



# Prewitt Reservoir

## FISH SURVEY AND MANAGEMENT DATA

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**General Information:** Prewitt Reservoir is a 2,431 acre water (at full capacity). Anglers can expect quality fishing for walleye, saugeye, channel catfish, and black crappie. Wiper, northern pike, and rainbow trout can also be caught. Wakeless boating is permitted.

**Location:** Logan and Washington Counties. From I-76 take the Merino Exit and head 1 mile north to Hwy 6. Take Hwy 6 3.3 miles northeast 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 ramp
- 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".
- Statewide bag and possession limits also apply.
- Ice fishing is restricted to within 50 yards of the dam.
- NO boat angling allowed from Oct. 1 through last day of regular goose season.
- Boating is prohibited if it creates a whitewater wake.
- Clean, drain, and dry all watercraft before launching on and after leaving the reservoir to avoid the spread of aquatic nuisance species.

### Previous Stocking

#### 2012

Walleye  
Saugeye  
Rainbow trout and Cuttbow

#### 2011

Walleye  
Saugeye  
Channel catfish  
Black crappie  
Rainbow trout and Cuttbow

#### 2010

Saugeye  
Channel catfish  
Black crappie  
Bluegill  
Cuttbow

#### 2009

Saugeye  
Channel catfish  
Black crappie  
Bluegill  
Rainbow trout

### Sportfishing Notes

#### Walleye/Saugeye

- Fishing during early spring produces the best numbers.
- Boat anglers do well trolling shad raps and wally divers during late spring and early summer.
- Areas near the boat ramp and the south shore represent traditional hot-spots.

#### Channel catfish

- Shore anglers generally do as well as boat anglers.
- Cut shad or shrimp as bait work well.

#### Black crappie

- Fishing for this species was excellent during the 2012 fishing season.
- Fish the west end of the reservoir in 5 feet of water during April and May.
- Later in the year when the reservoir is drawn down, try fishing along the east dam.



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### *About the Reservoir...*

Constructed in 1908, Prewitt Reservoir is 105 years old. The reservoir has a maximum depth of 25 feet and a mean depth of 11 feet. With exception of the willows, cottonwoods, and smartweed that grow near the inlet, the reservoir virtually devoid of structure.

The reservoir is managed as a recharge impoundment, meaning outflows to the South Platte River are strategically timed to offset reduced river flows caused by irrigation and aquifer pumping. During a typical year, Prewitt Reservoir is drawn down to approximately one-half of its maximum

volume (Figure 1). While this water management regime supplies much needed water to the South Platte River, it has negative impacts on the reservoir's fishery. As water is released from the reservoir, some fish get flushed into the river. Remaining fish are subject to water draw-down which eliminates littoral habitat that young fish would normally use to escape predation. The risk of being consumed is heightened as the water level continues to drop and fish are concentrated into a successively smaller pool.

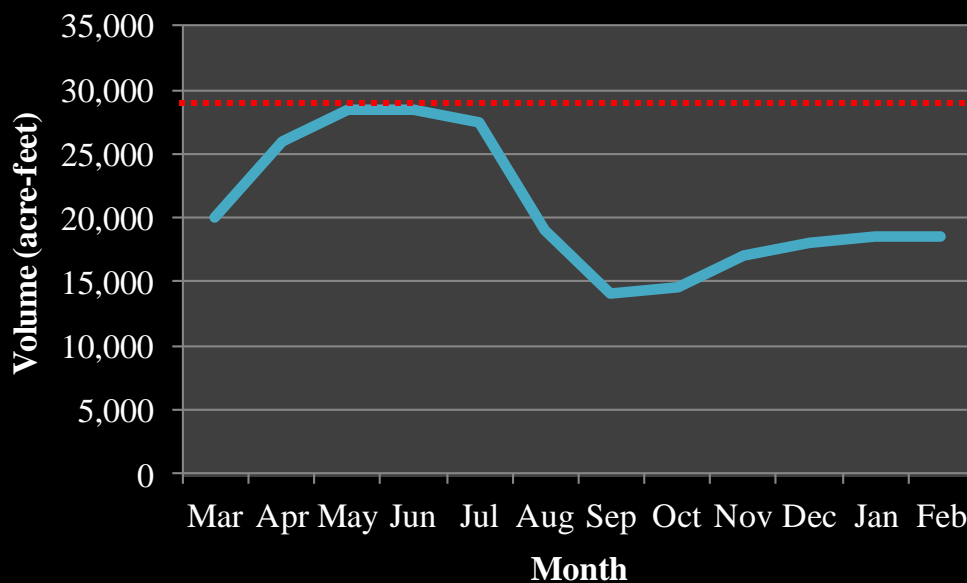


Figure 1. Water level fluctuation at Prewitt Reservoir during a typical year. The reservoir usually reaches full capacity (red dotted line) prior to the irrigation season, which begins in May. During the irrigation season (May-October), water is released from the reservoir to augment flows in the South Platte River, drawing the reservoir down to approximately one-half of its capacity. Refilling usually begins near the end of October, is suspended during the winter months (December-February) to protect the dam, and resumes again in the spring (March).

Though it can be trying for young fish to survive in these conditions, Prewitt's dead pool (6 feet deep) is substantial enough to support many of the older, larger fish until the reservoir refills.



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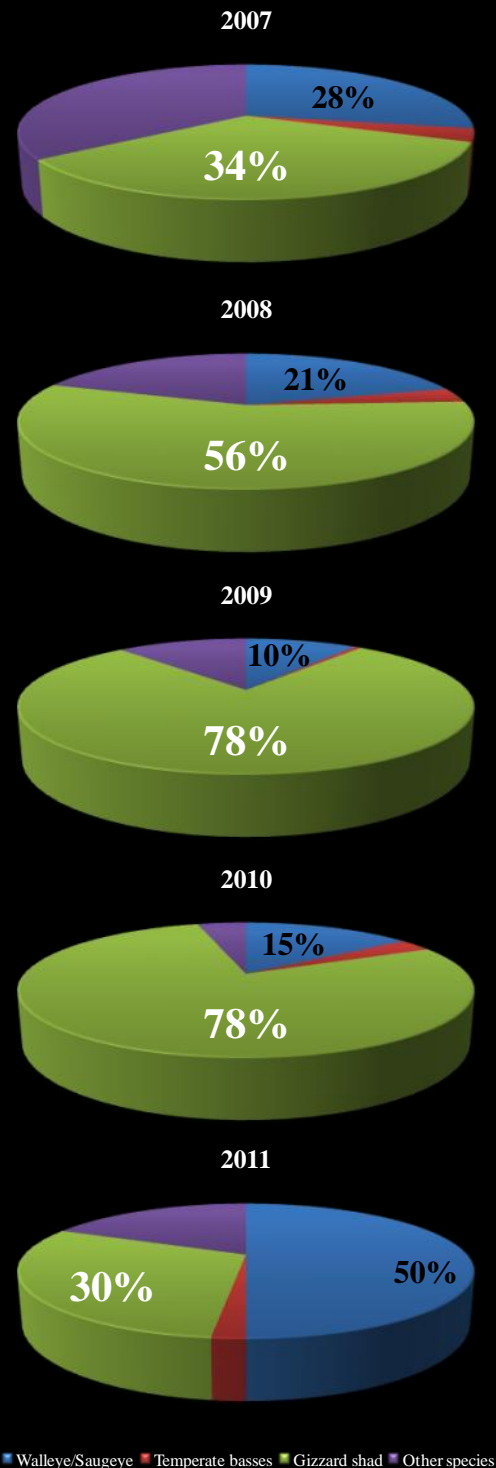
### *About the Fish...*

#### Gizzard shad

Gizzard shad are relied upon as the primary prey species in many of Colorado's reservoirs because they are highly prolific (250,000 eggs per female), broadcast spawners. Because sportfish target smaller, young-of-the-year fish that they can fit into their mouths, gizzard shad must successfully spawn to contribute to the forage base. Furthermore, large numbers of shad must be successful to produce enough young to adequately support the biomass of sportfish. In that sense, having large numbers of gizzard shad in a reservoir can be advantageous. However, abundant gizzard shad can make angling difficult because competition among sportfish for the plentiful food is lowered.

Walleye, saugeye (♂ sauger x ♀ walleye hybrid), and wiper (♂ white bass x ♀ striped bass hybrid) fishing began to slow down in 2008 as Prewitt Reservoir's gizzard shad population expanded, and was extremely slow during the 2009 and 2010 fishing seasons due to a severely over-abundant prey base (Figure 2). Fortunately, many gizzard shad succumbed to winter-kill prior to the 2011 fishing season, creating greater competition among predators. This winter-kill, combined with high recruitment of walleye and saugeye, resulted in better fishing during the 2011 and 2012 fishing seasons. Due to extremely low water levels, no annual survey was performed during 2012; thus, the present size of the gizzard shad population is unknown. However, it is believed that the walleye and saugeye populations, which comprised 50% of the catch during the 2011 annual survey (Figure 2), helped control the gizzard shad population during the 2012 fishing season because high numbers of these predators were caught by anglers. Now that the gizzard shad population is under control, anglers can expect better fishing at Prewitt Reservoir in the future.

Figure 2. (Right) Relative abundance of fish species caught in gill-nets during the 2007 to 2011 annual surveys at Prewitt Reservoir. Fish caught in trap nets are not included.





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### About the Fish...

#### Walleye and saugeye

Prewitt Reservoir is primarily managed as a walleye and saugeye fishery because these species have had greater success in the reservoir than wiper. Walleye and saugeye caught during the 2011 annual survey were 15.5" and 13.2" long on average, with the largest walleye and saugeye being 19.1" and 16.1", respectively (Table 1). Approximately 56% of the walleye and saugeye sampled exceeded the 15" minimum size limit, supplying anglers in the 2012 fishing season with several fish that were already keeper-sized (Figure 3). Additionally, many of the 10 to 15" fish sampled in 2011 exceeded 15" by the spring of 2012. Though fewer numbers of walleye and saugeye were caught during the 2011 annual survey than during the 2010 annual survey, fishing was better in 2012 than in 2011 due to the gizzard shad population decline (Figure 2).

Table 1. Summary data for fish caught during the 2011 annual survey at Prewitt Reservoir. Data are based on 52 hours of gillnetting. Unfortunately, low water levels prevented the use of trap nets and high winds compromised fish weights.

Species	Number caught	Length (inches) [mean (range)]
Black crappie	3	9.2 (8.5-9.9)
Bluegill	1	6.7 (6.7-6.7)
Gizzard shad	31	11.1 (4.7-16.3)
Rainbow trout	3	11.6 (10.7-12.6)
River carpsucker	1	11.2 (11.2-11.2)
Cutbow	8	11.3 (9.7-12.3)
Saugeye	8	13.2 (9.2-16.1)
Wiper	2	21.9 (20.7-23.0)
Walleye	44	15.5 (12.2-19.1)
White sucker	1	14.6 (14.6-14.6)
Yellow perch	2	8.2 (7.9-8.5)

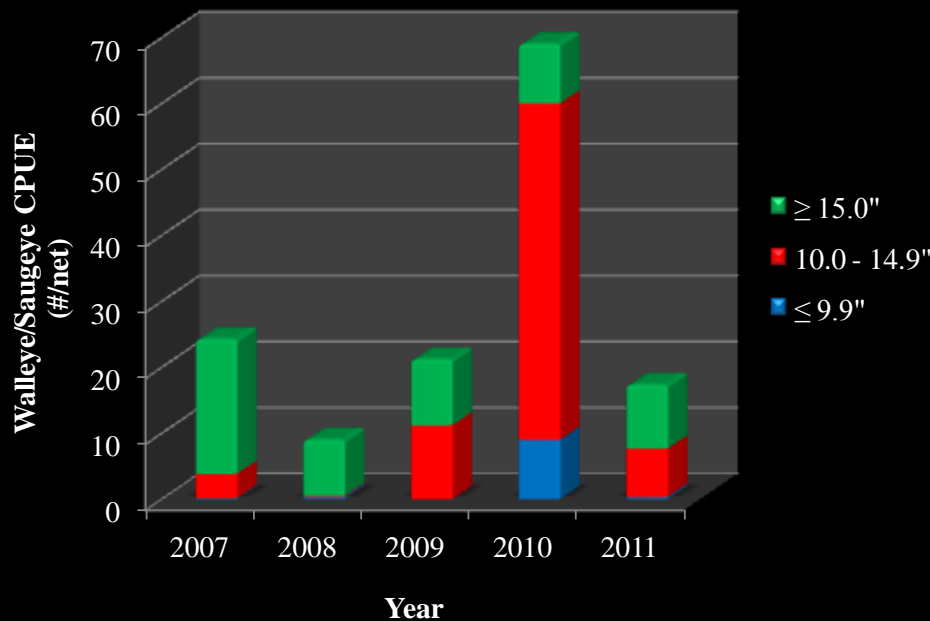


Figure 3. (Left) Walleye and saugeye catch-per-unit-effort (CPUE) during the 2007 to 2011 annual surveys at Prewitt Reservoir. For comparative purposes, the number of fish collected was standardized per gillnet.



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### *About the Fish...*

#### Temperate basses (white bass, striped bass, and wiper)

Wiper were initially stocked into Prewitt Reservoir in 1982 to increase angler harvest of warmwater sportfish. Though this species has been stocked on a nearly annual basis for this purpose, desired stocking rates have not been achieved in most years due to low wiper availability. In 2007, white bass and striped bass were also stocked into the reservoir. Despite stocking nearly three million temp-



erate basses since 2006, wiper, white bass, and striped bass have only comprised one to two percent of the catch during annual surveys. Low numbers of temperate basses can be attributed to low availability, poor recruitment due to cold water temperatures at the time of stocking, reservoir draw down, or a combination of the these factors. Anglers seeking temperate basses are encouraged to fish for wiper at Jackson and North Sterling Reservoirs.



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### *About the Anglers...*

#### 2012 Prewitt Reservoir creel survey

According to the 2012 creel survey, almost 6,250 anglers fished Jackson Reservoir for nearly 25,200 hours between May and September of 2012 (Table 2). Nearly all anglers (99.5%) were Colorado residents, of which 77.2% were from nearby towns in the six surrounding counties (Morgan, Washington, Logan, Sedgwick, Phillips, and Yuma). Non-resident anglers were from Wyoming, New Mexico, and Idaho. The majority of anglers fished with bait (55%), followed by lures (24%), or a combination of the two (21%). Nearly one-half of anglers targeted walleye (Figure 4). Wiper, channel catfish, and black crappie were also highly sought after (Figure 4). Nearly 13,000 fish (all species included) were caught, of which approximately 47% were kept and 53% were released. In general, most anglers enjoyed their fishing trips at Prewitt Reservoir, ranking their trip quality as either excellent (15%), good (58%), or average (19%). Likewise, most anglers approved of the fish they caught, ranking fish quality as either excellent (21%), good (70%), or average (8%).

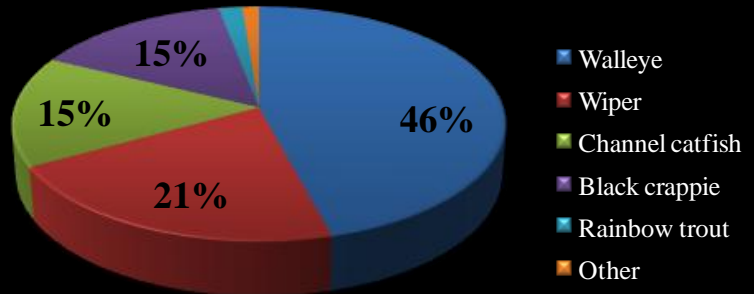


Figure 4. Fish species targeted by anglers during the 2012 Prewitt Reservoir creel survey.

Table 2. Prewitt Reservoir creel survey summary (May through September of 2012).

Statistic	Estimates		
	Shore anglers	Boat anglers	Total (all anglers)
FISHERMAN-HOURS (# of HRS FISHED)	17939	7250	25189
FISHERMAN (# OF ANGLERS)	4642	1607	6249
TOTAL CATCH (# OF FISH)	7936	5039	12975
KEPT CATCH (# OF FISH)	4007	2068	6075
RETURNED CATCH (# OF FISH)	3929	2971	6900
TOTAL CATCH/HR (# FISH/HR)	0.44	0.70	0.52
KEPT CATCH/HR (# FISH/HR)	0.22	0.29	0.24
RETURN CATCH/HR (# FISH/HR)	0.22	0.41	0.27
AVERAGE COMPLETED TRIP LENGTH (HRS)	3.87	4.51	4.03

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



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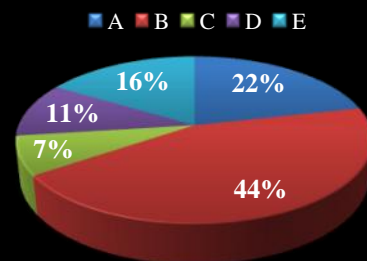
### *About the Anglers...*

#### 2012 Prewitt Reservoir creel survey continued...

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

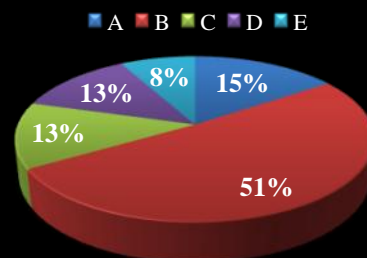
1) Using the following scale, please rank your support (or not) for the user fee at Prewitt Reservoir? 1)

- 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



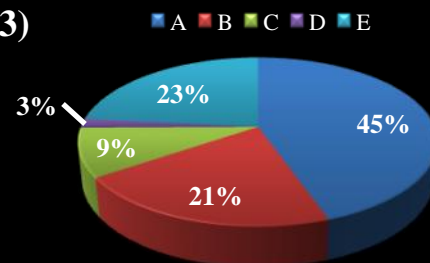
2) Please rank your support (or not) of creating a minimum size limit of 10" long for crappie using the following scale? 2)

- A) Strongly support creation of minimum size limit
- B) Support creation of minimum size limit
- C) It does not matter one way or the other
- D) Do not support creation of minimum size limit
- E) Strongly against creation of minimum size limit



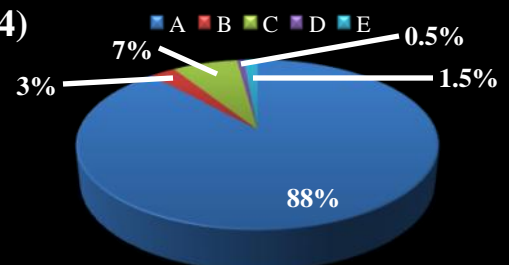
3) Of the following warmwater fish species, which would you most like to catch at Prewitt Reservoir? 3)

- A) Walleye/Saugeye
- B) Wiper
- C) Crappie (black and/or white)
- D) Yellow perch
- E) Channel catfish



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

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





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### *Master Angler Awards*

<u>Year</u>	<u>Species</u>	<u>Length</u>	<u>Angler Name</u>
2012	Walleye	27"	Jerry McKee
2012	White bass	17 1/2"	Tyler Nicely
2012	Crappie	16 1/2"	Walter Campbell
2012	Crappie	15 3/4"	Helen Campbell
2011	Wiper	30"	Kim Campbell
2011	Cutbow trout	23 3/4"	Vincent Hacking
2011	Common carp	32"	Wesley Hardy
2010	Channel catfish	36"	Rodney Hardy
2010	Channel catfish	32"	Brey Wyett
2010	Channel catfish	31"	Donna Harper
2010	Channel catfish	30"	Corby Wyett
2010	Channel catfish	30"	Tim Schroeder
2010	Blue catfish	31"	Hunter Schroeder
2009	Channel Catfish	34"	Brian Robinson
2009	Channel Catfish	32"	Sean Ford II
2008	Channel Catfish	33 1/2"	Johnny Guzman
2008	Channel Catfish	31"	Matthew Dean

