MR. HIGGINS

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An Estimate of Damage Sustained by Commercial Fishermen in Southern New England During the Hurricane and So-called Tidal Wave of September 21, 1938.

by

Milton J. Lobell
Jr. Aquatic Biologist
U. S. Bureau of Fisheries

On September 21, 1938, a hurricane of tropical origin struck the Southern New England coast with great intensity. As a result of the high wind velocities, great masses of water were piled up along the shores of Long Island, Connecticut, Rhode Island and Massachusetts. Observers stated that the water reached a height at least 20 feet above the mean high water mark. Weather Bureau observers at various points found wind speeds as high as 110 miles an hour. Although storm warnings were broadcast before the hurricane, many boats were driven ashore, sunk, or smashed to pieces. Adequate precautions were taken by a great majority of fishermen to cope with the regular September storms of their experience, but the unlooked-for violence of the wind coupled with the increased height of the water and smashing waves, rendered most of their efforts useless.

In a hurried survey of a small portion of the Rhode Island coast, it was found that the small-boat fishing industry was practically wiped out. On the basis of those findings, it was deemed important to make a more extended study of the entire hurricane area. The majority of the permanent inhabitants of the coastal regions of Southern New England derive their livelihood from fishing, handling fish, or supplying fishermen. A great number fish during the winter and hire out as "party boat" operators in the summer. Their boats are, on the average, of small size and can be used for a variety of fishing purposes. They can be fitted as

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small draggers, lobster boats, small line trawlers, trap boats, and as before stated, party boats. Although the individual losses are comparatively small, they represent a large total loss because of the numerous boats to be found in the area. In addition, practically none of the equipment was insured. Several poor seasons have put the operators in debt, and now, with some boats a total loss and others requiring extensive repairs, it is doubtful whether they can again operate without some assistance in repairing and replacing their boats and gear. As these men have no other means of gaining a livelihood, they are in grave need of assistance. Most of them have lost not only their means of livelihood, but also their homes and personal effects.

In addition to the loss of boats, docks and shore plants were destroyed. Several large Narragansett Bay oyster houses were wrecked. Fish handling establishments, fuel docks, ice plants, and shipyards suffered substantial damage. In many localities, there is not even a dock standing at which to tie a boat. Thousands of lobster pots with their lines, numerous traps, eel pots, and other gear have been destroyed. Many oyster and clam beds have been demolished, silted over, or contaminated. Even channels and harbors have been altered so that navigation is perilous. It is not known to what extent the storm and its after effects have damaged the fish and lobsters themselves, but it is reported that numerous dead fish littered the beaches.

In considering the estimates of property damage given in the following report, it must be borne in mind that the figures are very rough, because of the limited time and records available. However, it is felt that they are substantially correct. They have been partially checked by State officials and fishermen.

The survey was started at Bridgeport, Conn., where it was found that losses were slight in that area because of the limited number of boats, but some damage was inflicted on lobster gear. Passing eastward, the amount of damage increased both as a result of the heavier storm intensity and larger number of boats. Lobstermen and oyster men sustained damage all along the Connecticut coast, their boats being driven up on the beaches or sunk--but the greatest loss was of gear. Oystermen suffered from the destruction of boats, plants, and oysterbeds along the shore of Long Island Sound. At New London, 18 boats of various sizes were counted in one small area. Of this number, 17 were piled up on the beach in various stages of damage, and one was sunk near the remains of the landing dock. Boats driven ashore were found from 100 to 500 yards from the water. Most of the damage was found to be in the hulls. Keels, shoes, rudders, skegs, propellers, and often hull planking were damaged. In addition, many hulls are expected to require refastening because of the unusual strains of moving about on dry land. Attempts were being made to refloat some of the least damaged. At the same place, a large fish handling dock and building were destroyed, and three trucks and trailers were badly wrecked, leaving no facilities for handling fish. Near the New London railroad station, four large menhaden steamers, two old steam otter trawlers, and one modern dragger were almost a total loss, having been piled up against the railway embankment by the storm. One boat was several hundred feet from the water and astride the railroad tracks. At Groton, Conn., across the river, damage to boats was nominal. However, a fish dock and store were badly damaged and several lobster cars were smashed and the contents lost.

A great toll was taken in the Noank-Mystic-Stonington region, which normally supports a fleet of over 100 fishing boats of various sizes, ranging from small lobster boats to 35-40 ton draggers. At least 100 of these were damaged in this area. No boat escaped without some loss and most of them showed the results of considerable battering. At Noank, three fish docks were destroyed with all their equipment, and the entire shore front was smashed and altered. The State lobster hatchery was a total loss, as were the State fisheries boats and wharf. A complete check-up of the losses suffered by fishing interests was made in the Stonington, Conn., region in cooperation with the local American Red Cross unit. Out of 45 boats employed in fishing operation (dragging or lobstering), 28 were partially damaged, 7 were sunk, 9 were judged to be total losses, and 3 were missing. Boats partially damaged include all that were beached. These will require hull repairs and moving to water. Repairs will approach $50,000, including the replacement of 9 totally wrecked boats. Engine repairs will total $5,000 or more, not including engines in those boats which were total losses. Gear replacement will be in the neighborhood of $10,000. In addition, rebuilding of fish docks, net houses, ice houses, etc., is expected to amount to another $25,000. From these figures, it can be estimated that $100,000 worth of damage was inflicted on the fishing industry of Stonington alone. Of the 45 vessel operators, 37 were wholly dependent on fishing as a vocation.

The remainder of the Connecticut fishermen eastward from Stonington were hard hit by the storm, but the total loss was small, since there were no concentrations of fishermen in that section. Clam diggers equipment, fish traps, and several lobster boats were destroyed as well as a few small party boats. On the basis of the estimated loss at Stonington, it can safely be stated that the losses to the fishing industry in Connecticut approach $500,000.

The coastline of Rhode Island from Watch Hill to Point Judith supported a small lobstering and clamming industry. Besides this, there was considerable activity in hiring out party boats in the summer. Just west of Point Judith, two important fishing villages were located, Jerusalem and Galilee. Besides being an important commercial center, numerous sports fishermen hired boats from the several boat liveries, and in addition, supported a considerable party boat business. Also, several large sea-food markets were located here, where draggers, lobstermen, and trapmen unloaded their catch at one of the three wharves, which gave rise to an important handling and shipping business. Both towns have been practically wiped out. A survey carried on with the cooperation of the Red Cross unit in the area showed that a conservative estimate of losses to boats and gear will reach $125,000. Of about 75 fishing boats, 7 were afloat in fair condition. The remainder were either sunk, beached, or missing. Thirty beached boats will require about $400 each to place them in commission. Losses to docks, fish handling facilities, sheds, and other equipment, will approach $10,000. The total loss to the fishing industry was estimated as close to $150,000. In addition, most of the fishermen have lost their homes and personal effects.

Narragansett Bay normally supports a tremendous shellfish industry including oyster plants, clam digging, and lobstering. Also, a considerable dragging business is carried on to supply both bait and food. Sportsmen conducted much angling both from boats and shore. A great amount of destruction was wrought in this area. At Wickford, the State lobster hatchery was badly damaged. Two oyster plants also suffered considerable loss in boats and plants. Fifteen draggers and lobster boats suffered various amounts of damage. East Greenwich, Apponaug, and other shoreside towns suffered also in the loss or destruction of small boats and shellfish apparatus. However, the losses were less on the west side of Narragansett Bay because of the small size of the boats and the lack of very expensive gear.

The east side of Narragansett Bay suffered a great deal of damage to fishing and shellfishing apparatus and boats. At Barrington, Warwick, and Bristol, extensive destruction occurred particularly to oyster plants. Numerous small fishing boats with their gear were sunk or driven ashore. At Newport, an important center for landing fish, practically every boat in the harbor was damaged or sunk and some were declared total losses. Trap fishermen in the Newport area lost heavily in gear. Webbing, buoys, and anchors were either smashed, lost, or so tangled that no salvage could be made. Losses to trap fishermen in Newport County are estimated to be in the neighborhood of $160,000. In addition, repairs to boats, replacement of gear, and rebuilding of docks and auxiliary buildings will cost approximately $500,000. Tiverton suffered the loss of 9 quahog draggers including one sunk at the dock. The other eight were piled up on the beach and will require an indeterminate sum to repair or replace them.

At Sakonnet Point and Little Compton, towns devoted almost entirely to fishing, a partial survey was carried on with the cooperation of the local Red Cross unit. The settlement at Sakonnet Point including the fish wharf, twine sheds, breakwater, and fishermen's homes, suffered almost complete extinction. Among the tangled wreckage of lobster pots, webbing, line, boat parts, buoys, and all other manner of debris, lie such boats as were driven up on the beach. Others with holes stove in them lie at the bottom of the harbor. Trap skiffs, power skiffs, lobster boats, and small draggers all were affected. Seven traps plus gear for at least five others were lost when twine sheds were swept away. At least 5,000 lobster pots valued at $4.00 each minus buoys and lines, were smashed to kindling wood. Fifteen small lobster boats valued on the average of $750 were destroyed. Three large fishing companies were practically devoid of any equipment to carry on their business. Smaller operators suffered so severely that they have no chance of continuing in business unless help is extended.

Although commercial gear was destroyed, a large part of the damage from Sakonnet Point to New Bedford was due to destruction of party boats. At Westport, lobstermen, shellfish operators, and miscellaneous small boat fishermen were hard hit. However, the region does not support a very large fishery.

New Bedford, a large center for fishermen, fish handlers, and a distribution center for all kinds of fish, suffered a smaller amount of damage in comparison to other places struck. Most of the large vessel fleet was saved although at least three of the larger, offshore type vessels were total losses. Numerous smaller draggers and lobster boats were lifted onto docks or washed into the streets, but damage was not excessively high. Several badly-battered wharves were soon placed in temporary working order. At Fairhaven, just across the bay but more exposed to the sea, a large amount of damage was done to outfitting plants, shipyards, and marine railways. Many small lobstercraft, draggers, and clam boats were damaged. It is estimated that repairs and replacements to New Bedford and Fairhaven fishing interests will require approximately $150,000.

Buzzards Bay suffered from both the hurricane and the tidal wave. However, the fishing industry is not particularly important in that area except as regards lobstermen, clam diggers, and a few miscellaneous fishermen. A large tourist and sportsmen's trade is found in this area and a good many of the boats which were rented or chartered for their use were lost. At Cuttyhunk, the fish wharf and several boats were smashed. At Woods Hole, docks were damaged but few fishing boats were injured. Marthas Vineyard was hit hardest at Menemsha Bight where small boats were driven on the beach or sunk. Edgartown was also a scene of destruction for fishing gear and boats. Nantucket Island, off the main path of the storm, was not severely affected.

The eastern portion of Cape Cod was not affected to any great extent. The large Provincetown fishing fleet was not damaged, according to reliable reports. North of Cape Cod, although some small boats were slightly damaged, no significant amount of destruction occurred. The large vessels fishing out of Boston, Gloucester, and Portland were not affected in any way. Fishermen on the offshore banks during the storm reported high winds but not of the intensity experienced inshore. Because the storm swung westward after hitting Buzzards Bay, the coast of Eastern Massachusetts, New Hampshire, and Maine escaped the brunt of the storm. Property of State and Federal agencies suffered a great deal of destruction from the elements. The Coast Guard lost equipment, buildings, boats, and men, but were soon on the job helping fishermen refloat their boats and aiding in rescue work besides maintaining communications with isolated communities. The Bureau of Lighthouses lost buoys, lighthouses, equipment, boats, and at least one man. Their lighthouse at Whalerock in the entrance to Narragansett Bay was completely swept off its base. One man lost his life at this place. The State of Connecticut lost its Noank hatchery (practically a total loss), several boats, and a good deal of equipment. Rhode Island had its hatchery at Kickford almost demolished. The Narragansett Marine Laboratory of Rhode Island State College was completely wiped out, destroying all scientific equipment, books, data, and a new boat. The Woods Hole Station of the U. S. Bureau of Fisheries suffered damage to the boat basin and dock. New pilings will have to

be driven, the dock must be replanked, and the seawall will have to be repaired. The water supply pipe for the hatchery was destroyed and much damage was inflicted on the seal pool, grounds, and livecars. The buildings will require some work in reconditioning, although they were not seriously damaged.

Work is going on apace to put things on a normal basis, but it will take some time and a good deal of money to repair and replace property affected by the storm. Boats will have to be refloated and repaired, docks and fish handling equipment replaced, buoys relocated, the coastline and channels resurveyed, and fishermen rehabilitated.

Summary.--On the basis of estimates made almost entirely on personal observation, but often with the judgment of local men in regard to monetary damage, totals by natural areas follow:

Connecticut		
Bridgeport to Niantic	$ 50,000	
New London to Westerly	450,000	$ 500,000
Rhode Island		
Watch Hill to Matunuck	10,000	
Point Judith, including Jerusalem, Galilee, and Sand Hill Cove	150,000	
Block Island	200,000	
Narragansett Bay, including Newport and Sakonnet	600,000	960,000
Massachusetts		
Buzzards Bay, including New Bedford	500,000	
Vineyard & Nantucket Sounds	150,000	650,000
Total - southern coast of New England		$2,110,000
New York		
Long Island (on basis of reports only)		500,000
Grand Total		$2,610,000

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ORIGINAL REPORT FROM MR. NEVILLE

DEPARTMENT OF COMMERCE

BUREAU OF FISHERIES

College Park, Md.

October 10, 1938

~~Commissioner of Fisheries,~~
~~Washington, D. C.~~

~~Attention: Mr. Bailey~~

~~In response to your telephone request of October 10,~~ the ~~following is a report on~~ damage to fishing villages and fishing gear resulting from the severe storm of September 21, 1938, as a result of a general survey of the following information has been obtained. The brunt of the storm and the greatest damage occurred on the south and eastern shores of Long Island, particularly in the vicinity of Fire Island Inlet, Great South Bay, Moriches Bay and Montauk.

Fire Island Region

All ocean traps off Fire Island Inlet were completely demolished, together with considerable damage to fishermen's camps located just inside the Inlet on Great South Bay. Loss of gear and shore property estimated at $125,000.

An attempt will be made by one or two companies to fish one trap each throughout the remainder of the season which ends about November 15. Most of the concerns, which numbered about six, do not expect to resume fishing because of the lack of financial reserve and the uncertainties of successful fishing during the short period that remains of the usual season. It is possible that at least one of the largest and oldest of these outfits may have to declare bankruptcy.

Great South Bay

This region suffered relatively less damage than the outside ocean trap area since there are fewer and smaller traps set inside the Bay than on the ocean side of Fire Island Inlet. All of the Bay traps, numbering approximately eight, were a complete loss, much of the damage resulting from houses being carried directly through the trap area on the crest of the high tidal wave which swept over the strip of sandy beach near Fire Island Inlet, engulfing the Bay and flooding the towns and villages on the northern side of Great South Bay. Trap fishing in the Bay will not be resumed until May of 1939. Damage to gear estimated at $10,000. There are indications that the valuable shellfish beds, most of which are privately owned by the Blue Point Oyster Company, West Sayville, have been severely damaged by the overflow of sludge and mud. A survey of these beds is being made by the Blue Point Oyster Company in an effort to determine the extent of the damage.

Moriches Bay Region

Although practically no commercial fishing is done in these waters, this region is a center of considerable sports fishing, particularly by row boats. This sports fishing activity was conducted by approximately ten operators possessing 512 row boats. All of the stands and many of the boats were completely damaged. Extent of damage estimated at $15,000.

Shinnecock Bay Region

Practically no commercial or sports fishing is conducted in this Bay and hence the loss here was insignificant compared to the other regions. Considerable damage was done, however, to private property and to small shacks used by a few shellfish operators that engaged in tonging principally for clams and oysters. Damage to fishing industry estimated at $2,000.

Montauk

Montauk village consisting of approximately 400 fishing shanties was completely demolished. All pound nets located in Fort Pond and Gardiners Bays were completely wiped out and most of the fishing boats were beached on the sandy shore and thereby escaped complete ruin, most of the damage being confined to sprung seams resulting from excessive strain and from damage to hulls and riggings resulting from collision with other drifting vessels and from the pounding of the surf while on the sandy beach.

A few of the commercial boats and a number of charter boats used for sports fishing were sunk in the vicinity of the dock at the Montauk Yacht Club. An effort is being made to repair those vessels that were driven ashore and to raise the sunken boats.

It is expected that only a few pound nets will be reset for fall fishing out of approximately 80 nets in operation prior to the storm. Loss from damage to sport and commercial fishing, including shacks, boats, and gear, estimated at $400,000.

Long Island Sound Region

Sport and commercial fishing from East River to Greenport at the eastern end of Long Island is relatively less important than at other parts of Long Island. Little damage was sustained by the commercial fishery which is concentrated on the Sound side in the vicinity of Greenport and Orient Point. A few otter trawls operating out of Greenport were damaged but have been quickly repaired and will resume fishing within the next week or so. Loss from damage in the Greenport area to commercial fishery is estimated at $10,000. Sports fishing, particularly by row boats, is of some importance at the western end of the north shore in the vicinity of Hampstead Harbor, extending eastward to Smithtown Bay. This region experienced an exceptionally high tide causing considerable damage to row boats and row boat stands. It is not known definitely how many of the 1,000 row boats operated in this area were damaged but it is expected that

it was not relatively as much as in Moriches Bay area. Without reliable data it is estimated that the damage to the sports fishery in this western region on the north shore is possibly $10,000.

In this region considerable destruction of private pleasure boats resulted from being washed ashore by the 15 foot tidal wave which over-flowed most of this region.

Insert summary

General Comments

It is our opinion that immediate financial assistance is needed by the County of New Suffolk for rehabilitation of the numerous towns in that county which suffered ~~the greatest~~ most seriously through loss of life and property damage. Some of these towns, ~~and~~ particularly, West Hampton, are already receiving governmental relief assistance through WPA and National Youth Administration projects but additional help is sorely needed.

Revisions in the program of the Biological Survey of the marine fisheries of Long Island being conducted by the New York State Conservation Department with the cooperation of the Bureau of Fisheries have been made in order to determine what physical and biological changes in the bay and ocean regions have resulted from the recent storm. For instance, eleven new inlets from the ocean to the bays on the south shore have been made as result of the storn and it is naturally expected that this will result in considerable changes in the physical, chemical and biological conditions of these bay regions which are noted for their commercial and recreational fisheries.

Insert above

Summary.- Estimated damages in the various regions are as follows:

New York (Long Island area)

Great South Bay (damage to gear)	$10,000
Moriches Bay	15,000
Shinnecock Bay	2,000
Montauk	400,000
Long Island Sound region	
Commercial fishery in Greenport area	10,000
Sports fishery (estimated)	10,000
Total for Long Island area	$447,000

Milton J. Lobell

Rec'd, October 31, 1938

FURTHER FINDINGS ON THE DESTRUCTION OF FISHING GEAR AND BOATS IN THE HURRICANE OF SEPTEMBER 21, 1938

A detailed survey of Block Island in regard to the amount of damage done to fishing gear and boats was completed recently. Of a total of 50 boats, 20 were total losses, 15 were damaged seriously, and 15 were slightly damaged or not affected. Of the boats, the majority were lobstering craft and the remainder were rigged either as swordfishermen or draggers. An estimated $100,000 will be required to repair and replace the fishing vessels.

Gear losses include 5,500 lobster pots and their lines, and about $1,500 worth of flounder and swordfishing gear. Total gear losses will approach $50,000.

Dealers' losses include destruction of docks, houses, and equipment, which amounts to around $10,000.

In summarizing, it appears that the total damage to gear, boats, and structures devoted to fishing and handling of fish will be in the neighborhood of $160,000.