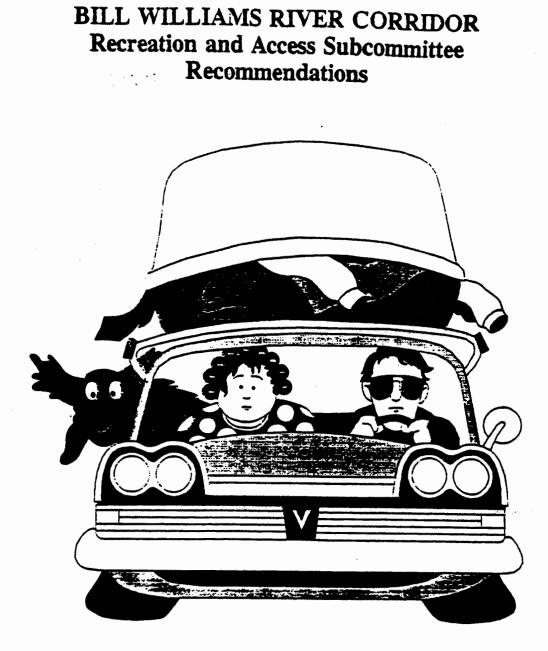
APPENDIX G.

RECREATION SUBCOMMITTEE REPORT



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Prepared by: Recreation and Access Subcommittee Chairman: William Ballinger

Revised: February 1, 1994

Acknowledgements

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I would like to thank the members of the Recreational Use and Access Subcommittee for their assistance in putting together the following subcommittee report. This effort involved working with very little advanced notice of meeting times and short turn around times due to the fast track the Bill Williams River Corridor Technical Committee had set. The individuals that were members of this subcommittee were Nancy Gilbertson, Bill Williams Wildlife Refuge of the U.S. Fish and Wildlife Service; Clif Bobinski, Havasu Resource Area of the Bureau of Land Management (BLM); Ron Morfin, Yuma District of BLM; Don Applegate, Yuma District of the BLM; Brad Jacobson, Yuma Regional Office of the Arizona Game and Fish Department (AGFD); Jim Glass, Phoenix Development Branch of the AGFD; and Ted Carr, Los Angeles District of the U.S. Army Corps of Engineer.

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Introduction:

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The Bill Williams River Corridor Recreation and Access Subcommittee was formed for the purpose of discussing the recreational needs and activities at Alamo Lake and in the Bill Williams Corridor and the necessity to place lake levels and river flows in perspective. Activities on Alamo Lake are quite different, both in scope and in kinds of activities, to those on the Bill Williams River Corridor so each will be discussed separately.

Alamo Lake:

In terms of user-days, the overwhelming bulk of recreational activity at Alamo Lake is fishing for largemouth bass. While some shore fishing occurs, the majority of this fishing activity is done from motor powered watercraft. Most of the other activities, i.e. camping, picnicking, etc. are done in conjunction with fishing (Figure 1). Consequently, recreation at Alamo Lake is highly dependent upon visitors being able to launch their watercraft in a safe and convenient manner. Recreation is also highly dependent upon the quality of the fishery. Lake levels need to be maintained in a manner to continue quality fishing, to allow for use of boat launching facilities, and below levels that would inundate the campground and infrastructure of Alamo Lake State Park.

Other recreational activities include hunting (deer, quail and waterfowl during open seasons), hiking, horseback riding, photography, bird watching, and nature study. Some water skiing and personal watercraft activity also occurs, but on a very minimal scope.

The future recreational activity pattern is not likely to change drastically. Fishing will continue to be the primary activity. However, as the population continues to increase, the number of people seeking outdoor recreation will result in increased visitation to the area, and the "secondary" recreational activities listed above will increase in scope.

Bill Williams River:

Below the dam, there is light but steady recreational activity that is presently limited due to access problems. The wide range of recreational activities

range from visitors looking for a wilderness experience and a sense of solitude while hiking, backpacking, or floating through the two wilderness areas, to hiking, fishing, quail and waterfowl hunting, off-highway vehicle use. Most of this use occurs during the more moderate climate periods. Stream floating by cance, kayak, or rubber boat is almost non-existent due to difficulty in getting the watercraft to the stream and undependable stream flows. J

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As more private land is acquired by public agencies, recreational use of the Bill Williams corridor will steadily increase. In comparison to the scope of use at Alamo Lake, it is doubtful that this recreational use will ever be considered as "heavy".

Present access problems below the dam, due to current dam operations, continue to inhibit recreational activities, even during moderate climate periods and times of optimum stream flows. Public access is also limited throughout the remainder of the river corridor because existing access routes go across private lands. However, current Federal acquisition efforts should improve opportunities for legal public access to the Bill Williams River corridor in the future.

With this background information in mind, the recreation and access subcommittee present the following goals, objectives and recommendations for Alamo Lake and the Bill Williams River Corridor below Alamo Dam.

I. Goal and Objectives:

A. Goal:

Recommend dam operation prescriptions, under various weather patterns, to maximize recreational opportunities along the Bill Williams River Corridor, including Alamo Lake.

B. **Objectives**:

- 1. Maximize fishing, boating, and camping opportunities at Alamo Lake under various water conditions.
- 2. Maximize recreational opportunity along the riparian corridor below Alamo Dam by establishing water release patterns which mimic a more "natural" stream system.

- II. Assumptions made, and limitations considered, in developing recommendations:
 - A. The following assumptions and limitations concerning dam operations were considered:
 - 1. The lake elevation will be lowered to the 1,100' msl on the average of once every 5 years in order to inspect the dam.
 - 2. The dam operation will go into flood control operation prescriptions if the lake elevation exceeds 1,171' msl.
 - 3. Releases from the dam are not possible between 25 cfs and 147 cfs or above 7,000 cfs. The maximum authorized flood control release from Alamo Dam is 7000 cfs, and is unlikely to be exceeded.
 - 4. It is possible for the dam to be operated at the lake elevations listed in the various recommendations below.
 - B. The following assumptions and limitations concerning recreation at Alamo Lake were considered:
 - 1. Recreation activities, particularly fishing, boating, and camping at the State Park, decrease as the lake surface and fishable shoreline decreases.
 - 2. Recreation use of the lake increases as the quality of the fishing experience increases.
 - 3. Historical recreation use patterns will remain the same. Most use will occur during the Spring and Fall (Figure 2), on week-ends, and most State Park visitors camp at least one night.
 - 4. Higher lake elevations than listed in the body of this report could possibly provide more recreational opportunity if the existing facilities on the Lake were modified. Therefore, the existing facilities could be a limiting factor.
 - C. The following assumptions and limitations concerning recreation opportunities along the Bill Williams River were considered:

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- 1. In general, recreation opportunities along the Bill Williams River Corridor can and will vary with the flow regime.
- 2. The two wilderness areas below the dam will continue to be managed to provide for preservation of the areas wilderness character and opportunities for solitude, and primitive and unconfined types of recreation. Motor vehicles, motorized equipment, bicycles, and hanggliders are not permitted.
- 3. Presuming the Federal acquisition or exchange of State and private land in the river corridor, will occur. The recreation opportunities in the area will change. Legal public access to the river and potential development of recreation facilities will promote an increase in the variety of opportunities and the amount of recreation use in the river corridor.

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- 4. Recreation opportunities in the Wildlife Refuge are subject to Refuge mandates and regulations. However, wildlife viewing, hunting, sightseeing, and other recreation opportunities in the Refuge are expected to increase with the improvement of riparian/wildlife habitat.
- 5. Scenic float trips are possible with flows of 300-7000 cfs and likely to increase as legal public access is available.
- 6. Water releases for the Bill Williams River Corridor, under various weather condition, will result from the product produced by the other subcommittee reports. Primarily from the fisheries and riparian reports.

III. Water operation recommendations that optimize recreational opportunities on Alamo Lake and along the Bill Williams River Corridor:

A. Purpose:

Identify desired recreation needs and access for Alamo Lake and the Bill Williams River Corridor and determine water-related (lake level, stream flow) constraints and opportunities.

B. Recommendations:

All recommendations in this report will be based on maximizing recreational opportunity and access availability under the existing locations of the facilities. Recommendation # 1 will refer to optimal operations, recommendation # 2 will refer to acceptable operations, and recommendation # 3 will refer to what would be considered adverse operations.

1. Recommendation Number 1:

Prescription for operating Alamo Dam that would maximize recreational opportunity on the lake and in the Bill Williams River Corridor (Optimal Scenario).

- a. Operate Alamo Lake in such a way that both existing boat ramps are within the optimal operating range. Operation would be between 1,115' and 1,125' msl. This elevation not only maximizes the functionality of both boat ramps it also maximizes access and opportunity at other locations around the lake.
- b. Following seasonal inflow, if lake elevations reach the 1,144' msl to 1,154' msl releases should be made as fast as possible until the lake elevation is below 1,144'msl. At these elevations the grade on all of the roads and surrounding terrain are too flat for launching boats. Resulting in NO BOAT LAUNCHING ACCESS.

c. If releases are schedule in excess of 300 cfs recreational opportunity for river floating below the dam would be maximized if the releases incorporate a week-end.

Resource Outcome for Recommendation #1

Maximization of the recreational opportunity at Alamo Lake and along the Bill Williams River Corridor below Alamo Dam would result from operating Alamo Dam under this recommendation.

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Benefits Resulting from Recommendation # 1

Alamo Lake and River Corridor Below Alamo Dam:

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- 1. This operational pattern would provide the stability in the system that would allow for long term planning of park facilities.
- 2. This operational pattern would provide the stability in the system that would allow for the development of facilities and access in areas off of the park.
- 3. In maximizing the recreational opportunity and access there would be an increase in the economy for the area.
- 4. The public would be assured of being able to launch their boats all year round.
- 5. This operational pattern would provide an additional form of recreation that has not been utilized to any great extent at the present time (floating /rafting).
- 6. In promoting an additional recreational opportunity there would be an increase in the economy for the area.

Impacts Resulting from Recommendation # 1

Alamo Lake and River Corridor Below Alamo Dam:

- 1. There may be a potential for an increase in human impacts to the different areas.
- 2. The increase in recreation may cause problems for the park until budget, staff, and facilities are improved to handle the increase in recreation.

- 3. Increased recreation may also cause an increased impact on the fisheries and riparian resources which will cause a change in the current regulations for the area.
- 2. **Recommendation Number 2:**

Prescription for operating Alamo Dam that would be acceptable for providing recreational opportunity on the lake and on the Bill Williams River Corridor.

a. Operate Alamo Lake in such a manner that boat launching is possible. There are three operational elevation windows outside of the optimum range which will provide boat launching capabilities. Two are above the optimum and one is below the optimum. If at all possible operations at the higher elevations is better.

- 1) Elevations 1,154' msl to 1,178' msl will provide boat launching from a dirt ramp facility that is located below the main campground.
- 2) Elevations 1,125' msl to 1,144' msl will provide boat launching from the main boat ramp and the Cholla ramp when between 1,125' msl and 1,130' msl.
- 3) Elevations 1,094' msl to 1,115' msl will provide boat launching from the Cholla boat ramp and the main boat ramp when between 1,108' msl and 1,115' msl.
- b. Following seasonal inflow, if lake elevations reach the 1,144' msl to 1,154' msl releases should be made as fast as possible until the lake elevation is below 1,144' msl. At these elevations the grade on all of the roads and surrounding terrain are too flat for launching boats. Resulting in NO BOAT LAUNCHING ACCESS.
- c. If releases are schedule in excess of 300 cfs recreational opportunity for river floating below the dam would be maximized if the releases incorporate a week-end.

Resource Outcome for Recommendation # 2

Recreational opportunity would remain at the current levels for Alamo Lake and the Bill Williams River Corridor below Alamo Dam.

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Benefits Resulting from Recommendation # 2

Alamo Lake and River Corridor Below Alamo Dam:

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- 1. This operational pattern would provide the stability in the system that would allow for long term planning of park facilities.
- 2. This operational pattern would provide the stability in the system that would allow for the development of facilities and access in areas off of the park.
- 3. Recreational opportunity and access there would remain the same as it is at the present time which would stabilize the economy for the area at the present level.
- 4. The public would be assured of being able to launch their boats all year round.
- 5. This operational pattern would provide an additional form of recreation that has not been utilized to any great extent at the present time (floating /rafting).
- 6. In promoting an additional recreational opportunity there would be an increase in the economy for the area.

Impacts Resulting from Recommendation # 2

Alamo Lake and River Corridor Below Alamo Dam:

- 1. There may be a potential for an increase in human impacts to the different areas.
- 2. The increase in recreation may cause problems for the park until budget, staff, and facilities are improved to handle the increase in recreation.

3. Recommendation Number 3:

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Prescription for operating Alamo Dam that would be used only during adverse conditions for providing recreational opportunity on the lake and on the Bill Williams River Corridor during dry years.

a. If possible, operate Alamo Lake in such a manner that one ramp is functional during the two high use periods of the year. Spring = March, April, May

Fall = September, October, November The elevation for the months involved with the high use periods would be any elevation > 1,094' msl. If it isn't at least at that elevation none of the presently existing ramps are functional.

- b. If releases are schedule in excess of 300 cfs recreational opportunity for river floating below the dam would be maximized if the releases incorporate a week-end.
- c. If the lake elevations reaches 1,100' msl or less only legally mandated releases will be made.

Resource Outcome for Recommendation # 3

Recreational opportunity would decrease below the current levels for Alamo Lake and the Bill Williams River Corridor below Alamo Dam.

Benefits Resulting from Recommendation # 3

Alamo Lake and River Corridor Below Alamo Dam:

1. NONE !!

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Impacts Resulting from Recommendation #3

Alamo Lake and River Corridor Below Alamo Dam:

- 1. There would be a decline in the economy for the area.
- 2. Park visitation would decline
- 3. The resources, both fisheries and riparian would decline.

IV. Information Needs and Deficiencies:

During the course of the discussions several needs and deficiencies were brought out. This list is as follows:

A. At the present time there isn't any data on recreational usage of that area below Alamo Dam or the other portions of the Bill Williams River Corridor. This information is desired for formulating recreational plans for the area in the future. Data should include information on recreation types and levels of use; access points and modes of access; recreation time and frequency. Locations of particular interest include the area below the dam; Rawhides Mountain and Swansea Wilderness Areas; Lincoln and Planet Ranches; the El Paso pipeline; and the Bill Williams Refuge. The effect of the road closure in the Wildlife Refuge on recreation is also unknown. Ų

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- B. Information needs to be compiled for exploring ways to provide boat launching facilities between the 1,144' msl to 1,154' msl elevation.
- C. There is a deficiency in legal access to the Bill Williams River Corridor below the dam. Information needs to be complied for the purpose of exploring ways to provide better access in some areas and restricted access for other areas.
- V. Issues, Concerns, and Opportunities Regarding Water Management for Recreations:
 - A. If an operation elevation is chosen between 1,144' msl and 1,154' msl an additional boat launching facility would be required. The location and terrain around the existing launch ramps will not allow for modifications.
 - B. Inundation of the sewage facilities will occur if the lake elevation reaches 1,214' msl.
 - C. Inundation of the current developed facilities will occur if the lake elevation reaches 1,200' msl.
 - D. Continual lake level fluctuations are bad for the appearance of the lake. This will increase the size of the "bath tub ring" which in turn degrades the visual esthetics of the recreational resources.

E. If releases are required, large releases over a short duration are better. This type of release will reduce the amount of shoreline erosion and maintenance of the existing boat ramps.

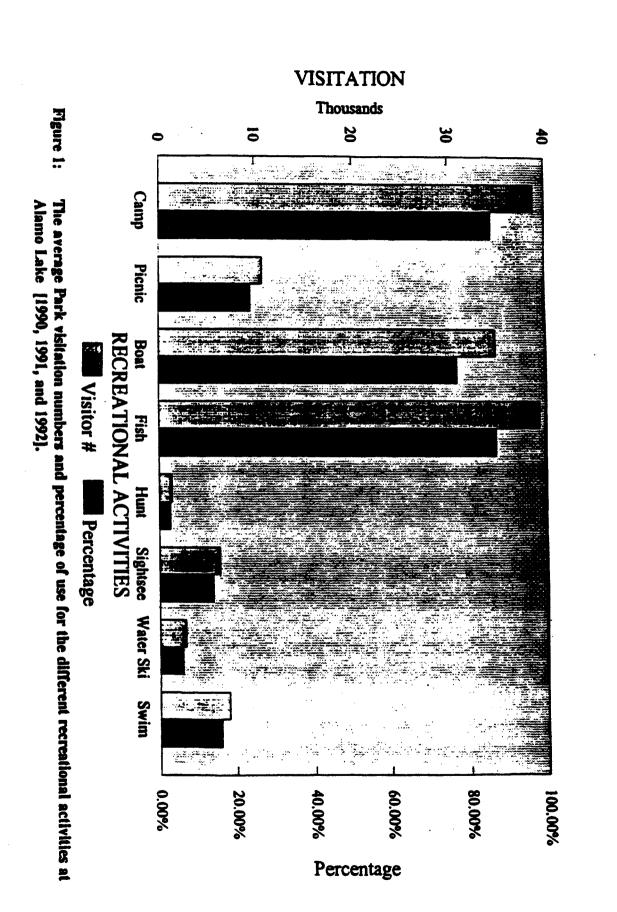
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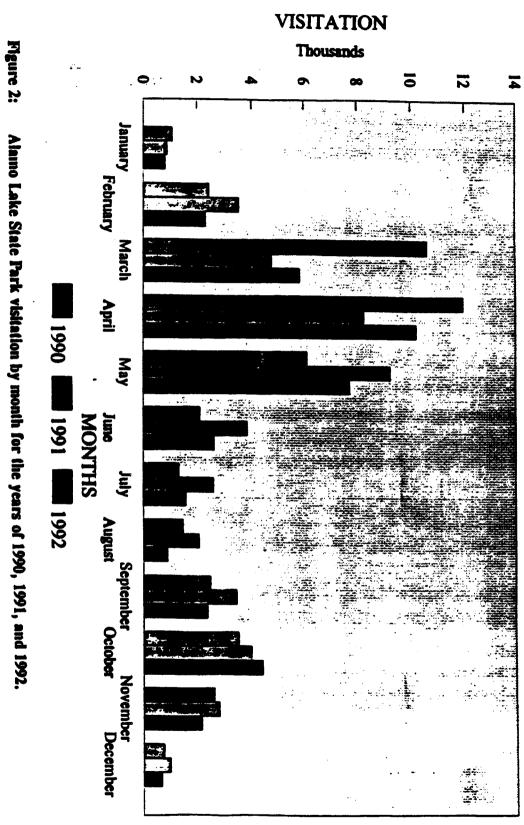
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- F. The location of existing facilities should not dictate where the ideal operating elevations is. If an elevation is selected that is in conflict with the existing facilities the existing facilities can be changed or even relocated if necessary.
- G. There is a concern about the lack of access to areas below the dam.
- H. Explore the possibility of modifications to the bulkhead gate so it can be installed or removed mechanically, without the use of divers and a crane. This could lessen the down time and cost for dam inspections and maintenance.
- I. Schedule dam inspections when the lake elevations is down to eliminate the need to make releases for the sole purpose of making an inspection. This should be done even is it hasn't been 5 years since the last inspection.
- J. When scheduling a dam inspection, schedule it during low recreational periods (June, July, August, December, or January).







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DAM OPERATION SUMMARY [Recreation and Access Oriented]

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Desirable Lake Elevations:	1,115' to 1,125' msl Main & Cholla Ramps are at the optimum.	1,154' to 1,178' msl Dirt ramp is functional	If possible, > 1,094' msl during high use periods.
		1,125' to 1,144' msi Main ramp is functional	Spring [March, April, May] Fall [September,
	T (1)	1,094' to 1,115' msl Cholla ramp is functional	October, November]
Undesirable Lake Elevations:	1,144' to 1,154' msi No boat launching is available:	1,144' to 1,154' msl No boat launching is available.	1,144' to 1,154' msl No boat launching is available.
River Flow Requirement:	If releases are > than 300 cfs, incorporate a week- end into the release period.	If releases are > than 300 cfs, incorporate a week- end into the release period.	If releases are > than 300 cfs, incorporate a week- end into the release period.

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