US Army Corps
of Engineers®

WATER CONTROL MANUAL

MATHEWS CANYON DAM & RESERVOIR
CLOVER CREEK, LINCOLN COUNTY, NEVADA

SEPTEMBER 2000

MATHEWS CANYON DAM AND RESERVOIR
LINCOLN COUNTY, NEVADA
JULY 1999

PERTINENT DATA

Construction completed		December 1957
Stream System		Clover Creek
Drainage Area	sq mi.	34
Reservoir		
Elevation		
Streambed at Dam	ft., msl	5,420
Flood Control Pool (Spillway Crest)	ft., msl	5,461
Revised PMF surcharge level	ft., msl	5,481.7**
Top of Dam	ft., msl	5,483
Area *(From 1977 Survey)*		
Spillway Crest	acres	299.0
Revised Spillway Surcharge Level	acres	443.0
Top of Dam	acres	448.3
Capacity, Gross *(From 1977 Survey)*		
Spillway Crest	acre-ft.	6,270.7 (3.46*)
Revised Spillway Surcharge Level	acre-ft.	13,994.7 (6.86*)
Top of Dam	acre-ft.	14,576.5 (8.04*)
Allowance for Sediment (50-year)	acre-ft.	1,000 (0.55*)
Dam		
Type		Earthfill
Height Above Original Streambed	ft.	71
Crest Length	ft.	800
Crest Width	ft.	20
Freeboard	ft.	4.9
Spillway		
Type		Ungated, ogee
Crest Length	ft.	50
Crest elevation	ft., msl	5,461
Design Surcharge	ft.	20.7
Design Discharge	cfs	13,060
Outlet Conduit (ungated)		
Invert Elevation (inlet portal)	ft., msl	5,420
Diameter	ft.	3.5
Length	ft.	368
Discharge Capacity (Reservoir at Spillway crest)	cfs	260
Reservoir Design Flood		
Duration (inflow)	days	2
Total Volume	acre-ft.	5,800 (3.20*)
Inflow Peak	cfs	8,500
Revised Probable Maximum Flood		
Duration (inflow)	days	1.25**
Total Volume	acre-ft.	16,000** (8.82*)
Inflow Peak	cfs	57,000**
Historic Maximums		
Instantaneous Maximum release	cfs	204
Date		3-3-83
Maximum Water Surface Elevation	ft., msl	5,445.0
Date		3-3-83

*Inches of runoff
**Revised PMF based on new criteria set by the National Weather Service

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LOS ANGELES DISTRICT

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Prepared By:

U.S. ARMY CORPS OF ENGINEERS
LOS ANGELES DISTRICT

Reservoir Regulation Section
CESPL-ED-HR

MATHEWS CANYON DAM

NOTICE TO USERS OF THIS MANUAL

Regulations specify that this Water Control Manual be published in a hard copy binder with looseleaf form, and only those sections, or parts thereof, requiring changes will be revised and printed. Therefore, this copy should be preserved in good condition so that inserts can be made to keep the manual current. Changes to individual pages must carry the date of revision, which is the Division's approval date.

REGULATION ASSISTANCE PROCEDURES

In the event that unusual conditions arise, contact can be made by telephone to the U.S. Army Corps of Engineers, Los Angeles District office, Reservoir Regulation Section at (213) 452-3527 or (213) 452-3623.