

**REPORT TO INLAND FISHERIES AND WILDLIFE LEGISLATIVE
OVERSITE COMMITTEE
ON
LD 1329 – A RESOLVE TO STUDY THE CONDITION OF THE
LANDLOCKED SALMON IN MAINE AND MAKE
RECOMMENDATIONS TO IMPROVE THEIR HEALTH**

January 20, 2012

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**REPORT TO INLAND FISHERIES AND WILDLIFE
LEGISLATIVE OVERSITE COMMITTEE
ON
THE REVIEW AND UPDATE OF MAINE'S 2001-2016 STRATEGIC MANAGEMENT
PLAN FOR LANDLOCKED SALMON**

Executive Summary

This report is provided in accordance with your letter dated June 28, 2011, whereby the Department was instructed to reconvene the Coldwater Working Group, with new members, to update our agency's 2001-2016 Goals and Objectives for Landlocked Salmon (Appendix 1). This request followed the committee's unanimous ONTP vote on LD 1329 (Resolve, To Study the Condition of the Landlocked Salmon in Maine and Make Recommendations To Improve Their Health). We are pleased to report that this effort was recently completed. A summary of the Department's work with the Coldwater Working Group (CWWG) is provided below.

Maine's Coldwater Working Group (CWWG) was re-established in late summer 2011. Members serving during the 2001 planning effort were polled regarding their interest in serving in 2011. There was strong interest expressed by most 2001 members in continuing to serve on the CWWG, though one member was deceased, one member moved out of state, and one member declined to participate in 2011. New members were added to replace these individuals, and included Mr. Dennis Smith as requested by your Committee. Members of the reconvened CWWG in 2011 included:

CWWG Member	Residence	Affiliation/Interests
Lance Wheaton	Forest City Twp.	IFW Advisory Council
Vaughn Anthony	Boothbay	SAM FIC Committee
Dennis Smith (new member)	Otter Creek	SAM FIC Committee
Richard Walthers	Otisfield	Trout Unlimited-Mollyocket Chapter
Don Dudley	Patten	MPGA and avid salmon angler
Roddie McLellan	Symrna Mills	Avid salmon angler, northern Maine
Donald Raymond	Fort Kent	Avid salmon angler, northern Maine
John Cote	Greenville Junction	Avid salmon angler, Moosehead region
Eric Ward	Greenville Junction	Avid salmon angler, Moosehead region
David Irving	Baileyville	Avid salmon angler, Downeast region
Dennis Bolduc (new member)	Oakland	Avid salmon angler, central Maine
Frank Braley	Anson	Avid salmon angler, western Maine
Peter Dunn (new member)	Raymond	Sebago Lake Focus Group

During October and November 2011, each CWWG member was provided detailed assessments (Appendix 2) of progress the Department made in meeting the Goals and Objectives set forth in the 2001-2016 Strategic Management Plan (Appendix 1). Written comments on these assessments were received from 8 of 13 CWWG members (Appendix

3), and a meeting to elicit oral comments on the assessments was held on December 5, 2011 (Appendix 4). The December 5th meeting also provided the CWWG an opportunity to finalize their suggestions for changes to the Objectives moving forward. This meeting was attended by 10 of 13 CWWG members, 9 Fisheries Division biological staff members, and 2 public members.

Written and oral reviews by the CWWG indicated there was broad agreement that the Department made significant, meaningful progress in meeting the management Objectives set forth in 2001 (see Appendices 3 and 4), and they recommended retention of most Objectives as presently constructed. The CWWG suggested one minor revision to the Objectives:

- Remove “youth fishing opportunities” from Objective 2b. The CWWG and Department staff agreed that brook trout are a more appropriate species for providing this type of fishing opportunity. However, the CWWG strongly encouraged the Department to continue existing programs designed to promote the growth of youth fishing (e.g. Hooked on Fishing - Not on Drugs, youth fishing derbies, etc.)

While the majority of CWWG members clearly affirmed that the Department made excellent progress in meeting the 2001 Plan Objectives, there were several areas of focused discussion and concern, which are summarized as follows:

- There was some concern regarding the Department’s staffing/budget capability to adequately manage and monitor the increase in principal salmon fisheries (about 30 waters were added from 2001 to 2010). Increasing salmon fishing opportunity should not come at the expense of our ability to maintain quality fisheries in a smaller number of waters.
- Resources dedicated to smelt research/management were inadequate and the Department was strongly encouraged to seek “novel” means of bolstering and maintaining smelt populations in support of those Plan Objectives that focus on growing large salmon in selected lakes.
- Two CWWG members strongly contended that the Department made little or no progress in generating more opportunity for “trophy-size” salmon, and that additional efforts must be made to grow larger salmon in a larger number of lakes.
- There was general agreement by the CWWG to encourage the Department to intensify work to increase salmon size on a small subset of the state’s “best” salmon lakes, most of which are presently listed in the Plan’s “Size Quality Management” category.

In consideration of the assessment conducted by the Department’s biological staff and the valuable input provided by the CWWG, we propose the following work items in support of the revised Statewide Objectives for Landlocked Salmon:

- Seek input from the CWWG in prioritizing the revise Objectives for landlocked salmon (in progress);

- Update the Problems and Strategies section of the Strategic Plan for Landlocked Salmon and submit to the CWWG (in progress);
- Publish the revised Objectives on the Department's website, and submit to the Department's Federal Aid Coordinator to assure continued Sportfish Restoration funding for landlocked salmon projects (January 2012);
- Complete a comprehensive update of all statewide databases for landlocked salmon (January-March 2012);
- Utilize the Fisheries Division's Salmon Management Committee to review the revised Objectives and recommend regional strategies to meet the Objectives, particularly as they pertain to improving salmon size quality, within the context of the agency's staffing and budget capability (April-May 2012).

Appendix 1. LANDLOCKED SALMON GOALS AND OBJECTIVES

2001-2016 (Revised December 2011)

STATEWIDE GOALS: To 1) maintain the current distribution of principal fisheries for landlocked salmon; 2) provide for a diversity of fishing opportunities; 3) maintain and, where feasible, expand the contribution of wild salmon to the sport fishery; 4) where feasible, increase statewide fishing quality.

STATEWIDE OBJECTIVES:

- 1) Maintain principal fisheries for landlocked salmon in about ~~220~~ 260 waters.
 - a) Maintain principal fisheries in about ~~176~~ 200 lakes and ponds (~~485,000~~ 505,000 acres), to include about ~~130~~ 140 waters based wholly or partially on hatchery stocks and about ~~46~~ 62 waters based entirely on natural reproduction.
 - b) Maintain riverine fisheries of moderate to high fishing quality in ~~44~~ 50 stream reaches (about ~~290~~ 320 miles).
 - c) Maintain habitat quality in waters that support principal fisheries for salmon.
 - d) Develop strategies to address threats to salmon populations from illegally introduced exotic fish species.
- 2) Provide for a variety of fishing opportunities for salmon.
 - a) Maintain present level and statewide distribution of open water and ice fishing opportunities.
 - b) Increase remote ~~and~~; urban, ~~and youth~~ fishing opportunities.
 - c) Increase riverine fishing opportunities in central and southern Maine.
 - d) Increase fall fishing opportunities.
 - e) Increase fishing opportunities for large salmon.
- 3) Where feasible, maintain or enhance the contribution of natural reproduction to salmon fisheries. Provide enhanced emphasis, including appropriate regulatory protection, to selected wild populations that will ensure adequate spawning escapement and preserve older-age salmon to maintain genetic diversity. Protect critical spawning and nursery habitat that support wild populations.
- 4) Provide for a variety of fishing quality objectives for salmon, as follows (~~lakes and acreages to be updated winter 2012~~):
 1. **Harvest Opportunity Waters:** A total of 31 lakes comprising 49,330 acres, or as necessary where forage availability limits salmon growth and condition. Waters selected

for this management class will provide the opportunity to catch salmon that commonly range from 14.0 to 16.0 inches long, with an expectation of catching an occasional fish over 2 pounds.

2. **General Management Waters:** A total of 95 lakes comprising 245,093 acres. Waters selected for this management class will provide the opportunity to catch salmon that commonly range from 16.0 to 18.0 inches long, with an expectation of catching an occasional fish over 3 pounds.
3. **Size Quality Management Waters:** A total of 27 lakes comprising 76,330 acres. Waters selected for this management class will provide the opportunity to catch salmon that commonly range from 18.0 to 21.0 inches, with an expectation of catching an occasional fish over 5 pounds.
4. **On Special Management Waters:** A total of 23 lakes comprising 114,038 acres. Waters selected for this management class will exhibit unique and/or valuable population and fishery characteristics. These may include, but are not limited to, extraordinarily high population densities, large numbers of older-age fish, or unique genetic attributes. Objectives for these waters will be developed on a water-by-water basis.

Appendix 2. Assessment of work completed (2002-2011) in support of Maine's 2001-2016 Strategic Management Plan for Landlocked Salmon.

LANDLOCKED SALMON OBJECTIVES

2001-2016

STATEWIDE OBJECTIVE NO. 1:

- 5) Maintain principal fisheries for landlocked salmon in about 220 waters.
- a) Maintain principal fisheries in about 176 lakes and ponds (485,000 acres), to include about 130 waters based wholly or partially on hatchery stocks and about 46 waters based entirely on natural reproduction.
 - b) Maintain riverine fisheries of moderate to high fishing quality in 44 stream reaches (about 290 miles).
 - c) Maintain habitat quality in waters that support principal fisheries for salmon.
 - d) Develop strategies to address threats to salmon populations from illegally introduced exotic fish species.

Assessment of Progress on Objective No. 1 (October 2011):

Item a) Please refer to Table 1 titled “Summary of changes in salmon principal fisheries listed in 2001 and 2010 lake inventories” and Table 2 titled “Number of Maine lakes with principal fisheries for salmon sustained by natural reproduction or by stocking, 2011 and 2010”.

- The number of principal salmon fisheries in lakes and ponds increased from 176 in 2001 to 200 in 2010. There were 31 new waters being managed for salmon by 2010, but seven lakes were dropped.
- Surface acreage of lakes and ponds managed for salmon increased from 484,791 in 2001 to 504,634 in 2010.
- Salmon principal fisheries supported wholly or partially by hatchery stocks increased from 127 to 138; those supported entirely by natural reproduction increased from 49 to 62. Between 2001 and 2010, there was a slight decrease in the ratio of lakes managed primarily with stocked salmon (69%) and a slight increase for those managed with wild salmon (31%).

Item b) Please refer to Table 3 titled “Salmon rivers (or river reaches) with moderate-to-high fishing quality, 2001 and 2010”.

- From 2001 to 2010 the number and miles of river reaches supporting salmon sport fisheries increased from 44 to 50 and from 288.9 and 321.4, respectively.
- New riverine salmon initiatives included:
 - Androscoggin River (Gilead to Bethel reach-Regions D/A). Hatchery fall yearlings to support the fall fishery.
 - St. Croix River (Grand Falls Dam Tailrace-Region C). Retired hatchery brood stock to support the October fishery.
 - Kennebec River (Wyman Dam Tailrace-Region D). Resurveyed and reclassified. Wild salmon fishery with small hatchery component from lakes in the immediate drainage.
 - Kennebec River (Abenaki Dam Tailrace-Region D). Hatchery fall yearlings to support the fall fishery.
 - Dead River (Grand Falls Flowage-Region D). Hatchery spring yearlings and fall yearlings, and dropdown hatchery salmon from Flagstaff Lake. Project is designed to utilize an unusual resident smelt population present in this large, deep flowage (smelt drift from Flagstaff also occurs), in support an increasingly popular October fishery.
 - Kennebec River (West Outlet-Region E). Hatchery spring yearlings to support year-round fishery.

Item c) Maintain habitat quality.

- In 2002, several critical salmon spawning and nursery habitats received upgraded Water Classification from the Maine Department of Environmental Protection, at the request of Regional Fisheries Staff. All river reaches listed below were upgraded from Class A to Class AA¹.
 - Magalloway River and tributaries above Aziscohos Lake, Lynchtown Twp, Parmachenee Twp, Bowmantown Twp (35 miles).
 - Little Magalloway River and tributaries, Parmachenee Twp, Bowmantown Twp (22 miles).
 - Long Pond Stream, Sandy River Plt (2 miles).
 - Dodge Pond Stream, Rangeley (1 mile).
 - Crooked River (tributary to Sebago Lake); selected reaches.
 - Kennebec River from a point located 1,000 feet below the Harris Dam to its confluence with the Dead River.
 - Horseshoe Stream, Chain of Ponds Twp (3 miles).

¹ Class AA shall be the highest classification and shall be applied to waters which are outstanding natural resources and which should be preserved because of their ecological, social, scenic or recreational importance.

A. Class AA waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection, fishing, recreation in and on the water and navigation and as habitat for fish and other aquatic life. The habitat shall be characterized as free flowing and natural.

B. The aquatic life, dissolved oxygen and bacteria content of Class AA waters shall be as naturally occurs.

C. There shall be no direct discharge of pollutants to Class AA waters.

- Sheepscot River tributaries, including East Branch Sheepscot River (3.9 miles).
- A proposal to rebuild Scribners Mill Dam on the Crooked River (Sebago Lake) was denied, with significant input from Region A staff.
- FERC Settlement Agreements protective of salmon resource/recreation values were signed for several large hydro/storage projects (e.g. Upper and Middle Dams, Harris Dam, Wyman Dam, Flagstaff Dam, Ripogenus Dam).
- Regional staff continued to monitor lake and stream water quality during routine fish collection surveys.
- Several spawning/nursery stream reaches were newly identified or confirmed, including Mass Bog Stream (Arnold Pond), Mill Stream (Embden Lake), Hall Pond Outlet (Duncan Pond), and Munsungan Stream (Munsungan Lake), and tributaries to the Crooked River (Sebago Lake).
- Additional data from salmon nursery streams were collected during statewide Eastern Brook Trout Joint Venture surveys (2007-2009), and from large rivers by surveys conducted by the Midwest Biodiversity Institute (2002-2007).
- Regional staff continued to provide technical support to state and federal agencies responsible for managing and protecting lake and stream habitat quality.
- There was a major effort (ongoing) to develop GIS datasets of wild salmon fisheries/habitats for Town Planners (Beginning with Habitat program) and state/federal development review agencies.

Item d) Develop strategies to address threats from illegally introduced fishes.

- A statewide “Action Plan” now exists to guide the state in managing invasive aquatic species, including fish. The Action Plan was mandated by the legislature, developed by the Interagency Task Force on Invasive Aquatic Plants and Nuisance Species, and approved by the Governor's Land and Water Resources Council in October 2002, and by the Federal Aquatic Nuisance Species Task Force in November 2002. Maine is now eligible to apply for federal funds to prevent the introduction and spread of invasive aquatic species.
- In 2006, federal funds were used by MIFW, MDEP, and MDOC to develop a Rapid Response Plan, which implements a key component of the Action Plan. The Rapid Response Plan is intended to ensure that appropriate protocols, trained personnel, equipment, permits, other resources are ready to go to contain or eradicate newly detected illegal aquatic plant or animal introductions as they are reported to or discovered by agency personnel.
- Educational/informational materials were developed by MIFW and others to elevate awareness of this issue and elicit public support in containing the spread of invasive fishes. These materials included a brochure (cooperative project with SAM), regional and statewide posters installed at most public access facilities, and small “green cards” with invasive fish information and distributed widely by Regional Biologists.
- Regional Biologists have actively engaged the public on this issue through weekly fishing reports, website material, media interviews, speaking engagements, etc.

- A private, online fishery data collection project (TripTracks) was developed with input from MIFW, and included a provision for alerting Regional Biologists of new fish introduction as they're encountered by anglers. This was intended to provide early and therefore improved opportunities to eradicate new introductions.
 - Despite these efforts, illegal fish introductions have continued at an unprecedented rate. A few recent examples:
 - In 2008, largemouth bass were confirmed in a lake above Sebec Lake and threaten wild salmon in that water and in Wilson Stream, the lake's primary salmon production stream.
 - Smallmouth bass were recently confirmed in the upper Moose River system, where they will most certainly migrate to the major lakes in that part of the Moosehead drainage, most of which support salmon fisheries.
 - Smallmouth bass and muskellunge have migrated to within "striking distance" of the Fish River Chain of Lakes.
 - Smallmouth bass were recently (2011) confirmed in Spencer Lake, Hobbstown, which supports salmon.
 - Smallmouth bass have continued to colonize the upper Kennebec River and Dead River systems. They are now present in all accessible/suitable habitat in this expansive river system.
-

Table 1. Summary of changes in salmon principal fisheries listed in 2001 and 2010 lake inventories.

ADDITIONS

Region A

Water	County	Acres	Comments
Highland Lake	Cumberland	634	New Fall Yearling program (focus on ice season).
Keoka Lake	Oxford	467	New Fall Yearling program (focus on ice season).
Songo Pond	Oxford	224	New LLS retired brood program (focus on ice season).
Thomas Pond	Cumberland	442	New LLS retired brood program (focus on ice season).
Tripp Pond	Androscoggin	768	New LLS retired brood program (focus on ice season).
	Total acres:	2,535	

Region B

Water	County	Acres	Comments
Maranacook Lake	Kennebec	1,673	Reinitiated LLS stocking program (public request).
	Total acres:	1,673	

Region C

Water	County	Acres	Comments
Craig Pond	Hancock	218	Regained public access.
Hopkins Pond	Hancock	442	Reinitiated LLS stocking program (Exyr).
Jacob Buck Pond	Hancock	190	Reinitiated LLS stocking program (Exyr).
Lead Mountain Pond (Upper)	Hancock	1,021	Reinitiated LLS stocking program.
Long L & The Basin	Washington	595	Reclassified; dropdowns from W.Grand/Big Lake system.
Pleasant River Lake	Washington	949	Reinitiated LLS stocking program (Exyr/retired brood).
Springy Pond (Lower)	Hancock	114	SPK program suspended; reinitiated LLS stocking pgm.
Spruce Mountain Lake	Washington	448	Reinitiated LLS stocking program (Exyr).
Toddy Pond	Hancock	1,987	Reinitiated LLS stocking program.
	Total acres:	5,964	

Region D

Water	County	Acres	Comments
Little King Lake	Somerset	90	Resurveyed and reclassified (wild LLS).
Sturtevant Pond	Oxford	518	SPK program suspended; reinitiated LLS stocking program.
Webb Lake	Franklin	2,173	New Fall Yearling program (focus on ice season).
	Total acres:	2,781	

Region E

Water	County	Acres	Comments
Big Benson Pond	Piscataquis	320	Resurveyed and reclassified (wild LLS).
Long Pond	Somerset	173	New program supporting W. Outlet fishery.
Piper Pond	Piscataquis	420	Reinitiated LLS stocking program (Exyr).
Whetstone Pond	Piscataquis	256	Reinitiated LLS stocking program (public request).
	Total acres:	1,169	

Region F

<u>Water</u>	<u>County</u>	<u>Acres</u>	<u>Comments</u>
Cedar Lake	Penobscot	685	Reinitiated LLS stocking program (public request).
Endless Lake	Penobscot	1,499	Reinitiated LLS stocking program (public request).
Farrow Lake	Washington	224	Resurveyed and reclassified (wild LLS).
Hay Lake	Penobscot	588	Reinitiated LLS stocking program (Exyr). Experimental.
Matagamon Lake	Penobscot	4,165	Resurveyed and reclassified (wild LLS).
Passamagamet Lake	Piscataquis	461	Reclassified; wild LLS migrants WB Penobscot R. system.
Shin Pond (Lower)	Penobscot	638	Regained public access.
Togue Pond (Lower)	Piscataquis	384	Resurveyed and reclassified (wild LLS).
	<u>Total acres:</u>	<u>8,644</u>	

Region G

<u>Water</u>	<u>County</u>	<u>Acres</u>	<u>Comments</u>
Round Pond	Piscataquis	30	Reclassified; wild LLS migrants upper Aroostook R. system.
	<u>Total acres:</u>	<u>30</u>	

DELETIONS

Region B

<u>Water</u>	<u>County</u>	<u>Acres</u>	<u>Comments</u>
Megunticook Lake	Knox	1,305	Poor LLS performance; switched to RBT.
	<u>Total acres:</u>	<u>1,305</u>	

Region D

<u>Water</u>	<u>County</u>	<u>Acres</u>	<u>Comments</u>
Austin Pond	Somerset	684	Poor LLS performance; managed for BKT only.
Hancock Pond	Somerset	320	Lost public access.
Little Austin Pond	Somerset	110	Poor LLS performance; managed for BKT only.
Rowe Pond	Somerset	205	Poor LLS performance; managed for BKT only.
	<u>Total acres:</u>	<u>1,319</u>	

Region G

<u>Water</u>	<u>County</u>	<u>Acres</u>	<u>Comments</u>
Chandler Pond	Piscataquis	115	Resurveyed and reclassified to relict status.
Island (Chase) Pond	Piscataquis	214	Poor LLS performance; managed for BKT only.
	<u>Total acres:</u>	<u>329</u>	

Regions A, C, E, F: No deletions

Statewide summary:

Number of lakes added: 31
Number of acres added: 22,796

Number of waters dropped: 7
Number of acres dropped: 2,953

2001 Principal Fisheries: 176 lakes and 484,791 acres
2010 Principal Fisheries: 200 lakes and 504,634 acres

2001 Principal Fisheries sustained by stocking: 127(72%)
2010 Principal Fisheries sustained by stocking: 138(69%)

2001 Principal Fisheries sustained by natural reproduction: 49 (28%)
2010 Principal Fisheries sustained by natural reproduction: 62 (31%)

Table 2. Number of Maine lakes with principal fisheries for salmon sustained by natural reproduction or by stocking, 2001 and 2010.

Region	Sustained by natural reproduction		Sustained by stocking	
	Number (%) of lakes in:		Number (%) of lakes in:	
	2001	2010	2001	2010
A ²	0	0	20 (100)	25 (100)
B	0	0	8 (100)	8 (100)
C	2 (7)	2(5)	26 (93)	35 (95)
D	13 (37)	15 (44)	22 (63)	19 (56)
E	14 (48)	15 (46)	15 (52)	18 (54)
F	4 (17)	8 (25)	20 (83)	24 (75)
G	16 (50)	22 (71)	16 (50)	9 (29)
State	49 (28%)	62 (31%)	127 (72%)	138 (69%)

² Sebago Lake's population is comprised of 40-70% wild salmon, depending on the year.

Table 3. Salmon rivers (or river reaches) with moderate-to-high fishing quality, 2001 and 2010.

Region	Number of rivers		Number of miles	
	2001	2010	2001	2010
A	2	3	21.3	33.8
B	1	1	3.9	3.9
C	1	2	3.2	3.5
D	7	10	68.2	80.3
E	15	16	86.2	93.8
F	10	10	57.8	57.8
G	8	8	48.3	48.3
STATE	44	50	288.9	321.4

Appendix 2 (cont'). Assessment of work completed (2002-2011) in support of Maine's 2001-2016 Strategic Management Plan for Landlocked Salmon.

LANDLOCKED SALMON OBJECTIVES

2001-2016

STATEWIDE OBJECTIVE NO.2:

- 6) Provide for a variety of fishing opportunities for salmon.
- a) Maintain present level and statewide distribution of open water and ice fishing opportunities.
 - b) Increase remote, urban, and youth fishing opportunities.
 - c) Increase riverine fishing opportunities in central and southern Maine.
 - d) Increase fall fishing opportunities.
 - e) Increase fishing opportunities for large salmon.
-

Assessment of Progress on Objective No. 2 (October 2011):

Item a) Please refer to Table 4 titled “Maine salmon lakes (principal fisheries only) that are Open or Closed to ice fishing, 2001 and 2010”.

- There was a slight increase in the ratio of salmon lakes open to ice fishing (67% in 2001; 72% in 2010).
- This increase reflects the addition of 31 principal salmon fisheries, most of which were already open to ice fishing prior to their reclassification as principal fisheries. Except for Sturtevant Pond in Oxford County, there were no Department actions to either open or close ice fisheries on specific lakes during the planning period.
- Regional differences in ice fishing opportunity were approximately maintained.

Item b) Remote, urban, youth fishing opportunities.

- “Remote” salmon fishing opportunities were increased by virtue of adding as principal fisheries several lakes and streams in Regions D, E, F, and G. This was achieved by reinitiating historic salmon stocking programs that had been suspended for a period of time, by establishing new stocking programs, or by reclassifying several lakes to principal fishery status following resurvey (most waters in this latter category were wild populations).
- Several new “urban” fishing opportunities were generated using fall yearling or retired brood salmon, primarily in Region A. Riverine fisheries generated near population centers included the Kennebec River (Abenaki Dam

tailrace), the upper Androscoggin River near Gilead and Bethel, and the St. Croix River below Grand Falls Dam (pending in 2012). Several additional lake and riverine urban opportunities were established, but brook trout or brown trout were preferentially selected by Regional Biologists for those programs.

- No new “youth” fishing opportunities were developed; those that were developed focused on brook trout.

Item c) Fall fishing...(please note: this assessment may be incomplete, as I did not have access to statewide regulations history, regulations databases, etc.).

- In 2005, October fishing was established on a reach of the St. Croix River below Grand Falls Dam. Retired salmon brood stock (West Grand Lake Hatchery) will be stocked annually to support this new fishery (beginning in 2012).
- In 2008, the general law fall fishing season for lakes and ponds in the southern and eastern counties was extended to December 31 (previously, most special fall seasons ended on November 30).
- In 2008, the fall season was extended to November 30 on most waters that previously closed on October 31.
- Also in 2008, a portion of the East Outlet and the entire West Outlet of the Kennebec River below Moosehead Lake was opened to year-round fishing.
- In 2010, year-round ice and open water fishing was established on most lakes and ponds in the southern and eastern counties.
- New fall fisheries for salmon were established on the Dead River below Flagstaff Dam, the Kennebec River below Abenaki Dam, and the West Outlet of the Kennebec River. These programs are supported by spring and/or fall yearling hatchery salmon.
- All wild salmon fisheries remained closed to fall fishing to protect the integrity of wild brood fish.

Item d) Increase fishing opportunities for “large” salmon.

- Significant statute changes were made in 2006 to provide additional conservation measures for rainbow smelts (for details, please see Appendix 2a titled “Changes to Recreational and Commercial Smelt Management”. This initiative was, in part, directed at reallocating smelt production from recreational or commercial fisheries to salmon forage.
- Regional Biologists continued to reduce salmon stocking rates to promote good growth and body condition, where feasible and appropriate. The total number of spring yearlings stocked in lakes declined from 122,713 from 1996-1999 to 87,121 from 2007-2010.
- Several new “retired brood fish” programs were initiated utilizing adult salmon that generally range from 20 to 24 inches long and weigh 3 to 5 pounds.

- SAM and MIFW initiated the “Classic Salmon Program”, whereby management changes would be imposed to maximum salmon growth and size potential on several carefully selected lakes. These waters are listed in Appendix 2 along with brief updates - provided recently by Regional Biologists to SAM’s Program Coordinator– on the status of several of those projects.
 - Additional information will be forthcoming on the subject of “large salmon” in the assessment of Objective No. 4 (status of “Size Quality Management” Waters).
 - Please refer to Appendix 2c titled “Large Salmon Fact Sheet”, which provides some additional information pertinent to this particular Plan Objective, and was provided to MIFW’s Legislative Committee.
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Table 4. Maine salmon lakes (principal fisheries only) that are Open or Closed to ice fishing, 2001 and 2010.

	Number and % Lakes <u>Open</u> to Ice Fishing in:				Number and % Lakes <u>Closed</u> to Ice Fishing in:			
	2001		2010		2001		2010	
Region	No. lakes	Percent of lakes	No. lakes	Percent of lakes	No. lakes	Percent of lakes	No. lakes	Percent of lakes
A	17	85.0	22	88.0	3	15.0	3	12.0
B	7	87.5	7	87.5	1	12.5	1	12.5
C	27	96.4	36	97.3	1	3.6	1	2.7
D	9	25.7	10	29.4	26	74.3	24	70.6
E	18	62.1	20	60.6	11	37.9	13	39.4
F	24	100.0	32	100.0	0	0.0	0	0.0
G	16	50.0	16	51.6	16	50.0	15	48.4
STATE	118	67.1	143	71.5	58	32.9	57	28.5

Appendix 2a. Changes to Recreational and Commercial Smelt Management (Adopted in 2006)

Background:

Despite their relatively small size and low profile, rainbow smelt are of great importance to anglers and fisheries statewide. They are the only inland fish species to provide such a variety of uses and benefits including: recreational sport fishing opportunities, a commercial bait fishery, a favored bait for anglers targeting other sportfish, a popular food fish and a primary forage fish for both coldwater and warmwater fishes. These same attributes contribute to the complexity of smelt management, because demands from various user groups are often in direct conflict with one another, particularly when resources are limited. For example, protecting smelt populations for one type of use (i.e. forage) typically reduces or eliminates other use opportunities. Unpredictable and extreme fluctuations in smelt abundance, combined with a lack of knowledge and control over the factors influencing abundance further complicates management of the species. All of these factors can be the source of controversy among the various user groups and often creates dissatisfaction towards the resource management agency.

In 2001, the Maine Department of Inland Fisheries Wildlife (MDIFW) and various public-working groups developed a 15-year species plan for smelt management. The goals, objectives, and priorities of the species plan are:

Goal: Maintain existing smelt habitat quantity and quality; and increase smelt abundance and availability where feasible to moderate current demands as a forage fish, as a sportfish, and as a commercial baitfish.

Abundance Objective: On a statewide basis, maintain smelt populations at or above current abundance levels in 558 Maine lakes, totaling 749,114 acres. Seek opportunities to increase the distribution of smelts into new waters by 2016, where it will not negatively impact other coldwater species, to mediate demand for sportfishing and commercial interests.

Harvest Objective: The following objectives are prioritized as follows.

- (1) Maximize the supply of smelt available as forage for salmonids, particularly landlocked salmon and lake trout, within the context of the management objectives for those species.
- (2) Maintain and/or increase recreational hook-and-line and dip-netting opportunities.
- (3) Maintain and/or improve the supply of smelts available for the commercial baitfish industry.

The development of the species plan along with the above goals, objectives, and priorities was an important step towards the management and conservation of the State's smelt populations. In addition, the Department's fisheries staff recently conducted a comprehensive review of all known smelt waters to aid with future species planning updates and to insure consistency with the management priorities outlined above under the Harvest Objective. This review also allowed the Department to identify, and consider potential new opportunities for both recreational and commercial user groups.

The smelt species plan also suggests that in some cases there is not enough protection or conservation built into our current smelt management scheme, particularly in regards to commercial smelt management. In addition, commercial smelt fisheries in the State have been a continual source of controversy over the years. As a result, MDIFW has held a variety of staff meetings to explore opportunities for enhancing conservation measures for the State's smelt populations. These discussions covered a wide range of possibilities for recreational and commercial users including: smaller bag limits, no walking in streams while dipping, rotation of waters open to commercial, limited entry systems for commercials, shorter season lengths, limited number of nets/water, commercial waters with no bag limits, and others. Many of the proposals discussed were deemed to be unsuitable for a variety of reasons; however, we were able to come up with an assortment of proposed changes that build additional conservation measures into the way we currently managing our smelt populations. The proposed changes are outlined below.

I. Statute Changes:

(1) User Group: Recreational and Commercial

Proposal: Establish a 24 inch maximum hoop size for dip-nets.

Rationale: Provides additional opportunity for escapement and better distributes the catch among anglers, particularly on smaller streams.

(2) User Group: Commercial

Proposal: Modify existing grader law (T12. SS.717), require smelt dealers to use commercially manufactured graders.

Rationale: Many dealers are using "home-made" graders, which are ineffective and result in excessive, and unnecessary mortality to juvenile smelt with no market value.

(3) User Group: Commercial

Proposal: Commercial anglers will be required to report smelt catch information to MDIFW including: water fished, date fished, total catch, number of nets, etc. Failure to report will result in loss of license.

Rationale: Reporting is generally required with most commercial fisheries. Although this type of data is not always accurate, it provides a good tracking tool for monitoring fishery changes over time that allow MDIFW to better manage and understand our commercial smelt fisheries.

II. Rule Changes:

(1) User Group: Recreational

Proposal: Hook & Line Anglers/Dip-netters (without a commercial license) will only be allowed to keep 5-dozen smelt alive; the balance of their limit would have to be killed.

Rationale: The illegal selling of bait has been a problem in some areas of the State. This rule change will allow the Warden Service to more effectively enforce existing laws pertaining to the illegal sale of smelts, while still allowing anglers a reasonable number of live smelt for personal bait needs.

(2) User Group: Recreational and Commercial

Proposal: Establish a statewide midnight closure for dip-netting (2AM adopted).

Rationale: Protects the resource by giving smelt an opportunity to spawn without interference; provides some enforcement benefits for the Warden Service; and reduces many of the social issues associated with property owners and dip-netting activities.

(3) User Group: Commercial

Proposal: Smelt dealers only allowed to dip-net 2 quarts of smelt during the spring spawning season.

Rationale: Provides additional protection of the resource during a critical part of the smelt's life stage, and improves equity among the user groups.

III. Commercial Water List:

(1) User Group: Commercial

Proposal: Maintain existing commercial smelt list.

Rationale: This listing allows MDIFW to efficiently respond to and manage for changes in our smelt populations by removing and adding waters annually as needed.

(2) User Group: Commercial

Proposal: Conduct a comprehensive review of statewide smelt waters.

Rationale: Insure compliance/consistency with the goals & objectives of the smelt species plan, while also providing an opportunity to recognize additional commercial opportunities (see table below).

IV. Educational/Experimental Component:

(1) User Group: Recreational and Commercial

Proposal: Educate and encourage dip-netters to avoid walking on smelt eggs during the spawning season.

Rationale: Spawning is a critical life stage of any species, and dip-netting activity has been shown to cause high mortality of deposited smelt eggs.

(2) User Group: Commercial

Proposal: Investigate the feasibility of requiring graders/grader panels installed in the bottom of commercial dropnets. If successful this may be a future Statute change.

Rationale: Excessive and improper handling of juvenile smelt, as well as, exposure to extreme temperatures results in high mortality of juveniles. A built-in grading system would allow young smelt to escape without handling or removal from the water.

(3) User Group: Commercial

Proposal: MDIFW pathologist to investigate causes of commercial/retail smelt mortalities. This work will lead to the development of a resource guide for handling, transporting, and holding smelt to reduce mortality.

LLS Waters Proposed to be Closed to Commercial Dealers.

Region	Watcode	WaterName	Acres	Town	Priority Forage for(Spp):	Commercial Mngmt/Reg Changes	Commercial Mgmnt Rationale
A	3734	HIGHLAND (DUCK) L	634	FALMOUTH	LLS	close commercial	LLS water
A	5780	LONG L	4867	BRIDGTON	LLS	close commercial	LLS water
C	0177	MEDDYBEMPS L	6765	BARING	LLS	close commercial	LLS water
C	1238	LOVE L	672	T19 ED BPP	LLS	close commercial	LLS water
E	0446	ROACH P (FOURTH)	266	SHAWTOWN TWP	LLS, SPK	close commercial	LLS, SPK water
E	0482	ROACH P (THIRD)	570	SHAWTOWN TWP	LLS	close commercial	LLS water
E	2936	RAGGED L	2712	T2 R13 WELS	LLS, SPK	close commercial	LLS, SPK water
F	1088	MUSQUASH L (EAST)	806	TOPSFIELD	LLS	close commercial	LLS water
F	3038	MOLUNKUS L	1050	MOLUNKUS TWP	LLS	close commercial	LLS water
F	4766	NICATOUS L	5165	T40 MD	BNT,LLS	close commercial	LLS water

Appendix 2b. SAM’s “Classic” Salmon Waters and Partial Summary of Progress (March 2011).

Region	Water
A	KEZAR LAKE
A	SEBAGO LAKE
B	WASSOOKEAG LAKE
B	SWAN LAKE
C	TUNK LAKE
D	MOOSELOOKMEGUNTIC LAKE
D	RANGELEY LAKE
E	CHESUNCOOK LAKE
F	PLEASANT LAKE
F	SCHOODIC LAKE
G	EAGLE LAKE
G	LONG LAKE

Updates from Regional Biologists:

Mooselookmeguntic Lake (Boucher):

Salmon growth and body condition continue to be below the standard set in the program, but we’re making some headway. Being such a large lake with a large wild population - with 12 miles of prime nursery habitat in the Kennebago River – we knew from the start it would be a slow process. Unfortunately, reducing wild salmon numbers by liberalizing harvest rules has been confounded by several successive strong age classes produced during recent wet, cool seasons. Higher wild fish production isn’t a bad thing, of course, because there are lots more fish to catch, but it does prevent smelt populations from rebounding quickly.

Last summer we worked closely with some local business interests, the Rangeley Guides, and the Rangeley Lakes Heritage Trust to actively promote additional salmon harvest. We did this by co-sponsoring a well-advertised weekend fishing event in June, whereby club memberships and small gift packs were awarded to folks who signed on to participate. Being the first year of the event, and because it was organized late in the spring, we didn’t meet our participation goals or harvest projections. We’re willing to participate in a similar event next summer, if the other parties express the interest (not so far).

The good news regarding Mooselookmeguntic is that in 2010 release rates for legal salmon dropped for the first time since the early 1990’s, and the total harvest nearly doubled since 2007. I believe Mooselookmeguntic Lake anglers are finally becoming

comfortable with the idea that the salmon fishery can benefit from additional harvest, rather than decline.

Steady, yet slow progress at Mooselookmeguntic Lake. No significant changes to the original plan are required, but everyone needs to be in it for the long haul!

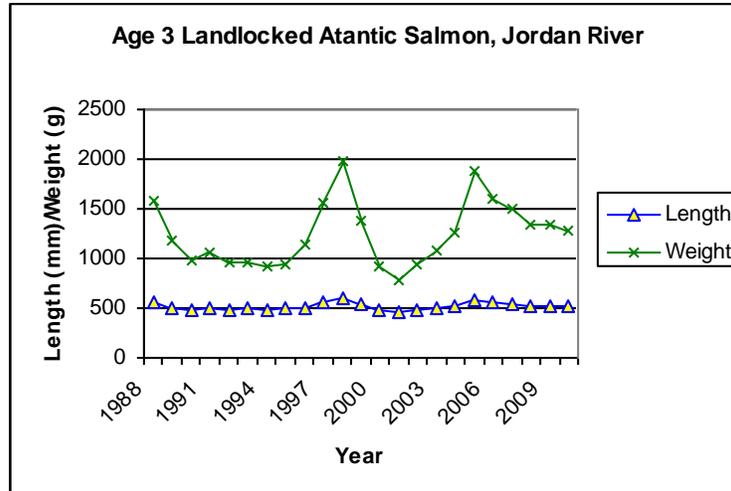
Rangeley Lake (Boucher):

Salmon growth slowed down here as well, again due to some years of high wild salmon and brook trout production. We suspended salmon stockings from 2007 to 2010 to facilitate a recovery in the smelt population, and we've relied on the wild fish to support the fishery. This has worked fine; the smelt runs were excellent in 2010, and our creel and trapnet surveys showed a strong rebound in salmon growth and condition. The strong wild cohorts (both salmon and trout) seem to be aging and dropping out of the population, so angler catch rates declined significantly last summer – along with a few angler complaints of slow fishing. We'll reinstitute salmon stocking this spring if there is another strong smelt run.

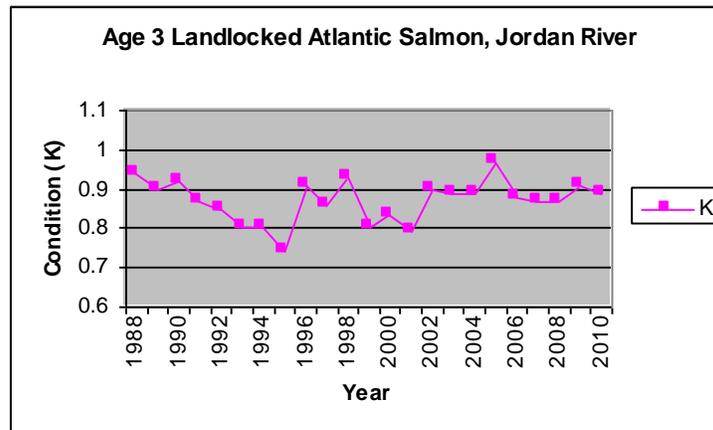
I believe we're on track at Rangeley - no significant changes needed.

Sebago Lake (Brautigam):

The salmon fishery is slightly below length and weight objectives, and exceeding the catch rate objective. The salmon are considered to be in average condition based size quality data (Jordan River) collected since 1988. The lake is currently not producing many trophy size salmon, but "the plan" acknowledges that trophy salmon production will not be sustainable in the absence of significant reductions in the lake trout population. In the continued presence of an abundance of lake trout there will be only periods of elevated smelt production that can support the development of a trophy salmon fishery. The proportion of trophy size LLS (4 – 9 lbs) did increase between '05 through '07. Trends in lake trout catch indicates 2/3rds of the legal size lake trout caught by anglers are released. Catch and release practices are limiting efforts to reduce the lake trout population and therefore limiting progress to create forage conditions that will favor the development of trophy-size salmon. Conservative stocking levels since 2002 appear to have stabilized historically wide fluctuations in the condition and quality of the salmon fishery. Recent establishment of landlocked alewives 2 years ago create additional uncertainty regarding future management prospects. Some regulations are being proposed to reduce the catch and handling of prespawn salmon during the extended fall season. The charts below were developed for my SLAA presentation.



- Age 2 & 3 male growth/size slightly below management plan objectives (1988 levels)

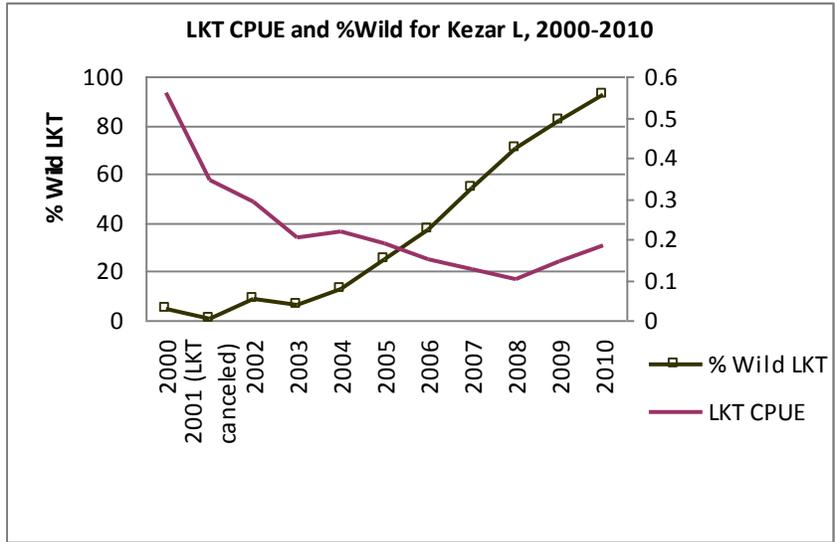


Since 2002: reduced/flat stocking (between 1000 & 3500) = stabilized salmon growth & condition

Kezar Lake (Brautigam):

This water has reached attainment of size quality objectives based on trap net sampling completed in 2009. The largest LLS examined in 2009 was 26 inches long and weighed 5.7 pounds. 28.8% of the 66 fish sample exceeded 4 pounds. Anecdotal reports suggest excellent LLS fishing in recent years, and relatively light angler use. The salmon fishery is probably in the best condition we have observed in over 2 decades. Our size quality objectives (LLS over 4lbs) defined under the Classic LLS Initiative has been realized; however, it remains uncertain if we can effectively increase and maintain the current percentage of these larger fish in the fishery. In the absence of stocking LKT, biannual netting indicates a wild population of lake trout may be developing (see chart below) and could compromise recent gains in the quality of the salmon fishery. Furthermore, improvements in the quality of the salmon fishery will likely increase angler use, both in

the winter and summer. An angler census being conducted this winter should provide some insight regarding winter use and harvest. Winter angling for lake trout is consistent with planned management, but efforts to provide trophy-size salmon at acceptable catch rates for both open water and ice fishing will be challenging. No management changes are being proposed at this time.



Chesuncook Lake (Obrey):

We conducted a winter clerk survey on Chesuncook Lake in 2010 and we have pretty good voluntary data from the summer months. Unfortunately, we are below our benchmarks for trophy salmon at Chesuncook Lake. As you may recall we implemented a 1 fish/16" minimum length limit in the mid 1990's which caused stockpiling and salmon growth crashed. We are still working to alleviate that situation at Chesuncook Lake. We have closed the lake and tributaries to smelting and liberalized the salmon bag limit to 3 fish. Angler use was very low in 2010. I was amazed at the lack of winter fishing pressure and the very good catch rates on this salmon lake. In past years this lake was fished very hard by anglers from the Millinocket and Bangor areas. I believe the lack of employment in the Millinocket Region has caused a severe decline in fishing pressure at Chesuncook Lake at a time when we are encouraging use and harvest to thin the salmon population. Anecdotal reports, primarily from the Warden Service, indicate the smelt runs have been very good. We have seen a drop in both the summer and winter catch rates of small salmon which is a good sign, but growth is still not up to par.

Appendix 2c. “Large Salmon” Fact Sheet.

- Of about 85,600 salmon from 200 lakes surveyed since 1939 to 2008, only 2.6% have exceeded four pounds in weight (~23 inches long);
 - Salmon exceeding four pounds have not been collected, ever, from 66% of 200 Maine lakes sampled since 1939;
 - About 77% of the 2,218 fish exceeding four pounds were from just three lakes (Long Lake, Rangeley Lake, Sebago Lake);
 - From this same dataset, less than 1% have exceeded five pounds; 70% of these were from the same three waters listed above.
-

The relative rarity of large salmon (and other salmonids) is due to several factors, including:

- Maine lakes are exceedingly infertile (nutrient poor);
 - Smelt populations are inherently unstable.
-

There are consequences to managing for larger salmon. These include:

- At least 40-60% reductions in stocking rates to reach 20 inches at age 3 or 4;
 - Even more dramatic stocking reductions if high length limits are imposed;
 - Commensurate reductions in catch rates (angler contacts with salmon);
 - Some populations will be relegated to relic status and some may disappear altogether.
-

Appendix 2 (cont'). Assessment of work completed (2002-2011) in support of Maine's 2001-2016 Strategic Management Plan for Landlocked Salmon.

LANDLOCKED SALMON OBJECTIVES

2001-2016

STATEWIDE OBJECTIVE NO.3:

- 7) Where feasible, maintain or enhance the contribution of natural reproduction to salmon fisheries. Provide enhanced emphasis, including appropriate regulatory protection, to selected wild populations that will ensure adequate spawning escapement and preserve older-age salmon to maintain genetic diversity. Protect critical spawning and nursery habitat that support wild populations.

Assessment of Progress on Objective No. 3 (October 2011):

Note: This objective is similar to some elements of Objective 1c (Maintain habitat quality in waters that support principal fisheries for salmon). Therefore, a few assessment items for Objective 1c are reiterated here.

- Lakes with salmon principal fisheries supported entirely by natural reproduction increased from 49 in 2001 (28% of all principal fisheries) to 62 in 2010 (31% of all principal fisheries).
 - This increase is largely attributed to the reclassification and addition of several lakes following survey updates (see Table 1 from Objective 1 assessment).
 - In addition, stocking programs were suspended on several waters because natural reproduction was deemed adequate to support good fisheries; this was related to several consecutive “high natural production” years resulting from favorable climatic conditions, and to reduced angler use (e.g Square Lake, Cross Lake, Eagle Lake in the Fish River Chain).
 - A dam breach at Jim Pond in Franklin County provided new access to spawning and nursery habitat, so salmon stocking was suspended (resurvey pending in 2012).
 - At Millinocket Lake in Piscataquis County, salmon stocking was suspended in favor of wild production following several public meetings with local anglers and guides. Wild production will be encouraged through judicious monitoring (debris removal) of a small fishway in the lake's outlet dam, or perhaps by dam removal (decision pending).

- Several wild salmon lakes are currently managed with “one-over slots”, whereby harvest of abundant, slow-growing cohorts is encouraged with reduced minimum length limits or liberal bag limits, but older-age fish (>16 or 18 inches) are

protected with a one-fish bag limit. This regulation is designed to improve or maintain conditions for good salmon growth, while minimizing harvest of adult brood fish.

- Wild salmon production will be enhanced in Chain of Ponds in Franklin County, where in 2009 a new Alaska steppass fishway was installed in the lake's outlet dam to the North Branch Dead River.
 - As noted above, wild production will be encouraged at Millinocket Lake in Piscataquis County by carefully monitoring the outlet's fishway or by eventual breaching of the dam.
 - In 2002, several critical salmon spawning and nursery habitats received upgraded Water Classification from the Maine Department of Environmental Protection, at the request of Regional Fisheries Staff. All river reaches listed below were upgraded from Class A to Class AA (please refer to the assessment for Objective 1c for a list of specific lake systems).
 - A proposal to rebuild Scribners Mill Dam on the Crooked River (Sebago Lake) was denied, with significant input from Region A staff. (May be appealed by applicant).
 - FERC Settlement Agreements protective of wild salmon resources were signed for several large hydro/storage projects (e.g. Upper and Middle Dams, Harris Dam, Wyman Dam, Flagstaff Dam, Ripogenus Dam).
 - Several spawning/nursery stream reaches were newly identified or confirmed, including Mass Bog Stream (Arnold Pond), Mill Stream (Embden Lake), Hall Pond Outlet (Duncan Pond), Munsungan Stream (Munsungan Lake), and several tributaries to the Crooked River (Sebago Lake).
 - Additional data from salmon nursery streams were collected during statewide Eastern Brook Trout Joint Venture surveys (2007-2009), and from large rivers by surveys conducted by the Midwest Biodiversity Institute (2002-2007).
 - Regional staff continued to provide technical support to state and federal agencies responsible for managing and protecting lake and stream habitat quality.
 - There was a major effort (ongoing) to develop GIS datasets of wild salmon fisheries/habitats for Town Planners (Beginning with Habitat program) and state/federal development review agencies.
-

Appendix 2. (cont'). Assessment of work completed (2002-2011) in support of Maine's 2001-2016 Strategic Management Plan for Landlocked Salmon.

LANDLOCKED SALMON OBJECTIVES

2001-2016

STATEWIDE OBJECTIVE NO.4:

- 4) Provide for a diversity of fishing quality objectives for salmon (recall that we established four management categories based on each water's demonstrated capacity to grow salmon of certain size and weight ranges. The Coldwater Working Group provided significant input in establishing the specific size goals for each group).

Assessment of Progress on Objective No. 4 (November 2011):

Harvest Opportunity waters: *A total of 31 lakes comprising 49,330 acres, or as necessary where forage availability limits salmon growth and condition. Waters selected for this management class will provide the opportunity to catch salmon that commonly range from 14.0 to 16.0 inches long, with an expectation of catching an occasional fish over 2 pounds.*

This category includes waters that typically exhibit chronically slow growth with little opportunity for improvements due to habitat constraints, or where the presence of salmon may compromise brook trout management so salmon harvest is encouraged. Lower length limits and/or liberalized bag limits should be considered on these waters.

- IFW fisheries staff sampled 14 of the 31 waters (45%) in this management category during the 2003-2010 period. Size group data for these samples are summarized in the following table (the "over 18 inches" group is a measure of 2-pound salmon).

Percent of salmon in size groups		
Less than 14 inches	14 to 16 inches	Over 18 inches
55%	30%	15%

- We conclude that the waters sampled are providing fishing opportunities for salmon that are of a size appropriate for this management category.

General Management waters: *A total of 95 lakes comprising 245,093 acres. Waters selected for this management class will provide the opportunity to catch salmon that*

commonly range from 16.0 to 18.0 inches long, with an expectation of catching an occasional fish over 3 pounds.

These are lakes where 16 to 18-inch fish predominate, are open to ice fishing, where lake trout are present as salmon competitors, or where we lack sufficient information to categorize growth and size potential.

- IFW fisheries staff sampled 59 of the 95 waters (62%) in this management category during the 2003-2010 period. Size group data for these samples are summarized in the following table (the “over 20 inches” group is a measure of 3-pound salmon).

Percent of salmon in size groups		
Less than 14 inches	16 to 18 inches	Over 20 inches
16%	71%	13%

- We conclude that the waters sampled are providing fishing opportunities for salmon that are of a size appropriate for this management category.

Size Quality Management waters: *A total of 27 lakes comprising 76,330 acres. Waters selected for this management class will provide the opportunity to catch salmon that commonly range from 18.0 to 21.0 inches, with an expectation of catching an occasional fish over 5 pounds.*

These are lakes where the ratio of fish 18-21 inches long usually exceeds regional averages, wild lake trout are often not present, and many are not open to ice fishing. Most are stocked waters and management will emphasize maintaining or improving size quality through stocking manipulations or, if necessary and desired by local anglers, more restrictive harvest regulations.

- IFW fisheries staff sampled 23 of the 27 waters (85%) in this management category during the 2003-2010 period. Size group data for the individual waters are listed in the table below, followed by a brief explanation of criteria used to establish if each lake met the standards for this management category.

**Current (2003-2010) status of salmon populations in Size Quality Management waters listed in the 2001-2016 Species Management Plan.
(See next page for a description of objectives and evaluation criteria for this Management Category)**

IFW Region	Lake	Town	County	Lake size (acres)	Distribution of salmon sizes (percent) in IFW samples, 2003-2009			Meeting Objectives?	Comments
					18 to 21 inches	Over 21 inches	Over 24 inches		
A	Auburn L	Auburn	Andro.	2,260	45%	25%	4%	Yes	Recently not meeting all objectives; in recovery by 2009.
A	Kezar L	Lovell	Oxf.	2,600	34%	11%	1%	Yes	Size quality declined in 2008-2009; now improving.
A	Moose P	Denmark	Oxf.	1,694	50%	27%	2%	Yes	
A	Peabody P	Sebago	Cumb.	735	59%	22%	14%	Yes	
A	Sebago L	Sebago	Cumb.	28,771	46%	25%	7%	Yes	
A	Thompson L	Oxford	Oxf.	4,426	59%	19%	0.30%	Yes	
A	Trickey P	Naples	Cumb.	311	14%	62%	5%	Yes	
B	Long P	Belgrade	Kenn.	2,714	26%	10%	5%	Yes	Fishery has collapsed.
B	Parker P	Fayette	Kenn.	1,513	36%	5%	0%	Partially	
B	St. George L	Liberty	Waldo	1,095	30%	5%	0%	Partially	
C	Alligator L	T34 MD	Han.	1,159	33%	8%	0.60%	Yes	Size quality declined in 2008-2009.
C	Echo L	Mt. Desert	Han.	237	Insufficient data			Unknown	
C	Tunk L	T10 SD	Han.	2,010	42%	11%	2%	Yes	Size quality declined in 2008-2009.
D	B Pond	Upton	Oxf.	471	31%	11%	0%	Partially	2011 data included.
D	L. Ellis P	Byron	Oxf.	297	29%	20%	0%	Partially	
D	Howard P	Hanover	Oxf.	128	44%	0%	0%	No	
D	Pierce P	Pierce P.	Som.	1,650	46%	3%	0%	Partially	Size quality declining in 2008-2009.
D	Rangeley L	Rangeley	Fra.	6,000	36%	15%	2%	Yes	Size quality declined in 2006-2009; improved by 2010.
E	Duncan P	Prentiss	Som.	143	Insufficient data			Unknown	
E	Lobster L	Lobster Twp.	Pisc.	3,475	31%	8%	0%	Partially	
F	Deering L	Orient	Aroost.	474	24%	5%	1%	Yes	
F	Duck L	T4 ND	Han.	1,222	20%	3%	0%	No	
F	Lambert L	Lambert L Twp.	Wash.	605	Insufficient data			Unknown	
F	Pleasant P	T4 R3 WELS	Aroos.	1,832	37%	12%	0%	Partially	
F	Seboeis L	T4 R9 NWP	Pisc.	4,201	39%	6%	3%	Yes	
G	Carr P	T13 R8 WELS	Aroost.	307	Insufficient data			Unknown	
G	Long L	St. Agatha	Aroost.	6,000	36%	15%	3%	Yes	

SUMMARY

- A total of 27 lakes comprising 76,330 acres was selected for this management category.
 - This is 15% of all lakes with principal fisheries for salmon (2001 inventory);
 - This is 16% of the total acreage with principal fisheries for salmon (2001 inventory).
- Twenty-one of the 27 lakes, or 78%, met or partially met the size objectives (see below) during the 2003-2010 period.
- Two lakes (7%) did not meet the size objectives during the 2003-2010 period.
- Four waters (15%) were not evaluated because sufficient data could not be obtained.

Management Objectives and Evaluation Criteria for Size Quality Management Lakes

- Plan objectives for this Management Category read as follows: “Waters selected for this management class will provide the opportunity to catch salmon that commonly range from 18.0 to 21.0 inches in length, with an expectation of catching an occasional fish over 5 pounds.” (Note: salmon over 24 inches long generally exceed 5 pounds in weight.)
- Yes was assigned to the “Meeting Objective” column if:
 - Percentages of fish from 18-21³ or over 21 inches exceeded those measured from lakes in other Management Categories (Harvest Opportunity, General, Special), AND
 - Fish over 24 inches were observed (the 5-pounders).
- “Partially” was assigned to the “Meeting Objective” column if:
 - Percentages of fish from 18-21 or over 21 inches exceeded those measured from lakes in other Management Categories (Harvest Opportunity, General, Special), BUT
 - No fish over 24 inches were observed (no 5-pounders).
- No was assigned to the “Meeting Objective” column if:
 - Percentages of fish from 18-21 or over 21 inches did not exceed those measured from lakes in other Management Categories (Harvest Opportunity, General, Special)

³ Values for other waters (n=95):
18-21 inches (24%)
Over 21 inches (5%)
Over 24 inches (0.6%)

Special Management Waters: *A total of 23 lakes comprising 114,038 acres. Waters selected for this management class will exhibit unique and/or valuable population and fishery characteristics. These may include, but are not limited to, extraordinarily high population densities, large numbers of older-age fish, or unique genetic attributes. Objectives for these waters will be developed on a water-by-water basis.*

Most lakes selected for this management category are supporting robust wild populations where older-age fish (age 5 and older) usually comprise 40-50% or more of samples. Also included are wild salmon lakes with high population densities that exhibit very slow growth rates, and those where adjacent waters are managed with specials. Management of these waters emphasizes maintaining or enhancing older-age salmon, and/or directing harvest to younger cohorts to stabilize growth where annual recruitment is unstable. Special minimum size limits and/or "one-over" slots are the preferred approach to achieve these objectives, pending further evaluation.

- IFW fisheries staff sampled 17 of the 23 waters (74%) in this management category during the 2003-2010 period.
- Nine waters in this group (39%) are currently managed with special low length limits and/or “one-over” slot limits. (NOTE: most of these special rules were imposed during the current planning period). These rules are also being proposed for an additional lake (2012 rulemaking).
- Data provided in the table below indicate that older-age salmon continued to be prevalent in lakes included in this management category.

Percent of fish age 5 and older (number of fish sampled 2003-2010)			
Harvest Opportunity lakes	General Management lakes	Size Quality Management lakes	Special Management lakes
8% (212)	5% (4,681)	6% (6,794)	44% (2,957)

Appendix 3. Summary of written comments from Maine’s Cold Water Fisheries Public Working Group on the management of landlocked salmon (2011).

STATEWIDE OBJECTIVES FOR LANDLOCKED SALMON:

- 8) Maintain principal fisheries for landlocked salmon in about 220 waters.
 - a) Maintain principal fisheries in about 176 lakes and ponds (485,000 acres), to include about 130 waters based wholly or partially on hatchery stocks and about 46 waters based entirely on natural reproduction.
 - b) Maintain riverine fisheries of moderate to high fishing quality in 44 stream reaches (about 290 miles).
 - c) Maintain habitat quality in waters that support principal fisheries for salmon.
 - d) Develop strategies to address threats to salmon populations from illegally introduced exotic fish species.
- 9) Provide for a variety of fishing opportunities for salmon.
 - a) Maintain present level and statewide distribution of open water and ice fishing opportunities.
 - b) Increase remote, urban, and youth fishing opportunities.
 - c) Increase riverine fishing opportunities in central and southern Maine.
 - d) Increase fall fishing opportunities.
 - e) Increase fishing opportunities for large salmon.
- 10) Where feasible, maintain or enhance the contribution of natural reproduction to salmon fisheries. Provide enhanced emphasis, including appropriate regulatory protection, to selected wild populations that will ensure adequate spawning escapement and preserve older-age salmon to maintain genetic diversity. Protect critical spawning and nursery habitat that support wild populations.
- 11) Provide for a diversity of fishing quality objectives for salmon (recall that we established four management categories based on each water’s demonstrated capacity to grow salmon of certain size and weight ranges. The Coldwater Working Group provided significant input in establishing the specific size goals for each group).

Comments from CWWG members on statewide landlocked salmon Objectives:

From Mr. Dick Walthers (TU representative):

Dave, We certainly set lofty goals. I question the urban fishing goal for wild Salmon. In region A the Androscoggin is fine. Maybe some other waters are lofty. The Crooked River threat of the Scribners Mills Dam is not dead. The folks behind the proposal will not accept defeat. They refuse to accept alternative proposals, and push for a dam. Probably the biggest alarm to all fish management is the increasing introduction of non native species. The best thing that could out of our group is: no live bait allowed in any watershed with wild or native Salmon or Brook Trout.

From Mr. Dennis Smith (SAM representative, IFW Legislative Committee Appointee):

Hello All

I think it is important that you all understand why this group is once again talking about one of our states greatest resources. LLS.

At my behest, Rep. Elsie Flemings introduced L.D. 1329, A RESOLVE TO STUDY TO THE CONDITION OF LLS IN MAINE AND MAKE RECOMMENDATIONS TO IMPROVE THEIR HEALTH.

Why did I ask for this study?

I first became involved with LLS in the mid 60,s. At that time, Keith Havey, one of the states foremost and knowledgeable biologists dealing with LLS was conducting research on Long Pond (S.W. Harbor and Mt. Desert). Long Pond was producing salmon up to 7 lbs. at that time, Havey refers to this in the book LLS IN MAINE.

I personally witnessed four LLS over 5 lbs. entered at a fishing derby on Long Pond in 1967.

Here on Mount Desert Island anglers have caught salmon over 5 lbs. from Echo Lake, Eagle Lake and Jordan Pond, keep in mind that none of these three waters have any warm water species in them.

At present, to my knowledge, none of these waters are producing LLS over 3 lbs., if that.

My knowledge also tells me that with but few exceptions, this is the condition of our LLS fisheries throughout the state.

To me this is unacceptable, given the fact that LLS historically in Maine have been documented to live up to 13 years of age and several individual salmon have grown to 30 lbs.. This was all gleaned from IF&W documents.

In my lifetime LLS up to 10 lbs. have been taken from waters which I am familiar with.

I feel it is no exaggeration to state that the largest salmon being grown in most of our lakes at present are less than one half the size they were historically.

For example in report by the superintendant of hatcheries, Gerry Wade, he refers to taking eggs at Long Lake in the early 40's from many salmon over 18 lbs.. In the 60,s I have documentation of anglers taking LLS over 10 lbs. from the Kennebec River below Wyman.

As I have looked around the nation and the world I have seen examples of fishery management being turned on its head with some new ideas and new styles of

management which are producing tremendous results ie. large fish.

There are ways to do this without enduring unacceptably slow angling.

Will this group be the ones to lead the way?

From Mr. Eric Ward (avid salmon angler from Moosehead Lake region):

Dave,

It appears that there has been a fair amount of effort put into this project since the last working group got together.

Looks good.

Eric

From Mr. Dennis Bolduc (avid salmon angler from Central Maine):

Dear Coldwater Working Group,

I would first like to begin by saying "thank you" for allowing me to participate in the (CWWG). I'm sorry I didn't respond sooner, but I finally finished reading all the info (Maine Landlocked Salmon: Life History, Ecology, and Management; Landlocked Salmon Management Plan; and No.1, No.2 and No.3 Landlocked Salmon Objectives) that Dave B was so kind enough to forward everyone. Has alot of great information and is very well written. I'm very pleased to see some 31 new salmon waters, lakes and ponds, added to the list of landlocked salmon waters already being managed. Also many more miles of rivers are now managed for landlocked salmon. I would like to see more habitat improvements for landlocked salmon spawning and nursery areas. I see they have identified many of these areas, but I suspect lack of staff and volunteers to do the actual work of keeping these areas cleared of debris is difficult. I like the statewide " Action Plan " that now exists in trying to manage invasive aquatic species, including fish. I can't think of anything more to add to this plan but unfortunately the spread of invasives is not slowing down one bit. It's actually increasing. Very sad.

Here are a few of my own thoughts about Maine's landlocked salmon program. In the first packet that Dave mailed to me. it had a cover letter with pictures of 11 different quality landlocked salmon that people had caught during both ice fishing and open water fishing seasons from recent years. These are very impressive fish indeed. It got me thinking that the Maine Department of Inland Fisheries and Wildlife (MIF@W) doesn't receive enough credit for the job they are already doing in growing large quality landlocked salmon each and every year. Here's my rationale for thinking this way. I had

the privilege of fishing many salmon waters this year and here are some of the fish I witness being caught:

Sebago Lake: several 4 to 5 pound salmon.
Rangeley Lake: a couple dozen 4 to 6 pound salmon, one was over 7 pounds caught in September.
Lake Auburn: several 4 to 6 pound salmon.
Schoodic Lake: several 4 to 6 pound salmon, one was over 7 pounds.
Pleasant Lake in Island Falls: several 4 to 5 pound salmon.
Long Lake in St. Agatha: a couple dozen 4 to 6 pound salmon, one was over 8 pounds.

Some very nice fish were caught from many different lakes this year. A good job being done once again by our [MIF@W](#). Now that being said, I read that [MIF@W](#) fall net trappings are not showing these similar size fish in their traps. I believe fishermen are keeping too many of the big fish and releasing many more smaller fish which makes the problem worse in subsequent years. If more of the bigger fish were protected, then some of these lakes would be able to produce more double digit landlocked salmon. I'm thinking some slot limits should be implemented thus protecting the big fish.

Talking about big salmon always leads me to start talking about bait fish, particularly, the rainbow smelt. I think this next statement best describes Maine's rainbow smelt populations: "Rainbow smelt populations are inherently unstable". Many factors are involved with their blooms and their crashes, including oxygen content in the water and water quality. Also, some of the smelt regulation changes over the years have really helped Maine's smelt populations. The best thing the State of Maine ever did was to close all tributaries to the taking of smelts. This preserves a spot for smelts to lay their eggs without being trampled by fishermen trying to dip them. Most of the new laws governing smelting, I agree with except for this next one which was started in 2006. I was reading the Statewide Objectives No.2, Appendix 1 and it stated in it's " Goal " section; " Maintain existing smelt habitat quantity and quality; and increase smelt abundance and availability where feasible to moderate current demands as a forage fish, as a sportfish, and as a commercial baitfish". This is where I think the State of Maine is doing the opposite of it's intended goal. By closing all lakes to smelting where the primary managed fish is landlocked salmon, the smelt runs have more fluctuations than if spring dipping was allowed. In my opinion, these lakes now bloom, overpopulate and have die-offs much faster than if dipping smelts were allowed. I think smelts need to be culled each year to leave room for the YOY to grow. This keeps the population from blooming too fast, running out of food/ and or oxygen for themselves. I wish [MIF@W](#) had the extra funds to do some studies on how well smelt populations do year after year where dipping is allowed compared to no dipping / smelting waters. I've enclosed a study done in Vermont about how older age smelts are preying on the YOY smelts in one of the Great Lakes. This study only begins to touch on the problems faced by unchecked smelt populations. I found it a very interesting read. I'd be curious to hear other people responses / thoughts. Thanks.

I've also included a few pictures of what I consider trophy landlocked salmon from many different Maine waters from the last couple of years.

From Mr. Eric Ward:

I have read that there were some huge salmon in the past. It is interesting to note that during the 1940's, I have been told that years went by that no one was on Lobster Lake. This might have come from a lady that was there. Anyway, in the 50's and 60's some huge togue were taken. It is hard to grow fish when there is pressure. Just look at Labrador, if you can drive to it, the fish are smaller. It would be nice to grow huge fish, good for the people that fish and good for the economy. If it were an easy task, it would seem IFW would be doing it.

From Mr. Dennis Smith:

Dennis and members of the coldwater working group

Great. Thank you for such a well thought out and learned piece regarding your thoughts. You have hit the nail squarely on the head in many areas.

Regarding your thoughts on invasives. There is one possibility which might help slow this down. While grandfathering those currently being held, enact a moratorium on any further derbies/tournaments for bass, pike, muskies and crappies as I suspect there are some instances where they are being introduced for that very purpose.

You are correct in that IF&W is producing some nice salmon in the waters you have mentioned and they deserve much credit for that. On the flip side I have considerable historical data which shows that the largest salmon now being produced are roughly 1/2 the size they were in the past.

For example, from a report by the superintendant of hatcheries in 1940 the fisheries staff were taking eggs from Long Lake salmon, many of which were over 18 lbs. and the largest reported was a salmon of 30 lbs.

You are 100% correct in calling for protective slot limits as too many anglers are culling and high grading. I have found that particularly in the waters with a one salmon limit this is a problem in the extreme as anglers, knowing they are limited to one salmon, catch and release until they get the fish they want.

If same age salmon all grew at the same rate, this would not be a problem. However that is not the case as fishery division data has shown. Trap net data obtained from Long Pond in S. W. Harbor/Mt. Desert shows that there can be as much as a 6" variation within the same age group. Fishery staff observed salmon that were 3+ yrs. In age that ranged from 17" to 23".

All of the salmon stocked in Long Pond are fin clipped, making it easy to tell their age. With that data I examined a 16" salmon from Long Pond which was 5 yrs. Old around the same time.

While talking with IF&W hatchery personnel they told about "brutes and runts". IF&W data indicates to me that the brutes grow very rapidly thus placing those particular salmon in a position of being the most desirable, the most sought after. The runts, conversely, are smaller and less attractive to the average angler. The result being, from my observations, that many of these runts may never be harvested as they are passed over and released.

The list of salmon you witnessed is very impressive. The question I have is: how can we improve on that and at the same time add other waters? My information (IF&W data) tells me that many more of these waters will grown salmon to 5 lbs. and more if managed differently. And equally important some waters will grow double digit salmon if managed differently. I see the task of this group being, how to do that.

Maine has over 175 waters, maybe as many as 200 waters which support salmon, many of which have produced double digit salmon in my lifetime.

More later.

Regards,
Dennis Smith

From Mr. John Cote (avid salmon angler from the Moosehead Lake region):
(on Objective 1)

To me, the key word in Objective No.1 and in parts **a, b, and c** was and still should be to "maintain" the existing number of principal LLS fisheries of lakes, ponds and streams. My personal notes from the meeting in 2001 indicate our collective primary concern was to make sure that the quality of these LLS waters and populations of salmon (and smelts) did not diminish over time. I can certainly understand that an ongoing review of the salmon waters in this population may result in the deletion of waters of lesser quality in favor of better candidates as long as the standards are not negatively changed. My personal feelings back then and now are that we should not add additional LLS waters if we have to, in any way, reduce the quality of the LLS waters already on the list.

I am not adverse to new additions to the total list of LLS waters as long as certain requirements are met:

1. That the new additions meet or exceed the standards of the existing waters.
2. That these new additions do not reduce the quality of the fishing experience in existing waters because of diminished stocking (where applicable), reduced attention to spawning and nursery beds in waters with natural reproduction and in time spent by staff in monitoring the quality of the existing waters.

Consequently, given the time and financial constraints of the department and staff

discussed in 2001 and, to a greater extent today, I would like to feel assured that we are not substituting quantity for quality, especially given the apparent reduction in fishing license sales and participation in the sport alluded to in several recent IF&W publications and releases.

As to part d of the objective, I am in full agreement with all the proactive efforts the department has initiated concerning illegal stocking of invasive species. I am concerned, however, whether the state and federal funding will continue to be available in the present economy to continue these programs and, if not, what alternatives the department has considered. Regarding reactive solutions to this problem, I am not aware of any selective methods of eliminating unwanted species, especially chemical solutions, that would not result in eliminating all fish species. I would like to see a discussion of this at the forthcoming meeting.

From Mr. Dennis Bolduc:

Hi Dennis and the rest of the CWWG,

I would just like to make a comment or two about the following 2 statements:

"You are correct in that IF&W is producing some nice salmon in the waters you have mentioned and they deserve much credit for that. On the flip side I have considerable historical data which shows that the largest salmon now being produced are roughly 1/2 the size they were in the past.

For example, from a report by the superintendant of hatcheries in 1940 the fisheries staff were taking eggs from Long Lake salmon, many of which were over 18 lbs. and the largest reported was a salmon of 30 lbs."

I would love to go back to the good old days of lots of big salmon but the problem is many of these same waters now have many more competing fish (smallmouth bass, largemouth bass, togue, perch, pickerel, pike and others which make our waters much harder to manage for landlocked salmon. Also, some have lost their capability to have healthy smelt populations due to poor water quality, introductions of alewives and other competing bait fish. There's only so much food (zooplankton) for smelts to live on. Once it's depleted, so goes the smelts.

There are only 2 ways that I know of to get salmon back to the sizes you refer to in years past. One way: eliminate one or all competing species in our salmon waters. Trouble with that idea is that there are too many bass, togue, perch, pickerel, and pike lovers who do not want to give up their preferred targeted species. And the second way: reduced that number of stocked salmon so the remaining salmon get bigger. Trouble with number 2 is that the salmon catch rates will drop dramatically thus making fishing slow and /or more difficult. I've seen number 2 work in improving salmon growth on a lot of waters. But not work in all.

Just my thoughts here. I don't claim to have all the answers, Den. I appreciate the exchange in ideas.

From Mr. Dennis Smith:

Hello Dave and members of CWWG

I am providing additional details in order that you all can understand how much has changed over the past years.

I have attached a PDF entitled...LLS Maine and the economy. Go to pages 9, 10, 15, 16, 19, and 20 in order to understand where I am coming from.

Also go to Keith Havey and Ken Warner's book printed in 1970,,Entitled THE LANDLOCKED SALMON.....ITS LIFE HISTORY AND MANAGEMENT IN MAINE.

On pages 83, 84 AND 85 it clearly shows what we have lost.

On page 107 Havey refers to Long Pond and growing LLS to 7 lbs. in the 60's and early 70's. At the present time a 3 lb. LLS is a big fish.

Let me know if this is not enough.

From Mr. Dennis Smith:

Hello Dave and members of CWWG

As a further detail regarding our largest LLS I offer you the following for your consideration.

When the "One that didn't get away" club came about the minimum size for LLS to qualify was Ten (10) pounds. I believe sometime around the 1980's it was changed to eight (8) pounds, now it is six (6) pounds.

I believe this is the most damning and irrefutable evidence one can point at when considering the size of our largest LLS at present and their size historically.

Regards,

Dennis Smith

Mr. John Cote (on Objective 2):

It certainly would appear that the objective of Item a to maintain the distribution of LLS waters between open water fishing and ice fishing on a statewide basis has been and is, for the most part, as recommended in our initial meeting in 2001. My only concern is that described in my assessment of objective No.1, that we do not stretch the limits of financing , staff and hatchery capabilities by adding more new LLS waters to the point where the quality of existing programs would be diminished.

As to increasing fishing opportunities for LLS in "remote" areas (Item b), I assume remote refers to less accessibility than areas closer to main roads and not to less populated areas. If this is the case, then I usually think of waters containing wild fish populations rather than stocked waters, which, however, I know is not always the case. Acknowledging that I am addressing this from a biased point of view, perhaps rural rather than remote would be a more descriptive term (just an observation, not a criticism).

On the other side of the coin, "urban" areas, I assume, are within a certain distance from population centers with reasonable vehicle access. LLS waters in these areas are certainly likely candidates for stocking programs and appear to be adequately covered in existing programs. Although, I would like to see some of those oversized retired brood salmon put in the East Outlet of the Kennebec River up here just for the fun of it.

I tend to think of "Youth Programs" generally presenting an initial opportunity for younger, inexperienced kids to catch less sophisticated fish in a less challenging environment (a small pond rather than a very large lake). This being the case, I totally agree that brook trout would be a better candidate than LLS.

It's interesting to see that the primary method of meeting the objective of increasing fall fishing for LLS (Item c) in stocked waters has been to extend the closing of the season or keep it open year round. Also, that only a few new fisheries were added to the list, and that these were primarily riverine tailwaters. I would be very interested to hear if there are any data on the usage of these waters specifically beyond the former closing dates. I was also glad to see that wild salmon fisheries remained closed to fall fishing, but I assume this applies to waters containing only wild salmon and not to those with mixed populations of stocked and wild fish.

Now comes the "Hot Ticket" item and the apparent main reason for our December 5th meeting ,based on the correspondence I've seen so far * Item d : Increase fishing opportunities for "large" salmon. In trying to wrap my mind around what is a "large" salmon, I referred back to our original goals and objectives of 2001 where we stated as a goal to "increase the average size of harvested salmon to 20 inches and 3 pounds" on a statewide basis. In retrospect, this seems to be a very lofty goal, especially on a statewide basis, and probably means that a "large" salmon would have be at least 5 or 6 pounds to attain that 3 pound average.

Recognizing that the natural quality of many LLS waters in the state are not conducive to

attaining this goal, I definitely agree with the concept of limiting extensive management practices to higher quality (as they are called in the report) "Classic" salmon waters. The connotation of the term classic as applied to a LLS fishery, to me, is that a particular body of water meets a set of environmental standards that allows a quality LLS fishery to exist and thrive (as you have set out in the text under "Habitat Requirements'). I would also like to hear how and why these particular lakes were selected, how long these experimental(?) programs are scheduled to run, and the biologists' results so far from the 7 fisheries not covered in this assessment.

I would also like to hear of the relative importance of the management tools chosen for these waters which appear to be the standards covered in the text:

1. Limiting competition from other fish species for food, spawning and nursery areas
2. Limiting the number of LLS to coincide with the carrying capacity of the body of water by control of stocking and harvesting
3. Increasing where necessary or maintaining optimum smelt populations.

As usual, I have come up with more questions than recommendations (reserved for the meeting); answers should come from the regional biologists, the pros in these matters.

From Mr. Dennis Smith:

Dave

Thank you for providing the information pertaining to the State-wide objectives for the 2001 15-year species management plan for landlocked salmon.

As you know the Dept. agreed to reconvene the cold-water working group to review and update the goals and objectives of the LLS management plan as a result of legislation this past year. In addition, the Dept. is responsible for a report to the legislative committee concerning the plan update.

I've gone through the information you've provided and I have to admit that I find it a little confusing in places. In order for me to better understand the information I'd like to be able to put a face on it instead of just looking at numbers of waters, percentages, etc.

Could you please provide the following information in an excel spreadsheet?

It would be helpful if the information would include all (200) of the updated principal LLS waters:

1. The name of the water and identifying information such as watcode, town, county, and region.
2. The updated fishery type information, for example those waters maintained by wild or stocked fisheries. Also are they stocked with other species? Lake trout, splake, brook

trout . etc.

3. A column showing the status of waters open or closed to ice-fishing.
4. A column that indicates the management category listed for all waters. (In the information you provided you mention the number of waters sampled in each category, if possible those waters should be indicated in a column adjacent to the management category column with the year sampled.) I noticed that the management category numbers you referenced total 176 waters. I assume this number does not include the new principal waters (31) added since 2001. If possible, please provide this information in the spreadsheet. (All (200) waters should have a management classification.)

I hope you can provide this information without too much trouble. I assume the information you've already provided came from a database that could be easily transferred to a spreadsheet. The information would be very beneficial to those of us that don't deal with these numbers/percentages on regular bases. It would allow us to be better informed so that our participation in the working group is better served.

Thank you,

Dennis Smith

From Dr. Vaughn Anthony (SAM representative):

Dave, we have a problem. I was wondering why your "installments" to us were not matching the objectives that we agreed to on June 14, 2001!! You are using the objectives listed on page 25 of the 2004 Management Plan that you sent to us recently and not the objectives listed on page 32 and agreed to by the Cold Water Working Group!! There are differences. The date of the objectives as listed on page 32 is June 6 but my copy that I have retained all these years and have shared with the FIC of SAM is dated 6/6/01 but also "Completed 6/14/01 by D. McNeish and also includes the footnote "1" dealing with trophy fish. This is the list that the Working Group agreed to. I have never seen the material on objective 4 listed on page 25 until now!! Clearly between June 14 and March of 2004 someone changed the list that the Group agreed to!! It is the list of objectives on page 32 that includes the requirement for 18 trophy waters and the requirement for fishing quality under objective 4D that has disappeared. I remember clearly that the IDF&W (McNeish?) was very upset in the latter and I sympathized with you at the time. However, none of us agreed with the changes you have listed on page 25 under objective 4 or especially with the omission of 18 trophy waters. In fact, the group was unanimous that 10% of the principal salmon waters be trophy waters.

I can't believe that that the IDF&W would do this.
On Dec 5 it is the list on page 32 that we should discuss, not a list developed by the IDF&W after the working group meetings had ended!!
Vaughn Anthony

From Mr. John Cote (on Objective 3):

After reading over this particular assessment, I became somewhat confused with some of the terminology used in that I am not sure if certain terms are interchangeable or specific. The primary example is whether "natural reproduction" means the same as "wild production", or whether "wild production" refers only to the natural reproduction of wild fish in waters where no stocking has taken place, and "natural reproduction" can be applied to waters with wild fish, hatchery raised fish and crossovers. For my purposes until I hear otherwise, I'm going with the latter definition.

In the context of the above, then, I assume the first part of Objective 3 - "to maintain or enhance the contribution of natural reproduction to salmon fisheries" does not exclude the beginning or continuation of stocking programs if they are determined to be needed. My recollection of our discussion of this topic from 2001 is that most felt reducing the stocking of LLS wherever natural reproduction was sufficient to maintain adequate populations would result in a better quality fishery and free up the hatcheries for the stocking of other species in more needful situations. As noted from the assessment, with an increase of 3 % in fisheries maintained by this method and apparently more waters scheduled to be converted, it certainly appears this part of Objective No.3 is being met.

Again, in the context of the opening paragraph, I would assume the second part of Objective No.3 - "Provide enhanced emphasis ... to selected wild populations that will ensure adequate spawning escapement...preserve older age salmon ... Protect critical spawning and nursery habitat that support wild populations " refers only to the natural reproduction of wild fish. Again from 2001, my recollection is that we were primarily interested in not losing this highly desirable and important part of the overall LLS program. I am pleased to see from the examples shown in your recap of the projects and regulation modifications completed and in progress, that the emphasis is on improving environmental conditions and reducing or eliminating physical obstructions rather than imposing new, costly and more radical artificial changes to existing wild fisheries.

From Mr. John Cote (on Objective 4):

Harvest Opportunity Waters - One of the first things I noticed about this management category is that the average (arithmetic mean) acreage of the waters is 1591 acres, which is considerably lower than that of any of the other 3 categories. I'm assuming this is one of the factors, along with limited forage availability and possibly other species competition, in the habitat constraints contributing to their limited ability to provide "opportunity for improvement". I would also be interested in knowing what the trophic types of these waters are and whether they are all or mostly in the 72.6% oligotrophic LLS fisheries as listed in Table 19 of your publication.

The apparent favoring of brook trout management over LLS management in some of

these waters begs the question (at least to me) as to why both species are present in the same body of water in the first place, given the relatively smaller size of the average water and the inherent limiting factors mentioned above. Are these LLS populations relics, and if not, are they scheduled to become relics, with the waters then managed primarily for brook trout? Since this is a "Management Category", what specific tools and at what level of intensity (if any) are the remaining waters scheduled to be managed? If these existing LLS populations are scheduled for very low (or no) management in the future with the objective of allowing them to become relics in favor of other game fish, than I would agree with your recommendations for lower length limits and/or liberalized bag limits.

General Management Waters - This category has the largest number of lakes and ponds (95) in the total population of 176 waters and, at the average of 2580 acres, is the second lowest average size. Again, I would be interested in knowing what the trophic types are of these waters and how much of a factor this was in their selection in this particular management category.

I am confused with the wording in the characterization of these waters where they are described as "lakes where 16'-18' fish predominate, are open to ice fishing, where lake trout are present as salmon competitors, or (?) where we lack sufficient information to categorize growth and size potential". It appears to me that this is not a characteristic of the lake or pond, but rather a gap in the information gathering process. If this is the case, what are the plans to gain this information for a complete picture of the ecology of the waters? Is this lack of information the main reason there is such a large number of waters in this category making it a sort of temporary catch-all until further information is available to more accurately reclassify some waters?

Whatever the answers to these questions, this group of waters, based on the significant 62% sample you took, definitely appears to meet the objectives we set out in 2001 for "salmon that commonly range from 16' to 18' (sample - 71%) with an expectation of catching an occasional fish over 3 pounds (sample - 13%)". As asked in the assessment of the first category, I would be interested in what specific management practices are used in

Size Quality Management Waters - With 27 lakes at an average of 2827 acres, these bodies of water are the second largest in average size. This is understandable given that both Sebago Lake and Rangeley Lake are included in this management category and would tend to skew the arithmetic mean to a higher number. In spite of the fact that there only 27 lakes and ponds in this group, and realizing that Sebago Lake and Rangeley Lake are considered two of the more important fisheries in the state, it appears that this grouping probably has a higher level of management intensity than the previous two categories reviewed. This observation is also reinforced by the fact that 85% of these waters were sampled between 2003 and 2010 (the highest sampling percentage of all categories) with apparently more data available than the other categories.

Given that many waters in this grouping do not have lake trout competition and are not

open to ice fishing, they would certainly appear to have an initial advantage over many of the other waters in the state in providing quality LLS fishing. This should also provide better control in evaluating the results of stocking and harvesting regimens as outlined in your assessment on a stand alone basis. What I would like to see, however, is more information about the physical characteristics and ecology of these fisheries and the inherent variations among them given the enormous disparity in the size of these waters (123 acres to 28,771 acres).

Especially considering the size disparity of the waters in this category and all the other variables you had to take into account, the selection of the candidates for this grouping and commensurate management activities must have been both very time consuming and difficult. It would be interesting to hear your own evaluation of how the current results of fish size distribution and populations compare to the previous fish size distributions and populations before enacting current management practices. I consider your current sample results showing that 78% of these fisheries met or partially met management objectives to be very acceptable. Given that nothing stands still in nature for very long and that outside influences can drastically alter existing conditions, I would be interested in hearing more about your future plans to at least maintain the status of these waters, and which ones will be eliminated or replaced.

Special Management Waters - This management category has the smallest number of lakes and/or ponds with 23, but has the largest average at 4958 acres. Here again, it would be helpful to have the list of waters in this category to better associate a specific body of water with the characterization : "will exhibit unique and/or valuable population and fisheries characteristics". It would also be very useful to know the natural characteristics and ecology of these waters that enables them to promote and sustain these very unique fish.

Do I take it to mean that these fish populations already had the numbers of fish aged 5 and older in the percentages in your sample before management of these waters began, or that this is a result of the management programs enacted since classification? Also, I am unclear as to the meaning of "wild salmon lakes ... where adjacent waters are managed with specials" which appears in your discussion of lake characteristics in the assessment. The discussion in the assessment is primarily about the fish themselves with the only management tool discussed being "directing harvest to younger cohorts to stabilize growth ... with special minimum size limits and/or "one over" slots ... to achieve these objectives" and on only 9 of the 23 waters. Does this mean, then, that these waters will see none to low management intensity on primarily a maintenance basis? If this is the case, then I would totally agree since the old adage "If it's not broke, don't try to fix it" would certainly seem to apply here.

General Comments and Observations - It is apparent to me that you have put a lot of work into forming this management plan and that you and the other biologists have put in a lot of effort to make it work. As a member of the 2001 Cold Water Species group who participated in the basic outlining of the plan, I believe that you and the others have done a great job in fulfilling the group's objectives and recommendations and look forward to

continued quality LLS fishing as a result.

In many places in my responses to your assessments I have made reference to my desire for additional information, either printed or in discussion, and would like to follow up on this at some time in the future. Any of these requests that are available for the meeting would be appreciated but not necessarily expected. In light of staff and financing reductions that seem to be in favor in Augusta and the time required by you for this meeting, it would be unreasonable and ludicrous of me (or anyone) to expect that you have nothing better to do than cater to an individual's long personal wish list. If we have a moment during break or at lunch, maybe we can discuss this further. See you at the meeting!

From Dr. Vaughn Anthony (SAM representative):

(unable to convert Vaughn's pdf file to this format. Try the link below, or better yet refer to e-mail attachment dated 11/30/11).

[CWWG\Vaughn Anthony comments.pdf](#)

From Mr. Rod McLellan (avid salmon angler from Northern Maine):

Hi Dave!

Thanks for all the info which you have forwarded to me. Please find my comments listed below:

> Objective No. 1

The increase of lakes supported by hatchery stocks is great if the hatcheries have the capability and funding to provide the stocks. The increase of lakes supported by natural reproduction is a huge success if the performance is acceptable. It looks like a lot of good work has gone into the Table 1 summaries. I support all of the comments. Objectives C and D have received positive results with continued work in both areas.

> Objective No. 2

I think it is reasonable to maintain present fishing levels for open water and ice fishing opportunities. Increasing remote and urban fishing opportunities is great where possible. My concern is youth fishing. I think the focus for youth fishing should be trout. Rivers may be OK for youths, but salmon fishing in lakes requires fishing techniques not available to youths; consequently, trout fishing is more realistic.

Re fall fishing: For northern Maine, I don't see the interest, and I personally feel that it is harmful for the fishery. When fish are ready to spawn, I wonder how many eggs may be lost from the stress of being caught even when the fish is released. Fishing

opportunities for large salmon directly relate to smelt populations. Stream beds should not be disturbed during smelt runs, and we need to strive to improve spawning grounds for smelts. For example, forest harvest operations near streams and beaver building dams in spawning areas have a direct impact.

> Objective No . 3

To this point, it appears the results are very positive. My only comment is to continue to maintain and enhance natural reproduction.

I look forward to seeing you soon, Rod McLellan

From Mr. Dennis Bolduc:

Hello Cold Water Working Group and other interested parties,

It appears our audience is growing. I've waited patiently for Dave Boucher to return from vacation and to address Vaughn Anthony's concerns before I responded on the "Salmon Plan Objective No. 4". As I look over the information provided by Dave B, I notice during the 7 year data collecting / sampling (2003 - 2010) that alot of waters have shown definite improvements in salmon growth. As a long time salmon fisherman, I've noticed the ones that show some decline usually rebound to bigger sizes because these waters are known to have salmon cycles with good years followed by bad years, then good years again. I'm sure smelt fluctuations have a definite impact on the good and bad year outcomes. I see a lot of waters responding and showing progress to the management changes implemented so far. I assume this is what the CWWG is trying to achieve. Please correct me if I'm wrong, but I haven't heard any comments to the contrary about this project's intended goals. I would appreciate any and all other's comments about what MIF@W has accomplished or not accomplished regarding improving Maine Landlocked Salmon growths so far. Personally, I believe we are headed in the right direction and congratulate MIF@W's for their efforts in getting us there. Looking forward to seeing everyone Dec. 5th.

Sincerely,

Dennis C Bolduc

Appendix 4. Cold Water Working Group Meeting Minutes December 5, 2011, MDIFW Bangor HQ

Attendees:

CWWG Members:

Dennis Bolduc
Lance Wheaton
Don Dudley
Roddie McLellan
Dick Walthers
Vaughn Anthony
Peter Dunn
Eric Ward
John Cote
Dennis Smith

IFW staff members:

David Boucher
Francis Brautigam
Robert Van Riper
Tim Obrey
Gordon Kramer
David Basley
Greg Burr
Merry Gallagher
Jason Seiders
Russell Danner

Public members:

Peter Bourque
Ed Courtney

10:00 Introduction

Boucher: housekeeping items – reimbursement forms to attendees.
Introduction of attendees and staff.

Goal of CWWG – Assist IFW with development of LLS plan
Boucher: Discussion of recent correspondence re: plan objectives
-Discussion of slides

Objective 1 – Maintain fisheries for LLS in about 220 waters

Cote: Concerned with the term “maintain”. Would rather see more effort on the current list than adding to the list due to limited resources.

Anthony: Concern regarding changing of objectives regarding trophy waters and trophy fish. Concerned with loss of wording regarding 18 trophy waters as discussed in prior CWWG. How do we do it? Would like to go from 1.6 lbs to 3lbs.

Walthers: Should we have a trophy LLS committee? Would allow more focus on specific waters and regions. Recently caught largest LLS of his life.

Ward: Regionalization of LLS management planning may be a better way to do this.

Wheaton: Concerns with changes in shoreline development and fishing pressure and the effects on LLS fishing. Concerns with predation immediate to stocking. Perhaps a reduction in fishing opportunities in order to produce larger salmon.

-Other concerns regarding predation (cormorants, mergs, loons).

Smith: Economic concerns – bigger fish to bring in out of state anglers. Spread out availability of trophy salmon lakes.

Boucher: Should there be a marketing campaign for Maine LLS?

- Should there be concerns with adding waters to this objective?

Brautigam: Talk of expanded opportunities not creating demands on staff – put and take LLS fisheries as an example.

-Concerns regarding SLT harvesting – Long Lake as an example.

Anthony – Are SLT fluctuations caused by too many SLT's spawning (eggs too dense)?

Brautigam: Closures have been advanced where necessary with reasonable success.

Bourque: Utilizing dense populations as donor waters for lesser runs elsewhere.

Bolduc: SLT closures have been beneficial.

Wheaton: Propose study of plankton communities in lakes and ponds – forage for YOY SLT?

Kramer: Discussed observations regarding a lack of overly dense SLT spawning. LLA vs. SLT is another factor in SLT decline/fluctuation.

Walthers: Competing fish species and predatory fish species – what are the effects on SLT population?

Boucher: Discussion of zooplankton requirements for YOY SLT and how it may cause year class failures. Many variables involved in SLT population dynamics.

McLellan: Concerns regarding habitat degradation on SLT spawning habitat.

Priority – Money for SLT work (insert in Problems and Strategies; IFW Committee report).

Invasives: Maine's Federal funds are reduced due to other state's involvement. Sport Fish Restoration funds are used to purchase reclamation equipment. DEP reimbursements for invasives (weed sticker).

Smith: Limit derbies and tournaments for invasive species.

Wheaton: Stronger judges and enforcement regarding prosecuting illegal introductions. Perhaps educate the legal system on the problems of illegal introductions.

Brautigam: Discussion of limiting LLS stocking densities due to
-competing fish species
-predation by invasive fishes
-hatcheries growing larger, more expensive fish to mitigate predation

Kramer: Large amounts of staff time dedicated to dealing with invasives (Pushaw).

Bolduc: SLT forms filled out by commercial harvesters – good data?

Kramer: Problems with a lack of reliable data in SLT harvesting. How do you solve the problem of incomplete or inaccurate data?

Bourque: There has been some enforcement regarding reporting. Transportation of invasives is illegal – new law.

VanRiper: Increase in derby permits in recent years.

Group recommends no changes to Objective 1.

Objective 2 discussion.

Walthers: Question regarding providing urban and youth fisheries – are they worth it?

Boucher: MDIFW currently more focused on using BKT for youth opportunities.

McLellan: Provide youth opportunities with other species. BKT and other species provide more action for kids fishing.

Cote: Kids need to just catch something.

Dunn: Costs lots of money – drop it?

Walthers: Problem with people complaining about FFO. Should seek funding for HOF to teach fly fishing to kids.

Smith: Should strike LLS Kid Fishing areas from the objective. Problems with kids properly releasing fish. Catch-release fishing missing as opportunity objective.

Group strongly supports encouraging youth fishing efforts, but with species other than LLS (BKT, BNT). Consensus to drop “youth fishing” objective, but continue to promote/encourage youth fishing in general.

Boucher: Discussion regarding prior working group discussion on allowing fall fishing on wild fish. MDIFW has utilized hatchery fish to provide this opportunity.

Cote: Question regarding October opportunities.

Boucher: UDP October fishery as an example.

Brautigam: Fall fishing opportunities in southern Maine. High fall angling use – BKT and BNT target species (FY)

Cote: Late season access can be an issue.

Ward: Question regarding IFW comments on more fall fishing with general law regulations? Unknown??

McLellan: Concerns regarding fall fishing and increased mortality on wild fish. Fishing should halt on wild fish after September.

Boucher: Southern Maine fisheries largely stocked – fall fishing not an issue. Northern Maine is more wild fish – fishing is an issue.

Anthony: Disagreement: states that fall angling is not detrimental to wild fish. Mortality is mortality.

McLellan: Examples of problems with catch and release and fall fishing.

Smith: Why are areas open to keeping fish most of the year and then closed to fall fishing?

Anthony: Mortality is the same no matter if it's summer or fall.

Ward: If fall fishing collapsed the resource how long would it take to come back?

Boucher: Description of the CWWG's charge and how MDIFW will assess feasibility of suggestions from the group.

Ward: Concerns with impacts on sporting camps.

Boucher: River fisheries are more popular in the fall rather than lake and pond fisheries.

Wheaton: Personal experience with the negative effects of angling pressure on spawning fish. Observations at the Forest City Dam. Historically only fished LLS in May and June, now it's year round (downriggers). Overall concerns with the increase in fishing pressure. Bringing a fish up with a downrigger – does it kill the fish?

Group recommended maintaining status quo regarding allowing fall fishing on stocked populations only, and continuing to prohibit fall fishing on wild fish.

NOON – LUNCH BREAK

Objective 2 Continued

Objective 2E

Anthony: Objection to disappearance of 18 trophy waters (10% of lakes) from 2001 plan.

Boucher: Discussion of Working Group Planning process.
-Dept is final arbitrator of Working Group input.

Smith: Does IFW want to grow larger salmon?
-Some regs leading to culling issues.

Cote: What constitutes a large salmon?

Ward: Question of angling experience comes into play (ie. surroundings, etc).

Basley: Need to be able to sell the idea of trophy waters to the public.

Anthony: Need to look at growth rates and mortality to determine potential.

Burr: What numbers justify 10% trophy waters?

Anthony: References his paper to justify growth rates, etc.

Burr: Lakes must be looked at on a case by case basis. Reference Cathance Lake as to how locals refuted SAM FIC initiative.

Anthony: Need to collect more data on various aspects of LLS – mortality, predation, growth, etc.

Smith: Slot limits to grow larger salmon. Examples of various species from various states. Fin clip to study LLS harvest.

Boucher: Reminder not to focus on specific strategies. Discussion about biological objectives set up by MDIFW biologists.

Cote: 18 trophy waters is an arbitrary number.

Anthony: A few lakes need to be set aside to increase salmon growth.

Wheaton: Trophy is subjective.

-Dealing with uneducated anglers.

-Regulate hook size, made from degradable metal.

Anthony: Plastic lures a problem?

Wheaton: Go to manufacturers and demand biodegradable lures.

Anthony: SAM wishes to catch larger fish (increase 1.6-lb avg). Move more quickly in that direction.

Boucher: Keep the letter E objective?

Bolduc: Many factors involved in LLS lake status. Lakes have changed making it difficult to manage for trophy LLS. MDIFW is trying to grow larger fish.

Consensus to keep Objective 2e as is.

Objective 3 discussion

Cote: Natural reproduction and wild production – the same?

Boucher: The terms are interchangeable.

Walthers: Good growth, little pressure – consider for trophy?

McLellan: Is water quality a factor? Reference experience on East Grand with brown substance on ice fishing line.

Boucher: Reference to waters where water quality deteriorated and we lost the salmon fishery.

Anthony: Monitor zooplankton in salmon waters.

Smith: Requests examples of managing for older age salmon.

Boucher: Several examples (Aziscohos, Chain of Ponds).

Smith: If a water contains 50-50 wild stocked would fish grow bigger if stocking ceased?

Boucher/Burr: Fishery may grow larger fish, but catch rates would drop - potentially crash.

Dunn: Question regarding issues with anadromous alewives.

VanRiper: Discusses ALW vs LLA, DMR anadromous fish restoration.

Wheaton: Possible for anadromous fishes to bring diseases to inland waters?

Danner: It is possible for anadromous species to bring disease.

Wheaton: Reference to ALW stocking in Spednic and collapse of AMB fishery.

Cote: Overlap with Obj 3 and 4.

Smith: More protection needed for wild salmon.

Cote: If IFW identifies wild salmon, do we cease salmon stocking if OK?

General – Catch rates are acceptable.

Smith: Question regarding Lobster Lk salmon growth.

Obrey: Fishing pressure is very low, catch rates are low for LLS – Lobster Lk.

Basley: Square Lk may produce larger salmon in the future due to new regs.

Cote: How do we protect/enhance spawning and nursery habitat.?

Boucher: Identify passage impediments.

Consensus to keep Objective 3 as is.

Objective 4 discussion

Objective 4.1

Boucher: Description of Harvest Opportunity Waters.

- Description of LLS in Kennebago as an example.
- Waters mostly in Region's D,C,E.
- Is this an appropriate objective?

Smith: Why are some of these stocked with other species?

Boucher: To produce diverse fishing opportunities.

Boucher: Updated lists will look different because more waters will be added.

Smith: Why are the ponds stocked? Do some have wild BKT?

Boucher: Some have wild trout populations.

McLellan: If this is desirable to local fishermen then it should be supported.

Consensus: Maintain this category as is.

Objective 4.2 discussion

Boucher: Description of General Management waters.

McLellan: Are there any LLS waters without SLT that produce good salmon?

Boucher/All: None known of in Maine.

Wheaton: Any data regarding LLS fisheries before SLT were introduced?

Boucher: Original salmon waters likely had smelt due to proximity to coastal plain.

Smith: Question regarding competition from stocked LKT on LLS.

Cote: Will other LKT waters be managed like Moosehead (remove LKT)?

Boucher: Some are – depends on management goals.

Consensus – Maintain this category as is.

Objective 4.3 discussion

Boucher: Description of Size Quality Management waters.

Anthony: Of 27 waters, only a few have fish over 5 lbs. Feels that this objective is failing.

Walthers: Original goal was to catch occasional fish over 5lbs.

Smith: Are there any plans to bring failing waters up to the goal?

Anthony: This goal is not being attained.

Dunn: How is the data collected?

Boucher: Staff biologists have handled these fish; mostly fall trapnetting samples.

Smith: Are there plans to bring them up to standards?

Boucher: This is the responsibility of the regional bios.

Smith: How could regulations be changed?

Obrey: Moosehead group discusses potential management changes, regional bios are ultimately responsible for reg changes.

Brautigam: Some waters perform better/worse year to year.

Burr: Discussion of different variables in different waters that impact salmon growth.

Anthony: Not impressed with this category – should be able to get 12 or so lakes with trophy fish.

Smith: Why use general law limits? It creates 18 inch fish at best.

Anthony: Apply historic growth rates to today and there's potential.

Smith: Is it unreasonable to look at novel ideas for salmon growth?

Boucher: IFW is open to new ideas.

Cote: Have there been changes made in these waters to improve size?

Brautigam: Constant management changes are being made. Shooting for K of 0.9 to 1.0. Invasives are a major problem with SLT populations.

Danner: WHS, YLP can be commercially harvested. Dept. cannot issue permits for commercial harvest for other species.

Smith: LKT population on Schoodic Lk?

Kramer: Stopped stocking LLS for 12 years. In 2004 stocked 500 LLS – saw great growth. Catch rates are incredibly low on Schoodic Lake.

Boucher: Parker and Long had good growth initially, then tailed off.

Smith: This could be attractive to some anglers.

Wheaton: East Grand Lk – Kramer talking to Canadians re: SLT brook closure. Discussion of dealing with reduced stocking rates.

Bolduc: Discussion of SLT stocking study in Sebago.

Brautigam: Discussion of Sebago SLT study. Difficulty in getting DMR permit for SLT transfer.

Kramer: IFW does move SLT eggs routinely to bolster low populations.

Anthony: Should be stocking SLT fry.

Kramer: Unknown whether or not fry stocking works – egg transfer has worked.

Bolduc: Hydroacoustic program – where is it?

Obrey: Discussion of hydroacoustic program and how the data mirrors fall trapnetting.

Smith: Before ceasing LLS in Schoodic, how many were you stocking.

Kramer: 2000 LLS. Could not establish a SLT population without stopping LLS stocking.

Anthony: Department is understaffed and can't conduct the studies that they should.

Cote: Will the general public accept lower catch rates in exchange for larger size?

Anthony: SLT stocking can offset and allow higher stocking rate.

Dunn: Should be more smelt research, salmon size research.

Boucher: Increase research on LLS and SLT; keep Objective 4.3 as is?

Gallagher/Boucher: Discussion of Canadian SLT studies.

Walthers: Would it make sense to take a smaller number of lakes for more intense research? Form a working group to assist Dept with this goal?

Smith: Should be 50 lakes in this category. Should be a variety of opportunities, including low catch rates for bigger fish.

Consensus to maintain this category as is, but CWWG indicated their desire to intensify work on a subset of the “best” lakes in this category to further enhance ratios of fish exceeding 5 pounds. CWWG also recommended additional research on rainbow smelts to support this effort.

Objective 4.4 discussion

Boucher: Describes Special Management Waters.

Cote: Question regarding regulation clarification.

Smith: Is there an S-20 for LLS? Would it work on these waters?

Boucher: We do have some new regs (3 fish, 12") on some waters.

Cote: Would like to see this category stay separate to monitor these unique waters.

Danner: Discusses LLS broodstock. All LLS are from feral fish from West Grand.

Consensus – Maintain this category as is.

Boucher to summarize meeting and report to CWWG and IFW Committee.

Meeting adjourned at approximately 1600 hrs.