



CITY OF NEW BEDFORD

JONATHAN F. MITCHELL, MAYOR

May 24, 2022

Thomas A. Nies, Executive Director
New England Fishery Management Council
50 Water Street, Mill #2
Newburyport, MA 01950

RE: Atlantic Sea Scallop Limited Access Leasing

Dear Director Nies:

I write to provide comments regarding Atlantic Scallop Limited Access Leasing in conjunction with the scoping sessions being conducted by the New England Fisheries Management Council in New Bedford.

The Council's decision-making in this matter could not be more potentially consequential to the Port of New Bedford, as the scallop-related enterprises within the Port are performing well within the existing regulatory structures, and scallop-related enterprises (both vessels and shoreside operations) account for the overwhelming share of the Port's landed value and economic output. It is therefore imperative that the past and present success of the industry is weighed carefully by the Council before any consideration is given to changing the management policies which have been so integral to the Port's and the scallop industry's success.

As you know, the Port of New Bedford is the most valuable commercial fishing port in the United States. This success, again, is due in large part to the profitability of the scallop industry. The Port is home to roughly 7,000 workers and 400+ fishing vessels. Its complexity and scale are unparalleled on the U.S. East. Local shoreside businesses thrive from providing support services to the fleet, and the port continues modernize its operations and infrastructure. Our goal is to maintain New Bedford's overwhelming leadership position and maximize the Port's potential as an economic engine for the state and region.

It is with this in mind that I encourage the Council to focus its attention on reforms that have the most potential to deliver broad, tangible, quantifiable benefits across the commercial fishing industry, and refrain from an investment of the Council's time and resources on proposals with uncertain impacts and potential benefits likely to accrue to narrow interests. The policy changes which would allow for Atlantic Scallop Limited Access Leasing is one such concept that should warrant deep skepticism from the Council--as how it will affect, over the long-run, each owner, crew, and port stakeholder is essential unknowable.

On the other hand, we do know that the current performance of the fishing industry, especially the scallop-related enterprises, rests on a solid management foundation—not perfect in all respects, but solid nonetheless. The scale and profile of the scallop industry has come to help shape and define the Port of New Bedford, and has supported consistent growth along the waterfront and delivered positive economic and social benefits extending far beyond the docks.

New Bedford is the full-service port that it is today—with a robust array of warehouses, ice houses, shipyards, engineering firms, workboats, pilots, mechanics, brokerages, insurers, distributors, and others—because of a policy-making process that has worked for the good of all, rather than the advantage of some. The central question before the Council today is then: “Do we need to change something that is already working?” The burden of an affirmative answer rests with proponents, and yet there are multiple, obvious weaknesses to their argument:

- Evidence of a reduction in the carbon footprint is lacking;
- There is a failure to mention reduced crew share of catch by passing on the cost of leasing to the crew (similar to what has happened in some portion of the groundfish sector);
- Not addressed is the potential shifting of efforts to other species by vessels that own multiple permits. A vessel could lease the scallop permit but increase effort on other species such as squid, groundfish;
- Not addressed is the consolidation of ownership of quota that will result in excess market power and market control;
- Not addressed is the likelihood of reduce employment in the industry due to vertical integration and reduction in number of vessels.

Given the many evidentiary gaps, the Port of New Bedford itself commissioned the attached independent study/survey titled “Perspectives on Leasing and Stacking Proposal” conducted by Daniel Georgianna, PhD, Chancellor Professor Emeritus at the School for Marine Science and Technology at UMASS Dartmouth. Although the result of the survey suggests that a “leasing” program within the scallop fleet would give multi-vessel owners more flexibility to use their vessels efficiently, many other issues were also found to arise that could negatively affect the scallop fishery.

Of particular importance, the survey concludes that effective control over the fishery by a smaller number of larger-scale vessels owners would arise as permits and revenues became concentrated among the larger fleet owners. The result would be undue influence over the fishery and its infrastructure.

Furthermore, these larger fleet owners, by exercising their buying power, could obstruct smaller fleet owners from critical shoreside services. Single vessels owners not associated with a larger vertically integrated scallop fishery and processing could also suffer lower ex-vessel prices. Crew income could similarly suffer as larger fleet owners gained increased bargaining power over crew and shoreside suppliers, and this could lead to a wage-based system.

It is safe to say that, at the very least, that there will be a loss of trust and cooperation within the fishing community. Indeed, we have seen evidence of that emerging discord and division during the scoping sessions that have already taken place. To my mind, opponents have been vociferously critical because they have astutely recognized the fundamental inequity that lies at the heart of the proposal: There is no denying that there will be costs and impacts associated with the leasing program. But those costs and impacts will not fall equally; they will fall disproportionately onto individual boat owners who do not consolidate. The playing field will be tilted on day one, perhaps irrevocably so, and the transformation of the scallop fishery from a “community fishery” to a “corporate fishery” may become all but inevitable.

I am deeply concerned by this potential outcome, and I would argue that the Council should be as well. For one, an outcome that has the effect of corporatizing the scallop fishery runs counter to years of Congressional oversight and guidance. By way of example, I would ask the Council members to consider the remarks of then Maine Senator Olympia Snowe in 2003 before the Senate Subcommittee on Oceans, Fisheries and Coast Guard. Senator Snow spoke to the importance of National Standard 8 when implementing the Magnuson-Stevens Act:

“Second and critically, National Standard 8 states that managers shall take into account the importance of fishery resources to fishing communities in order to provide for the sustained participation of such communities and, to the extent practicable, minimize adverse economic impacts on such communities. Again, in Amendment 13 the agency has offered little more than a minimal cursory assessment of how stock size relates to landings and income... This is far from what Congress intended. To the contrary, we directed fishery managers to recognize that their actions impact the livelihoods of an untold number of fishermen. We intended for managers to fully identify and analyze the effects of regulations on the social fabric of communities and then to factor that information into their management approach, so that fishing-dependent businesses in small coastal communities would not be unnecessarily harmed by Federal fisheries management.”

Although Senator Snowe offered her concerns regarding NMFS handling of the issue of stock assessments, I would argue that her sentiments are as valid today as then, and the Council would be well served by applying them to the matter at issue today.

As the most valuable fishing port in the nation, New Bedford has, without a doubt, more at stake in this matter than any community in the nation. The Council’s decision will reverberate across the waterfront and into the homes and businesses of our residents, impacting tens of thousands of lives in ways large and small. I trust then that Council will fairly consider all comments and views regarding this important topic and reach a reasonable conclusion that is received with broad consensus. Indeed, achieving consensus is the only sustainable path forward. In the absence of broad consensus, the Council risks not only a harmful division among fishing interests but puts in jeopardy its own role as a fact-based, arbiter that acts to advance the broad public good.

That said, I am hopeful that the Council will decline to proceed with the proposal before it, based on the vigorous opposition presented by New Bedford stakeholders and the Council's own record of incorporating stakeholder feedback into its deliberations. Thank you for this opportunity to share my thoughts with the Council.

Sincerely,



Jon Mitchell
Mayor, City of New Bedford
Chairman, New Bedford Port Authority

ATTACHMENT: *Perspectives on Leasing and Stacking Proposal*

Perspectives on Leasing in the LA Sea Scallop Fishery

Discussion Document for The New Bedford Port Authority



prepared by:

Daniel Georgianna, PhD

Alex Georgianna, MBA MSc

May 19, 2022

Executive Summary

The Scallopers Campaign, representing some of the scallop fishery's fleet owners, has requested that the Scallop Fishery Management Plan (the FMP) allow leasing of Limited Access (LA) permitted fishing rights (including trips within restricted areas (AA Trips) with possession limits and additional days-at-sea (DAS) outside of such areas) between LA vessels. Other stakeholders question the benefit to fishermen, boat owners, shoreside services and others from leasing.

In the first several months of 2022, we interviewed vessel owners, captains and crew, government officials, academics, and a wide variety of shoreside business owners on an anonymous basis to better advise the Port of New Bedford. These individuals reflect interests from across the fishery and form a reasonably broad panel of perspectives. We also reviewed the scoping document produced by the New England Management Fishery Council (the Council), other published data on the scallop fishery, and academic literature on transferable quota systems in other fisheries.

To simplify terminology, we defined:

- Transfer to mean the annual or permanent transfer of AA trips and/or DAS between vessels within a single owner's fleet,
- Leasing to mean the annual or permanent transfer of AA trips and/or DAS between separate fleet owners.

Conclusions.

- The LA scallop fishery has been both successful and stable. Major changes in the structure of this successful and stable fishery may cause unintended harmful effects.
- Northern Economics' potential benefits of leasing in the LA scallop fishery identifies cost savings of less than 3% of the fishery's annual catch value. Of that total, nearly all comes from the permanent retirement of 114 vessels.
- Transferring fishing rights among vessels within the fleet of a single owner would give that owner more flexibility to use their vessels efficiently with fewer harmful effects than leasing.
- As experienced in other fisheries, the regulations and enforcement of leasing between owners typically results in more complex regulation.
- Unless the cost of a lease is entirely born by the boat owner, leasing between owners will result in a net transfer of income from crew to owners.
- It is not apparent how a 5% limit on fishing rights could be enforced when AA Trips or DAS can be leased between owners.
- Leasing may encourage high-grading and other destructive fishing practices as owners and crew seek more revenue to pay for their leasing costs.

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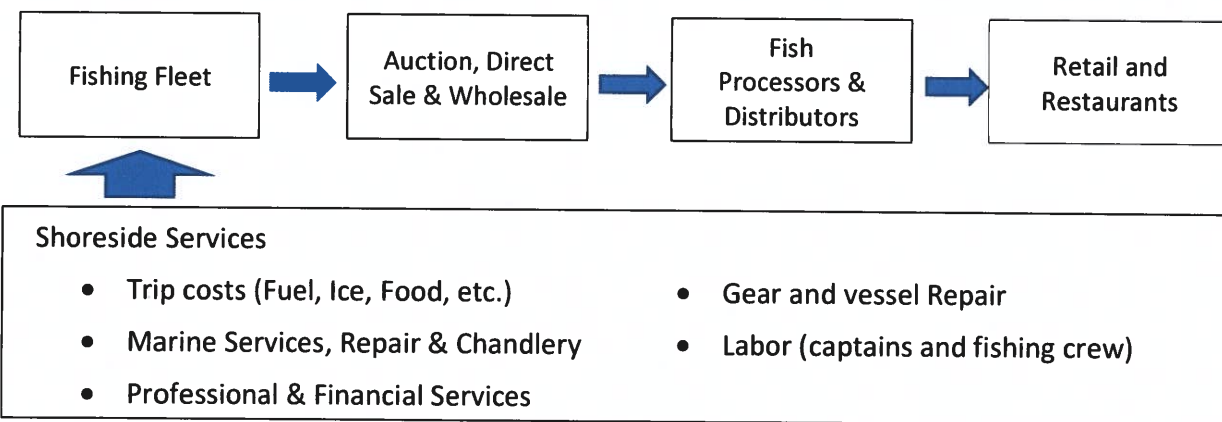
Statement of the Problem

The fishing community around New Bedford and Fairhaven comprises a closely-knit group of businesses and individuals, many with a hereditary connection to the working waterfront, within the area’s long sea-faring tradition.

The nation’s most valuable fishing port for each of the last 20 years, New Bedford is also one of the few that offer a full array of shoreside services from auction to catch processing to chandlery, marine services, financial & professional services, and a rich pool of experienced fishermen.

By a wide margin, scallops represent New Bedford’s most valuable catch. Annual landings approach a half-billion dollars that yields at least 3 times that value to the local community, making the fishery an important part of the local and regional economy.

Within the port and as reflected below, the fleet operates within a highly organized infrastructure of both downstream fish processing & distribution and upstream shoreside services:



In September 2022, the Council will, “decide whether to initiate an amendment to its Atlantic Sea Scallop Fishery Management Plan that may allow the leasing of access areas allocations and DAS in the Limited Access component of the fishery.” Stakeholders from throughout the fishery do not uniformly support the introduction of a leasing structure, citing impairment of their own interests and of the fishery as a whole.

A Brief History of Existing Regulation and Proposed Change

The Council amends the scallop FMP annually, setting catch limits in frameworks to reach Optimum Yield (OY) to provide “the greatest overall benefit to the Nation.” When the Council established the LA management plan in 1994, vessel owners needed only to prove that they had held a federal scallop permit and had landed at least one trip with at least 400 pounds of scallop in 1988 or 1989 to qualify for an LA permit. Allowances were also made for vessels that could prove change of ownership.

As shown at right, the LA full-time fleet now comprises 250 full-time vessels with about 100 additional smaller and part-time permitted vessels.

As with many if not most fishery management plans, a central problem in scallop management is to manage fishing effort so as to attain OY. In the ten years ending 2021, full-time vessels in the LA fleet were annually allowed between two and seven AA Trips with a possession limit of between 12 and 18 thousand pounds and between 24 and 35 DAS.

Full-time	250
Full-time Small Dredge	55
Full-time Trawl	11
Part-time	-
Part-time Small Dredge	30
	346

Source: Framework Adjustment 34

Year	AA Trips	DAS	POS Limit
2012	4	34	18,000
2013	2	33	13,000
2014	2	31	12,000
2015	3	31	17,000
2016	3	35	17,000
2017	4	30	18,000
2018	6	24	18,000
2019	7	24	18,000
2020	5	24	18,000
2021	4	24	18,000

Source: Framework 34 of the Scallop Fishery Management Plan

Proposed Regulatory Change

In 2021, the Scallopers Campaign commissioned Northern Economics to study the potential impacts of leasing on the LA fishery. In the “The Problem Defined” section of their report, the authors state that, “the prohibition on leasing of LA Scallop permits and the downward trend in AA trips and DAS constrains the ability of vessel owners to efficiently utilize their vessels and businesses.”

In April of 2022, the Council issued its scoping document to assess “1) the need for a leasing program, and 2) what elements the leasing program should consider.” The Council will hold a series of scoping meetings throughout the spring and summer of 2022.

Recent Scallop Fishery Performance

Three recent surveys (Dredge, Drop Camera, and Habcam towed camera) show large scale declines in biomass between 2017 to 2021. Overall, the estimated biomass in 2021 may be less than 2/3rds that estimated in 2017.

To protect the natural resource, most within the fishery anticipate future FMP frameworks to include reductions in AA Trips and DAS. Such reductions will exacerbate under-utilization and perceived over-capitalization of the LA fishing fleet, potentially increasing the call for transfers or leasing.

Stakeholder Perspectives

In early 2022, we interviewed 29 stakeholders within the Port of New Bedford and the broader Atlantic Sea Scallop fishery to gather perspectives on the introduction of a leasing scheme.

Sample Size	
Academia	3
Civil Service & Regulatory	3
Professional and Financial Services	2
Marine Services & Chandlery	10
Fishing & Processing	11

- **Under-utilization of the LA Fleet**

As reflected in the “Brief History” section above, the 1994 allocation of LA permits effectively allowed those vessels already in the scallop fishery to remain. However, to moderate the extent to which the natural resources was exploited, the FMP subsequently restricted the use of each permit (and thereby that permit’s associated vessel).

That the LA component of the FMP created under-utilization of the LA fleet is widely acknowledged, however stakeholders presented a number of observations:

- **Under-utilization is a Function of Resource Stewardship** – Data in Framework 34 to the FMP indicates that full-time LA vessels were limited to an average of about 75 days fishing per year between 2008 and 2018. This under-utilization reflects: the Council’s determination in 1994 that retained vessels in the LA fleet and its subsequent actions to limit pressure on the scallop stock.
- **Few Opportunities to Supplement Scalping Income** – The Council’s Scoping Document shows that only 72 of the 346 vessels in the total LA fleet chose to make trips for species other than scallops in 2020 (most vessels with LA permits also hold permits for other species).

In 2020, the average LA vessel landed about \$15,000/day on 84 days scalloping. Those 72 that also made trips for other species earned only about \$1,000/day on an additional 143 days fishing. After fuel, provisions, maintenance and other variable costs, the net value of these non-scallop trips must be negligible.

Stakeholders told us that most full-time LA vessel owners with groundfish permits lease their groundfish quotas to other druggers rather than fish their own rights.

- **Market Evidence Validates the Value of Owners’ Capital** – Because owners of full-time LA vessels see little opportunity outside of the scallop fishery, the capital value of their boats depends almost entirely on the value of scallop landings. However, despite FMP-related under-utilization of a permitted vessel’s fishing capacity, two observations validate the idea that owners see their businesses as appropriately capitalized:

- The size of the full-time LA fleet has remained relatively stable since its establishment in 1994 indicated that owners receive an acceptable return on their invested capital.

☞ Data in Northern Economics' report shows that nearly 40% of the full-time LA fleet were built after 1996 (two years after inception of the LA fishery). In purchasing these new boats, owners show their recognition that their investment in new vessels was worth the cost.

- **Consolidating Control Within Larger-scale Vessel Owners**

Many stakeholders' express concern that leasing would increase fishing access and revenue within a concentrated group of larger fleet owners (leasing in AA trips and DAS from other owners would increase fishing access while maintaining the 5% cap on permits). They fear that these owners would enjoy undue influences over the fishery and its infrastructure including:

- **Proprietary Access to Critical Shoreside Services** - Access of smaller fleet owners (and single vessel owners) to shoreside services could be obstructed first by the buying power of larger fleet owners and subsequently by their vertical integration.
- **Expansion of "Outside" Investors** – The attractiveness of LA vessel ownership is demonstrated by acquisitions of international investors Cooke (Canadian) and Blue Harvest (European). Should leasing enhance profitability and market power of large fleet owners at the expense of small fleet owners, fishermen and other stakeholders, outside investors would focus on the bottom line with little concern for the local community.

- **Impact on Crew Income**

Some stakeholders express particular concern that by consolidating ownership within a smaller group of fleet owners who own at or near the maximum of permits, leasing would enhance these owners' bargaining power over fishermen.

- **Greater Influence over Share Allocation** – In general, the "clear lay" system allocates catch value equally to owner and crew. The owner then covers vessel expenses (e.g., maintenance, insurance, etc.) while "trip" expenses (e.g., fuel, food and suppliers, etc.) are deducted from the crew's share. The enhanced bargaining power of these major fleet owners could lead to a reduction of share allocated to crew or a shifting of costs to crew share.
- **Loading Lease Fees to Crew Share** – If leasing from another vessel owner comes with an associated cost, the enhanced bargaining power of these major fleet owners could lead to the inclusion of leasing cost within trip expenses, paid from the crew share.
- **Impairment of Sustainable Fishing Practices** – Paying leasing costs of many dollars per pound may lead scallopers to increase high grading (the practice of scrapping lower value high-count scallops in favour of higher value low-count meats) with damaging impact on juvenile scallops and longer tows that crush scallops on the sea bed.

- **Community Issues**

Stakeholders also express concern with the impact that leasing could have on the fishery and its community:

- **Impairment of Relations Within the Port** – Concentrating ownership of and participation in the LA scallop fishery could impair the traditionally competitive/cooperative nature of the businesses within the fishery. Stakeholders fear that by concentrating ownership within a limited number of vertically integrated and foreign owned firms, leasing will fundamentally change relations within the port.
- **Comparisons with the Groundfish Fishery** - Many stakeholders pointed to the leasing quota structure in the New Bedford multispecies fishery as one of the causes for the reduction of active groundfish vessels in the Port.

Observations from Other Fisheries

Many economic studies show that leasing quota increase economic efficiency and reduce vessel owners' costs. Other empirical studies, however, show losses in income and employment.

In commenting on the imposition of a “leasing and stacking” paradigm (more universally referred to as an “Individual Transferable Quota” or “ITQ” system) within the Atlantic scallop fishery in 2009, Dr. Julia Olson wrote that,

“The primary social impacts that have been documented in empirical cases involving consolidation range from employment loss, decreased income, decreased quality of life, changing relations of production structural disadvantages to smaller vessels and firms, dependency and debt patronage, concentration of capital and market power inequitable gains, regulatory stickiness, reduced stewardship, decreased community stability of cultural values and so on.”

Studies of the Mid-Atlantic surf clam and quahog fisheries, Australia's southern bluefin tuna fishery, Tasmania's rock lobster fishery, British Columbia's halibut fishery, and Iceland's cod fishery, have shown that employment and/or incomes among fishermen were reduced as a result of similar regulatory changes. Empirical studies of ITQ fisheries show other negative impacts of ITQ regulation:

- **Impacts to Crew, Communities and Fishing Practices**
 - By consolidating ownership within larger fleet owners, leasing may enable the smaller group of owners to exploit bargaining power by increasing their share of the lay,
 - Owners' increase bargaining power may ultimately lead to their abandoning the traditional lay allocation in favor of a wage-based crew remuneration structure.
 - There is little evidence that consolidation of fishing quota on larger and presumably newer and safer vessels has reduced accidents,

- Loss of fishing employment and income puts pressure on local welfare resources and inhibits future generations of fishermen,
- In those fisheries that have embraced a leasing structure, fishermen often pay a share (usually half) of leasing costs.
- In the one case in which crew income eventually increased, such increase was actually tied to longer working hours,
- **Impact to Smaller Fleet Owners**
 - Individual or small fleet vessel owners have less access to finance leasing quota,
 - Smaller fleet owners suffer a disadvantage in hiring crew that seek full-year employment as well as access to shoreside services (which may rely on the volume of business offered by larger-scale fleet owners) and in pricing on insurance and other services.

Northern Economics’ Analysis on Behalf of the Scallopers Campaign

In the Autumn of 2021, the Scallopers Campaign engaged Northern Economics to analyse the impacts from “a change in the scallop FMP to allow owners of LA Scallop Permits to assign the allocations of up to two permits to a single vessel.” In particular, the study looked at:

- Potential reductions in fuel use while fishing and while vessels are in port
- Potential reductions in greenhouse gas (GHG) emissions
- Potential cost savings to vessel owners as they retire older and less efficient vessels
- Increased safety and other positive impacts to crew members

Northern Economics assumed a regulatory mandate that each lessor/lessee pair show similar vessel length and horsepower. Pro forma, their analysis found 114 potential pairs in which an owner in the lessor group could potentially lease 100% of their permitted fishing rights to a lessee owner.

Northern Economics’ Conclusions

For a fishery with annual catch value approaching ½ billion dollars, Northern Economics identified potential cost savings of \$12.2 million. Of the total, \$9.5 million comprised a reduction of fixed annual costs associated with the permanent removal of 114 full-time vessels from the LA fleet.

	millions
Annual Trip-based Fuel Savings from More Fuel-efficient Continuing Fleet	\$0.4
Annual Non-fishing Fuel Savings Arising from Fewer Days Idling at Dock	\$2.5
Annual Savings of Fixed Costs on 114 Eliminated Fleet	
Vessel Insurance	\$4.3
Annualized Vessel Hull Maintenance	\$4.6
Annual VMS Charges	\$0.2
Annual Tie-up Fees	\$0.4
subtotal	<u>\$9.5</u>
Total Cost Savings	<u>\$12.3</u>

Observations

Northern Economics identifies costs savings from leasing of less than 3% of the fishery's annual catch value. Of that total, nearly all comes from the permanent retirement of 114 older vessels for which owners will lease permit rights to owners of newer vessels.

The level of savings is open to further analysis:

- With more trips, insurance premiums for the lessee vessels will increase, offsetting some of the estimated \$4.3 million in savings from vessel insurance,
- With harder use, those vessels in the lessee fleet (i.e., those vessels that have leased additional fishing rights from the lessor group) will likely need more gear and vessel maintenance offsetting some of the \$4.6 million estimated savings,
- The analysis does not consider who will pay leasing costs. These costs may be paid in part from the crew share as an additional trip cost.

Conclusions

To simplify terminology, we defined:

- Transfer to mean the annual or permanent transfer of AA trips and/or DAS between vessels within a single owner's fleet;
- Leasing to mean the annual or permanent transfer of AA trips and/or DAS between separate fleet owners

While transfers between vessels in a single owner's fleet do not require payment; leasing between owners generally does.

1. NOAA'S Performance Measures for scallop management from 2004 to 2020 (<https://apps-nefsc.fisheries.noaa.gov/socialsci/pm/index.php/programs/2>) show the success and general stability of the scallop fishery. Number of vessels declined from 2005 to 2010 mostly due to the elimination of single dredge vessels from the Scallop LA GC fishery but has remained stable since 2010. Total ex-vessel revenue, revenue per vessel, and revenue per trip increased from 2008 through 2012, fell a bit from their highs, but have remained more or less constant since. Average prices fell from 2012 through 2020 but have increased since.

While NOAA doesn't collect much data on shoreside businesses, it is probable that this pattern of employment and income in processing and most other shoreside businesses has also followed this trend of stability and prosperity.

This successful fishery and its associated spending, jobs, and incomes has maintained the economy of greater New Bedford, especially for men and women without college degrees or

other professional training, who make up the core of employment in scalloping and shoreside businesses that depend on the scallop fishery.

Major changes in the structure of this successful and stable fishery may cause unintended harmful effects.

2. Northern Economics' potential benefits of leasing in the LA scallop fishery identifies cost savings of less than 3% of the fishery's annual catch value. Of that total, nearly all comes from the permanent retirement of 114 vessels.
3. Transferring fishing rights among vessels within a fleet owned by a single entity would give the owner more flexibility to use their vessels more efficiently. Increased efficiency in fishing, however, usually causes larger catches (especially harmful in declining stocks) and trigger stricter regulations that will be shared by all.
4. As shown in other fisheries, enforcement of leasing AA trips and DAS between owners would result in increasingly more complex regulations. A large section of Framework 34 of the FMP pertains to the regulation of leasing in the LAGC ITQ system.
5. Barring special or unforeseen circumstances, lease cost demanded by a lessor (i.e., the vessel owner who leases their permit fishing rights to another owner) will probably be substantial. Lessors will usually expect compensation roughly equal to what the owner would have earned simply by fishing their own rights on their own vessel.

In many ITQ systems, lease costs (usually half) are charged to the crew. These costs may simply be included with trip expenses deducted from the crew's share. In either case, payment of lease costs by crew results in an income transfer from fishermen to owners.

Unless the owner pays all of the lease cost (which we anticipate in transfers between vessels within a single owner's fleet), there is no leasing structure that does not reduce crew income. (See appendix)

6. Currently, the LA FMP limits ownership of permits to 5%. It is not apparent how a 5% limit on fishing rights could be enforced when AA Trips or DAS can be leased between owners. Perhaps ownership could be capped at total AA trips and DAS, where AA trips and DAS could only be leased between vessels with matching dredge length, vessel length, and horse power. Once again, leasing would add more complex regulations.
7. Transferable quotas were not needed to reduce the race to fish. The current vessel quota system in the LA scallop fishery already allows scallop vessel captains and owners to choose when and where to fish (within conservation regulations). Leasing would not reduce high-grading, deck loading, long tows, and other destructive practices. It is more likely that leasing would encourage destructive fishing practices as owners and crews seek more revenue to pay for their leasing costs.

Appendix – Comparison of Income to Owner and Crew

The impact of leasing on the LA scallop fishery must be evaluated in contrast to the current regulations.

While the FMP currently limits utilization of an LA permitted vessel, fishermen are free to supplement income simply by signing on to incremental vessels at no cost. Therefore, unless the lease is free of cost or the owner absorbs 100% of such cost (which we anticipate in a transfer of permit between vessels within a single owner’s fleet), there is no leasing structure that does not impair crew income.

Lay Allocation Methodology

Allocation of catch value among owner and crew (the “Lay”) typically reflects:

- A roughly equal split between owner and crew before,
- Owners pay “boat” expenses (e.g., maintenance & repair, insurance and other vessel costs) while crews pay “trip” expenses (e.g., fuel, lubricants, provisioning and other supplies).

Impact of Leasing on Owner and Crew Shares

The table below compares share allocation to owner and crew under the current regulation with comparable allocation under a basic leasing structure:

	Current Regulation			Leasing Paradigm		
	1st Vessel Owner	2nd Vessel Owner	Crew	Lessee Owner	Lessor Owner	Crew
1st Permit/Vessel	\$750,000	-	\$750,000	\$750,000	-	\$750,000
2nd Permit/Vessel	-	750,000	750,000	750,000	-	750,000
Lease Cost	-	-	-	-	750,000	(750,000)
Net Allocation	\$750,000	\$750,000	\$1,500,000	\$1,500,000	\$750,000	\$750,000
Impact of Leasing to Crew and Owner Shares				100%	0%	(50%)

Within the “Current Regulation”

- Each of two owners deploy their own vessels to fish their permitted rights and each receives a 50% gross share of the landed value (i.e., before covering the costs of maintenance and other “boat” expenses). Framework 34 indicates landed value per Full-time LA vessel of about \$1.5 million/year.
- Captain and crew fish out the permitted rights of the first vessel before moving on to the second and receive a 50% gross share of the landed value of each (i.e., before covering the cost of fuel, provisions and other “trip” expenses).

In the “Leasing Paradigm”

- The first vessel (the “lessee”) leases 100% of the permitted rights of the second (the “lessor”). The lessee uses their own vessel to fish both permits (the lessor’s vessel remains in port) and receives a 50% gross share of the landed value of both permits before “boat” expenses.
- The lessor receives the lease cost, which generally reflects the share allocation they would have earned by simply fishing their permitted rights on their own vessel.

- Rather than transferring from boat to boat, the crew remains with that lessee’s vessel and receives a 50% gross share of the landed value of both permits before “trip” expenses. The cost of the lease is then included within those “trip” expenses deducted from the crew’s income.
- When compared with the income each party would have received under the current regulation:
 - The lessee enjoys a 100% increase,
 - The lessor enjoys an identical level of income and
 - Captain and crew suffer a 50% decrease.

Analytical Conclusion

Those promoting adjustment of the FMP to allow the leasing of permitted fishing rights between vessel owners espouse an opportunity to enhance efficiency. By increasing the utility of their most productive vessels, owners in favor of leasing see opportunity for incremental profit.

However, while the FMP currently limits utilization of a permitted vessel, fishermen are free to supplement income simply by signing on to incremental vessels at no cost. In fact, the example illustrated above reflects a widely-held consensus that fishermen typically crew two or more LA permitted vessels in order to secure their full-year’s employment.

Therefore, unless the lease is free of cost or the owner absorbs 100% of such cost (which we anticipate in a transfer of permit between vessels within a single owner’s fleet), the table below indicates that there is no leasing structure that does not impair crew income.

		Lease Cost as a Percent of Owner's Share			
		0%	10%	50%	100%
Allocation to Crew	0%	0%	0%	0%	0%
	10%	0%	(1%)	(3%)	(5%)
	50%	0%	(3%)	(13%)	(25%)
	100%	0%	(5%)	(25%)	(50%)

References

- Brandt, S and Ding, N, 2008. "Impact of property rights on labor contracts in commercial fisheries." *Ocean and Coastal Management*. 25: 740-748
- Brandt, S. 2005. "The Equity Debate: Distributional Impacts of Individual Transferable Quotas." *Ocean & Coastal Management* 48: 15–30
- Brinson, A.A. and E.M. Thunberg. 2016. "Performance of federally managed catch share fisheries in the United States." *Fisheries Research* 179: 213–223.
- Bromley, D. W. 2005. "Purging the frontier from our mind; Crafting a new fisheries policy", *Reviews in Fish Biology and Fisheries* 15: 217-229.
- Casey, E., C. Dewees, B. Turriss and J. Wilen. 1995. "The Effects of Individual Vessel Quotas in the British Columbia Halibut Fishery." *Marine Resources Economics* 10(3): 211-230.
- Copes, P. 1986. "A Critical Review of the Individual Quota as a Device in Fisheries Management." *Land Economics*, 62: 278-291.
- Carothers, C. 2008. "Rationalized Out': Discourses and Realities of Fisheries Privatization in Kodiak, Alaska," in M.E. Lowe and C. Carothers, eds., *Enclosing the fisheries: People, Places and Power*, Bethesda, MD: American Fisheries Society, Symposium 68 pp. 55-74
- Eythórsson, E. 2000. "A decade of ITQ-management in Icelandic fisheries: consolidation without consensus." *Marine Policy*, 24:483-492.
- Eythórsson, E. 1996. "Theory and Practice of ITQs in Iceland. Privatization of Common Fishing Rights," *Marine Policy*. 20: 269-281.
- Gibbs, M.T. 2007. "Lesser-known consequences of managing marine fisheries using individual transferable quotas." *Marine Policy*, 31: 112-116
- Jin, D., M-Y Lee, and Thunberg, E.M. 2019. "An Empirical Analysis of Individual Fishing Quota Market Trading." *Marine Resource Economics*. 34: 39-57.
- McCay, B.J. and S. Brandt. 2001. "Changes in Fleet Capacity and Ownership of Harvesting Rights in the United States Surf Clam and Ocean Quahog Fishery." pp. 44-60 in *Case Studies on the Effects of Transferable Fishing Rights on Fleet Capacity and Concentration of Quota Ownership*, ed. Ross Shotton. FAO Fisheries Technical Paper 412.
- McCay, B J., Carolyn F. Creed, A. Finlayson, R. Apostle, and K. Mikalsen (1995) "Individual Transferable Quotas (ITQs) in Candaidan and US Fisheries", *Ocean & Coastal Management* 28 (1-3): 85-115.
- McEvoy, S.M., S. Brandt, N. Lavoie and S. Anders. 2009. "The Effects of ITQ Management on Fishermen's Welfare When the Processing Sector Is Imperfectly Competitive." *Land Economics*," 85: 470-484.

-
- New England Fishery Management Council. 2022. "Framework Adjustment 34 Regulatory Flexibility Analysis Final Submission." *Atlantic Sea Scallop Fishery Management Plan*.
- New England Fishery Management Council. 2022. "Scoping document for Limited Access Leasing Final." *Atlantic Sea Scallop Fishery Management Plan*.
- North Pacific Fishery Management Council. 2009. "Leasing practices in North Pacific fisheries Bering Sea and Aleutian Island crab fisheries."
- Olson, J. 2009. "Social Impact Assessment Literature Review: Leasing and Permit Stacking." Mimeo.
- Olson, J. 2006. "Changing Property, Spatializing Difference: The Sea Scallop Fishery in New Bedford, Massachusetts." *Human Organization* 65(3):307-318.
- Palsson, G. and A. Helgason. 1995 "Figuring Fish and Measuring Men: The Individual Transferable Quota System in the Icelandic Cod Fishery", *Ocean & Coastal Management* 28(1-3): 117-146.
- Phillips, G., Lorne K. and P. Hay (2002) "Private property and public interest in fisheries management: the Tasmanian rock lobster fishery." *Marine Policy* 26(6): 459-469.
- The Scallopers Campaign. 2021. "Potential Impacts of the Concept to Allow Leasing in the Limited Access Scallop Fishery." Mimeo.
- Windle M.J.S., B. Neis, S. Bornstein, M. Binkley, P. Navarro (2008) "Fishing occupational health and safety: a comparison of regulatory regimes and safety outcomes in six countries", *Marine Policy* 32(4): 710-710.