WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Great Lakes Trout And Salmon Stamp Revenue And Expenditures Report

FISCAL YEARS 2014-2015

Open House at the Root River Steelhead Facility in October 2015. / Photo credit: Wisconsin DNR

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To protect and enhance our natural resources:
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our wildlife, fish and forests
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To provide a healthy, sustainable environment
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To ensure the right of all people
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To work with people
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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 (commonly referred to as the 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 Salmon Stamp in addition to a fishing license. 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 and 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

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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 purchasing, maintaining and repairing 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 accrues 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 75 cents for the two-day license and the patron card; it is 25 cents 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. In 1984, the Wisconsin State Legislature approved a $6 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. One-half of the revenues from the license supported Great Lakes salmon and trout projects to prevent a sharp reduction in funding for the salmon and trout program.

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 to $7. In 2004, the Salmon Stamp fee was increased to $10, and the two-day license fee was increased to $14.

In recent years, the allocation from each Patron License has exceeded $3, totaling $154,472 in the fiscal year 2014 and $159,301 in the fiscal year 2015. 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. Collectors can purchase souvenir Salmon Stamps from previous years. All revenues from these sales contribute to the Salmon Stamp account.

REPORTS

Findings of evaluation and research activities are included in annual reports that are posted on the DNR's Lake Michigan and Lake Superior webpages. Stocking data is available in the on-line fish stocking database.

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Summary Tables

Table 1. Salmon Stamp account revenues and expenditures in fiscal years 2008-2015. Expenditures for individual projects include supplies and limited-term employee (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 3.5 positions total, supporting or partially supporting five staff. There were two fisheries technician positions on Lake Michigan (split over three positions; 1.5 positions in Milwaukee and 0.5 position in Sturgeon Bay) and one-half of a fisheries biologist position and one fisheries technician on Lake Superior. Note that $2,246,555 allocated for Wild Rose Hatchery development in 2005 and 2008 was refunded to the DNR by the Department of Administration in 2010.

	2008	2009	2010	2011	2012	2013	2014	2015
Beginning Cash Balance	**2,205,083**	**408,106**	**750,718**	**3,142,558**	**3,068,697**	**3,184,633**	**3,013,097**	**3,361,366**
Revenues	**1,846,803**	**1,795,005**	**1,785,900**	**1,685,224**	**1,835,864**	**1,673,600**	**1,718,479**	**1,749,968**
Stamp Sales	1,309,600	1,288,649	1,307,505	1,243,274	1,393,021	1,244,742	1,284,136	1,316,013
Two-Day License Sales	352,161	331,197	310,644	288,489	293,288	276,126	279,871	274,654
Patron License Sales	183,925	171,443	166,846	152,914	149,544	152,732	154,472	159,301
Collector Fee	1,080	1,670	880	547	10	0	0	0
Refunds And Corrections	37	2,046	35	0	0	0	0	0
Refund Of Money Allocated For Wild Rose	**0**	**0**	**2,246,555**	**0**	**0**	**0**	**0**	**0**
Total Available Funds	**4,051,886**	**2,203,147**	**4,783,221**	**4,827,782**	**4,904,561**	**4,858,233**	**4,731,576**	**5,111,334**
Expenditures	**3,643,780**	**1,452,393**	**1,640,615**	**1,759,085**	**1,719,930**	**1,845,136**	**1,370,210**	**2,331,245**
Lake Michigan Projects								
Brown Trout	3,268	1,457	2,506	3,184	8,156	7,567	2,921	5,218
Feral Steelhead Broodstock Mgmt	2,488	0	0	1,249	2,574	2,352	1,157	947
Lake Michigan Creel Surveys	121,710	110,592	128,670	115,178	110,953	106,586	111,948	134,763
Sport Fish Data Analysis	12,824	10,525	11,654	11,955	14,027	11,735	9,005	9,585
Habitat On Oconto River	0	1,772	0	0	0	0	0	0
Broodstock Management And Eval.	21,876	12,621	14,761	26,100	24,292	14,430	36,600	38,779
Steelhead Fin Clipping	21,524	18,176	16,322	20,799	21,894	16,475	16,508	6,595
Nearshore Rainbow	2,340	169	1,628	0	705	30	0	0
G.L. Assessment Boat	0	0	0	179,829	21,653	298,580	0	0
Lake Michigan & Lake Superior Projects								
Lake Trout Restoration & Management	63,471	56,750	50,664	47,683	58,260	65,751	40,679	55,233
Lake Superior Projects								
Brule River Sea Lamprey Barrier	21,906	19,730	20,063	22,229	17,763	49,409	15,608	22,173
Lake Superior Creel Survey	34,681	0	22,949	24,764	37,566	34,732	33,668	42,054
Coaster Brook Trout Management	5,584	0	5,628	5,809	4,044	3,159	1,787	0
Tributary Management	2,706	2,654	2,166	2,027	2,054	3,359	2,699	2,782
Propagation								
Basic Hatchery Services	73,090	60,136	85,545	103,738	70,219	55,929	48,744	64,039
Salmon And Trout Production	621,405	640,184	705,752	638,408	732,359	665,102	509,373	770,588

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Salmon And Trout Distribution	16,270	7,427	8,448	9,976	9,782	4,761	5,046	21,338
Weir Operations	127,604	112,142	117,552	113,275	99,923	104,096	75,053	81,533
Hatchery Maintenance	0	0	53,870	1530	55,974	0	100,175	638,445
Capital Development Project	0	0	0	0	0	0	0	33,986
Off Station Propagation	2,716	4,089	2,884	4,603	2,783	2,604	0	0
Operate Annex At KMSSFH	11,369	30,204	14,932	20,113	20,984	20,294	14,542	16,754
Wild Rose SFH Development	2,100,000	0	0	0	0	0	0	0
Other								
Salmon Stamp Administration Costs	1,955	2,061	1,808	0	0	0	0	0
Permanent Salaries & Fringe Benefits	275,141	276,223	23,740	221,078	215,550	222,606	218,659	221,282
Overhead And LTE Fringe Benefits	99,853	85,479	149,076	185,557	188,418	155,578	126,038	165,151
Closing Cash Balance	**408,106**	**750,718**	**3,142,558**	**3,068,697**	**3,184,633**	**3,013,097**	**3,361,366**	**2,780,089**

Table 2. License-year sales of cards, licenses, and stamps supporting the Great Lakes Trout and Salmon Stamp account for 2013-2015. License reporting categories have changed over the years. For this report, categories of license sales for Patron Cards include regular resident patron cards, junior, purple heart and recruiter card sales. Two-Day Licenses include two-day Great Lakes fishing licenses and two-day Great Lakes fishing licenses issues on charter boats. Great Lakes Trout and Salmon Stamps contain recorded sales from that category only.

	PATRON CARDS	TWO-DAY LICENSES	GREAT LAKES TROUT AND SALMON STAMPS
2013	45,585	38,936	131,638
2014	46,633	38,975	130,946
2015	47,965	37,411	133,111

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 selling various fish and wildlife licenses and stamps. The second row shows expenditures from the Segregated Fund, excluding Salmon Stamp expenditures 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.

	2014	2015
Salmon Stamp	1,370,210	2,331,245
Segregated Fund (not Salmon Stamp)	1,836,395	1,534,321
General Purpose Revenues	0	0
Great Lakes Surcharges	0	0
TOTAL	**3,206,605**	**3,865,566**

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Table 4. Production summary. Lake Trout stocked by the U.S. Fish and Wildlife Service (USFWS) in Lake Michigan 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.

		LAKE MICHIGAN			LAKE SUPERIOR		
		Fingerlings	**Yearlings**	**LM Total**	**Fingerlings**	**Yearlings**	**LS Total**
2014	Lake Trout				32,987	89,630	122,617
	Brown Trout	8,844	579,785	588,629		158,949	158,949
	Chinook Salmon	823,222		823,222			
	Coho Salmon		421,100	421,100			
	Rainbow Trout		409,121	409,121			
	Splake				46,798	60,380	107,178
2015	Lake Trout				20,147	85,771	105,918
	Brown Trout	133,655	687,299	820,954		149,471	149,471
	Chinook Salmon	823,496		823,496			
	Coho Salmon	107,109	432,020	539,129			
	Rainbow Trout		432,665	432,665			
	Splake				56,254	45,050	101,304

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Lake Michigan Evaluation and Research Activities

BROWN TROUT

Contact: Tammie Paoli, DNR Fisheries Biologist, Peshtigo

Note: A complete list of each contact's information is available at the end of this report.

This project refers to Brown Trout originating from Lake Michigan and tributaries and stocked back to Lake Michigan or Lake Superior waters. This project includes broodstock and gamete collection, hatching fertilized eggs and rearing fish to either fall fingerling or yearling age.

It covers the collection and transportation of broodstock, disinfection, enumeration, incubation and hatching of the eggs. It also covers water quality monitoring, preparation and maintenance of rearing units, and final rearing unit enumeration and harvest. It also includes operations and transportation costs for stocking fish from the hatcheries to waters of the state and equipment maintenance of related equipment.

FERAL STEELHEAD BROODSTOCK MANAGEMENT

Contact: Nick Legler, DNR Fisheries Biologist, Sturgeon Bay

The annual steelhead assessment project was initiated in 1992 at the Besadny Anadromous Fisheries Facility (BAFF) to (1) assess the return of steelhead strains to BAFF and (2) collect basic biological information on each strain. During fiscal years 2014-2015 the steelhead biologist and technician continued the ongoing steelhead project. All data are entered into the Lake Michigan database system and proofed.

LAKE MICHIGAN CREEL SURVEYS

Contact: Laura Schmidt, DNR Fisheries Biologist, 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, interview anglers and 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. Clerks also count and collect registration numbers for all moored fishing boats on Lake Michigan and Green Bay. In addition, clerks submit weekly fishing reports that are put online.

SPORT FISH DATA ANALYSIS

Contact: Laura Schmidt, DNR Fisheries Biologist, Milwaukee

Data from a postal survey of moored boats, reports submitted by charter captains, and the Lake

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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. The work includes the following elements: 1) continue to refine survey design of Lake Michigan Creel Survey, moored boat survey and charter boat survey; 2) refine data analyses programs and create new programs to handle specific requests; 3) supervise data collections, entry and editing of data to ensure compliance with #1 above; 4) surveillance of creel clerks to ensure the quality of data; 5) analyze and summarize data collected during surveys; 6) provide annual summaries and reports to Lake Michigan biologists for inclusion in assessment surveys; 7) report on annual and long-term trends in the Lake Michigan sport fishery.

Creel survey reports are available here.

BROODSTOCK MANAGEMENT & EVALUATION

Contact: Laura Schmidt, DNR Fisheries Biologist, Milwaukee (regarding Coho, Chinook and steelhead management at the Root River Steelhead Facility); Nick Legler, DNR Fisheries Biologist, Sturgeon Bay (regarding Coho, Chinook and steelhead management at the Besadny and Strawberry Creek Facilities); Tammie Paoli, DNR Fisheries Biologist, Peshtigo (regarding stocking Brown Trout evaluations)

ROOT RIVER STEELHEAD FACILITY, STRAWBERRY CREEK AND BESADNY FACILITIES

Each year salmon and trout are stocked in many Lake Michigan locations. For detailed information about stocking numbers and locations, see the webpage here.

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 assesses the biological characteristics of stocked fingerlings, yearlings and mature adults. Annual data collected include length, weight, age, sex and fin clip. Various lots of Chinook, Coho, Brown Trout and steelhead are marked with fin clips or tags before stocking to evaluate different strains' performance or 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 provide baseline fish health data.

The Strawberry Creek Weir (SCW) is the primary site for collecting 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 the collection of Chinook Salmon. The Root River Steelhead Facility collects spawning adult Coho Salmon and steelhead and serves as a backup facility for the 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.

Annual reports are available on the DNR's Lake Michigan fishery webpage here. Laura Schmidt can provide reports for all species returning to the Root River Steelhead Facility. Nick Legler can provide reports for all species returning to the Besadny and Strawberry Creek Facilities and Tammie Paoli can provide reports for Brown Trout.

STOCKING EVALUATIONS

This project has several components related to Green Bay trout and salmon management: 1) annual electroshocking surveys in the lower Menominee and Peshtigo Rivers to evaluate fall runs of salmonids; 2) collecting and analyzing biological data from the M&M Great Lakes Sportfishing Club's annual fishing derby; 3) assisting in salmonid stocking, such as recording water temperatures to better coordinate stocking location and timing, drilling holes in the ice to stock fish through, and assisting truck drivers onsite during stocking events; 4) purchasing fuel required for the RV Coregonus to stock fish offshore; 5) a cooperative project with the M&M Great Lakes Sportfishing Club to floy-tag Brown Trout stocked by those groups; and 6) data entry and analysis of the above projects.

STEELHEAD FIN CLIPPING

Contact: Andrew Hron, DNR 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.

LAKE TROUT RESTORATION & MANAGEMENT

LAKE MICHIGAN

Contact: Laura Schmidt, DNR Fisheries Biologist, Milwaukee

The Lake Trout restoration and management program has two main components: 1) annual spring lake-wide assessment protocol (LWAP) done in conjunction with other state, federal and tribal agencies; and 2) Fall spawning reef surveys. The Wisconsin portion of LWAP is conducted to assess trends in the abundance of Lake Trout at the mid-lake reef complex (MLRC), trends in the prevalence of sea lamprey wounds and scars, Lake Trout strain performance and presence of naturally reproduced (unmarked) Lake Trout.

Fall Lake Trout spawning reef surveys are conducted in the MLRC and nearshore near Milwaukee. The surveys assess the abundance and age composition of mature spawning Lake Trout, determine trends in the prevalence of sea lamprey wounds and scars, evaluate natural reproduction and collect eggs to measure thiamine concentration.

For more information on the Lake Michigan fishery visit the webpage here.

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LAKE SUPERIOR

Contact: Brad Ray, DNR NR Region Team Supervisor, Bayfield

Lake Superior Lake Trout restoration and management address 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. However, sea lamprey-related fish mortality remains an obstacle to complete rehabilitation.

This project covers the cost associated with the spring and fall Lake Trout assessments. It 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.

Lake Superior Evaluation and Research Activities

BRULE RIVER SEA LAMPREY BARRIER OPERATION

Contact: Paul Piszczek, DNR Fisheries Biologist, Superior

The Bois Brule River sea lamprey barrier is among three concrete barriers (Middle River, Iron River) that control sea lamprey by blocking upstream migration to spawning areas and limiting reproduction and recruitment. However, the Bois Brule River barrier is the only barrier to have a companion concrete fish ladder (with adjustable gates) and concrete sea lamprey trap.

The fish ladder facilitates upstream passage of recreationally important Lake Superior migratory salmonid species such as steelhead, Brown Trout and Coho Salmon. The fish ladder and lamprey trap are passive appurtenances operated, inspected, and maintained throughout the year. However, inspections are only periodically made from December through March due to snow and ice cover. The Bois Brule River barrier's fish ladder is convertible from step-pool to vertical-slot configuration during spring and fall to accommodate salmonid passage and sea lamprey trapping seasons.

The DNR converts the fish ladder, whereas the USFWS conducts trapping operations, including sorting by-catch. The agencies maintain an ongoing partnership toward improving lamprey trapping and fish passage efficiency through various design changes within the fish ladder. The agencies also discuss repair needs for all barriers, the Bois Brule River fish ladder and Bois Brule River lamprey trap. The upstream end of the fish ladder is adjoined by a viewing chamber, an observation window and video recording equipment to monitor lake-run salmon and trout.

The window and video equipment are inspected and maintained regularly throughout the fish migration seasons, primarily spring and fall. The DNR reviews video records after the conclusions of the migration seasons, identifies, measures and counts fish, then produces

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semi-annual reports of relative abundances and size structures of salmonid populations. The UWFWS handles all fish encountered in the trap.

Each of the three barriers is accessible via gravel roads, inspected, maintained, and repaired if necessary throughout the year. For additional information about the Brule visit the webpage here.

LAKE SUPERIOR CREEL SURVEY

Contact: Brad Ray, DNR NR Region Team Supervisor, Bayfield

Annual creel surveys are conducted at all major ports on Lake Superior to monitor the 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 estimate population size, evaluate and develop stocking strategies and decide how to best manage the Lake Superior fishery.

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 the 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 the webpage here.

COASTER BROOK TROUT MANAGEMENT FOR WISCONSIN'S LAKE SUPERIOR BASIN

Contact: Paul Piszczek, DNR 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), 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 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 compared to the years before the late 1800s. This project has funded Wisconsin's activities on the Brook Trout Subcommittee of the Great Lakes Fishery Commission, leading to a lake-wide rehabilitation plan to improve brook trout abundance.

Wisconsin's "Lake Superior Basin Brook Trout Plan", a joint effort by the DNR and the USFWS 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 outlines objectives and tactics necessary to accomplish the goal of rehabilitation and protection of the depleted stock.

Primary objectives include: improving overall abundance of Brook Trout; improving the ability of Brook Trout populations to sustain themselves through natural reproduction; improving their habitat within the Basin; and attempting to establish several populations that exhibit life history diversity (both stream resident and migratory 'coaster' life history). Three streams were selected for the project: Bois Brule River, Bark River and Whittlesey Creek.

See the webpage here for additional information about Brook Trout management and restoration. The DNR and USFWS joint Brook Trout plan is available here.

LAKE SUPERIOR TRIBUTARIES MANAGEMENT

Contact: Paul Piszczek, DNR Fisheries Biologist, Superior

This project supports management initiatives in the Lake Superior clay plain tributaries. Individual activities include support for:

- fisheries management of the South Shore Fish and Wildlife Area (acquisition and riparian property management project on five of the coldwater trout tributaries) and the Bois Brule River (angling regulation evaluation and support of the Brule River Sportsmen's Club and Brule River Preservation Inc. habitat initiatives),
- beaver control assistance on 117 miles of critical stream thread,
- the Non-point Source Pollution Abatement Strategies Technical Steering Group/Lake Superior Basin Partnership Team (vision statement - to develop an understanding of the erosion processes that impact waterways and to identify management strategies that promote healthy watershed conditions in the Wisconsin Lake Superior Basin) and others (Sioux River Watershed Council, Bad River Watershed Council, Whittlesey Creek Wildlife Refuge, the Chequamegon National Forest, Bayfield County, Red Cliff and Bad River bands of the Lake Superior Chippewa),
- individual landowners in land management strategies to protect and enhance coldwater tributary habitat and to continue wild-strain stocking evaluation of naturalized salmonids.

For more information on the Lake Superior fishery, visit the webpage here.

Propagation Activities

BASIC HATCHERY SERVICES

Contact: Darren Miller, DNR Operations Supervisor, Les Voigt State Fish Hatchery; Andrew Hron, DNR Operations Supervisor, Kettle Moraine Springs State Fish Hatchery; Jesse Landwehr, DNR Operations Supervisor, Wild Rose State Fish Hatchery

Funds expended in this project area cover basic operating services not directly associated with fish rearing at Les Voigt, Kettle Moraine Springs, Wild Rose and Lake Mills state fish hatcheries, as well as at the Besadny, Strawberry Creek and Root River weirs. 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 the removal of trees for safety and aesthetic reasons.

SALMON AND TROUT PRODUCTION

Contact: Dave Giehtbrock, DNR NR Program Manager, 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 increase oxygen levels and reduce the ice cover. Table 4 summarizes all Great Lakes salmon and trout production during 2014-2015.

SALMON AND TROUT DISTRIBUTION

Contact: Dave Giehtbrock, DNR NR Program Manager, Madison

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

WEIR OPERATIONS

The BAFF, the Root River Steelhead Facility, and the SCW are key to Wisconsin's salmon and trout stocking programs. Salmon Stamp funds are used to collect broodstock and eggs for fertilization and maintain/operate the facilities.

Salmon Stamp funds also support public education and tours.

BESADNY ANADROMOUS FISHERIES FACILITY

Contact: Jesse Landwehr, DNR Operations Supervisor, Wild Rose State Fish Hatchery

Each year eggs are collected for propagation from adult anadromous trout and salmon. Steelhead are trapped in late spring and summer and Chinook and Coho Salmon are trapped in the fall. The Besadny Facility allows the general public to safely observe the harvesting of eggs and other related spawning activities at a very close distance. There are guided as well as self-

guided tours available seasonally.

ROOT RIVER STEELHEAD FACILITY

Contact: Dave Giehtbrock, DNR NR Program Manager, Madison

Funding from the Salmon 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 propagation. More than two dozen educational/informational tours are conducted each year.

STRAWBERRY CREEK WEIR

Contact: Jesse Landwehr, DNR Operations Supervisor, Wild Rose State Fish Hatchery

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 running a pump and pipeline to supply water from the Sturgeon Bay ship canal to the facility. Salmon Stamp funds have supported this pumping system's installation, maintenance, and running.

HATCHERY MAINTENANCE

Contact: Dave Giehtbrock, DNR NR Program Manager, Madison; Neal Rosenberg, DNR Northwest Hatchery Group Leader, Spooner

Funding covers general maintenance and upkeep of hatchery facilities. In addition to covering numerous smaller maintenance and upkeep projects, funds have been used for completing more significant projects. At the Les Voigt Hatchery, fiscal year projects have included repairing and or maintaining dimmer switches for starter tanks, sewage heater repairs and boiler cleaning (2015). Brule Rearing Station includes repair on concrete, screens and small engines (2015).

BAYFIELD FH-RPL SEWAGE LIFT PUMP

Contact: Neal Rosenberg, DNR Northwest Hatchery Group Leader, Spooner

This project supported the upkeep and maintenance of the onsite mini sewer treatment facility at the Les Voigt Hatchery. This treatment system is used by both hatchery residences and the hatchery itself.

STATEWIDE- FISHERY GROUNDWATER STUDY

Contact: Dave Giehtbrock, DNR NR Program Manager, Madison

The groundwater study at the Kettle Moraine Springs Hatchery identified the quantity and quality of the water available for fish rearing at the site beyond the glacial wells already in place. The information produced by this study will be used to design the new hatchery infrastructure planned for this site. The quantity of water available told us how many fish we can raise, and the quality information told us what treatment facilities to plan for to make it ready for fish.

OPERATE ANNEX FACILITY AT KETTLE MORAINE SPRINGS STATE FISH HATCHERY

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

Steelhead and Coho Salmon eggs are brought in from Lake Michigan spawning weirs (Root River and Kewaunee) and incubated at the Annex facility. Eyed eggs are then transferred to other state hatcheries (Wild Rose, Les Voight, Kettle Moraine) and other Great Lake hatcheries (Ohio DNR). The Annex facility also rears 40,000-60,000 yearling steelhead.

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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.

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 monitor the harvest of Lake Trout by commercial fishers.

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.

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For more information on the Lake Michigan fishery visit the webpage here. More information on the Lake Superior fishery is available here.

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