

Lake surveys in the Blackfoot Basin

Introduction and study area

During the field season of 2006 and 20007, fisheries crews surveyed both the high mountain lakes in the “backcountry” areas (i.e. roadless and wilderness areas) as well as several low-elevation lakes located on the valley floor of the Blackfoot Basin (Figure X). Last surveyed >20 years ago, many of the backcountry lakes were historically stocked with rainbow trout and “undifferentiated” cutthroat trout. Our survey objectives were to describe physical and biological attributes of lakes and evaluate accessibility and relative levels of recreational use. Surveys included fish population assessments, amphibian searches, bathymetric mapping, water chemistry measurements, and a description of recreation sites and trail networks. We surveyed at total of 15 backcountry lakes, including three in the upper Monture Basin, seven in the North Fork Basin and five in the Landers Fork Basin. In addition to the backcountry lakes, we also surveyed Nevada Reservoir and eight additional lower-elevation natural lakes that possess some level of public access (Figure X). Additional lake surveys are planned for the summer of 2008.

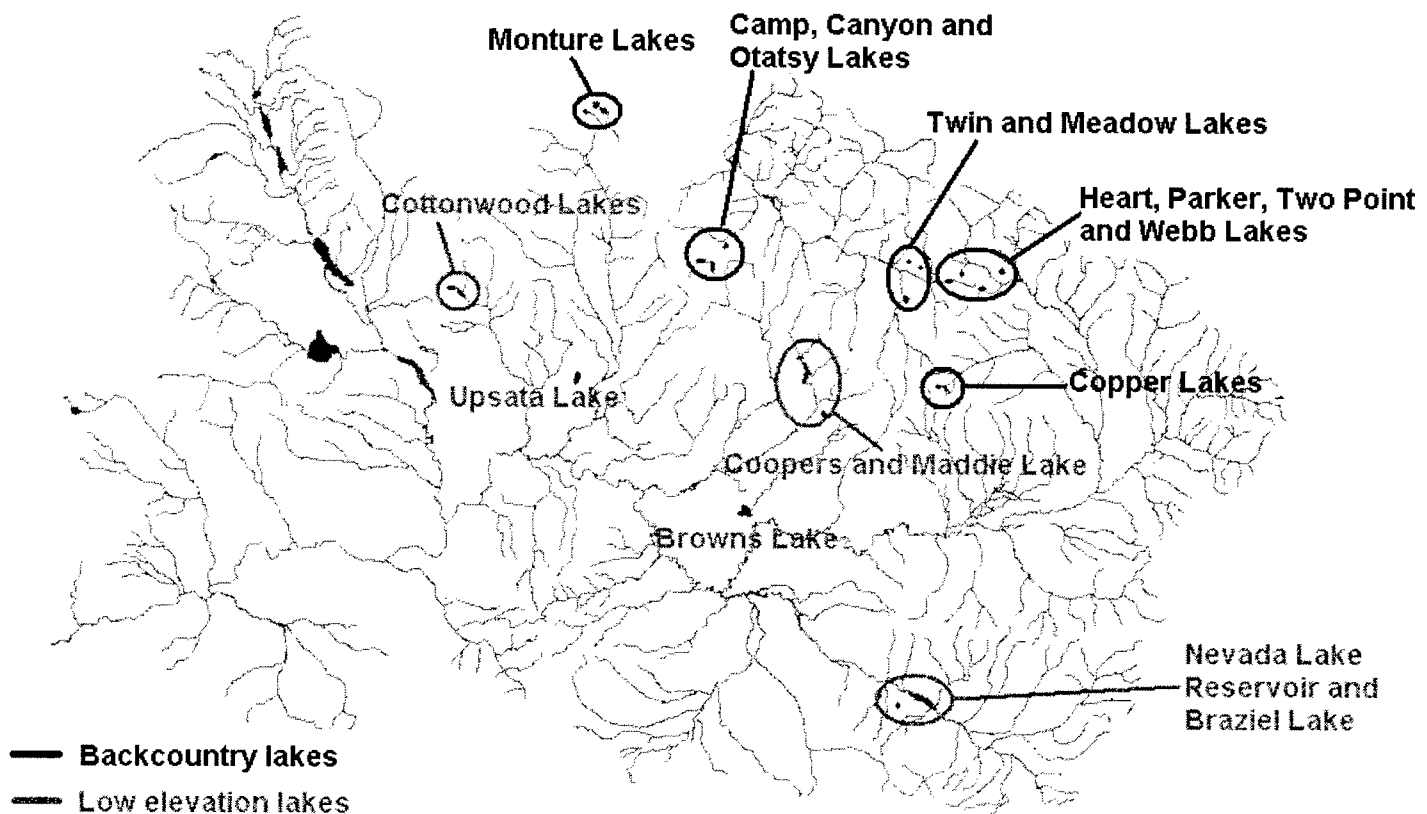


Figure X. Lake survey sites: The lakes identified in black are the backcountry lakes and lakes identified in brown are lower-elevation lakes.

Procedures

Backcountry lakes - Using packhorses, mules and by backpacking, fisheries crews established a series of remote base camps near all known fish-bearing and a few fishless backcountry lakes. Descriptive information (e.g., elevation, surface area, specific location, etc.) was approximated from USGS topographic maps and existing GIS data.

Fish sampling was conducted using overnight sets of sinking experimental gill nets. We used standardized net dimensions and mesh size (125'x 4'; 5 panels; 0.75", 1.00 ", 1.25", 1.5", and 2.0" bar) specified for alpine lake sampling in Montana. Nets were set for a single sampling period (minimum 10 hrs) usually beginning between

18:00 and 20:00. Nets were typically anchored to a log or rock on the shoreline (small mesh end) near a point or prominent feature with gradual depth contour. We used an inflatable boat or float tube to stretch and set the remainder of the net (maximum depth rarely exceeded 30 ft). Small lakes (< 10 acres) were sampled for one netting period. On larger lakes and in instances where fish abundance was obviously low, we set two nets concurrently at widely spaced locations. For comparative purposes, all gill net catch results were standardized by species as number of fish per net-hr. Nets were located at previous sampling locations where possible.

Fish caught in gill nets were sacrificed and processed on shore. We weighed and measured each individual, assessed sex and maturity, and recorded a qualitative description of stomach contents. Scales were removed from a subsample for subsequent age and growth analyses. In most instances where *Oncorhynchus Clarkii lewisi* were suspected, we preserved 25 fin clips in individual vials filled with 95% ethanol. In streams where visually identified as smaller sample was often taken in order to confirm phenotypic observations.

Amphibian surveys were conducted during lake perimeter surveys. All amphibians were identified to species and life stage. Total observed abundance of each species and life stage was approximated for each lake.

Basic water chemistry measurements were collected at shoreline and mid-lake locations using a hand-held electronic meter. Measurements included surface water temperature, PH, conductivity (uS/cm), and total dissolved solids (TDS; ppm). Water clarity was also measured from an inflatable boat with a Secchi disk between 10:00 and 17:00 while wearing polarized sunglasses. The Secchi depth reported was the mean of two replicates by independent observers. In some cases, the maximum observable Secchi depth was estimated because it exceeded the maximum depth of the lake.

Lake bathymetric maps were created using field location and depth measurements at a series of points that characterized each lake. Although the total number of points varied based on lake size and depth variability, the protocol always included locations along the entire lake perimeter and at least five transects across the water body. At each transect point, latitude and longitude measurements were collected from an inflatable boat using a hand held GPS unit. Water depth was measured with a hand held electronic depth-finder. The total number of points collected per lake generally ranged from 150-300.

Field data were transferred to spreadsheet files in the office and shipped to the FWP Information Services Unit. Once formatted, point data were processed by TIN (triangulated integrated network) mapping software to produce bathymetric maps with 2-10 ft contours. The program also calculated surface area, lake volume, etc., Features of interest such as trails, inlet streams, outlet streams and campsite/fire ring locations were later plotted on each map.

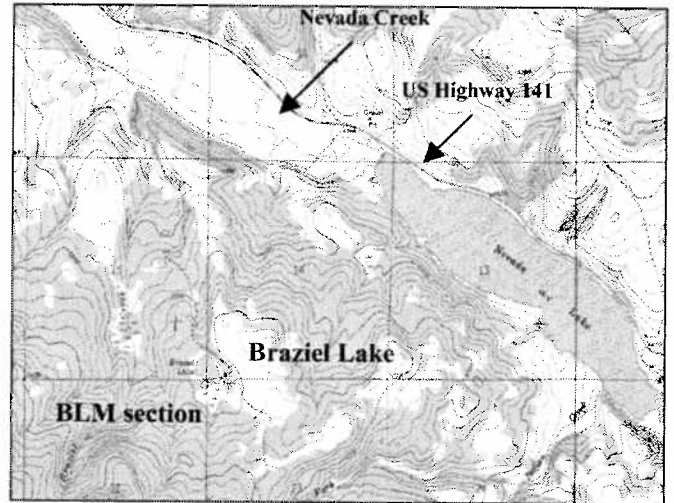
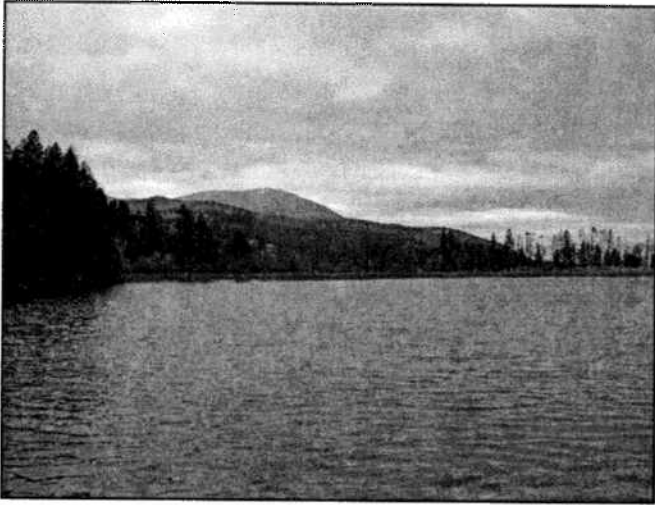
Results

Summary results of all lake surveys are located in Table X. More detailed individual descriptions of all surveyed lakes are identified below.

Table x. Summary of lake survey information collected in 2006-2007.

| Lake | Survey Date | Location | Trailhead | Miles In | Lake Features | | | | Recreation | | Fisheries | | | | Water Chemistry | | | |
|------------------------|----------------------|--|--|------------------------------|----------------|--------|-------|-----------|--|-------------------------------|--------------------------------|-----------------------------|----------------------------|----------------------------|-----------------|-----|------|-------|
| | | | | | Morph. | Elev. | Acres | Max Depth | Camp Sites | Use | # of Fish | Fish/Hr | Genetics | Size Range (inches) | Secchi depth | TDS | pH | Cond. |
| Brazier Lake | Oct-06 | Helena NF, T17N R11W S28/33. | N/A | No Access | Isolated basin | 5141' | 7.8 | 18.5' | None | Heavy, local resident, cattle | None | 1 gill net, 24 Hr | N/A | N/A | 2 | 101 | 8.36 | 203 |
| Browns Lake | 5-17-2006, 10/2/2006 | Powell County, T14N R11W S16C, 17D, 20A/B /C/D, 21B/C, 29B | N/A | 0 | Kettle Basin | 4292' | 530 | 27.4' | 10, developed | Heavy | 270 RBT (2004) | Set times were not recorded | N/A | 4.2-24.2 AVG = 12.3 | 22.6 | 166 | 8.5 | 334 |
| Camp Lake | Jul-05 | Lolo NF, T17N R11W S32. | North Fork Blackfoot River | 8 | Glacial Valley | 6161' | 15.5 | 13.9' | 1, Hardly Discernable | Light | 16 RBT | 1 gill net, 14.5 Hr = 1.1 | RBT | 5.9-13.8 Avg = 9.0 | 13.9 | 49 | 8.4 | 97 |
| Canyon Lake | Jul-05 | Lolo NF, T17N R11W S32 / | North Fork Blackfoot River | 8.5 | Glacial Valley | 5741' | 11.2 | 6.8' | 1, Marginal | Light | 18 WCT | 1 gill net, 18.5 Hr = 0.97 | WSCT | 6.5-13.5 Avg = 10.2 | 6.8 | 83 | 8.81 | 170 |
| Coopers Lake | May-06 | Lolo NF, T15N R10W S6B/C, 12A. | N/A | 0 | Glacial Valley | 4491' | 200 | 70' | 3, developed | Heavy | WSCT EBT | 0.072 0.028 | N/A | 9.5-16.9 10-14.6 | 24.6 | 66 | 8.23 | 144 |
| Heart Lake | Jul-05 | Helena NF, 16N R8W S17C/18D/19A | Indian Meadows | 4.2 | Glacial Valley | 6424' | 28.3 | 55.8' | 4, Well Established | Heavy | 17 WCT | 2 gill nets 26.8 Hr = 0.63 | Planted WSCT | 13.6-18.5 Avg = 16.1 | 37.5 | 108 | 8.71 | 216 |
| Lake Otatsy | Jul-05 | Lolo NF, T17N R11W S32 / T16N R11W S18 | North Fork Blackfoot River | 7 | Glacial Valley | 6089' | 19.1 | 32.6' | 2, Well Established 1, Marginal | Moderate | 21 RBT | 1 gill net, 14 Hr = 1.5 | RBT | 6.1-11.5 Avg = 9.7 | 21.5 | 44 | 8.13 | 89 |
| Lower Copper Lake | Jun-06 | Helena NF, T15N R9W S10C, 9D. | Option 1: Stonewall Mt Option 2: end of Copper Cr Rd | Option 1: 3 Option 2: 1 | Glacial valley | 6870' | 6.1 | 20.3' | None | Light | 2 WCT | 1 gill net, 19.2 Hr = 0.10 | WSCT | 13.3-14.8 AVG = 14.0 | 20.2 | 14 | 7.77 | 27 |
| Lower Twin Lake | Jul-05 | Helena NF, T16N R9W S6. | Option 1: Meadow Creek Option 2: Indian Meadows | Option 1: 13.75 Option 2: 12 | Glacial valley | 5900' | 6.6 | 11.6' | None | Light | 25 Trout | 1 gill net, 7 Hr = 3.66 | Hybrids YCT x WSCT x RBT | 5.7-23.6 Avg = 12.7 | 6.6 | 112 | 8.7 | 226 |
| Maddie Lake | Jul-06 | Powell County, T15N R10W S30C | | 2 | Isolated basin | 4560' | 5.6 | 33.7' | None | Light | None, Redside shiners abundant | 1 gill net, 21 Hr = 0.0 | N/A | N/A | 13.5 | 132 | 8.37 | 265 |
| Meadow Lake | Jun-05 | Helena NF, T16N R9 S18. | Option 1: Meadow Creek Option 2: Indian Meadows | Option 1: 10 Option 2: 11.7 | Glacial valley | 5800' | 4.4 | 15' | 1, Well Established | Medium | 2 RBT | 1 gill net, 16 Hr = 0.13 | RBT | 8.1-14.5 Avg = 10.3 | 4.4 | 91 | 8.03 | 181 |
| Middle Cottonwood Lake | Jul-06 | Lolo NF, T16N R14W S3D/10A | N/A | 0 | Glacial Valley | 4835' | 10.3 | 30.5' | One, primitive at boat launch | Medium | 10 RBT | 1 gill net 20.75 Hr = 0.48 | WSCT & RBT | 7.0-14.6 AVG = 10.1 | 21 | 111 | 8.78 | 224 |
| Monture Lake #1 | Jun-05 | Lolo NF, T18N R12W S17. | Monture Creek | 14.5 | Glacial Cirque | 7217' | 5.5 | 48.7' | A few places to pitch camp on eastern shore | Very Light | 2 WCT | 1 gill net 17 Hr = 0.12 | WSCT | 7.6 and 9.1 | 23.5 | 3 | 6.84 | 5 |
| Monture Lake #2 | Jun-05 | Lolo NF, T18N R12W S17. | Monture Creek | 15.25 | Glacial Cirque | 7709' | 6.9 | 18.4' | None | None | None | 1 gill net 17.5 Hr = 0 fish | N/A | N/A | 9.3 | 1 | 7.55 | 5 |
| Monture Lake #3 | Jun-05 | Lolo NF, T18N R12W S18. | Monture Creek | 16.75 | Glacial Cirque | 7641' | 4.5 | 18.4' | None | None | None | 1 gill net 17.5 Hr = 0 | N/A | N/A | 12 | 2 | 6.65 | 5 |
| Nevada Reservoir | May-06 | Powell County, T12N R10W S13A/B/D, 14A, 18 C, 19B. | N/A | 0 | Man Made | 4615' | 350 | 65.0' | One, primitive at boat launch | Moderate/ Heavy | WSCT RBT YP | Set times were not recorded | N/A | 5.0-14.0 7.2-18.6 5.2-10.1 | 5.6 | 89 | 8.18 | 179 |
| Parker Lake | Jul-05 | Helena NF, T16N R9W S9 | Indian Meadows | 8.5 | Glacial Valley | 6000' | 18.9 | 6.2' | 2, one at the base of each peninsula | Moderate | 54 YCT | 1 gill net, 18 Hr = 4.17 | Hybrids YCT x WSCT x RBT | 5.9-14.9 Avg = 10.6 | 6.2 | 142 | 8.36 | 291 |
| Two Point Lake | Jul-05 | Helena NF, T16N R9W S10 | Indian Meadows | 8.5 | Glacial Valley | 6187' | 9.5 | 10.5' | None | Very Light | None | 1 gill net 19 Hr = 0 | N/A | N/A | 10.5 | 129 | 9 | 258 |
| Upper Copper Lake | Jun-06 | Lewis and Clark County, T15N R9W S8D, 9C, 16B | Option 1: Stonewall Mt Option 2: end of Copper Cr Rd | Option 1: 3.75 Option 2: 2 | Glacial Cirque | 77.06' | 11.1 | 36.6' | None | Low | 37 WCT | 1 gill net, 19.75 Hr = 1.87 | WSCT | 6.1-15.4 AVG = 11.3 | 36.6 | 8 | 8.19 | 18 |
| Upper Cottonwood Lake | Jul-06 | Lolo NF, T16N R14W S3C/D. | | 0 | Glacial Valley | 4867' | 3.8 | 53.2' | None | Low | 9 RBT | 1 gill net, 20.5 Hr = 0.44 | WSCT & RBT | 8.6-17.0 AVG = 13.3 | 5.2 | 117 | 8.96 | 236 |
| Upper Twin Lake | Jun-05 | Helena NF, T16N R9W S5/8. | Option 1: Meadow Creek Option 2: Indian Meadows | Option 1: 13 Option 2: 10.75 | Glacial valley | 5969' | 6.3 | 10.4' | 1, open area on west shore | Light | None | 1 gill net 13.25 Hr = 0 | N/A | N/A | 10.4 | 150 | 8.57 | 300 |
| Upsata Lake | Apr/May-07 | Powell County, T15N R13W S2, 3, 10 | N/A | 0 | Isolated basin | 4130' | 90.6 | 43.0' | 4 at FAS | Moderate/ Heavy | YP LMB NP | Set times were not recorded | N/A | N/A | 11.8 | 197 | 8.26 | 394 |
| Webb Lake | Jul-05 | Helena NF, T16N R9WS14 | Indian Meadows | 6.5 | Glacial Valley | 6079' | 6 | 5.5' | Numerous places to pitch camp at Webb Lake Guard Station | Heavy | 5 WCT | 2 gill nets 32.5 Hr = 0.15 | WSCT with some RBT markers | 6.5-14.5 Avg = 8.5 | 5.5 | 109 | 9.25 | 216 |

Braziel Lake



Description: In the upper Braziel Creek drainage, Braziel Lake is a small (7.4 acres) kettle lake (elevation of 5,141') and is located 3.2 miles due east of Hoodoo Mountain and 1.2 miles southwest of Nevada Lake (Reservoir) in the eastern Garnet Mountain Range (see above map). Private ranch surrounds the lake except for the very west-southwest side of the lake (section 22), which is Bureau of Land Management land (BLM).

Location: T12N, R10W, Sections 14, 15, 22 and 23; Latitude N47.78848°, Longitude W112.83057°; Nearest Town: Helmville.

Public Access: The very corner of section 22 of BLM land touches Braziel Lake (see above map), which appears to limit public access to this single site. "Corner-crossing" at section lines is not recommended. Recreationists are advised to obtain permission from the adjacent landowners to reduce conflict and ensure compliance with applicable access laws and rules.

Camp Sites and Use: Because the majority of lake's perimeter is privately owned land, there are no camping areas on Braziel Lake.

Angling Opportunity: Our 2006 gill net survey found no fish in Braziel Lake. However, the lake was recently planted by adjacent private landowner. Many areas of the immediate shoreline are marshy with cattails, sedges and rushes.

Stocking History: The lake has been periodically stocked by private landowners, most recently in 2007

Angling Pressure: unknown

Other Nearby Lakes: Nevada Lake (Reservoir) is only other lake in the immediate vicinity of Braziel Lake. Nevada Lake can be access from Highway 141 approximately 10.6 miles southeast of Helmville or 20.2 miles northwest of Avon.

Braziel Lake: Biological & Physical Information

Date Sampled: 10/18-19/2006

Water Code: None

Game Fish Present: WSCT

Other Fish Species Present: None

Size Captured: NA

Trout Condition (Wr): NA

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: NA

Natural Recruitment: NA

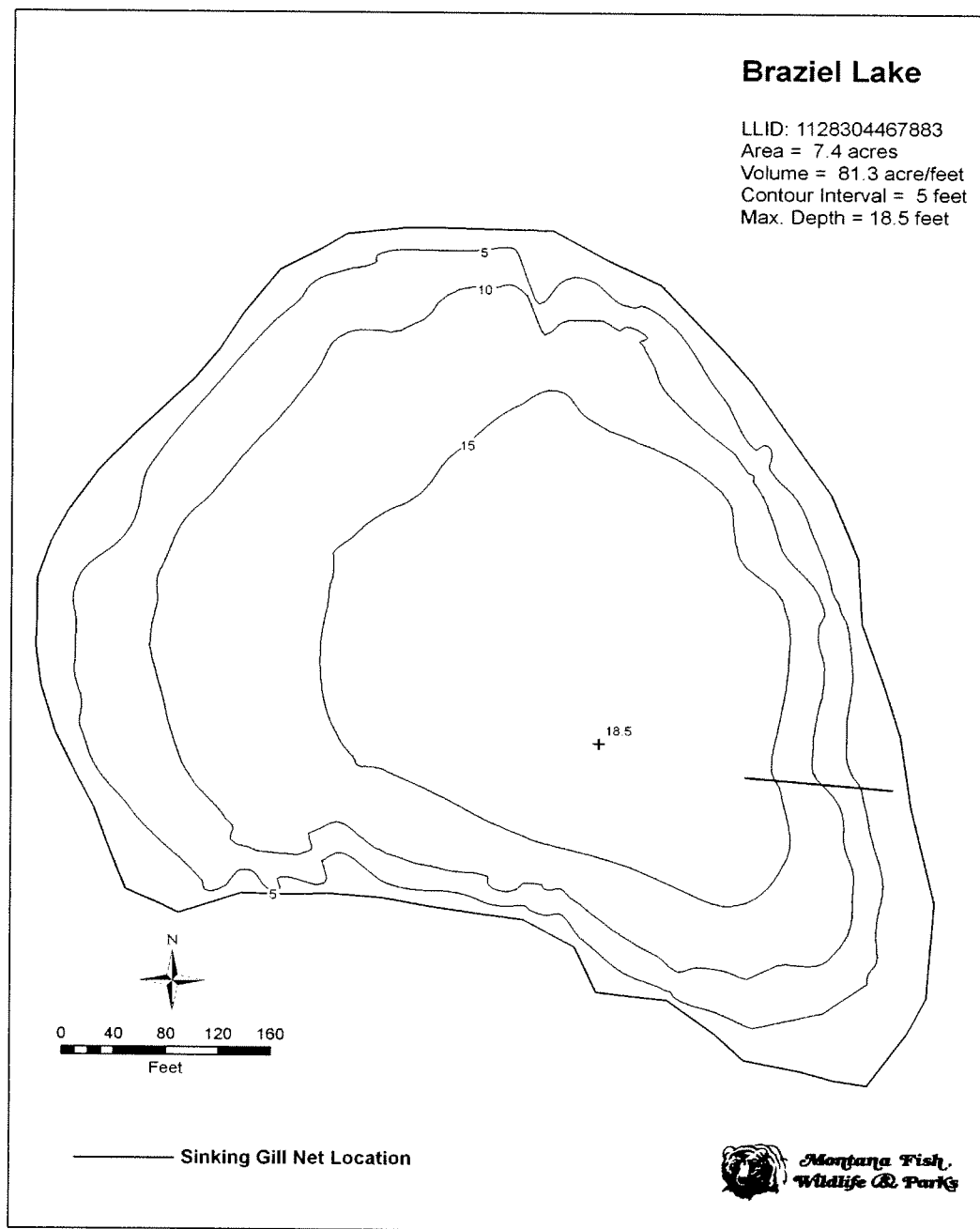
Amphibians Observed: None

Management Objectives: Explore opportunities to improve public access to the lake. Consider stocking program that provides for limited public recreation.

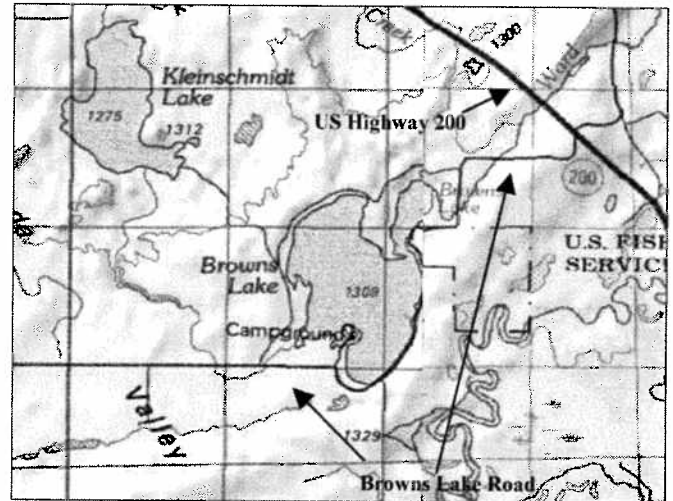
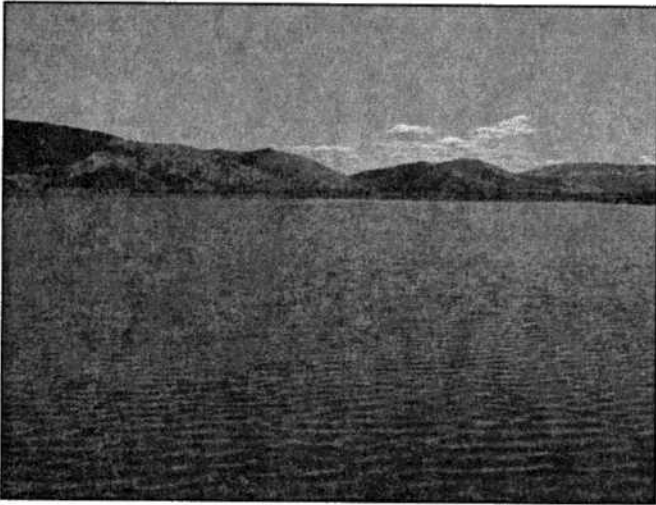
Currently Stocked: Yes (by private landowner) **Last Stocked:** 2007 (private landowners)

Species: Westslope Cutthroat Trout **Recommended Stocking Frequency:** NA

Water Chemistry: pH: 8.36 TDS: 101 ppm Conductivity: 203 uS Secchi Depth: 2.0 ft



Browns Lake



Description: Browns Lake is a large (549.9-acre) “pothole” lake located in the “knob and kettle” topography of Kleinschmidt Flats near the middle Blackfoot River watershed. The lake sits at an elevation of 4,294’ and is bordered primarily by private ranchlands except for about 80-acres of state land on the northeast corner of the lake. Portions of the eastern shoreline are owned by USFW for waterfowl production. Ward Creek enters at the northeast corner and exits at the southwest corner of the Browns Lake with estimated flows ranging from 0.5-5cfs.

Location: T14N, R11W, Sections 16,17,20,21 & 29; Latitude N46.9523°, Longitude W113.0110°; Nearest Town: Ovando.

Public Access: Access to Browns Lake can be reached from Ovando or Helmville by using the Ovando-Helmville Road then turning east for 4 miles on the Browns Lake Road. Access can be obtained from US Highway 200 by turning south for 3 miles on the Browns Lake Road. Browns Lake is signed from Ovando and Highway 200.

Camp Sites and Use: Browns Lake has an established campground under lease and by maintained by Montana Fish, Wildlife and Parks. This “fee” area has 15 camp sites with fire rings, two boat ramps and toilets. There are numerous other undeveloped (primitive) camp sites on the eastern shore of the lake along Browns Lake Road.

Angling Opportunity: Browns Lake is a productive “put-and-take” rainbow trout fishery. The lake also supports an abundant number of longnose suckers. Primary means of fishing is done from a boat or through the ice. Shoreline topography lends well to shoreline angling from most of the lake’s perimeter.

Stocking History: From 1953 through 2006 annual stocking has occurred with primarily rainbow trout augmented with periodic stockings of westslope cutthroat trout in 1959, 1989, 1994 and 1998 and Coho salmon between 1953-55, and 1968-69. Currently Browns Lake is stocked annually with ~50,000 rainbow trout.

Angling Pressure: From March 2005 to February 2006, estimated angling pressure for Browns Lake supported 10,078 angler-days.

Other Nearby Lakes: Kleinschmidt Lake (a fishless lake surrounded by private land), approximately one mile to the northwest is the only other lake in the immediate vicinity of Browns Lake.

Browns Lake: Biological & Physical Information

Date Sampled: 9/9-10/2007, 5/10, 16, 17 & 10/2/2006,
9/ 8 – 11/2004

Water Code: 04-6210

Game Fish Present: Rainbow trout

Other Fish Present: Longnose sucker, redbside shiner

Size Captured: Mean 14.8 inches (range 6.2 - 22.8 inches)

Trout Condition Factor (Wr): Mean 113 ± 16.1 (range 42 – 157)

Amphibians Observed: Spotted frogs (adults & larvae), painted turtles

Sampling Methods: Floating and Sinking Gill
Nets

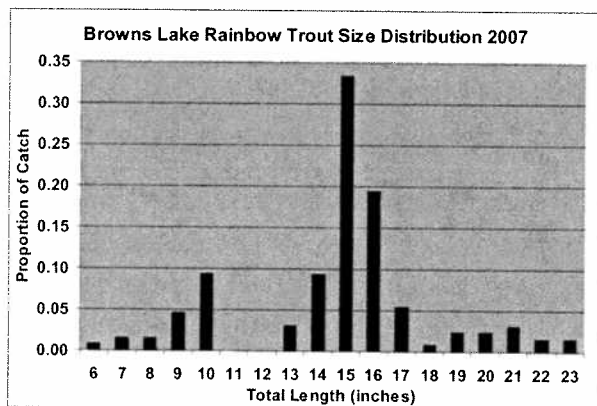
Gill Net Catch Rate: 0.9/trout/net/hr

Natural Recruitment: NA

Management Objectives: Continue existing annual stocking fishery and investigate alternative strains and timing of rainbow trout plants.

Currently Stocked: Yes **Last Stocked:** Stocked annually **Species:** RBT **Recommended Frequency:** Annually

Water Chemistry: pH: 8.50 TDS: 166 ppm Conductivity: 334 uS Secchi Depth: 22.6 ft



Stocking History

| Year | Species | # Stocked |
|----------------------------|---------|-----------|
| 2006-1932 periodically | RBT | 2,779,083 |
| 1998 -1959 periodically | WSCT | 72,856 |
| 1969-1940 periodically | Coho | 327,590 |
| 1937 | Kokanee | 63,200 |
| 1931, 1928 | Chinook | 73,000 |

Browns Lake

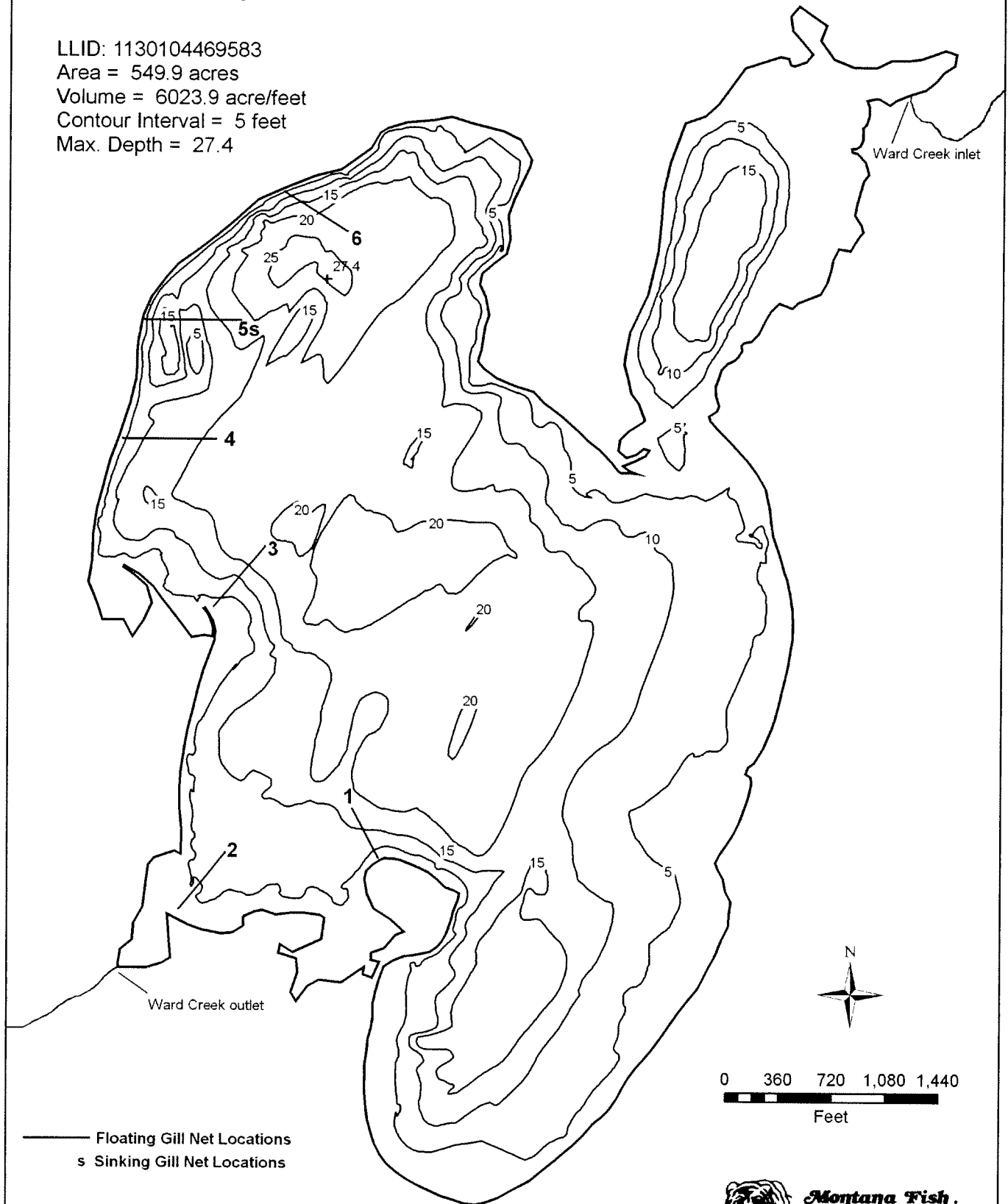
LLID: 1130104469583

Area = 549.9 acres

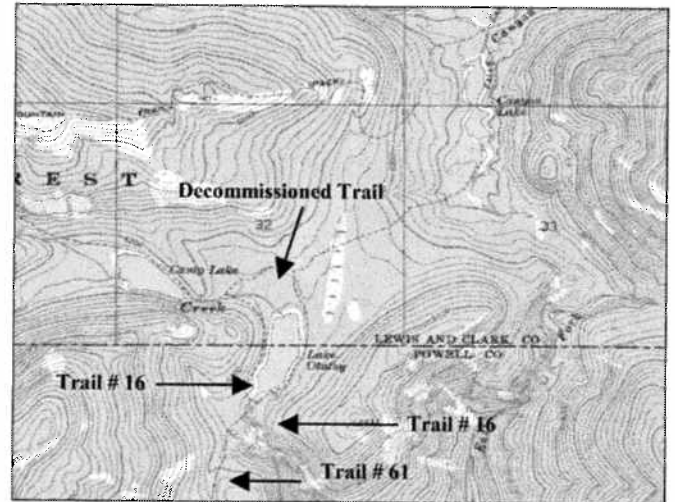
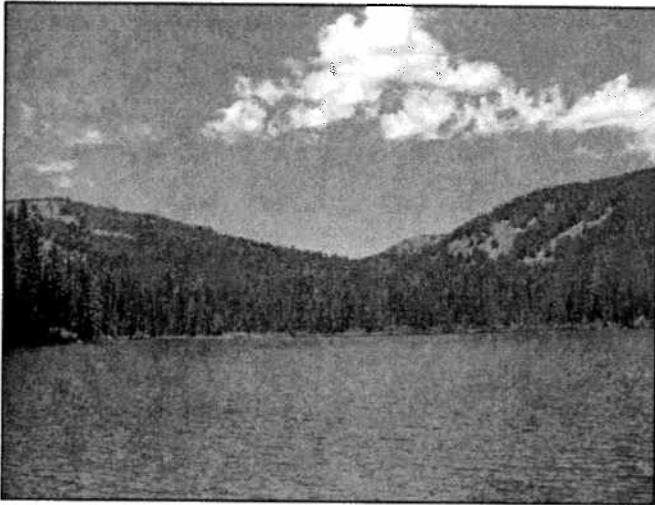
Volume = 6023.9 acre/feet

Contour Interval = 5 feet

Max. Depth = 27.4



Camp Lake



Description: Camp Lake is a small (17.8 acres) glacial valley trough lake located approximately 1.5 miles north of East Spread Mountain near the southwestern boundary of the Scapegoat Wilderness. The lake lies within the Lolo National Forest in a proposed wilderness area at 6,161' in North Fork Blackfoot River drainage.

Location: T17N, R11W, Section 32; Latitude N47.1811°, Longitude W113.0394°; Nearest Town: Ovando.

Public Access: Access to Camp Lake can be obtained by taking Highway 200 from Ovando ~19 miles to the McCabe-Lake Creek Trail at North Fork Blackfoot River Trailhead. From the trailhead either hike or pack in on horses following USFS Trail #61 (McCabe-Lake Creek Trail) to its intersection with USFS Trail #1404, approximately 4.0 miles from the trailhead. The USFS Trail #61 changes its name to Lake Otatsy Trail and continues north to the southern end of Lake Otatsy where it intersects with USFS Trail #16 which splits and follows both sides of Lake Otatsy. The trail on the west side of Lake Otatsy continues on for another 0.7 miles to Camp Lake. The Camp Lake route is approximately 7.7 miles distance, with a moderate difficulty.

Camp Sites and Use: Camp Lake lies in a remote setting that receives very light recreational use. Only one very primitive camp site was observed near the Lake Creek inlet on the western side of the lake. "Leave no trace" camping and recreating is essential in this area as it is proposed wilderness. Camping is available nearby at Lake Otatsy.

Angling Opportunity: Camp Lake supports a wild rainbow trout population through natural reproduction. Shoreline topography is brushy and may hinder shoreline angling in most areas.

Stocking History: Historically planted with rainbow trout, Camp Lake now supports a self-sustaining rainbow population.

Angling Pressure: From March 2005 to February 2006, estimated angling pressure for Camp Lake supported 50 angler-days.

Other Nearby Lakes: There are two other lakes in the general vicinity of Camp Lake that lies in the North Fork Blackfoot River drainage. Lake Otatsy is approximately 0.4 miles southeast of Camp Lake and is passed on USFS Trail #16 on the way to Camp Lake. USFS Trail #16 splits at the southern end of Lake Otatsy. The trail on the eastern side of Lake Otatsy leads to Canyon Lake, approximately 1.5 miles northeast of Camp Lake.

Camp Lake: Biological & Physical Information

Date Sampled: 7/12-13/2005

Water Code: 04-6240

Game Fish Present: Rainbow trout

Other Fish Present: None

Size Captured: Mean 9 inches (range 5.9-13.8 inches)

Trout Condition (Wr): Mean 86 ± 17.7 (range 71-147)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 1.1 trout/net/hr

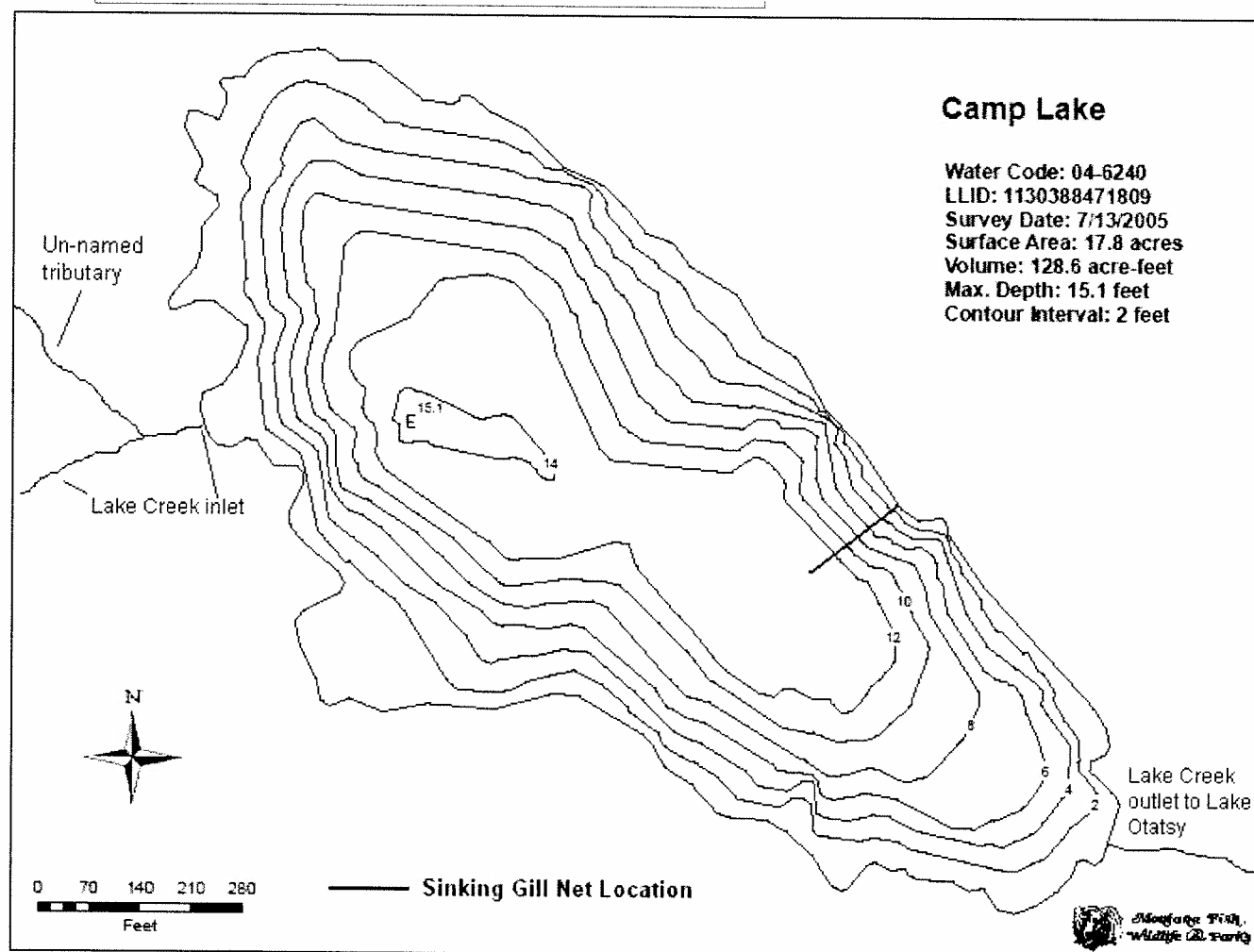
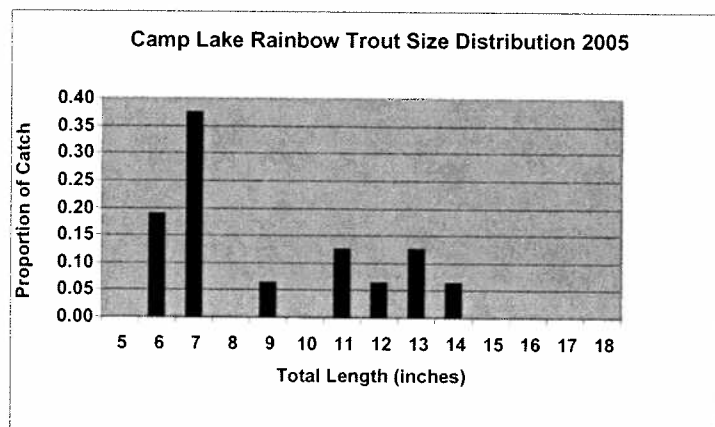
Natural Recruitment: Present (limited)

Amphibians Observed: Spotted Frogs (adults)

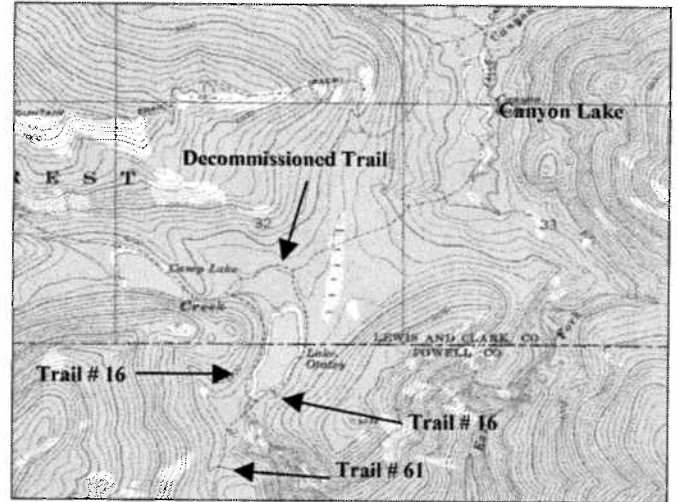
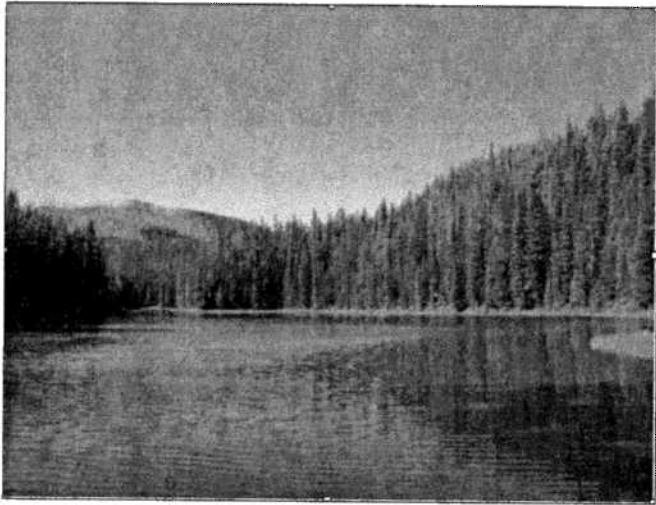
Management Objectives: Continue as a self-sustaining rainbow trout fishery.

Currently Stocked: No **Last Stocked:** Unknown **Species:** RB **Recommended Frequency:** NA

Water Chemistry: pH: 8.4 TDS: 49ppm Conductivity: 97uS Secchi Depth: 13.9 ft



Canyon Lake



Description: Canyon Lake is a shallow 11.5 acres glacial valley lake located approximately 2.7 miles northeast of East Spread Mountain near the southwestern boundary of the Scapegoat Wilderness. The lake lies within the Lolo National Forest in a proposed wilderness area at an elevation of 5,741 ft, within the Dry Fork drainage of the North Fork Blackfoot River watershed.

Location: T17N, R11W, Section 28, 33; Latitude N47.19213°, Longitude W113.01548°; Nearest Town: Ovando.

Public Access: Access to Canyon Lake can be obtained by taking Highway 200 from Ovando approximately 19 miles to the North Fork Blackfoot River Trailhead. From the trailhead either hike or pack in on horses along USFS Trail #61 (McCabe-Lake Creek Trail) to its intersection with USFS Trail #1404, about 4.0 miles from trailhead. USFS Trail #1404 retains the McCabe-Lake Creek Trail name. The USFS Trail #61 changes its name to Lake Otatsy Trail and continues north to the southern end of Lake Otatsy where it intersects with USFS Trail #16 (Falls-Canyon Trail). USFS Trail #16 (Falls-Canyon Trail) loops around the southern end of Lake Otatsy following both shores. The trail on the west side of Lake Otatsy leads north to Camp Lake (~ 0.7 miles). The trail on the east side of Lake Otatsy continues on in a northeasterly direction for another 1.7 miles to Canyon Lake. The Canyon Lake route is approximately 8.5 miles distance from the North Fork trailhead, with a moderate difficulty.

Camp Sites and Use: Canyon Lake lies in a remote setting and appears to support light recreational use, except during hunting season during which time the Canyon Lake area serves hunting camps. The USFS Trail #16 (Lake Otatsy Trail) is a well established trail that skirts the eastern side of the lake. Numerous primitive camp sites are located around the lake; one near the inlet on the northern end of the lake, a second site near a small inlet on the southeast corner of the lake and a couple near the outlet. "leave no trace" camping and recreating is essential in this area as it is a proposed wilderness.

Angling Opportunity: Canyon Lake supports a small population of westslope cutthroat trout through natural reproduction from Canyon Creek. Genetic testing suggests a potentially pure strain of westslope cutthroat trout in the lake. Shoreline topography is steep and brushy in areas and may hinder shoreline angling.

Stocking History: NA

Angling Pressure: NA

Other Nearby Lakes: There are two other lakes in the general vicinity of Canyon Lake. Lake Otatsy is approximately 1.7 miles southwest along USFS Trail #16 on the way to Canyon Lake. Camp Lake is about 2.5 mile southwest of Canyon Lake along USFS Trail #16 following the trail along the western side of Lake Otatsy. A short trail of approximately 0.3 miles in length north of Lake Otatsy that connected Camp and Canyon Lakes has been decommissioned (see map).

Canyon Lake: Biological & Physical Information

Date Sampled: 7/13-14/2005

Water Code: 04-6270

Game Fish Present: Westslope Cutthroat Trout

Other Fish Present: None, although bull trout were historically present

Size Captured: Mean 10.3 inches (range 6.5 - 13.5 inches)

Trout Condition (Wr): Mean 103 ± 9.5 (range 85 - 122)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 0.97 trout/net/hr

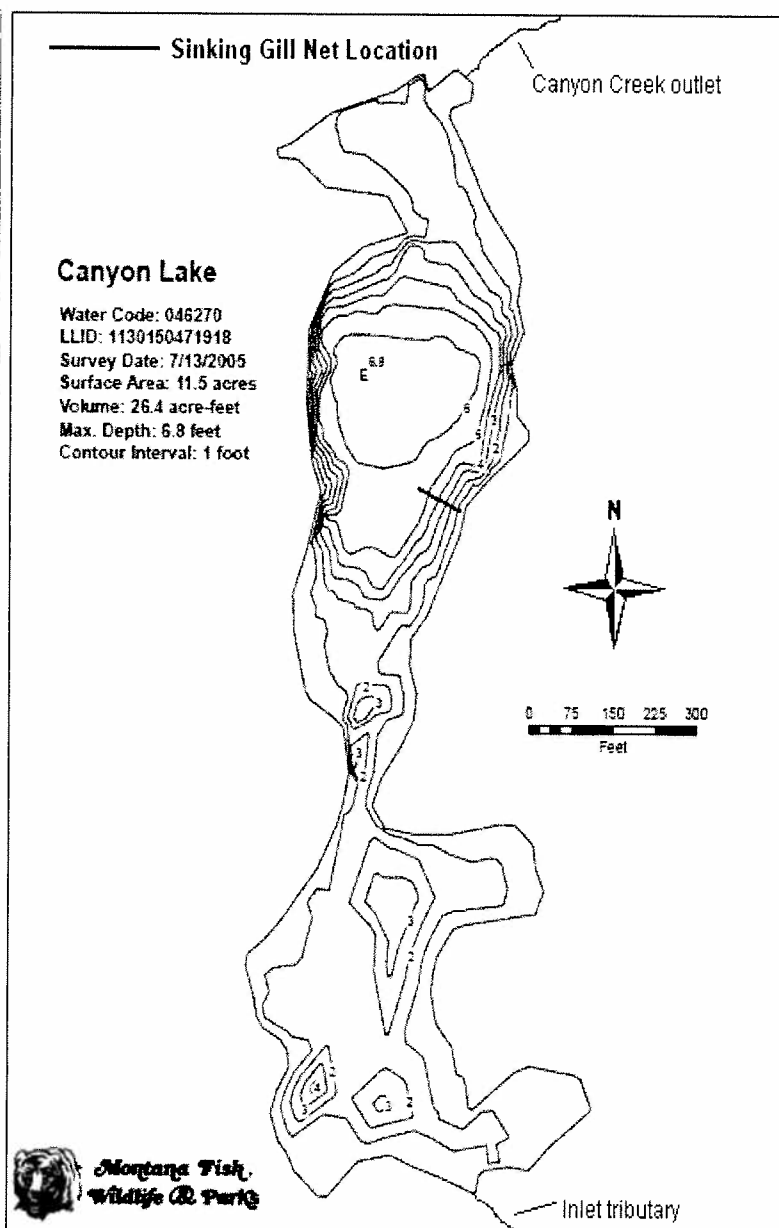
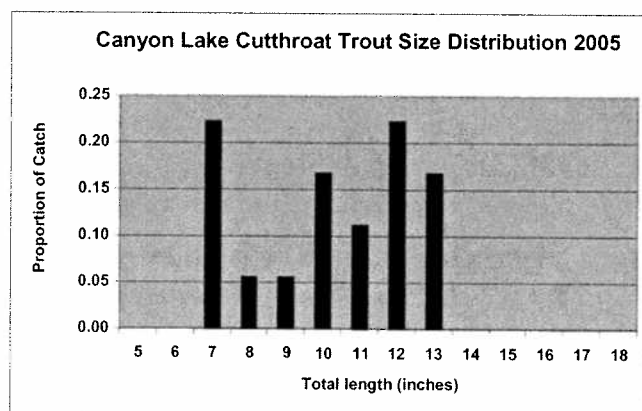
Natural Recruitment: Present (limited)

Amphibians Observed: Western Toad (adult)

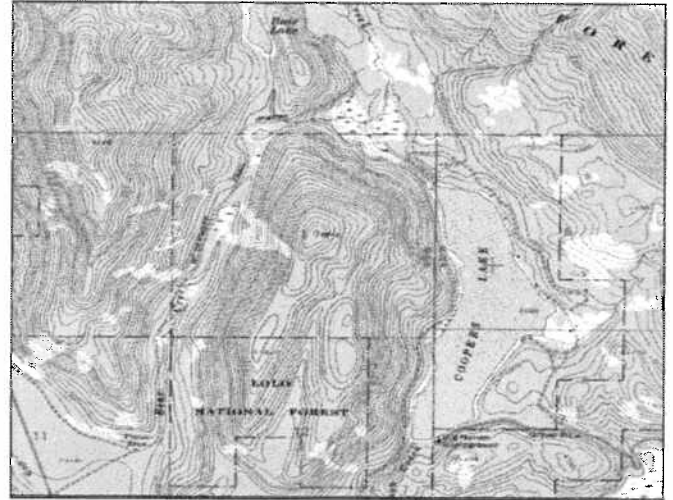
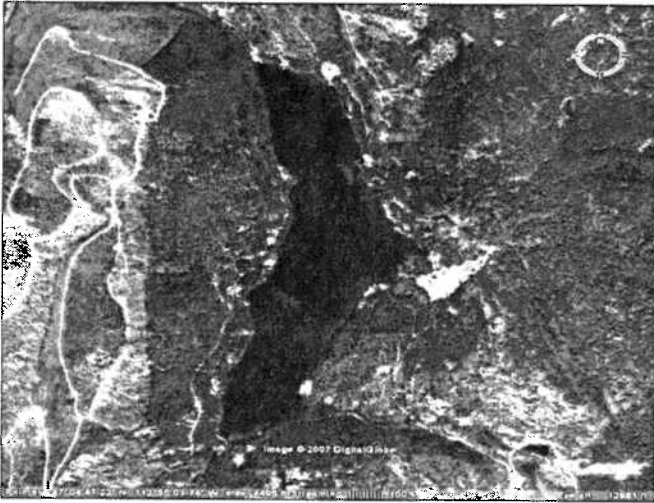
Management Objectives: Continue to manage as native population of pure westslope cutthroat trout

Currently Stocked: No **Last Stocked:** NA **Species:** NA **Recommended Frequency:** None

Water Chemistry: pH: 8.81 TDS: 83ppm Conductivity: 170uS Secchi Depth: 6.8 feet



Coopers Lake



Description: Coopers Lake is a 215.5 acres glacial trough lake located northeast of Kleinschmidt Flat at an elevation of 4,491'. The lake is bordered primarily by privately owned land on all side with the exception of approximately 10 acres on the south end of the lake that lies within the Lolo National Forest (Seeley Lake Ranger District). McDermott Creek enters the northern end of the lake and contributes approximately 10-15cfs. On the eastern side of the lake, an un-named tributary and numerous small feeder springs contribute approximately 2-5cfs. Coopers Lake's outlet stream forms Salmon Creek, which flows south to its junction with Dry Creek and form Rock Creek, a tributary to North Fork Blackfoot River.

Location: T15N, R10&11W, Sections 1, 6, 7 &12; Latitude N47.07762°, Longitude W112.91864°; Nearest Town: Ovando.

Pubic Access: Coopers Lake can be accessed from Ovando by traveling east on Highway 200 approximately 6.2 miles, then turning north on North Fork Blackfoot River Trailhead road for 2.2 miles. At the crossroads turn east and continue approximately 3.0 miles to the intersection with Dry Creek road, turn north and continue 6.5 miles to the lake. An alternate route is to travel east along US highway 200 to the Dry Creek road (approximately 8.3 miles east of Ovando) turn north and continue approximately 11.4 miles to the lake. The route to Coopers Lake is signed from both directions.

Camp Sites and Use: USFS Big Nelson Campground on the south end of the lake offers three basic campsites with a restroom facility near a boat ramp. The lake experiences light use.

Angling Opportunity: Coopers Lake contains primarily hatchery westslope cutthroat trout, along with brook trout, northern pikeminnow and longnose sucker. Primary means of fishing is done from a boat or through the ice. Because the majority of the land adjacent to the lake is privately owned, shoreline angling is limited to USFS land unless landowner permission is granted. The surrounding topography is heavily timbered, rocky, steep and very brushy that may hinder shoreline angling.

Stocking History: From 1936 through 1953, Coopers Lake was annually stocked with cutthroat and rainbow trout followed by only cutthroat trout in 1955 and 1956. The lake was again stocked periodically from 1969 to 2005 with westslope cutthroat trout. Currently Coopers Lake receives and annual plant of 4,000 WSCT greater than 6 inches.

Angling Pressure: From March 2005 through February 2006, the estimated angling pressure for Coopers Lake was 756 angler-days.

Other Nearby Lakes: Bear Lake is approximately 1.0 mile to the northwest and is the only other lake in the immediate vicinity of Coopers Lake. Access to Bear Lake can be obtained from a small trailhead along an unmarked dirt road that spurs off from the North Fork Blackfoot River Trailhead road in section 11. The McDermott Creek Trail #17 crosses Bear Creek outlet stream approximately 2.0 miles from the trailhead and then requires bushwhacking upstream along the outlet stream 0.4 miles to the lake (see map).

Coopers Lake: Biological & Physical Information

Date Sampled: 5/23-25/2006

Water Code: 046330

Game Fish Present: Westslope Cutthroat & Eastern Brook Trout

Sampling Methods: Sinking & Floating
Gill Nets

Other Fish Present: Northern pikeminnow, longnose sucker and reidside shiner

WSCT Size Captured: Mean 12.8 inches (range 9.5-16.9 inches)

Gill Net Catch Rate: 0.072/WSCT/net/hr

WSCT Condition Factor (Wr): Mean 103 (range 92-115)

Natural Recruitment: Present (limited)

EBT Size Captured: Mean 12.2inches (range10-14.6inches)

Gill Net Catch Rate: 0.028/EBT/net/hr

EBT Condition Factor (Wr): Mean 111 (range 100-121)

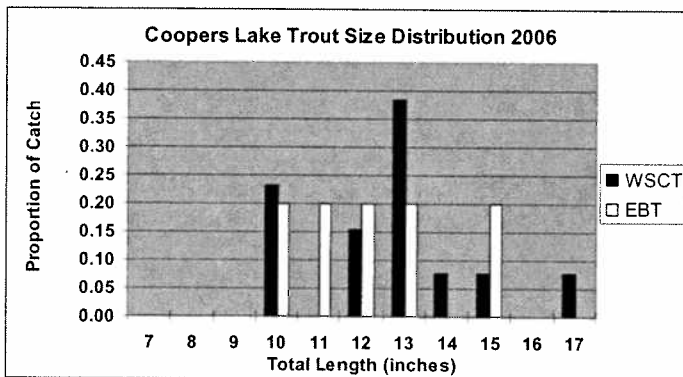
Natural Recruitment: Present (limited)

Amphibians Observed: None observed

Management Objectives: Continue annual stocking and evaluate stocking program.

Currently Stocked: Yes **Last Stocked:** 2005 **Species:** WSCT **Recommended Frequency:** Annually

Water Chemistry: pH: 8.23 **TDS:** 66ppm **Conductivity:** 144 uS **Secchi Depth:** 24.6ft



Stocking History

| Year | Species | # Stocked |
|---------------------------|---------|-----------|
| 2005-1969 | WSCT | 284,866 |
| 1969-1936 periodically | CT | 234,138 |
| 1953-1937 periodically | RBT | 152,704 |

Coopers Lake

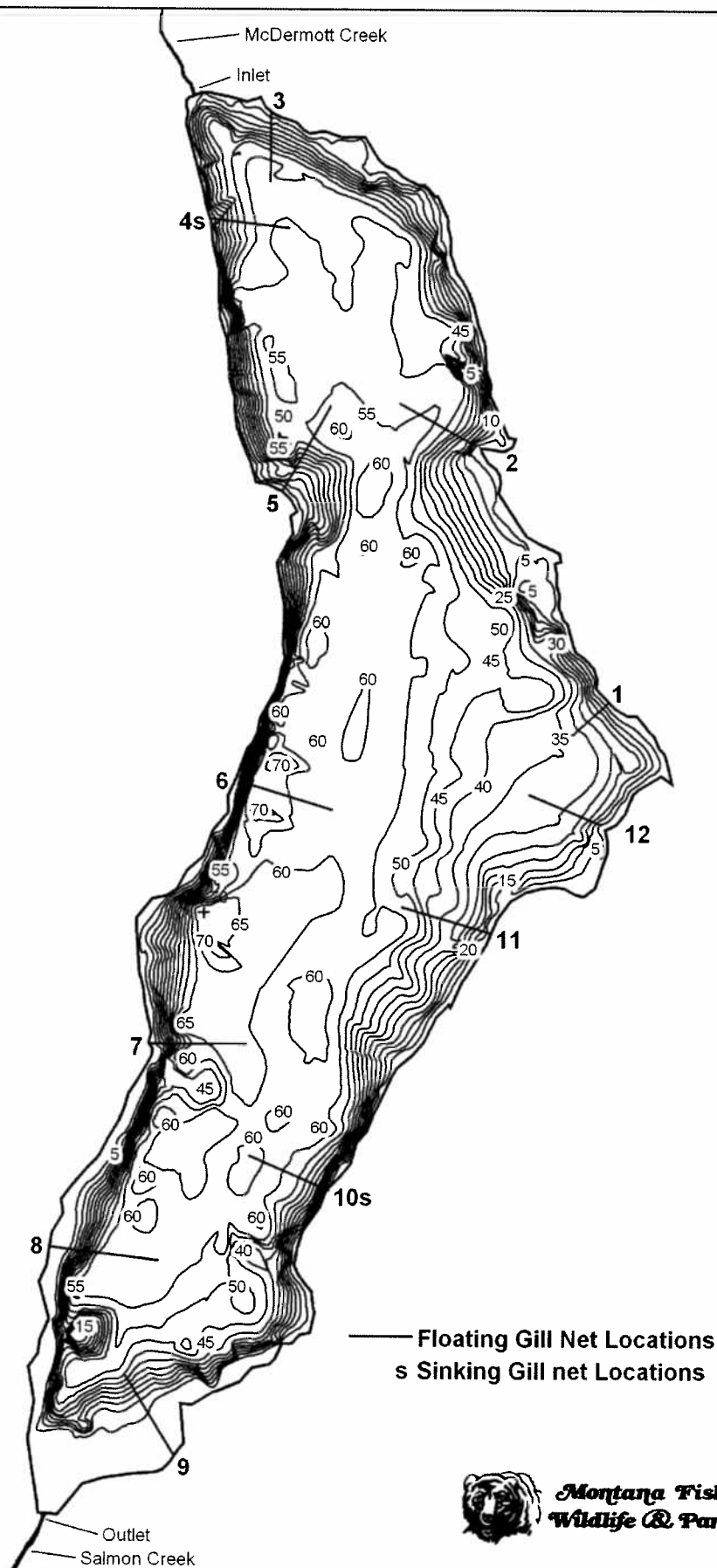
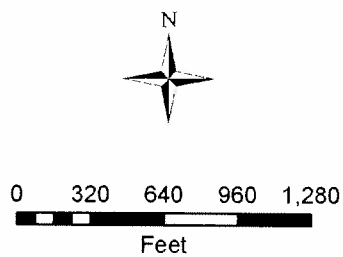
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Area = 215.5 acres

Volume = 8606.4 acre/feet

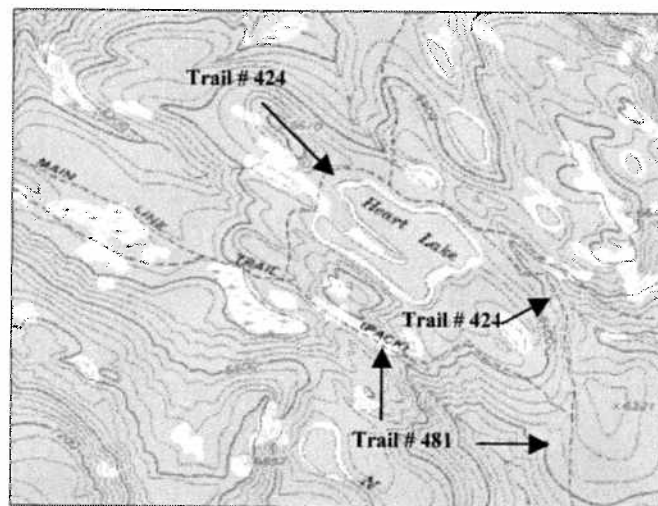
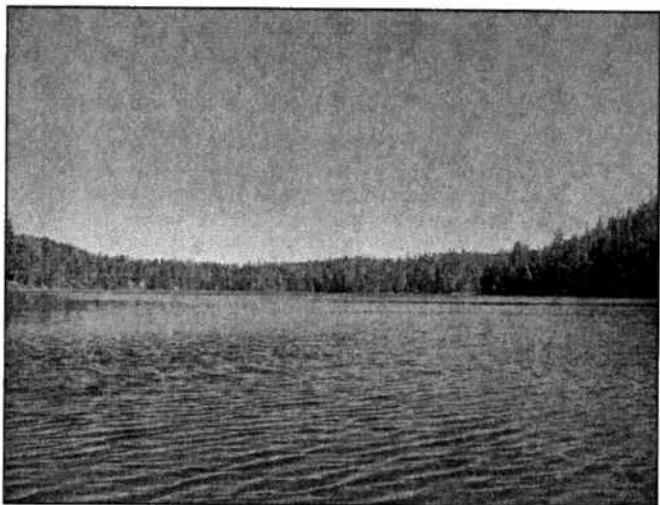
Contour Interval = 5 feet

Max. Depth = 70 feet



**Montana Fish
Wildlife & Parks**

Heart Lake



Description: Heart Lake is a moderate sized (31.6 acres) glacial valley lake located approximately 4.2 miles northeast of Red Mountain and 5.0 miles west of the Continental Divide. The lake lies within the Scapegoat Wilderness, Helena National Forest (Lincoln Ranger District) at 6,424ft elevation in Landers Fork of the Blackfoot River drainage.

Location: T16N, R8W, Sections 17, 18 &19; Latitude N47.13774°, Longitude W112.65070°; Nearest Town: Lincoln.

Public Access: Access to Heart Lake can be obtained by taking Highway 200 east from Lincoln approximately 6.2 miles to the Copper Creek road. Follow the Copper Creek road approximately 10.2 miles to the Indian Meadows Trailhead. From the trailhead either hike or pack in on horses along USFS Trail #481 (Main Line Pack Trail) 4.1 miles to its intersection with USFS Trail #424 (Heart Lake Trail) and follow Trail #424 the final 0.7 miles into Heart Lake (see map). The Heart Lake route is approximately 4.8 miles distance, with moderate difficulty.

Camp Sites and Use: Because of Heart Lake's relatively short distance within the Scapegoat Wilderness boundary on a well maintained trail system, it receives moderate-to-heavy recreational use. Four campsites were observed. Two campsites were observed along the southeast shoreline, one site along northeast shoreline and one along the north-northwest shoreline. All four campsites show heavy use. Pack stock is not allowed within 200 feet of the shore. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Heart Lake is managed as a "put-and-take" Arctic grayling and westslope cutthroat trout fishery. Areas of the shoreline topography are brushy, heavily timbered and moderately steep; however, there are many areas that lend well to shoreline angling.

Stocking History: Heart Lake has a long history of Arctic grayling stocking, and more recently it was stocked in 1996 with grayling and in 2001 the plant was converted with westslope cutthroat trout due to shortages of available arctic grayling. In 2006, both westslope cutthroat trout and Arctic grayling were planted in Heart Lake.

Angling Pressure: Moderate

Other Nearby Lakes: There are numerous small un-named pot-hole lakes averaging approximately 2.5 acres in size in the near vicinity of Heart Lake. Webb Lake is about 2.3 miles northwest of Heart Lake. To access Webb Lake, follow the Heart Lake Trail #424 back to and continue west-northwest along the Main Line Pack Trail #481(see map) access to Parker and Two Point Lakes are also west- northwest along Main Line Pack Trail #481. Two Point Lake is about 4.3 miles then right on Trail #479 for additional 0.4 miles and Parker Lake is ~5.0 miles from Heart Lake along the Main Line Pack Trail #481. Travel is moderately difficult to these other lakes.

Heart Lake: Biological & Physical Information

Date Sampled: 7/18-19/2005

Water Code: 04-6690

Fish Species Present: Westslope Cutthroat Trout

Other Fish Present: Arctic Grayling

Size Captured: Mean 16.1 inches (range 13.6-18.5 inches)

Trout Condition (Wr): Mean 110 ± 13.5 (range 94-143)

Amphibians Observed: Spotted Frogs (adults)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 0.64 trout/net/hr

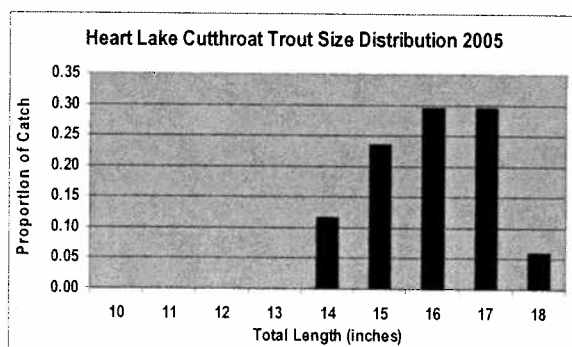
Natural Recruitment: NA

Management Objectives: Continue as a "put and take" fishery for WSCT and Arctic grayling and periodically evaluate planting program.

Currently Stocked: Yes **Last Stocked:** 2006 **Species:** WSCT and Arctic grayling

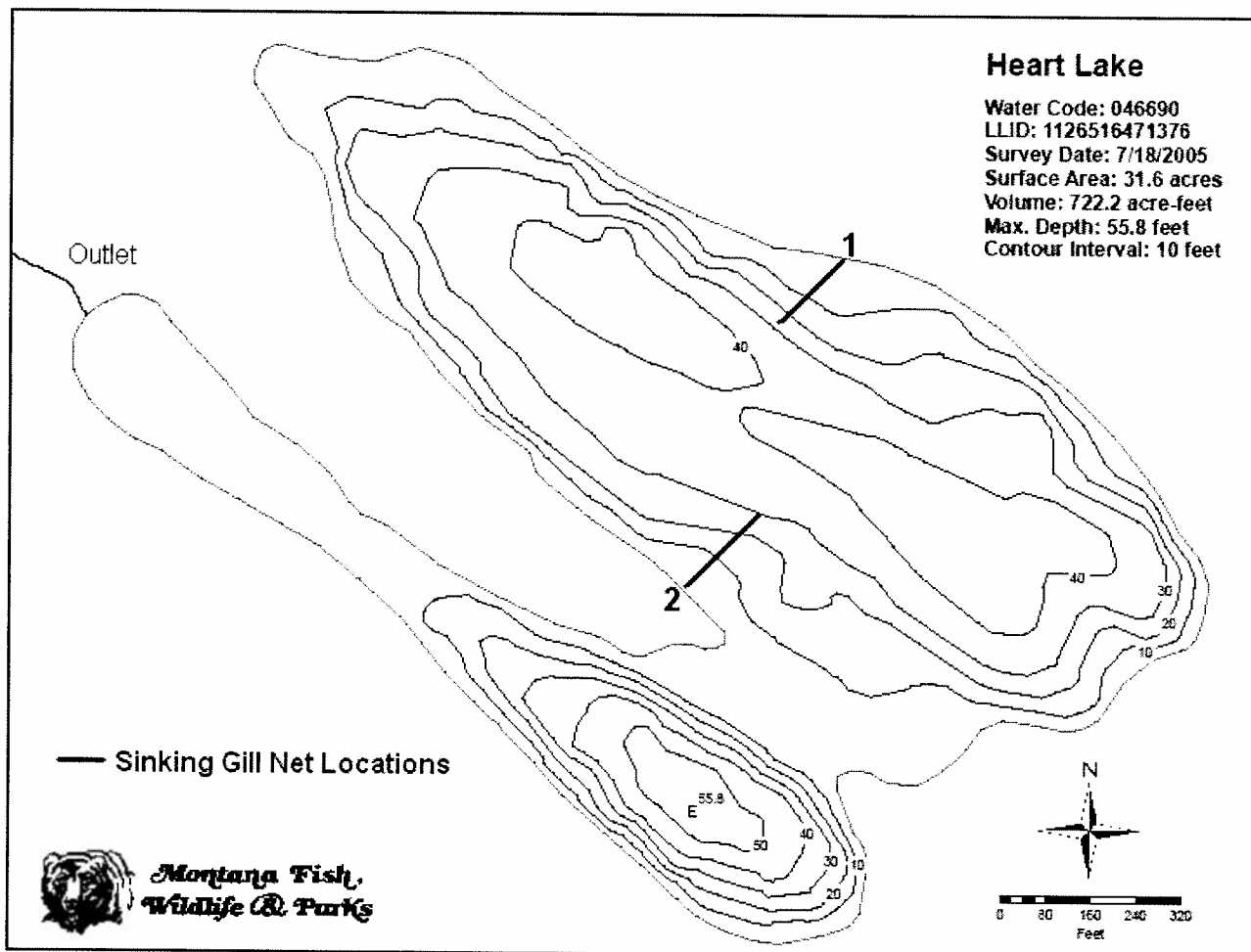
Recommended Frequency: 4-6 years for WSCT and 10 years for Arctic grayling

Water Chemistry: pH 8.71 **TDS:** 108ppm **Conductivity:** 216uS **Secchi Depth:** 37.5ft

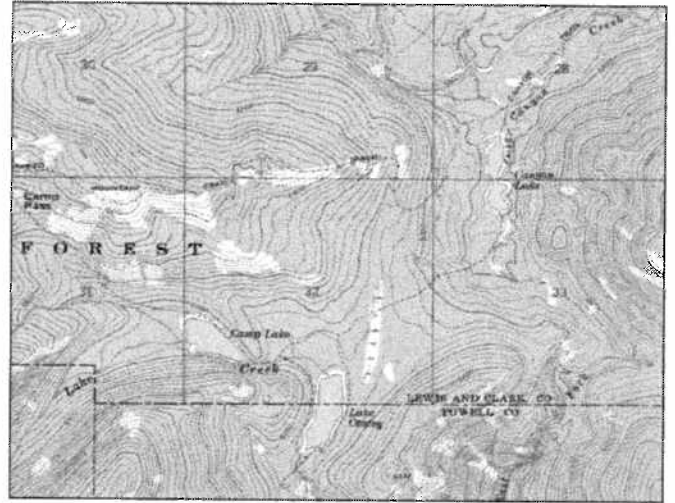
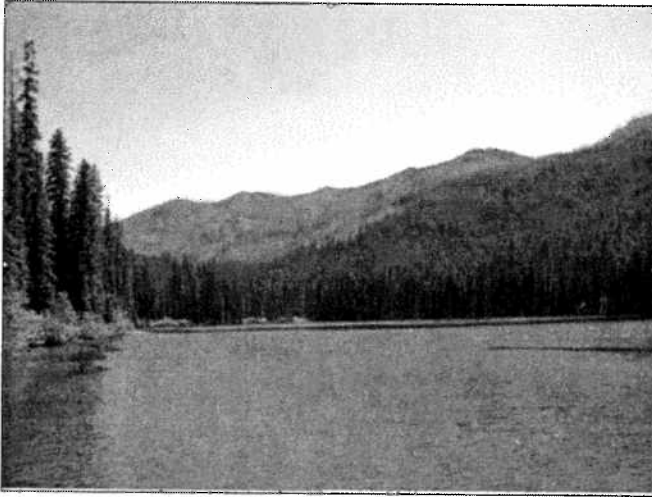


Stocking History

| Year | Species | # Stocked |
|----------------------------|---------|-----------|
| 2001-1988 periodically | WSCT | 11,587 |
| 1989 -1932 periodically | GR | 884,500 |
| 1952 -1942 periodically | CT | 48,704 |
| 1937 | RBT | 10,000 |



Lake Otatsy



Description: A small glacial valley trough lake, Lake Otatsy is 22.3 acres in size and located approximately 1.5 miles northeast of East Spread Mountain near the southwestern boundary of the Scapegoat Wilderness. The lake lies within the Lolo National Forest (Seeley Lake Ranger District) on a proposed wilderness area at 6,069' elevation in the North Fork Blackfoot River drainage.

Location: T16N, R11W, Section 6; T17N, R11W, Section 32; Latitude N47.17626°, Longitude W113.02958°; Nearest Town: Ovando.

Public Access: Access to Lake Otatsy can be obtained by taking Highway 200 from Ovando northeast 19 miles to the North Fork Blackfoot River Trailhead. From the trailhead, travel along USFS Trail #61 (McCabe-Lake Creek Trail) to its intersection with USFS Trail #1404, about 4.0 miles. The USFS Trail #61 changes its name to Lake Otatsy Trail and continues north 3.0 miles to the southern end of Lake Otatsy where it intersects with USFS Trail #16 (Falls-Canyon Trail), which divides and follows both sides of Lake Otatsy. The Lake Otatsy route is ~7.0 miles distance from the North Fork Blackfoot River Trailhead, with a moderate degree of difficulty.

Camp Sites and Use: Lake Otatsy lies in a remote setting that receives light recreational use. The USFS Trail #16 (Falls-Canyon Trail) follows both sides of the lake. Three primitive camp sites were observed with light to moderate use. One site was located near the Lake Creek outlet on the east-southeastern end of the lake. A second site was located on the east-northeastern end of the lake and a third site near the middle of the lake on the western shore. "Leave no trace" camping and recreating is essential in this area as it is a proposed wilderness.

Angling Opportunity: Lake Otatsy supports "wild" rainbow trout through natural reproduction. The shoreline topography lends well to shoreline angling for most of the lake perimeter.

Stocking History: Lake Otatsy was historically planted with rainbow trout and is now a self-sustaining population in high abundance.

Angling Pressure: Light

Other Nearby Lakes: There are two other lakes in the vicinity of Lake Otatsy that lie in the North Fork Blackfoot River drainage. Camp Lake is northwest of Lake Otatsy 0.7 miles from the intersection of USFS Trail #61 (Lake Otatsy Trail) and USFS Trail #16 (Falls-Canyon Trail) at the southern of Lake Otatsy. Canyon Lake is approximately 1.7 miles northeast of Lake Otatsy following USFS Trail #16 (Falls-Canyon Trail) along the eastern shore of Lake Otatsy.

Lake Otatsy: Biological & Physical Information

Date Sampled: 7/12-13/2005

Water Code: 04-7050

Game Fish Present: Rainbow Trout

Other Fish Present: None

Size Captured: Mean 9.7 inches (range 6.1-11.5 inches)

Trout Condition Factor (Wr): Mean 81 ± 12.25 (range 61-125)

Amphibians Observed: Spotted Frogs (adults & tadpoles), Western Toads (adult)

Sampling Methods: Sinking Gill Net

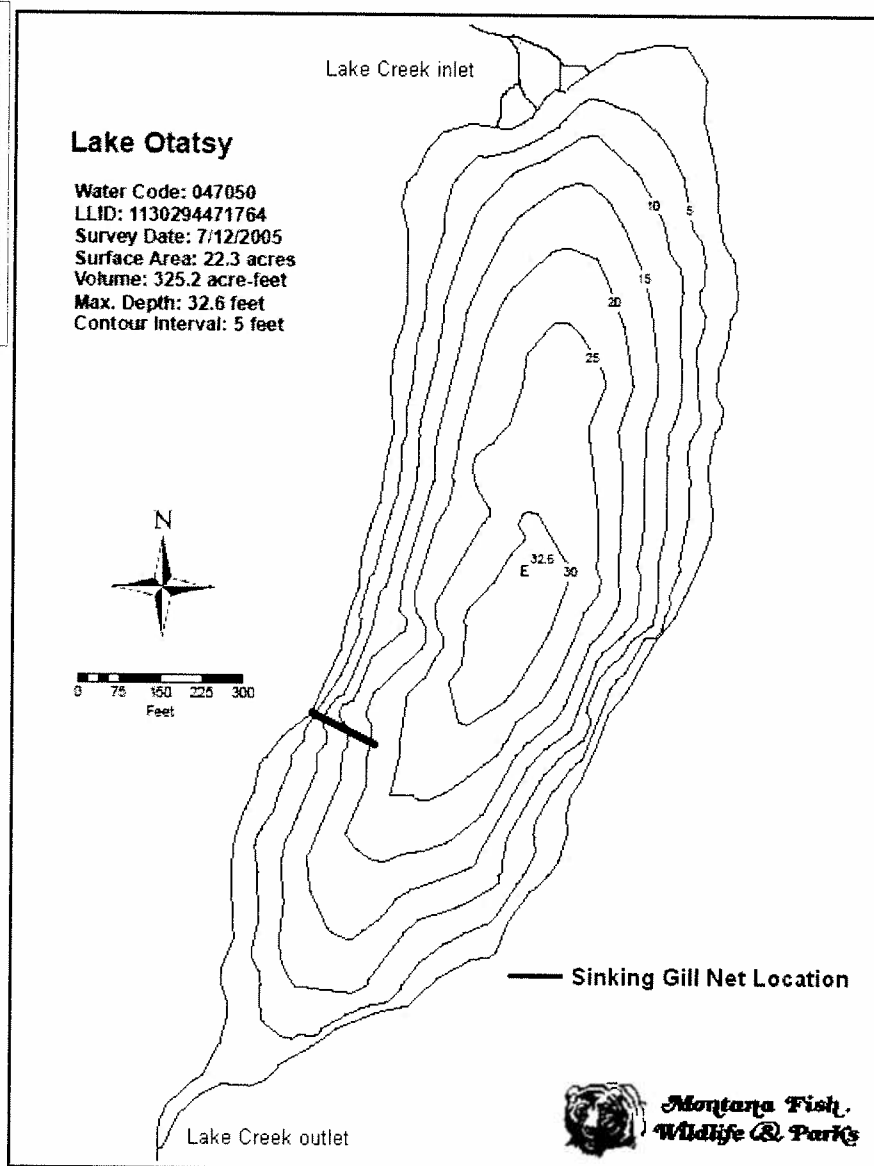
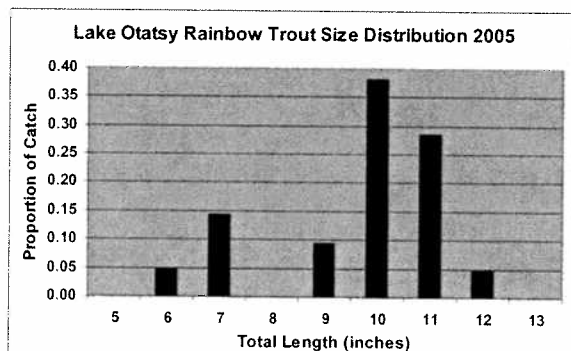
Gill Net Catch Rate: 1.5trout/net/hr

Natural Recruitment: Present

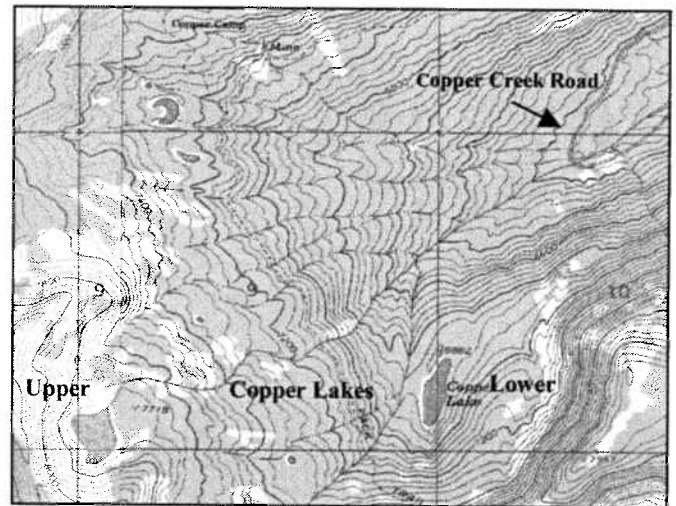
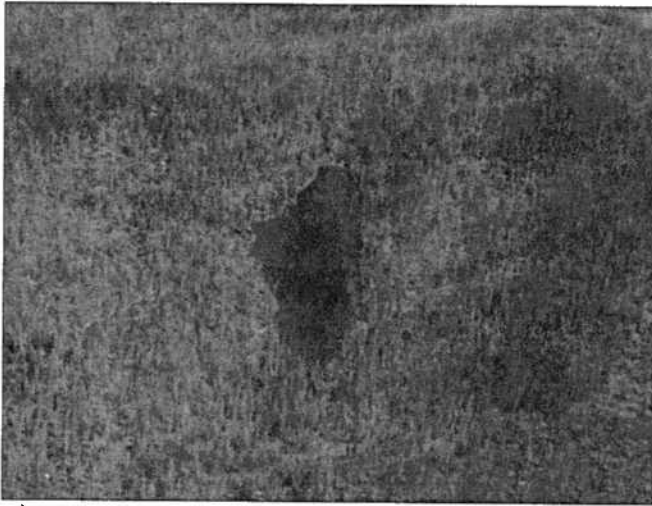
Management Objectives: Status Quo

Currently Stocked: No **Last Stocked:** Unknown **Species:** RBT **Recommended Frequency:** NA

Water Chemistry: pH: 8.13 TDS: 44 ppm Conductivity: 89 uS Secchi Depth: 21.5 ft



Lower Copper Lake



Description: Lower Copper Lake is a small (5.9 acres) glacial cirque lake located about 1.8 miles west-northwest of Stonewall Mountain and 3.6 miles south-southeast of Red Mountain. The lake lies within the Helena National Forest (Lincoln Ranger District) at 6,700' elevation. Its outlet flow combined with the outlet flow from upper Copper Lake form the headwaters to Copper Creek, in the Landers Fork drainage, a major tributary of the upper Blackfoot River.

Location: T15N, R9W, Sections 9&10; Latitude N47.06284°, Longitude W112.73242°; Nearest Town: Lincoln.

Public Access: Access to lower Copper Lake can be obtained by taking Highway 200 east from Lincoln ~6.2 miles to the USFS Road 330 (Copper Creek Road). Follow the USFS Road 330 for 12 miles to the end of the road (USFS gate). At the end of the road there is small trailhead information board and parking for 3 vehicles. Not shown on maps, the trail is an unmarked primitive trail that ascends following the effluent streams from the lakes that form Copper Creek. Lower Copper Lake is about 1.0 mile up the trail with an elevation gain of 600'. The trail is very brushy.

Camp Sites and Use: No camping areas were observed around Lower Copper Lake.

Angling Opportunity: Historically supplemented with hatchery westslope cutthroat trout, lower Copper Lake now supports a very small population of self-sustaining westslope cutthroat trout. The immediate shoreline topography is relatively flat, brushy, with thick areas of alder and timbered with sub-alpine fir and spruce, but is easily accessible on foot and lends well to shoreline angling.

Stocking History: According to Lower Copper Lake fish planting records, only westslope cutthroat trout have been planted in this lake. It was first planted in 1969 then again in 1975 and 1978. The lake was last stocked in 1979.

Angling Pressure: Very light

Other Nearby Lakes: Upper Copper Lake is the only lake in the near vicinity of lower Copper Lake. Upper Copper Lake sits at a higher elevation of 7,706'. Access upper upper Copper Lake requires bushwhacking an additional mile passed lower Copper Lake with an elevation gain of approximately 800 ft. Because of the lack of an established trail between the lakes, travel is steep and difficult. An easier, but longer, alternate route to upper Copper Lake is traveling ~3.0 miles up the closed jeep road (behind the USFS gate at the trailhead) by foot to the old mining site and intercepting the northern end of USFS Trail #485. USFS Trail #485 runs south and stays relatively level while skirting the slopes of the upper Copper Creek basin (elevation 7,100 ') and intercepts the outlet stream from the upper lake. An ascent of 0.7 miles along the outlet stream, with an elevation gain of 600 ft, will terminate at the lake. Caution: a large area between the upper and lower lakes burned in 2003 and is dangerous due to falling trees during windy conditions.

Lower Copper Lake: Biological & Physical Information

Date Sampled: 6/26-27/2006

Water Code: 04-6360

Game Fish Present: Westslope Cutthroat Trout

Other Fish Present: None

Size Captured: Mean 14.0 inches (2 fish, 13.3 and 14.8 inches)

Trout Condition Factor (Wr): NA (scale malfunction)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 0.1 trout/net/hr

Natural Recruitment: Present (limited)

Amphibians Observed: None observed

Management Objectives: Continue to manage as a self-sustaining westslope cutthroat trout population

Currently Stocked: No **Last Stocked:** 1979 **Species:** WSCT **Recommended Frequency:** NA

Water Chemistry: pH: 7.77 TDS: 14 ppm Conductivity: 27 uS Secchi Depth: 20.3 ft

Stocking History

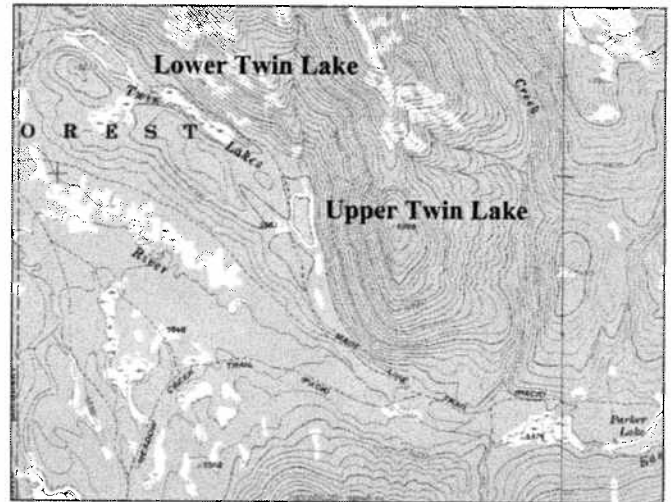
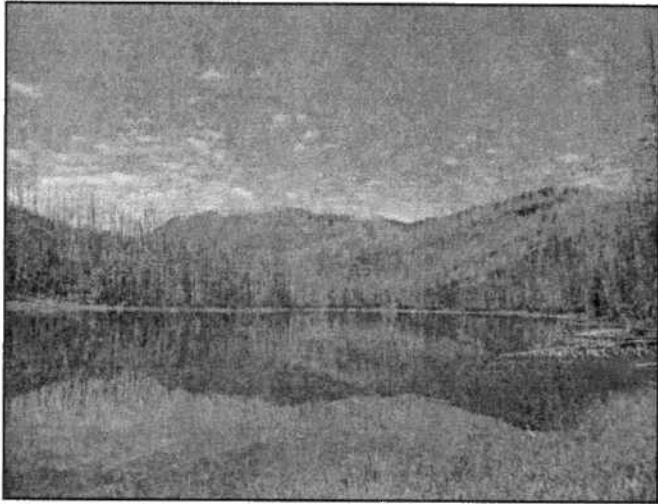
| Year | Species | # Stocked |
|------|---------|-----------|
| 1969 | WSCT | 2,541 |
| 1975 | WSCT | 2,400 |
| 1978 | WSCT | 3,000 |
| 1979 | WSCT | 1,000 |

Lower Copper Lake

LLID: 1127316470629
Area = 5.9 acres
Volume = 35.9 acre/feet
Contour Interval = 5 feet
Max. Depth = 20.3 feet



Lower Twin Lake



Description: Lower Twin Lake is a small (8.6 acres) glacial lake located ~2.4 miles north-northeast of Bugle Mountain and 2.7 miles west-southwest of Pyramid Peak within the Scapegoat Wilderness. The lake lies on the Helena National Forest (Lincoln Ranger District) at 5,900' in East Fork of the North Fork Blackfoot River drainage. Lower Twin Lake's outlet feeds Lost Pony Creek.

Location: T16N, R9W, Sections 6; Latitude N47.17288°, Longitude W112.78843°; Nearest Town: Lincoln.

Public Access: There are two options to access to lower Twin Lake. Option 1: Meadow Creek Trailhead, near the northeast corner of the Kleinschmidt Flats east of Ovando take USFS Trail #483 (Meadow Creek Trail) 12 miles to its intersection with USFS Trail #481 (Main Line Pack Trail) then travel 0.25 miles northwest to the Twin Lakes Trail #425 and follow it 1.5 miles passed upper Twin Lake to lower Twin Lake. Option 2: Indian Meadows Trailhead, east of Lincoln in the Landers Fork and Copper Creek drainage, take the USFS Trail #481 (Main Line Pack Trail) northwest about 10.5 miles to the USFS Trail #425 (Twin Lakes Trail) and follow it another 1.5 miles to the lake. Both trails leading to lower Twin Lake have a moderate degree of difficulty.

Camp Sites and Use: No campsites were observed on Lower Twin Lake. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Lower Twin Lake currently supports self-sustaining hybridized population of westslope cutthroat, Yellowstone cutthroat and rainbow trout. Areas of the shoreline topography are lined with sedges, dense brush and lodgepole pine; however, there are some areas that lend well to shoreline angling.

Stocking History: Fish planting records show lower Twin Lake was planted once in 1950 and twice in 1952 with undesignated cutthroat trout. Genetics analyses confirm rainbow trout were also introduced at some point.

Angling Pressure: Very light

Other Nearby Lakes: Upper Twin Lake is in the very near vicinity of lower Twin Lake, 0.9 miles southeast along Twins Lakes Trail (USFS Trail #425) on the way into lower Twin Lake. If you accessed lower Twin Lake using the Main Line Pack Trail (USFS Trail #481) from Indian Meadows Trailhead, you can back-track 2.9 miles southeast to Parker Lake. Meadow Lake is 4.0 miles south-southwest of Lower Twin Lake. To access Meadow Lake will require you to back-track to the Main Line Pack Trail (USFS Trail #481) before continuing on Meadow Creek Trail (USFS Trail # 483).

Lower Twin Lake: Biological & Physical Information

Date Sampled: 6/21/2005

Water Code: 04-6900

Game Fish Present: Hybridized Cutthroat-Rainbow Trout

Other Fish Present: None

Size Captured: Mean 12.3 inches (range 5.7 - 23.6 inches)

Trout Condition (Wr): Mean 82 ± 21.78 (range 25 - 111)

Genetics: All fish possessed genetic markers for Yellowstone and westslope cutthroat trout and rainbow trout. Genetic analyses identify two somewhat reproductively isolated populations of hybrid rainbow trout and hybrid Yellowstone cutthroat trout

Amphibians Observed: Spotted frogs (adults), tadpoles and eggs present, western toad (adult)

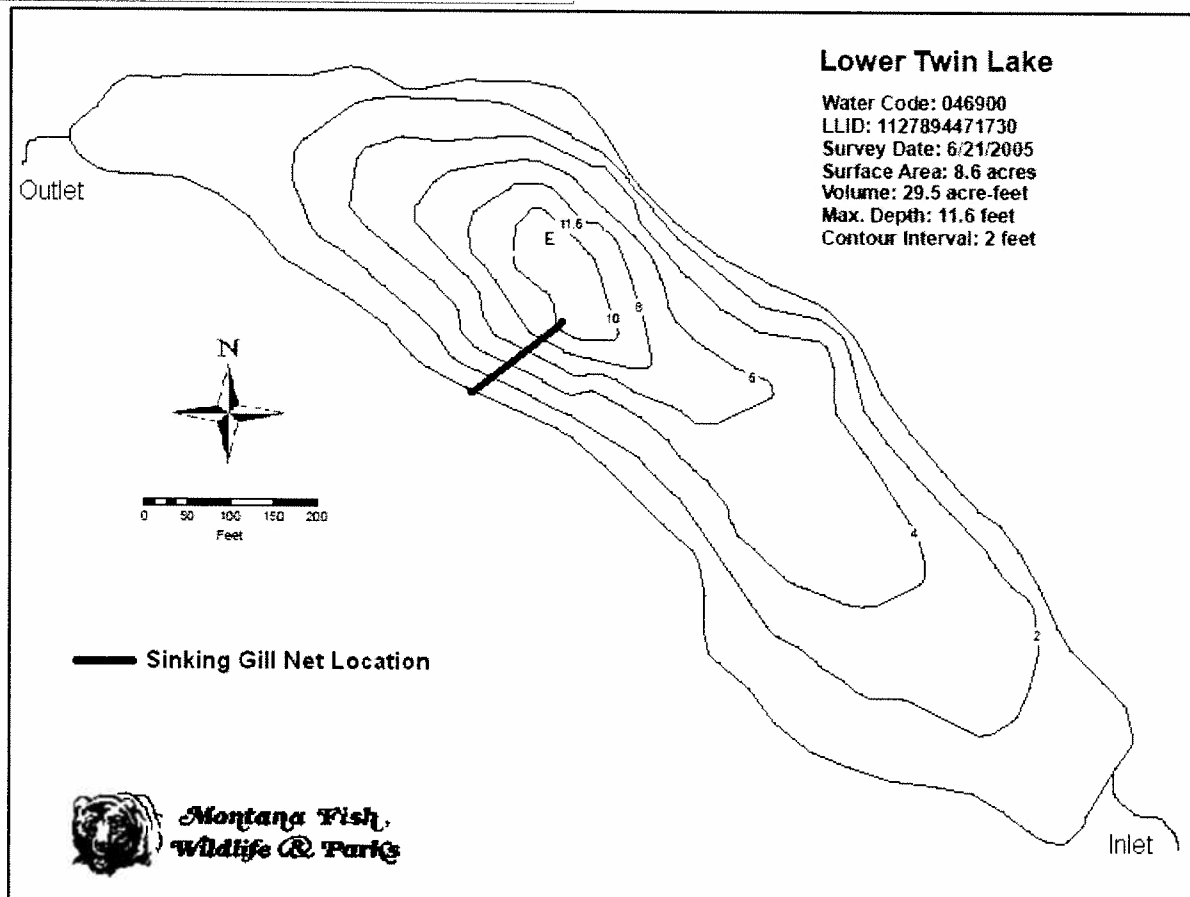
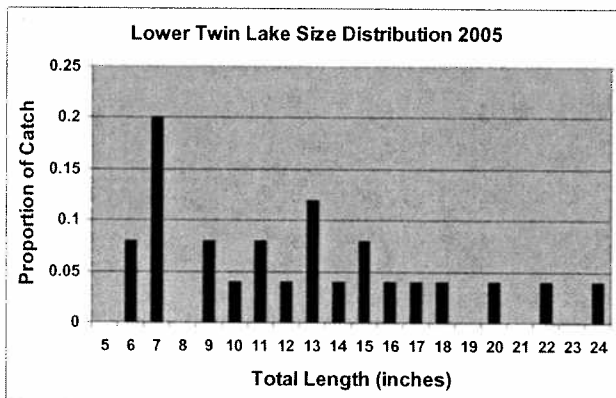
Management Objectives: Identify opportunities to convert to WSCT

Currently Stocked: No **Last Stocked:** 1952 **Species:** CT **Recommended Frequency:** NA

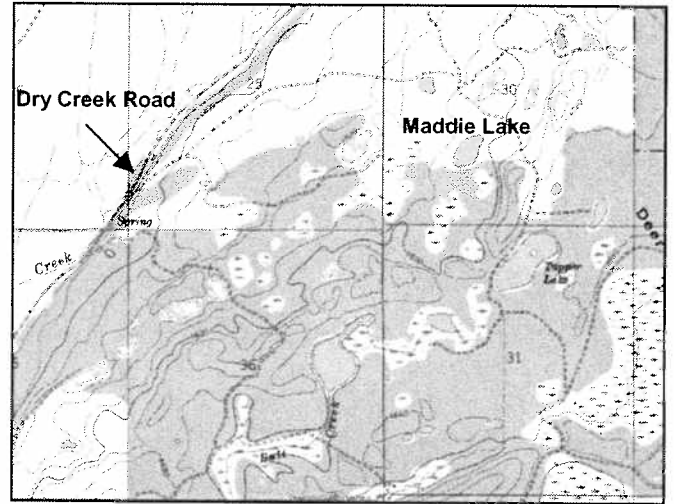
Water Chemistry: pH: 8.70 TDS: 112 ppm Conductivity: 226 uS Secchi Depth: NA

Stocking History

| Year | Species | # Stocked |
|------|---------|-----------|
| 1952 | CT | 3,120 |
| 1952 | CT | 6,864 |
| 1950 | CT | 3,600 |



Maddie Lake



Description: Maddie Lake is a small (5.7 acres) kettle lake located ~4.1 miles north-northeast of Marcum Mountain. The lake is part of The Nature Conservancy land holdings, located about 1.1 miles east of Kleinschmidt Flats off the Dry Creek Road. It lies at 4,560' in the Rock Creek drainage, a tributary to the North Fork Blackfoot River.

Location: T15N, R10W, Sections 30; Latitude N47.02429°, Longitude W113.91551°; Nearest Town: Ovando.

Public Access: Approximately 8.3 miles east of Ovando along Highway 200, follow the Dry Creek Road north 6.5 miles to a Nature Conservancy gate, walk in area only. The lake is 1.0 mile from the gate and requires bush-whacking from a second Nature Conservancy gate off the main road into the lake. The lake is on Nature Conservancy land.

Camp Sites and Use: No camping areas were observed around Maddie Lake. Because of its size, relative remote location and lack of sport fishing opportunities, the lake experiences light use.

Angling Opportunity: The 2006 gill net survey found no game fish within Maddie Lake although red-side shiners are present in abundance. The immediate shoreline is marshy with floating vegetation mats and overgrown with alder and red-osier dogwood. The surrounding topography is a mixture of aspen and coniferous forest with an alder, willow and dogwood under-story.

Stocking History: NA

Angling Pressure: NA

Other Nearby Lakes: There are a series of small kettle lakes in the immediate vicinity of Maddie Lake. Most are grown in with sedges and rushes. Tupper Lake lies 0.3 miles to the southeast and lies entirely on private land with no access. Coppers Lake is located ~7.0 road miles north of Maddie Lake on the Dry Creek Road.

Maddie Lake: Biological & Physical Information

Date Sampled: 6/7-8/2006

Water Code: 04-6950

Game Fish Present: None

Other Fish Present: Redside shiners

Size Captured: NA

Trout Condition Factor (Wr): NA

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: NA

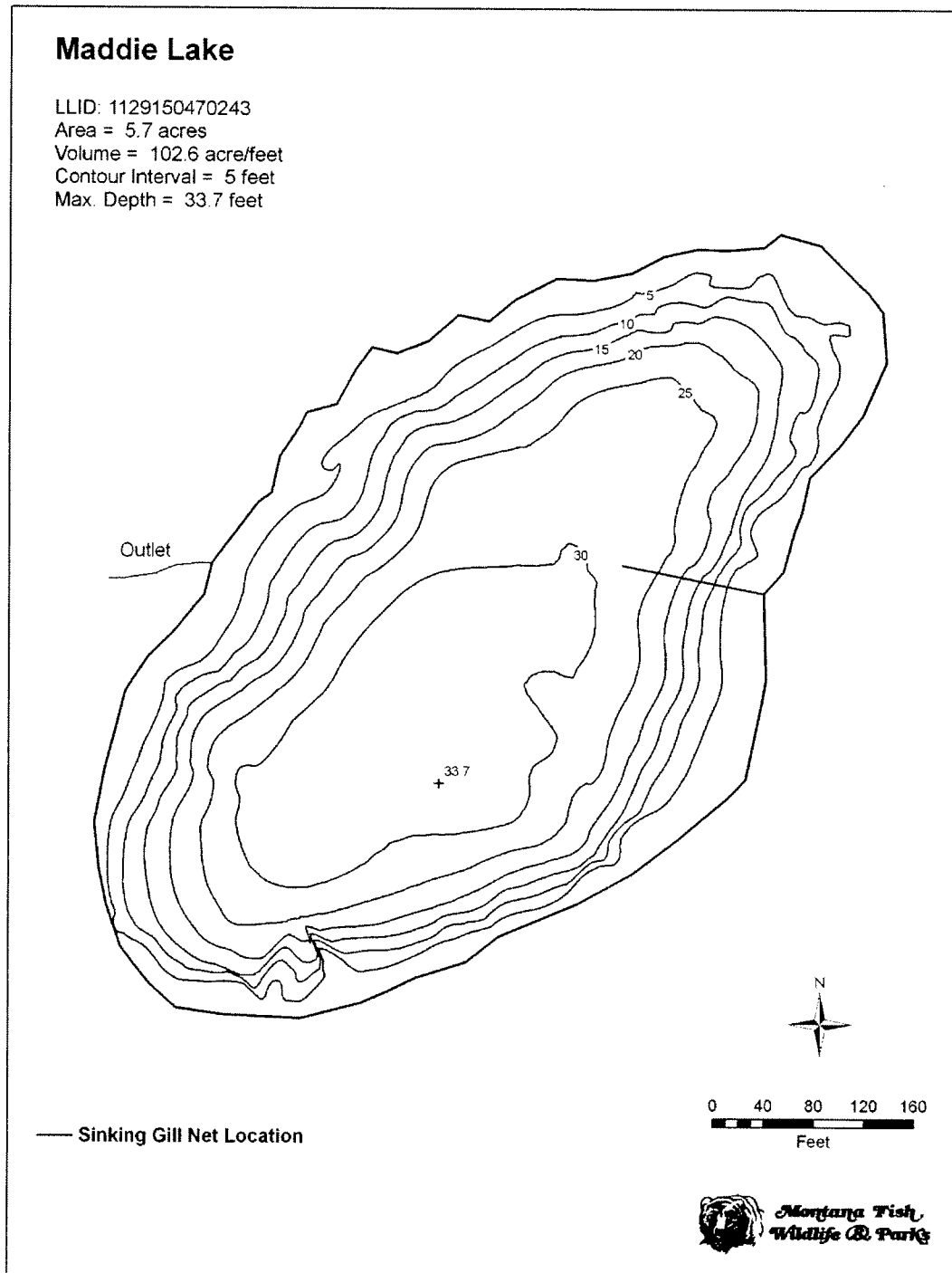
Natural Recruitment: NA

Amphibians Observed: Painted turtles

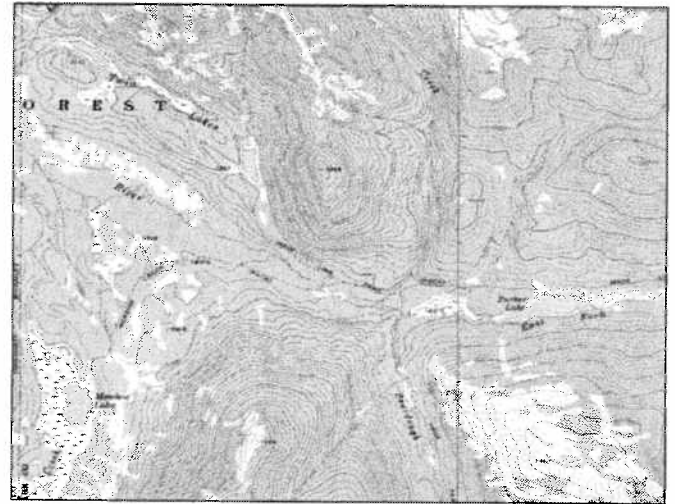
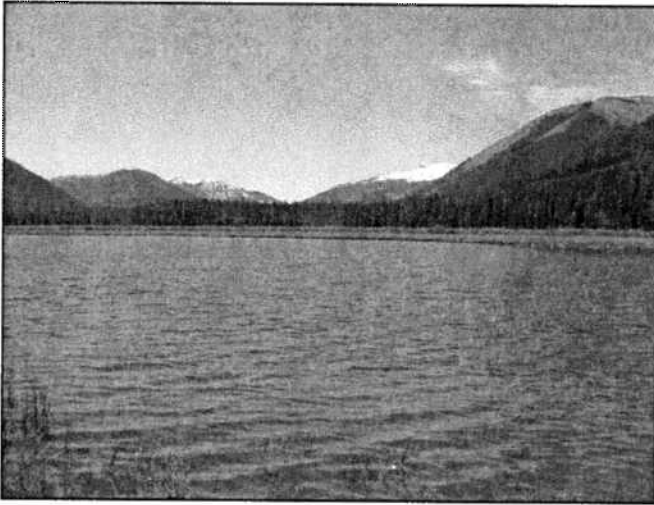
Management Objectives: Consider future WSCT stocking if public access is secured.

Currently Stocked: No **Last Stocked:** None known **Species:** NA **Recommended Frequency:** NA

Water Chemistry: pH: 8.37 TDS: 132 ppm Conductivity: 265 uS Secchi Depth: 13.5 ft



Meadow Lake



Description: Meadow Lake is a shallow and small (8.5 acres) glacial valley trough lake. Meadow Lake is located 1.4 miles east of Bugle Mountain and 3.0 miles north-northwest of Red Mountain. The lake lies within the Scapegoat Wilderness, Helena National Forest (Lincoln Ranger District), at 5,800' in the Meadow Creek watershed. Meadow Creek is a tributary to East Fork of the North Fork Blackfoot River drainage.

Location: T16N, R9W, Sections 18; Latitude N47.14495°, Longitude W112.78987°; Nearest Town: Lincoln.

Public Access: There are three options to access to Meadow Lake: Option 1: From Meadow Creek Trailhead near the northeast corner of the Kleinschmidt Flats, east of Ovando, take USFS Trail #483 (Meadow Creek Trail) about 11.5 miles to the lake. Option 2: From the Arrastra Creek Trailhead, accessed on USFS Road #4106, take USFS Trail #482 (Arrastra Creek Pack Trail) north 8.0 miles to its intersection with USFS Trail #483 (Meadow Creek Trail). From there, travel another 2.6 miles to the lake. Option 3: From the Indian Meadows Trailhead, east of Lincoln, in the Landers Fork and Copper Creek drainage, take the USFS Trail #481 (Main Line Pack Trail) northwest ~10 miles to USFS Trail #483 (Meadow Creek Trail) and follow it 1.8 miles to the lake. Travel on USFS Trail # 483 and Trail #481 has a moderate degree of difficulty. USFS Trail #482 has a higher degree difficulty.

Camp Sites and Use: Only one moderately used campsite was observed on the northeast side of the lake. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Meadow Lake supports rainbow trout at low densities. The surrounding topography is heavily timbered, rocky and steep. Shoreline topography is flat and marshy with sedges and rushes encroaching well out into the lake. Shoreline angling is limited to a few small areas. Wade fishing is difficult because of the high level of silt.

Stocking History: Historically planted with RBT

Angling Pressure: Very light

Other Nearby Lakes: There are three lakes in the general vicinity of Meadow Lake. Access to upper Twin and lower Twin Lakes is easily obtained by following the Meadow Creek Trail (USFS Trail #483) northeast 1.8 miles to its intersection with Main Pack Trail (USFS Trail #481) then northwest for 0.4 miles to Twin Lakes Trail (USFS Trail #425). Once on the Twin Lake Trail, both lakes are within 1.5 miles distance. Turning southeast on to the Main Line Pack Trail from the Meadow Creek Trail will take you to Parker Lake, a total distance of 3.0 miles from Meadow Lake. All routes are relatively easy traveling with a moderate degree of difficulty.

Meadow Lake: Biological & Physical Information

Date Sampled: 6/21-22/2005

Water Code: 04-6960

Game Fish Present: Rainbow Trout

Other Fish Present: None

Size Captured: Mean 10.3 inches (range 8.1 – 14.5 inches)

Trout Condition Factor (Wr): Mean 83 ± 13.67 (range 71 – 98)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 0.12trout/net/hr

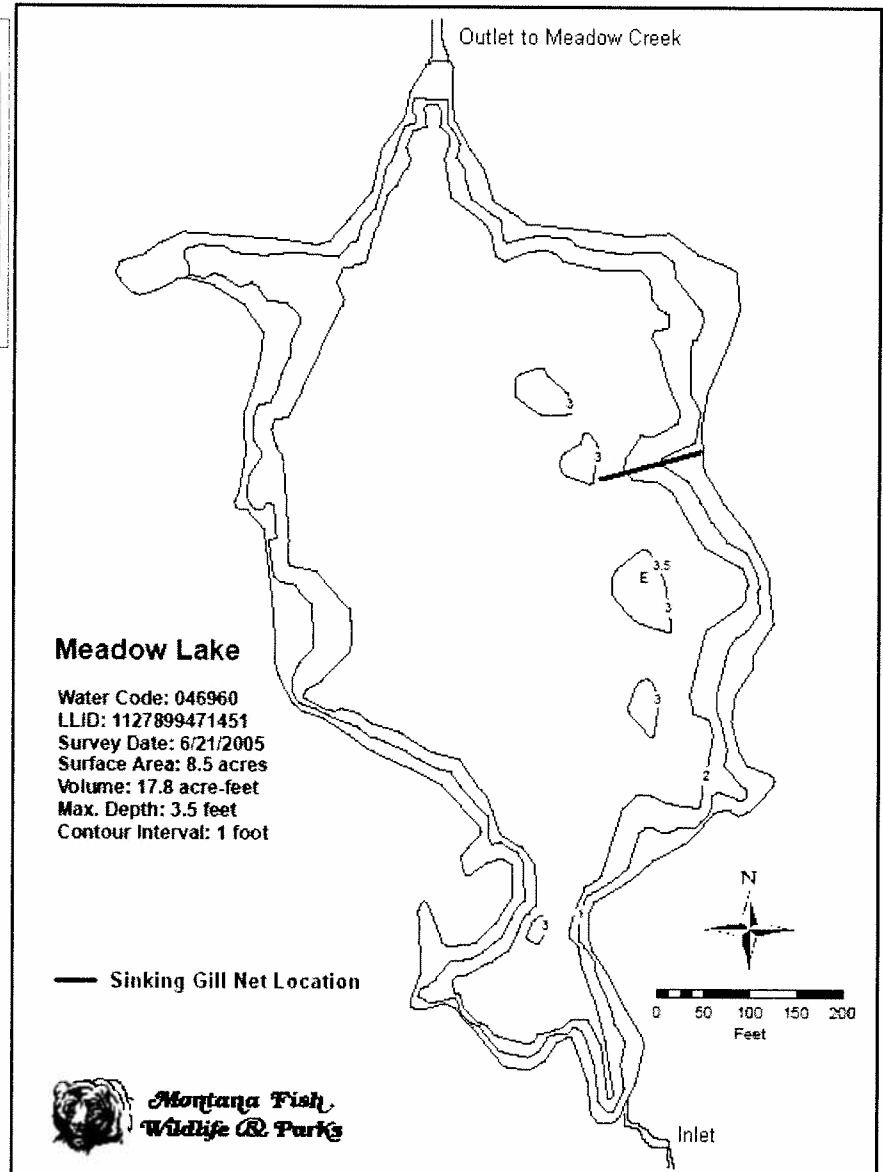
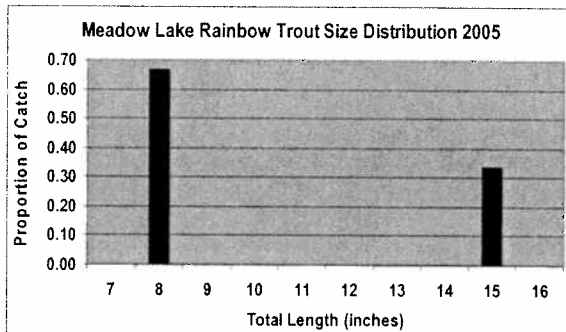
Natural Recruitment: Present (Limited)

Amphibians Observed: Spotted Frogs (adults)

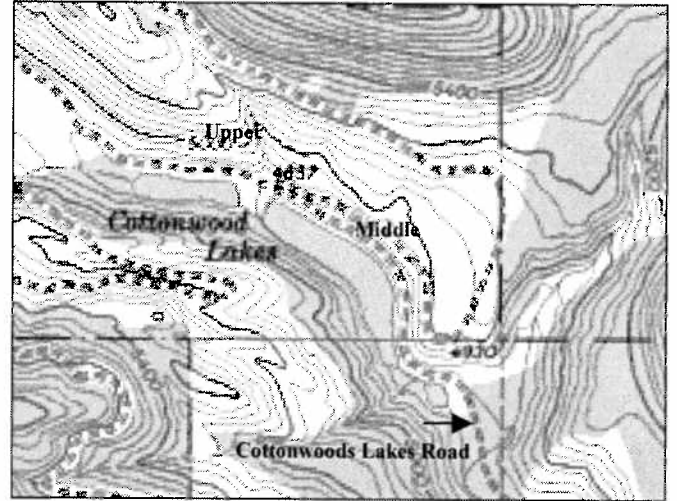
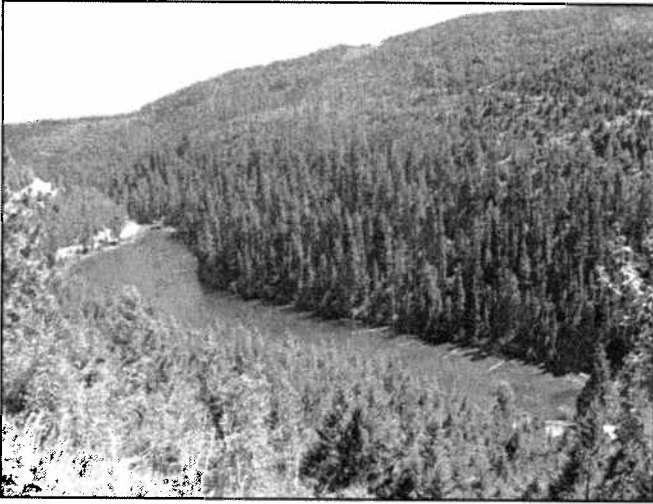
Management Objectives: The lake is naturally limited by its very shallow depth – recommend no changes at this time

Currently Stocked: No **Last Stocked:** unknown **Species:** RBT **Recommended Frequency:** NA

Water Chemistry: pH: 8.03 TDS: 91 ppm Conductivity: 181 uS Secchi Depth: 3.5 ft



Middle Cottonwood Lake



Description: Middle Cottonwood Lake is a moderate-sized (12.0 acres) glacial valley trough lake located 1.5 miles south-southwest of Morrell Mountain and ~8.3 miles east-southeast of Seeley Lake. The lake lies within the Lolo National Forest (Seeley Lake Ranger District) at 4,835' in Cottonwood Creek drainage, a tributary to the middle Blackfoot River.

Location: T16N, R14W, Sections 3 & 10; Latitude N47.16637°, Longitude W113.35097°; Nearest Town: Seeley Lake.

Public Access: Middle Cottonwood Lake lies along USFS Road 477 (Cottonwood Lakes Road) providing easy access to the lake. From Highway 83 in Seeley Lake, take USFS Road 477 (primary road) east 8.3 miles to the lake. From US Highway 200, take Woodworth Road northwest 9.0, then right (north) on USFS Road 9976 for 3.6 miles and then left (west) on USFS Road 447 for 2.2 miles to the lake.

Camp Sites and Use: Only one campsite / boat launch on the northwest corner of the lake along USFS Road 477 was observed. The site experiences heavy use.

Angling Opportunity: Middle Cottonwood Lake supports a self-sustaining population of rainbow trout. From 2001 through 2005, the lake was on a yearly stocking schedule of westslope cutthroat trout; however these fish did not show up in recent lake surveys. The northwest corner of the lake has a boat launch. Most areas of the north shoreline topography are very brushy with alder and red osier dogwood, but there are areas that lend well to shoreline angling. The southern shoreline is steep, very brushy with alder and heavily timbered.

Stocking History: According to fish planting records, from 1974 through 2000 the lake was planted with rainbow trout on a yearly schedule. From 2001 through 2005, the lake was switched to annual stocking of westslope cutthroat trout.

Angling Pressure: From March 2005 to February 2006, angling pressure was estimated at 155 angler-days.

Other Nearby Lakes: Upper Cottonwood Lake also lies along USFS Road 477 (Cottonwood Lakes Road) immediately west, within 0.1 mile of middle Cottonwood Lake. Immediately east, within 0.1 mile of middle Cottonwood Lake, is a small un-named lake. All three lakes are connected by a small first-order tributary stream that feeds Cottonwood Creek. High water events allow fish passage between the lakes.

Middle Cottonwood Lake: Biological & Physical Information

Date Sampled: 7/18-19/2006

Water Code: 04-6390

Game Fish Present: Rainbow Trout

Other Fish Present: Redside shiners

Size Captured: Mean 10.1 inches (range 7.0 – 14.6 inches)

Trout Condition Factor (Wr): Mean 100 ± 10.1 (range 85 -121)

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: 0.48trout/net/hr

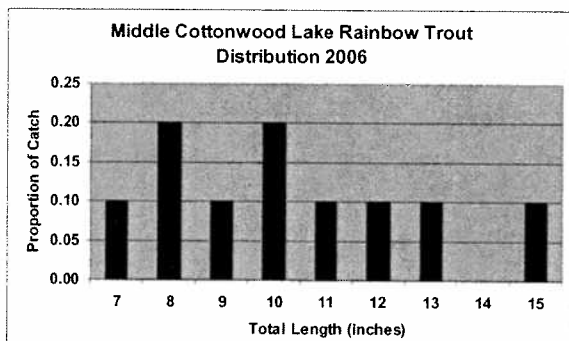
Natural Recruitment: Present (limited)

Amphibians Observed: Spotted Frogs (adults)

Management Objectives: Stop WSCT plan and evaluate potential to convert to WSCT due to downstream hybridization risk to pure WSCT in Cottonwood Creek.

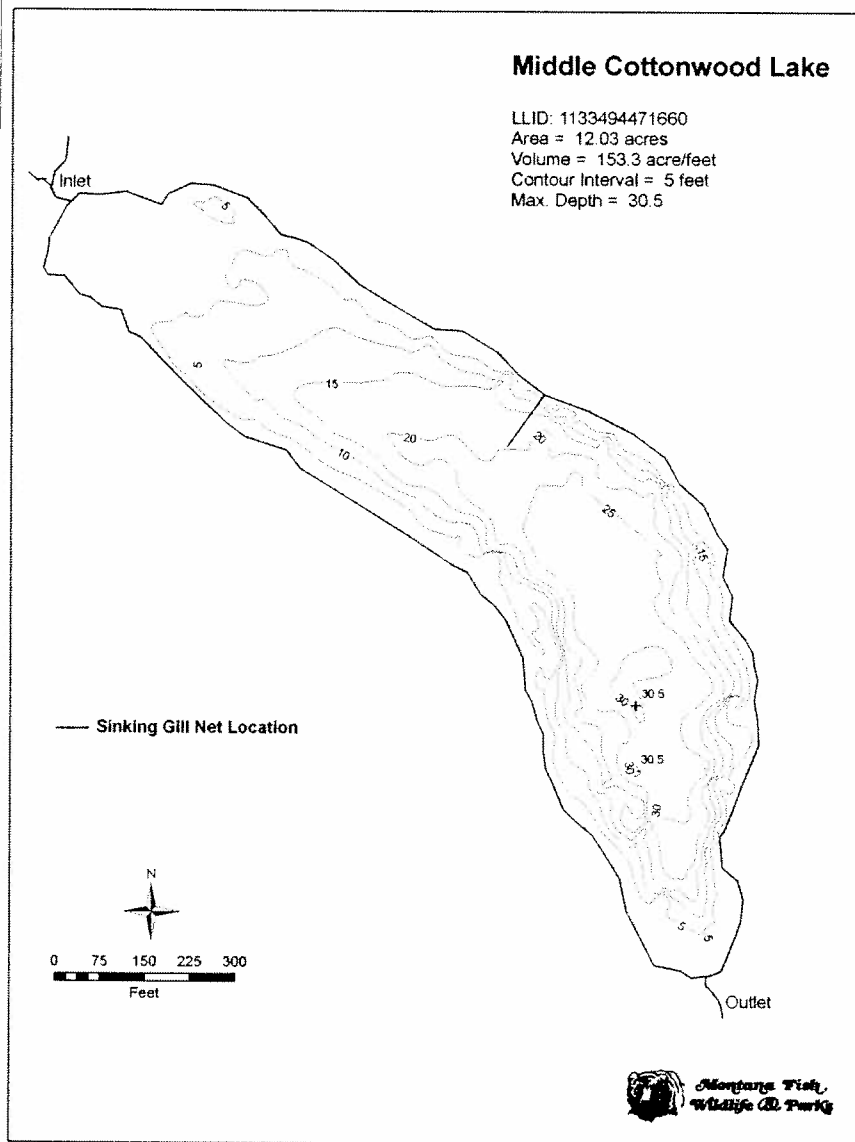
Currently Stocked: No **Last Stocked:** 2005 **Species:** WSCT **Recommended Frequency:** NA

Water Chemistry: pH: 8.78 TDS: 111 ppm Conductivity: 224 uS Secchi Depth: 21 ft

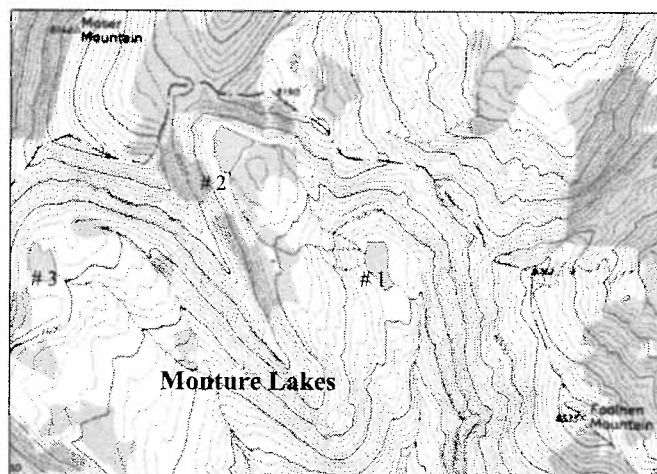


Stocking History

| Year | Species | # Stocked |
|-----------|---------|-----------|
| 2005-2001 | WSCT | 2,760 |
| 2000-1974 | RBT | 25,902 |



Monture Lake #1



Description: One of a cluster of three un-named lakes, Monture Lake #1 is a small high elevation (7,217') glacial cirque lake geographically located on the Lolo National Forest (Seeley Lake Ranger District) along the flanks of Foolhen Mountain, the southern border of the Bob Marshall Wilderness. Only 5.8 acres in size, its outlet stream forms the headwaters of Middle Fork Monture Creek in the upper Monture Creek drainage, a major tributary to the middle Blackfoot River.

Location: T18N, R12W, Sections 17; Latitude N47.31398°, Longitude W113.15554°; Nearest Town: Ovando.

Public Access: Access to Monture Lake #1 can be obtained by traveling north 8.0 miles from Highway 200 at Ovando, on USFS Road 89 to the Monture Creek Campground / Trailhead. From the trailhead, travel along USFS Trail #25, which changes to USFS Trail #27 (Monture-Hahn Pack Trail) at trail mile 1.6 near Falls Creek. Continue north along USFS Trail #27 for 12.6 miles or 1.1 mile above the Monture Creek Falls to USFS Trail #371W. Follow Trail #371W northeast up the Middle Fork Monture Creek drainage to the lake, a distance of ~3.7 miles. The total distance from the trailhead to Monture Lake #1 is roughly 16.3 miles. USFS Trail #25 & 27 are categorized as a mainline (primary) trail in good condition with moderate ascent and difficulty. Trail #371W is categorized as a primitive trail with areas of steep ascents and more difficult traveling.

Camp Sites and Use: Three small primitive camp fire-rings with a few small tent sites were observed along the eastern side of the lake. Pack stock is not allowed within 200' of the shore. "Leave no trace" camping and recreating is essential in this proposed wilderness area.

Angling Opportunity: Monture Lake #1 supports an abundant population of small (stunted) westslope cutthroat trout through natural reproduction. The immediate shoreline on the eastern and southern sides of the lake is relatively flat and brushy with sporadic stands of subalpine fir and spruce. The north and west sides of the lake are rugged, steep, and rocky with scattered timber. The eastern shoreline lends itself more to shoreline anglers.

Stocking History: According to fish plant records, Monture Lake #1 was stocked once with westslope cutthroat trout in 1968.

Angling Pressure: Light

Other Nearby Lakes: There are two other cirque lakes in the general vicinity of Monture Lake #1. Monture Lake #2 lies ~0.5 miles northwest at an elevation of 7,700' on the southeastern slope of Moser Mountain. To reach Monture Lake #2 involves a 500' ascent up from Monture Lake #1. Monture Lake #3 lies at an elevation of 7,623' about 1.1 miles directly west of lake #1 on the southwestern slope of Moser Mountain. Access requires an ascent of 644' up then over a finger ridge of Moser Mountain, then a descent of 255' to the lake. There are no established trails between the three lakes and only the one primitive trail leading into Monture Lake #1. Travel is difficult and strenuous, over rocky terrain, to these other lakes and requires good physical health.

Monture Lake #1: Biological & Physical Information

Date Sampled: 6/28-29/2005

Water Code: 04-6985

Game Fish Present: Westslope Cutthroat Trout

Other Fish Present: None

Size Captured: Mean 8.3 inches (range 7.6 – 9.0 inches)

Trout Condition Factor (Wr): Mean 100 ± 2.9 (range 96-103)

Amphibians Observed: Spotted Frogs (adults, larvae, eggs)

Sampling Methods: Sinking Gill Net

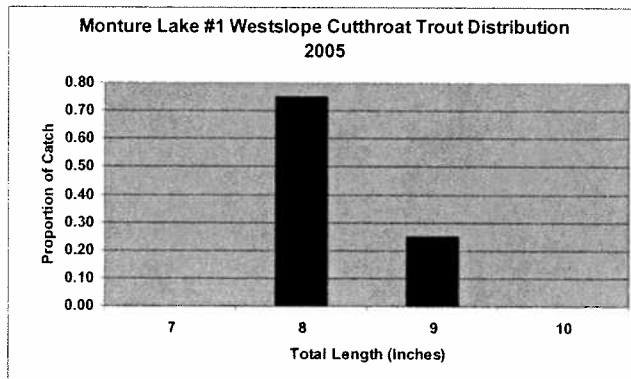
Gill Net Catch Rate: 0.12trout/net/hr

Natural Recruitment: Present

Management Objectives: No change

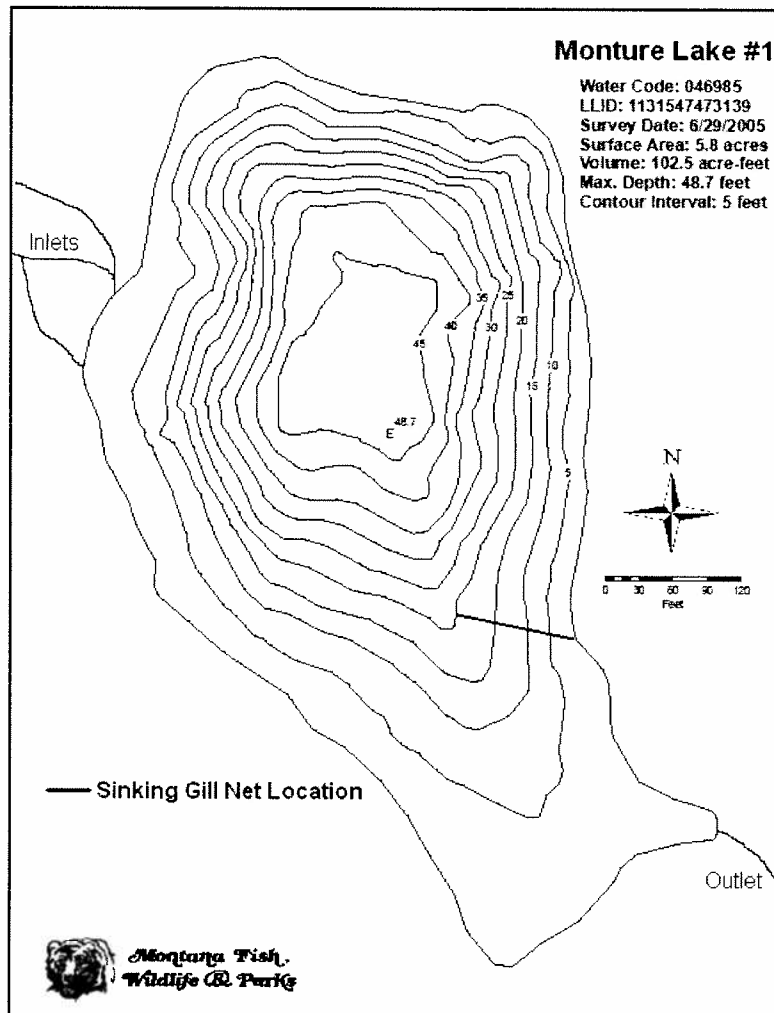
Currently Stocked: No **Last Stocked:** 1968 **Species:** WSCT **Recommended Frequency:** NA

Water Chemistry: pH: 6.84 TDS: 3 ppm Conductivity: 5 uS Secchi Depth: 23.5 ft

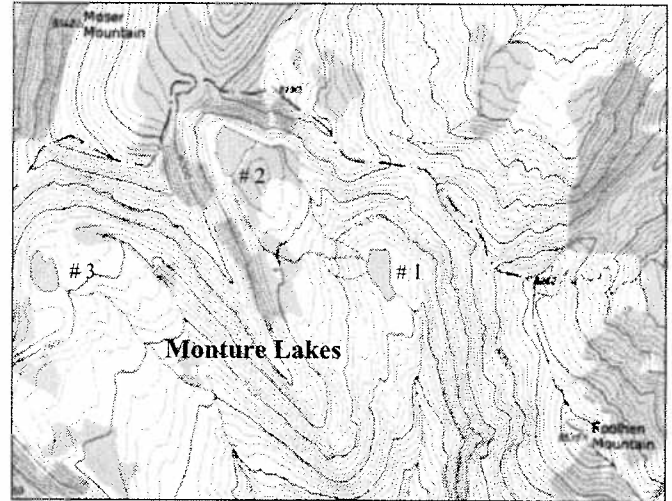
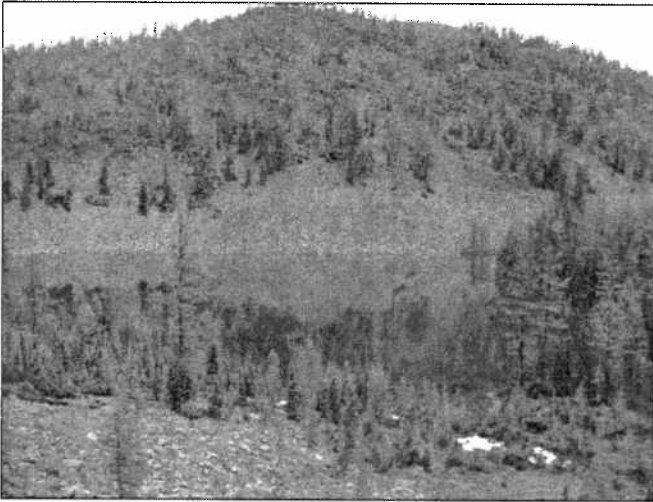


Stocking History

| Year | Species | # Stocked |
|------|---------|-----------|
| 1968 | WSCT | 2,272 |



Monture Lake #2



Description: One of a cluster of three un-named lakes, Monture Lake #2 is a small (7.2 acre) high elevation (7,700') glacial cirque lake geographically located on the Lolo National Forest (Seeley Lake Ranger District) on the southeastern slope of Moser Mountain, just south of the Bob Marshall Wilderness. The lakes outlet flows into Monture Lake #1, which forms the headwaters of the Middle Fork Monture Creek in the upper Monture drainage. Monture Creek is a major tributary to the middle Blackfoot River.

Location: T18N, R12W, Sections 17 & 18; Latitude N47.31854°, Longitude W113.16580°; Nearest Town: Ovando.

Public Access: Access to Monture Lake #2 can be obtained by traveling north 8.0 miles from Highway 200 at Ovando on USFS Road 89 to the Monture Creek Campground / Trailhead. From the trailhead, travel along USFS Trail #25, which changes to USFS Trail #27 (Monture-Hahn Pack Trail) at trail mile 1.6 near Falls Creek. Continue north along USFS Trail #27 for 12.6 miles, 1.1 miles above the Monture Creek Falls, to USFS Trail #371W. Follow USFS Trail #371W northeast up the Middle Fork of Monture Creek to Monture Lake #1, a distance of ~3.7 miles. From Monture Lake #1 it is an ascent of approximately 500' over a distance of 4,000' to reach Monture Lake #2. There are no established trails between the lakes. The total distance from trailhead to Monture Lake #2 is ~17.1 miles. Trails #25 and #27 are categorized as mainline (primary) trails, and these are well maintained with a moderate ascent and difficulty. Trail #371W is categorized as a primitive trail with areas of steep ascents.

Camp Sites and Use: No camping areas were observed around Monture Lake #2.

Angling Opportunity: Our 2005 gill net survey found no fish in Monture Lake #2. The immediate shoreline on the southeastern side of the lake is relatively flat, brushy and timbered with sub-alpine firs. The remaining shoreline surrounding the lake is rugged, steep, rocky talus slopes and lightly timbered.

Stocking History: No record of historical fish plants

Angling Pressure: NA

Other Nearby Lakes: There are two other cirque lakes in the vicinity of Monture Lake #2. Monture Lake #1 lies at an elevation ~500' lower than Monture Lake #2 (7,217'), about 0.5 miles southeast on the western slope of Foolhen Mountain and accessed from the USFS Trail #371W that leads to lake. Monture Lake #3 is about 1.1 miles west-southwest of Monture Lake #2 on the southwestern slope of Moser Mountain and it lies at an elevation of 7,623'. Access requires an ascent up and over a finger ridge of Moser Mountain that separates the two cirque lakes. There are no established trails between the three lakes and only the one primitive trail leading into Monture Lake #1. Travel is difficult and strenuous, over rocky terrain, to these other lakes and requires good physical health.

Monture Lake # 2: Biological & Physical Information

Date Sampled: 6/28/2005

Water Code: 04-6986

Game Fish Present: None

Other Fish Present: None

Size Captured: NA

Trout Condition (Wr): NA

Sampling Methods: Sinking Gill Net

Gill Net Catch Rate: NA

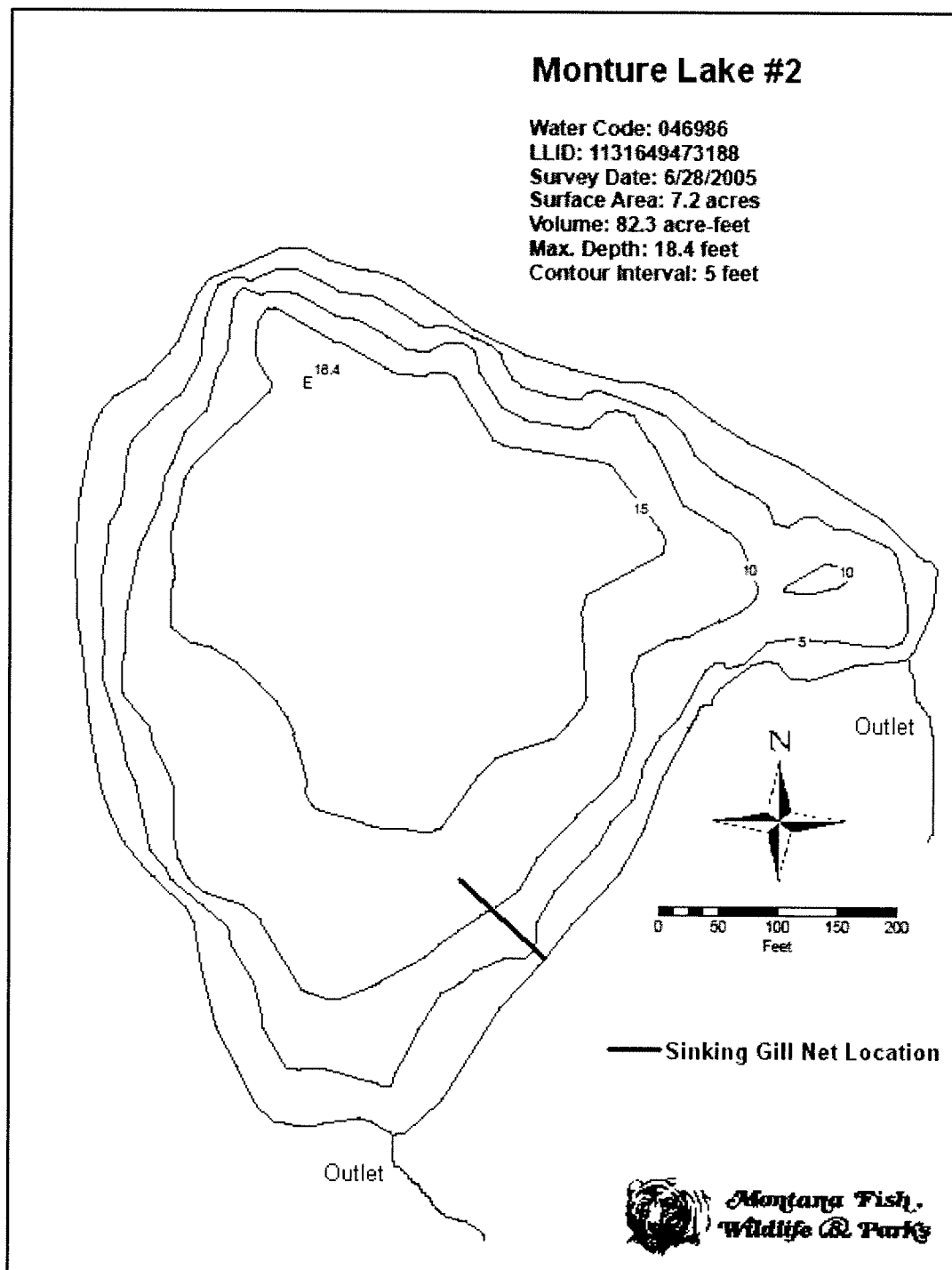
Natural Recruitment: NA

Amphibians Observed: None

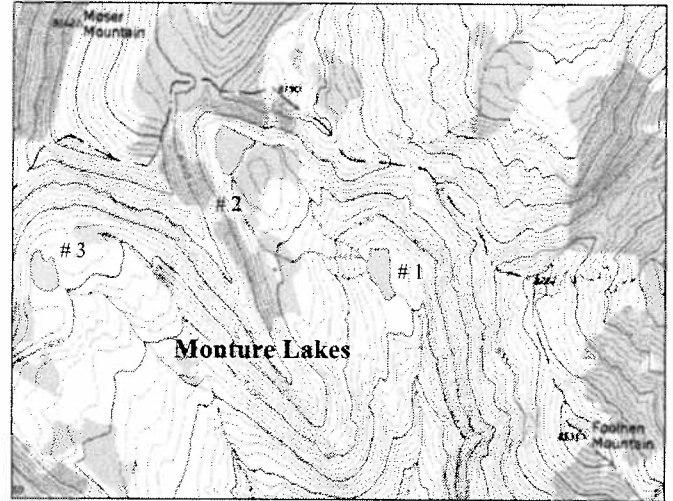
Management Objectives: Potential to convert from fishless to WSCT in the future if desired

Currently Stocked: No **Last Stocked:** NA **Species:** NA **Recommended Frequency:** NA

Water Chemistry: pH: 7.55 TDS: 1 ppm Conductivity: 5 uS Secchi Depth: 9.3 ft



Monture Lake #3



Description: One of a cluster of three un-named lakes, Monture Lake #3 is a small (6.0 acre) high elevation (7,641 ft) glacial cirque lake located on the Lolo National Forest (Seeley Lake Ranger District) on the south-southwestern slope of Moser Mountain, just south of the Bob Marshall Wilderness. The outlet stream, together with that from Monture Lake #1, forms the headwaters of Middle Fork Monture Creek in the upper Monture Creek drainage. Monture Creek is a major tributary to the middle reach of the Blackfoot River.

Location: T18N, R12W, Sections 18; Latitude N47.31356°, Longitude W113.17903°; Nearest Town: Ovando.

Access: Access to Monture Lake #3 can be obtained by traveling north 8.0 miles from Highway 200 at Ovando on USFS Road 89 to the Monture Creek Campground/Trailhead. From the trailhead, travel along USFS Trail #25 which changes to USFS Trail #27 (Monture-Hahn Pack Trail) at trail mile 1.6 near Falls Creek. Continue north along USFS Trail #27 for 12.6 miles and 1.1 mile above the Monture Creek Falls to USFS Trail #371W. Follow USFS Trail #371W northeast up the Middle Fork of Monture Creek about 2.5 miles to the first tributary stream flowing down from the northwest. Follow this small tributary upstream 2.0 miles to the lake. There is no established trail leading to the lake. An alternate route is to continue following USFS Trail #371W to Monture Lake #1, a distance of 3.7 miles from the USFS Trail #27. From Monture Lake #1, an ascent up and over a finger-ridge of Moser Mountain that separates the two cirque lake basins is required. Depending on the route followed, the average distance from trailhead to Monture Lake #3 is approximately 17.3 miles. Trails #25 and #27 are categorized as mainline (primary) trails and are well maintained with moderate ascents and difficultly. Trail #371W is a primitive trail with areas of steep ascents and more difficult travel.

Camp Sites and Use: No camping areas were observed around Monture Lake #3.

Angling Opportunity: Our 2005 gill net survey identified Monture Lake #2 as fishless. The shoreline on the southern side of the lake is relatively flat, brushy and timbered with sub-alpine firs. The remaining shoreline surrounding the lake is rugged, steep, rocky talus slopes and lightly timbered.

Stocking History: No history of fish plants

Angling Pressure: NA

Other Nearby Lakes: There are two other cirque lakes in the vicinity of Monture Lake #3. Monture Lake #1 is 425' lower in elevation than lake #3 (7,217ft), and it is found about 1.4 miles east on the western slope of Foolhen Mountain and is accessed from the USFS Trail 371W that leads up to the lake. Monture Lake #2 is 1.3 miles northeast of Monture Lake #3 on the southeastern slope of Moser Mountain (elevation of 7,700') and access to it requires an ascent from Monture Creek Lake #1. There are no established trails between the three lakes and only the one primitive trail leads to Monture Lake #1. Travel between the lakes is difficult and requires good physical health.

Monture Lake #3: Biological & Physical Information

Date Sampled: 6/28/2005

Water Code: 04-6987

Game Fish Present: None

Other Fish Present: None

Size Captured: NA

Trout Condition Factor (Wr): NA

Amphibians Observed: Spotted Frogs (adults, eggs), Long-toed Salamander

Sampling Methods: Sinking Gill Net

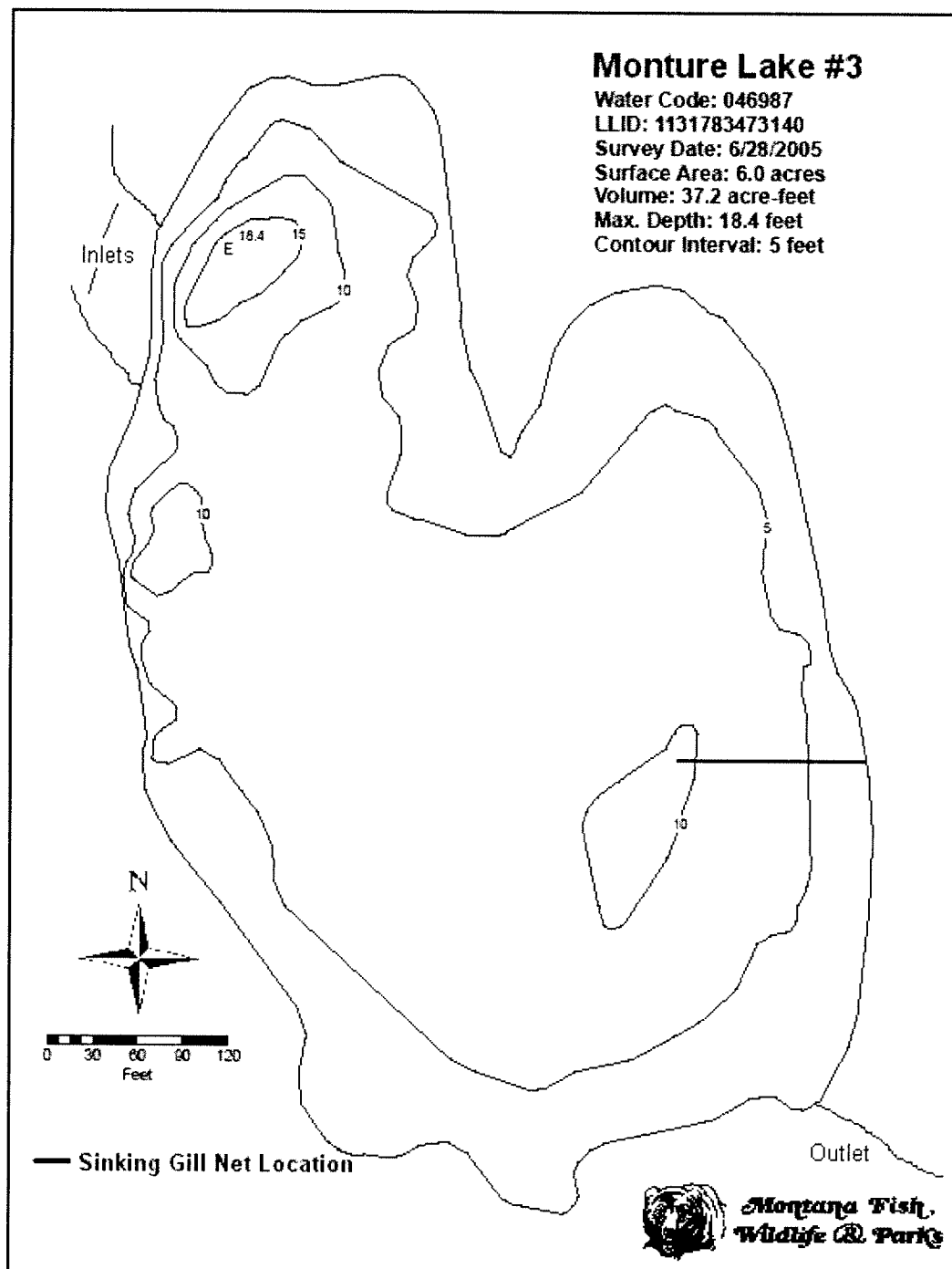
Gill Net Catch Rate: NA

Natural Recruitment: NA

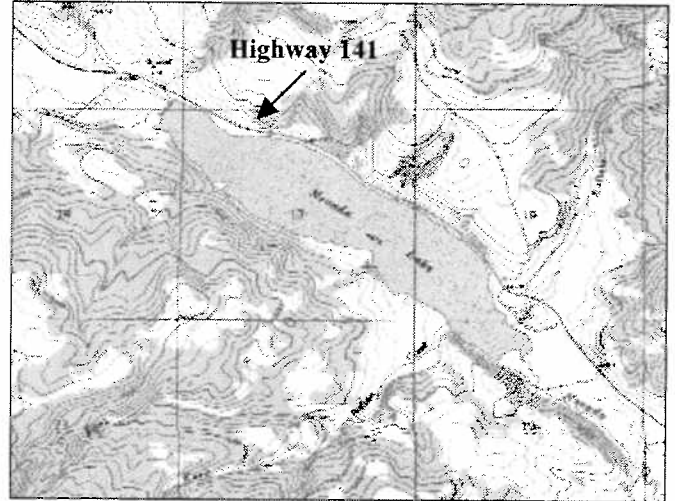
Management Objectives: No change – manage as fishless

Currently Stocked: No **Last Stocked:** NA **Species:** NA **Recommended Frequency:** NA

Water Chemistry: pH: 6.65 TDS: 2 ppm Conductivity: 5 uS Secchi Depth: 12.0 ft



Nevada Lake Reservoir



Description: Nevada Lake Reservoir is an instream (366.6 acre) reservoir (elevation of 4,615') in the upper Nevada Creek watershed, a tributary to the middle Blackfoot River. It is located ~4.3 miles east-northeast of Hoodoo Mountain and 10.4 road miles southeast of Helmville. The reservoir was created in 1939 by damming Nevada Creek to provide irrigation water to the Nevada Creek valley ranchlands and for recreational benefits. The lake is bordered by private ranch land on all side except the northeastern third, which is State land.

Location: T12N, R9&10W, Sections 11-14, 18 ,19; Latitude N46.7953°, Longitude W112.7946°; Nearest Town: Helmville.

Public Access: Nevada Lake Reservoir lies adjacent to Highway 141, located 10.4 miles southeast of Helmville and 20.2 miles northwest of Avon.

Camp Sites and Use: The reservoir offers no camping facilities, but does have a boat ramp access off of Highway 141. The lake experiences moderate angling use.

Angling Opportunity: Nevada Lake Reservoir supports a stockeed rainbow and westslope cutthroat trout fishery. The lake also supports a population of yellow perch, which were illegally introduced. Angling is primarily from a boat, shoreline and through the ice. Only the northeast third, along Highway 141, is easily accessible to shoreline angling.

Stocking History: From 1939 to 2001, Nevada Lake Reservoir was periodically stocked with rainbow trout and in 1948 and 1951 with Coho salmon. In 2002, stocking was switched to an annual plant of westslope cutthroat trout.

Angling Pressure: From March 2005 to February 2006, angling pressure was estimated at 1,264 angler-days.

Other Nearby Lakes: Browns Lake and Braziel Lake are the only two lakes in the area of Nevada Reservoir. Access to Browns Lake can be reached from Ovando or Helmville by using the Ovando–Helmville Road. From Ovando, follow the Ovando-Helmville Road south to Browns Lake Road then turn east for 4 miles to the lake or from Highway 141 and then follow County Road 271 to the Ovando-Helmville Road (1.8 miles), then northwest for 8.6 miles to the Browns Lake Road. The intersection of Browns Lake Road and Highway 200 is 8.3 miles east of Ovando, turn south and continue 3 miles to the lake. Braziel Lake is accessed by taking USFS Road 117 located 0.3 miles below Nevada Lake Reservoirs. Braziel Lake is a walk-in lake and a map is required since most of the land adjacent to the lake is private.

Nevada Lake Reservoir: Biological & Physical Information

Date Sampled: 5/15-16/2006 & 6/20-23/2006

Water Code: 047020

Game Fish Present: Westslope Cutthroat & Rainbow Trout, Yellow Perch

Other Fish Present: Largescale suckers and redbreasted shiners

Sampling Methods: Sinking & Floating Gill Net

WSCT Size Captured: Mean 8.4 inches (range 5.0-14.0 inches)

WSCT Condition Factor (Wr): Mean 121 ± 62 (range 81-429)

RBT Size Captured: Mean 13.2 inches (range 7.2-16.6 inches)

RBT Condition Factor (Wr): 85 ± 8.7 (range 69-132)

YP Size Captured: Mean 6.7 inches (range 5.2-10.1 inches)

YP Condition Factor (Wr): 104 ± 15.8 (range 60-163)

Gill Net Catch Rate: 0.13WSCT/net/hr

Natural Recruitment: Present

Gill Net Catch Rate: 0.37/RBT/net/hr

Natural Recruitment: Present

Gill Net Catch Rate: 0.96YP/net/hr

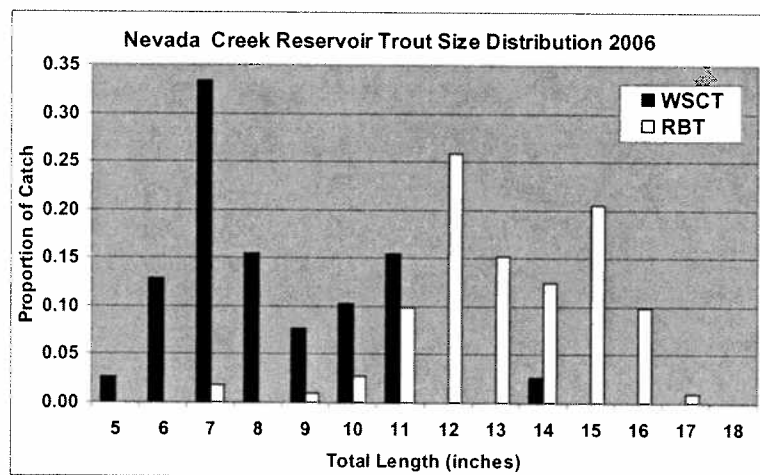
Natural Recruitment: Present

Amphibians Observed: None observed

Management Objectives: Manage as a put-and-take WSCT fishery until such a time as natural reproduction can be sustained. This will involve substantial restoration activities in upper Nevada Creek.

Currently Stocked: Yes **Last Stocked:** 2006 **Species:** WSCT **Recommended Frequency:** Annually

Water Chemistry: pH: 8.18 TDS: 89 ppm Conductivity: 179 uS Secchi Depth: 5.6 ft



Stocking History

| Year | Species | # Stocked |
|-----------|---------|-----------|
| 2006-2002 | WSCT | 10,000 |
| 2001-1989 | RBT | 28,613 |
| 1969-1967 | RBT | 16,785 |
| 1954-1951 | RBT | 48,810 |
| 1951 | Coho | 10,850 |
| 1950-1949 | RBT | 16,890 |
| 1948 | Coho | 4,845 |
| 1947-1939 | RBT | 302,860 |

Nevada Lake Reservoir

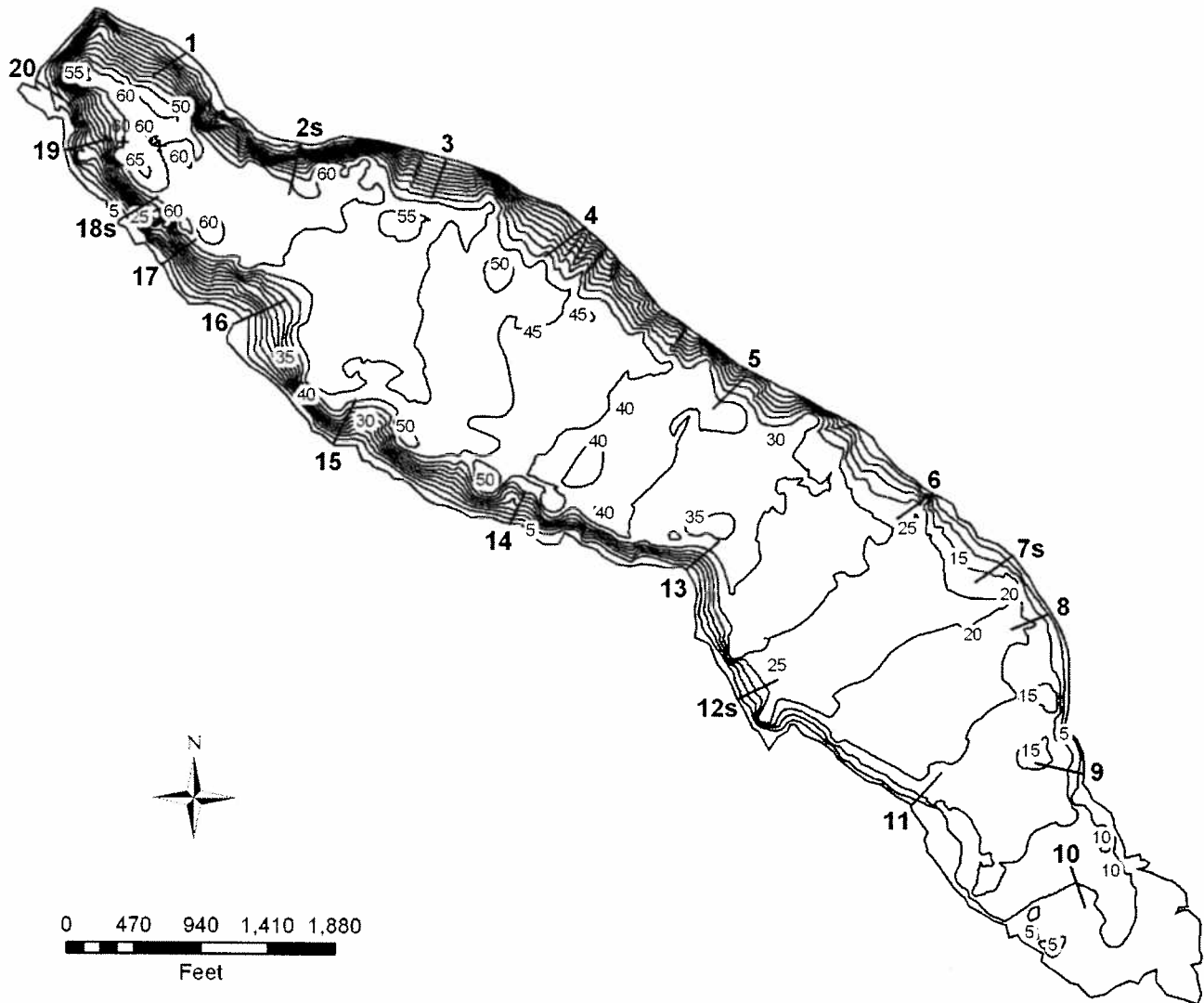
LLID: 1127946467953

Area = 366.65 acres

Volume = 10416 acre/feet

Contour Interval = 5 feet

Max. Depth = 65 feet



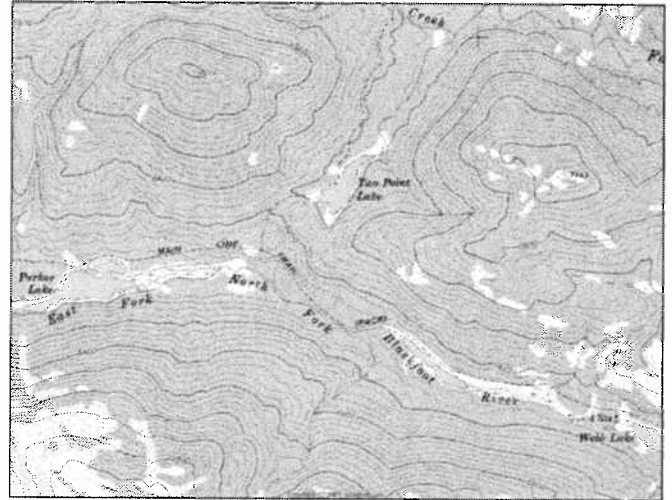
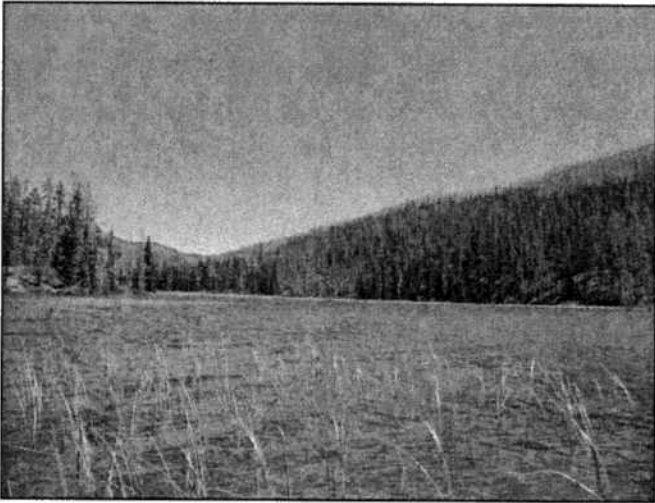
— Floating Gill Net Locations

#s — Sinking Gill Net Locations



**Montana Fish
Wildlife & Parks**

Parker Lake



Description: Parker Lake is a moderate sized (24.7 acres) glacial valley trough lake ~ 2.5 miles north-northwest of Red Mountain. The lake lies within the Scapegoat Wilderness, Helena National Forest (Lincoln Ranger District) at 6,000' elevation in the East Fork of the North Fork Blackfoot River drainage.

Location: T16N, R9W, Sections 9; Latitude N47.15331°, Longitude W112.74102°; Nearest Town: Lincoln.

Public Access: Access to Parker Lake can be obtained by taking Highway 200 east from Lincoln 6.2 miles to the Copper Creek Road. Follow the Copper Creek Road 10.2 miles to the Indian Meadows Trailhead. From the trailhead, travel along USFS Trail #481 (Main Line Pack Trail) 9.5 miles to the Parker Lake. The trail is in good condition with moderate difficulty.

Camp Sites and Use: Parker Lake receives moderate recreational use because of its relatively short distance within the Scapegoat Wilderness boundary on a well-maintained trail system. Two primitive campsites that are offset from the shoreline were observed. One campsite was located at the base of the peninsula at northeast corner near the inlet stream to the lake. A second campsite was observed at the base of the adjacent peninsula near the north-northwestern shoreline of the lake. Both campsites show heavy use. Camping is not allowed on the peninsulas. Pack stock is not allowed within 200 feet of the shore. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Parker Lake currently supports hybrid cutthroat trout (Yellowstone and westslope) as well as hybridized rainbow trout, all of which are currently sustained through natural reproduction. Most areas of the shoreline topography are brushy, heavily timbered and moderately steep; however, there are areas that lend well to shoreline angling.

Stocking History: Fish planting records show that Parker Lake has been stocked with cutthroat trout. It was first planted in 1942 and 1943 then every two years through 1952 when the last stocking of the lake occurred. Genetics samples confirm that at some point rainbow trout were also introduced, but no records are known of this stocking.

Angling Pressure: Moderate

Other Nearby Lakes: In the vicinity of Parker Lake are five other lakes. Approximately 7.0 miles from the Indian Meadows Trailhead, Webb Lake lies next to the Main Line Pack Trail (USFS Trail #481) 2.3 miles east of Parker Lake. Continuing northwest along USFS Trail #481, Two Point Lake is accessed by USFS Trail #479 that intersects the Main Line Pack Trail 0.5 miles east of Parker Lake, a total distance of 0.9 miles from Parker Lake. Unlike Parker Lake, both Webb and Two Point Lakes lie in the Landers Fork drainage. Both Upper and lower Twin Lakes can be accessed by continuing northwest along USFS Trail #481 past Parker Lake, 1.7 miles, to Twin Lakes Trail (USFS Trail #425), then another 0.4 miles to upper Twin Lake or 1.5 miles to lower Twin Lake. Before reaching the Twin Lakes Trail, Meadow Creek Trail (USFS Trail #483) branches off to the west from the Main Line Pack Trail 1.2 miles past Parker Lake and continues for another 1.8 miles to Meadow Lake. Travel is moderately difficult to these other lakes.

Parker Lake: Biological & Physical Information

Date Sampled: 7/20/2005

Water Code: 04-7080

Game Fish Present: Hybrid Cutthroat-Rainbow Trout

Other Fish Present: None

Size Captured: Mean 10.6 inches (range 5.9 - 14.9 inches)

Trout Condition Factor (Wr): Mean 95 ± 11.1 (range 63 -120)

Genetics: All fish possessed genetic markers for Yellowstone and westslope cutthroat trout and rainbow trout. Genetic analyses suggest that there maybe two somewhat reproductively isolated populations, both of which are hybridized.

Amphibians Observed: Spotted Frogs (adults and tadpoles), Western Toads (adults and tadpoles)

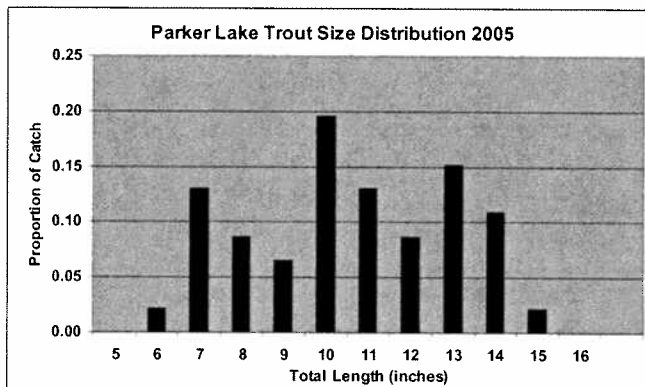
Management Objectives: To be determined

Currently Stocked: No **Last Stocked:** 1952 **Species:** CT and RBT **Recommended Frequency:** NA

Water Chemistry: pH: 8.36 TDS: 142 ppm Conductivity: 291 uS Secchi Depth: 6.2 ft

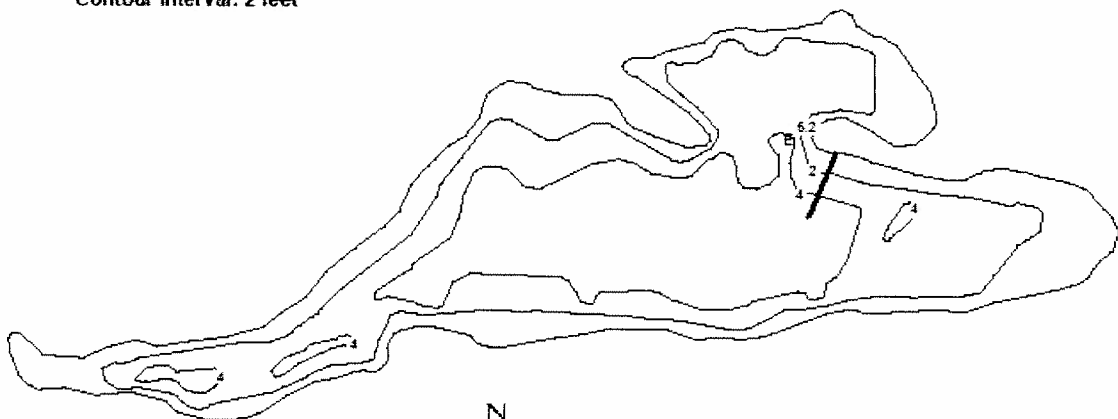
Stocking History

| Year | Species | # Stocked |
|-----------|---------|-----------|
| 1942-1943 | CT | 16,000 |
| 1946 | CT | 7,333 |
| 1948 | CT | 10,000 |
| 1950 | CT | 3,600 |
| 1952 | CT | 16,164 |

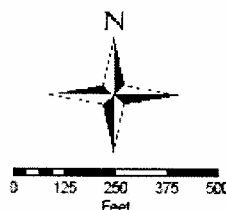


Parker Lake

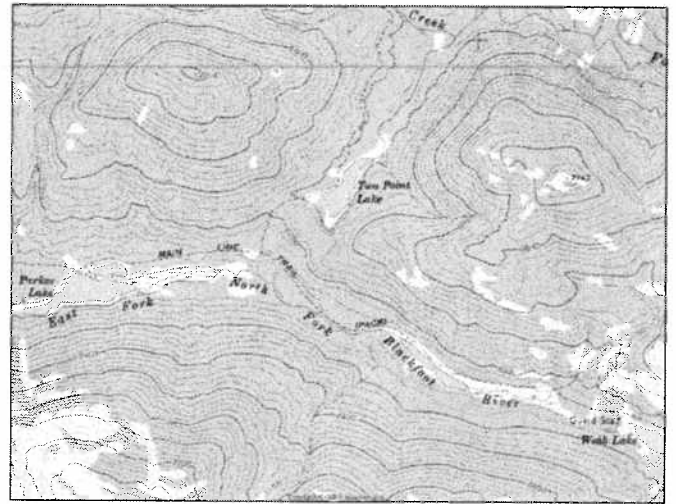
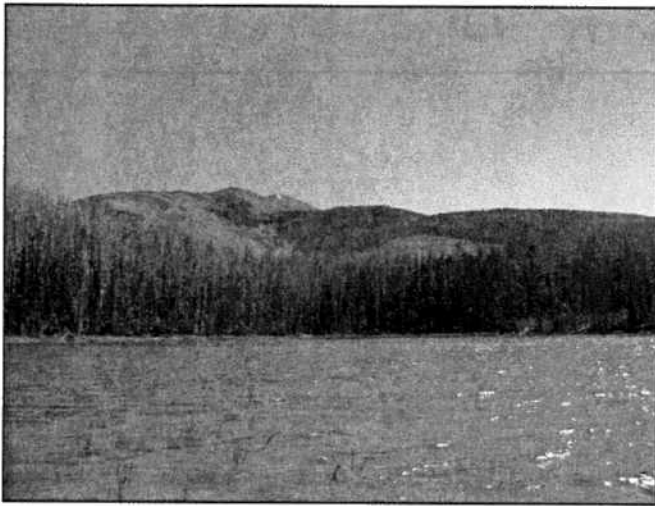
Water Code: 047080
LLID: 1127422471532
Survey Date: 7/20/2005
Surface Area: 24.7 acres
Volume: 68.9 acre-feet
Max. Depth: 6.2 feet
Contour Interval: 2 feet



— Sinking Gill Net Location



Two Point Lake



Description: Two Point Lake is a small (8.3 acres) glacial valley trough lake located ~2.9 miles north-northeast of Red Mountain. The lake lies within the Scapegoat Wilderness, Helena National Forest (Lincoln Ranger District) at 6,187'. Its outlet stream flows into Maryann Creek, a tributary to the Landers Fork - an Upper Blackfoot River tributary.

Location: T16N, R9W, Sections 10; Latitude N47.15861°, Longitude W112.72011°; Nearest Town: Lincoln.

Public Access: Access to Two Point Lake can be obtained by taking Highway 200 east from Lincoln 6.2 miles to the Copper Creek Road. Follow the Copper Creek Road 10.2 miles to the Indian Meadows Trailhead. From the trailhead travel along USFS Trail #481 (Main Line Pack Trail) passed Webb Lake USFS Guard Station to USFS Trail #479, a total distance of 8.5 miles, then northeast on USFS Trail #479 for 0.5 mile to the lake. The trail is in very good condition with a moderate ascent and difficulty.

Camp Sites and Use: No camping areas were observed around Two Point Lake. Pack animals are not allowed within 200 feet of the shore. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Our 2005 gill-net survey identified Two Point Lake as fishless. Much of the shoreline is marshy with sedges and rush extending out into the lake. The surrounding topography is heavily timbered moderately steep slopes.

Stocking History: None

Angling Pressure: NA

Other Nearby Lakes: There are three other lakes in the vicinity of Two Point Lake. Approximately 4.8 miles from the Indian Meadows Trailhead, Heart Lake lies along USFS Trail #424 that branches off the Main Line Pack Trail (USFS Trail #481) at about trail mile 3.9, which eventually reconnects back into the Main Line Pack Trail northwest of Heart Lake. Webb Lake lies along the Main Line Pack Trail 7.0 miles from Indian Meadow Trailhead and roughly 1.5 miles before reaching the Trail #479 turnoff. Continuing northwest along USFS Trail #481, 2.3 miles passed Webb Lake and 0.6 miles passed the USFS Trail #479 turnoff to Two Point Lake, is Parker Lake. Travel is moderately difficult to these other lakes.

Two Point Lake: Biological & Physical Information

Date Sampled: 7/20/2005

Water Code: 04-7470

Game Fish Present: None

Sampling Methods: Sinking Gill Net

Other Fish Present: None

Size Captured: NA

Trout Condition Factor (Wr): NA

Amphibians Observed: Spotted Frogs (adults, tadpoles), Western Toad (tadpoles)

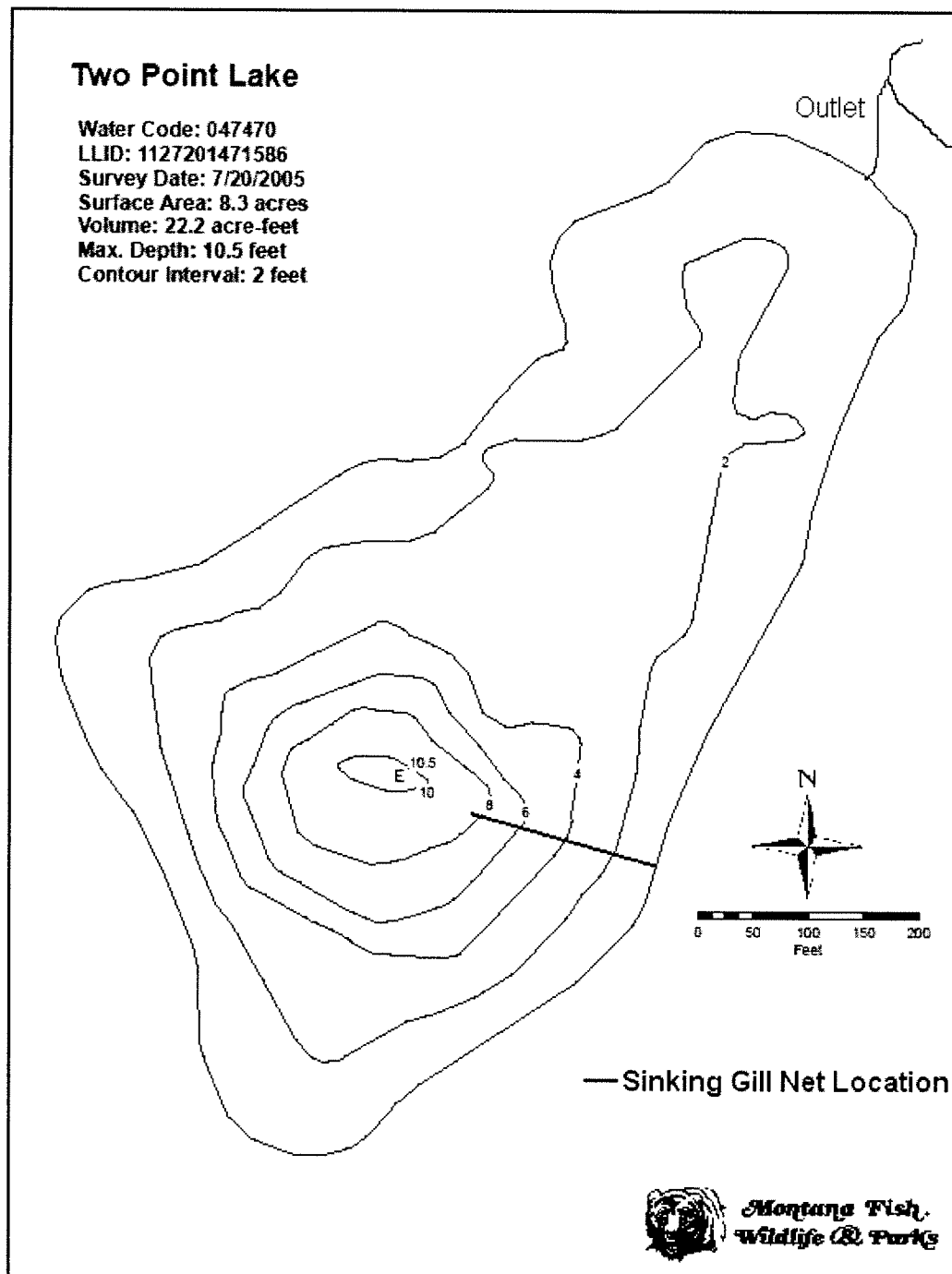
Gill Net Catch Rate: NA

Natural Recruitment: NA

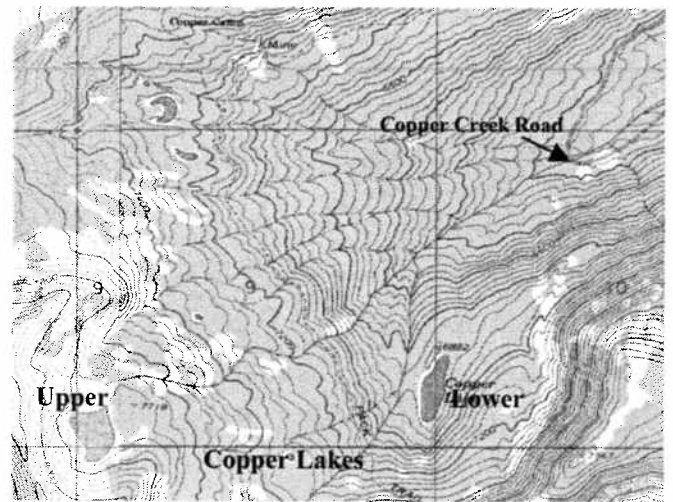
Management Objectives: This lake likely will not sustain fish and should be managed as fishless.

Currently Stocked: No **Last Stocked:** NA **Species:** NA **Recommended Frequency:** NA

Water Chemistry: pH: 9.00 TDS: 129 ppm Conductivity: 258 uS Secchi Depth: 10.5 ft



Upper Copper Lake



Description: Upper Copper Lake is a small (9.44 acres) glacial cirque lake located ~2.5 miles west-northwest of Stonewall Mountain and 3.8 miles south-southwest of Red Mountain. The lake lies within the Helena National Forest (Lincoln Ranger District) at 7,706'. Its outlet forms the headwaters to Copper Creek, in the Landers Fork drainage, a major tributary of the upper Blackfoot River.

Location: T15N, R9W, Sections 8, 9 & 16; Latitude N47.06065°, Longitude W112.75204°; Nearest Town: Lincoln.

Public Access: To access upper Copper Lake, take Highway 200 east from Lincoln 6.2 miles to the USFS Road 330 (Copper Creek Road). Follow USFS Road 330 12 miles to the end of the road (USFS gate). At the end of the road there is a small trailhead information board and parking for 3 vehicles. Not shown on maps, the trail is an unmarked primitive trail that ascends following the outlet streams from the lakes that form Copper Creek. Lower Copper Lake is one mile up the trail with an elevation gain of 600'. The trail is very brushy with alder and downed trees. Reaching upper Copper Lake requires an additional mile hike, with no trail, through a "burn" area and an elevation gain 800'. There is a total elevation gain of 1,400' from the trailhead. An alternate route to upper Copper Lake is by traveling 3 miles up the closed jeep road (behind USFS gate at the trailhead) by foot to the abandoned mining site and intercepting the northern end of USFS Trail #485. USFS Trail #485 runs south and stays relatively level while skirting the slopes of the upper Copper Creek basin (elevation 7,100') and intercepts the outlet stream from the upper lake. An ascent of 0.7 miles along the outlet stream, with an elevation gain of 600', will terminate at the lake. Caution: a large area between the two lakes burned in 2003 making it hard to distinguish the trail in many areas and dangerous due to falling trees during windy conditions.

Camp Sites and Use: No camping areas were observed around Upper Copper Lake.

Angling Opportunity: Upper Copper Lake supports a small population of native westslope cutthroat trout. The topography on the eastern side of the lake is relatively flat; however, the western side of the lake is steep, rocky and prone to avalanches and rockslides, but is easily accessible by foot lending itself to shoreline angling.

Stocking History: None

Angling Pressure: Very light

Other Nearby Lakes: Lower Copper Lake is the only lake in the near vicinity of upper Copper Lake. Lower Copper Lake sits at a lower elevation of 6,858' and is passed while accessing upper Copper Lake along the unmarked trail from the trailhead along USFS Road #330, or it can be accessed from USFS Trail #485, above the lake, by descending 245' to the lake. Because of the lack of an established trail between the lakes, traveling is steep and difficult.

Upper Copper Lake: Biological & Physical Information

Date Sampled: 6/26-27/2006

Water Code: 04-6363

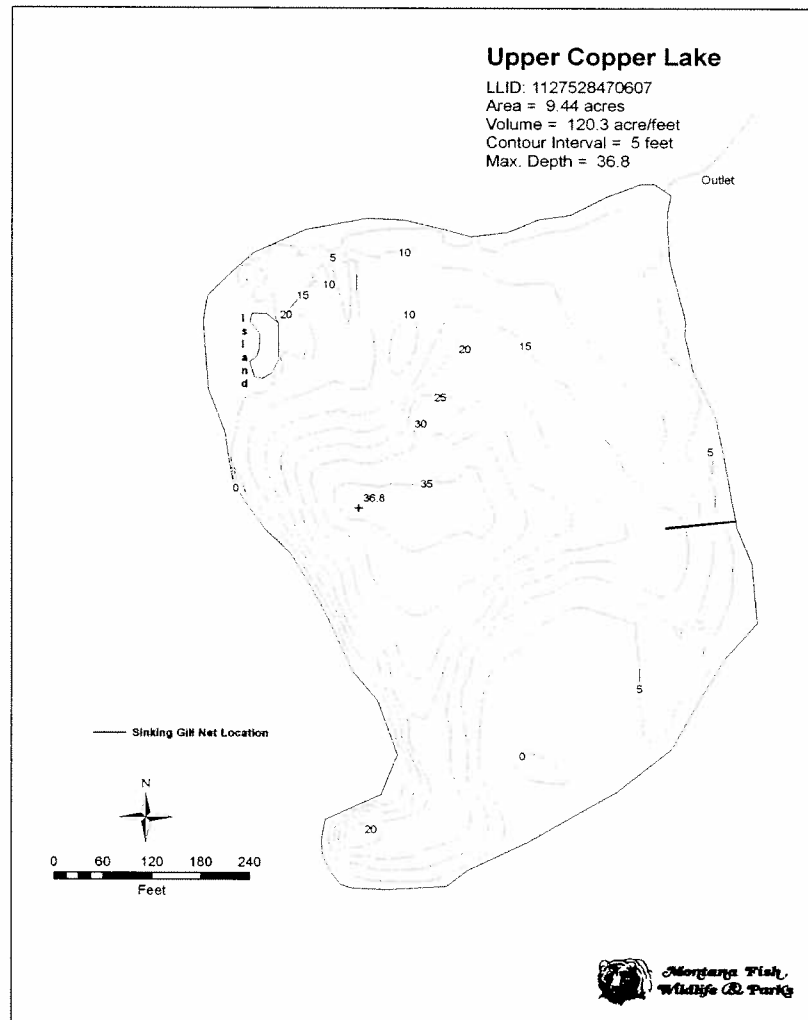
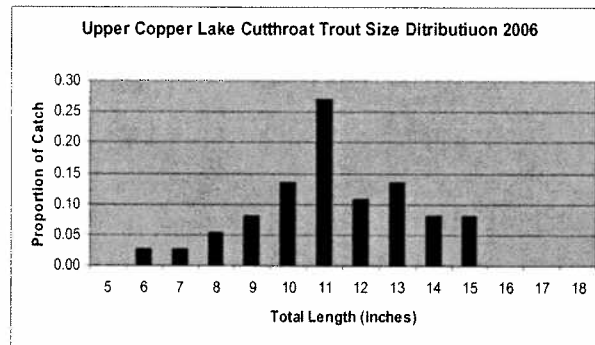
Game Fish Present: Westslope Cutthroat Trout
Other Fish Present: None
Size Captured: Mean 11.3 inches (range 6.1-15.4 inches)
Trout Condition Factor (Wr): No data
Amphibians Observed: Long-toed salamander

Sampling Methods: Sinking Gill Net
Gill Net Catch Rate: 1.87trout/net/hr
Natural Recruitment: Present
Genetics: 100% pure westslope cutthroat trout

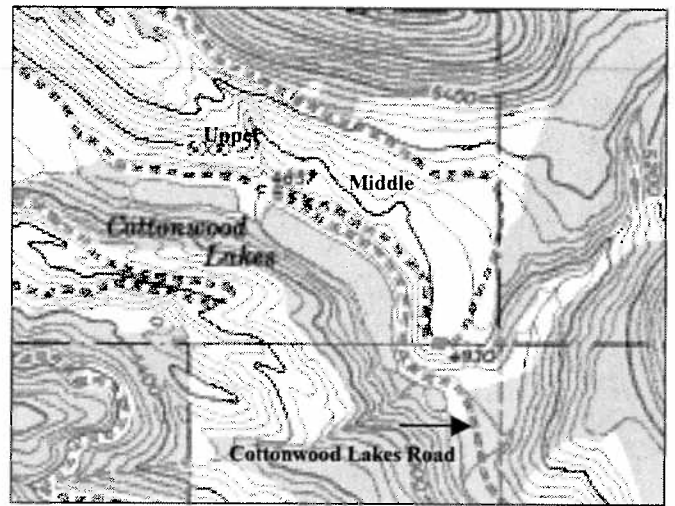
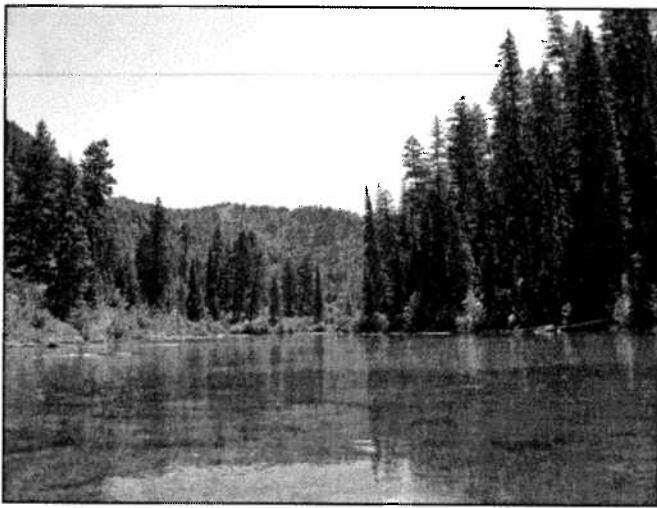
Management Objectives: Status Quo

Currently Stocked: No **Last Stocked:** NA **Species:** NA **Recommended Frequency:** NA

Water Chemistry: pH: 8.19 TDS: 8 ppm **Conductivity:** 18 uS **Secchi Depth:** 36.8 ft



Upper Cottonwood Lake



Description: Upper Cottonwood Lake is a shallow and small (4.15 acres) glacial valley trough lake located ~1.5 miles south-southwest of Morrell Mountain and 8.3 miles east-southeast of Seeley Lake. The lake lies within Lolo National Forest (Seeley Lake Ranger District) at 4,867' in the upper Cottonwood Creek drainage. Cottonwood Creek is a tributary to the middle Blackfoot River.

Location: T16N, R14W, Sections 3; Latitude N47.16783°, Longitude W113.35612°; Nearest Town: Seeley Lake.

Public Access: Upper Cottonwood Lake lies along USFS Road 477 (Cottonwood Lakes Road), which provides easy access to the lake. From Highway 83 in Seeley Lake, take USFS Road 477 (primary road) east 8.3 miles to the lake. From Highway 200, take Woodworth Road northwest 9.0 miles, then turn right (north) on USFS Road 9976 for 3.6 miles and then left (west) on USFS Road 447 2.2 miles to the lake.

Camp Sites and Use: No camping areas were observed around upper Cottonwood Lake. Because of the absence of a boat launch combined with a very brushy shoreline, the lake experiences light to moderate use.

Angling Opportunity: Upper Cottonwood Lake supports a small self-sustaining population of rainbow trout. The lake is has also been planted with westslope cutthroat trout, however none were sampled during 2006 surveys. The majority of the north shoreline topography along USFS Road 477 is very brushy with alder and red osier dogwood. There are a few small areas that allow shoreline angling. The southern shoreline is steep, very brushy with alder and heavily timbered.

Stocking History: According to past fish planting records, rainbow trout were stocked only once in 1954. However, upper Cottonwood Lake is connected to middle Cottonwood Lake, which had been on the fish plant program.

Angling Pressure: From March 2005 to February 2006, angling pressure was estimated at 163 angler-days.

Other Nearby Lakes: Middle Cottonwood Lake also lies along USFS Road 477 (Cottonwood Lakes Road) immediately east, within 0.1 mile of upper Cottonwood Lake. 0.6 miles east of upper Cottonwood Lake is a small un-named lake. These three lakes are connected by a small first-order tributary stream, which then enters Cottonwood Creek. High water allows fish passage between the lakes.

Upper Cottonwood Lake: Biological & Physical Information

Date Sampled: 7/18-19/2006

Water Code: 04-7500

Game Fish Present: Rainbow Trout

Sampling Methods: Sinking Gill Net

Other Fish Present: Redside shiners

Size Captured: Mean 13.3 inches (range 8.6 – 17.0 inches)

Trout Condition Factor (Wr): Mean 96 ± 6.6 (range 87 -108)

Amphibians Observed: Spotted Frogs (adults & larvae), Painted Turtles

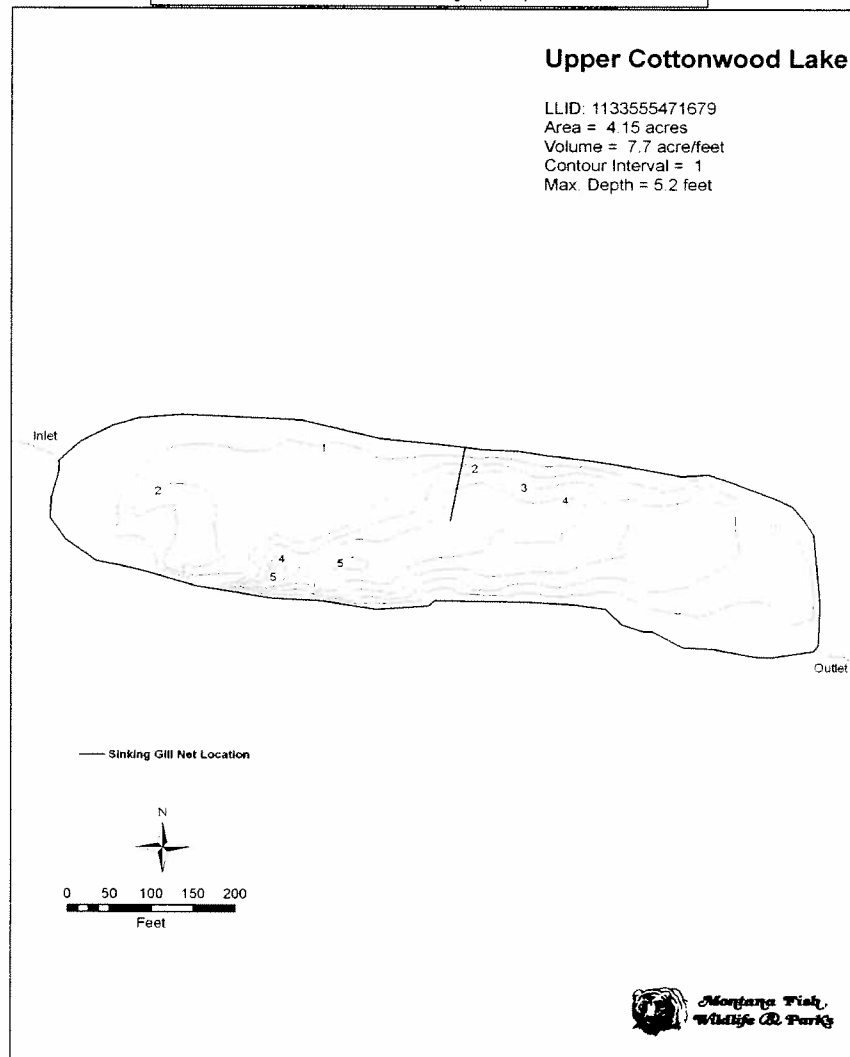
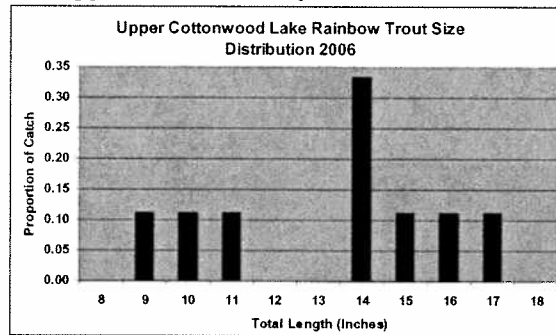
Gill Net Catch Rate: 0.44trout/net/hr

Natural Recruitment: Present

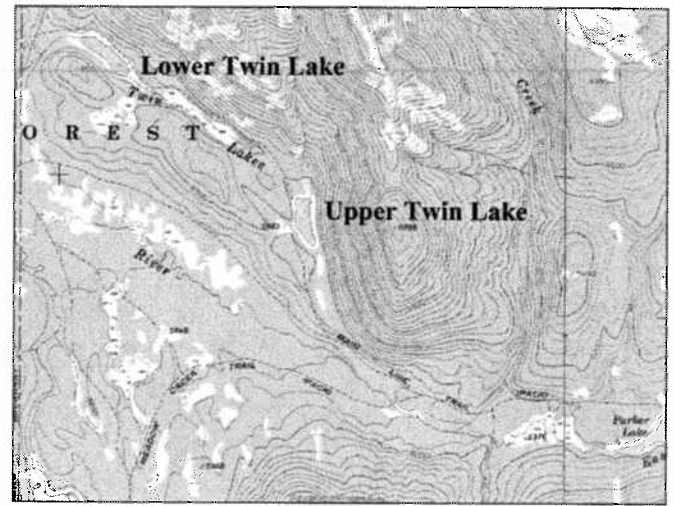
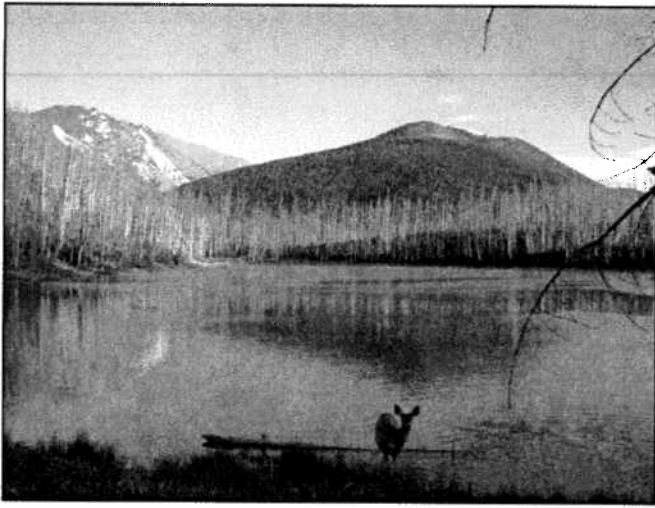
Management Objectives: Stop the WSCT plant and evaluate potential to convert to WSCT due to downstream hybridization risk to pure WSCT in Cottonwood Creek

Currently Stocked: No **Last Stocked:** 2005 **Species:** WSCT **Recommended Frequency:** NA

Water Chemistry: pH: 8.96 TDS: 117 ppm **Conductivity:** 236 uS **Secchi Depth:** 5.2 ft



Upper Twin Lake



Description: Upper Twin Lake is a small (6.3 acres) glacial lake located ~2.6 miles east-northeast of Bugle Mountain and 2.5 miles south-southwest of Pyramid Peak within the Scapegoat Wilderness. The lake lies on the Helena National Forest (Lincoln Ranger District) at 5,967 ' in the East Fork of the North Fork Blackfoot River drainage.

Location: T16N, R9W, Sections 5 & 8; Latitude N47.16432°, Longitude W112.77245°; Nearest Town: Lincoln.

Public Access: There are two options to access to Upper Twin Lake: Option 1: From Meadow Creek Trailhead, east of Ovando, take USFS Trail #483 (Meadow Creek Trail) 12 miles to its intersection with USFS Trail #481 (Main Line Pack Trail) then travel ~0.25 miles northwest to the Twin Lakes Trail #425 and follow it 0.6 miles to the lake. Option 2: From the Indian Meadows Trailhead, east of Lincoln in the Landers Fork and Copper Creek drainage, take the USFS Trail #481 (Main Line Pack Trail) northwest 10.5 miles to the USFS Trail #425 (Twin Lakes Trail) and follow it 0.6 miles to the lake. Both trails leading to upper Twin Lake have a moderate degree of difficulty.

Camp Sites and Use: One primitive campsite was observed at upper Twin Lake on the northern end of the lake near the small inlet stream. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Gill net surveys identified upper Twin Lake as fishless.

Stocking History: Fish planting records show that upper Twin Lake was stocked four times, beginning in 1943 with unspecified cutthroat trout. In 1969 and 1971, Yellowstone cutthroat were also planted. The most recent stocking occurred 1988 with westslope cutthroat trout.

Angling Pressure: NA

Other Nearby Lakes: In the vicinity of upper Twin Lake is lower Twin Lake located ~0.9 miles northwest along the Twin Lakes Trail #425. If you accessed upper Twin Lake via the Main Line Pack Trail (USFS trail #481) from the Indian Meadows Trailhead, you can retrace it back approximately 2.0 miles southeast to Parker Lake. If you accessed upper Twin Lake area using the Meadow Creek Trailhead (USFS Trail #483), Meadow Lake is ~2.9 miles southwest of upper Twin Lake on the return trip to the trailhead.

Upper Twin Lake: Biological & Physical Information

Date Sampled: 6/20/2005

Water Code: 04-7530

Game Fish Present: None

Sampling Methods: Sinking Gill Net

Other Fish Present: None

Size Captured: NA

Trout Condition Factor (Wr): NA

Gill Net Catch Rate: NA

Natural Recruitment: NA

Amphibians Observed: Spotted frogs (adults)

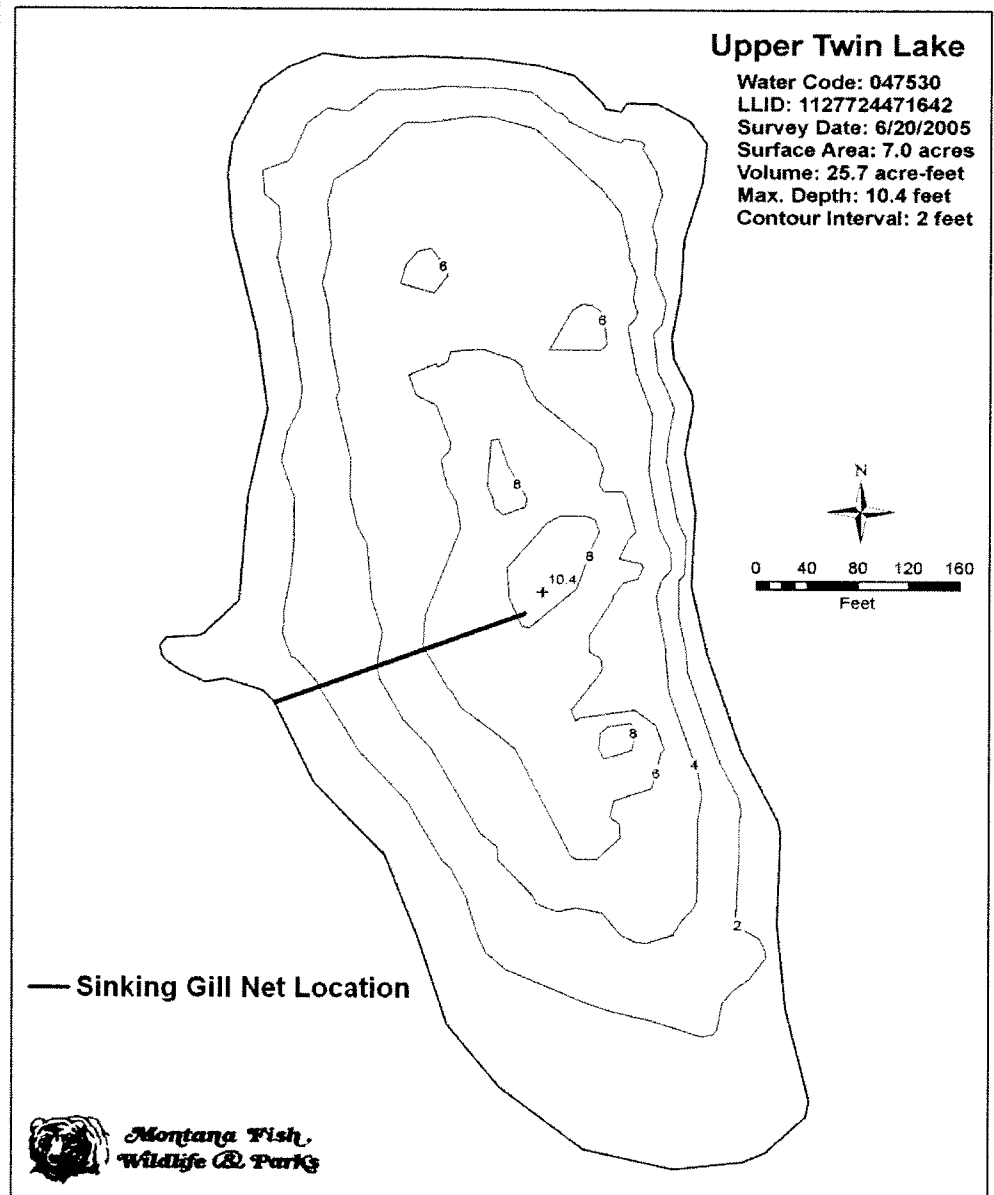
Management Objectives: The lake can not sustain natural reproduction and appears marginal from the perspective of winter survival. Recommend the lake remain fishless.

Currently Stocked: No **Last Stocked:** 1988 **Species:** WSCT **Recommended Frequency:** NA

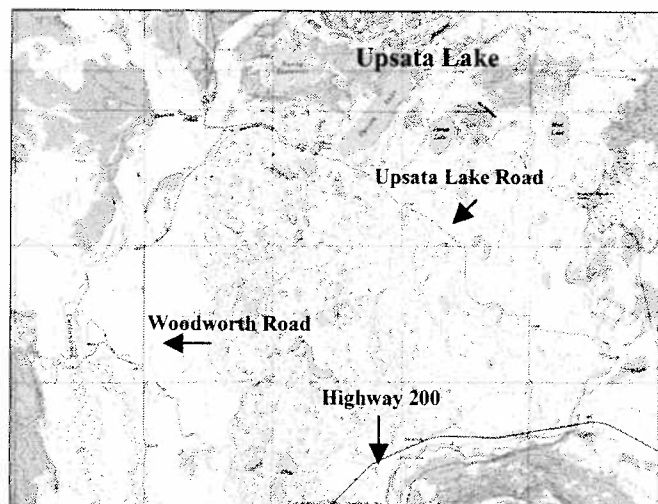
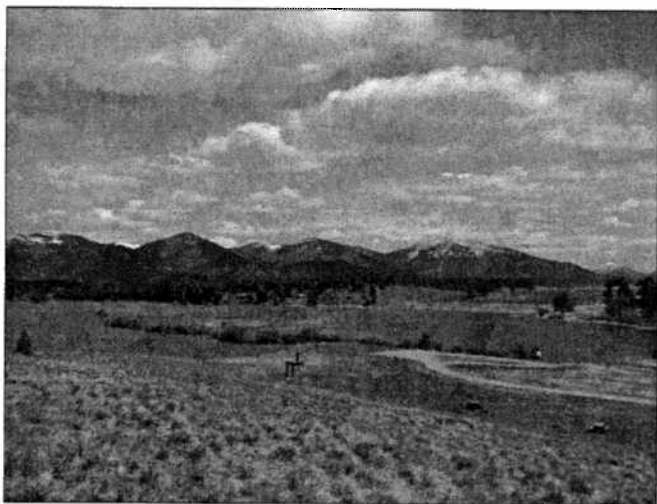
Water Chemistry: pH: 8.57 TDS: 150 ppm Conductivity: 300 uS Secchi Depth: 10.4 ft

Stocking History

| Year | Species | # Stocked |
|------|---------|-----------|
| 1988 | WSCT | 3,990 |
| 1971 | YCT | 1,035 |
| 1969 | YCT | 990 |
| 1943 | CT | 4,000 |



Upsata Lake



Description: Upsata Lake is a 90.6 acre glacial “pothole” lake (elevation of 4,130’) located in the “knob-kettle” topography of the middle Blackfoot River watershed. Upsata Lake is 6.1 miles south of Dunham Point and ~11.2 miles east-northeast of Ovando.

Location: T15N, R13W, Sections 2, 3 & 10; Latitude N47.07795°, Longitude W113.22162°; Nearest Town: Ovando.

Public Access: Upsata Lake lies along Upsata Lake Road, which is easily accessed from the Woodworth Road. From Highway 200, take Woodworth Road northwest 3.3 miles, then turn right (east) on Upsata Lake Road for 0.9 miles to the Upsata Lake Fishing Access Site.

Camp Sites and Use: Four campsites and a boat launch are located at the Upsata Lake Fishing Access Site. These camp sites receive moderate to heavy use.

Angling Opportunity: Upsata Lake supports an abundant population of “stunted” yellow perch and low numbers of largemouth bass and northern pike. Upsata Lake is surrounded by private property with the exception of the Fishing Access Site at the southwest end of the lake.

Stocking History: From 1959 to 1992, Upsata Lake was on a yearly stocking schedule of rainbow trout. Starting in the early 1990’s, largemouth bass were also stocked annually to curb rising populations of yellow perch that were illegally introduced. Upsata Lake is now periodically supplemented with adult largemouth bass.

Angling Pressure: From March 2005 to February 2006 angling pressure estimated at 770 angler-days per year.

Other Nearby Lakes: The Cottonwood Lakes lie along USFS Road 477 (Cottonwood Lakes Road) to the northwest of Upsata Lake approximately 12.0 miles. Browns Lake is southeast of Upsata Lake 18.2 miles and can be accessed from Highway 200, east of Ovando, or from the Ovando-Helmville Road, south of Ovando.

Upsata Lake: Biological & Physical Information

Date Sampled: 8/7/2006, 4/24/2007 and 5/2/2007

Water Code: 04-7560

Game Fish Present: Yellow Perch, Largemouth Bass and Northern Pike

Other Fish Present: Redside shiners

Size Captured: N/A

Trout Condition (Wr): N/A

Amphibians Observed: Spotted Frogs (adults) and Painted Turtles

Sampling Methods: N/A

Gill Net Catch Rate: N/A

Natural Recruitment: Present

Management Objectives: Status quo

Currently Stocked: No **Last Stocked:** 1992 **Species:** LMB **Recommended Frequency:** NA

Water Chemistry: pH: 8.26 TDS: 197 ppm Conductivity: 394 uS Secchi Depth: 11.8 ft

Stocking History

Histogram: No Data

| Year | Species | # Stocked |
|-----------|---------|-----------|
| 1988-1991 | LMB | 3,613 |
| 1959-1992 | RBT | 371,921 |

Lake Upsata

LLID: 1128304467883

Area = 90.6 acres

Volume = 1,185 acre/feet

Contour Interval = 5 feet

Max. Depth = 43 feet

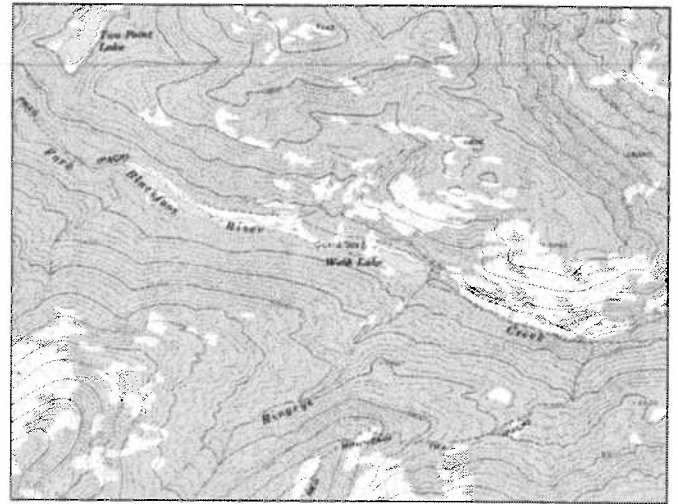
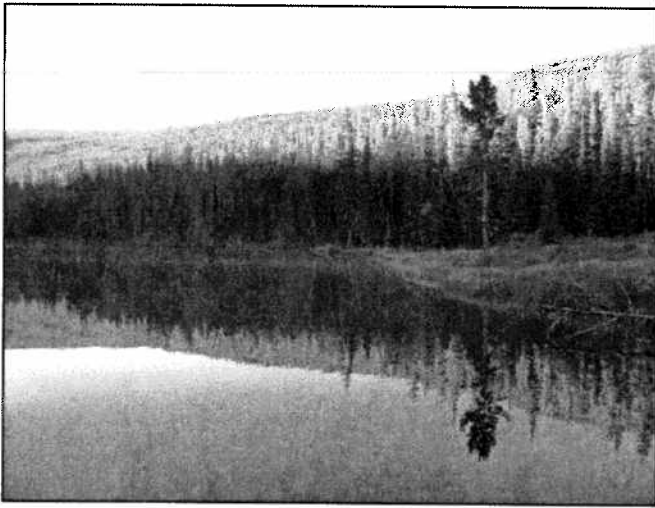


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Feet



Montana Fish,
Wildlife & Parks

Webb Lake



Description: Webb Lake is a shallow (24.7 acres) glacial valley trough lake located ~ 2.8 miles northeast of Red Mountain at an elevation of 6,079'. The lake lies within the Scapegoat Wilderness, Helena National Forest (Lincoln Ranger District). Its outlet flows into Ringeye Creek, a tributary to the Landers Fork of the Blackfoot River.

Location: T16N, R9W, Sections 14; Latitude N47.14522°, Longitude W112.69466°; Nearest Town: Lincoln.

Public Access: Access to Webb Lake can be obtained by taking Highway 200 east from Lincoln 6.2 miles to the Copper Creek Road. Follow the Copper Creek Road 10.2 miles to the Indian Meadows Trailhead. From the trailhead follow USFS Trail #481 (Main Line Pack Trail) 6.5 miles to Webb Lake. The trail is in very good condition with moderate difficulty.

Camp Sites and Use: Because of its relatively short distance within the Scapegoat Wilderness boundary on a well maintained trail system, Webb Lake receives relatively heavy recreational use. Camping opportunities exist in the vicinity of the inlet (near USFS Webb Lake Guard Station) located at the northwest end of the lake. Pack stock is not allowed within 200' of the shore except on the trail. "Leave no trace" camping and recreating is essential in this wilderness area.

Angling Opportunity: Webb Lake supports a small hybrid cutthroat trout population through natural reproduction. Many areas of the shoreline topography are brushy with sedges and rushes extending out into the lake. The adjacent topography is heavily timbered with moderately steep slopes; however, there are areas that lend well to shoreline angling.

Stocking History: Webb Lake was stocked with undifferentiated cutthroat trout between 1940 and 1952.

Angling Pressure: Moderate

Other Nearby Lakes: In the vicinity of Webb Lake are three other lakes. Approximately 4.8 miles from the Indian Meadows Trailhead, Heart Lake lies along a short spur trail (USFS Trail #424) that branches off the Main Line Pack Trail (USFS Trail #481) at trail mile 3.9 then reconnects back into the Main Line Pack Trail at mile 4.8, 2.1 trail miles to the southeast of Webb Lake. Continuing northwest along USFS Trail #481 west of Webb Lake, but 0.6 miles before Parker Lake, Two Point Lake is 0.5 miles north of the Main Line Pack Trail along USFS Trail #479. Parker Lake lies 2.3 miles west of Webb Lake along USFS Trail #481, or 7.0 miles from Indian Meadows Trailhead. Travel is moderately difficult to these other lakes.

Webb Lake: Biological & Physical Information

Date Sampled: 7/19/2005

Water Code: 04-7590

Game Fish Present: Hybridized Westslope Cutthroat Trout
Other Fish Present: None
Size Captured: Mean 8.5 inches (range 6.4 – 14.5 inches)
Trout Condition Factor (Wr): Mean 90 ± 14.6 (range 67 -106)
Genetics: Westslope cutthroat trout hybridized with rainbow trout.

Sampling Methods: Sinking Gill Net
Gill Net Catch Rate: 0.15trout/net/hr
Natural Recruitment: Present (limited)
Amphibians Observed: Spotted Frogs

Management Objectives: Recommend no change

Currently Stocked: No **Last Stocked:** 1952 **Species:** CT **Recommended Frequency:** NA

Water Chemistry: pH: 9.25 TDS: 109 ppm Conductivity: 216 uS Secchi Depth: 5.4 ft

Stocking History

| Year | Species | # Stocked |
|-----------|---------|-----------|
| 1940-1952 | CT | 34,485 |

