<table>
<thead>
<tr>
<th>DAM NAME</th>
<th>DATE</th>
<th>BUILDER</th>
<th>DAM TYPE</th>
<th>LENGTH</th>
<th>HEIGHT</th>
<th>WIDTH</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney Lake Dam</td>
<td>1918</td>
<td>Farnsworth Canal and Reservoir Company</td>
<td>Earth fill</td>
<td>630'</td>
<td>24'</td>
<td>14'</td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>Brown Duck Lake Dam</td>
<td>1919</td>
<td>Farnsworth Canal and Reservoir Company</td>
<td>Earth fill</td>
<td>220'</td>
<td>15'</td>
<td>20'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Island Lake Dam</td>
<td>1919</td>
<td>Farnsworth Canal and Reservoir Company</td>
<td>Earth fill</td>
<td>250'</td>
<td>20'</td>
<td>18'</td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>Farmers Lake Tunnel</td>
<td>1920</td>
<td>Farmers Irrigation Company</td>
<td>Rock-cut tunnel</td>
<td>300'</td>
<td>18'</td>
<td></td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>Water Lily Lake Dam</td>
<td>1920</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>64'</td>
<td>10'</td>
<td>4'</td>
<td>NRPH eligible under criteria B and C</td>
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<tr>
<td>Deer Lake Dam</td>
<td>c1925</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>140'</td>
<td>18'</td>
<td>7'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Clements Lake Dam</td>
<td>1926</td>
<td>Dry Gulch Irrigation Company</td>
<td>Earth fill</td>
<td>680'</td>
<td>13'</td>
<td>8'</td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>White Miller Lake Dam</td>
<td>c1926</td>
<td>Farmers Irrigation Company</td>
<td>Rock and sod fill</td>
<td>105'</td>
<td>3'</td>
<td>2'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Drift Lake Dam</td>
<td>1928</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>235'</td>
<td>12'</td>
<td>5'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Five Point Lake Dam</td>
<td>1929</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>970'</td>
<td>41'</td>
<td>10'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Bluebell Lake Dam</td>
<td>1930</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>230'</td>
<td>8'</td>
<td>7'</td>
<td>NRHP noneligible</td>
</tr>
<tr>
<td>Superior Lake Dam</td>
<td>1930</td>
<td>Farmers Irrigation Company</td>
<td>Earth fill</td>
<td>235'</td>
<td>17'</td>
<td>5'</td>
<td>NRHP noneligible</td>
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<tr>
<td>Twin Pots Dam</td>
<td>1931</td>
<td>Farnsworth Canal and Reservoir Company</td>
<td>Earth fill</td>
<td></td>
<td></td>
<td></td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>Milk Lake Dam</td>
<td>1935</td>
<td>Chester Hartman et al.</td>
<td>Grouted stone masonry</td>
<td>218'</td>
<td>12'</td>
<td>7'</td>
<td>NRHP eligible under criteria B and C</td>
</tr>
<tr>
<td>East Timothy Lake Dam</td>
<td>1951</td>
<td>Moon Lake Water Users Association</td>
<td>Earth fill</td>
<td>1,390'</td>
<td>34'</td>
<td>15'</td>
<td>NRHP noneligible</td>
</tr>
</tbody>
</table>

* indicates NRHP eligible structure
HABS/HAER INVENTORY

1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
Kidney Lake Dam

3. SITE ADDRESS (STREET & NO)
Upalco Unit, Central Utah Project
Ashley National Forest
4.7 miles north of Miners Gulch Campground

4. CITY/VCINITY
Hanna vicinity

COUNTY
Duchesne

STATE
Utah

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATES, PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXISTING EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

dam length: 630 ft. construct: earth fill dam with stone riprap facing
dam height: 24 ft. lake area: 194.2 acres; 3,288 acre-foot maximum capacity; 20 vertical foot maximum drawdown
dam width : 14 ft. outlet : gated steel pipe

The Farnsworth Canal and Reservoir Company filed for irrigation water storage rights on three high mountain lakes - Kidney, Island and Brown Duck - in the Lake Fork River drainage in July 1915. The permits were approved by the State Engineer the following April and by November 1920 small-scale earth-fill dams had been constructed at all three lakes to raise and control the water levels. Located on a small tributary of the Lake Fork River, Kidney Lake is by far the largest of the reservoirs in the Brown Duck Basin. Its 630-foot dam is the longest of the three and is built using typical earthfill construction with sloped, riprap-covered faces. In 1977 the original outlet works, with a cribbed log support structure, were replaced with the current inclined steel pipe outlet and screw. It is proposed that the dam be breached to lower the lake to within three feet of its natural level.

14. CONDITION
EXCELLENT

GOOD

FAI

DETERIORATED

RUINS

15. DANGER OF DEMOLITION?
SPECIFY THREAT
YES

NO

UNKNOWN

16. SIGNIFICANCE

Kidney Lake is by far the largest of the reservoired high mountain lakes in the Upalco Unit of the Central Utah Project. One of three lakes in the Brown Duck Basin dammed by the Farnsworth Irrigation Company in 1920, its 630-foot dam is among the largest built in the Unit. The dam itself is representative and relatively well-preserved, but the recent replacement of the outlet mechanism has compromised its historical integrity.


Field inspection by Clayton Fraser, 22 July 1985.
10-909  2/82

HABS/HAER INVENTORY
U.S. Department of the Interior
National Park Service
Washington, DC 20240

1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
   Farmers Lake Tunnel

3. SITE ADDRESS [STREET & NO]
   Upalco Unit, Central Utah Project
   Ashley National Forest
   5.7 miles north of Swift Creek Campground

4. CITY/VICINITY
   Mountain Home vicinity
   COUNTY
   Duchesne
   STATE
   Utah

12. OWNER/ADMIN ADDRESS
   Moon Lake Water Users Association
   Roosevelt Utah 84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

   tunnel length:  300 ft.  construct: rock-cut tunnel
   tunnel width:  3 ft.  lake size: 73 acres; 1327 acre-feet maximum capacity; 12.5 vertical feet maximum draw
   outlet:  30'' slide gate on outlet side of tunnel

   On October 10, 1917, representatives of the Farmers Irrigation Company applied for 803 acre-feet of water from Farmers Lake, the largest in the Swift Creek drainage. The application was approved by the State Engineer in April 1919, and in September the Forest Service granted a special use permit to impound the water. Rather than build a typical earth-fill dam, the irrigation company drifted a tunnel through the rock of the terminal morrain on the southeast corner of the lake. Approximately 300 feet long and three feet wide, the tunnel lowered the natural lake level by 12.5 feet. The original shaft completed in 1920 later collapsed, and the access holes were filled and a second tunnel cut nearby. Although the shaft through solid stone remains in good condition, the outlet tunnel has been inoperable for several years, and the surface structures have been allowed to deteriorate. It is proposed that the tunnel be blocked to return the lake to its natural level.

14. CONDITION
   □ EXCELLENT  □ GOOD  □ FAIR  □ DETERIORATED   □ RUINS

15. DANGER OF DEMOLUTION?
   □ YES  □ NO  □ UNKNOWN

16. SIGNIFICANCE

   On the majority of the reservoirs in the Upalco Unit, the irrigation companies created storage by building dams to raise the natural high-water level of the lakes and cut drainage channels below the natural outlets. On only one reservoir - Farmers - no dam was built and the lake drawn down by tunnel. For this reason, the Farmers Lake tunnel is unique among the structures in the Unit. With a log grizzly at the inlet and a control gate at the outlet, the tunnel is a picturesque and technologically interesting structure.


### Superior Lake Dam

**Description and Background History**

On February 2, 1927, special use permits were issued by the National Forest Service to the Farmers Irrigation Company for the purpose of water storage on Superior and Five Point Lakes, two high mountain lakes in the Yellowstone River drainage. Located at an elevation of 11,160 feet, Superior was the higher of the two. It was composed of two shallow bodies of water in its natural state, with an outlet stream flowing east. The dam that the irrigation company built in 1930 along the southern edge effectively doubled the lake’s surface area and diverted its outlet flow south into Five Point Lake. The dam is a small-scale earth-fill structure with sloped faces covered by stone riprap. In 1977, the Moon Lake Water Users Association rehabilitated the original cribbed log support structure for the outlet gate. The dam and gate remain. It is proposed to breach the dam by excavating a spillway through it, remove the timber crib and block the outlet pipe to lower the water to within five feet of its natural level.

**Significance**

Superior Lake is one of several natural high mountain lakes in the Swift Creek and Yellowstone River drainages dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale earth-fill construction in the Upalco Unit of the Central Utah Project.


Superior Lake Reservoir File, Ashley National Forest Roosevelt District Ranger Office, Roosevelt Utah.

Drift Lake Dam

5. ORIGINAL USE

dam

7. CLASSIFICATION

SPEC STRUC: DAM: EARTHFILL

9. RATING

9 7 9 1

10. DATE

1928

11. REGION

UTM ZONE EASTING NORTHING LTRMRO

12 5 4 3 1 8 0 4 5 0 5 6 6 0

12. OWNER/ADMIN ADDRESS

Moon Lake Water Users Association Roosevelt Utah 84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXISTING EQUIPMENT, AND IMPORTANT BUILDING, ARCHITECTS, ENGINEERS, ETC.

dam length: 235 ft. construct: earth fill dam with stone riprap facing
dam height: 12 ft. lake size: 24.8 acres; 197 acre-foot maximum capacity; 9 vertical foot maximum drawdown
dam width: 5 ft. outlet: gated steel pipe

On July 21, 1926, the National Forest Service granted special use permits to the Farmers Irrigation Company for water storage rights on Bluebell and Drift Lakes, two high mountain lakes in the Yellowstone River drainage. Drift Lake, the smaller of the two, was an elongated natural pool, ½ mile long and 300 yards at its widest point, located in a cirque at the base of a rock slide ridge. The Forest Service recommended that a 100-foot long by 7-foot high dam across the southeastern outlet of the lake would greatly increase its active storage capacity. The structure that the irrigation company completed in 1928 was over twice as long and 12 feet high, substantially increasing the lake's volume. The dam featured standard earth-fill construction, with a variable-slope upstream face covered with a layer of handplaced riprap stone. Its outlet was a 24" corrugated steel pipe with an upright screw-type gate. The original dam and outlet remain. It is proposed that the dam be breached and a spillway built through it to lower the water to within four feet of its natural level.

14. CONDITION

EXCELLENT GOOD FAIR DETERIORATED RUINS

15. DANGER OF DEMOLITION? YES NO UNKNOWN

16. SIGNIFICANCE

Drift Lake is one of several natural high mountain lakes in the Swift Creek and Yellowstone River drainages dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale earth-fill construction in the Upalco Unit of the Central Utah Project.


Drift Lake Reservoir File (#5155), Ashley National Forest Roosevelt District Ranger Office, Roosevelt Utah.

Five Point Lake Dam

Uopalco Unit, Central Utah Project
Ashley National Forest
12.0 miles northwest of Swift Creek Campgrd.

Moon Lake Water Users Association
Roosevelt Utah 84066

dam length: 970 ft. construct: earth fill dam with stone riprap facing
dam height: 14 ft. lake size: 82.6 acres; 607 acre-foot maximum capacity; 11 vertical foot maximum drawdown
dam width: 10 ft. outlet: gated steel pipe

On February 2, 1927, special use permits were issued by the National Forest Service to the Farmers Irrigation Company for the purpose of water storage on Five Point and Superior Lakes, two high mountain lakes in the Yellowstone River drainage. On Five Point Lake, the company built two dams, a long V-shaped primary structure with a steel pipe outlet and a much smaller secondary dike, in 1929. The dams are earth fill, with sloped and riprapped upstream and downstream faces. The spillway is a natural rock saddle 300 feet south of the main outlet, with a concrete crest poured to minimize erosion. With a surface area of over 82 acres, Five Point is the largest reservoir in the Yellowstone drainage. With an aggregate crest length of almost 1,000 feet, the two dams in the lake's southeast corner constitute the longest retention structure in the basin. It is proposed to excavate a spillway through the dam and block the existing outlet to lower the water to within two feet of its natural level.

Five Point Lake is the largest reservoired body of water in the Yellowstone drainage, and with a crest length of 970 feet, Five Point Lake dam is the second longest of the earthen dams in the Uopalco Unit. A representative earth-fill structure with stone riprap facing, the dam is additionally notable because of the original construction equipment left on-site. Essentially unaltered and well-preserved, the Five Point Lake dam with its natural stone spillway is one of the most picturesque in the Unit.


Water Lily Lake Dam

Upalco Unit, Central Utah Project
Ashley National Forest
1.1 mile northeast of Swift Creek Campgrd.

Moon Lake Water Users Association
Roosevelt Utah 84066

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

Located at the head of a small creek at an altitude of approximately 9600 feet, Water Lily Lake is the lowest of the impounded lakes in the Swift Creek drainage. Its outlet tumbles down 1300 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 totaling 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" 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 be blocked to return the lake to its natural state.

The Water Lily Lake dam is the oldest man-made 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.


dam length: 1,390 ft. construct: earthfill dam with stone riprap facing

dam height: 34 ft. lake size: 43.6 acres; 569 acre-foot maximum capacity; 19 vertical foot maximum drawdown
dam width: 15 ft. outlet: gated steel pipe

The highest - 11,000 feet - and most northerly situated lake on the Swift Creek drainage is East Timothy Lake. The lake is fed from an extensive drainage field involving five other lakes and 2,070 acres of land. Brigham Timothy was the first to file and receive an approved application from the State Engineer to impound irrigation water in the 40-acre lake sometime around 1920. He was awarded a Forest Service special use permit soon after and constructed a 12'x 18' sod dam across the outlet. Timothy's water rights to the lake were transferred to the Swift Creek Reservoir Company, which in turn became part of the Moon Lake Water Users Association. In 1951, the irrigation company removed Timothy's rudimentary sod dam and built an extensive earth-fill structure, 1,390 feet long and 34 feet high, by scooping material from the lake basin. Today the dam is subject to widespread seepage on the downstream toe, and the lake is maintained at maximum drawdown to avoid structural failure. It is proposed that the dam be stabilized and breached, with an outlet installed to lower the water to near its natural level.

With a crest length of almost 1400 feet, the East Timothy Lake dam is distinguished as by far the largest dam in the Upalco Unit of the Central Utah Project. It was completed in 1951 as the last privately financed dam in the Swift Creek drainage: a substantial capital investment for the Moon Lake Water Users Association. The construction of the dam resembles that of other dams built in the 1910s and 1920s, indicating the relatively unsophisticated nature of earth-fill technology.


Bluebell Lake Dam

**SITE ID NO**

**NAME(S) OF STRUCTURE**
Bluebell Lake Dam

**SITE ADDRESS (STREET & NO)**
Upalco Unit, Central Utah Project
Ashley National Forest
11.2 miles northwest of Swift Creek Campgrd.

**CITY/ Vicinity**
Mountain Home vicinity

**COUNTY**
Duchesne

**STATE**
Utah

**OWNER/ADMIN ADDRESS**
Moon Lake Water Users Association
Roosevelt Utah 84066

**ORIGINAL USE**
dam

**PRESENT USE**
dam

**CLASSIFICATION**
SPEC STRUC: DAM: EARTHFILL

**DATE**
1930

**UTM ZONE**
12

**EASTING**
543480

**NORTHING**
4504940

**REGION**
RMRO

**SCALE**
1:124

**QUAD NAME**
Garfield Basin

**DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.**

- Dam length: 230 ft.
- Dam height: 8 ft.
- Lake size: 47.2 acres
- 258 acre-foot maximum capacity
- 6 vertical foot maximum drawdown
- Outlet: gated steel pipe

On July 21, 1926, the National Forest Service granted special use permits to the Farmers Irrigation Company for the water storage rights on Bluebell and Drift Lakes, two high mountain lakes in the Yellowstone River drainage. Both were natural pools located at the base of a rock slide ridge which forms the western wall of the Garfield Basin. The Forest Service recommended that a 200-foot long by 2-foot high dam across the northeastern outlet of Bluebell Lake would greatly increase its active storage capacity. The structure that the irrigation company completed in 1930 was similar in length, though taller than the recommended size, substantially increasing the lake's volume. The dam featured standard earth-fill construction, with a sloped upstream face covered with riprap stone and a steel pipe outlet with upright screw-type gate. The original dam and outlet remain. It is proposed that the dam be breached, a spillway built through it and the outlet blocked to return the water to its natural level.

**SIGNIFICANCE**
Bluebell Lake is one of several natural high mountain lakes in the Swift Creek and Yellowstone River drainages dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale earth-fill construction in the Upalco Unit of the Central Utah Project.


Following the drought years of 1919 and 1920, stockholders of the Farnsworth Canal and Reservoir Company approved the construction of the Twin Pots Dam to store water for irrigation. The reservoir, located on the west bank of the Lake Fork River about four miles downstream from Moon Lake, was situated in a large grassy natural bowl. This was not an existing lake like the other water storage reservoirs in the Upalco Unit, but a reservoir which was created by building an earth-fill dam across the natural outlet on the bowl's north end. The land occupied by the reservoir was purchased from the U.S. Bureau of Indian Affairs, and the Utah State Engineer approved filings to store water on it. Farnsworth contracted with Austin G. Burton, a shareholder in the company, to engineer the dam. The small structure completed in 1921 was constructed of dirt-fill with sorted rock. Without a compacted clay core, it was too porous, however, and burst in 1927. A new clay-core dam was completed on the site in 1931 for a reported cost of $40,000. Still leaking, the Twin Pots Dam remains in functional condition today.

At the time of its initial construction in 1921, the Twin Pots Dam not only held the largest body of impounded water in the Upalco Unit, it was the first successful attempt to impound running water and create a man-made reservoir. The Twin Pots Reservoir produced a significant increase of irrigation water storage for the Farnsworth Company and allowed the expansion of farming in the Mountain Home area, served by the Farnsworth Canal. The reconstructed dam is an undistinguished, but representative, example of the relatively unsophisticated earth-fill dam technology found in the Uinta Mountains.


Field inspection by Clayton Fraser, 22 July 1985.
1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
   White Miller Lake Dam

3. SITE ADDRESS (STREET & NO);
   Upalco Unit, Central Utah Project
   Ashley National Forest
   6.9 miles north of Swift Creek Campground

4. CITY/VICINITY
   Mountain Home vicinity

5. ORIGINAL USE
   dam

6. PRESENT USE
   dam

7. CLASSIFICATION
   SPEC STRUC: DAM: ROCKFILL
   9.7.9.2

8. UTM ZONE
   12

9. RATING
   c1926

10. DATE

11. REGION
   RMRO

12. OWNER/ADMIN ADDRESS
   Moon Lake Water Users Association
   Roosevelt Utah 84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXISTING EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

   dam length: 105 ft.
   construct: stacked fieldstone rockfill dam
   dam height: 3 ft.
   lake size: 10.0 acres;
   77 acre-foot maximum capacity;
   1.7 vertical foot maximum drawdown
   dam width: 2 ft.
   outlet: log weir

   On September 4, 1926, the National Forest Service issued a special use permit to the Farmers Irrigation Company for "constructing and maintaining a dam and storing water for irrigation purposes" on White Miller Lake in the Swift Creek drainage. A small - approximately 10 acres - shallow lake, White Miller receives flow from Farmers Lake and drains into Deer Lake, two other Farmers Irrigation Company reservoirs. The 105-foot dam built across the natural outlet on the south point of the lake was a rudimentary structure consisting of stacked fieldstones and sod, with a cribbed log outlet weir. Only three feet high, the dam is the least substantial among those in the Upalco Unit. In 1959 it was abandoned. Today, dam and outlet are deteriorated and overgrown; the lake's size has been reduced by encroachment from the peat meadow which surrounds it. It is proposed that the original outlet works be removed and the lake be returned to its natural level.

14. CONDITION

15. DANGER OF DEMOLITION?
   (SPECIFY THREAT)

16. SIGNIFICANCE

White Miller Lake is one of several natural high mountain lakes dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale, unsophisticated construction in the Upalco Unit of the Central Utah Project.


HABS/HAER INVENTORY

1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
Milk Lake Dam

3. SITE ADDRESS (STREET & NO)
Upalco Unit, Central Utah Project
Ashley National Forest
9.4 miles northwest of Swift Creek Campgrd.

4. CITY/VICINITY
Mountain Home vicinity
COUNTY
Duchesne
STATE
Utah

13. DESCRIPTION AND BACKGROUND HISTORY (INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC."

14. CONDITION
☐ EXCELLENT
☐ GOOD
☐ FAIR
☐ DETERIORATED
☐ RUNS

5. ORIGINAL USE
dam

6. PRESENT USE
dam

7. CLASSIFICATION
SPEC STRUC: DAM: MASONRY
9 7 9 0

8. UTM ZONE
12

9. RATING
10. DATE
1935

11. REGION
RMRO

12. OWNER/ADMIN ADDRESS
Moon Lake Water Users Association Roosevelt Utah 84066

15. DANGER OF DEMOLITION?
☐ YES
☐ NO
☐ UNKNOWN

scale
1:24
other
1:625
quad name
Garfield Basin

16. SIGNIFICANCE

Situated picturesquely on the western tip of Milk Lake at the base of a steep mountainside, the Milk Lake dam is perhaps the most visually striking of the Upalco Unit dams. It is technologically significant as the only grouted stone masonry dam in the Unit. Beset by structural problems since its completion and the subject of numerous Forest Service complaints, the dam's checkered history makes it appropriate as a symbol of Forest Service leniency and permitee noncompliance.

dam length: 218 ft. construct: grouted fieldstone dam with stone riprap facing on downstream side
dam height: 12 ft. lake size: 21.9 acres; 195 acre-foot maximum capacity; 9 vertical foot maximum drawdown
dam width: 7 ft. outlet: gated steel pipe

Milk Lake, an isolated body of water in the Yellowstone River drainage, is situated in a glacial cirque on the west side of the divide that separates the Yellowstone from the Swift Creek drainage. In August 1931, Chester Hartman, George Rogers and S.K. Daniels filed an application for a special use permit to store irrigation water on Milk Lake. Despite warnings by National Forest Service staff, the partners had by then already begun construction on a small-scale dam at the west end of the lake, and by 1935 it was completed. The permit was finally granted by the Forest Service in July 1938. Once described as "one of the best projects in the district," the Milk Lake dam was a grouted masonry structure with a sloped and riprapped downstream face. It began to leak in 1939 and burst in 1940. The breach repaired, the dam functioned until 1973, when continual structural and administrative problems prompted the Forest Service to withdraw the permit. The structure has begun to leak again, and it is proposed to demolish it to lower the water to its natural level.

Milk Lake Reservoir File, Ashley National Forest Roosevelt District Ranger Office, Roosevelt Utah.
1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
Island Lake Dam

3. SITE ADDRESS (STREET & NO)
Upalco Unit, Central Utah Project
Ashley National Forest
4.8 miles north of Miners Gulch Campground

4. CITY/VICINITY
Hanna vicinity
COUNTY
Duchesne
STATE
Utah

5. ORIGINAL USE
dam

6. PRESENT USE
dam

7. CLASSIFICATION
SPEC STRUC: DAM: EARTHFILL
9
7
9
1

8. UTM ZONE
12
9. DATE
1920
10. REGION
RMRO
11. QUAD NAME
Kidney Lake

12. OWNER/ADMIN ADDRESS
Moon Lake Water Users Association
Roosevelt
Utah
84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

dam length: 250 ft.
construct: earth fill dam with stone riprap facing

dam height: 20 ft.
lake size: 60.7 acres; 757 acre-foot maximum capacity; 14 vertical foot maximum drawdown
dam width: 18 ft.
outlet: gated steel pipe

The Farnsworth Canal and Reservoir Company filed for irrigation water storage rights on three high mountain lakes - Island, Kidney and Brown Duck - in the Lake Fork River drainage in July 1915. The permits were approved by the State Engineer the following April and by November 1920 small-scale earth-fill dams had been completed at all three lakes to raise and control the water levels. Damming Island Lake changed its character significantly. Originally two smaller natural lakes located on a tributary of the Lake Fork River, these were joined into a single reservoir with an island near the center by the higher water. The dam featured typical earth-fill construction, with sloped, riprap-covered faces and an inclined steel gate over a 40" corrugated steel outlet pipe. The outlet works were replaced in 1977 with the current inclined steel outlet pipe and screw. It is proposed that the dam be breached to lower the lake to within two feet of its natural level.

14. CONDITION
☑ EXCELLENT
☐ GOOD
☐ FAIR
☐ DETERIORATED
☐ RUINS

15. DANGER OF DEMOLITION?
☐ YES
☐ NO
☐ UNKNOWN

16. SIGNIFICANCE
Island Lake is one of three high mountain lakes in the Brown Duck Basin dammed by the Farnsworth Canal and Reservoir Company in 1920. The dam itself is representative and relatively well-preserved, but the replacement of the outlet mechanism has compromised its historical integrity.


Field inspection by Clayton Fraser, 22 July 1985.
Clements Lake Dam

Upalco Unit, Central Utah Project
Ashley National Forest
6.5 miles north of Miners Gulch Campground

Hanna vicinity
Duchesne County
Utah

May 1926

Located at an elevation of 10,440 feet, approximately 3½ miles north of Brown Duck Lake, Clements Lake is the highest of the four Lake Fork River reservoirs and is located closest to the headwaters of the watershed in the Brown Duck Basin. The lake draws from a densely forested drainage of 1,273 acres. In 1921, the Forest Service granted the Dry Gulch Irrigation Company a special use permit to impound water for irrigation on the lake. Later that year, the company built a small log dam across the lake's natural outlet on its east side to prove up on the water. In 1926, Dry Gulch employed engineer Louis Galloway to survey the dam site and blaze a pack trail from the trailhead at Moon Lake. Using equipment packed on horseback, the Dry Gulch crew built the dam that year. With a crest length of 680 feet, the Clements Lake Dam is the longest in the basin. It displays typical clay core/earth fill construction, with its upstream face covered with a single layer of flat stones and the lower face with stone riprap. It is proposed that the dam be breached, a spillway formed at its center, and the outlet pipe blocked to lower the lake to its natural level.

The largest of the Brown Duck Basin dams, the Clements Lake is a representative, though undistinguished, example of clay core/earth fill dam technology found in the Upalco Unit. Its principal significance derives from its association with the Dry Gulch Irrigation Company. With by far the most extensive network of canals and laterals, Dry Gulch was the largest and most important irrigation company in the Uinta Basin. The company impounded five lakes in the Uintah Unit of the Central Utah Project, but Clements lake is the only Dry Gulch reservoir in the Lake Fork drainage. As such, it is an integral component of an historically important irrigation system.


Clements Lake Reservoir File (#5153), Ashley National Forest Roosevelt District Ranger Office, Roosevelt Utah.

Field inspection by Clayton Fraser, 22 July 1985.
1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
Deer Lake Dam

3. SITE ADDRESS (STREET & NO)
Upalco Unit, Central Utah Project
Ashley National Forest
5.8 miles north of Swift Creek Campground

4. CITY/ Vicinity
Mountain Home
COUNTY
Duchesne
STATE
Utah

5. ORIGI NAL USE
dam

6. PRESENT USE
dam

7. CLASSIFICATION
SPEC STRUC: DAM: EARTHFILL 9 7 9 1

8. UTM ZONE
12
EASTING
553860
NORTHING
4502350

9. RATING
c1925

10. DATE

11. REGION
RMRO

12. OWNER/ADMIN ADDRESS
Moon Lake Water Users Association Roosevelt Utah 84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

- Dam length: 140 ft.
- Construction: earth fill dam with stone riprap facing
- Dam height: 18 ft.
- Lake size: 11.0 acres; 249 acre-foot maximum capacity; 14 vertical foot maximum drawdown
- Dam width: 7 ft.
- Outlet: gated pipe; timber weir spillway

On June 25, 1925, The National Forest Service issued a special use permit to the Farmers Irrigation Company for "constructing and maintaining a dam and storing water for irrigation purposes" on Deer Lake in the Swift Creek drainage. A small - approximately 8 acres - but relatively deep lake, Deer was limited in littoral area because of its narrow confines between two ridges. The lake receives flows from both White Miller and Farmers lakes - two other Farmers Irrigation Company reservoirs - and now acts as a regulating reservoir. The 140-foot long, 18-foot high dam is an earth-fill structure, with stone riprap on both the sloped upstream and downstream faces. It is drained by a 30" diameter gated steel pipe outlet, with a small timber weir for an overflow spillway. It is proposed that the dam be altered somewhat to return the lake to its natural level.

14. CONDITION
- EXCELLENT
- GOOD
- FAIR
- DETERIORATED
- RUINS

15. DANGER OF DEMOLITION?
(SPECIFY THREAT)
- YES
- NO
- UNKNOWN

16. SIGNIFICANCE
Deer Lake is one of several natural high mountain lakes in the Swift Creek and Yellowstone River drainages dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale earth-fill construction in the Upalco Unit of the Central Utah Project.


HABS/HAER INVENTORY
U.S. Department of the Interior
National Park Service
Washington, DC 20240

1. SITE I.D. NO

2. NAME(S) OF STRUCTURE
Brown Duck Lake Dam

3. SITE ADDRESS (STREET & NO)
Upalco Unit, Central Utah Project
Ashley National Forest
4.4 miles north of Miners Gulch Campground

4. CITY/VICINITY
Hanna vicinity
COUNTY
Duchesne
STATE
Utah

5. ORIGINAL USE
dam

6. PRESENT USE
dam

7. CLASSIFICATION
SPEC STRUC: DAM: EARTHFILL

8. UTM ZONE
12
EASTING
534050
NORTHING
4493580

9. RATING
9791

10. DATE
1920

11. REGION
RMRO

12. OWNER/ADMIN ADDRESS
Moon Lake Water Users Association
Roosevelt Utah 84066

13. DESCRIPTION AND BACKGROUND HISTORY INCLUDING CONSTRUCTION DATE(S), PHYSICAL DIMENSIONS, MATERIALS, MAJOR ALTERATIONS, EXISTING EQUIPMENT, AND IMPORTANT BUILDERS, ARCHITECTS, ENGINEERS, ETC.

dam length: 220 ft. construct: earth fill dam with stone riprap facing
dam height: 15 ft. lake size: 36.1 acres; 268 acre-foot maximum capacity
dam width: 20 ft. outlet: gated steel pipe; concrete spillway

The Farnsworth Canal and Reservoir Company filed for irrigation water storage rights on three high mountain lakes - Brown Duck, Island and Kidney - in the Lake Fork River drainage in July 1915. The permits were approved by the State Engineer the following April and the small-scale earth-fill dams completed by November 1920. The lowest of the three lakes in the Brown Duck Basin, this reservoir receives water from the other two. With a surface area of 36 acres, Brown Duck is the smallest of the three lakes, and with a crest length of 220 feet, the retention structure is the shortest. The dam was partially breached in 1967; it has not functioned for agricultural water storage since. It remains in damaged and uncertain condition.

14. CONDITION
☑ Excellent □ Good □ Fair □ Deteriorated □ Ruins

15. DANGER OF DEMOLITION?
☑ Yes □ No □ Unknown

16. SIGNIFICANCE
Brown Duck Lake is one of three high mountain lakes in the Brown Duck Basin dammed by the Farnsworth Canal and Reservoir Company in 1920. The dam itself is representative, though structurally damaged, and the recent replacement of the outlet mechanism has compromised its historical integrity.


Field inspection by Clayton Fraser, 22 July 1985.
GARFIELD BASIN QUADRANGLE
UTAH—DUCHESENE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)