I - INTRODUCTION

1-01 <u>Authorization</u>. This water control manual was prepared in compliance with the following authorities and directives:

Engineering Regulation (ER) 1110-2-240: Engineering and Design, Water Control Management; dated 8 October 1982.

Engineering Manual (EM) 1110-2-3600: Engineering and Design, Management of Water Control Systems; dated 30 November 1987.

Engineering Regulation (ER) 1110-2-8156: Engineering and Design, Preparation of Water Control Manuals; dated 31 August 1995.

The chain of correspondence leading to approval of this manual is included in Exhibit D.

1-02 <u>Purpose and Scope.</u> This Water Control Manual is a revision of the original manual dated August 1975. It provides current information about Mathews Canyon Dam and its drainage basin, its water control plan, the facilities used for collection of hydrologic data, and the agencies involved and affected by its regulation.

Mathews Canyon Dam falls under a Type III project category as defined in ER 1110-2-240 referenced above. This category includes uncontrolled projects such as Mathews Canyon Dam which control floods, including their corresponding project design floods, using ungated outlets. This manual prescribes policies and procedures to be followed by the U.S. Army Corps of Engineers in carrying out water control management activities. In addition, this manual was prepared in accordance with the standardized format as required by ER 1110-2-8156 referenced above.

1-03 <u>**Related Manuals and Reports.**</u> Manuals and reports with data and information relevant to the information in this water control manual are listed in Table 1-1.

1-04 <u>Project Owner.</u> Mathews Canyon Dam was built, and is owned and maintained by the U.S. Army Corps of Engineers, Los Angeles District (LAD).

1-05 <u>**Operating Agencies.**</u> LAD is responsible for the maintenance of the dam, reservoir, and outlet works. The outlets are ungated, and are therefore, self operating. They are maintained as necessary following significant storm events, or in response to recommendations following the periodic inspection which is performed every 5 years.

1-06 <u>Regulating Agencies.</u> LAD is solely responsible for the regulation of Mathews

Canyon Dam. The Mathews Canyon Dam Water Control Plan is specified in this water control manual, which was prepared by the LAD, Reservoir Regulation Section. LAD also coordinates its regulation with the following agencies:

a. <u>Lincoln County Emergency Management</u>, has the responsibility for local cooperation. According to the House Document No. 530, 81st Congress, 2nd Session, "*the local interests shall adjust all water-rights claims resulting from operation of the improvement and keep the flood channel below the flood-control reservoir free from man-made encroachments*". The Corps is responsible for maintaining the project.

b. <u>National Weather Service</u>, located at Las Vegas, Nevada, which is about 100 miles southwest of the City of Caliente. Upon request, this office can provide weather forecasts and climatological reports for the Muddy River Basin, which is located in the State of Nevada and includes the drainage area above Mathews Canyon Dam.

c. <u>The National Resources Conservation Service</u>, formerly, the Soils Conservation Service, located in Reno, Nevada, can provide data on existing snow cover in the nearby Pine Canyon Basin, which can be used as an indicator of snow cover in the Mathews Canyon Basin.

Table 1-1. Mathews Canyon Dam Water Control ManualRelated Manuals, Reports and References

No.	Title	Date
1	Report on Survey, Flood Control, Virgin River and Tributaries in Nevada, Arizona and Utah	Jun 1942
2	Design Memorandum No. 1, Hydrology for Pine and Mathews Canyon Dams, Meadow Valley Wash and Lower Muddy River Basins, Nevada	Jan 1955
3	Design Memorandum No. 2, General Design for Mathews Canyon Dam, Meadow Valley Wash and Lower Muddy River Basins, Nevada	Mar1955
4	Operation and Maintenance Manual for Mathews Canyon Dam and Pine Canyon Dam, Meadow Valley Wash and Lower Muddy River Basins, Nevada	Jul 1963
5	Water Resources Development by the U.S. Army Corps of Engineers in Nevada	Jan 1967
6	Summary Report on Review of Design Features of Existing Dams	Jun 1967
7	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 1	Oct 1969
8	Nevada, A Guide to the Silver State, Nevada State Historical Society, Inc.	1973
9	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 2	May197
10	Flood Plain Information, Muddy River, Vicinity of Overton, Clark County, Nevada	Jun 1974
11	Reservoir Regulation Manual for Mathews Canyon Dam, Virgin River and Tributaries, Nevada, Arizona, and Utah, meadow Valley Wash and Tributaries, Nevada	Aug197
12	Hydrology and Hydraulic Review of Design Features of Existing Dams for Pine Canyon and Mathews Canyon Dams	Jul 1978
13	Interim Report on Hydrology and Hydraulic Review of Design Features of Existing Dams for Pine Canyon and Mathews Canyon Dam	Jul 1978
14	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 3	Jul 1979
15	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 4	May198
16	General Report, Flood Emergency Plan, Mathews Canyon Dam, Clover Creek, Lincoln County, Nevada	Jan 1980
17	Flood Emergency Plan, Mathews Canyon Dam, Clover Creek, Lincoln, Nevada, Emergency Action and Notification Subplan, Mathews Canyon Dam, Inundation Maps Emergency Plan	Feb 198
18	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 5	Jun 1989
19	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection Report No. 6	Jun 1994
20	Pine Canyon Dam and Reservoir and Mathews Canyon Dam and Reservoir Periodic Inspection	Jun 1999