WHITE PERCH MANAGEMENT PLAN

DEPARTMENT OF INLAND FISHERIES AND WILDLIFE DIVISION OF FISHERIES AND HATCHERIES

PREPARED BY MICHAEL R. SMITH REGIONAL FISHERIES BIOLOGIST REGION F

MAY, 2002

WHITE PERCH LIFE HISTORY

The white perch, known by its scientific name as <u>Morone americana</u>, is actually a member of the true basses and is not closely related to the yellow perch with which it is often associated. White perch were misnamed years ago because people thought they were similar to and therefore related to yellow, or European, perch. White perch have a spiny-rayed dorsal fin and large ctenoid scales typical of most warmwater sportfish found in Maine. Because of its great abundance, excellent eating qualities, and catchability, the white perch has long been regarded as one of Maine's most important freshwater sportfish.

White perch are closely related to striped bass, which live principally in salt or brackish water. Although both species are capable of living in salt water, they both spawn in fresh water. The white perch spawns mainly in the spring at water temperatures around 59-60 degrees F. Spawning takes place in shallow water over almost any bottom type. The total number of eggs per female varies from 20,000 to 300,000 depending on the size of the fish. A 6-inch long perch would have approximately 22,000 eggs. The eggs hatch in 4-5 days at 59-60 degrees F. The average life span is 5-7 years. Perch can survive and often thrive in most Maine lakes and ponds of approximately 50 acres or more in size and about 25 feet or more in depth if the deeper water is not depleted of oxygen during the winter months. Perch are considered to be a warmwater fish because they seek out and grow better in warmer water. White perch do better in waters that reach a temperature of 75 degrees F. or higher in the summer months. Perch eat most small creatures that other fish eat, and large perch will eat most small fish including their own species.

Where conditions are favorable, white perch form very large populations that occasionally dominate the waters they inhabit. Their reproductive potential is so great that only major mortalities induced by unfavorable weather at spawning time can cause failures in certain year classes. Loss of year classes, however, causes few problems in the management of white perch. Usually the problem is one of too many small perch. Even small, slow-growing perch can mature and spawn successfully thus preserving a population. Fishermen prefer larger perch for food and sport and are likely to complain when the perch are all small.

SPECIES MANAGEMENT HISTORY

The white perch is distributed along the Atlantic coast from South Carolina to the Canadian Maritime Provinces. In the southern portion of its range perch are found mostly in brackish water estuaries. In Maine, white perch thrive mainly in fresh water lakes and ponds. The distribution of the perch population within Maine prior to the arrival of European settlers is not known. It is quite likely, however, that perch were present in all of the major river drainages as far upstream as the first barrier to further migration. White perch were considered a valuable fish by earlier settlers and were introduced into many waters where they were not native, thereby increasing the range of perch in Maine. Additionally, in some instances, dams built below natural falls, that were barriers to perch movement, increased the water level in the impoundment, which allowed perch and other species to swim over the inundated falls and invade previously unoccupied waters. Some of the few areas not presently inhabited by white perch are the headwaters of the St. John River above Grand Falls, and the upper portion of the Androscoggin River drainage.

Until the 1950's, many types of size, season and bag limit regulations were imposed on white perch fishermen to supposedly protect the resource and allow small perch to grow to a desirable size. In many instances protection resulted in over abundance and subsequent stunting of the population. For most waters, the only management recommendation needed for white perch is unlimited harvest at current levels of fishing pressure. Too many perch can deplete the food supply and may result in stunting so extreme that a 6-year-old perch may be only 4 inches long. Depletion of the food supply also affects the growth of more highly prized sportfishes such as salmon, trout, and bass.

Several major rivers are deep enough to support resident white perch populations, and several streams provide perch fishing although the perch may not be resident populations, but rather migrants from nearby lakes and ponds. Although there is no estimate of the acreage or perch abundance involved in river and stream fisheries, angler use data for rivers and streams has been collected since 1994 and the results have been presented in subsequent plans and plan updates.

PAST MANAGEMENT GOALS

During the last five years there has been some increase in and refinement of data collected from white perch populations. Changes in numbers concerning abundance, distribution and use are due mainly to a more accurate accounting of the species in Maine and not to changes in management or angler use. However, information is still lacking for an accurate analysis of abundance, angler use and harvest, and for a determination of whether specific management objectives established for this species are being satisfied.

The long range goal for white perch established in 1986 and restated in subsequent updates was to maintain the current supply and increase use of this species statewide. The standing crop of white perch has steadily increased since 1975 through an increase in the number of lakes containing white perch (Table 2). This increase has occurred both through new lake surveys in which perch were found to be present and through the illegal introduction of white perch into other lakes.

The goals for white perch management established in 1996 were to (1) maintain the distribution and abundance of white perch; (2) increase angler use and harvest of white perch; (3) provide the opportunity to catch larger-than-average-size white perch on selected waters. Specific management objectives were as follows:

Distribution and abundance objectives:

Maintain current distribution and abundance in about 514 lakes totaling 570,000 acres.

Distribution and abundance has not changed during the planning period.

Harvest objectives:

Increase angler utilization to about 2,000,000 angler days and increase harvest to about 4,000,000 fish.

During the plan period, the number of anglers in the open water season on lakes containing white perch is estimated to have decreased by 7.6%, however, angler-days increased by approximately 5% (Table 1). Angler use of stream white perch fisheries in the open water season decreased by 744 % and angler days decreased by 54%. Total open water angler use was 151,037 anglers and 1,593,664 angler days. Ice fishing effort was relatively stable. Total annual angler use increased from 1,762,137 to 1,932,900 angler days which is slightly below the use objective of 2,000,000 angler days. Yearly angler use increased by 9%, however, catch increased only slightly from 2.2 million to 2.3 million fish. Estimated annual harvest decreased from 1,015,323 to 964,889, or 75.8% lower than the 1986 harvest objective of 4,000,000.

		ANGLER	FISH		PERCENT	FISH PER ANGLER DAY				
REGION	ANGLERS	DAYS	CAUGHT	FISH KEPT	KEPT	CAUGHT	KEPT			
			ICE FISHING	QUESTIONNA	IRE SURVEY 1	998-99				
A	10,455	62,202	34,393	11,954	35	0.55	0.19			
В	22,862	160,890	115,357	58,480	51	0.72	0.36			
С	5,820	35,349	45,516	24,326	53	1.29	0.69			
D	2,614	13,034	7,284	3,868	53	0.56	0.30			
E	5,402	27,370	5,925	3,102	52	0.22	0.11			
F	7,702	38,404	49,628	33,980	68	1.29	0.88			
G	244	1,987	279	35	13	0.14	0.02			
STATE	55,099	339,236	258,382	135,745	53	0.76	0.40			
			OPEN WATE		IAIRE SURVE	Y 1999	FISH PER			
				LEGA	L FISH		ANGLER			
REGION	WATER TYPE	ANGLERS	ANGLER DAYS	CAUGHT	KEPT	PERCENT KEPT	DAY CAUGHT			
A	LAKES	37,712	460,412	362,633	102,974	28.4	0.79			
	STREAMS	760	9,879	8,169	0	0.0	0.83			
	ALL	38,472	470,291	370,802	102,974	27.8	0.79			
В	LAKES	58,325	665,107	909,982	363,993	40.0	1.37			
	STREAMS	2,280	27,668	65,829	8,549	13.0	2.38			
	ALL	60,605	692,775	975,811	372,542	38.2	1.41			
С	LAKES	13,489	108,107	128,192	38,582		1.19			
	STREAMS	285	855	950	285	30.0	1.11			
	ALL	13,774	108,962	129,142	38,867	30.1	1.19			
D	LAKES	5,984	50,369	125,191	36,790		2.49			
	STREAMS	760	19,885	6,829	0	0.0	0.34			
	ALL	6,744	70,254	132,030	36,790	27.9	1.88			
E	LAKES	11,494	76,560	147,341	83,727		1.92			
	STREAMS	285	1,140	2,375	855	36.0	2.08			
	ALL	11,779	77,700	149,716	84,582	56.5	1.93			
F	LAKES	17,668	158,309	300,748	180,470	60.0	1.90			
	STREAMS	1,330	9,199	14,914	9,594	64.3	1.62			
	ALL	18,998	167,508	315,662	190,064	60.2	1.88			
G	LAKES	665	6,174	6,080	3,325	54.7	0.98			
	STREAMS	190	986	379	0					
	ALL	855	7,160	6,459	3,325	51.5	0.90			
STATE	LAKES	145,337	1,525,038	1,980,167	809,861	40.9	1.30			
	STREAMS	5,700	68,626	99,076	19,283	19.5	1.44			
	ALL	151,037	1,593,664	2,079,243	829,144	39.9	1.30			

Table 1. Estimated Catch and Effort for White Perch by Season and by Management Region

_

Although annual angler use has increased the catch rate and the harvest rate (percent of fish kept) have declined. The 1996 ice fishing catch and harvest rates were 0.88 fish/angler-day and 0.55 fish/angler-day, respectively. In 1999 these values had declined to 0.76 fish caught/angler-day and 0.40 fish kept/angler-day. Open water fishing showed a similar trend with a catch rate of 1.35 fish and a harvest of 0.58 perch per angler day in 1996 and catch rate of 1.30 fish and a harvest of 0.52 perch per angler day in 1999. In 1996 ice fishing anglers kept 62% and open water anglers kept 43% of white perch caught. In 1999 ice fishing anglers kept 41% and open water anglers kept 53% of the white perch caught. It is not known if this trend in the decline of white perch harvested is due to the increased angler catch and release ethic or to a reduction in the supply of desireable sized white perch. If the decline in harvest continues it will result in an increase in stunted perch populations.

Fishing quality objective: Provide the opportunity to catch larger-than-average-size white perch on selected waters.

No work was done on the objective to manage selected waters for larger-than-averagesize perch with a goal of providing 0.75 lb. white perch.

OPPORTUNITY

Information in this plan is presented on the basis of Fisheries Management Regions, which are aggregations of townships (Figure 1).



The distribution of white perch in lakes is shown in Figure 2. Of 522 Maine waters known to contain white perch populations, 445 (85%) have principal fisheries. Perch populations in



FIGURE 2. THE DISTRIBUTION OF WHITE PERCH LAKES IN MAINE

all waters are wild and self sustaining. Due to the prolific nature of this species, fishery managers have found no need to supplement perch populations with hatchery reared fish, and there are no hatchery facilities for this species in Maine.

The amount of white perch habitat by Fishery Management Region is presented in Table 2. Standing crop cannot be estimated at this time because of inadequate data.

In addition to the white perch waters given, there are many waters suitable for perch which they do not presently inhabit. Most of these waters are managed for existing coldwater species, and considering the present abundance of white perch in Maine, introductions of white perch in these waters would not be desirable.

	TOTAL OC	CURRENCE	PRINCIPAL	FISHERIES
	NUMBER OF		NUMBER OF	
REGION	WATERS	ACRES	WATERS	ACRES
Α	101	72,477	81	41,812
В	160	95,009	148	91,569
С	103	108,706	84	79,974
D	23	16,225	16	6,710
E	26	126,355	24	51,038
F	94	150,834	80	119,929
G	7	1,630	4	284
STATE	514	571,236	437	391,316

Table 2. White Perch Habitat in Maine

With the present demand for brook trout fisheries and the re-activation of the reclamation program it is likely that some waters containing white perch will be reclaimed in the future. However, reclaimed waters are usually small and the reduced white perch acreage would be quite small compared to the present total.

There are about 67,359 acres of unsurveyed lakes and ponds in the state. Many of these waters probably contain white perch.

Maine citizens and non-resident sportsmen are fortunate that their opportunities to utilize fish and wildlife resources have been almost limitless. Very few waters are closed to fishing except on a seasonal basis, and most waters have public access (Table 3). Summer access by vehicle is possible to within 1/2 mile in 99.2% of Maine's perch lakes. It is possible to launch from a boat trailer at 90.8% of the lakes and 72.3% have a good public right of way.

Some white perch waters are closed to winter fishing, not with the intention of preventing fishing for white perch, but to limit fishing for other species present in these bodies of water.

REGION	SUMMER ACCESS BY AUTO ¹	BOAT LANDING PERSENT ²	LEGAL RIGHT-OF- WAY ³	PUBLIC LANDOWENR USER FEE ⁴	ACCESS RESTRICTED⁵
A	99.7	88.0	84.5	6.8	1.6
В	100.0	96.1	83.8	1.1	0.5
С	99.9	91.5	61.2	2.6	1.1
D	99.7	92.1	60.8	13.4	0.0
E	99.0	92.1	66.5	4.4	0.3
F	98.2	87.1	73.3	2.2	0.0
G	100.0	89.2	86.9	0.0	0.0
STATE	99.2	90.8	72.3	3.5	0.6

Table 3.	Physical Access	s to White Perch	Lakes Expresse	d as a Percentage o	of Total Acres
----------	-----------------	------------------	----------------	---------------------	----------------

Some are closed for reasons that have nothing to do with the protection of the fishery resource. During the summer season two white perch waters with a combined acreage of 213 acres are closed to fishing. In the winter season, 16 principal fishery perch waters totalling 10,115 acres are closed to fishing. However, this is only 3% of the total number and 1.6% of the total acreage of principal fishery perch waters in the state. An additional 10 waters, 9,159 acres, where perch are present are closed to winter - fishing. During the open water season, 521 of 523 perch waters provide principal fisheries for white perch (Table 4). On an area basis this amounts to 586,049 acres or 99.9% of all white perch water acreage. In winter, 430 (391,139 acres) of 523 white perch waters, or 66.7% of all white perch water area, provide principal fisheries. Table 4 summarizes regional and statewide opportunities for ice fishing.

		ALL L	AKES		PRINCIPAL FISHERIES								
	OPEN V	VINTER	OPEN S	UMMER	OPEN W	/INTER	OPEN SUMMER						
REGION	NUMBER	ACRES	NUMBER ACRES		NUMBER	ACRES	NUMBER	ACRES					
A	98	70,614	100	72,892	83	39,991	84	42.251					
В	154	91,027	157	93,982	144	87,798	146	90,520					
С	99	108,550	103	109,452	84	83,295	88	84,197					
D	23	11,284	27	19,993	17	6,662	18	9,032					
E	24	129,035	30	132,594	21	49,972	24	51,038					
F	95	154,8484	96	155,506	77	132,137	81	123,795					
G	7	1,630	7	1,630	4	284	4	284					
STATE	500	566,988	520	586,049	430	391,139	445	401,117					

Table 4. Number and Acres of White Perch Lakes Open to Fishing

Present day fishing regulations applied to white perch present minimal restriction on the hook and line fishery in Maine waters. The summer season from April 1 to September 30 includes most of the period of perch activity, and most waters are open for winter fishing from the time the ice forms in the fall until the end of March. Many waters are also open to summer fishing through November 30 and a few more waters are open through October 31 for perch and

¹ Access to within ½ mile by either 2-wheel or 4-wheel drive vehicle.

² Includes lakes where it is "reasonably possible to back a boat trailer to the water".

³ Rights-of-way may include those established by tradition as well as by legal, public deed.

⁴ Fee charged by landowners at landing points or as general land-use fees charged at road gates.

⁵ Primarily exercise of trespass rights by landowners.

pickerel. Tables 5 and 6 summarize regional and statewide opportunities for extended season white perch fishing opportunities.

Recent public concerns for white perch conservation have resulted in a 25 fish per day bag limit for white perch being imposed on seven lakes in eastern Maine. This regulation was implemented as a result of a citizen petition and not for biological reasons.

There is a large surplus of use opportunities for white perch fishing in all regions with the exception of Region G where white perch fisheries are limited to the extreme southwestern section f that region. On a statewide basis, anglers are utilizing only a fraction of the available resource, even with the present liberal regulations on this species and relative freedom of access for anglers.

The supply of white perch presently available for harvesting from Maine waters must be based upon the size of fish that anglers will keep. Perch have to be skinned, scaled or filleted prior to cooking and eating. Very small perch would be difficult to handle with small reward for the effort. Creel survey interviews with anglers have shown that Maine anglers do not want to keepperch smaller than 8 to 10 inches long. Recent creel survey data showed anglers keeping perch 9 to 10.5 inches long and 0.43 to 0.61 lb. in weight. The average 8 to 10 inch perch from most Maine waters weighs about 0.45 pound and is approximately four years old.

	ALL PER	CH LAKES	PRINCIPAL	PERCENTAGE			
REGION		ACRES		ACRES			
REGION	NUMBER	ACRES	NUMBER	ACRES	LARES		
A	82	66,294	71	36,571	86.6		
В	151	88,211	140	84,927	92.7		
С	58	50,815	54	50,145	93.1		
D	12	3,011	10	3,545	83.3		
E	4	1,293	3	866	75.0		
F	42	47,595	42	47,595	100.0		
G	1	55	0	0	0.00		
STATE	350	257,274	320	223,649	91.4		

Table 5. White Perch Lakes Open to Extended November 30th Season (S-24)

Table 6. White Perch Lakes Open to Extended October 31st Season (S-23)

	ALL PER	CH LAKES	PRINCIPAL	PERCENT PF		
REGION	NUMBER	ACRES	NUMBER	ACRES	LAKES ¹	
А	0	0	0	0		
В	3	4,053	3	4,053	100.0	
С	1	881	1	881	100.0	
D	1	2,370	1	2,370	100.0	
E	6	1,257	3	703	50.0	
F	1	18,300	1	18,300	100.0	
G	3	1,274	2	217	66.7	
STATE	15	28,135	11	26,524	73.3	

¹ Percent of total principal fishery lakes in region that are open for extended season.

It is estimated that 50% of the desirable-size white perch could be harvested without harm to the fisheries. The present harvest of of 964,889 fish represents only a fraction of the harvestable standing crop.

Fishing opportunities for white perch are likely to remain high during the next 5-year planning period, assuming no significant loss in habitat. Some increase in fishing opportunities, principally in remote areas, is expected to develop as physical access improves and public demands for legal rights-of-way to great ponds continue. The present liberal regulations on white perch are expected to be maintained. The increase in the number of lakes open under the provisions of the extended open water season has greatly increased the use opportunity of perch populations.

Further enhancements of use opportunities and utilization of existing populations, the management goal selected in the initial plan, can probably only be accomplished through programs to encourage angling for the species.

At present levels of management, use opportunity, in terms of available supplies of white perch, public access, and liberal regulations permitting high rates of harvest, will continue to be in excess of demand by a wide margin. A trend toward more favorable utilization of the resource should continue with a nominal 1% per year increase in angler day use statewide. Due to the present and projected low use of the species where it is now abundant, its potential as a competitor with more favored salmonid species, and its ability to expand its range once established in a watershed, it seems prudent to continue the present Department policy of trying to contain the species within its present range.

DEMAND

There has been a reduction in white perch harvest of about 50,427 (5%) fish since the 1991 update. There is some non-appropriative use of white perch as well as other species of fish. Some people will travel to observe the heavy spawning runs of white perch in streams. Others find enjoyment in the knowledge that white perch inhabit a lake or pond as evidenced by schooling or feeding of white perch at the surface at which time dorsal fins may protrude from the water. Any such non-appropriative use should be considered in management plans. In the future it may become possible to measure or at least estimate the amount of non-appropriative use tourists and residents make of fish and wildlife, including the white perch.

Fishing pressure on white perch populations is and probably will continue to be unevenly distributed due to the uneven distribution of the human population statewide and regional differences in the attitudes of anglers (also availability of perch and other sportfish populations within given areas, i.e., more perch fishing where fewer salmonid fisheries are present) that affect the utilization or non-utilization of this species.

WHITE PERCH GOALS AND OBJECTIVES 2001-2016

STATEWIDE GOAL

Maintain current supply and increase use statewide.

STATEWIDE OBJECTIVES

- 1) Increase utilization except where greater use threatens the viability of an existing white perch fishery.
- 2) Maintain current distribution except where white perch are considered undesirable.
- 3) Provide/maintain size quality where desirable and possible

<u>Capability of Habitat:</u> The existing habitat is capable of sustaining the current level of production and an increase in harvest.

Feasibility: In order to affect an increase in harvest it would be necessary to change angler attitudes and perceptions. Generally white perch populations consist of large numbers of undersized fish, which anglers perceive as fish that need to be released to grow to a larger size. The actual situation is that these smaller fish are the product of an overabundant, slow growing population and need to be harvested to increase the growth potential of the overall population. The potential of a PR program to change angler attitudes and affect a higher harvest of an under-utilized warmwater species has not been tested. Also, an increase in the angler catch and release ethic has probably contributed to the apparent decline in the harvest of white perch. Certain waters have demonstrated the capacity to produce larger than average white perch. Special regulations need to be developed to maintain the size quality in these waters. The feasibility of improving growth and size structure in other populations needs to be investigated.

Desirability: Greater utilization of white perch would be desirable for providing more recreational opportunity, creating possible diversion of fishing pressure from coldwater species, and thinning of overpopulated perch populations to enhance growth and contribute to greater production of other desirable sport species in those waters.

Possible Consequences: Encouraging anglers to harvest smaller fish from an under sized, slow growing population of any species of fish can cause conflict with the promotion of the catch and release ethic on populations in need of this procedure. PR programs might not be effective in changing angler preferences or attitudes toward white perch as a sport or food fish.

WHITE PERCH MANAGEMENT PROBLEMS AND STRATEGIES

FINANCIAL ISSUES:

PROBLEM 1. Existing staff and financial resources are inadequate to fully accomplish the goal and objectives of the charr management plan.

<u>Strategy a.</u> Seek financial and personnel assistance from non-governmental organizations, private individuals, and educational institutions to support the study of white perch in Maine.

HABITAT PROTECTION AND ENHANCEMENT:

There do not appear to be any habitat protection or enhancement issues with white perch populations

POPULATION AND MANAGEMENT INFORMATION:

- PROBLEM 1. Not enough is known about white perch population dynamics in Maine waters.
 <u>Strategy a.</u> Conduct studies on representative waters to collect baseline data on white perch abundance, growth, maturity, size structure, and response to fisheries.
 <u>Strategy b.</u> Conduct studies on representative stream populations to determine the dynamics of these populations.
- PROBLEM 2. Current angler use and harvest estimates are not reliable.
 Strategy a. Expand angler questionnaire to include unlicensed juveniles. Include survey questions on unlicensed juveniles associated with licensed anglers sampled.
 Strategy b. Conduct creel surveys on white perch principal fishery waters.
- **PROBLEM 3.** Harvest of white perch appears to have declined during the last planning period. **Strategy a.** Determine if there actually was a decrease in harvest and if so determine the reason(s) for the decrease.

Strategy b. Encourage anglers to harvest more white perch.

PROBLEM 4. The proliferation of small size and/or stunted undesirable perch populations.
Strategy a. Investigate possibilities of reducing population sizes to increase average fish sizes.

<u>PROBLEM 5.</u> Unexplained disappearances of white perch populations. **<u>Strategy a.</u>** Document occurrences of the demise of populations and investigate causes.

FISHERY RESOURCE PROTECTION AND ENHANCEMENT:

There do not appear to be any resource protection or enhancement problems with white perch populations.

APPENDIX A

WARMWATER WORKING GROUP INPUT

WHITE PERCH MEETING SUMMARY

Thursday, 23May2002

Issues:

- ✓ How can use be increased, statewide? Education/information: develop "Pamphlet" describing how, when and where to catch white perch. Should contain a listing of white perch waters and should be available on the DIFW website, tackle shops, info booth, etc.
- ✓ Do white perch have high Hg content and, if so, might this affect consumption?
- ✓ Size, i.e. large fish, may have declined in numbers.
- ✓ Where did the" low" bag limits that are found on a few waters, mostly Downeast, originate?
- These limits were proposed by the public because of the concern of some anglers and guides that the WHP populations were being over fished in certain waters for food, bear bait and sometimes just wasted.
- ✓ WHP attract anglers at "no" management cost.
- ✓ We should practice proactive mgt., that is, act now before the species is in decline.
- ✓ Other WW-Group members have not observed a similar decline in WHP fisheries but some were concerned that the Downeast "scenario" might be repeated in their home waters.
- ✓ How variable are WHP growth rates ?
- ✓ How important a competitor with other species is the WHP?
- ✓ Commercial fishing should be considered as an option to reduce WHP numbers.
- ✓ Where's the money coming from for all these new projects?

Goals and Objectives:

- 1) Increase utilization except where greater use threatens the viability of an established WHP fishery.
- 2) Maintain current distribution and abundance except where WHP are considered undesirable.
- 3) Provide/maintain size quality where desirable and possible.

PRIORITIZED WHITE PERCH MANAGEMENT OBJECTIVES, WARMWATER GROUP

DESCRIPTION OF STATEWIDE OBJECTIVES I Provide/maintain size quality where desirable and possible. I Maintain current distribution except where white perch are considered undesirable. I Increase use except where greater use threatens the viability of an existing white perch I					
Provide/maintain size quality where desirable and possible.	1				
Maintain current distribution except where white perch are considered undesirable.	2				
Increase use except where greater use threatens the viability of an existing white perch fishery.	3				

PRIORITIZED WHITE PERCH MANAGEMENT PROBLEMS

DESCRIPTION OF MANAGEMENT PROBLEMS	FISHERIES	COLDWATE R GROUP	FINAL RANKING
Existing staff and financial resources are inadequate to fully accomplish the goal and objectives of the white perch management plan.	1	3	2
White perch population dynamics in Maine waters are not sufficiently understood to permit the development and implementation of the most effective management plan for the species.	2	2	2
Current angler use and harvest estimates are not reliable and compromise our ability to develop and implement the most effective management plan for the species.	3	4	4
Harvest of white perch appears to have declined during the last planning period	5	5	5
The proliferation of small size and/or stunted undesirable perch populations.	4	5	5
Unexplained disappearances of white perch populations.	5	1	3

CONCEPT PLAN FOR IMPLEMENTATION OF WHITE PERCH MANAGEMENT OBJECTIVES (2001-2016)

PRIORITIZED WHITE PERCH MANAGEMENT OBJECTIVES		Region A Contribution			Region B Contribution			Region C Contribution		Region D Contribution		Region E Contribution		Region F Contribution		F tion	Region G Contribution			Statewide n Totals ¹					
DESCRIPTION OF STATEWIDE MANAGEMENT OBJECTIVES	Rank	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct	Exst	Prop	Dfct
Provide/maintain size quality where desirable and possible.	1	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
Maintain current distribution except where white perch are considered undesirable.	2	81	81	0	148	148	0	84	84	0	16	16	0	24	24	0	80	80	0	4	4	0	437	437	0
Increase use except where greater use threatens the viability of an existing white perch fishery.	3	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?

Exst = Existing; Prop = Proposed; Dfct = Deficit (Proposed – Existing).

¹ Numbers only include those waters having principal fisheries for pickerel