

# Great Lakes Trout and Salmon Stamp Revenue and Expenditures Report Fiscal Years 2006-2011

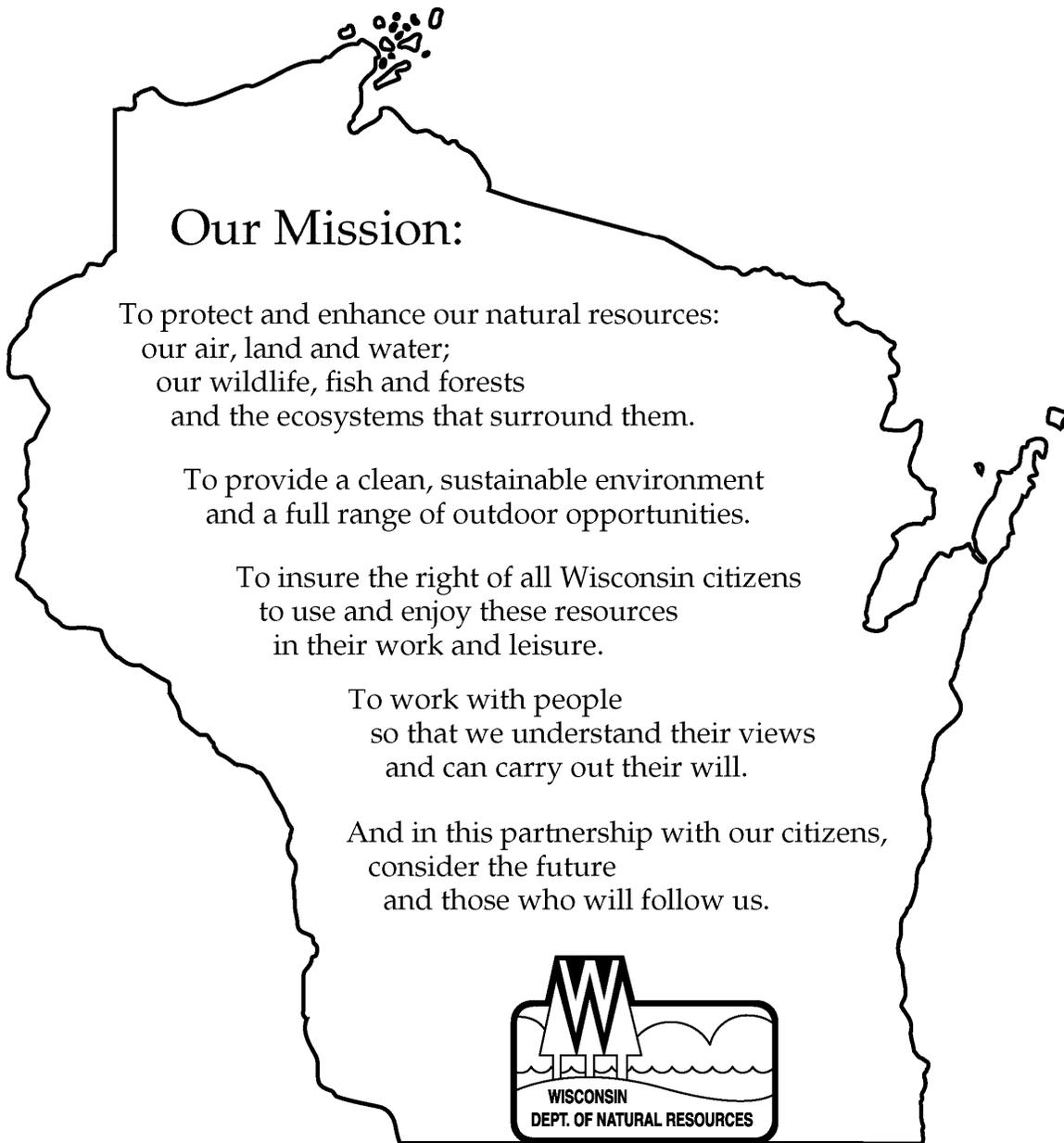


Roger Hellen holds world record 41 pound 8 ounce brown trout caught north of Racine on July 16, 2010. Photo by Paul A. Smith, Milwaukee Journal Sentinel

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# **Program Background**

## **Creation of the Trout and Salmon Stamp Program**

In the early 1980s, the loss of federal funding for non-native trout and salmon stocking prompted the creation of Wisconsin's Great Lakes Trout and Salmon Stamp Program. The Wisconsin Department of Natural Resources (DNR) faced the prospect of large reductions in the Great Lakes stocking program, including the elimination of coho salmon stocking. Concerned Great Lakes anglers initiated and promoted the legislation that created the Great Lakes Trout and Salmon Stamp (Salmon Stamp). Since 1982, every angler fishing for salmon or trout in the Wisconsin waters of the Great Lakes has been required to purchase a Great Lakes Trout and Salmon Stamp (commonly referred to as the Salmon Stamp) in addition to a fishing license. (The Department no longer prints physical Salmon Stamps displaying artwork selected in an annual contest. Collectors can purchase souvenir Salmon Stamps from previous years.) Revenues from the sale of Salmon Stamps help support the DNR trout and salmon rearing and stocking program for the Great Lakes.

## **Guidelines for the use of Great Lakes Salmon & Trout Stamp revenues**

Wisconsin statutes stipulate, "The Department shall expend the receipts from the sale of Great Lakes Trout and Salmon Stamps to supplement and enhance the existing trout and salmon rearing and stocking program for outlying waters and to administer this section." The expenditures are (1) species limited to salmon and trout only, (2) geographically limited to the Wisconsin waters of Lakes Michigan and Superior and their tributaries, and (3) program limited to the rearing and stocking program. Projects funded by stamp monies must meet these three requirements or be related to the administration of these monies.

### **Species requirement**

Great Lakes Trout and Salmon Stamp revenues may only be used for projects that pertain to salmonine species. These species include Pacific salmon (coho, chinook), trout (rainbow [steelhead], brown) and chars (brook trout, splake and lake trout). Stamp money may not be used for projects specifically directed toward warm or cool water fishes such as percids, esocids, and centrarchids.

### **Geographical requirement**

Projects that use stamp revenues must be geographically focused on the Great Lakes watershed. Specifically, the geographical scope of these projects may include tributaries accessible to Great Lakes salmon and trout, as well as Lakes Michigan and Superior themselves. Projects that pertain to trout waters other than the Great Lakes (e.g., Great Lakes tributaries inaccessible to Great Lakes salmon and trout, inland trout streams and lakes) may not use Salmon Stamp money.

### **Program requirement**

Projects funded with Salmon Stamp money must also relate specifically to the Great Lakes stocking program. Activities within the stocking program may be categorized as evaluation and research or propagation activities (including facility developments). Examples of evaluation and research activities include lake-wide creel surveys, species and strain evaluations (tagging and marking studies), development of management plans (annual stocking plans, species plans, long-term plans) and annual propagation planning. Propagation activities include hatchery operation costs (electricity, labor, fish food, waders, etc.), acquisition of fertilized eggs, egg incubation, fish rearing and transportation of fish to stocking sites. Propagation activities also include the purchase, maintenance, and repair of the physical facilities that

support the stocking program. Those facilities include raceways, rearing ponds, hatchery grounds, generators, pumps, water supply systems, vehicles, aerators, automatic fish feeders, land, engineering plans, and incubators.

## Sources of revenue for the Salmon Stamp Account

The Salmon Stamp account pays for about half of the total Great Lakes trout and salmon program. As summarized in Table 3, fishing license fees and other sources also support the program.

All receipts from the sale of Salmon Stamps are placed in the DNR Fish & Wildlife Segregated Account and reserved for eligible Salmon Stamp activities. These funds are referred to as the Salmon Stamp account. Interest earned on these funds accrue to the Fish & Wildlife Segregated Account. Some revenues from the sales of patron licenses, two-day sport fishing licenses and collector stamps also contribute to the account. The price of each license to the consumer includes the base price of the license plus a fee that goes to the vendor. The vendor's fee is \$0.75 for the two-day license and the patron card; it is \$0.25 for the Salmon Stamp. Revenue and expenditure figures in this report exclude the vendors' fees.

Funding for the Salmon Stamp account has changed over time. It was established in 1982 with a price of \$3.00. In 1984, the Wisconsin State Legislature approved a \$6.00 one-day fishing license for the Great Lakes. This inexpensive license allowed anglers to spend one day fishing for trout and salmon on the Great Lakes without being required to buy an annual Great Lakes Trout and Salmon Stamp. To prevent a sharp reduction in funding for the salmon and trout program, one-half of the revenues from the license supported Great Lakes salmon and trout projects.

In 1988, the Legislature changed the one-day license by allowing inland fishing. Revenues from the new one-day license were split among Great Lakes salmon projects, inland trout habitat projects, and general fisheries work. In 1992, the Legislature replaced the one-day license with a \$7.25 two-day license, valid for the Great Lakes only, and in 1997, the two-day license fee was increased to \$9.25. One-half of those revenues are placed in the Salmon Stamp account. Also in 1992, the Salmon Stamp fee was increased from \$3.00 to \$7.00. In 2004 the Salmon Stamp fee was increased to \$10.00 and the two-day license fee was increased to \$14.00

Until recently the Salmon Stamp account also received \$1.83 from every Patron License sold. In recent years the allocation from each Patron License has exceeded \$3.00, totaling \$198,933 in fiscal year 2006, \$186,506 in fiscal year 2007, \$183,925 in fiscal year 2008, \$171,443 in fiscal year 2009, and \$158,851 in fiscal year 2010 (with an additional \$7,985 allocated retroactively for fiscal years 2006-2009). Patron license revenue not deposited to dedicated stamp accounts is deposited to the larger fish and wildlife account and spent for a wide variety of conservation purposes—including enhancement of salmon rearing and stocking programs. All revenues from these sales contribute to the Salmon Stamp account.

# Summary Tables

**Table 1.** Salmon Stamp account revenues and expenditures in fiscal years 2006-2011. Expenditures for individual projects include supplies and LTE wages. Combined expenditures for LTE overhead costs and fringe benefits are shown in a separate line. Individual projects are described briefly in the body of this report. Permanent staff positions made possible by Salmon Stamp include two fisheries technicians on Lake Michigan, a fisheries biologist and a fisheries technician on Lake Superior, and a fisheries technician at the Kettle Moraine Springs State Fish Hatchery. Note that \$2,246,555 allocated for Wild Rose Hatchery development in 2005 and 2008 was refunded to the Department by the Department of Administration in 2010.

	2006	2007	2008	2009	2010	2011
<b>Beginning Cash Balance</b>	<b>1,268,569</b>	<b>1,892,612</b>	<b>2,205,083</b>	<b>408,106</b>	<b>750,718</b>	<b>3,142,558</b>
<b>Revenues</b>	<b>1,917,413</b>	<b>1,819,807</b>	<b>1,846,803</b>	<b>1,795,005</b>	<b>1,785,900</b>	<b>1,685,224</b>
Stamp sales	1,259,141	1,294,674	1,309,600	1,288,649	1,307,505	1,243,274
Two-day license sales	310,364	337,629	352,161	331,197	310,644	288,489
Patron license sales	198,933	186,506	183,925	171,443	166,836	152,914
Collector fee	1,420	997	1,080	1,670	880	547
Refunds and corrections	147,555	0	37	2,046	35	0
<b>Refund of money allocated for Wild Rose</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,246,555</b>	<b>0</b>
<b>Total Available Funds</b>	<b>3,185,982</b>	<b>3,712,419</b>	<b>4,051,886</b>	<b>2,203,111</b>	<b>4,783,173</b>	<b>4,827,782</b>
<b>Expenditures</b>	<b>1,293,370</b>	<b>1,507,336</b>	<b>3,643,780</b>	<b>1,452,393</b>	<b>1,640,615</b>	<b>1,759,085</b>
<u>Lake Michigan Projects</u>						
Seeforellen brownt trout (FHCB)	1,112	1,505	3,268	1,457	2,506	3,184
Feral broodstock mgmt(FHCC)	663	1,084	2,488	0	0	1,249
Lake Michigan creel survey (FHCR)	98,689	121,577	121,710	110,592	128,670	115,178
Creel survey data analysis (FHIC)	11,375	13,268	12,824	10,525	11,654	11,955
Habitat on Oconto River (FHCD)	83	36	0	1,772	0	0
Broodstock eval (FHHZ and FHSE)	24,736	20,563	21,876	12,621	14,761	26,100
Steelhead fin clipping (FHKV)	15,831	17,120	21,524	18,176	16,322	20,799
Nearshore rainbow (FHNL)	3,780	1,797	2,340	169	1,628	0
Lake trout restoration (FHCA)	11,739	13,543	24,500	16,572	16,780	13,940
G.L. Assessment Boat (FHNS)	0	0	0	0	0	179,829
<u>Lake Superior Projects</u>						
Sea lamprey barriers (FHCI)	20,292	21,544	21,906	19,730	20,063	22,229
Lake Superior creel survey (FHFE)	26,892	34,672	34,681	0	22,949	24,764
Coaster brook trout mgmt (FHIB)	7,759	5,644	5,584	0	5,628	5,809
Tributary management plan (FHSC)	2,391	1,869	2,706	2,654	2,166	2,027
Lake trout restoration (FHCA)	29,362	57,023	38,971	40,178	33,884	33,743
<u>Propagation</u>						
Basic hatchery survices (FHBS)	58,220	57,284	73,090	60,136	85,545	103,738
Salmon and trout prod. (FHBW)	507,029	540,055	621,405	640,184	705,752	638,408
Salmon and trout distr. (FHBZ)	6,239	2,647	16,270	7,427	8,448	9,976
Weir operations (FHCX)	110,160	132,494	127,604	112,142	117,552	113,275
Hatchery maint. (FHII and HDYH)	5,467	53,747	0	0	53,870	1530
Off station propagation (FHJG)	4,909	3,117	2,716	4,089	2,884	4,603
Operate annex at KMSSFH (FHME)	3,325	30,871	11,369	30,204	14,932	20,113
Wild Rose SFH development	0	0	2,100,000	0	0	0
<u>Other</u>						
Salmon stamp adm costs (FHNB)	7,353	1,982	1,955	2,061	1,805	0
Permanent salaries and fringe benefits	259,561	258,064	275,141	276,223	223,740	221,078
Overhead and LTE fringe benefits	76,403	115,832	99,853	85,479	149,076	185,557
<b>Closing Cash Balance</b>	<b>1,892,612</b>	<b>2,205,083</b>	<b>408,106</b>	<b>750,718</b>	<b>3,142,558</b>	<b>3,068,697</b>

**Table 2.** License-year sales of cards, licenses, and stamps supporting the Great Lakes Trout and Salmon Stamp account from the inception of the program.

	<b>Patron Cards</b>	<b>Two-day licenses</b>	<b>One-day licenses</b>	<b>Great Lakes Trout and Salmon Stamps</b>
1982			27,586	245,890
1983			34,783	279,552
1984	217		35,282	239,971
1985	265		34,312	237,571
1986	286		46,569	226,243
1987	366		45,023	224,283
1988	449		83,615	208,811
1989	567		88,431	175,314
1990	713		84,526	151,769
1991	1,024		83,566	139,715
1992	2,847	45,884		113,442
1993	12,243	43,769		109,566
1994	24,566	43,514		111,208
1995	34,927	40,644		109,569
1996	43,915	40,570		109,866
1997	50,036	41,827		111,227
1998	54,011	41,223		113,809
1999	67,221	40,601		111,741
2000	77,443	38,052		114,926
2001	81,340	51,943		116,453
2002	81,934	44,248		123,994
2003	81,112	44,351		122,653
2004	74,822	41,016		126,894
2005	70,410	44,995		129,744
2006	60,778	49,204		129,240
2007	57,516	53,420		136,978
2008	56,096	48,670		130,766
2009	51,757	48,953		133,281
2010	47,762	43,967		131,841

**Table 3.** Total expenditures from all sources for work described in this report. The first row is taken directly from Table 1. The Segregated Fund receives money from the sale of a variety of fish and wildlife licenses and stamps. The second row shows expenditures from the Segregated Fund, excluding those reported in Table 1. General Purpose Revenues are from income and other taxes. Great Lakes Surcharges are a portion of fines levied for certain violations related to Great Lakes fish.

	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
<b>Salmon Stamp</b>	1,293,370	1,507,336	3,643,780	1,452,393	1,640,615	1,759,085
<b>Segregated Fund</b>	2,161,942	1,575,397	1,572,321	1,625,729	1,619,817	1,595,153
<b>General Purpose Revenues</b>	0	0	0	0	2,026	0
<b>Great Lakes Surcharges</b>	0	0	0	44,801	0	0
<b>TOTAL</b>	3,455,312	3,082,733	5,216,101	3,122,924	3,262,460	3,354,238

# **Lake Michigan Evaluation and Research Activities**

## **Assessment of seeforellen brown trout**

**Contact:** Tammie Paoli, Fisheries Biologist, Peshtigo

This project supports field activities and data collection related to seeforellen strain brown trout in the Menominee River. It complements and supports fish production work at the Wild Rose State Fish Hatchery. The fish are collected in the fall by electroshocking, transported to the hatchery for spawning, and returned alive to the river. The eggs are hatched and the young fish reared for 18 months before being stocked out as yearlings.

## **Feral steelhead broodstock management**

**Contact:** Steve Hogler, Fisheries Biologist, Mishicot

An annual steelhead assessment project was initiated in 1992 at the Besadny Anadromous Fisheries Facility (BAFF) to (1) assess the return of the three steelhead strains to BAFF and (2) collect basic biological information on each strain. In 2004, a third component, monitoring the out-migration of trout and salmon from the Kewaunee River was added to the project.

## **Lake Michigan creel surveys (data collection)**

**Contact:** Brad Eggold, Fisheries Supervisor, Milwaukee

We conduct an annual contact creel survey to estimate the harvest of salmon and trout. Creel clerks visit fishing locations to count anglers and trailers, to interview anglers, and to measure and examine a sample of the catch from March through October. Each year the clerks visit over 150 ramp, pier, shore, or stream sites (not counting multiple locations on individual streams), conduct approximately 13,000 interviews, make approximately 10,000 angler or trailer counts, and measure and examine for clips approximately 3,000 salmon and trout. The data are analyzed as part of a separately-funded project (see below).

## **Lake Michigan creel surveys (analysis)**

**Contact:** Brad Eggold, Fisheries Supervisor, Milwaukee

Data from a postal survey of moored boats, reports submitted by charter captains, and the Lake Michigan creel survey are analyzed to estimate fishing effort, catch rates, total harvest, and size of fish harvested. Data are also used to evaluate the effectiveness of stocking strategies and to guide the geographic distribution of stocking. The creel survey design is continuously evaluated so maximum effort is directed at sites and times anglers are present. To see creel survey reports, visit (<http://dnr.wi.gov/fish/lakemich/managementreports.htm>).

## **Oconto River habitat improvement**

**Contact:** Tammie Paoli, Fisheries Biologist, Peshtigo

In partnership with local chapters of Trout Unlimited and other groups, DNR has enhanced habitat for trout and salmon by installing two artificial islands and placing hundreds of boulders in a 1000 section of the lower Oconto River. The purpose of this project was to evaluate the impact of the habitat improvements.

## **Broodstock management & evaluation**

**Contact:** Brad Eggold, Fisheries Supervisor, Milwaukee (regarding coho, chinook and steelhead management at the Root River Steelhead Facility)  
Steve Hogler, Fisheries Biologist, Mishicot (regarding steelhead management at Besadny Anadromous Fisheries Facility)  
Scott Hansen, Fisheries Biologist, Sturgeon Bay (regarding coho and chinook management at Besadny and Strawberry Creek Facilities)

Each year salmon and trout are stocked in many Lake Michigan locations ( for detailed information about stocking numbers and locations see [http://infotrek.er.usgs.gov/wdnr\\_public/](http://infotrek.er.usgs.gov/wdnr_public/)). Those stocked in Strawberry Creek, the Kewaunee River, and the Root River sustain the salmon and trout program in Lake Michigan. When fish return to those rivers as adults to spawn, eggs are collected and fertilized for the hatcheries to raise. This project is an assessment of biological characteristics of the stocked fingerlings and yearlings, and of the mature adults. Annual data collected includes: length, weight, age, sex, and fin clip. Various lots of chinook, coho and steelhead are marked with fin clips or tags prior to stocking to evaluate the performance of different strains or to assess alternative rearing strategies and disease treatments. Long-term trends indicate whether the desired characteristics of size, health, time of spawning run and survival are achieved. Health assessments are performed on coho, chinook and steelhead brood fish to detect early signs of disease and to provide base line data on fish health.

The Strawberry Creek Weir (SCW) is the primary site for the collection of mature chinook salmon. The C. D. "Buzz" Besadny Anadromous Fisheries Facility (BAFF), on the Kewaunee River, is used to assess the return of three steelhead strains, collect adult coho salmon, and serves as a backup facility for collection of chinook salmon. The Root River Steelhead Facility is used to collect spawning adult coho salmon and steelhead, and serves as a backup facility for capture of mature chinook salmon. At SCW and BAFF, surplus eggs and eggs unsuitable for hatchery production are sold under contract to a bait dealer with the proceeds returned to the Wisconsin general fund.

Because of the importance of adequate forage, we have in some years participated in inter-jurisdictional cooperative studies of the abundance of alewife, smelt, and chubs using acoustical equipment mounted on the Research Vessel Barney Devine and the Research Vessel Gaylord Nelson. Data are provided to the US Geological Survey to assist in producing a lake-wide forage estimate.

Annual reports are available at <http://dnr.wi.gov/fish/lakemich/fishmanagementreports.html> on the DNR's Lake Michigan fishery web page. They can also be obtained from Brad Eggold for all species returning to the Root River Steelhead Facility, from Paul Peeters for coho and chinook salmon returning to Besadny Facility and Strawberry Creek and from Steve Hogler for steelhead returning to the Besadny Facility.

## **Finclip Rainbow Trout**

**Contact:** Andrew Hron, Operations Supervisor, Kettle Moraine Springs State Fish Hatchery

This project supports the fin clipping of rainbow trout, both steelhead and non-migratory strains stocked to provide a nearshore fishery. The marks allow us to identify separate strains for propagation and to assess returns to the spawning weirs.

## **Nearshore stocking of rainbow trout**

**Contact:** Steve Hogler, Fisheries Biologist, Mishicot

There is a strong public demand for nearshore fishing opportunities on Lake Michigan, which declined after the late 1980's because of changes in species or strains stocked, reduction in the Lake Michigan forage base, increased water clarity, or other factors. To address this issue the Department initiated a program of stocking non-migratory strains of rainbow trout. Annual reports on the nearshore rainbow program are available at <http://dnr.wi.gov/fish/lakemich/managementreports.htm>.

## **Lake trout restoration & management**

**Contact:** Pat McKee, Fisheries Technician, Sturgeon Bay

The lake trout restoration and management program focuses on assessing of trends in the fraction of lake trout with sea lamprey wounds and scars, assessing trends in the abundance of mature spawning lake trout in the mid-lake reef complex (MLRC), and providing information for an annual lake-wide lake trout survey conducted by state, federal, and tribal agencies. Sea lamprey data are provided to the Great Lakes Fishery Commission, which has responsibility for sea lamprey control in the Great Lakes. Fall lake trout assessments are conducted in the MLRC to assess the buildup of mature spawning lake trout. We have identified 16 sexually mature age groups ranging from age 7 to age 22. The MLRC has the highest abundance of sexually mature lake trout in Lake Michigan. This level of abundance compares favorably with levels in other Great Lakes regions where natural reproduction has been documented. In addition, DNR personnel cooperated with early life history investigations within the MLRC being conducted with the UW-Milwaukee Great Lakes Water Institute and the University of Michigan.

## **Great Lakes Assessment Boat**

**Contact:** Scott Hansen, Fisheries Supervisor, Sturgeon Bay

In 2011 the Department retired the RV Barney Devine after more than 70 years of service on Lake Michigan, replacing it with the RV Coregonus at a cost of \$2,058,895. Most of that cost will be paid for from the Fish and Wildlife Account with license fee revenues, but \$500,000 will be provided from the Great Lakes Trout and Salmon Stamp account. Of that portion, \$179,829 was expended in FY 2011.

## **Permanent employee salaries - Lake Michigan**

Permanent employee salaries are for Fisheries Technicians at the Great Lakes Research Facility. They work on lake trout assessments, manage operations at the Root River Steelhead Facility, conduct surveys and evaluations, collect data, and manage databases.

**For more information on the Lake Michigan fishery visit:**  
<http://dnr.wi.gov/fish/lakemich/index.html>

# Lake Superior Evaluation and Research Activities

## Brule River lamprey barrier operation

**Contact:** Dennis Pratt, Fisheries Biologist, Superior

The Great Lakes Fishery Commission has primary responsibility for the control of sea lamprey in the Great Lakes. Lamprey barriers are one element, along with lampricides and trapping, in the control program. The goal of this project is to efficiently operate and maintain Wisconsin's three lamprey barrier's on the Middle, Bois Brule, and Iron Rivers. These barriers block the upstream spawning migration of sea lamprey limiting reproduction to the downstream portion of the stream. The Brule River barrier also provides a valuable tool to fisheries biologists by giving them the ability to monitor trout and salmon runs with a time-lapse video monitoring system as they pass an underwater observation window. General maintenance was performed on the access roads at the Brule and Iron River barriers. Salmon Stamp funds were also used to purchase two new time-lapse video recorders which replaced older less reliable models at the Brule facility. For additional information about the Brule barrier and fish passage go to <http://dnr.wi.gov/fish/lakesup/> and look under "Fishing the Brule"

## Creel survey & index sampling

**Contact:** Mike Seider, Fisheries Biologist, Bayfield

Annual creel surveys are conducted at all major ports on Lake Superior to monitor sport harvest of salmon and trout. Creel clerks randomly check anglers at boat landings throughout the year. When combined with information about commercial and charter harvests, the creel data helps to estimate population size, evaluate and develop stocking strategies and decide how to best manage the Lake Superior fishery. Index sampling with graded mesh gill nets during the summer monitors long term trends in the fish community of Lake Superior. These surveys also measure the success of other Lake Superior fishery management projects, including the Brule River sea lamprey barrier and the lake trout rehabilitation program. Interactions between anadromous species and other species are also monitored throughout Wisconsin waters of Lake Superior. Diet and age data collected from trout and salmon provide a look at long-term, lake-wide trends. For survey and sampling results, visit <http://dnr.wi.gov/fish/lakesup/>.

## Brook trout management plan for Wisconsin's Lake Superior basin

**Contact:** Dennis Pratt, Fisheries Biologist, Superior

Brook trout were the only known species originally inhabiting coldwater tributaries flowing into Wisconsin's Lake Superior. Early visitors reported abundant stream populations and a unique group of brook trout they called rock trout (coaster), which were caught along the rocky shoreline of Lake Superior's Bayfield Peninsula and seasonally in streams when they ascended to spawn. They were also commonly found utilizing the downstream portions of streams during the summer months as a refuge from warming lake temperatures. Many different factors led to brook trout decline, most notably stream habitat destruction resulting from early logging practices in the late 1800s and early 1900s. Today, brook trout populations are very small in comparison to the years prior to the late 1800s. This project has funded Wisconsin's activities on the Brook Trout Subcommittee of the Great Lakes Fishery Commission leading to the development of a lake-wide rehabilitation plan to improve brook trout abundance.

Wisconsin's "Lake Superior Basin Brook Trout Plan", a joint effort by the Wisconsin Department of Natural Resources and the U.S. Fish and Wildlife Service was completed in 2005. This plan describes the life

history, threats, and management of brook trout in Wisconsin's portion of the Lake Superior basin and its tributaries and also outlines objectives and tactics necessary to accomplish the goal of rehabilitation and protection of the depleted stock. Primary objectives include; improve sustaining brook trout populations and their habitat within the Basin and attempt to establish several populations that exhibit life history diversity (both stream resident and migratory 'coaster' life history). Three streams were selected to conduct particular strategies, the Bois Brule, Bark and Whittlesey Creek.

See <http://dnr.wi.gov/fish/lakesup/cbrktrout.htm> for additional information about the brook trout management and restoration.

## **Lake Superior tributaries management plan**

**Contact:** Dennis Pratt, Fisheries Biologist, Superior

This project focuses on protecting, rehabilitating and enhancing self-sustaining lake-run trout and salmon in the coldwater tributaries flowing into Lake Superior. These streams are a valuable/unique resource providing spawning and nursery areas for migratory rainbow and brown trout, coho and chinook salmon and smaller populations of resident brook and brown trout. Work items over this time period include:

- Intensive beaver control program in conjunction with the federal APHIS program. Activities include reconnaissance and removal on one hundred twelve plus stream miles. Beaver dams can completely block migrating fish from reaching spawning areas and degrade/destroy critical fishery habitat.
- Documenting limiting factors to success by stream reach and each watershed as a whole.
- Identifying critical fish habitat reaches and developing strategies and tactics to overcome them. Implementing stream habitat improvement techniques as needed. Since 1994, over fifteen miles of degraded stream habitat has been restored in high value areas.
- Developing strategies and partner with local forestry personnel to protect and enhance riparian forests in critical habitat reaches.
- Identifying threats to these critical fishery areas and tools to remove these threats.
- Developing baseline information for detailed and reach specific fishery management plans for each of the important lake run tributaries including the Bois Brule in Douglas county and the Flag, Cranberry, Bark, Saxine, Pikes, Onion, Sioux, Thompson's, Whittlesey and North Fish creeks in Bayfield County.

## **Lake Trout restoration & management**

**Contact:** Mike Seider, Fisheries Biologist, Bayfield

Lake Superior lake trout restoration and management addresses two critical factors regulating lake trout populations: harvest levels and sea lamprey-related fish mortality. The controls on harvest include constraints on commercial and sport fishing. Wild lake trout abundance has increased steadily due to these regulations. In the Ashland-Bayfield area, approximately 34% of the lake trout harvested in 1985 were wild fish. By 2006, the percentage had risen to over 90%. Consequently stocking in the Apostle Islands area has been discontinued. Sea lamprey related fish mortality, however, still remains an obstacle to complete rehabilitation.

This project covers the cost associated with the spring and fall lake trout assessments and evaluates the long-term trends in the lake trout population including distribution, abundance, growth, and mortality rates. Data collected from these assessments and commercial and sport harvest are incorporated into computer models that help determine safe harvest levels for lake trout.

## **Permanent employee salaries - Lake Superior**

Permanent employee salaries are for a Fisheries Biologist and a Fisheries Technician on Lake Superior. The Fisheries Biologist conducts evaluations and research to support the fish stocking program for the Lake

Superior watershed. The primary responsibilities of the Fisheries Technician are to conduct creel surveys and to monitor the harvest of lake trout by commercial fishers.

**For more information on the Lake Superior fishery visit:**  
<http://dnr.wi.gov/org/gmu/superior/Fish/Fish.html>

## **Propagation Activities**

### **Basic hatchery services**

**Contact:** Darren Miller, Fisheries Team Supervisor, Bayfield State Fish Hatchery.  
Andrew Hron, Operations Supervisor, Kettle Moraine Springs State Fish Hatchery  
John Nelson, Natural Resources Operations Supervisor, Green Bay  
Steve Fajfer, Operations Supervisor, Wild Rose State Fish Hatchery

Funds expended in this project area cover basic operating services not directly associated with fish rearing at Bayfield, Kettle Moraine Springs, Thunder River, Lake Mills and Westfield hatcheries. Expenses include facilities and grounds maintenance; operational expenses such as telephone, electricity and heat; staff travel costs; supplies; computer equipment and costs associated with conducting public educational events and tours.

General maintenance and safety upgrades were performed at all of the hatcheries. Grounds were landscaped including removal of trees for safety and aesthetic reasons.

### **Coldwater production**

**Contact:** Alfred Kaas, Statewide Fish Propagation Coordinator, Madison

This project covers production costs associated with fish rearing at hatcheries and rearing stations and is separate from basic hatchery services. Typical costs include fish food, electricity, pond and raceway maintenance and aerators to provide increased oxygen levels and reduce the ice cover. In 2007 the Department provided \$20,000 of Salmon Stamp revenues to the Michigan DNR on a one time basis to enhance their production of yearling cohos for stocking in 2008. This was matched by \$48,000 raised by fishing clubs. Table 3 summarizes all Great Lakes salmon and trout production during 2006-2010.

### **Coldwater distribution**

**Contact:** Alfred Kaas, Statewide Fish Propagation Coordinator, Madison.

Salmon Stamp funds are used to inventory, load, and deliver fish for to designated sites. Costs include equipment disinfection and maintenance.

### **Operate anadromous fisheries facilities**

The Besadny Anadromous Fisheries Facility, the Root River Steelhead Facility, and the Strawberry Creek Weir are key to Wisconsin's salmon and trout stocking programs. Salmon Stamp funds are used to collect broodstock and eggs for fertilization, as well as maintain/operate the facilities. Public education and tours are also supported

#### **Besadny Anadromous Fisheries Facility**

**Contact:** Neal Rosenberg, Field Operations Team Supervisor, Crivitz

Each year approximately 3 1/2 million eggs are collected from spawning adult anadromous trout and salmon. Steelhead are trapped in late spring and summer and in the fall chinook salmon. The weir at Strawberry Creek also collects chinook salmon eggs. The Besadny Facility allows the general public to safely observe at a very close distance the harvesting of eggs and other related spawning activities. There are guided as well as self-guided tours available year round.

**Root River Steelhead Facility**

**Contact:** John Komassa, Field Operations Team Supervisor, Eagle

Funding from the Salmon & Trout Stamp is used to maintain and operate the Root River Steelhead Facility in Racine from mid February to early May and mid July to mid November. The Root River facility traps adult trout and salmon for collection and egg fertilization. The weir also captures broodfish for use at the Kettle Moraine Springs Hatchery. More than two dozen educational/informational tours were conducted. DNR personnel also assisted Fish Health Specialist with spawning chinook salmon as part of a long-term study of bacterial kidney disease. The study in conjunction with the Western Fisheries Research Center in Seattle, WA will help DNR personnel better understand the hatchery conditions that induce BKD and ultimately prevent catastrophic fish mortality.

**Strawberry Creek Weir**

**Contact:** Neal Rosenberg, Field Operations Team Supervisor, Crivitz

This facility in Door County is the primary chinook salmon spawning facility in Wisconsin. In recent years, low natural flow rates at the facility have required the installation of a pump and pipeline to supply water from the Sturgeon Bay ship canal to the facility. Salmon Stamp funds have supported the installation and maintenance of this pumping system.

**Hatchery renovation and maintenance**

**Contact:** Darren Miller, Fisheries Team Supervisor, Bayfield Hatchery

Funding covers general maintenance and upkeep of hatchery facilities. Funds have been used for repair of a walk-in freezer at Bayfield. During the fiscal year 2006 and fiscal year 2007 this project has funded the disinfection and inspection of two wells at Lake Mills State Fish Hatchery. At Lake Mills State Fish Hatchery funds have been used to erect an improved predator barrier around the raceway and pond rearing area, purchase a pond harvest seine and chemicals to control aquatic vegetation in the over wintering coho salmon pond. In fiscal year 2011 roof repair work was completed at Kettle Moraine State Fish Hatchery.

**Off-station coho and steelhead propagation activities**

**Contact:** Andrew Hron, Operations Supervisor, Kettle Moraine Springs State Fish Hatchery

This project covers special activities related to the propagation of coho salmon and rainbow trout (including steelhead strains). It includes funding for collection at the spawning weirs of coho salmon and steelhead eggs, the collection of adult Skamania broodstock, and other off-station activities.

**Operate annex facility at Kettle Moraine Springs State Fish Hatchery**

**Contact:** Andrew Hron, Operations Supervisor, Kettle Moraine Springs State Fish Hatchery

Chinook salmon and steelhead are spawned, hatched, and reared at the annex facility of the Kettle Moraine Springs State Fish Hatchery. These fish are transferred elsewhere for final rearing.

### **Wild Rose SFH development**

**Contact:** Alfred Kaas, Statewide Fish Propagation Coordinator, Madison.

Salmon Stamp funds were allocated in 2005 and 2008 for renovation of the Wild Rose State Fish Hatchery. In 2010, because this project was funded by bonding financed from the Fish and Wildlife Account, those allocated funds were refunded to the Department by the Department of Administration. They will remain available for hatchery renovations elsewhere in the state.

### **Permanent employee salaries in the propagation system**

Permanent employee salaries are for one Fisheries Technician at the Kettle Moraine Springs Hatchery whose primary duties are incubating coho eggs and propagating and rearing steelhead.

**Table 3.** Production summary for calendar years 2006-2011. Lake trout stocked by the USFWS are not included. For all species except chinook salmon, fingerlings are stocked in the fall after one year of hatchery rearing and yearlings are stocked the following spring after 18 months of hatchery rearing. Chinooks are stocked as spring fingerlings after only one winter of hatchery rearing. Rainbow trout include both steelhead and non-migratory strains.

	<u>Lake Michigan</u>			<u>Lake Superior</u>		
	fingerling	yearling	LM total	fingerling	yearling	LS total
2006	brook trout				50	50
	lake trout				86,420	86,420
	brown trout	437,918	576,412	1,014,330	92,744	92,744
	chinook salmon	1,166,185		1,166,185	245,783	245,783
	coho salmon	173,918	263,830	437,748		
	rainbow trout	12,684	588,911	601,595		
2007	splake	40,028	40,028	80,056	42,000	30,257
	lake trout				141,113	94,815
	brown trout	420,470	591,507	1,011,977	97,709	124,532
	chinook salmon	1,112,562		1,112,562	203,322	203,322
	coho salmon	288,071	354,994	643,065		
	rainbow trout	193,509	552,995	746,504		
2008	splake	44,272	44,272	44,272	93,294	45,854
	brown trout	345,195	619,642	964,837		
	chinook salmon	725,572		725,572		
	coho salmon	129,416	153,494	282,910		
	rainbow trout	143,230	399,413	542,643		
2009	splake				138,750	138,750
	lake trout				103,871	103,871
	brown trout	405,986	528,434	934,420	37,419	83,945
	chinook salmon	952,804		952,804		
	coho salmon		344,471	344,471		
	rainbow trout	231,561	425,828	657,389		
2010	splake				90,665	90,665
	brook trout		40,546	40,546		
	lake trout				93,613	93,613
	brown trout	177,068	558,298	735,366	94,367	94,367
	chinook salmon	1,233,922		1,233,922		
	coho salmon	11,665	333,770	345,435		
2011*	rainbow trout		445,135	445,135		
	lake trout				145,675	145,675
	brown trout	19,098	577,006	596,104	42,302	42,302
	chinook salmon	1,127,444		1,127,444		
	coho salmon		433,196	433,196		
		427,693	427,693			

\* Numbers for 2011 do not include fall fingerlings, which had not yet been stocked at the time of this report.

# **Program Administration**

## **Print stamps and prepare expenditure reports**

**Contact:** Bill Horns, Great Lakes Fisheries Specialist, Madison

This project covers costs associated with preparing the Great Lakes Trout and Salmon Stamp expenditure report. The Department no longer prints physical Salmon Stamps. Collectors can purchase souvenir Salmon Stamps from previous years.

## Contact List

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Darren Miller	Bayfield Hatchery, Bayfield; (715) 779-4021; <a href="mailto:Darren.Miller@wisconsin.gov">Darren.Miller@wisconsin.gov</a>
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Neal Rosenberg	Thunder River rearing station; (715) 757-3541; <a href="mailto:Neal.Rosenberg@wisconsin.gov">Neal.Rosenberg@wisconsin.gov</a>

### Direct your suggestions for improving this report to

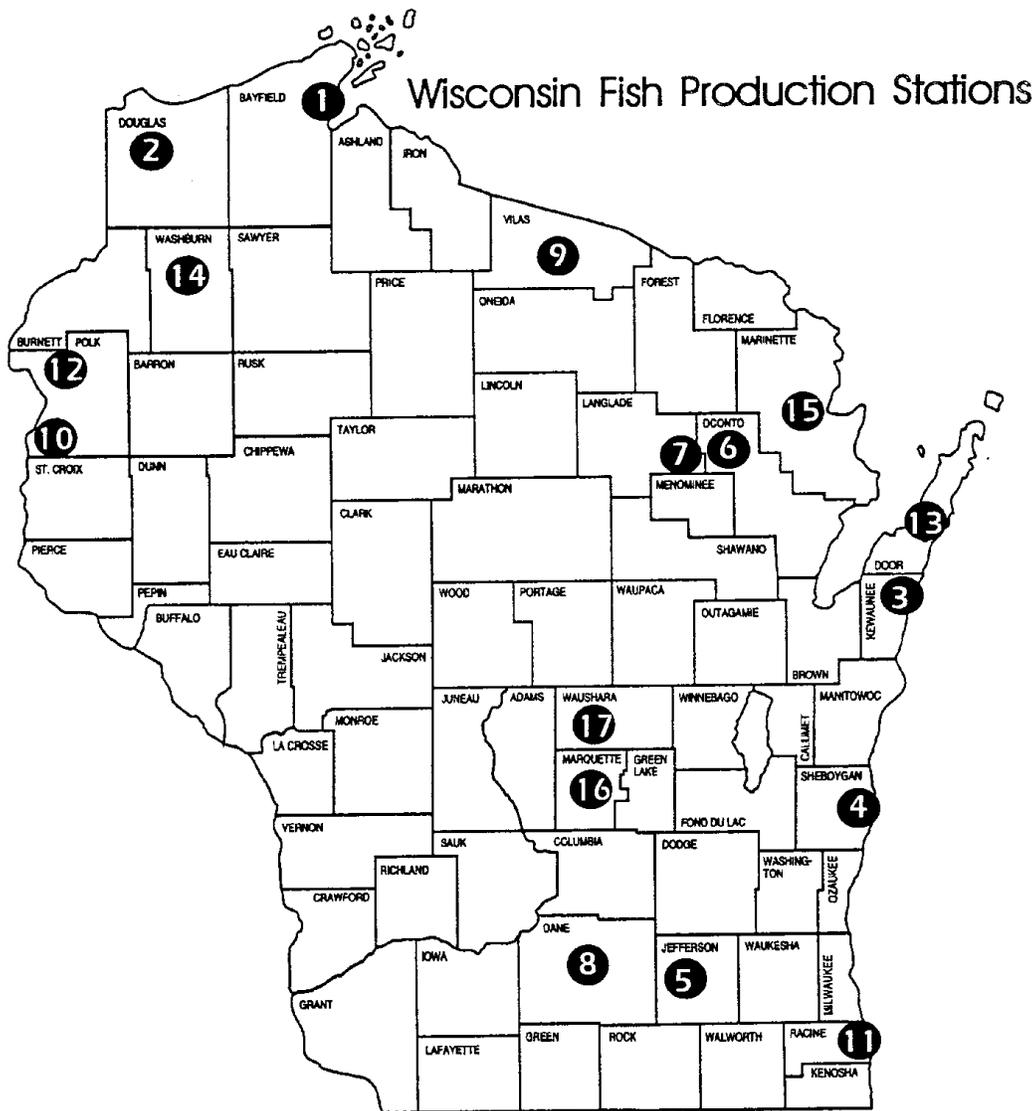
Bill Horns; WDNR; 101 S. Webster St., Madison; (608) 266-8782; [William.Horns@wisconsin.gov](mailto:William.Horns@wisconsin.gov)

**For more information on Great Lakes fishing and many other subjects, visit the DNR Web site.**

<http://www.dnr.wi.gov>

Find the *Fish Wisconsin* page by clicking on

“*Outdoor Recreation*” and then “*Fishing*”



<u>Facilities</u>	<u>Phone</u>	<u>Type of Fish Production</u>
1 Voigt (Bayfield) SFH	(715) 779-4021	Coldwater
2 Brule rearing station	(715) 372-4820	Coldwater
3 Besadny Anadromous Fisheries Facility	(920) 388-1025	Coldwater
4 Kettle Moraine Springs SFH	(920) 528-8825	Coldwater
5 Lake Mills SFH	(920) 648-8012	Coldwater, Cool/warm water
6 Lakewood rearing station	(715) 276-6066	Coldwater
7 Langlade rearing station	(715) 882-8757	Coldwater
8 Nevin SFH	(608) 275-3246	Coldwater
9 Oehmcke (Woodruff) SFH	(715) 356-5211	Cool/warm water
10 Osceola SFH	(715) 294-2525	Coldwater
11 Root River Spawning Facility	(414) 638-0134	Coldwater
12 St Croix Falls SFH	(715) 483-3535	Coldwater
13 Strawberry Creek Weir	(920) 746-2860	Coldwater
14 Thompson (Spooner) SFH	(715) 635-4147	Cool/warm water
15 Thunder River rearing station	(715) 757-3541	Coldwater
16 Westfield SFH (closed )	(608) 296-2343	Coldwater
17 Wild Rose SFH	(920) 622-3527	Coldwater, Cool/warm water





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**Wisconsin Department of Natural Resources**

**Bureau of Fisheries Management & Habitat Protection**  
**Madison, Wisconsin**  
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