belong to my organization and all the people here  
 4 tonight is that we get to pay the bill. And as such, being  
 5 in that position, we were very strongly in favor of the  
 6 proposal No. 5B as being that proposal which most favorably  
 7 speaks to the interests and the positions of everybody in the  
 8 preemptive dilemma that we find ourselves in with flood  
 9 problems in Phoenix, with development that seems to have  
 10 pretty well ignored the possibility that there could be floods  
 11 and now we somehow have to work this problem out.

12           The points that I would like to specifically make  
 13 with regard to the proposal 5B are the following, and in --  
 14 speaking further to the letter.

15           One, is that we would seek insurances that any  
 16 bikeways or any trails in existence which are destroyed in  
 17 the construction of project facilities, will be replaced with  
 18 aesthetically and functionally equivalent trails. And also  
 19 that trails that we would -- also with regard to trails, we  
 20 would request that wherever participating monies are available  
 21 that underpasses for such trails be provided, utilizing the  
 22 channel bottom. Access to the rectangular channel would aid  
 23 rescue effects that are undoubtedly needed on occasions when  
 24 errant drivers find themselves in the bottom of the ditch and  
 25 perhaps in any recreation activities that can be eventually

1 conceived of for such a structure.

2           Three, we'd like to re-emphasize our hopes that  
3 landscaping will be utilized to a great extent to assist in  
4 making the structures -- the dam structures more compatible  
5 with the Sonoran desert that they surround. In the letter we  
6 suggest things as sculpturing of the land and vegetating the  
7 sides of the embankments with native vegetation as much as  
8 possible in keeping the slopes compatible with such vegetation  
9 as much as reasonable.

10           I would also like to make some brief comment on  
11 the logic with which we support the flood plain easements in  
12 the rivers where easements are proposed.

13           One, the major argument we would propose is that  
14 the public should not have to pay extravagant sums for what  
15 would essentially be unwise use of land. The flood plain  
16 easement appears to justly compensate any hardship that falls  
17 within the plain and the difference in price between flood  
18 plain easements and channelization is considerable.

19           And the second point in regard to flood plain  
20 easement is that the river bottom can provide much needed  
21 recreation and habitat without preemption of land which is  
22 better suited for other uses. In other words, that the public  
23 very much desires recreation and without the river bottom  
24 they're going to buy some other land. It is our presumption  
25 that the other land that's available in this valley is -- has

1 much more viable use than the river bottom land which would  
2 become available to a flood plain easement.

3 I thank you gentlemen.

4 PRESIDING OFFICER: Thank you, Mr. Keefer.

5 Mr. Philip Thatch?

6 MR. PHILIP THATCH: I have no statement.

7 PRESIDING OFFICER: Mr. Henry Senseman?

8 MR. HENRY SENSEMAN: I think there's been enough  
9 Sensemans speaking tonight, but -- I'm representing S. C.  
10 Development Company and my name is Henry Senseman. And we  
11 have a mobile home park that is adjacent to New River on the  
12 lower end and we're concerned about that. We're also concerned  
13 about the commercial property we have.

14 We're adjacent across the street from Sun City and  
15 we feel very strongly that channelization should come down  
16 through the New River area. Because it does have the potential  
17 of hitting a lot of property, including Sun City, and we think  
18 that this should be done. We do oppose the changing of water  
19 from Cave Creek from its natural stream to our side of the  
20 valley. I'm sure Phoenix is happy to get rid of it but we're  
21 not quite as happy to accept it. And we've seen in the past --  
22 I know when I was about five (5) years old we waded from our  
23 house, which was a quarter a mile away from Skunk Creek in  
24 floodwater, so it's something that you remember from all the  
25 way back. And to some of the new people in this area they

1 probably wouldn't understand that. But we know that there's  
 2 problems. There's water above that has to be released and  
 3 we are concerned with how the channelization is taking place  
 4 so that it will handle this water. We do want to know that  
 5 the fifteen (15%) per cent that's being transferred over to  
 6 us, that we do have the capacity to carry it. And I know  
 7 that plan B -- 5B, does not show channelization of New River  
 8 on down. And I think that this is really important.

9           And, the other question I've heard come up tonight  
 10 is, who assumes the liability in the event that these mobile  
 11 homes we have in our park float down the river? Will the U.S.  
 12 Government, State of Arizona, Maricopa County, or who's going  
 13 to assume the liability for this in the event that this should  
 14 happen? And I think this is something that should be taken  
 15 into consideration at this time before this plan is enacted  
 16 and I would certainly appreciate that everything would be  
 17 taken -- every step and everything possible to avoid something  
 18 like this happening.

19           Thank you.

20           PRESIDING OFFICER: Thank you, Mr. Senseman.

21           Mr. Edward Martori?

22           Mr. Martori has evidently left this evening. His  
 23 remark is that he supports Plan 2.

24           Mr. Art Burroughs?

25           MR. ART BURROUGHS: I've already spoken.

1 PRESIDING OFFICER: Oh, yes. I'm sorry.

2 Mr. Medigovich? We discussed this at the break.

3 Is he still here?

4 (No response)

5 Mr. Burke Wyatt put a question mark as to whether  
6 or not he wants to make a presentation.

7 (No response)

8 Mr. H. L. Anderson?

9 MR. H. L. ANDERSON: Major Worthington, Ladies and  
10 Gentlemen, I'm Lynn Anderson. I'm a farmer in western  
11 Maricopa County. I appear before you tonight representing the  
12 Agua Fria and New River natural resource conservation district.  
13 It's a district made up of landowners. It is a combination of  
14 two of the old soil conservation districts that have been  
15 operating in the area for, oh, some twenty (20) to twenty-five  
16 (25) years in natural resource conservation.

17 We would want to submit written testimony later,  
18 Major. I'll touch the highlights in summarization here on  
19 what our testimony will be.

20 We very strongly favor Alternative No. 2. We  
21 regard the dams as absolutely necessary. Similarly, we  
22 consider that channelization -- adequate channelization  
23 completely necessary for a number of reasons. Let me touch  
24 first on the matter of the loss of the tax base. Our County  
25 now, in accordance with the action of the Legislature of the

1 first session of the 31st Legislature in mandating flood plain  
2 regulation are in the process of establishing the 100 year  
3 flood plan designation. And these areas will cover much land.  
4 That is per ~~(thousand)~~ tax base to this County and to the  
5 what to be superseded be who felt he would pay the cost of the  
6 dams as a taxpayer, he would paying the cost of a dam in the  
7 lack of tax base.

8           As another need for the channelization is a need  
9 for the bridging of the Agua Fria River and even New River in  
10 certain reaches, which will in itself require channelization.  
11 You're all aware, I'm sure, of the need of channelization of  
12 the Salt River in order to construct the bridges for the  
13 penetration routes from South Phoenix into Metropolitan  
14 Phoenix. The same will be true as the west side of the valley  
15 develops. We'll need several more bridges, each of which  
16 demands some channelization. So in toto for communications  
17 and transportation alone, virtually all of the Agua Fria and  
18 New River must be channelized.

19           Already in conjunction with the proposed construction  
20 of Interstate 10 there is elaborate plan for channelization  
21 in conjunction with the work of the State Highway Department  
22 for the water that would arise north of Interstate 10 in the  
23 area of Maryvale and Fort West in the Agua Fria and then south  
24 into the Gila River. Should the Inter -- should Interstate 10  
25 fail to carry a sufficient quantity of the traffic that would

1 be generated in the valley in the next forty (40) years, there  
 2 would need to be ultimately additional traffic penetration  
 3 routes into Phoenix from the west side, each of which would  
 4 concentrate the flow from the north, carrying into the Agua  
 5 Fria and further demanding channelization.

6 And with respect to Mr. Lakin's feeling that sometimes  
 7 those people down there, the Gila River, consider themselves  
 8 expendable, we do not. We recognize, and I'm sure you do, that  
 9 there is a very grave need for a solution of the lack of  
 10 channel from 91st Avenue west to Gillespie Dam. And the  
 11 channelization of the New River and Agua Fria Rivers, of course,  
 12 would have to be predicated upon an adequate solution of that  
 13 problem.

14 I mentioned before that the taxpayer has to pay  
 15 this cost. Sometimes he doesn't recognize that he is doing  
 16 so. One of the great problems, the cross-town traffic in the  
 17 City of Phoenix, and the one that was proposed to be avoided  
 18 by the now defunct Interloop, and one of the reasons it was  
 19 proposed to be elevated was to avoid the necessity of handling  
 20 the water that flows north and south through Phoenix, not  
 21 only from the Cave Creek bridge, but through all of the breaks  
 22 along the Arizona Canal. And it runs into structures of  
 23 immense cost. And if you don't do this -- if it is not done,  
 24 then they have the problem -- there's pictures in your little  
 25 leaflets of stormfloods in the business areas and disruption

1 of traffic and the other utilities.

2 Surely, a comprehensive study of all of the  
3 factors involved cannot lead anyone to a conclusion other  
4 than that in western Maricopa County the comprehensive flood  
5 control plan will embrace a diversion to an extent of the  
6 waters of Cave Creek, the detention insofar as is practical  
7 in dams of all of the water upstream that can -- within reason  
8 and within prudence be detained and adequate channeling to  
9 accommodate those floods which cannot be detained.

10 I thank you very much. I stand aside for any  
11 questions.

12 PRESIDING OFFICER: There are none, and thank you,  
13 Mr. Anderson.

14 I'll proceed now to get into the representatives  
15 of the various City governments. I'd like to read a brief  
16 letter which I received today from the City of Glendale  
17 addressed to the Army Corps of Engineers District dated  
18 today and it reads as follows:

19 (Reading) "Gentlemen: At their regular  
20 meeting April 23, 1974, the City Council  
21 of the City of Glendale unanimously en-  
22 dored a modified Alternate "5B" plan.  
23 The Mayor and Council have asked that  
24 the following statement of modification  
25 be read into the record at the Flood

1 Control Hearing.

2 'That right-of-way of 600 feet be ob-  
3 tained for the diversion channel which  
4 would be sufficient for a modified  
5 trapezoidal earthen bottom channel  
6 which could be developed for park and  
7 recreational purposes and still allow  
8 for the free flow of flood waters. In  
9 return for this consideration by the  
10 Flood Control District, the City would  
11 be willing to maintain the green belt  
12 for recreational use.

13 The other modifications should include  
14 proper structures and channels to be included  
15 on Skunk Creek and New River to avoid  
16 damage to existing bridges and properties  
17 while still maintaining as much of the  
18 natural terrain and vegetation as possible.  
19 Further, construction scheduling should  
20 be such that the dams are constructed  
21 prior to the diversion channel along with  
22 the necessary refinements of channels and  
23 structures on Skunk Creek and New River.'  
24 Sincerely yours, S. F. Van de Putte, City  
25 Manager."

1 I'll now call on Mr. Mike McNulty, City of Peoria.

2 MR. MIKE McNULTY: My name is Mike McNulty. I'm  
3 City Manager of the City of Peoria and I am appearing here  
4 at the direction of the City Council. We had hoped to  
5 present a written statement tonight but due to the rather  
6 short time we've had to examine all of the alternatives, we  
7 will make a written statement at a later date.

8 However, for the record tonight we wish to state  
9 first of all, that the primary function of all of this is  
10 the protection of life and property. Therefore, any plan  
11 that envisions the diversion of water from one watershed to  
12 another that does not provide the same degree of protection  
13 to all of the lands and all of the lives, is totally  
14 unacceptable.

15 Thank you very much.

16 PRESIDING OFFICER: Thank you, Mr. McNulty.

17 Mr. Jim Attebery.

18 MR. JAMES ATTEBERY: Major Worthington, Ladies  
19 and Gentlemen, my name is Jim Attebery. I'm City Engineer  
20 for Phoenix and I appear here this evening in that capacity.

21 We appreciate the opportunity to be here this  
22 evening and express an interest in the phase B portion of  
23 the comprehensive flood control plan of Maricopa County. The  
24 concepts of phase B -- and by the way, that's the program  
25 we're looking at tonight -- offer substantial benefits to

1 large segments of Phoenix and to the areas to the west. As a  
2 consequence, we have, for a number of years, endorsed the  
3 phase B program that was contemplated in the 1964 interim  
4 report of flood control for Phoenix and vicinity. Through  
5 the joint efforts of past City Administrations, the Board of  
6 Supervisors of Maricopa County, and other interested agencies  
7 and individuals, it has been possible to adjust the tax levies  
8 for flood control to assure that the local share of funds  
9 would be made available to support the comprehensive program.  
10 With this funding assurance by the District, we have looked  
11 forward anxiously to the construction of Cave Buttes Dam as  
12 contemplated in the 1964 Study Report.

13           Because of new regulations and procedural require-  
14 ments, the contemplated Cave Buttes project has not come to  
15 fruition, but instead, it has been necessary to reevaluate  
16 the design concepts of phase B. We readily recognize that  
17 this is the sole purpose of the meeting here tonight. We  
18 have not had the time to carefully analyze the April 1974  
19 Report -- the one we have before us, the alternate plan for  
20 flood control and recreational development, New River and  
21 Phoenix City streams -- nor have we had the time to discuss  
22 it with our City Council. As a consequence, the City of  
23 Phoenix is not prepared to present detailed comments or full-  
24 scale endorsement of any of the alternatives that have been  
25 presented. We do, however, plan to do this and will file our

1 written remarks with the Corps of Engineers within the next  
2 two (2) weeks.

3 In our opinion control of Cave Creek is an absolute  
4 necessity if the western portion of our City is to be afforded  
5 a proper measure of protection from flooding. It appears to  
6 us that this protection can best be provided through the  
7 construction of a dam with the gated outlet, which will reduce  
8 floodflows in Cave Creek to a minimum.

9 The other element of positive importance to flood  
10 control for the City of Phoenix, is a channel along the north  
11 side of the Arizona Canal which will collect and dispose of  
12 floodwaters that originate north of the Arizona Canal.

13 With these two (2) basic concepts in mind it appears  
14 that our preliminary position would support an Alternate No. 5.  
15 Now, again, our Parks Director finds the recreational benefits  
16 of this alternative substantial. Please again, do recognize  
17 that we will look to our City Council for endorsement of one  
18 of the plans.

19 We note that number -- that the No. 5 Alternatives  
20 both offer excellent ratios of benefit to cost. While we  
21 regret that we are unable to present firmer recommendations  
22 regarding the alternative concepts, please be assured that we  
23 will file a report with you as soon as possible. We are  
24 extremely hopeful that a decision on a plan for flood control  
25 will -- that will protect western Phoenix and our neighbors,

1 will be made promptly so that construction can begin in the  
2 immediate future. We, of course, continue to remember that  
3 Cave Buttes Dam could be moving toward early construction  
4 even now had it not been caught up in a re-study as a part of  
5 a project formulation memorandum.

6 Major Worthington, we appreciate the opportunity  
7 afforded us to make these comments. Thank you.

8 PRESIDING OFFICER: Thank you, Mr. Attebery.

9 Mr. Larry Linser from the Arizona Water Commission.

10 MR. LAURENCE LINSER: Major Worthington, Ladies  
11 and Gentlemen. My name is Larry Linser, Chief of Flood  
12 Control Planning for the Arizona Water Commission. Les  
13 Steiner, our Executive Director, is in Washington, D.C.  
14 tonight and asked that I speak for the Water Commission.

15 First, I would like to compliment the Corps of  
16 Engineers on the considerable effort expended in developing  
17 a number of alternatives for a comprehensive flood control  
18 plan in the Phoenix area.

19 There should be little doubt in anyone's mind that  
20 flood control is needed in Phoenix. The devastating flood of  
21 June, 1972 was a vivid demonstration of the destruction that  
22 can be brought about by a flood in the metropolitan area.  
23 Now is the time for decisive and positive action in providing  
24 the highest feasible degree of flood protection.

25 For a project of this magnitude to become a reality,

1 there must be considerable local financial input. The State  
2 Legislature in 1973 passed Senate Bill 1104 which is designed  
3 to assist agencies like Maricopa County Flood Control District  
4 in meeting this financial obligation. This legislation  
5 provides that the State will, upon appropriation by the State  
6 Legislature, reimburse local agencies for up to one-half (1/2)  
7 of the non-Federal cost associated with the Flood Control  
8 Project. This is not an unlimited program, however, as it  
9 will terminate in fourteen (14) years. We should, therefore,  
10 proceed to select a project and proceed with its design  
11 and construction as rapidly as possible.

12           It's quite unfortunate that projects of the magnitude  
13 of those under consideration are necessary. Had there been  
14 adequate floodplain management practices in the past, a project  
15 costing in hundreds of millions of dollars as proposed tonight,  
16 would not be necessary today. You cannot undo the past and  
17 there can be no question that this project is necessary.  
18 Ongoing development of residential and commercial properties  
19 can do nothing but compound the problem in the future if the  
20 project is not implemented.

21           I will now address myself to the alternatives  
22 proposed. First, as I have previously stated, the flood  
23 control project is needed in Phoenix. Therefore, we oppose  
24 Alternative 1, which is to do nothing. From the economic data  
25 presented of benefits and costs, and especially the magnitude

1 of non-Federal costs shown behind us, it is quite conclusively  
 2 shown that Alternatives 2 and 4 would be the least desirable.  
 3 I do not believe, I cannot speak for them, but I do not believe  
 4 that the State Legislature would be receptive to appropriating  
 5 additional eighteen to thirty-four million dollars in support  
 6 of a project alternative which has no additional benefits and  
 7 may have significant adverse environmental impacts.

8           The eighteen to thirty-four million dollars cited  
 9 represents the estimated additional State share of costs  
 10 if Alternative 2 or 4 are selected over one of the Alternative  
 11 5's.

12           It is unfortunate that the costs shown here tonight  
 13 do not reflect the impact of the Water Resources Development  
 14 Act of 1974, which was signed by the President March 7th.  
 15 Under this law, it would seem that the purchase of eighty  
 16 (80%) per cent of the necessary easement under Alternative 5  
 17 would be a Federal responsibility. If this is the case, the  
 18 difference in local costs between Alternative 2 or 4 and  
 19 Alternative 5 would be even greater.

20           Looking strictly at the benefit-cost ratio and the  
 21 local costs involved, one would select Alternative 3, which  
 22 is to construct Cave Buttes Dam only. We must recognize,  
 23 however, that with this alternative there remains approximately  
 24 thirty-two million dollars of non-preventable annual damages.  
 25 We believe this is unacceptable. Of the alternatives presented,

1 the selection, therefore, boils down in our view to either  
2 Alternative 5A or 5B. The only difference between these two  
3 (2) being the inclusion of Cave Creek Diversion Channel in  
4 5A.

5 I will return to make some comments about this  
6 feature, but first I want to request your consideration of  
7 another variation of Alternative 5.

8 The Corps of Engineers has made an evaluation of  
9 what was referred to previously as Alternative 6. This  
10 alternative was suggested by the Arizona Water Commission and  
11 was a proposal to divert water from the proposed Cave Buttes  
12 Dam into the Central Arizona Project Aqueduct, thus eliminating  
13 the need for the Cave Creek Diversion. This alternative was  
14 rejected because releases from the reservoir would have to be  
15 pumped into the aqueduct. The Cave Buttes Dam is now proposed  
16 to be located upstream from the original site. This location  
17 will make it physically possible for delivery by gravity of  
18 releases from Cave Buttes Dam into the Paradise Valley  
19 Detention Dike which is proposed to be under construction in  
20 the very near future by the Bureau of Reclamation. I believe  
21 that such a diversion would be a feasible feature of the  
22 project and would have two (2) benefits. First, the Cave  
23 Creek Diversion proposed in Alternative 5A would not be re-  
24 quired and water would not be released down Cave Creek to  
25 possibly cause downstream damages.

1           Secondly, the water diverted into the Paradise  
2 Detention Basin would subsequently be released into the  
3 aqueduct and would have a conservation benefit. If water  
4 rights would allow, an exchange could possibly be arranged  
5 to provide necessary water for the recreation pool. We,  
6 therefore, urge consideration of this alternative.

7           If the Corps' evaluation determines that this  
8 proposed alternative is not feasible, we would recommend  
9 either Alternative 5A or 5B. From the standpoint of non-  
10 Federal costs, and from the benefit-cost ratio presented,  
11 Alternative 5B appears desirable. However, we believe that  
12 Alternative 5A should receive some further evaluation. Although  
13 not included in the benefit analysis, we believe that additional  
14 benefits would result from the construction of the Cave Creek  
15 Channel presented in Alternative 5A. I under -- someone  
16 answered my question on this tonight, as you said that there  
17 was additional benefits there.

18           In conclusion, I want to thank you for the  
19 opportunity to make this presentation tonight and urge your  
20 continued efforts towards construction of the proposed project  
21 as soon as possible. I would also like to mention again that  
22 the State will assist in the project by reimbursing the  
23 Maricopa County Flood Control District for up to one-half (1/2)  
24 of the non-Federal costs associated with the project. This  
25 reimbursement, of course, is contingent upon appropriations by

1 the State Legislature.

2 PRESIDING OFFICER: Thank you, Mr. Linser.

3 I believe that I have called on everyone who has  
4 indicated desire on their card to make a presentation tonight.  
5 Did I miss anyone? Is there anyone else who would like to  
6 speak?

7 PHIL ASHLEY: Major Worthington?

8 PRESIDING OFFICER: Yes?

9 PHIL ASHLEY: I have a question. I don't have to  
10 approach the podium, do I?

11 PRESIDING OFFICER: No.

12 PHIL ASHLEY: (inaudible)

13 (Mr. Ashley did not approach the podium and did  
14 not address the record, but from the audience phrased a  
15 question to the Panel which was concerned with loss of habitat  
16 and vegetation in an area where Skunk Creek passes under an  
17 Highway I-17 bridge, due to a diversion channel above  
18 Adobe Dam.)

19 CLIFFORD FORD: You're asking, I believe, about  
20 this channel right at this -- (indicating on map) -- position.

21 PHIL ASHLEY: Right.

22 CLIFFORD FORD: Skunk Creek, coming down, does  
23 cross under the Freeway at this point. The standard project  
24 flood that we're designing for could be in excess of what  
25 could get under here -- (indicating) -- so we have to put in a

1 dike and a channel to make sure that it goes under the bridge  
2 and then to behind the dam, rather than breaking out and  
3 running parallel to the Freeway. Does that answer your  
4 question?

5 PHIL ASHLEY: (inaudible)

6 CLIFFORD FORD: We have a dike there and the length  
7 of the existing bridge is not too long and it's not too easy  
8 to channelize, and to bring the type of flood that we're talking  
9 about across is going to take dikes as well as channelization.  
10 We'll see -- we'll try to keep as much of the growth in there  
11 as we can, see if we can come up with a little better plan.

12 PHIL ASHLEY: (inaudible)

13 CLIFFORD FORD: Well, the bridge would be enlarged  
14 as well.

15 MAJOR WORTHINGTON: Are there any other questions  
16 or comments?

17 (no response)

18 Ladies and Gentlemen, there seem to be no more  
19 questions or comments. Both for myself and on behalf of the  
20 Corps of Engineers, I want to tell you how much we appreciate  
21 your interest and your comments. They are very valuable to  
22 us. I want to thank the Maricopa County Flood Control District  
23 and particularly Mr. Herb Donald for arranging this meeting  
24 place this evening and for their assistance throughout the  
25 course of our studies. I particularly want to thank each of

1 you here for the interest you've shown by being with us this  
2 evening. Good night.

3 (WHEREUPON, the hearing in the  
4 above entitled matter was closed.)

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C E R T I F I C A T E

THIS IS TO CERTIFY that the attached proceedings,  
consisting of pages 1 through 108, inclusive, before the

UNITED STATES ARMY CORPS OF ENGINEERS  
were held as herein appears and that the foregoing is a  
true and correct transcript of my stenographic notes and  
electronic tape recordings.

In The Matter Of: Alternative Proposals for Flood Control  
and Associated Recreational Development  
in the Phoenix Metropolitan Area.

Place of Meeting: Phoenix, Arizona

Date of Meeting: Thursday, April 25, 1974



Charles L. Emmons, Field Reporter

For:  
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