

SUNNYCOVE DAM INFORMATION REPORT

A341.902

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1988 Revisions

PROJECT TITLE: Sunnycove Dam

WATERSHED AND RELATIONSHIP TO OTHER STRUCTURES:

Sunnycove Dam works in coordination with Sunset Dam as flood protection for Wickenburg, Arizona. The dam is across Sunny Wash, a tributary to the Hassayampa River.

LOCATION: Township, range, section; description from well know physical feature; how to get there.

Sunnycove Dam and Reservoir are located in the southeast quarter of Section II, Township 7N, Range 5W, G&SRB&M, approximately one mile southwest of the center of the town of Wickenburg, Arizona.

AUTHORIZATION: Watershed Protection and Flood Prevention Act
Public Law 566

FEDERAL SPONSOR: Soil Conservation Service

LOCAL SPONSOR(S): Flood Control District of Maricopa County
Board of Supervisors of Pinal County
East Maricopa Natural Resource
Conservation District

DOCUMENTATION: e.g., Watershed Workplan title/date;
supplements EIS date approved.

CONTRACTOR: M. M. Sundt

DATE OF CONSTRUCTION AWARD: March 22, 1976

DATE OF FINAL ACCEPTANCE: September 15, 1976

FUNCTIONAL DESCRIPTION: How it works

This Dam is a flood water retarding structure to protect the community of Wickenburg. It is designed to never have a permanent storage pool. This structure collects the runoff in Sunnycove Wash and conveys it via a 30" pipeline to a point below Wickenburg when it flows into the Hassayampa River. The intake structure has an 18" x 18" gated opening at streambed level and also functions as a drop inlet with an opened top has been constructed to the Northwest of the north abutment.

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PROJECT FEATURES

Type of structure	Zoned, Compacted Earthfill	
Top of structure elevation	2178.5	
Length of Structure	714 L.F.	
Maximum Height	48.5 feet	
Top Crest Width	14 L.F.	
Spillway Crest Elevation	2170.0	
Spillway Capacity	6300 CFS	
Drainage Area	1.35 square miles	
Storage Capacity	218 acre feet	<i>250 ac-ft at spillway crest</i>
Maximum Water Surface Elevation	2,177.8	<i>218 ac-ft 100 year flood</i>
Freeboard	8.5 feet	
Peak inflow	7709 cfs	
Peak outflow	7188 cfs	
Drawdown Time	10 days	
Principal Outlet Discharge Rate		
Principal Outlet Structure	Vertical reinforced concrete tower from below streambed elevation to approximate spillway crest elevation. At streambed elevation there is on 18" x 18" gated opening. The open top acts as a drop inlet for above normal runoff. A 30' RCP runs from the tower to the outfall area.	

COSTS:

FEDERAL:	\$776,700
LOCAL: land, relocations, engineers; total	\$150,000
TOTAL COST OF PROJECT:	\$377,258

ADWR OPERATIONAL CERTIFICATE ISSUED: February 22, 1977

DAM SAFETY STATUS:

- ENCLOSURES: SITE MAP (Attached)
 STAGE STORAGE CURVE
 STAGE DISCHARGE CURVE (Attached)
 STORAGE DISCHARGE SUMMARY
 AREA AND CAPACITY CURVE (Attached)

MAINTENANCE RESPONSIBILITIES

STRUCTURE:

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Access Ladder		each
Bank Protection - Riprap		sq yds
Bank Protection - Grouted Riprap		sq yds
Bank Protection - Soil Cement		sq yds
Bank Protection - Shot Crete		sq yds
Bridges - Pedestrian		each
Bridges - Vehicle		each
Culverts, Box		each
Culverts, Pipe		each
Dip Crossings (Asphalt)		each
Drainage Channel - Lined		feet
Drainage Channel - Lined (Riprap)		feet
Drainage Channel - Lined (Gr Riprap)		feet
Drainage Channel - Unlined		miles
Drop Structure		each
Embankment, Dirt	2.5	acres
Embankment, Soil Cement		acres
Energy Dissipator		each
Erosion Protection (Conc. Paving)		sq ft
Fencing - Wire	2800	feet
Fencing - Wrought Iron		feet
Floodway - Lined		feet
Floodway - Lined (Riprap)		feet
Floodway - Lined (Gr Riprap)		feet
Floodway - Unlined		acres
Gabions		sq yd
Gated Outlet		each
Gates - Wire	1	each
Gates - Wrought Iron		each
Gates - Pipe	3	each
Grade Control Structure		each
Guardrail		feet
Gutters, Concrete	100	feet
High Flow		acres
Landscaping/Erosion Control	7	acres
Irrigation Heads		each
Irrigation Controls		each
Irrigation Lines		feet
Plantings	100	each
Low Flow - Structures	12	acres
Manholes		each
Meter Houses		each
Outlet Structure		each

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Pilot Channel - Gila River		feet
Pool Area	18	acres
Principal Outlet	1	each
Principal Outlet - Pipe	293	feet
Railing - Pipe		feet
Ramps - Asphalt		feet
Ramps - Concrete		feet
Ramps - Earth		feet
Ramps - Grouted Riprap		feet
Ramps - Soil Cement		feet
Retaining Wall		feet
Right-of-Way	35.7	acres
River Clearing		acres
Roads - Asphalt		miles
Roads - Dirt	.5	miles
Sediment Basins		each
Side Inlet - Concrete		each
Side Inlet - Drop		each
Side Inlet - Flap Gate		each
Side Inlet - Grouted		each
Side Inlet - Pipe		each
Spillway - Earth	.7	acres
Spillway - Lined		feet
Stormdrain Pipe		feet
Trash Racks	2	each
Vegetative Drains		each

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