

Sea to School Success



Evaluating the results of a USDA Farm to School Grant focused on increasing local seafood consumption in New England K-12 schools

Gulf of Maine Research Institute
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Introduction

From July 2020 - June 2022, the Gulf of Maine Research Institute partnered with eight school districts across New England to increase the amount of local seafood consumed in the cafeterias of K-12 schools.

Seafood represents a key opportunity for public schools that are mandated to find ways of sourcing leaner, healthy protein in response to federal nutrition standards. Seafood is rich in important nutrients like vitamins A and D and omega-3 fatty acids, all of which are important for the growth and development of kids.

Meanwhile, local fishermen from New England compete in a massive global seafood marketplace - one in which the U.S. imports between 70-90% of the seafood that we eat. Many fisheries in our region have been rebuilt and are healthy and abundant, yet many species are under-harvested due to a lack of market demand and tough competition with imports. This makes it more challenging for fishermen in our region to make a stable living from a diversified set of species.

Our goal with this project was to increase the amount of local (from New England) seafood served and consumed in school districts around New England, thus improving access to healthy, local protein for students and growing the demand for fish caught by New England fishermen. We implemented a comprehensive sea-to-school program, including efforts to improve both local seafood procurement and seafood education and engagement in schools. The results of this project and our work in collaboration with eight different districts can inform and be leveraged by others to launch successful sea-to-school programs in districts across New England and in other coastal areas of the country.

We took a multi-pronged approach to increase local seafood consumption in schools. Our three primary objectives and areas of work were:

- Objective 1: Secure pledges from schools throughout the New England region to increase the amount of seafood served in schools to a minimum of once per month.
- Objective 2: Facilitate connections and collaboration between local seafood processors and school foodservice operators to improve local seafood procurement.
- Objective 3: Provide resources to schools and pilot engagement and education strategies and tools for increasing the uptake of local seafood.

Project Design

Participating School Districts

Our target was initially large school districts in Maine, Massachusetts, New Hampshire, and Vermont, particularly those with high rates of free and reduced lunch eligibility. The original intent was to work with 10 districts and significant outreach was conducted to meet that goal in the first six months of the project (July - December 2020). However, many schools were hesitant to commit due to the unprecedented challenges resulting from the pandemic. Food service directors cited a lack of staff, staffing challenges related to COVID-19 illness, and supply chain issues exacerbating the already challenging situation. Indeed, one school that

originally agreed to the partnership was forced to back out after losing 60% of its staff in just a few days. However, we did have eight districts commit to the project, representing broad diversity in geographic location (inland and coastal, rural and urban) and size (ranging from under 1,000 students to 14,000+ students). We also prioritized districts where more than half of students are eligible for free and reduced lunch, and all but one district met that threshold. Finally, three districts have substantial racial diversity in their student populations and another three districts are significantly more racially diverse than their states as a whole.* (See table below for data).

Table 1. Partner school districts

State	School District	Student Population	Average meal Participation	Percent Free & Reduced Lunch (district-wide)	Percent of students identifying as non-white
Maine	Auburn School Department	3,382	1,700	53%	18%
	RSU 12 - Sheepscot Valley	950	750	53%	5%
	Portland Public Schools	6,795	3,398	54%	46%
Massachusetts	Chicopee Public Schools	6,850	5,500	100%	49%
	New Bedford Public Schools	14,000	8,500	100%	63%
New Hampshire	Portsmouth Public Schools	2,585	900	17%	20%
Vermont	Lamoille North Modified Unified Union	1,361	720	60%	4%
	Windham Northeast Unified School District	1,055	600	55%	10%

**According to the U.S. Census, the populations of Maine, New Hampshire, and Vermont are between 93-95% white.*

School Pledges

At the start of the project, the participating school districts set pledges, or goals, around their local seafood aspirations. The aim of these pledges was to have schools make specific, quantifiable goals to work towards, to encourage ambition through goal-setting, to help schools hold themselves accountable, and to hopefully reach accomplishments they would be proud to share with their broader school community at the end of the project. GMRI's experience working with retailers, college foodservice operators, chefs, and broadline distributors has shown us that making a public commitment to selling more local seafood results in a higher likelihood of following through. Below are the pledges that each district made:

Table 2. Local seafood pledges

State	School District	Pledge goal
ME	Auburn School Department	Serve local seafood at least once per menu cycle at each of the schools.
	RSU 12 - Sheepscot Valley	Serve local seafood once a month.
	Portland Public Schools	Serve local seafood once every 6-week menu cycle
MA	Chicopee Public Schools	Serve local seafood every other month or at least five times.
	New Bedford Public Schools	Serve local seafood once per menu cycle.
NH	Portsmouth Public Schools	Serve local seafood once a month at each of the schools.
VT	Lamoille North Modified Unified Union	Serve local seafood twice a month.
	Windham Northeast Unified School District	Serve local seafood once a month.

Local Seafood Procurement

Product Format

From early on, the school districts were focused on two product format options - either fresh or frozen fillets, or ready-to-bake products such as fish sticks and nuggets. While many seafood processors in New England offer fresh or frozen fillets of local fish, only three processors manufacture ready-to-bake local fish products that fit schools' needs. Most schools indicated that they prefer a ready-to-bake product as it requires little time or labor to prepare, versus fillets of fish, which require scratch cooking and need to be portioned, prepared, and baked. While fresh or frozen fillets are typically less expensive, most directors were initially wary of the additional staff training, cooking time, and logistics it might require.

In the spring of 2021, nearly all the districts involved chose to procure a ready-to-bake local fish product. Several had tested a ready-to-bake item from one regional seafood processor, so procurement was not perceived as an obstacle. However, over the summer (2021), the seafood supplier of this particular product shared that they were unable to continue producing their local ready-to-bake K-12 products given constraints related to the pandemic. This meant a big pivot for schools that had to find an alternative local seafood product early in the school year. Efforts across all districts were further constrained by the impacts of the COVID-19 pandemic (staffing shortages, general supply chain issues, etc.)

For schools that were solely interested in a ready-to-bake product, there were two other companies that offered a local ready-to-bake fish item. However, the procurement of these products proved to be difficult as some distributors (most school districts contract with a primary vendor) did not carry these products and were not willing or able to add these items. One broadline distributor did make some of the products available, but supply and geographic distribution limits still presented challenges. GMRI staff also talked with several smaller distributors and seafood processors to explore any options that might be accessible to the participating districts.

School Location and Procurement

The participating districts' experiences with procurement varied greatly depending on their location in the region and their accessibility to seafood processors in coastal hubs like Boston

or Portland. Below are details of the different procurement experiences faced by our partner districts, depending on their distance from coastal seafood hubs:

INLAND DISTRICTS ~2+ HOURS FROM COASTAL SEAFOOD HUBS (BOSTON/PORTLAND):

- **Chicopee, MA (western MA):** Chicopee had tried for several years to access a ready-to-bake local seafood product but could not find a nearby distributor that would make a product from the Boston area available in western Massachusetts. Through this project, they successfully convinced their meat vendor to bring on a local ready-to-bake seafood product from a Boston-based processor. On top of that success, it also meant that the seafood is now available to a much larger buying group of schools in western Massachusetts.
- **Lamoille, VT (northern VT):** This district's large broadline distributor wouldn't explore bringing on a local seafood product, citing COVID challenges and lack of demand from other schools in the area. However, Karyl Kent, the foodservice director, was determined to find a way to access local seafood for her district. After exploring every possible sourcing option with GMRI, Karyl successfully connected with a local seafood market in the area, Stowe Seafood, and they picked up the product on their weekly trips to Boston and delivered it to Lamoille. Further, Karyl has advocated to have a local Vermont distributor bring on local seafood items from Boston, to establish more opportunities for districts in her area to access local seafood.
- **Windham, VT (southern VT):** In this district, they had the same challenges as Lamoille with the same large broadline distributor. The district and GMRI tried to connect with other, smaller vendors, but the district was not on existing distribution routes for a couple of potential seafood vendors, and they were not ultimately able to procure local seafood. Their food service was extremely short-staffed (even shutting down at one point due to a lack of staff), making it difficult to focus on additional projects like this. We will continue to stay in touch with this district as they build back capacity, as we know they remain interested and committed to sourcing local seafood.

DISTRICTS ~1 HOUR FROM A COASTAL SEAFOOD HUB (PORTLAND)

- **RSU 12 - Sheepscot Valley** (regional district stretching from a midcoast Maine island to a town one hour inland) and **Auburn, ME** (one hour inland and north of Portland, ME): The primary distributor for these two districts did not have a local ready-to-bake product available and would not work to make one available. However, the foodservice directors, Mike Flynn (RSU 12) and Chris Piercey (Auburn), connected with a local program, Fishermen Feeding Mainers, which spun up during the pandemic to pay fishermen for their catch when other markets had disappeared. The fish is then donated to the food bank system and schools in Maine. This fish was available in fresh and frozen fillets and required driving 2 hours round trip to Portland to pick it up. Mike trained his staff to be experts at quickly and efficiently preparing fillets, ultimately being able to prepare 100 pounds of fish in 30 minutes. Chris and his staff initially thought they would not have the capacity to work with fresh fillets but took on the challenge and quickly realized that their staff was more than capable of preparing fillets. Having access to ready-to-bake products would have made it feasible to serve even more local seafood more regularly, but Auburn

still served seafood once per month at the high school level and several times at other schools. At RSU 12, they accomplished serving local seafood twice a month, and Mike has continued to train other districts on how to efficiently prepare fillets.

DISTRICTS ON THE COAST AND ON MAJOR DISTRIBUTION ROUTES

- Portland, ME:** Portland was able to access a local ready-to-bake item periodically from their broadline distributor, although there were supply and availability challenges throughout the year. The district also took advantage of the Fishermen Feeding Mainers program, although they prefer a ready-to-bake item given the logistics of working with a central kitchen.
- Portsmouth, NH:** This district was one that was prepared to source the local ready-to-bake item that became unavailable because of the pandemic. They did get access through their distributor to another option and served it a few times, but had major staffing challenges due to the pandemic, making it difficult to put time into this work when they were just trying to survive.
- New Bedford, MA:** New Bedford is part of the Metropolitan Area Planning Council (MAPC) in the greater Boston area, which involves collective purchasing for local food procurement and has contracts with two Boston-area seafood processors, including one that offers local ready-to-bake items.

Volume and Value of Local Seafood Purchases

The table below shows the volume and value of local seafood that each district purchased.

Table 3. Total local seafood volume and value

State	School District	Local Fish Pre-project (pounds/year)	Local Fish Post-project (pounds/year)	Value	Menu frequency
ME	Auburn School Department	0	460 lbs	FFM (donated/~\$2 per lb to fishermen, or ~\$920)	1x/month (HS) 4x/year (MS) 1x/year (elem)
	RSU 12 - Sheepscot Valley	0	1,400 lbs	FFM (donated/~\$2800 to fishermen)	2x/month
	Portland Public Schools	0	400 lbs	\$892 (plus FFM donated fish/~\$520 to fishermen)	1x/month (HS); 2x/year (elem)
MA	Chicopee Public Schools	1,500 lbs	3,430 lbs	\$19,990	5x/year
	New Bedford Public Schools	0	4,044 lbs	\$22,241	3x/year
NH	Portsmouth Public Schools	100	150 lbs	\$955	2x/year

VT	Lamoille North Modified Unified Union	155 lbs	1,070 lbs	\$6311	3x/month
	Windham Northeast Unified School District	0	0	n/a	0
	Totals	1,755 lbs	10,954 lbs	\$54,629	

School Pledge Success

Procurement during the past two school years has been challenging due to various pandemic-related issues, and despite this, the school districts involved made extraordinary efforts to source local seafood in working towards their pledged goals. While not every school district was able to reach the goal they originally set, the pledges had a positive impact in providing goals to aspire to and a benchmark that the schools will continue to work towards, maintain, or exceed. Their work also had the very tangible impact of purchasing nearly 11,000 pounds of local seafood and putting nearly \$55,000 in value back into the local seafood economy. When they made their original pledges in 2020, there were a lot of unknowns about how long staffing challenges would continue and how supply chains would be impacted. Perhaps the greatest accomplishment is that every district received a positive response from students and is interested in continuing this work. See below for more details of their achievements despite the many challenges of the past two years.

Table 4. Seafood Pledge Success

State	School District	Local seafood pledge	Actual menu frequency	Pledge success
ME	Auburn School Department	Once/menu cycle at all schools	1x/month (HS) 4x/year (MS) 1x/year (elementary)	Goal achieved at high school and middle schools. Early procurement challenges, plus barriers at the middle and elementary level due to lack of kitchen space/capacity, prevented fully meeting the goal across all schools, but it was a huge success that staff learned to prepare fresh fillets.
	RSU 12 - Sheepscot Valley	Once/month	2x/month	Goal exceeded by double, serving twice/month instead of once.
	Portland Public Schools	Once every 6-week menu cycle	1x/month (HS); 2x/year (elem)	Goal achieved at the high school level. While they had access to a ready-to-bake item, the supply varied in availability throughout the year.
MA	Chicopee Public Schools	Once every other month	5x/year	Goal achieved: Served 5 times (once every other month)
	New Bedford Public Schools	Once/menu cycle	3x/year	Served seafood district-wide once, an additional two times at the middle school and an additional one time at the elementary schools. Delayed in serving seafood due to ongoing kitchen renovations at some schools, plus staffing shortages that made it difficult for them to do additional projects.

NH	Portsmouth Public Schools	Once/month	2x/year	Extremely difficult staffing issues meant they were just trying to survive. Served seafood once district wide and a second time at the middle schools, not quite achieving their goal, but still tested new products and interested in expanding once better staffed.
VT	Lamoille North Modified Unified Union	Twice/month	3x/month	Goal exceeded, serving three times/month instead of twice/month.
	Windham Northeast Unified School District	Once/month	0	Did not meet goal - could not procure local seafood from available vendors. They experienced extreme staffing shortages and didn't have additional time for this project.

Key Procurement Takeaways

- Having school nutrition staff (especially directors) who are champions for local food, and seafood specifically, makes a critical difference. For many schools, serving local seafood brings with it more challenges than other types of local food - for example, it's different from replacing a frequently served, familiar food like apples with local apples. Rather, schools might be introducing seafood to some students for the first time or staff might be preparing it for the first time. It's extremely valuable and results in a much greater chance of success when the school nutrition director sees the value and benefits of serving local seafood and sparks the same enthusiasm in their staff.
- Sourcing local seafood in New England is more challenging for schools that are further away from coastal seafood hubs where processors are located and/or schools that are more rural and not on major distribution corridors.
- While there is some availability of local seafood from broadline distributors, it is inconsistent across the region. If a school district's broadline distributor or primary vendor does not already source local seafood, that is a significant hurdle for inland districts that do not have the time or capacity to search for and set up other, new vendors.
- School kitchen staff might be nervous to prepare and cook fresh seafood, but with some training, this is a hurdle that can be easily overcome for those districts or schools that have scratch cooking capacity.
- Price is a key barrier, unsurprisingly, for school districts in procuring a protein like seafood. However, there are affordable options available - but the price can limit how frequently a district is able to source the product.

Future Opportunities to Increase Procurement

- As a result of this project, GMRI staff now understand the landscape across New England of vendors offering local ready-to-bake seafood products that work for K-12 schools, as well as opportunities to purchase fresh seafood. After exploring many sourcing and distribution options for different parts of the region, we are well-

equipped to advise other schools of the options available and how to approach this with their vendors.

- Broadline distributors play an important role in more inland and rural areas in making ready-to-bake and fresh or frozen local seafood products available to K-12 schools, but they need a certain level of demand to make these products available. We plan to leverage the knowledge and resources developed during this project to engage more schools in the future and build on the demand this project established.
- The Fishermen Feeding Mainers program was a great risk-free opportunity, at no cost to the schools, to test out the capacity to cook fresh seafood. While a charitable program is not a long-term solution for sourcing local seafood, it has demonstrated the benefit of giving schools fresh seafood for free to learn how to prepare it, as well as introduce it to students. It has empowered the schools that participated to realize their capacity for cooking and serving seafood, which is an important foundation in building confidence and demand. In future efforts, we would provide schools with substantial seafood samples to test out cooking and serving it, risk-free.
- A powerful way to continue building comfort with cooking local seafood and to develop more local seafood champions is to conduct foodservice staff trainings around the region. We will seek out opportunities to do this in partnership with some of the school nutrition staff from the districts involved in this project. We want to empower more school foodservice staff with the knowledge of how to cook a variety of seafood recipes and why serving local seafood has a positive impact on both kids and coastal communities.

Education, Engagement, and Resources

Procurement and putting local seafood on the menu are the first steps but working to encourage students to choose seafood in the cafeteria and achieving good uptake are also critical. We know that the three C's are the gold standard in farm-to-school work (cafeteria - classroom - community) and that making a connection in the classroom is important for buy-in and participation in the cafeteria. We worked with a subset of our school district partners on strategies to build awareness and excitement around the local seafood being served, including pilot activities in the classroom with teachers and taste test events in the cafeteria. We also developed a comprehensive resource hub of sea-to-school recipes and educational materials, as well as a vibrant set of signage focused on highlighting the health, climate, and community benefits of choosing local seafood.

Classroom Engagement

It was exceedingly difficult to engage with teachers, given the additional stressors of the pandemic (staffing shortages, burnout, etc.) We contacted more than 70 teachers across three districts and successfully made connections with Matt Turgeon in Chicopee, MA, and Todd Chretien, Annie McIntire, and Erin Towns in Auburn, ME.

Matt Turgeon is a STEM (Science, Technology, Engineering, and Math) Teacher at Fairview Elementary School in Chicopee, MA. We worked with Matt to provide him with a Gulf of Maine food web game for his class, which gave them an engaging and interactive way to learn about the food chain in our ocean ecosystem. This food web game came from GMRI's education team, who typically work with teachers on science and climate literacy. The game taught students about ocean food chains from the smallest organisms like plankton up to the

fish students were eating in the cafeteria like haddock or pollock. As Matt reported, "It was awesome! The kids really loved that they were actually having the opportunity to eat one of the things in the game. I will definitely be using it in the future as well."

In Auburn, we connected with Todd Chretien (Spanish teacher), Annie McIntire (English), and Erin Towns (Ecology), all of whom are at Auburn High School. GMRI staff gave a local seafood presentation to the classes of these three teachers on the same day when a taste test event was happening in the cafeteria. From Todd Chretien, "Everyone was very happy to have you here for the day and I think we changed a lot of opinions about Local Fish Day."

We also conducted a survey of students in Todd's class before they experienced the taste test in the cafeteria. Of the 25 students who took the survey, nearly 70% said they love (36%) or like (32%) fish in general, yet more than half (56%) never choose fish when it is offered in the cafeteria. This disconnect points to a huge opportunity to build buy-in among students for eating seafood in the cafeteria. Further, a third of students surveyed said sustainability always (21%) or usually (12%) impacts their decision to eat seafood and more than a third of students reported that local always (16%) or usually (20%) impacts their decision to eat seafood. These results demonstrate the opportunity to build awareness with students about the local and sustainable attributes and stories of the seafood being served. The students also gave open-ended feedback about what would make them eat more seafood in the cafeteria. The most common responses were more flavorful preparations and varied recipes, including healthy options, as well as good quality fish. This is all valuable feedback for school nutrition staff.

The students were also surveyed later in the day after the taste test in the cafeteria. Of those that tried the samples and were asked to rate their reaction on a 3-point scale, two-thirds "loved it" and one-third thought "it was okay" - no one said they "did not like it." About half of the respondents chose the fish option as their meal, too, and shared some of the following: "I love seafood, and have never tried the type of fish that was present. I just wish I could have more, it was wonderful!" and "I love local food, especially seafood." Of those that didn't choose seafood, two-thirds preferred the other menu option (pizza) and one-third brought their own lunch. Two-thirds of respondents didn't know that the fish in the cafeteria was local before the taste test event, and half of them reported that knowing the fish is local will make them "very likely" or "likely" to choose the fish next time. Additionally, 80% reported that the presentation from GMRI made them "very" or "moderately" likely to try more seafood.

These classroom-based efforts demonstrate the wide range of opportunities to engage around seafood with different age ranges. We will continue to seek out opportunities to develop more classroom activities and curricula around local seafood in the future.

Taste Tests

Taste tests and opportunities to try seafood are extremely important for success in student participation, especially given the stigma that both students and foodservice staff sometimes have about seafood in a cafeteria setting. We conducted tabling events and taste tests in four of the participating school districts, and students overwhelmingly enjoyed the seafood. We sometimes hear skepticism from foodservice staff about whether students will choose seafood if given the option, and the results of the taste tests are important evidence for staff that seafood can receive a very positive response. Also, some students are skeptical of seafood served in a cafeteria. The taste tests gave them a risk-free chance to try it before

committing to a seafood entrée, which typically resulted in a realization that the seafood was much better than anticipated. We did make an effort to bring fishermen to these events, but it was challenging timing and especially difficult to ask fishermen to take multiple days off to travel overnight to inland districts. Instead, GMRI and district staff set up interactive table displays, and GMRI staff shared the impact on fishing communities with students. Below are the results of surveys conducted at taste test events we held in the 2021-22 school year, providing evidence that the majority of students across all schools and age ranges loved the seafood they tried.

Table 5. Taste Test Survey Results

School	Loved it	It was okay	Not for me
Auburn Middle School (ME)	83%	10%	7%
Auburn High School (ME)	72%	22%	6%
Ocean Elementary School - Portland (ME)	70%	23%	7%
Rowe Elementary School - Portland (ME)	71%	18%	11%
Johnson Elementary School - Lamoille (VT)	79%	15%	6%
Hyde Park Elementary School - Lamoille (VT)	76%		
Fairview Elementary School - Chicopee (MA)	83%	12%	5%
Average:	76%	17%	7%

Resource Hub

We developed a comprehensive online resource hub for sea-to-school programs using a Google drive (visit: www.gmri.org/seatoschool), which has received more than 500-page visits. The resource hub includes sections for teachers/staff/parents and for foodservice staff. We did a deep search for seafood recipes specifically formatted for K-12 and gathered 50 recipes from around the country. The recipes are shared as pdf documents in the hub to avoid the issue of links becoming outdated over time. Similarly, we combed the country for any sea-to-school curriculum or classroom activities and have gathered close to 40 resources in the hub. We believe this is the most comprehensive resource on sea-to-school work nationwide and will continue to look for opportunities to add to it and to share it broadly.

The participating districts reported that the resource hub was very useful, particularly having a recipe library in a central location. They highlighted that more information on how to work with local seafood (food safety, food handling, etc.) would be helpful. Most of the classroom activities and curriculum are not focused on the New England region and teachers reported that it was hard to find the time to adapt lessons to be New England-specific. While we were challenged to engage with more than a couple of teachers due to their lack of capacity, we will continue to seek further funding to do more comprehensive curriculum development around local seafood specifically from New England.

Promotional Signage

We also wanted to provide schools with materials and signage to build student awareness of the efforts to serve local seafood and its benefits for students. We developed a set of three posters - one focused on local seafood as a climate-friendly choice, one focused on the health benefits in student-friendly language, and one focused on local sourcing and its impact on communities. We also created a table tent using the same messaging and used the imagery and language to create social media posts for the school districts to use. Finally,

some schools have digital menu boards and we provided digital versions of the posters formatted to the menu boards. We also produced a series of fish stickers to hand out at the taste test events and to engage students in learning about the different species being served. The signage was very well received. Student engagement with the signage in their cafeterias varied by age group, with younger, elementary students paying more attention than older, high school students. At least three districts reported that students noticed and commented on the posters and demonstrated that they were more informed and/or interested because of the signage. Other districts could not pinpoint whether the signage had a direct impact on students' choosing seafood but believed the opportunity to provide some education was important. All of this signage is designed to be relevant for years to come and we will have the digital files available to any schools that are interested. We have already received requests to use the signage from other schools outside of the participating districts.

Seafood Awards and Communications

In addition to the taste test events, classroom activities, and signage, we worked to share the stories of the participating districts and to give them tools to share their stories within their districts. Below are the communications methods we used:

- GMRI designed a one-pager (using similar imagery from the cafeteria signage) for food service staff to share their efforts to source local and why it matters with other school staff, administrators, and parents.
- School nutrition staff across the districts also shared their efforts to source local seafood in their internal newsletters and on social media.
- GMRI presented each school with a Seafood Spirit Award at the end of the 2021-22 school year, to recognize their accomplishments. Hard copy awards were mailed to each district to hang in their cafeterias, further raising awareness among their school communities of their local seafood work.
- We worked to earn local press (<https://www.sunjournal.com/2022/06/28/new-seafood-options-in-auburn-schools-make-a-splash/>) and also published stories on GMRI's website, social media channels, and through GMRI's Tidings newsletter, which has an audience of more than 20,000 people (<https://gmri.org/stories/sea-to-school-project-brings-local-fish-to-k-12-cafeterias/> and <https://gmri.org/stories/public-schools-serving-local-seafood/>)
- GMRI staff presented our work on this project at the Massachusetts Farm to School conference (with co-presenters from two of the district partners, Chicopee and RSU 12), the inaugural Maine Farm and Sea to School Institute, and the Maine School Nutrition Association conference (as part of a session led by Mike Flynn from RSU 12). We also presented as part of the 2022 USDA Farm to School Grant Program Webinar Series in May 2022.
- Mike Flynn, foodservice director from RSU 12 in Maine was contacted by the U.S. Government Accountability Office during an audit they were conducting of the USDA's commodity purchasing and use of local food in the National School Lunch program. GMRI staff were also invited to the conversation, and we spoke to them about opportunities for more commodity purchasing of local seafood in New England.
- GMRI staff were tapped to partner with the Maine State Library system as they developed summer programming and materials around the theme "Oceans of Possibilities," being used by libraries across the country over summer 2022. Despite

our project having ended in June 2022, we were able to leverage the imagery and language developed for signage in this project to create a poster for libraries to use to highlight the importance of choosing local seafood. This is a great complementary partnership and a way to continue sharing our message out to parents and students. (<https://gmri.org/projects/oceans-of-possibilities/>)

We will continue to seek out opportunities to share what we learned with other school districts through conferences, webinars, press, and social media. For example, GMRI staff will present a virtual one-hour workshop in November 2022 as part of a workshop series hosted by Vermont FEED for their Northeast Farm to School Institute. Karyl Kent, school nutrition director at Lamoille North in Vermont, will partner with us on that workshop, as will the Maine Farm and Sea to School Network.

Sea to School Success

It is an understatement to say that the COVID-19 pandemic had significant impacts on our project. Every school district we worked with was impacted, dealing with supply chain disruptions (shortages, delays, lack of staff at every level of the supply chain from factory to truck drivers), staffing shortages with positions staying open for months, staff burnout, and loss (often leaving school nutrition directors to step in and work even more overtime), staff absences due to covid infection, and more. There was an extreme lack of time and capacity for schools everywhere, and many of them were struggling just to get food in front of the kids.

Despite these immense challenges, the districts that worked with us on this project achieved an amazing set of accomplishments and established models of how to lead sea-to-school programs for other schools to learn from.

- We actively engaged on procurement and established new opportunities to source local seafood, not just for the participating districts, but paving the way for other districts to now access local seafood, too.
- We promoted their work to students, to staff and administrators in their schools, and to their own nutrition staff, building critical support and buy-in for a local product that sometimes receives deep skepticism in a school cafeteria.
- Nutrition staff connected us to teachers at the elementary and high school levels to test out different ways to engage students of various ages, laying the groundwork for more classroom connections in the future.
- We dispelled myths about kids not liking seafood and provided evidence through taste test events that kids, in fact, overwhelmingly love seafood when given the chance to try it.
- These districts purchased and served nearly 11,000 pounds of local seafood and put nearly \$55,000 in value back into the local seafood economy.

We now have a comprehensive set of resources for any school district in New England to use if they are interested in setting up a sea-to-school program and we reached our overarching goal of increasing local seafood consumption in K-12 schools. We see this as incredible groundwork for continuing to make local seafood available to kids and to help build demand for what fishermen and sea farmers are harvesting from New England's waters. We look

forward to working with more schools in the coming years to expand upon these resources and to further increase local seafood consumption in schools across the region.