

High Mountain Dams in Upalco Unit,  
Water Lily Lake Dam  
Ashley National Forest  
1.1 miles northeast of Swift Creek Campground  
Mountain Home Vicinity  
Duchesne County  
Utah

HAER No. UT-42-N

HAER  
UTAH,  
7-MOHON,  
I-N-

PHOTOGRAPHS

WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record  
Rocky Mountain Regional Office  
National Park Service  
U.S. Department of the Interior  
P.O. Box 25287  
Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

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1-N-

High Mountain Dams in Upalco Unit, Water Lily Lake Dam

HAER No. UT-42-N

Location: 1.1 miles northeast of Swift Creek Campground, Ashley National Forest, Mountain Home vicinity, Duchesne County, Utah

UTM: 12.557640.4488040  
Quad: Burnt Mill Spring

Date of Construction: 1920

Builder/Designer: Farmers Irrigation Company

Present Owner: Moon Lake Water Users Association, Roosevelt, Utah 84066

Original Use: Dam

Present Use: Dam

Significance: The Water Lily Lake Dam is the oldest manmade structure to reservoir a natural lake in the Swift Creek drainage. With a crest length of 64 feet, it is the smallest of the dams in the Upalco Unit of the Central Utah Project. The reservoir was never a water storage success and has reverted to near a natural state. Long left unused, the dam on Water Lily Lake has deteriorated significantly and no longer functions to impound water for active storage.

Inventoried by: Clayton Fraser and James Jurale  
Fraserdesign  
Loveland, Colorado

October 19, 1985

### HISTORICAL INFORMATION

Located at the head of a small creek at an altitude of approximately 9,600 feet, Water Lily Lake is the lowest of the impounded lakes in the Swift Creek drainage. Its outlet tumbles down 1,300 feet of descent to Swift Creek about one-half mile north of its confluence with the Yellowstone River. On January 25, 1918, the Farmers Irrigation Company filed for irrigation water storage rights totalling 723 acre-feet from Water Lily Lake. The permit was approved by the State Engineer the following April, but the National Forest Service had already granted a special use permit to build a dam in November 1918. By 1920, the company had completed the small-scale earth-fill dam over the outlet at the south point of the lake. Fed by an extremely small drainage area, Water Lily was limited in its active storage capacity. It was reported unused in 1932 and again in 1954. Today, the lake is drained by a 24-inch-diameter concrete outlet pipe with an upright (and inoperable) upright headgate. The dam is choked with debris by beavers, which have repaired a partial breach in the wall. It is proposed that the breach be further repaired and the outlet blocked to return the lake to its natural state.

### ARCHITECTURAL INFORMATION

Dam length: 64 feet  
Dam height: 10 feet  
Dam width: 4 feet  
Construct: Earth fill dam with stone riprap facing  
Lake size: 22.2 acres; 470 acre-foot maximum capacity; 3 vertical foot maximum drawdown  
Outlet: Gated pipe

### BIOGRAPHICAL INFORMATION

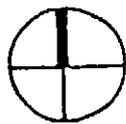
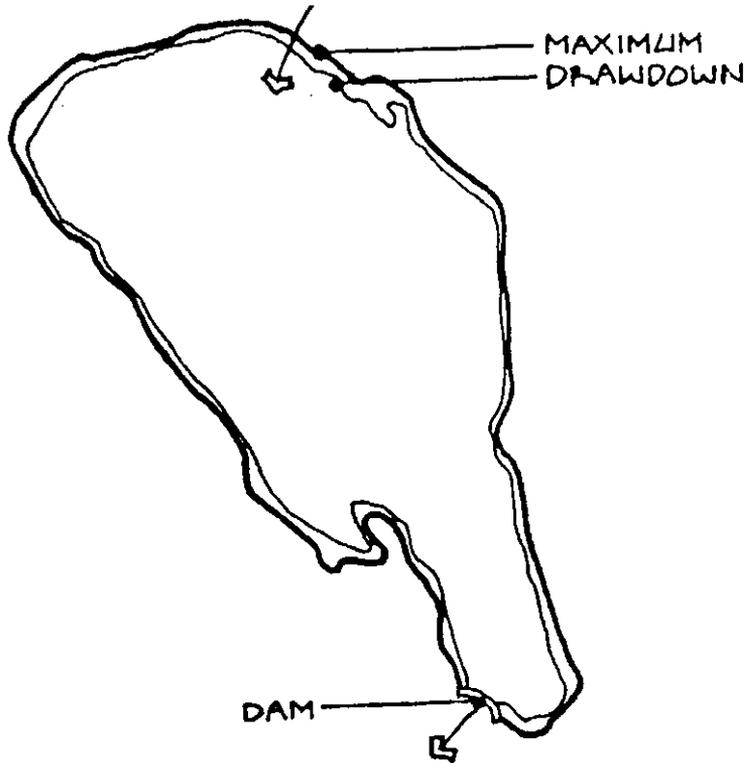
"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Upalco Unit" National Forest Service Report, 1968, n.p.

William F. Gettleman, "Report on the Lakes and Reservoir of the Headwaters of the Uintah, Whiterocks and Lakefork Rivers, Uintah Project, Utah: Feb. 1932," page 24.

Water Lily Lake Reservoir File #5163, Roosevelt District Ranger Office, Ashley National Forest, Roosevelt, Utah

Field inspection by Robert Righter, July 27, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.



SCALE: 1" = 600'