

# 2012 Fall Walleye Index Netting (FWIN) Surveys in Washington State



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## Introduction

The walleye is a popular sport fish throughout the United States and represents an important recreational fishery in Washington. Management of walleye fisheries must include periodic standardized sampling, appropriate harvest regulations and exploitation by anglers in order to reduce negative impacts on other fish populations.

The Washington Department of Fish and Wildlife (WDFW) fisheries biologists, along with Spokane and Colville tribal fisheries biologists began monitoring important walleye populations in Washington in 2002 using Fall Walleye Index Netting (FWIN) methodologies. The FWIN methodologies were developed in Ontario, Canada as a means of monitoring a wide variety of biological parameters in walleye populations in a standardized fashion.



Fisheries biologists from WDFW conduct FWIN surveys on five important walleye populations in eastern Washington (FIGURE 1) each fall, when water temperatures are 50–59°F, a range at which walleye are more equally distributed throughout lakes. Standardized sampling effort (i.e. nets set per lake) is based on lake size, or the minimum number of nets needed to collect 300 walleye (TABLE 1).

In 2012 walleye abundance in our FWIN waters was excellent. The average catch per unit effort (CPUE), for all lakes combined, was 18 walleye per net, and approximately 29 percent of the walleye collected from all lakes were over 16 inches. Length-at-age of walleye in Banks Lake, Moses Lake, Potholes Reservoir, and Scooteney Reservoir was above the statewide average with walleye reaching 16 inches by age–2. Length-at-age of walleye in Lake Roosevelt (FDR) was below average with most walleye reaching 16 inches by age–5. Anglers in search of walleye over 18 inches should visit Banks Lake, Moses Lake, Moses Lake, and Potholes Reservoir (FIGURE 27).

We sample five lakes in eastern Washington each year during our FWIN sampling schedule (Scooteney Reservoir (Franklin County), Moses Lake (Grant County), Potholes Reservoir (Grant County), Banks Lake (Grant County) and Lake Roosevelt (Stevens County)) (Figure 1.). All fish in the FWIN surveys are collected with gill nets only. The FWIN gill nets have eight panels of differing mesh size from ½ inch to 4 inches, are 200 feet long and are designed to have a particular catch bias toward percids (walleye and perch). Nets are soaked for 21–24 hours overnight. The number of nets set per lake is based on the total surface area of the lake (Table 1.) so the effort per lake is comparable to other waters. Net set locations are randomly chosen so as not to bias the catch rates. Data collected from each fish includes: length (for size distribution) and weight, otoliths (for age and growth data), sex, sexual maturity, gonad weight (for reproductive potential) and fat weight (for condition factor).

We collect length and age data on all walleye which allow us to determine the size distribution of the population, the percentage of harvestable fish in the population and at what age walleye recruit to the fishery. Walleye ages are determined from otoliths, which provide a precise age estimate. Otoliths are fish ear bones, which have growth rings analogous to growth rings in a tree. Length and age data, when combined with abundance data, also help us determine if a change in regulations is necessary or if regulations are helping us meet our management goals.

Length and weight data, as well as relative abundance estimates, on other fish species are collected and presented but may not be an accurate representation of those populations. For instance, low numbers of largemouth bass and bluegill captured in a FWIN survey are not a cause for



concern since these species are more effectively sampled using a boat electrofisher. In addition, length averages of smallmouth bass collected in gill nets tend to be higher than those collected via boat electrofishing and must be interpreted accordingly.

The average number of walleye collected per net gives fisheries managers an index of walleye population size. Throughout this report we report this as catch per unit effort (CPUE  $\pm$  80% confidence intervals). Abundance estimates, when examined over multiple years, reveal trends in populations and allow managers to make informed decisions on possible changes in angling regulations. Significant declines in abundance may signal a need for more restrictive regulations; whereas, increases in abundance, or

stable populations at high abundance, may indicate the need for more liberal regulations.

Water Body Surface Area	Water Body	Min. # of net sets
(Hectares)		
<200		8
201—500	Scooteney Reservoir	12
501—1000		14
1001—2000	Moses Lake	18
2001—3000		22
3000—5000		28
5001—10,000	Potholes Reservoir	36
10,001—20,000	Banks Lake	48
>20,000	Lake Roosevelt (FDR)	150

TABLE 1. Recommended minimum number of net sets for FWIN surveys based on lake surface area.



FIGURE 1. Map of FWIN waters in Washington.

## **Results/Discussion**

## Lake Roosevelt (FDR)

## Walleye Population Sampling

The CPUE of walleye collected in 2012 was 4.1 walleye per net. The CPUE of walleye from all FWIN surveys on FDR from 2002– 2012 varied from 3.6–6.8 walleye per net with an average of 5.1 (FIGURE 2), with 2012 being the second lowest for all years. Walleye CPUE has declined steadily since 2010 when CPUE was 6 walleye per net on average. Walleye collected during our 2012



FWIN survey on FDR averaged 13 inches, which corresponded to walleye 2–3 years of age (FIGURE 3 and 4) and was similar to the average length from all FDR FWIN surveys. Only 11 percent of the walleye collected in 2012 were at least 16 inches (a size at which most anglers begin to retain walleye). This is slightly higher than the percentage collected in 2011 but lower than the average from all FWIN surveys on FDR (17%). When compared to all Washington FWIN waters FDR produced the lowest percentage of walleye measuring 16 inches or greater (FIGURE 27).

Length-at-age of FDR walleye collected in 2012 was below the long-term northern lakes average (Banks Lake and FDR) for all age classes collected (FIGURE 5). Walleye aged 1–3 were the most abundant collected in 2012. Due to slow growth FDR has abundant small walleye; approximately 89 percent were less than 16 inches.

### Fish Community

Besides walleye, which was the most abundant species collected, numerous other game fish species were collected during the 2012 FWIN survey on FDR, and anglers can expect to find diverse fishing opportunities. Yellow perch, smallmouth bass, burbot, and lake whitefish dominated the catch in 2012 while other species ranged in abundance from 1 to 5 percent of the total catch (FIGURE 6). Lake whitefish are abundant in many of our lakes but this species is underutilized in Washington. This is likely a regional phenomenon but anglers should be aware that lake whitefish are a very popular food fish in the upper Midwestern US due to the fact that they make excellent table fare. Rainbow trout fishing can be excellent, especially in winter, due to the cooperative net-pen rearing projects at numerous locations along the reservoir. The net-pen project stocks approximately 750,000 catchable sized rainbow trout annually into

Lake Roosevelt. Check the latest regulations pamphlet for special trout and kokanee rules.

## Lake Roosevelt Recreational Opportunities

Lake Roosevelt is more than 150 miles in length, from Grand Coulee Dam to British Columbia, Canada. There are numerous access points along the 150 mile length of FDR on both sides. They are owned and operated by state, city, county and federal agencies, along with tribes and private businesses. There are both boat ramps and good shore angling opportunities. There are also numerous campgrounds, resorts and RV parking. The National Park Service operates 35 recreation areas along the 660 miles of shoreline. Maps are available at the Grand Coulee Dam visitor center and WDFW Spokane office. Water level fluctuations can be a problem for boat launching. For current water level information, call (800) 824–4916.



FIGURE 2. Mean (± 80% CI) number of walleye captured per net (CPUE) for all FWIN surveys on FDR from 2002–2012 (*Dashed line represents the average CPUE for all years 2002–2012*).



FIGURE 3. Percent length frequency distribution (LFD) of walleye collected during FWIN on FDR in 2012 compared to the percent length frequency distribution (LFD) of walleye collected during FWIN on FDR in 2011 and the average length frequency (ALF) from all FWIN surveys on FDR from 2002–2012.



FIGURE 4. Age distribution of walleye collected during FWIN on FDR in 2012 compared to the average age distribution from all FWIN surveys on FDR from 2002–2012.



FIGURE 5. Length-at-age ( $\pm$  80% CI) of walleye collected during FWIN on FDR in 2012 compared to the Northern Lakes Average from all FWIN Surveys on FDR and Banks Lake 2002–2012.



FIGURE 6. Relative abundance by percent of the total catch of fishes collected during FWIN on FDR in 2012.

## Banks Lake

## Walleye Population Sampling

The CPUE of walleye collected in 2012 was 7.0 fish per net. The CPUE of walleye from all FWIN surveys on Banks Lake from 2002–2012 varied from 1.9–7.0 walleye per net, with an average of 4.4 (FIGURE 7), with 2012 being the highest catch rate for all years. Walleve CPUE has increased since 2010 when it was 3.5 walleye per net, the second lowest CPUE since we began FWIN in 2002. Walleye averaged 12 inches in 2012, a significant decline from the 17 inch average in 2011 and the long-term average of 15 inches (FIGURE 8). Only 34 percent of the walleye collected in 2012 were at least 16 inches. This is down considerably from 2011 (70 percent at least 16 inches) and below the long-term average (41 percent at least 16 inches). This shift in size distribution was primarily the result of an increase the number of



walleye less than 16 inches (age–0 fish) collected (2011 (n = 68), 2012 (n = 223)) (FIGURE 8 and 9). The increase in abundance of small walleye is positive in terms of walleye production and indicates that there may be more walleye recruiting to the sport fishery in 2013 and 2014.

Length-at-age of walleye collected from Banks Lake in 2012 was higher than the northern lakes average with walleye reaching 16 inches by age-2 (FIGURE 10). Overall, the Banks Lake walleye population appears to be increasing slightly due to an increase in the number of small walleye in the population. Anglers can expect good walleye fishing, however, the relative abundance of larger walleye (over 16 inches) is the lowest since 2008 (FIGURE 27).

### Fish Community

Numerous other game fish species were collected during our 2012 FWIN survey on Banks Lake. Yellow perch dominated the catch in 2012 followed by walleye and lake whitefish (Figure 11). . Other species ranged in abundance from 1 to 8 percent of the total catch. Despite their abundance, large size (average weight 2 ½ pounds in 2012), and palatability, few anglers exploit lake whitefish in Banks Lake. Lake whitefish are targeted by a small group of dedicated anglers in fall and winter. Similar to FDR, Banks Lake is an important smallmouth, and largemouth bass fishery hosting several bass tournaments each year. While not known for trophy smallmouth bass Banks Lake hosts a healthy, consistent smallmouth bass fishery. In 2012 we collected 183 smallmouth bass averaging 1.5 pounds during our FWIN survey. This is an increase from 2011 when we collected 150 smallmouth bass averaging 1.3 pounds. Banks Lake also contains very good opportunities for yellow perch, rainbow trout, black crappie and kokanee. A rainbow trout net-pen rearing project in Coulee City helps provide excellent fishing for rainbow trout up to 5 pounds. Kokanee fishing can also be excellent on Banks Lake as approximately 1 million kokanee have been stocked annually in recent years.

### Banks Lake Recreational Opportunities

Banks Lake stretches almost 27 miles from Coulee City at the south end to Grand Coulee at the north end and has numerous access points for launching boats and shore angling. Restaurants, lodging as well as city-owned parks (some with water access) can be found in Coulee City, Electric City and Grand Coulee. Steamboat Rock State Park offers camping, trailer and RV hook-ups, well maintained boat ramps, shore angling and it surrounds the "Devil's Punch Bowl", which has very good largemouth bass and black crappie habitat.



FIGURE 7. Mean (± 80% CI) number of walleye captured per net (CPUE) for all FWIN surveys on Banks Lake from 2002–2012 (*Dashed line represents the average CPUE for all years 2002–2012*).



FIGURE 8. Percent length frequency distribution (LFD) of walleye collected during FWIN on Banks Lake in 2012 compared to the percent length frequency distribution (LFD) of walleye collected during FWIN on Banks Lake in 2011 and the average length frequency (ALF) from all FWIN surveys on Banks Lake from 2002–2012.



FIGURE 9. Age distribution of walleye collected during FWIN on Banks Lake in 2012 compared to the average age distribution from all FWIN surveys on Banks Lake from 2002–2012.



FIGURE 10. Length-at-age (± 80% CI) of walleye collected during FWIN on Banks Lake in 2012 compared to the Northern Lakes Average from all FWIN Surveys on FDR and Banks Lake 2002–2012.





## Moses Lake

#### Walleye Population Sampling

The walleye CPUE in 2012 was 35.9 walleye per net. The CPUE of walleye from all FWIN survey on Moses Lake from 2002–2012 varied from 19.3–68.7 walleye per net, with an average of 33.6 for all years. (FIGURE 12). The walleye CPUE in 2012 was 35.9, which was the fourth highest average from all Moses Lake FWIN surveys. The combined average walleye CPUE from Moses Lake has consistently been higher than from any other FWIN lake. Walleye averaged 15 inches in 2012, a slight decline from both 2011 and the long-term (2002–2012) average (FIGURE 13). Approximately 40 percent of the walleye



collected in 2012 were at least 16 inches. This is well below what we found in 2011 (72%) and below the long-term average (53%) (FIGURE 13). Declines in walleye were most significant in the 16–20 inch range. Consequently, walleye in the 12–16, 20–24 and 24–28 inch range increased. The increase in the abundance of walleye in the 12–16 inch range from 2011 to 2012 was significant (7 to 33%) and is likley a good indication that walleye fishing in 2013 should be good for this size range. The shortage of 16–20 inch walleye is not surprising based on results from our 2011 FWIN survey, which indicates a strong year-class in 2010. In 2011 we collected low numbers of age–1 walleye (8–14 inches). In 2012 this year class (now age–2, 16–20 inches) was collected in low abundance (FIGURE 14).

Length-at-age of walleye collected on Moses Lake was near the southern lakes average (Moses Lake, Potholes Reservoir, Scooteney Reservoir) with walleye reaching 16 inches by age–2(FIGURE 15). Walleye in the 12–16 inch size range averaged 14  $\frac{1}{2}$  inches in fall 2012. By spring and summer of 2013 these fish should average 15–16 inches and should provide anglers with good opportunities.

#### **Fish Community**

Similar to 2011, yellow perch dominated the catch during our 2012 FWIN survey on Moses Lake (FIGURE 16). Over 2,000 yellow perch (average length 5 ½ inches) were colleced. Yellow perch are a preferred prey item for walleye and abundant small perch are likely a key factor in high walleye growth rates. High prey abundance can also negatively affect angler success since walleye spend less time foraging.

For years Moses Lake has been a popular walleye and smallmouth bass fishery; however, in recent years it has become a well respected largemouth bass fishery with anglers reporting catches of largemouth bass weighing 8–10 pounds. Perch fishing can be quite good on Moses Lake, especially during winter. Some anglers also target common carp with both hook and line and bow and arrow. Moses Lake has one of the most abundant common carp populations in the state and they can be both challenging to catch on hook and line and put up a fierce fight.

### Moses Lake Recreational Opporunities

There are six improved public boat launches on Moses Lake and one gravel launch at the north end of the lake. The city of Moses Lake offers lodging and two city-owned parks with boat ramps and docks. In addition to water access these parks offer grass day-use areas with picnic tables. Cascade Park also has camping facilities and boat moorage. An annual "Fishing Kids" derby, held at Cascade Park in early summer introduces youth ages 5–14 to sport fishing.



FIGURE 12. Mean (± 80% CI) number of walleye captured per net (CPUE) for all FWIN surveys on Moses Lake from 2002–2012 (*Dashed line represents the average CPUE for all years 2002–2012*).



FIGURE 13. Percent length frequency distribution (LFD) of walleye collected during FWIN on Moses Lake in 2012 compared to the percent length frequency distribution (LFD) of walleye collected during FWIN on Moses Lake in 2011 and the average length frequency (ALF) from all FWIN surveys on Moses Lake from 2002–2012.



FIGURE 14. Age distribution of walleye collected during FWIN on Moses Lake in 2012 compared to the average age distribution from all FWIN surveys on Moses Lake from 2002–2012.



FIGURE 15. Length-at-age (± 80% CI) of walleye collected during FWIN on Moses Lake in 2012 compared to the Southern Lakes Average from all FWIN Surveys on Moses Lake, Potholes Reservoir, and Scooteney Reservoir 2002–2012.





## Potholes Reservoir

#### Walleye Population Sampling

Walleye CPUE in 2012 was 22.7 walleye per net. The CPUE of walleye from our FWIN survey on Potholes Reservoir from 2002–2012 varied from 12.3–39.7 walleye per net, with an average of 22.5 for all years. (FIGURE 17). Walleye CPUE in 2012 was 22.7, which was the 5<sup>th</sup> highest average from all FWIN surveys on Potholes Reservoir and a considerable increase from the 2011 walleye CPUE of 12 fish per net (FIGURE 17). Walleye averaged 16 inches in 2012, which is unchanged from 2011 and consistent with the long–term



average (FIGURE 18). Approximately 41 percent of the walleye collected in 2012 were at least 16 inches. This is down from both 2011 (48%) and the long-term average (56%). Similar to Moses Lake the most significant decline was in walleye 16–20 inches, which corresponds to age–2 walleye (FIGURE 19). Walleye in the 12–16, 20–24 and 24–28 inch range increased from 2011 and were in higher abundance than the long-term (2002–2012) average (FIGURE 18). Abundant walleye in the 12–16 inch range may be an indication of good fishing in 2013.

Length-at-age of walleye in Potholes Reservoir was above the southern lakes average for walleye to age–5, while growth of older walleye was variable, likely due to the small sample size of older age fish. Potholes Reservoir walleye have the fastest growth rates of all our FWIN waters, reaching 15 inches by age–1 and over 19 inches by age–2(FIGURE 20). Walleye fishing on Potholes Reservoir should be good in 2013, especially near the mouth of Lind Coulee and along the east shore (Medicare Beach/Perch Point). These locations were where we collected our largest samples of walleye as well as the largest walleye overall.

#### Fish Community

One of the most striking differences from the 2011 to 2012 FWIN results was the change in abundance of yellow perch. In 2011 yellow perch represented about 3 percent of the total catch, whereas, in 2012 yellow perch comprised 65 percent of the total catch (FIGURE 21). The average size of perch collected in 2012 was 5 inches.

Our results may not reflect the actual change in yellow perch abundance because our gear is designed to target walleye, but it is indicative of a strong year-class entering the

population, which was not captured in 2011. Also, as suggested for Moses Lake, abundant small perch may negatively affect angler success if walleye spend less time foraging because they are sated on perch.

With the exception of yellow perch and walleye relatively few other fish were collected during the 2012 FWIN survey of Potholes Reservoir. Lake whitefish, which were abundant in our samples in 2011 (20 percent of the relative abundance), and plentiful in the reservoir, were underrepresented in 2012 samples. This is likely not due to an actual decline in their abundance but may have more to do with net aversion. Once nets become saturated with fish other fish may be less likely to be caught in the net. If nets were saturated with yellow perch perhaps lake whitefish were able to avoid being captured.

While Potholes Reservoir is widely recognized as a world class walleye fishery it is also one of the most popular bass fisheries (smallmouth and largemouth) in Washington. Smallmouth bass fishing can be very good along the face of O'Sullivan Dam and in Lind Coulee. Excellent largemouth bass fishing can be found in the sand dunes at the north end of the reservoir. Black crappie fishing is popular in the sand dunes of Potholes Reservoir as well as along the docks at Mardon Resort.

### Potholes Reservoir Recreational Opportunities

Potholes Reservoir is the home of Potholes State Park and Mardon Resort. Both offer water access for boat launching and shore fishing, as well as camping and RV hookups. Mardon Resort also offers cabin rental and a store that sells a wide variety of fishing supplies. Both facilities are in close proximity to the desert lakes and chain lakes directly adjacent to the south side of Potholes Reservoir where anglers can find numerous opportunities for walleye and bass fishing as well as trout and panfish. Those lakes are relatively small and offer very good shore access for fishing.



FIGURE 17. Mean (± 80% CI) number of walleye captured per net (CPUE) for all FWIN surveys on Potholes Reservoir from 2002–2012 (*Dashed line represents the average CPUE for all years 2002–2012*).



FIGURE 18. Percent length frequency distribution (LFD) of walleye collected during FWIN on Potholes Reservoir in 2012 compared to the percent length frequency distribution (LFD) of walleye collected during FWIN on Potholes Reservoir in 2011 and the average length frequency (ALF) from all FWIN surveys on Potholes Reservoir from 2002–2012.



FIGURE 19. Age distribution of walleye collected during FWIN on Potholes Reservoir in 2012 compared to the average age distribution from all FWIN surveys on Potholes Reservoir from 2002–2012.



FIGURE 20. Length-at-age (± 80% CI) of walleye collected during FWIN on Potholes Reservoir in 2012 compared to the Southern Lakes Average from all FWIN Surveys on Moses Lake, Potholes Reservoir, and Scooteney Reservoir 2002–2012.



FIGURE 21. Relative abundance of fishes collected during FWIN on Potholes Reservoir in 2012.

## Scooteney Reservoir

### Walleye Population Sampling

Walleye CPUE in 2012 was 17.9 walleye per net. The CPUE of walleye from our FWIN survey on Scooteney Reservoir from 2002–2012 varied from 14.0–25.6 walleye per net, with an average of 20.1 for all years. (FIGURE 22). Walleye CPUE in 2012 was 17.9, which was an increase from 2011 but still lower than all previous years. Walleye abundance in Scooteney Reservoir has remained



relatively stable since 2002, especially when compared with the yearly fluctuations in Moses Lake and Potholes Reservoir. Walleye from Scooteney Reservoir averaged 14 inches in 2012. This is unchanged from 2011 and identical to the long-term (2002–2012) average (FIGURE 23). Approximately 17 percent of the walleye collected in 2012 were at least 16 inches. This is down slightly from 2011 (20%) but similar to many previous surveys. Most walleye collected were between 12 and 16 inches (FIGURE 23). This corresponds to walleye 1 and 2 years of age (FIGURE 24 and 25). While Scooteney Reservoir normally has a low percentage of large walleye (at least 18 inches) when compared to other Washington walleye waters such as Moses Lake and Potholes Reservoir, anglers should find excellent opportunities for 12–16 inch walleye (FIGURE 27).

Length-at-age of walleye in Scooteney Reservoir was near the southern lakes average for most age classes, with walleye reaching 16 inches by age 2–3. (FIGURE 25)

#### Fish Community

In addition to walleye, yellow perch dominated the catch in our 2012 FWIN survey of Scooteney Reservoir. Twelve other species were collected; however; none represented more than 6 percent of the total catch, although there are very good opportunities for some larger yellow perch, along with smallmouth and largemouth bass, black crappie and lake whitefish (FIGURE 26).

#### Scooteney Reservoir Recreational Opportunities

Water access is plentiful at Scooteney Reservoir, with abundant shore fishing and several boat ramps, including a double paved ramp with a launching float at the Bureau

of Reclamation park. That park also has a meticulously maintained grassy day-use area with picnic tables, overnight camping and RV hook-ups.



FIGURE 22. Mean ( $\pm$  80% CI) number of walleye captured per net (CPUE) for all FWIN surveys on Scooteney Reservoir from 2002–2012 (*Dashed line represents the average CPUE for all years 2002–2012*).



FIGURE 23. Percent length frequency distribution (LFD) of walleye collected during FWIN on Scooteney Reservoir in 2012 compared to the percent length frequency distribution (LFD) of walleye collected during FWIN on Scooteney Reservoir in 2011 and the average length frequency (ALF) from all FWIN surveys on Scooteney Reservoir from 2002–2012.



FIGURE 24. Age distribution (AD) of walleye collected during FWIN on Scooteney Reservoir in 2011 compared to the average age distribution (AAD) from all FWIN surveys on Scooteney Reservoir from 2002–2011.











Figure 27. Percent of walleye in each size class collected during FWIN surveys in 2012.

## Summary

In 2012 the average CPUE for all lakes was 18 walleye per net. This is an increase from 2011 when the average CPUE was 12 walleye per net. In 2012 approximately 29 percent of the walleye collected from all lakes were at least 16 inches. In 2011 approximately 46 percent were at least 16 inches. Length-at-age of walleye in Banks Lake, Moses Lake, Potholes Reservoir, and Scooteney Reservoir was above average with walleye reaching 16 inches by age–2. Length-at-age of walleye in FDR was below average with most walleye reaching 16 inches by age–5. Anglers in search of walleye over 18 inches should visit Banks Lake, Moses Lake, and Potholes Reservoir (FIGURE 27).

In speaking to many anglers and fishing clubs we have found that there is a strong catch-and-release mentality among many angler groups. Our data on walleye populations over the past 11 years indicate that these populations can tolerate much more harvest. In fact, in 2006 we raised the daily limit to 8 walleye per day on Lake Roosevelt, Potholes Reservoir, and Moses Lake. Unfortunately, few anglers took advantage of this as the results from our two year creel survey on Potholes Reservoir and Moses Lake indicated that very few anglers ever retained a limit of walleye. We would like to encourage anglers to harvest more walleye as too many walleye in a population can have a negative impact on the rest of the fish community, which will in turn negatively impact the walleye population as adult fish begin to run out of forage.

Besides walleye, yellow perch, smallmouth bass and lake whitefish were abundant in several of our FWIN lakes. Yellow perch populations are quite cyclical; however, perch fishing on Banks Lake and Moses Lake can be excellent at times. Smallmouth bass are abundant, and anglers report excellent fishing for them on all our FWIN lakes with the exception of Scooteney Reservoir. Lake whitefish are very abundant on FDR, Banks Lake, and Potholes Reservoir, yet are underutilized by most angler groups. There is a small, but dedicated, group of wintertime lake whitefish anglers on Banks Lake who target whitefish under the ice. We are trying to encourage anglers to diversify their angling experiences by fishing for, and harvesting, more lake whitefish, which are excellent eating, particularly when smoked.

This report serves as a status update on popular walleye fisheries in Washington and also as an informational guide on other fisheries in these lakes. For further details on the FWIN surveys conducted on various waters please contact regional warmwater fisheries biologists.

## Frequently Asked Questions

Washington Department of Fish and Wildlife fisheries biologists, along with Spokane and Colville tribal biologists have been conducting FWIN surveys on the five lakes mentioned in this report since 2002. Despite the longevity of this project there is a significant amount of misunderstanding among anglers concerning what FWIN is, and why the surveys are conducted annually. Below are the most commonly asked questions anglers have concerning FWIN.

## Question 1. Are FWIN nets set in the "good locations" to catch the largest number of fish?

Answer: The FWIN nets are randomly placed in order to reduce any species or size bias that could affect catch rates.

#### Question 2. Is WDFW killing too many walleye in Lake X with their nets?

Answer: In most cases we collect 300 or fewer walleye from each lake. This represents much less than 1% of the entire population of walleye in the lake and is the equivalent of 300 anglers harvesting one more walleye over the course of a year. In addition, natural mortality rates far exceed that of angling mortality and are an indication that these populations can undergo much more harvest. As mentioned earlier, all Washington FWIN waters can tolerate more harvest and WDFW encourages anglers to harvest walleye, particularly in Lake Roosevelt.

#### Question 3. Is FWIN sampling used to see what the walleye are eating?

Answer: Our FWIN sampling is conducted to monitor changes in relative abundance of walleye from year to year, walleye growth, condition, and fecundity. While we do get an indication of what walleye are eating while collecting other information we do not make note of it as fish often regurgitate when caught in gill nets and diet information taken from these fish is often unreliable.

If you are interested in volunteer opportunities, have questions about our FWIN surveys or would like additional copies of this report please contact the following regional warmwater fisheries biologists.

## Lake Roosevelt and Scooteney Reservoir

Marc Divens WDFW Region One 2315 North Discovery Place Spokane Valley, WA 99216-1566 (509) 892-1001 ext. 301

## Banks Lake, Moses Lake, and Potholes Reservoir

Marc Petersen or Mike Schmuck WDFW Region Two 1550 Alder Street NW Ephrata, WA 98823 (509) 754-4546 x222 or x227



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