



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
 mandi.brandt@state.co.us / 970-842-6330

General Information: Jumbo Reservoir is a 1,578 acre water (at full capacity). Anglers can expect excellent fishing for walleye, and quality fishing for saugeye, smallmouth bass, crappie, bluegill, and channel catfish. Fishing pressure is moderate.

Location: Logan and Sedgwick Counties. From I-76 take Exit 155 and head 3 miles north to Hwy 138. Take Hwy 138 1 mile northeast to CR 95. Take CR 95 2 miles north to the reservoir.

Recreational Management: Colorado Parks and Wildlife

Fishery Management: Warmwater angling

Purchase a Fishing License: <http://wildlife.state.co.us/ShopDOW/AppsAndLicenses/>

Amenities

- Boat ramps
- Picnic areas
- Primitive restrooms
- Camping
- Hiking trails
- Wildlife viewing
- Ice fishing

Regulations

- Min. size for walleye and saugeye is 15" (only 1 can exceed 21").
- Min. size for wiper is 15".
- Min. size for crappie is 10".
- Statewide bag and possession limits also apply.
- NO boat angling allowed from Oct. 1 through the last day of regular goose season.
- Ice fishing is **no longer restricted to within 50 yards of the two south dams or 50 yards of the outlet tower.**
- Clean, drain, and dry all watercraft before launching on and after leaving the reservoir to avoid the spread of aquatic nuisance species.

Previous Stocking

2011

Walleye
 Smallmouth bass
 Channel catfish
 Black crappie
 Bluegill
 Rainbow trout and Cuttbow

2010

Walleye and Saugeye
 Smallmouth bass
 Channel catfish
 Black crappie
 Bluegill
 Rainbow trout and Cuttbow

2009

Walleye
 Channel catfish
 Black crappie
 Bluegill
 Rainbow trout

2008

Walleye and Saugeye
 Smallmouth bass
 Channel catfish
 Black crappie
 Bluegill
 Rainbow trout and Cuttbow

Sportfishing Notes

Walleye and Saugeye

- During early months fish are typically scattered. Try using a crawler harness or bottom bouncer.
- During later months, when water temperatures rise, try casting shad raps.

Smallmouth bass

- New species added to the stocking schedule in 2007.
- Try starting with a crayfish imitation or crank bait.

Channel catfish

- Cut shad or crayfish as bait work well.
- The west end of Jumbo is weedy, but it tends to produce more channel catfish.

Rainbow trout and Cuttbow

- Shore and ice anglers do well using night crawlers and powerbait.
- Boat anglers do well using small shad raps near the two concrete dams along the south shore.



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
mandi.brandt@state.co.us / 970-842-6330

About the Reservoir...

Similar to all northeastern plains reservoirs, Jumbo (Julesburg) Reservoir was constructed to store irrigation water for agricultural use. Water used to fill the reservoir is diverted from the South Platte River between the towns of Proctor and Crook, and flows through a 22-mile earthen inlet canal before reaching the reservoir. First filled in 1907, Jumbo Reservoir is 105 years old.

Since the primary function of Jumbo Reservoir is to store irrigation water, water levels routinely drop during the irrigation season. During a typical year, water levels are drawn down by approximately 15 feet (Figure 1). During dry years more water is needed for agricultural purposes, drastically reducing water levels and creating many fish management challenges. Due to severe drought conditions, the reservoir was completely drained in the early fall of 2006. Former Colorado Division of Wildlife crews managed to salvage some walleye and sunfish species, which were moved to Jumbo Annex Reservoir. Unfortunately, all other fish were lost. By winter, the reservoir was filled to full capacity and crews began rebuilding the fishery by restocking hundreds of thousands of sportfish.

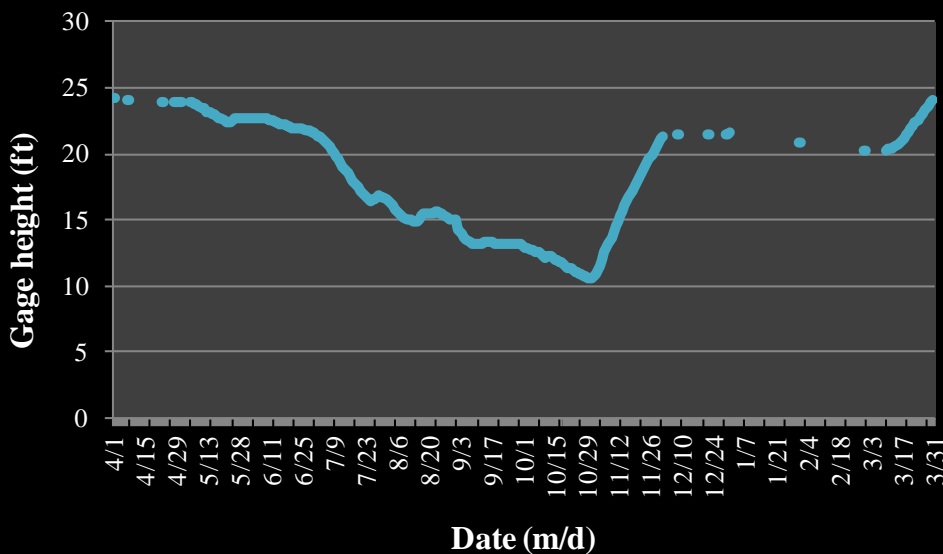


Figure 1. Water level fluctuation at Jumbo Reservoir during a typical year. Prior to the irrigation season, which usually starts in May, the reservoir is at full capacity. During the irrigation season (May-October) the reservoir is routinely drawn down, often to $\leq 50\%$ of its capacity. Refilling usually begins near the end of October, is suspended during the winter months (December-February), and resumes again in the spring (March).



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
mandi.brandt@state.co.us / 970-842-6330

About the Fish...

Jumbo Reservoir is primarily managed as a warmwater fishery. Management is focused on walleye; however, efforts are also made to provide quality fishing opportunities for saugeye (♂ sauger x ♀ walleye hybrid), smallmouth bass, crappie, bluegill, and channel catfish.

Walleye and saugeye

Approximately 3.5 million fry and 40,000 fingerling walleye were stocked into Jumbo Reservoir in the spring of 2007 as part of the rebuilding effort. Since then, an additional 12.5 million walleye and saugeye fry or fingerlings have been stocked. At Jumbo Reservoir, it takes approximately three growing seasons for walleye and saugeye fry and fingerlings to reach the minimum size limit of 15" (Figure 2). Fish that are released or that escape being caught can reach greater than 20" by the end of the fourth growing season (Figure 2). Walleye and saugeye that reached the minimum size limit by the fall of 2009 provided good fishing during 2010. Likewise, fish that reached 15" by the fall of 2010 provided excellent fishing during 2011. Anglers are expected to have tremendous catch rates during 2012 due to the high number of fish ≥ 15 " caught during the 2011 annual survey (Figure 2).

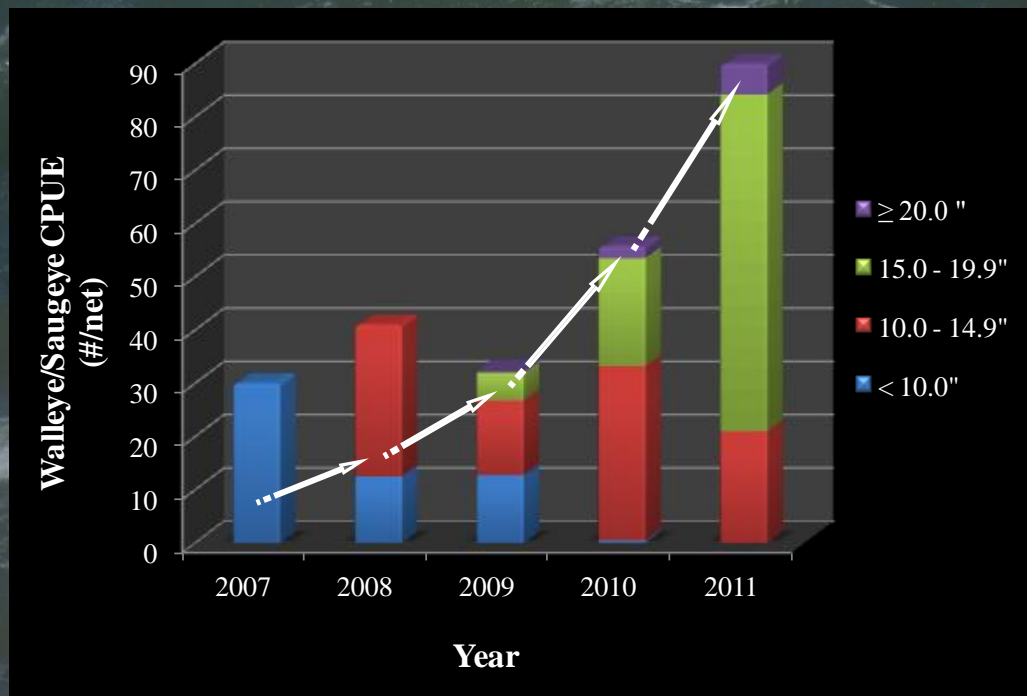


Figure 2. Walleye/saugeye catch-per-unit-effort (CPUE) during the 2007 to 2011 annual surveys at Jumbo Reservoir. For comparative purposes, the number of fish collected was standardized per gillnet. The white arrows indicate growth of fish stocked in 2007 through the years of 2007 to 2011.



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
mandi.brandt@state.co.us / 970-842-6330

About the Fish...

Smallmouth bass

Though smallmouth bass grow well in Jumbo Reservoir due to the substantial abundance of crayfish, natural reproduction of this species is extremely limited. Therefore, the smallmouth bass fishery is entirely built through stocking. As part of the rebuilding effort, 15,000 3" smallmouth bass were stocked in 2007. These fish reached 10" by 2008, 13.5" by 2009, and were large enough (>15") for anglers to legally take home in 2010. Due to the tremendous growth rates of smallmouth bass in Jumbo Reservoir, another 25,000 3" fish were stocked between 2008 and 2011. Unfortunately, smallmouth bass will not be stocked in future years due to limited rearing space at Colorado Parks and Wildlife warmwater hatcheries. Thus, the smallmouth bass population is expected to diminish. In the event more warmwater hatchery space is acquired, stocking of this species will resume due to its success in the reservoir.

Crappie (black and white)

Crappie have always performed well in Jumbo Reservoir. In fact, crappie were the primary sportfish species caught by anglers between the years of 1960 and 1975. This species lost its primary status in the reservoir as fishery management shifted due to the popularity of walleye fishing. Currently, both black crappie and white crappie reside in Jumbo Reservoir; however, black crappie, which are stocked, comprise a majority of the crappie population. Nearly 33,000 black crappie have been stocked in Jumbo Reservoir since 2007 as part of the rebuilding effort, providing a quality black crappie fishery for anglers. According to a creel survey performed at Jumbo Reservoir between May and September of 2011, anglers were catching crappie 9 to 14" in length. If hatchery production allows, higher numbers of black crappie will be stocked in future years to increase catch rates.

Bluegill

The primary purpose of stocking this species was to diversify the prey base for larger sportfish while the Jumbo Reservoir fishery was being rebuilt. However, tremendous growth experienced by bluegill within the reservoir resulted in a substantial bluegill fishery. The average length of bluegill caught during the 2011 annual survey was approximately 9" (Table 1). According to the 2011 creel survey, several bluegill measuring 8 to 10" were caught; however, no anglers sought Master Angler Awards for their fish (qualifying length is 10"). Additionally, a 13.5" bluegill was caught that would have broken the current state record (11.5"), had the angler known. Good bluegill fishing is expected to continue during 2012.



Black crappie: 13.9" (1.7 lbs)



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
 mandi.brandt@state.co.us / 970-842-6330

About the Fish...

Table 1. Summary data for fish caught during the 2011 annual survey at Jumbo Reservoir. Data are based on 77 hours of gillnetting and 65 hours of trap netting.

Species	Number caught	Relative abundance (%)	Average length (in)	Length range (in)	Average weight (lbs)	Weight range (lbs)
Walleye	332	53.64	16.4	9.0 - 23.3	1.8	0.3 - 5.3
Saugeye	29	4.69	13.6	11.3 - 19.7	1.1	0.5 - 3.4
Black crappie	22	3.55	9.0	4.1 - 13.9	0.56	0.1 - 1.7
White crappie	3	0.49	7.7	4.1 - 11.2	0.40	0.1 - 0.9
Bluegill	2	0.32	9.3	8.9 - 9.6	0.62	0.6 - 0.7
Rainbow trout	3	0.48	12.3	10.9 - 14.8	0.58	0.9 - 1.3
Cuttbow	37	5.98	11.4	9.6 - 12.9	0.50	0.7 - 0.9
Freshwater drum	3	0.48	8.8	5.1 - 16.1	0.86	0.2 - 2.5
Black bullhead	8	1.29	8.5	2.6 - 12.4	0.41	0.2 - 1.1
Common carp	4	0.65	18.9	14.0 - 21.7	3.83	1.4 - 4.8
River carpsucker	8	1.29	17.2	6.9 - 19.3	2.09	1.1 - 3.6
White sucker	8	1.29	15.0	13.6 - 17.0	1.47	1.1 - 2.0
Gizzard shad	160	25.85	6.6	3.5 - 16.9	0.16	0.2 - 1.3

Channel catfish

Approximately 36,800 channel catfish have been stocked into Jumbo Reservoir since 2007. Though no channel catfish were caught during the 2011 annual survey (Table 1), results from the 2011 creel survey show anglers caught decent numbers of channel catfish ranging from 6 to 26”.

Rainbow trout and cuttbow

Though Jumbo Reservoir is primarily managed as a warm-water fishery, rainbow trout and cuttbows are stocked to diversify angling opportunities. Additionally, trout are stocked to increase shore angler catch rates because trout tend to be easier to catch from shore than many warmwater species. Finally, when trout do not succumb to Jumbo Reservoir’s high summer temperatures, they form a substantial ice-fishery due to their exceptional growth rates within the reservoir.





Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
 mandi.brandt@state.co.us / 970-842-6330

About the Anglers...

Table 2. Summary of the 2011 Jumbo Reservoir creel survey conducted from May through September.

Statistic	Estimates		
	Shore anglers	Boat anglers	Total (all anglers)
FISHERMAN-HOURS (# OF HRS FISHED)	6276	13639	19916
FISHERMAN (# OF ANGLERS)	2356	3068	5424
TOTAL CATCH (# OF FISH)	4048	18850	22898
KEPT CATCH (# OF FISH)	2182	4203	6384
RETURNED CATCH (# OF FISH)	1866	14647	16513
TOTAL CATCH/HR (# FISH/HR)	0.65	1.38	1.15
KEPT CATCH/HR (# FISH/HR)	0.35	0.31	0.32
RETURN CATCH/HR (# FISH/HR)	0.30	1.07	0.83
AVERAGE COMPLETED TRIP LENGTH (HRS)	2.66	4.45	3.67



2011 Jumbo Reservoir creel survey

According to the 2011 creel survey, over 5,400 anglers fished Jumbo Reservoir for nearly 20,000 hours between May and September of 2011 (Table 2). Eighty-eight percent of anglers were Colorado residents, of which 57% were from nearby towns in the six surround-

ing counties (Logan, Sedgwick, Phillips, Yuma, Washington, and Morgan). The majority of anglers fished with bait (63%) or a combination of bait and lures (24%), while fewer anglers used only lures (13%). Over one-half of anglers targeted walleye and saugeye, while nearly one-quarter of anglers targeted trout (Figure 3). Nearly 23,000 fish (all species included) were caught, of which approximately 28% were kept and 72% were released. In general, most anglers enjoyed their fishing trips at Jumbo Reservoir, ranking their trip quality as either excellent (22%), good (45%), or average (21%). Likewise, most anglers approved of the fish they caught, ranking fish quality as either excellent (33%), good (51%), or average (14%).

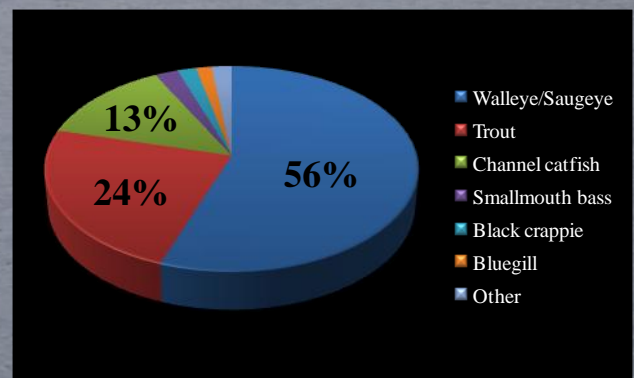


Figure 3. Fish species targeted by anglers during the 2011 Jumbo Reservoir creel survey.



Jumbo Reservoir

FISH SURVEY AND MANAGEMENT DATA

Mandi Brandt - Aquatic Biologist (Brush)
 mandi.brandt@state.co.us / 970-842-6330

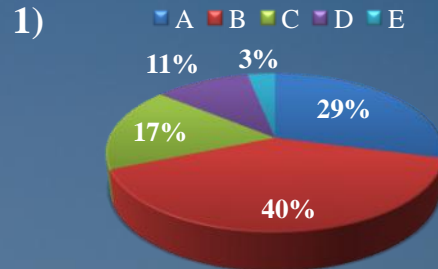
About the Anglers...

2011 Jumbo Reservoir creel survey continued...

Anglers were asked the following four questions and had the following responses:

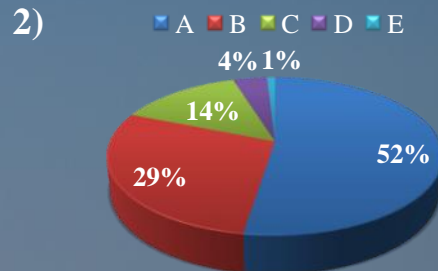
1) Given the following scale, please rank your support (or not) for the new user fee at Jumbo State Wildlife Area:

- A) Strongly support user fee
- B) Support user fee
- C) It does not matter one way or the other
- D) Do not support user fee
- E) Strongly against user fee



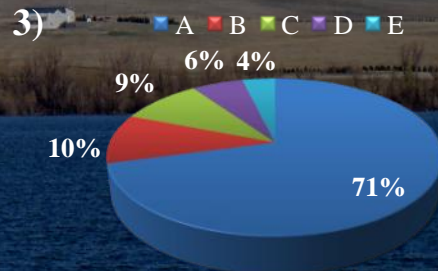
2) Please rank your support (or not) for the installation of a boat dock at Jumbo Reservoir using the following scale:

- A) Strongly support installation
- B) Support installation
- C) It does not matter one way or the other
- D) Do not support installation
- E) Strongly against installation



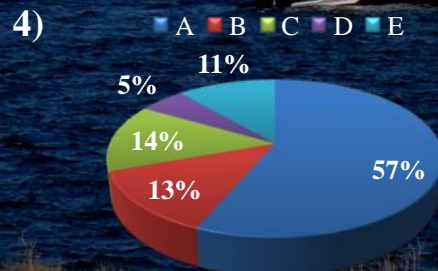
3) Of the following warmwater fish species, which would you most like to catch at Jumbo Reservoir?

- A) Walleye/Saugeye
- B) Bass (largemouth and/or smallmouth)
- C) Wiper
- D) Crappie (black and/or white)
- E) Yellow perch



4) What percentage of your angling time today did you spend actively targeting trout?

- A) 0%
- B) 1-32%
- C) 33-65%
- D) 66-99%
- E) 100%



Thank you to all of the anglers who were willing to participate in the creel survey!