

MMB SALMON HABITAT RECOVERY UNIT

2020 Activities

Atlantic Salmon Collaborative Management Strategy

Public Meeting

April, 2021



Trapped Rivers

- Androscoggin River
 - 5 Hatchery origin
- Kennebec River
 - 0 Hatchery origin
 - 53 Naturally reared

Estimated Rivers

- Sheepscot River
 - 10 redds (14 est. adults)

ABUNDANCE

MMB SHRU Total Salmon Returns
Adult returns of Atlantic salmon from 2011 to 2020

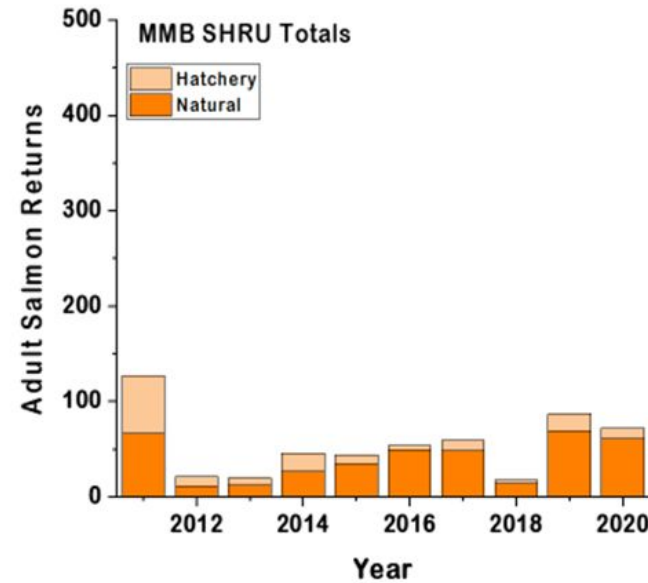


Figure. Adult returns of Atlantic salmon in the Merrymeeting Bay SHRU for the last 10 years. The Kennebec returns are indicative of adult returns upstream of the confluence with the Sebasticook (i.e. at the Lockwood fishlift).

REPLACEMENT RATE

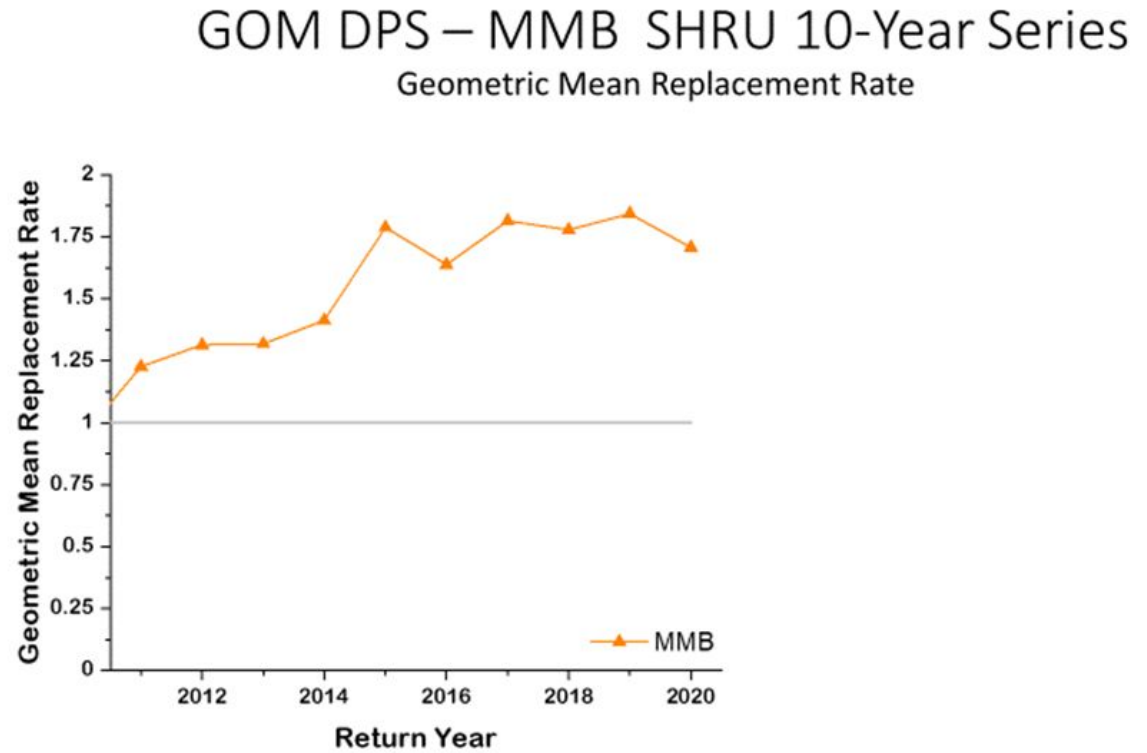


Figure. The 10 year geometric mean replacement rate (GM_R) for the Merrymeeting Bay SHRU. The rate for the 2020 return year is 1.71 with 95% CL 1.10,2.65.

SPATIAL DISTRIBUTION

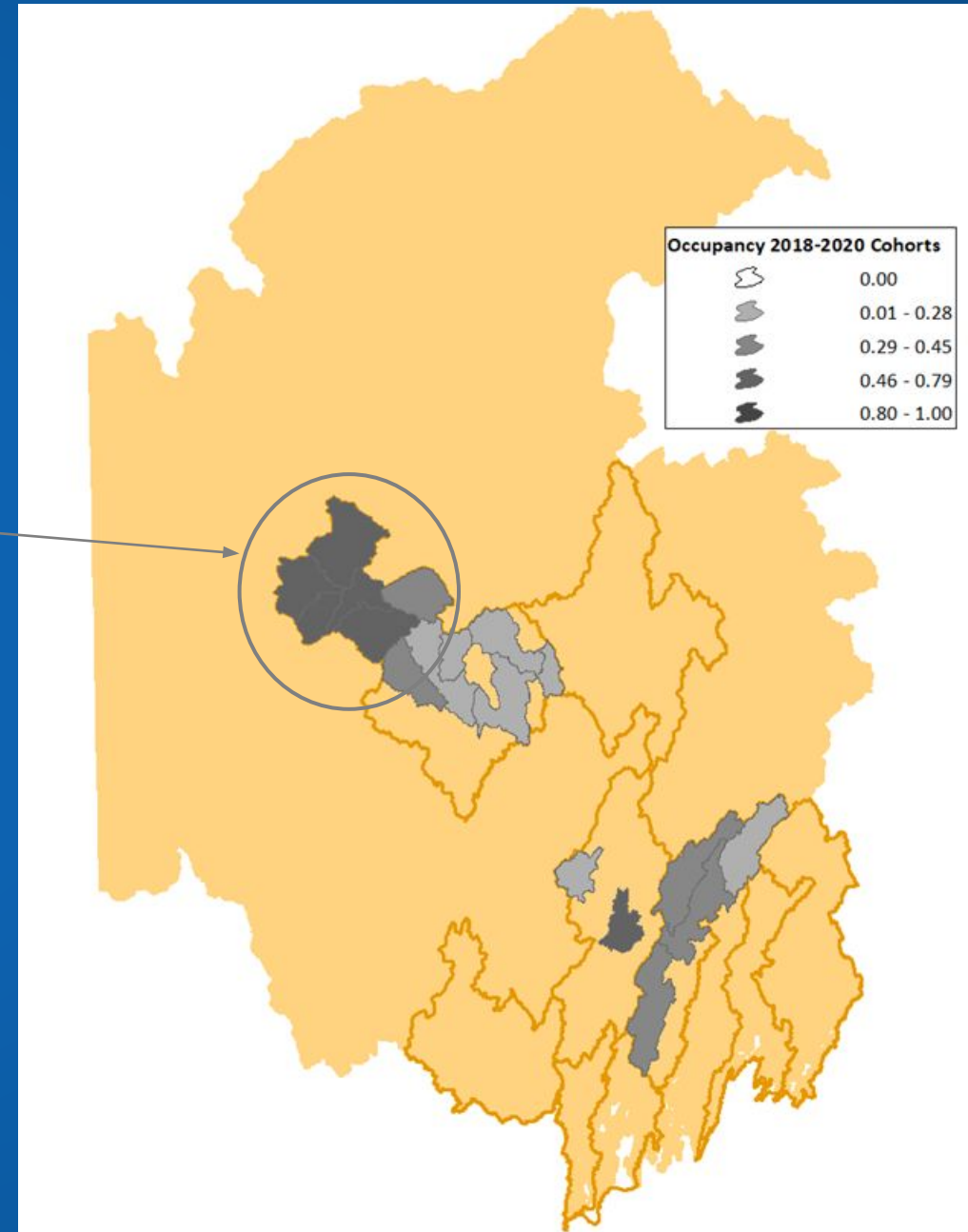
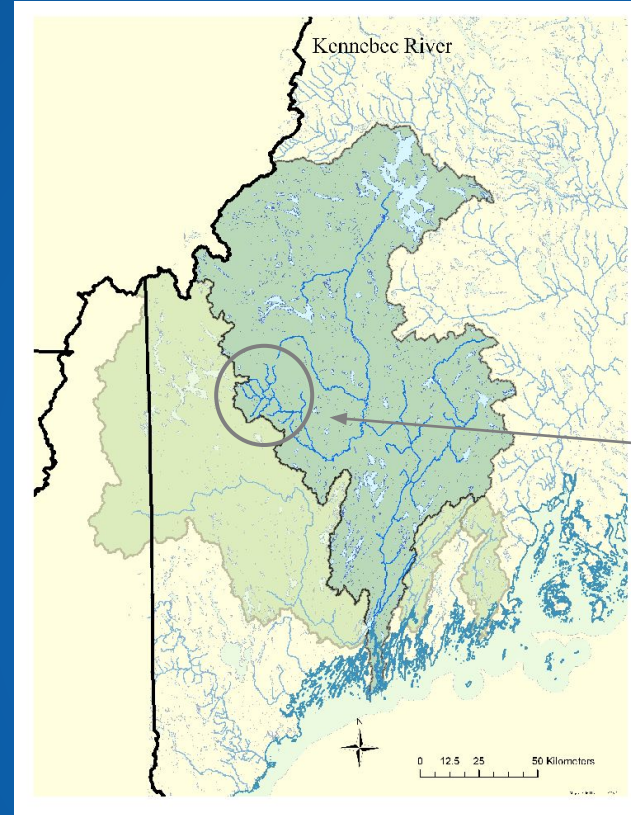


Figure. Map highlighting the relative proportion of river habitat occupied for the MMB SHRU (see figure legend) by the 2020 cohort at a HUC-12 watershed summary level. Production is a synthesis of modeled distributions from spawning surveys of Atlantic salmon in 2019, winter 2020 egg planting, and 2020 fry and parr stocking.

HABITAT ACCESS



To meet the standard of accessible habitat 1) habitat is accessible above a dam with upstream and downstream passage that does not preclude recovery, or 2) accessible above road stream crossings set at the correct elevation using the Stream Simulation methodology.

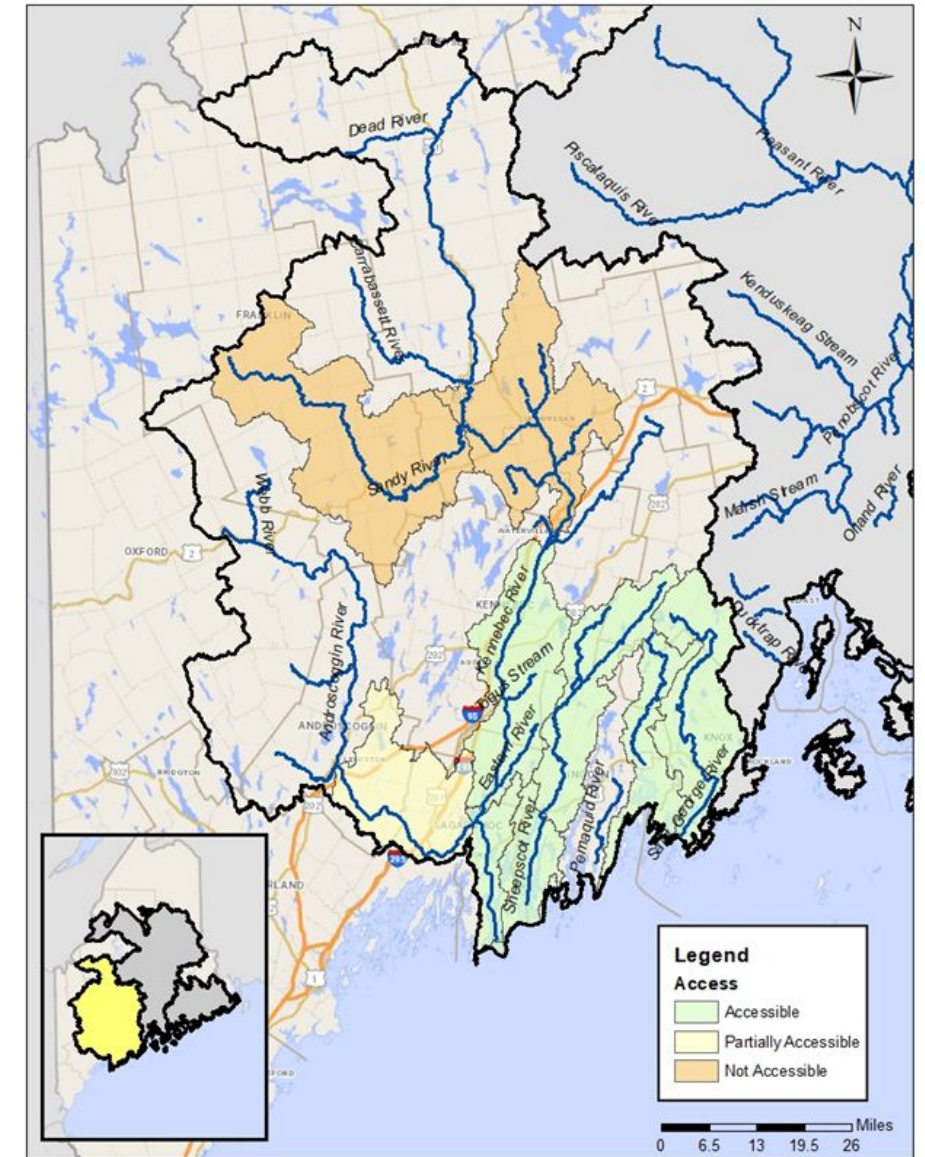


Figure 2c. Map of the MMB SHRU showing river and stream reaches accessible for anadromous fish.

RECOVERY RELATED PROJECTS



Phillips



Starks



Temple



Lower Sheepscot Parr Program

- USFWS restored the release of 0+parr into the Sheepscot River drainage.

STOCKING



Table. Atlantic salmon released in the Merrymeeting Bay SHRU

2020 Merrymeeting Bay Atlantic Salmon Released						
Drainage	Watershed	Eyed eggs	Fry	Fall Parr	Smolts	Captive Reared Adults
Kennebec	Sandy River	672,373	-	-	-	-
	Togus Stream	6,236	2,092	-	-	-
	Mainstem	-	-	-	88,753	-
Sheepscot	All	166,787	24,064	-	-	-

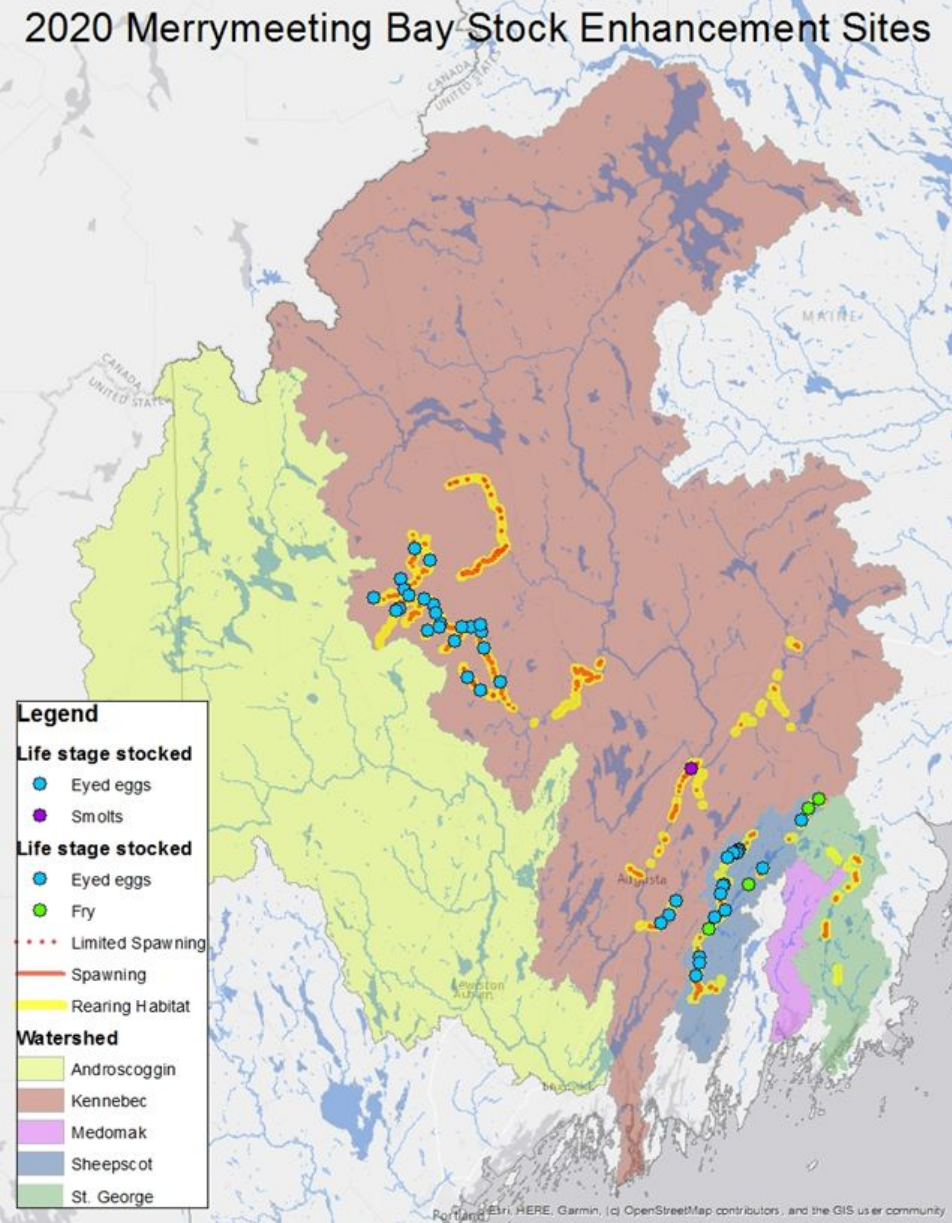


Figure. Map of stocking locations in the Merrymeeting Bay SHRU.

DIVERSITY:

Sheepscot parr-based broodstock

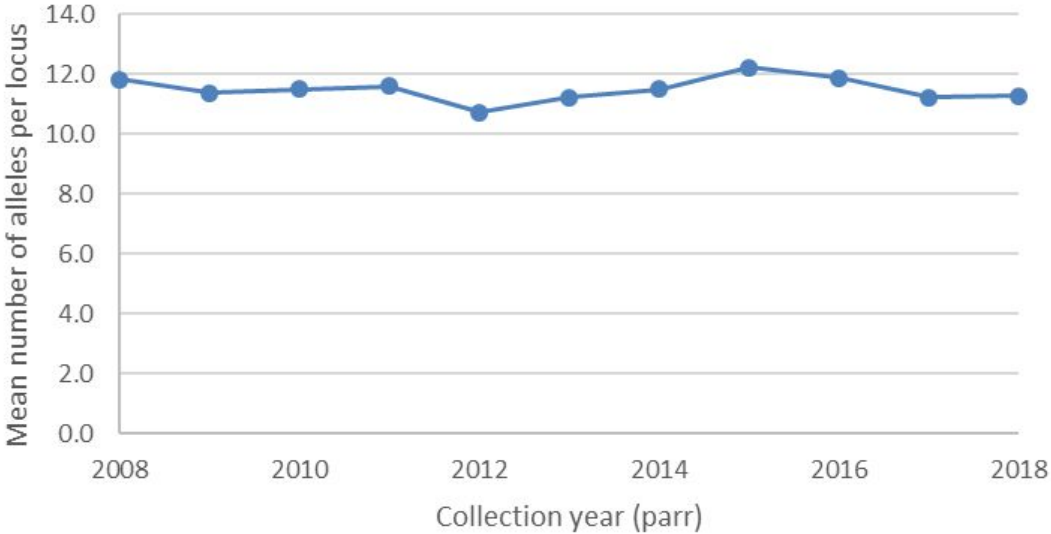


Figure. Allelic diversity in the Sheepscot River.

Table. 2020 Adult return and age class captured at traps in the MMB.

Adult Returns to the Kennebec and Androscoggin Rivers										
Total Adult Returns to the Kennebec	Hatchery					Naturally Reared / Wild				
	1SW	2SW	3SW	RPT	Total	1SW	2SW	3SW	RPT	Total
	0	0	0	0	0	4	49	0	0	53
53	0.00%	0.00%	0.00%	0.00%	0.00%	7.55%	92.45%	0.00%	0.00%	100.00%
Total Adult Returns to the Androscoggin	Hatchery					Naturally Reared / Wild				
	1SW	2SW	3SW	RPT	Total	1SW	2SW	3SW	RPT	Total
	0	3	0	0	3	0	2	0	0	2
5	0.00%	60.00%	0.00%	0.00%	60.00%	0.00%	40.00%	0.00%	0.00%	40.00%

EMERGING ISSUES AND PRIORITIES

- COVID 19 Pandemic
 - Social effects
 - Economic effects
- Maine Climate Change Action Plan
 - Strategies may present opportunities
- Kennebec Management Plan
 - Safe timely and effective passage
 - Improve chances of recovery

