

Community Profile

Hampton Bays/Shinnecock, NY

By Bryan Oles

I. Community Description

Hampton Bays, a community on the South Fork of Long Island, is home to the second largest commercial fishing fleet in New York and the location of significant recreational fishing activity. The commercial fleet landed over 9.7 million pounds of seafood, valued at just over \$9.2 million in 2001, according to National Marine Fisheries Service (NMFS) weighout data. Hampton Bays is known as "the boat ways of the Hamptons" due to the area's access to numerous waterways (<http://www.hamptonbayschamber.com/>). The Shinnecock Canal allows boats to move between the Peconic Bay system to the north and the coastal bays, including Shinnecock and Tiana Bays, to the south. The Shinnecock Inlet provides access to the Atlantic Ocean. Hampton Bays is bordered by a number of other hamlets in Southampton Town including East Quogue to the west, and Southampton Village and Shinnecock Hills to the east. Great Peconic Bay lies to the north, and Shinnecock Bay separates the mainland area of the hamlet from the barrier island that borders the Atlantic to the south.

Hampton Bays is the largest and most populous hamlet among eighteen unincorporated hamlets within the Town of Southampton.¹ This hamlet has a population of 12,236 according to the 2000 U.S. Census, which is up an astounding 54% from the 1990 population figures. The seasonal population swells during the summer tourist season. The hamlet is located in Suffolk County and administered by the Town of Southampton, which is governed by the Town Board, composed of five members. The Supervisor is elected to a two year term and other board members serve four year terms. The Town Council is responsible for legislative and executive functions as well as zoning policy.

Of particular interest is the political unit known as the Board of Trustees of the Freeholders and Commonalty of the Town of Southampton. The Board of Trustees is comprised of five elected officials who serve for two year terms. The political authority of the board was established by the Dongan Patent, a legal document written in 1686 by Governor Dongan of New York. Under the Patent, "residents of the town serve the waters, the lands under the waters, products of waters, fish, game and fowl, for the common use of all residents, forever" (cited in McCrave, n.d.). The patent authorizes Southampton Town Trustees to oversee the policy formation concerning waterways, bay productivity, and lands (including bay bottom) held in public trust. The Trustees govern

¹ Shinnecock is a name that denotes the home of the commercial fishing fleet. The NMFS weighout data that are recorded for this fleet are variably listed under "Hampton Bays" or "Shinnecock Hills." Hampton Bays is the location of the major commercial and recreational infrastructure of the area. Shinnecock Hills is a separate named hamlet within Southampton Township on the east side of the Shinnecock Canal.

water-related activities including boating, shellfishing, and shoreline development. Bay Constables enforce the policies enacted by the Trustees.²

Southampton is located approximately 80 miles from New York City along Route 27, Sunrise Highway. The town is bordered on the west by the town of Brookhaven and on the east by the town of East Hampton. The Great and Little Peconic Bays are located to the north, along with the town of Riverhead which lies at the junction of the North and South Forks. A series of coastal bays, including Moriches, Shinnecock, and Mecox, separate the mainland Town of Southampton from a barrier island along the Atlantic Ocean. The north side of the barrier island just south of Shinnecock Bay is the harbor for the commercial fishing fleet. The commercial properties, clustered along Dune Road, are surrounded by Suffolk County park land. The island is reached via the Route 32 Ponquogue Bridge. This fleet has access to the Atlantic via the Shinnecock Inlet, which is less than half a mile from the docks.

Shinnecock Indians were the original inhabitants of the Hampton Bays area. They planted crops, fished the coastal bays, hunted whales along the shore and are known to have passed their knowledge of whaling to early European settlers. Settlers established the Town of Southampton in 1640 after having purchased land from the area Indians. The Dongan Patent was granted by King James II of England through his General Governor, Thomas Dongan in 1686. This patent granted citizens access and rights to over 25,000 acres of common underwater land, marshland, and common areas, as well as Rights of Ways to the water, and it established the Board of Trustees of the Freeholders and Commonalty of the Town of Southampton to act as stewards of these areas.

The first house in what is now Hampton Bays was built in 1773 by a farmer from East Hampton named Ellis Squires. Within a few decades families were moving into the area and hamlets were sprouting up throughout the region, which, along with a growing lumber industry, caused widespread deforestation. By the late 1800s, the most populous hamlet was Good Ground, a thriving community of fishermen and farmers. The extension of the railroad to this hamlet in 1869 had far-reaching consequences for the area economy. Railroad transportation spurred the trade in agricultural produce and increased tourist traffic to the region. The summer tourist industry, initiated in the 1860s with the development of beach resorts at Westhampton Beach, Quogue, and Southampton Village, grew as a result of railroad transportation. The Bay View House, a resort favored by sportsmen, was established in 1870. The area became known as Hampton Bays in 1922 when the numerous hamlets consolidated in order to take advantage of the ever growing "Hamptons" tourist traffic.

Throughout the 18th and 19th Centuries, inhabitants dug inlets between Shinnecock Bay and the Atlantic Ocean in order to prevent the bay from stagnating and to keep water

² Southampton Town is also the location of the Shinnecock Nation, a self-governing, State-recognized Native American Tribe. The tribe, which numbers approximately 375 people, is located on a reservation in Shinnecock Hills that encompasses 750 acres of land (Southampton Town Online <http://www.town.southampton.ny.us/about.ihtml>)

levels high. Most were filled in by erosion within a short period of time. There was no inlet to the ocean between the early 1700s and early 1800s. By 1826, Shinnecock Bay was becoming stagnant and populations of clams and oysters were dying off. Despite the drafting of proposals to open the bay to Peconic Bay in the 1820s, efforts did not succeed until 1892 when the Long Island Canal and Navigation Company created a canal between the bays. Water moving between the bays caused significant erosion, necessitating dredging and the building of bulkheads. The canal gates were kept open Friday through Monday every week for six months during the summer season and throughout the winter. This greatly improved the bay waters, increasing salinity and increasing shellfish and fish productivity.

Additional efforts to open Shinnecock Bay to the Atlantic were initiated in the 1920s which resulted in improved water conditions. While the new inlet did not last, the improved conditions of the bay promoted the importance of having a permanent inlet for maintaining fish and shellfish stocks. In 1938, a hurricane hit Long Island, flooding coastal bays and towns. The storm tore an inlet out of the barrier island south of Hampton Bays which was thereafter improved. Fish and shellfish stocks in the bay began to rise and the new inlet provided the foundation for the establishment of an offshore commercial and recreational fishing fleet. The creation of the Shinnecock Inlet prompted the use of locks on the Shinnecock Canal to keep water from moving from Shinnecock Bay to Great Peconic Bay. Water is allowed to flow into Shinnecock from Great Peconic, but the locks are closed at the change of tide to keep water from flowing north out of Shinnecock Bay. These measures have kept the inlet fairly stable over the years (McCrave n.d.).

Today, Hampton Bays is a popular seasonal resort that draws tourists from western towns on Long Island, New York City, and surrounding states. The area population increases dramatically during the summer tourist season. Across Southampton, the summer population is over three times larger than the year-round population (Southampton Town 1999). Much of the increase is attributed to second home ownership and the trend towards more frequent second home use among owners. A growing number of telecommuters work from the area via Internet, telephone and fax use. The area's historical development as a tourist and second home community is one reason why residential land accounts for 24% of the Town of Southampton's total land area, compared to agricultural land which accounts for a mere 8% (ibid.). Tourism and the second home industries drive the area's economy, but commercial fishing and sportfishing are important facets of the community's economic and social life. According to the Southampton Town's Comprehensive Plan, the fishing industry supports the second home and tourist industry due to its central place in the character and economy of the area. The water-orientation of the town is a compelling factor in attracting tourists and developers, yet unfettered development of these sectors does constitute a threat to the commercial fishing industry (ibid.).

II. Dependency and Engagement in the Fisheries

A. Commercial Fishing

History and Current Description

Shinnecock Indians were the first to work the coastal bays and shorelines of the Hampton Bays area. They shared their knowledge of whaling and other fishing activities with early settlers in the region. Throughout the early years of settlement, scavenging beached whale carcasses was coupled with more sophisticated methods of harpooning, and myriad techniques for the harvest of bay fish and shellfish. A fifth-generation bayman in his eighties recalled the fishing methods of his father and father's father. They employed tongs, mud rakes, and scratch rakes for harvesting clams in the summer. Baymen also used nets for catching bunker, traps for eels, seines for elvers, and fyke nets for flounders and other fish. Other resources were harvested by hand, such as horseshoe crabs. Much of the fishing activity was conducted from small, shallow draft vessels called "sharpies" that rarely exceeded 16 feet long. Hampton Bays was home to a number of multi-generational fishing families, many of which are no longer working the water. In addition to supporting the full-time watermen, the productivity of area waters encouraged part-time participation in harvesting fish and shellfish. The declining water quality and decreasing stocks of shellfish drove many out of business. According to one old-timer, there used to be over 100 clammers working in Shinnecock Bay in the 1950s.

Scalloping in Peconic Bay was once an extremely important dimension of the social and economic life of the community. From September through March many families in the community would be involved in the harvesting and processing of scallops. It was an event that cemented family ties. All members of a household would participate in the division of labor, with the men responsible for harvesting and the women and children engaged primarily in the shucking and marketing of scallops. Most of scallops were frozen and then put onto the market when the prices were favorable. Nearly thirty percent of all bay scallops in the United States were harvested from Peconic Bay prior to 1985. The income from the harvest and sale was a substantial component of many household budgets that could cover a family's housing costs from year to year. This use of bay bottom was made possible by the continued authority vested in the Dongan Patent, which grants citizens the right to use common bottom. Only residents of Southampton may use bay bottom, and they are required to purchase a state license (250.00) and a Trustees permit (100.00).

The market for Peconic Bay scallops has declined over 95% since 1985, when the first brown tide algae bloom devastated the Peconic Bay estuary system. Over the years since 1985, occasional blooms of the algae, *Aureococcus anophagefferens*, have continued to plague the estuary and hamper the recovery of scallops and the multi-million dollar industry it supported. The decline in scallop stocks not only eliminated the second income for many families, but also undermined the social interaction among family and

community members that accompanied the scallop industry. As one local put it, "it was a three generation activity everyday for up to six months of the year."³

Today, there are approximately thirty full-time baymen in the entire Town of Southampton, a dozen or so of whom live in the Hampton Bays area. These baymen harvest fish with a variety of gear types including pound nets, fyke nets, and gillnets. Many also harvest shellfish such as clams, oysters, mussels and scallops. As many as 200 residents may also engage in shellfish harvest on a part-time basis (Southampton Town 1999).

Commercial fishing in the Atlantic did not become a significant business in Hampton Bays until after the creation of the Shinnecock Inlet in the late 1930s. Prior to this, Atlantic fisheries were limited to those men who launched boats from the surf further east on the South Fork in communities like Amagansett. Hook and line cod fishing, whaling, and ocean haul seining were once practiced in the area. Weighout data show that less than one percent of the total catch value landed in Hampton Bays is attributed to ocean haul seining, indicating that the practice is still in existence.

Today, Hampton Bays is the principal port of New York's second largest commercial fishing fleet. The fleet, which numbers approximately 40 vessels, is characterized by a diversity of gear types. One long time resident and participant in the fishing industry assisted in identifying boats from a 2002 National Marine Fisheries Service (NMFS) permit list. Of the 63 boats registered with a principal port of Hampton Bays or Shinnecock, 35 were identified as draggers, five as gillnetters, one as a lobster boat, and one as a clammer. The remaining boats were unknown (17), sportfishing boats (1), or non-operational commercial craft (3). A separate informant provided a list of local boats, and assisted in identifying the gear types for each boat. The list of 35 boats includes: 12 inshore draggers; 11 offshore draggers; four gillnetters; three transient draggers; two longliners; one scalloper; one clammer; and one baymen. There are additional baymen who work in the area as noted above.

Vessel Trip Report (VTR) data indicate that sixty one federally-permitted commercial boats landed 2,706 trips in Hampton Bays in 2001.⁴ Thirty seven of these boats claim either Hampton Bays or Shinnecock as their principal port of landing. These boats landed 2,441 trips in Hampton Bays in 2001, or 90% of all trips landed in Hampton Bays by federally permitted boats. The reported gear types among these boats in 2001 included otter trawl, handline, gillnet, lobster pot, bottom longline, pelagic longline, scallop dredge, and fish pot. There were twenty four boats from a variety of other ports that landed catch in Hampton Bays in 2001 including five from Montauk, four from Point Judith, RI, four from Greenport, NY, three with a principal port of New York, NY, two from New Bedford, and one each from Barnegat Light, NJ, Boston, MA, Bremen, ME, Lowland, NC, Mattituck, NY, and Point Lookout, NY.

³ For more information on the brown tide phenomenon, see Cosper et al. 1987; Drumm 1998; Kahn and Rockel 1988.

⁴ This analysis of VTR data includes trips reported for both Hampton Bays and Shinnecock, as these names refer to the same port of landing.

The fleet in Hampton Bays is largely owner-operated. An analysis of 2001 VTR data on federally permitted boats that designate Hampton Bays or Shinnecock as their principal port indicate that these boats (n=38) average 48 feet in length, 43 gross tons and 359 horsepower. The average year built is 1982. These boats reported a total of 2,511 trips. Of these trips, 97% were landed in Hampton Bays/Shinnecock. Other ports of landing included Brooklyn, NY, Elizabeth, NJ, Mattituck, NY, New Bedford, MA, New London, CT, and Point Judith, RI.

Weighout data presented in Appendix 1 depict the different gear types used in the harvest of fish and shellfish landed in Hampton Bays since 1994 and the percentage of value and pounds for which they account. The table illustrates the wide-range of gear types that are employed. These data show that the fish otter trawl accounted for 77% of the total value landed in 2001. Comparing across years, this gear type has accounted for at least 56% of the total value landed in Hampton Bays since 1994. The sink gillnet is the other gear type that stands out in the weighout data. It accounted for 12% of the total value landed in 2001 and has contributed at least 2% of the total value since 1994. Other important gear types included bottom longline and hand rakes, which contributed 5% and 2.5% of the total value in 2001. Both of these gear types have contributed more of the total value in recent years.

One interesting trend revealed by the data is the declining contribution of surf clam, ocean quahog dredging to the total value landed in Hampton Bays. Between 1994 and 1996 this gear type accounted for as much as 31% of the total value landed. This percentage dropped to zero in 1998 and has remained at that level. According to a 1996 report, Hampton Bays was an important port of landing for transient surf clam/ocean quahog vessels (Gall 1996). Industry sources estimated that two to eight vessels landed catch at Shinnecock docks at certain times of the year. Weighout data demonstrate that these landings were ocean quahogs. Representatives from the fishing industry who provided information for the present study indicated that one vessel currently packs surf clams in Hampton Bays. One gear type that has been eliminated entirely is the mid-water paired trawl, which accounted for 4% of the total value in 1995.

Weighout data presented in Appendix 2 show the changing percentages of value and pounds of species landed in Hampton Bays between 1994 and 2001. They demonstrate that *loligo* squid accounted for the highest percentage of total value landed (31%), and that a wide variety of species are important to the fleet including whiting (11%), monkfish (10%), flounder (8%), fluke (8%), finfish⁵ (8%), surf clam (8%), tilefish (6%), and 'other'⁶ (5%). Other species that show up in the 2001 weighout data include pelagics (4%), shellfish (2%), and tuna, dogfish, and lobster (each under 1% of the total value).

⁵ The "finfish" category includes Atlantic croaker, scup, black sea bass, weakfish, striped bass, and spot. Among the Shinnecock fleet, scup is one of the more important finfish.

⁶ The "other" category includes all species other than those accounted for in weighout data categories (whiting, monkfish, flounder, pelagics, finfish, tuna, fluke, dogfish, lobster, scallop, squid, shellfish, surf clam and ocean quahog, swordfish, eel, tilefish)

Since 1994, *loligo* squid has accounted for at least 17% (1995) and as much as 43% (2000) of the total value landed. The 1995 figure is low as a result of the high value of ocean quahogs landed at that time. The percentage of value contributed by whiting landings has dipped from a high of 27% in 1996 to 11% in 2001. From the mid-1980s to the mid-1990s, whiting landings ranged from over 1 million pounds and a value of \$0.5 million (1986) to a high of 4.7 million pounds with a value exceeding \$2 million in 1993 (Gall 1996). According to local fishermen, even though whiting was a low value fish, the allowable by-catch of species like fluke, porgy, and sea bass made it profitable. Once the by-catch was reduced, whiting was no longer worth pursuing. Prices dropped from \$0.60/pound to \$0.10/pound for whiting. Over the years, squid fishing has become a necessity for Shinnecock trawlers due to the restrictions on other Mid-Atlantic species. The control exercised by processors over the squid market is said to have kept prices as low today as they were 20 years ago (approximately \$0.35/pound).

In the 1980s summer flounder contributed the largest percentage of total dockside value and volume in Hampton Bays. The highest summer flounder landings were recorded in 1988 when 1.3 million pounds valued at 2.2 million were landed (Gall 1996). Since that time, management measures designed to limit the directed fishery and improve stocks have prompted trawlers to focus more effort on underutilized species like squid. The reduced quotas and rebounding stocks have frustrated many fishermen who feel that this is one more example of management run amok.

Other fish that have been important in the past include cod, yellow tail flounder, and dogfish. The cod and yellow tail flounder used to be more plentiful in the winter. According to local fishermen, these species are no longer available due to the warming water that has driven these species further north. Some believe that the warming trend is also responsible for the declines in local whiting stocks. When the fish and chips market created a demand for dogfish, what was once considered the trash of the sea became a lucrative target in the 1990s. Concern for the slow maturing creatures led to the implementation of the dogfish fishery management plan (FMP) that severely cut back the allowable catch, effectively eliminating this fishery for the Hampton Bays/Shinnecock fleet. Local fishermen, referring to the strict regulations, quizzically explain that trawlers cannot tow between three miles and 50 fathoms without filling the bag with dogfish.

Seasonal Round

Seasonal activities of the Hampton Bays fishing fleet vary according to gear type, but many other factors influence the movements of boats, the fishing grounds utilized, and the species targeted at different times of the year. One of the most important factors is the regulatory environment in conjunction with the natural environment. A local captain explained that Shinnecock draggers have always relied on a diverse, mixed trawl fishery throughout the season. "In the past, we used to land many different fish. There was a lot of diversity and no one fish made the day." This was due to the fact that the smaller mesh bags used by draggers caught groundfish as well as other species such as whiting, squid, butterfish, and mackerel. Since the imposition of the six inch minimum net law for groundfish, fishermen have to decide whether to fish for groundfish or the mixed Mid-

Atlantic species. "I have guessed wrong the last few weeks." Most draggers do fish for squid in the summer when they move in close to the southern shore of Long Island, but this pattern was interrupted in 2003 when the squid did not arrive in large numbers. In the winter, some boats steam to the Hudson Canyon and fish in 100 fathoms for squid while others spend time fishing for groundfish further north. For the majority of the year, draggers rely on a mixed trawl fishery of a variety of species.

Gillnetters who work out of Shinnecock also depend on a variety of species and activities. One gillnetter explained that it is important to diversify in order to make ends meet. Monkfish are the mainstay of his operation. Like other gear groups, the timing of gillnetting activities is heavily influenced by regulations. The fewer days at sea allowed for monkfishing requires fishermen to target the fish when they are most plentiful. "We try to hit the peak of the run which is between May and June, and again in the fall between November and December." He gillnets for a variety of other species including bluefish and weakfish in April, May, July, August, September and October. Fluke are caught March through November. Mackerel and bonita are targeted in July, August, and September. He also gillnets for bunker in the bay in March, April, and May. In addition to deploying gillnet gear, this fisherman also dredges crabs in the winter between January and March, churns clams in January and February, haul seines for spearing between February and May, and maintains oyster aquaculture beds throughout the year. He uses a small boat to clam in his "off" time and to tend the bottom that he leases from the state.

Baymen engage in myriad fisheries throughout the season. One old timer who still works the water traps eels in the spring and fall, pots conch in the bay during the summer and fall, and also scallops during the fall. Some baymen churn for razor clams in the winter, a technique that employs the use of an outboard motor to disturb the bottom and force the quick moving razor clams into a basket. Others are moving into oyster mariculture. One younger bayman explained that a one inch seed oyster, which costs a penny, will yield \$.40 when it is grown to full size. He purchases his spat from a dealer in New England. A few baymen still use fyke nets in the winter to catch flounder and pound nets in the spring through the fall for a variety of fish. Tonging clams in the summer is also practiced among the local baymen.

Crew Description

The Shinnecock commercial fleet employs roughly one hundred crew members directly. This figure is a rough estimate based on the following findings. Vessel Trip Report (VTR) data indicate that the 38 boats listing Shinnecock/Hampton Bays as principal port that landed trips in 2001 had an average crew size of two. This amounts to a total of 76 crew members. This number likely underestimates the total due to the numerous baymen who do not report VTR data and the fact that some boats work with different deckhands through the year. One informant who assisted in identifying federally permitted boats from the NMFS 2002 permit list specified the number of crew on each known commercial boat with a principal port of Hampton Bays or Shinnecock. According to his knowledge, the 42 boats identified as commercial fishing vessels employ approximately 94 crew members. Once again, this does not include participants in the small scale bay

fisheries. Other informants estimated that there are one hundred fishermen employed by the Shinnecock fleet. Most of these fishermen are said to live within 30-40 miles of the dock area.

The number of fishing vessel crewmembers has certainly diminished over the past decade. A 1996 report placed the number of dragger crew alone at one hundred (Gall 1996). A separate report that was drafted in the mid-1990s estimated that the local fleet employed 240 crew members and created 100 jobs in boat maintenance, fish packing, processing, and transportation (Southampton Town 1999). According to the 2000 US Census, 95 individuals in Hampton Bays were employed in agriculture, forestry, and fisheries, down from 133 in 1990. While this number cannot be treated as an absolute due to the fact that many of the fishermen do not live in Hampton Bays, it does indicate a relative decline in the overall workforce. Expanding the scope of the analysis to include all of Southampton Town illustrates an even more dramatic decline in this segment of the workforce. Employment in agriculture, forestry, and fisheries dropped from 1,106 in 1990 to 338 in 2000.

The decline in the fisheries workforce is one of the greatest concerns among fishermen in Hampton Bays. The lack of recruitment to the industry was repeatedly cited as one of the most pressing problems resulting from the cumulative effects of fisheries regulations. A fisherman in his mid-30s described the problem:

Look at the ages! There is no new recruitment. I am thirty three and the youngest [fisherman] that I know. When the old ones retire, that will be it. I was brought up on the water. My father and his father worked on the water. It's a struggle, the regulations are hurting us. We are working harder and making less - it is hard to maintain the same level of income.

According to another fisherman, the local construction industry is drawing away the fishing workforce by offering jobs that pay \$20 to \$25 an hour. In the past, the fishing industry lured crew from the construction industry. Boats were able to keep crew employed all year and pay them well. Now, the appeal of fishing has declined due to the instability of the industry, the unpredictability of the pay, and the risks associated with operating short handed. One captain explained:

I used to have two crew members and now I have one guy who shows up sometimes. Crew can bang nails for more than \$100.00 a day and be at home eating dinner when we are at sea. Not one father has brought his son down here to continue it.

In a separate interview, a dragger captain described how he used to have two deckhands working on board in the summer during the squid season, and up to four deckhands in the winter when the boat was groundfishing. The diminishing profits, coupled with the attraction of land jobs is hurting the industry and creating dangerous working conditions at sea. Some captains are forced to fish with only one crew member, or alone in certain

cases. According to one informant, most boats do not carry large hull insurance because too many claims have been submitted for damages caused by poorly qualified crew.

We are not getting quality people anymore and not one boat has a full time crew. There is a high turnover. The guy I have running my other boat walked up looking for work and I hired him. We are all trying to look for better crew and better days.

Another boat owner concurred, citing the lack of experience and reliability that characterizes his crew: "I have people running my boat that you wouldn't let drive a car." The lack of recruitment is due, in part, to the disruption of the cycle that allowed fishermen to progress from deckhand to mate, to captain, and owner. This cycle has been disrupted by the unpredictability of the future and the risks associated with investing in fisheries. The future is uncertain as a result of fisheries management policies that many consider to be capricious and unpredictable. Fishermen can no longer plan from year to year, and expect to become burdened with more regulations. "We are totally reactive now."

Infrastructure

Most of the infrastructure that supports the fleet of Hampton Bays is located on the barrier island to the south of Shinnecock Bay, just across the Route 32 Ponquogue Bridge. The docks and packing facilities are clustered along Dune Road, just west of the Shinnecock Inlet. From east to west, the facilities include a "town" commercial dock, a privately owned fish packing dock, a fishermen's cooperative that packs product and provides wharfage, and a second privately owned dock and fish packing facility. One other market located to the north of Ponquogue Bridge buys from local boats and packs product on a limited basis for some local baymen.

The Southampton Town dock was established in 1984 to accommodate the growing fleet of Hampton Bays. It was built by Suffolk County, on county-owned land with federal assistance. The dock is currently leased and managed by Southampton Town. It provides space for twenty commercial fishing vessels, and has been filled to capacity since its inception. Concern over the accumulation of fishing gear and the decrepit state of the dock led to an infusion of funds for renovations that were being carried out in 2003. The town's Local Waterfront Revitalization Plan calls for a study of the potential for expanding commercial fishing facilities in this region. According to the Comprehensive Plan, one possibility includes expanding the dock space into the County owned land west of the current dock (Southampton Town 1999). The renovations are much needed, but fishermen are concerned about the plan to raise the slip space rent from \$40/foot per year to \$100/foot per year.

The fishermen's cooperative was formed in 1984 by approximately ten local boat owners in order to provide predictable, low-cost fuel and packing services for area boats. The cooperative rents property from an owner who once operated a packing house on the same property since 1957. The cooperative provides the labor, ice, boxes, and trucking

necessary for packing seafood. It takes no part in the sale of product, and has no license to buy or sell fish. The cooperative also sells fuel to boats. Up until three or four years ago, fuel was sold at cost, but increasing operating costs necessitated an increase in fuel charges. The cooperative employs one dock manager and four laborers, two of which are from South America. Turnover among workers is high due to the odd work hours, laborious conditions, and unpredictable schedules. Regulations that restrict the fleet have resulted in temporary lay-offs of dock workers. As one representative from the cooperative put it, "Where do you find people to work at night in this weather after you laid them off for three months?" Area landscaping and construction firms draw much of the available labor.

An estimated 80-85% of the cooperative's business is generated by members of the cooperative. A few boats outside of the cooperative also land catch at the dock. Squid accounts for approximately 75% of the dockside value landed at the cooperative. Numerous other species account for the remainder including winter flounder, whiting, weakfish, summer flounder, and porgy. They also pack one surf clam boat as well.

The cooperative functioned well in the 1990s, having as many as twenty members (Gall 1996). Since that time, the cooperative has faltered. In late 2002, it had only seven members. The buildings on the property are in decay, services at the dock are inconsistent, and shortages of supplies like fuel and packing boxes are commonplace. The dock could conceivably pack 10 million pounds in a year, but it is operating at only 15-30% capacity. The cooperative used to pack 2,000 cartons a week in comparison to the 300-400 that currently come across the dock most weeks. According to one of the cooperative's founders, this decline is due to the cumulative effects of fishing regulations in combination with the general business climate of the industry. "We have fewer than one third of the boats we once had and there is no new recruitment." Whiting was once a major boon to the dock, but restrictions on the fishery in combination with tighter quotas on other Mid-Atlantic species limited the whiting fishery among Shinnecock boats. Many boats are simply laying up and not fishing.

To make matters worse, the owner of the property that is being rented by the cooperative died in late 2002, putting the cooperative in jeopardy. The estate has put the property up for sale and competition for the land will be fierce. A representative for the cooperative would like to buy the property and preserve the infrastructure for the future of the industry, but feels that this is an unlikely outcome.⁷

One of the two private docks on Dune Road has been a packing facility for over 20 years, but has been under new ownership for approximately four years. The operation provides water, ice, fuel, oil, cartons, dock space, and packing services for commercial boats, and also sells fuel, bait, and ice to sportfishermen. It also rents thirty slips to recreational

⁷ Following the completion of fieldwork, the property that housed the fishermen's cooperative dock was sold to the owner of the adjacent dock and fish packing house. A restaurant and seafood market are included in the plans for development. While the cooperative is now defunct, a functioning fish dock with commercial slip space will remain on the property.

boats. Commercial fishermen who pack at this facility sell their product on consignment to Fulton Fish Market buyers. The dock receives the business of approximately 22 fishing vessels. Seventy five percent of these boats are local. Although they try to attract the business of transient vessels, it is difficult to do so primarily because of the high New York State fuel taxes. The high price of fuel on the East End of Long Island, coupled with the \$0.35 per gallon diesel tax discourages the transient scallopers and monkfish gillnetters from New Jersey ports from landing here.⁸ The dock does receive the business of transient draggers from places like Montauk and Rhode Island when the squid are on the beach just outside of the Shinnecock Inlet during the summer. The dock's owner also owns three trawlers. These boats, along with a fourth, were originally supposed to pack out of this dock but regulations prompted the owner to send the boats to Georges Bank to fish for groundfish for the past three years. The owner anticipated packing out 60,000 cartons with these four boats alone, and their absence has hurt the dock. The boats are now packing out of New Bedford. The move was essential in order to maintain the boats. He lost all of the local crew and captains due to the long commute and the fact that they had no experience groundfishing. Reduced groundfish days at sea are further limiting the profitability of these vessels.

The dock used to rely more on whiting in the past, but squid has become the mainstay, contributing approximately 75-80% of the value landed. The months of June through August provide the greatest landings of squid, but there is also a fall run and offshore squid fishing in the winter. The dock can handle five million pounds a year but is currently operating at 50-60% capacity as a result of burdensome regulations that are driving the competent captains elsewhere. Fewer boxes across the dock results in fewer employees. This dock employs a dock master, six marina assistants, a dock manager, and four dock hands. It once employed eight dock workers. The owner also runs a restaurant that employs between 15 and 17 workers in the winter and 28 workers during the summer season. The restaurant has been essential in making up for losses at the dock incurred by tighter regulations. Many of the employees are from Central and South America - Guatemala, Costa Rica, and Colombia. Their employer spoke highly of their work ethic and responsibility, noting that they have been essential to the successful operation of the dock. All of the employees live within ten miles of the dock. Turnover has been low as a result of steady, competitive pay.

There is one other private dock on Dune Road. The manager was not available to discuss the particulars of the business operation. According to other informants, there are approximately three or four boats that pack out of this dock. Among these vessels are draggers that participate in the squid, whiting, and mixed-trawl Mid-Atlantic fisheries, as well as surf clam/ocean quahog boats.

One other operation in Hampton Bays is directly involved in packing seafood from the local fleet. This business markets seafood at retail and wholesale levels. They buy and process local fish, and sell it to other fish markets, restaurants, and catering businesses.

⁸ Tax laws allow for commercial operations to receive a refund for the fuel tax but many are unwilling to go through the paperwork, according to one local dock owner.

The business, which runs a retail market, fillet operation, and cold storage and freezer facility, has been in business for over twenty five years.

The business has gradually shifted from an emphasis on local seafood products to a greater reliance on imports like salmon, catfish, and tilapia. The owner explained that flatfish filleting was a much more important dimension of the operation when flounder fillets were more in demand. This aspect of their operation has diminished over the past five years and the market for flounder has declined. Flatfish still account for as much as 30-35% of the wholesale operation. The loss of the bay scallop fishery over the past decade also encouraged a shift in focus from local products to imports. Imports are favorable because supplies are stable and predictable. The local fleet could not supply the demand on a consistent basis throughout the year. The business buys from the local fleet year round, but concentrates this activity between May and September. Bay scallops used to carry the business through the fall into the winter, at which time locally caught flatfish became the primary product. Presently, the decline in bay scallops and flatfish makes the fall and winter difficult times for the business. The business can benefit from hard winters for fishing due to their close proximity to the docks and the ability to deal directly with the fishermen. The owner estimates that 50% of their product is purchased from Shinnecock boats and the rest comes from other dealers and fish brokers, such as those at Fulton Market. In the past, the local fleet provided between eighty and ninety percent of the product.

The business employs approximately two dozen people including seven full-time, year round retail assistants, four drivers, six retail shop helpers, three fish cutters, two managers, and two bookkeepers. According to the owner, it is very hard to find employees, especially from April through November when the landscaping businesses are attracting local laborers. It is difficult to match the pay that landscaping offers. Most of the employees live within twenty five miles, and many live within Hampton Bays. A number of African Americans who are employed in the fish fillet operation commute all the way from Greenport, NY.

In the mid-1990s, the supporting infrastructure for the local fishing fleet was described by industry representatives as "fantastic" in comparison to past conditions (Gall 1996). In less than a decade, the opinion on the state of the infrastructure has turned. A number of informants stated that the dockside infrastructure has declined in recent years. Fishermen described the loss of dockside jobs such as net-making and welding as evidence of the decline in infrastructure and support. The full-time welders who used to work at the docks are said to be making fences for the estates that are being built across the region. Others pointed out the cooperative dock's state of disrepair, the inability to afford new equipment, and the overall decline in product coming across each of the area docks. The smaller quantities of product are making it difficult for dock owners to keep employees and maintain their facilities in good operating condition. The Town of Southampton is in the process of upgrading the public dock, which will help support the fleet. In addition, maintenance of the Shinnecock Inlet and prevention of shoaling is a constant necessity. Unfortunately, there is great uncertainty concerning the future of the cooperative and the effects that a loss of this property might have upon local fishermen.

Economic Networks

The fishing industry centered in Hampton Bays is one node in a complex network of economic relationships that exist at the local, regional, national, and international levels. Fishermen are embedded in local networks that include the local seafood buyers who process and freeze squid, cook and freeze conch, fillet fish, and/or operate retail markets. These locally processed products are sold to area restaurants and other markets in New York City. The local docks ship most all of the product on consignment to Fulton Fish Market in New York, or to buyers in New Bedford where it becomes part of an international trade. Up to 20% of *loligo* squid is trucked to processors in New Jersey and New York. Shellfish is bought by numerous operations across Long Island. Bait companies on Long Island are also part of the economic networks of the commercial fishing industry, linking the sportfishing industry directly to the commercial harvest of clams, bunker, squid, and other products. The primary trucking firm that works in Hampton Bays has been operating in the area for nearly 30 years. Each of the dockside facilities in Hampton Bays relies on local builders, mechanics, refrigeration specialists, electricians, auto supply shops, hardware businesses, oil and fuel companies, marine electronics suppliers, and many other services. Dock packing supplies are purchased at the regional level from businesses such as CAS Pack in Pennsylvania.

Fishermen rely on a host of local and extra-local businesses and services. Commercial fishermen who were asked about their economic ties to other businesses described the scope of these economic networks. Most commercial fishermen obtain fuel and ice from one of the three local docks at which they pack their catch. Others buy ice from Long Island Ice and Fuel in Riverhead, NY. Many fishermen are skilled welders, performing necessary jobs whenever possible, but many employ local welders who come to the docks on weekends. Others employ welders from Riverhead, Moriches, and Greenport, NY. Boats are hauled out at a number of nearby locations including Jackson's Marina and Ponquogue Marina in Hampton Bays, Sennex Marine in East Moriches, and South Shore Boat Yard in Patchogue. Larger boats may haul out for more significant work in other ports. Commercial fishermen obtain fishing supplies at Gearwork in Riverhead, NY, in addition to ordering needed supplies from businesses such as Nylon Net in Tennessee and Mike Keller in North Carolina. Safety at sea equipment is purchased from All Points Marine, in Hampton Bays and West Marine in Riverhead, NY. There are a number of local marine electronics businesses that are patronized by commercial fishermen including Seatronics and Hampton Navigation. Others purchase from catalogs or other locations such as New York Marine Electronics in Port Jefferson, NY. Insurance is purchased from a number of companies, the most popular being Island Wide Marine Agency in New York. Many fishermen keep their own books with the assistance of their wives, but others employ accountant services such as Berger and Berger in Port Jefferson, NY and Jones and Little in Hampton Bays, NY.

The economic ties between local businesses and the commercial fishing fleet are considered to be extremely important, especially during the winter season when commercial fishing activity keeps many of the local marine-related businesses in

operation. According to the manager of a local electronics company, "commercial fishing keeps the lights on in the off-season." While the importance of commercial fishing has declined relative to inputs from the sportfishing clientele, it is still essential for the survival of this business. The manager estimates that commercial fishing accounts for as much as 15% of the total business that the company receives.

Social Networks and Community Relations

The role of commercial fishing in the social life of Hampton Bays and the wider community of Southampton Town is not readily apparent. Unlike other communities in which commercial fishing is intimately embedded both spatially and culturally, Hampton Bays does not overtly express its connection to the commercial fishing industry. The fleet, itself, is physically disconnected from the mainland, occupying the thin, bayside strip of sand along a barrier island that is separated from the community center by Shinnecock Bay. Driving through Hampton Bays and Southampton Town does not leave the impression that the area is deeply rooted in commercial fishing. There are no monuments or memorials dedicated to commercial fishing or those who have lost their lives in pursuit of this trade. In the bar that used to be above the cooperative dock were pictures and names of lost fishermen. The closest memorial is in Montauk. The town does not hold a blessing of the fleet or any other festivity that highlights the social, economic, or cultural significance of commercial fishing to the area. While the town has supported the industry through the maintenance of the public dock, there are few cultural expressions of the town's commitment to commercial fishing.

Inshore bay fishing, however, is one dimension of commercial fishing that is a recognized component of the area's identity. The respect ascribed to baymen and the harvest of inshore fish and shellfish stems from the area's historical connection to bay fisheries and the role of the Board of Trustees of the Freeholders and Commonalty of the Town of Southampton. The Board of Trustees is one of the oldest elected governing bodies in the country, authorized by the Dongan Patent of 1686. The five Trustees oversee policy decisions regarding the use of public waterways and bottom land. According to an industry representative, the body was traditionally composed of baymen, and approximately half of the current Trustees come from families with ties to bay fishing. The eldest member of a bay fishing family who is also a Trustee took the researcher on a short tour of the Hampton Bays area. During the tour, he described area family histories, kinship ties, and property divisions and holdings. Many of the local families still maintain connections to commercial bay fishing. One demonstration of the continuing importance of the baymen tradition in the area is the town's plan to fund the construction of a maritime heritage center on the Shinnecock Canal. Offshore commercial fishing is a relatively newer industry that does not have the same respect among locals. As one industry representative explained, "In Hampton Bays there is more respect for baymen because it is more of an established community." Prior to the collapse of the bay scallop population, the area's relationship to the inshore water was reified by the social and economic value inherent in the harvest of scallops. The harvest was built on kinship ties and family labor that included males and females across multiple

generations. The community identity was bound to the harvest, processing and sale of scallops, which provided income to hundreds of area families.

In addition to the baymen, offshore commercial fishermen operating from the area also have extensive kinship connections with one another and the community at large. One long time resident and industry representative assisted in identifying the boats from a federal permit list. During the process of identifying owners, captains, and crew the informant pointed out the complex ties that link members of the fishing community together. These connections are based on marriage, blood ties, friendships, economic transactions, interactions at sea, and other social linkages. Referring to the list of boats and fishermen, the informant noted: "These are not just individuals, it is an organic biomass." The ties exist among commercial fishermen from Hampton Bays, Montauk, Point Judith, RI and a host of other ports. The informant related numerous stories about the boats on the permit list, their owners, and the family connections, many of which involve father-son, uncle-nephew, sibling, and cousin relations. He described the community of fishermen as a separate sub-culture that is dying out due to the lack of recruitment. Relations among the fishermen are said to be friendly, despite occasional gear conflict. Some expressed the feeling that they are the last of a dying breed and part of a venerable tradition that has all but disappeared. "This is the tail end. I am part of something that could have been a lot better. There is a small community among us. We give help to each other and have no jealousy. We are all just trying to make a living. We share equipment and information." There is competition among the local docks to attract boats that leads to what is known as the 'Shinnecock Shuffle' - boats shifting allegiance from one dock to another. The shuffle may result from strained relationships between boat owners and docks - unpaid fuel bills, for example. According to one fisherman, everyone cooperates due to the need to work together and present a unified opposition to increasingly stringent regulations. He explained that complaints about regulations have taken over the radio chatter among boats at sea over the past few years, prompting many to keep quiet. Others have attempted to shift the at-sea conversations to family and friends. According to another informant, some members of this community are in difficult straits both socially and financially. He explained that there is a high suicide and divorce rate among fishermen that is due to the hopelessness and despair compounded by drug and alcohol problems. The sense of hopelessness is said to be created by a runaway system of fisheries management that makes the future unpredictable. "The desire to fish is greater than the reward, but how long can you listen to a wife who is saying that we don't have any money?"

The relationship between commercial fishermen, especially baymen, and the long-time area residents is said to be marked by respect and cooperation. Local families are hoping for the return of shellfish populations and improvements in the bay fisheries. Many also recognize the contributions made by participants in the commercial fishing industry to the local economy and society. Others, however, have lodged complaints about the odors associated with operations along the working waterfront. Newcomers who are buying up waterfront property are thought to have less admiration and tolerance for baymen and commercial fishing in general. One industry representative explained how, "Watermen get cursed at when they rake in front of some waterfront properties." This conflict over

waterfront property is indicative of a broader trend of gentrification that has disruptive effects on the area's commercial fishing families. One captain, describing the influx of second home buyers, described the problem:

Seinfeld bought a \$32 million dollar Billy Joel Mansion and plowed it down to make his own and these are the people I'm supposed to live next to! Houses cost \$250,000 at a minimum and taxes are over \$6,000 a year. It is too hard to live here due to the high cost of living. Just pick up a newspaper and look at the real estate!

In addition to the rising property values incurred by the second home and tourist industries, commercial fishermen say they are confronted with an increasingly ignorant public and hostility from sportfishermen. A dragger captain described the situation: "No one is in our corner. Some sportie is giving me the finger when I'm coming into the inlet. He doesn't know I am feeding him. We get a lot of bad press." Others agree that the sportfishermen in the area have a very inaccurate and unfavorable opinion of commercial fishermen, blaming them for declining stocks of many species. Sportfishermen are said to be particularly angered when boats are fishing close to the beach. Despite the poor opinions and tension that characterizes the relationship between sport and commercial fishermen in Hampton Bays, open conflict is said to be rare. As one dock representative put it, "We get along well here. They tolerate us because they want bait."

Discussion: Community/fisheries dependency and engagement

Commercial fishermen in Hampton Bays expressed some ambivalence over the status and value of fishing in the wider social and economic milieu. Most of those interviewed considered Hampton Bays to be a fishing community, but one whose attachment to a fishing identity is becoming increasingly attenuated. The area's historical connection to bay fisheries and the political power invested in the Trustees will undoubtedly encourage the continued promotion of the activities of traditional baymen. The same treatment is not predicted for the industrial fleet, according to some of those involved in the industry. A representative of one local dock explained that the town, which was once supportive of the industry, has come to believe that the commercial fishing industry is no longer profitable and hence, a waste of the town's effort. Not everyone shared this opinion, noting that the town has demonstrated support for the industry through the renovation of the public dock.

Economically, commercial fishing remains an important dimension of the area economy. The commercial fleet landed over 9.7 million pounds of seafood, valued at just over \$9.2 million in 2001. Despite the revenue generated by the commercial fishing industry, it is overshadowed by the overall contribution of other economic sectors, most notably tourism and the second home market. Hampton Bays receives a sizeable influx of seasonal visitors. According to the 2000 US Census, 29% of housing units are vacant and 25% of housing units are for seasonal, recreational, or occasional use.⁹ Employment

⁹ These percentages are lower than the percentages for Southampton Township, in which 39% of housing units are vacant and 35% of housing units are for seasonal, recreational, or occasional use.

data also demonstrate the significance of tourism and second home ownership. The top employment industry in 2000 was education (20%), followed closely by construction (19%), and retail trade (14%). Employment in agriculture, forestry, and fisheries accounted for 1.58% (98 individuals) in 2000, down from 3.49% (133 individuals) in 1990.

The maritime character of the area is one of the attractions that draws visitors and supports the second home industry. According to the Southampton Town Comprehensive Plan, the fishing industry is an integral aspect of the character and economy of the town that supports tourism and the second home industry. "Without the sense that Southampton is a rural, water-oriented community, the town would lose its appeal as a tourism and second home destination" (Southampton Town 1999). The Comprehensive Plan outlines a vision for the sustainability of the commercial fishing industry and recommends addressing the key concerns of the industry. Among these concerns is the negative impact of rising waterfront property values on access to the water; the problems created by residential developments such as nuisance suits and vandalism; the need for improved dockside waste treatment and water infrastructure; the need to develop local and regional markets; the increasing demand for skilled, reliable labor; and, the importance of planning transportation with the industry needs in mind. One of the stated action items in the plan calls for the improvement of the industry infrastructure at Shinnecock Inlet, recommending expansion of the public dock on county owned land in order to provide additional berths for fishing vessels. The town, in cooperation with Suffolk County, is currently funding much needed renovations of the town commercial dock.

Despite these measures and signs of commitment, many commercial fishermen expressed deep doubts about the future of the industry and the continued support from the town. Some business owners complained about the complex permitting process that stymies their ability to plan for the future. The high consultant fees coupled with the time-consuming permitting process and unpredictability of outcomes prevents business owners from initiating needed developments. "It could take years to get a permit and by then the conditions and your needs have changed." One fisherman noted that tourists and other community members might like the "nautical look" but ultimately do not care about the viability of the industry. One captain stated that, "The town does nothing for us." Referring to the future of the industry, he said "It's dead." The owner of a local company that once depended on the business of commercial fishermen concurred, explaining that the industry is, "half of what it used to be, and will soon disappear altogether." This outlook differs markedly from that which was reported in the New York's Seafood Council Newsletter in 1996:

Although significant expansion is not expected to occur in the near future, Shinnecock fishermen remain optimistic that they can maintain their businesses and continue to be competitive and profitable into the twenty first century (Gall 1996).

This transformation of the perceived value of commercial fishing and its future is intimately related to the cumulative effects of fisheries management measures in concert with the forces of gentrification that are discussed in the following sections. While Hampton Bays continues to be the second most important port of landing for commercial vessels in New York, the future is in doubt. The doubt is related to the lack of recruitment to an industry plagued by declining profits and decaying infrastructure, the uncertain future ownership of the cooperative property, the increasing burdens associated with fisheries management, and the expansion of the second home and tourist industry.

B. Recreational Fishing

History and Current Description

Hampton Bays has been a popular sportfishing destination over the past century. The town, known as "The boat ways of the Hamptons" provides access to a number of different bodies of water including coastal bays, the Peconic Bay system, and the Atlantic Ocean. Hampton Bays is the only town in the Hamptons with access to all surrounding waterways. From Shinnecock and Tiana Bays, anglers can reach the Atlantic Ocean through the Shinnecock Inlet, and the Peconic Bay system via the Shinnecock Canal to the north.

Hampton Bays has been a sportfishing destination since the establishment of a summer tourist industry in the 1860s. The industry was initiated in the 1860s with the development of beach resorts at Westhampton Beach, Quogue, and Southampton Village. The area's reputation among sportfishermen grew as a result of the extension of the railroad to the hamlet in 1869, which brought an increase flow of tourist traffic. The Bay View House, a resort favored by sportsmen, was established in 1870. The nearby Canoe Place Inn became a luxury retreat for the wealthy by the early 1900s, attracting politicians such as New York Governor Alfred E. Smith, who fished every summer along the Shinnecock Canal. The creation of the Shinnecock Inlet in 1938 and its subsequent maintenance allowed for the expansion of the sportfishing industry into offshore fisheries. Swordfish and other billfish were pursued within a few miles of the beach in the mid-1900s. While the swordfish populations have dwindled and moved further offshore, tuna fishing has grown in popularity along with shark fishing since the 1970s. One old-timer who has operated a marina in Hampton Bays for over 40 years described how the area has changed. Back in the early days, there were few marinas and a few small boatyards. Boats were much smaller than they are at present. The billfish used to be within striking distance of the Shinnecock Inlet and this attracted many sportfishermen to the area. Over the years, more and more marinas were built, many of which had motels attached. The average boat size increased along with private ownership of boats. Presently, there is virtually no ability to expand and the slip spaces are at maximum capacity. The permitting structure and zoning laws are said to prevent further expansion.

Today, sportfishing in Hampton Bays depends on numerous fisheries and attracts participants of all tastes and backgrounds from across the socioeconomic spectrum. The

direct value of the industry to the Town of Southampton is estimated between \$32 and \$67 million (Southampton Town 1999). There are an estimated 50 charter boats and one party boat operating out of approximately 34 area marinas that provide nearly 1,500 slip spaces. Many of these marinas are located off of little back roads that wind their way along the snaking canals and creeks of the northern shore of Shinnecock and Tiana Bays. Aside from a handful of highly visible marinas clustered along the Shinnecock Canal, most of the infrastructure is tucked inside the creek coves. In addition, it is interesting to note that many of the marinas combine boat slips with motel accommodations. One long time resident and marina owner explained that motel-marinas are rooted in the area's historical fluke fishery. When fluke were plentiful, Hampton Bays was a popular destination for anglers who would lodge at the marinas where they kept their boats or from which they rented boats or chartered guides. The motels offered boat rental and lodging packages to the fishermen. With the decline of fluke, sportfishing in Hampton Bays became more highly dependent on offshore tuna fishing. Inshore fluke fishing is still important, but the resurgent striped bass population has added a new dimension to the inshore fisheries. More people are on the water as a result of the exploding population of striped bass as well as the healthy stocks of tuna. Many consider these two fisheries to be the backbone of the area's sportfishing industry, but other fisheries, including fluke, bluefish, and blackfish (tautog), are also growing.

Most of the area charter boats operate seasonally, or on a part-time basis. There are inshore and offshore charters that offer a variety of options for clients - from chunking tuna offshore to fly fishing for striped bass in the bays. The one party boat in Hampton Bays concentrates on fluke, sea bass, porgy, bluefish, and flounder. Informants comment that there used to be a larger party and charter boat presence in Hampton Bays. The decline is attributed to the prohibitive expense of operating the boats coupled with the increasing cost of living in the area. Shore fishing in Hampton Bays is popular as well, and there are a number of favored locations including the Ponquogue Bridge Pier, Shinnecock Canal, Shinnecock Inlet, and the public beaches along the Atlantic. Recreational fishing is a very important component of the overall economic and social life of Hampton Bays. While there are a few marinas in the area that primarily cater to cruisers and pleasure boaters, the majority of them are built for fishermen. As one local fisherman put it, "You won't find many carpeted boats around here."

Seasonal Round

Sportfishing in Hampton Bays is highly seasonal, with the majority of activity occurring between April and October. In April, striped bass are targeted by private, party, and charter boat, and on shore by surf casters and fly fishermen. Favored baits include clam, squid, and live bait fish. Boating anglers may drift bait or troll with artificial lures. Fishing grounds at this time include the Peconic Bay, Moriches, and the canals. The spring run of striped bass includes the large fish. April may also feature a short run of mackerel lasting between one and three weeks during which some charters troll, drift bait, or use jigs offshore. Bluefish move into the area in May and this fishery has become very popular with party and charter clients. Anglers use plugs, spoons, bucktails and other artificials in addition to chunk bait such as mackerel and bunker. The blues are

caught in the Atlantic as well as the bays and inlets. Weakfish start arriving in late April, coming into the Peconic system through the Shinnecock Canal and from the east. They typically move east to west along the Peconic Beach. Weakfish have been getting bigger over the last few years, and have occasionally been tipping the scales at ten pounds and over. The large run of "tide-runners" lasts only about a month but the smaller weakfish stay around all summer near Robbins Island. Flounder come in at the same time. Striped bass fishing picks up in May and June as does fluke fishing in the bay, which is very popular in the summer months. Offshore fishing begins in earnest when the water warms up to approximately 65 degrees. In June, trollers target yellowfin tuna, which may come close to shore in warm water eddies that break off from the Gulf Stream. Marlin and swordfish used to be popular, but declining stocks shifted attention to tuna and shark, which are now the mainstay of offshore fishing fleet. Mako shark fishing is a popular offshore pursuit in the summer. Inshore summer fishing features the porgy. Fishermen use bait for porgy including squid, clams, blood worms and sandworms. Peconic Bay is a popular location for porgy fishing. Black sea bass fishing is good from July through November. This fishery has been making a very strong come-back in recent years. Popular baits for sea bass include squid and clam. Sea bass can be caught in the Peconic Bay, Shinnecock Bay, Moriches Bay and off of wrecks in the Atlantic. Striper fishing in the fall is popular among both surf fishermen who use bait and artificials, and boaters who troll with wire lines and umbrella rigs. Despite the increased productivity of striped bass in area waters, many sportfishermen go north to Massachusetts, New Hampshire and Rhode Island to fish for striped bass in the fall. Blackfish, or tautog, are also popular fish in the fall. They are available from roughly September through February and favored baits include green crabs, fiddler crabs, and sand fleas.

The charter boats in the area follow a similar season, depending on clientele, weather, and boat type. Most charters are equipped to fish inshore and offshore, and to take advantage of the variety of fisheries in the area's myriad waterways. According to one charter captain, the vast majority of charters operate primarily between June and August. These seasonal and part-time charter operators typically have some other form of employment that they turn to after the summer fishing season. There are a few full-time charters that operate in the spring and the fall. Weather plays a significant role in the seasonal activities of the charter fleet. In 2002, the spring and fall seasons were very slow due to high wind and rain.

The one party boat that operates out of Hampton Bays may begin fishing as early as March, targeting winter flounder in the vicinity of the Shinnecock Canal. In April, they put clients on the Atlantic mackerel run which may last a few weeks. By the second week of April, the captain begins fishing for fluke. May is also focused on fluke, but striped bass action picks up in middle of the month. They fish for fluke and striped bass through the summer. Weakfish can be caught up on the north end of the Shinnecock Canal in May and June, but it has been a slow fishery in recent seasons. Bluefish are also caught throughout the summer. Fluke lasts until October, just when the striped bass are making a return to the area. They do catch some sea bass throughout the summer, but this fishery really picks up in the fall along with the porgy fishing. In late October and November they may fish for tautog as well.

Fishing Grounds

The variety of fishing grounds associated with Hampton Bays is one of the primary draws among sportfishermen. A charter captain explained that he likes fishing here because he has the choice of fishing the Peconic Bay, Shinnecock Bay, or the Atlantic depending on weather conditions and clientele tastes. Fishermen are able to follow the spring and fall migrations of fish as they enter and exit the bay systems through the inlets and canals. There are numerous inshore and near-shore fishing grounds associated with wrecks, bathymetric contours, structure, and water temperatures. Offshore canyons and the Gulf Stream waters are within cruising distance of the charter and private fishing fleet. Shore based fishermen have access to miles of beaches as well as designated fishing areas such as the Ponquogue Fishing Pier and the Shinnecock Canal.

Angler/Clientele Description

Anglers who fish in Hampton Bays represent a broad spectrum of interests and socioeconomic backgrounds. According to one marina owner, "We get all types of fishermen from lawyers to house cleaners." Informants noted that there are a number of different categories of sportfishermen. There are, for example, day-trippers who come primarily from Queens, Nassau, and Rockland counties. Many of the day trippers come to fish from the shore, but others come to charter boats or to fish on the party boat. Another important category of sportfishermen includes the second home owners from New York City and surrounding areas who have property in Hampton Bays and operate privately owned boats. This category is the cornerstone of a number of different marine businesses including the marinas and the marine electronics stores. According to one business owner, these people are spending more time in the area, conducting business from their second homes and from their boats as a result of advances in communication technology including high speed internet and satellite phones. "They take their business with them when they go out on the boat. They want to be connected at all times." Other informants noted that the private boat industry is growing as a result of the strides in second home development and the influx of retirees who are buying bigger boats. Fishermen in Hampton Bays employ the full range of gear types and fishing techniques, from saltwater fly fishermen who sight cast to striped bass, to bottom bait bouncers who target fluke.

The mentality among the sportfishermen who fish in Hampton Bays is said to be changing from one focused on keeping as many fish as possible to one based on catch and release. One local captain explained the transition: "We have seen a major generational shift. There is no longer a meat emphasis and many are catch and release. Those who can afford it are not fishing for the table." One result of this change in mentality is a greater acceptance of bag limits. This trend has also been witnessed by those in the party boat industry - the clientele of which is historically keen on keeping fish. According to one party boat captain, clients want to catch fish first and foremost, which necessitates maintaining healthy stocks. "We may get some folks who want to catch and release but you have to get them to catch a fish first."

The party boat clientele in Hampton Bays includes those tourists who come to the East End for vacation, day-trippers, seasonal residents, as well as members of the local community. The vacationers contribute to the local economy by renting motels and patronizing local restaurants and retail businesses. The party boat operation in Hampton Bays claims to cater to clients from a higher socioeconomic status than party boat businesses located in Captree and Montauk. The majority of party boat patrons are Caucasian, and are said to prefer fluke and striped bass over fish like porgy, which are associated with fishermen from lower socioeconomic status. They receive a good deal of business from area second homeowners. The clientele varies by season. Experienced, serious fishermen are the core of the business in the early spring and late fall. The summer months are dominated by families. The captain attributed 75% to 80% of the business to return customers.

Charter operations are also highly dependent on return customers. Clients come from other communities on Long Island, New York City, and the nearby state of New Jersey. According to one captain, many fishing residents of Long Island prefer the party boat experience and are not used to paying higher fees associated with charters. Many of his clients are families who are out to have a fun and relaxing day. For these clients, bottom fishing for fluke and bluefish is the main technique employed. He and other area charters do receive business from more serious fishermen. Many have a dedicated shark fishing clientele among young males. Other operations cater to specialties such as fly fishing. One guide service provides clients with the opportunity to fly fish for stripers, bluefish, and false albacore in the summer and fall.

Clientele of the area marinas is varied. There are a few marinas located on the Shinnecock Canal that are geared primarily to sailboats and weekend yachts. The county dock caters to a diversity of boaters including a few transient fishermen. The majority of the remaining marinas depend heavily on a fishing clientele. One marina owner estimated that 95% of the boats in his marina are engaged in sportfishing. Charter boats operate from among these fishing-oriented marinas. Many of the marina clients are second home owners from New York City. Others are transients from nearby states like Connecticut and New Jersey.

Crew Description

There are approximately 30-40 charter boats and one party boat operating out of Hampton Bays. Most of the charters are in the 'six-pack' category, licensed to carry up to six passengers. According to Vessel Trip Report data, there were four federally-permitted for-hire vessels that landed forty trips in Hampton Bays in 2001. Two of these boats listed Hampton Bays as the principal port and made a total of 26 trips. The two other boats had principal ports in Brooklyn and New York, NY. The charter boats averaged 35 feet in length, 25 gross tons, 528 horsepower, and were built, on average, in 1990. They had an average crew size of one, and averaged four anglers per trip. These figures only include federally permitted vessels and do not include those boats without

federal permits and those for which VTR data are not reported.¹⁰ According to a representative from the charter boat industry, there are approximately 100 crew (both captains and mates) employed in the for-hire fishing industry, not including those crew employed by private boat owners, marina personnel, and employees of all the related infrastructure of the Hampton Bays sportfishing industry.

The majority of charter boats in Hampton Bays are owner-operated, part-time and seasonal businesses. There are only two full-time charter boats and one full-time party boat, according to local captains. Most of the operators have other sources of income besides chartering fishing trips. Some boats, for example, are operated during the summer by teachers who have a few months off. One part-time captain explained that it is too risky to rely on chartering for a living. The costs of operating a boat including high fuel bills, equipment, bait, crew pay, maintenance, and dockage often exceed the profits. "You cannot charge customers enough to make up for expenses. I know one boat that made a total of \$5000 after everything was paid for." The cost of running a charter operation is compounded by the high cost of living in Hampton Bays and the difficulty of making enough money to pay for the exorbitant housing costs and property taxes. These conditions create a part-time charter industry with a relatively short, summer fishing season.

Many of the charter operations are family businesses. One captain said that his son and daughter are both going to be involved in the business. Crew that are not family are recruited through word-of-mouth. Turnover depends on the stability and profitability of the operation. Most mates receive a daily pay plus clientele tips. They tend to live in Hampton Bays and along the eastern end of Long Island.

Infrastructure

Hampton Bays has a diversity of businesses and infrastructure that support the recreational fishing industry. Marinas and boatyards occupy areas that are zoned as Resort and Waterfront Business (RWB). Approximately seventy percent of all RWB land in the Town of Southampton is located at the northeastern end of Shinnecock Bay in close proximity to the Ponquogue Bridge, and on the western and eastern side of Shinnecock Canal (Southampton Town 1999). Marinas are also located in many residential areas where certain marine-related non-conforming uses have been grandfathered in. Much of the fishing infrastructure is found along back avenues and lanes running along the necks of land that are punctuated by creeks and bays. There are also a few businesses along Dune Road on the barrier island that cater to sportfishing boats. In the late 1990s, there were 34 marinas and boatyards with approximately 1,500 slips in these areas that generated an estimated \$17.6 million (ibid.). Eight marinas in the canal area alone offer 821 slips (Steadman 1999). A number of the area marinas provide motel lodging, as well as restaurant and bar services. There is a Suffolk County marina located on the Shinnecock Canal that provides berths for transient boats and other

¹⁰ There are many problems with using VTR data for estimates such as these. According to NMFS representatives who deal with these data, there are great inconsistencies in reporting among party and charter boat operations. The data most certainly underreport both numbers of boats and numbers of trips.

accommodations including showers, restrooms, electrical and water connections, and sewage pump out facilities.

Hampton Bays also has a high concentration of boat sales, marine equipment, and fishing tackle businesses. There are two marine electronics stores in the hamlet, along with numerous "trunk slammers" who market their wares in Hampton Bays. The manager of one business that offers marine electronics sales and service explained that recreational fishing is essential to the survival of the operation. They receive business from local sportfishermen and others from nearby fishing ports like Montauk. He estimates that 60% of his business is contingent on sportfishing sales and service. There are a handful of tackle shops in Hampton Bays. The owner of the oldest shop that specializes in custom rod building explained that the area is "saturated" with businesses catering to the sportfishing industry. His grandfather pioneered sportfishing in Hampton Bays and started the rod-building business in the 1930s. He has witnessed a tremendous growth in competition as other businesses have been created in order to take advantage of the high demand for sportfishing equipment and service.

Hampton Bays also features infrastructure that caters to private boat owners who transport their watercraft to and from the water via vehicle trailers. There are four ramps including Peconic Road Ramp, Corwin Lane Ramp, Argonne Ramp, and the Ponquogue Bridge Ramp. Southampton Town residents and non-residents are required to purchase launch permits which cost \$10 for residents, \$150 for recreational non-residents, and \$300 for commercial boats.

Shore-based angling is supported by a number of public access sites in Hampton Bays. The remains of the old Ponquogue Bridge have been converted into a fishing pier that is popular throughout the season. The concrete bulkheads along the Shinnecock Canal are another favored location for shore-based fishing. In addition, the County beaches along the Atlantic Ocean allow fishing in designated area during the summer, and beach-wide throughout the off-season. Anglers may also purchase beach vehicle permits for surf fishing. Shore-based fishing is also allowed on the north and south side of the Shinnecock Inlet.

The sportfishing infrastructure, while substantial, is considered inadequate by many of the local business owners and fishermen. Marina space and boat slips are extremely scarce in Hampton Bays. Some attribute this to zoning laws that restrict the growth of marine businesses and encourage the development of residential waterfront uses. One marina owner explained that, "slip space has diminished over the years as marina sites have been sold out to residential developers. There are no new marinas - only condos and houses." The captain of the only party boat in Hampton Bays described why there are no other party boats in the area. He experienced great difficulty finding a slip for his boat in consideration of the parking requirements imposed by the Town of Southampton. Whereas it is typical to require .25 parking spaces for each slip space, the Town requires 1.5 parking spaces per slip space. The required number increases for party boats. There is simply no space for customer parking.

Access to fishing infrastructure is burdened by permits and fees. Some representatives of the recreational fishing industry expressed dismay over the excessive permitting that plagues shore-based fishermen. A permit is required for fishing along the Shinnecock Canal. Parking permits are required for access points including the south side of the Ponquogue Bridge, the west side of the Shinnecock Inlet, and the east side of the Inlet. As one local put it, "the only free place to fish is on the north side of the Ponquogue Bridge and that isn't such a good place to fish." The ramp fees are considered to be burdensome for those who launch boats from trailers. In addition, most marinas do not have ramps that are available to the public.

Economic Networks

The seasonal tourist economy of Hampton Bays is tied to the sportfishing industry. The area hotels, motels, restaurants, and retail stores depend, in part, on the visitors who come to pursue fishing opportunities. The direct value of the industry to the Town of Southampton is estimated between \$32 and \$67 million (Southampton Town 1999). Businesses that participate directly in the sportfishing industry such as marinas, marine electronic suppliers, and tackle shops, have ties to other local businesses as well as regional, national, and international economic networks. Local marinas buy ice and fuel from area suppliers. Charters and private boat owners patronize local marine electronics businesses for sales and service, but also purchase from regional chain stores such as West Marine, and national distributors via catalogs and the Internet. Boats haul out at local marinas including Ponquogue Marina, which can handle larger boats. Bait is an essential product that is consumed in large quantities by the sportfishing industry. Bait is obtained regionally from companies such as Regal Bait in Huntington, NY, and from local harvesters including baymen and druggers. Tackle and equipment is purchased from numerous local shops and through mail orders. One specialty tackle shop in Hampton Bays deals locally, but also has a worldwide reputation and customers across the globe. The owner explained that they have a local customer base, but the economy demands diversification which is why they sell on the Internet to customers across a broad geographical range. His business, like others in the sportfishing industry of Hampton Bays, is tied to numerous local companies and service providers in addition to maintaining wider economic networks.

Social Networks and Community Relations

Participants in the sportfishing industry of Hampton Bays have important social ties to one another and the community at large. Relationships among sportfishermen, whether they are recreational private boat owners, shore anglers, or charter captains, are said to be congenial. As one captain explained, "This is a small town and I know all of the boats and they know me." There are a number of recognized watering holes frequented by sportfishermen, notably the bars that are attached to the marinas. Attempts to form an organization among charter and party boats failed some years ago due to a lack of interest and political conflict. There are, however, two sportfishing social clubs. One is known as the Shinnecock Angler's Society. This organization sponsors the Mako Mania Shark Tournament each July along with East End Bait and Tackle, Altenkirks, Molnar's

Landing, and Oakland Marina. The other association is called the Shinnecock Marlin and Tuna Club, which has approximately 220 members. This club hosts numerous tournaments and fishing events in cooperation with local marinas including a Spring Fling fishing tournament, the Inshore Tournament in June, a Fluke Derby in July, the Hamptons Offshore Invitational Tournament Inshore Fishing Tournament in August, and a Fall Rodeo in September. The Shinnecock Marlin and Tuna Club holds family cook-outs, represents the political interests of the members, and educates them on fisheries legislation and regulation.

Relationships between the sportfishermen and commercial fishermen in Hampton Bays are said to be positive on the whole. One charter captain explained that the locals all know one another and get along well. "We work together because we're both getting screwed." There are occasional conflicts on the water that are rooted in ignorance, but the locals who share the same fishing grounds are said to be cooperative. One user group that is not well-esteemed by some sportfishermen is the jet-ski crowd which is considered to be a tiresome annoyance. A marina manager summed up the feeling among fishermen: "Jet ski people should have a separate place to go. They are a nuisance that upset fishermen and pollute the water."

The social ties among those in the sportfishing industry go well beyond the boundary of Hampton Bays and Southampton. Most of the business owners and charter captains have connections to other sportfishing operations in other ports across Long Island. Sportfishing in Hampton Bays is intimately tied economically and socially to Montauk, where some have family, friends, and business associates. One local captain said that the sportfishing industry on Long Island itself is a small social and economic community in which the participants are intimately connected. The ports in this network include Montauk, Sheepshead Bay, Captree, Orient, Mattituck, Port Jefferson, and Hampton Bays. It constitutes such a small and tight knit community, he explained, that he knows when his customers are fishing on a different boat.

Discussion: Community/fisheries dependency and engagement

Sportfishing is an integral component of the economy and cultural identity of Hampton Bays, a community that is known as the "boat ways of the Hamptons." The lure of recreational pursuits on the water is a significant factor in attracting seasonal tourists. Visitors and second home owners are provided with access to the surrounding waters by the Shinnecock Inlet and the Shinnecock Canal. Maintaining access should be a priority of the Town of Southampton.

Despite the obvious economic and social importance of sportfishing in Hampton Bays, there is little recognition of this importance in the Town of Southampton Comprehensive Plan, which focuses primarily on the sustainability of the commercial fisheries. The plan states: "There are two distinct types of fishing industries in Southampton, commercial finfishing and commercial shellfishing" (Southampton Town 1999). The plan does specify the economic value of sportfishing, but offers little in the way of direction for the

future. The only goal related directly to sportfishing is to "promote an environmentally and economically sound approach to marina development."

The emphasis on environmentally sound development coupled with the lack of slip space, parking space, and the costs of obtaining parking and launch permits is cited as evidence of the town's lack of concern for the sportfishing industry. Some contend that the town is more worried about the environment than the livelihoods of its residents. The words of one marina owner exemplified this point of view: "The town is run by environmentalists who have blinders on. A lot of the locals who are baymen also serve as Trustees and they have environmental leanings." He went on to describe how the town has discouraged growth of the sportfishing industry by limiting the land available for development. "The town is sterilizing local business waterfront property by buying it up. The town bought a marina called Conscience Point Marina because they said it had a noise and parking problem." In addition, he described how plans for a 200 slip marina at the town beach were scrapped due to the opposition of Trustees with ties to the bay fisheries who believed that the construction would destroy area clam beds. The town has also imposed more restrictive length and depth limits on long docks. While the state allows docks built to a depth of four feet, the town set the maximum at two feet. "The town disregards the waterfront property owner and his rights. They have also outlawed personal hydraulic lifts at private docks." Some charge that the town has purposely delayed implementation of a decades-old waterfront revitalization program, and created a burdensome permitting structure that makes development untenable.

Suffolk County is also charged with thwarting the development of the sportfishing industry. The County dock in the Shinnecock Canal does not lease space to any commercial or for-hire craft. Furthermore, the county marina charges much less than other private businesses in the area. As one captain explained, "The county is screaming for money but they will not let commercial vessels including charter boats use the dock space and I'm not sure why. We need slips and parking spaces."

The Town of Southampton has taken measures that address the importance of maintaining the sportfishing industry, and many feel that the administration is supportive. For example, a grant was obtained by the Town Trustees to increase boating capacity through the introduction of mobile pumpout stations. Others mentioned the Ponquogue Fishing Pier as a sign of the town's dedication to the industry. Other representatives of the sportfishing industry feel that the town's attempts to curb waterfront development are ultimately beneficial to the industry because, they believe, a clean environment is what brings people to the area.

Resident participants in the sportfishing industry expressed the belief that Hampton Bays is a fishing community due to overwhelming value of fishing, boating, and the marine environment to those who live there. While the potential for growth is limited, the sportfishing industry will remain an integral dimension of the economic and social life of the area.

III. Vulnerability and Cumulative Impacts

A. Commercial Fishing

Gentrification and Economic Development

The landscape of Southampton Town has experienced a rapid transformation from one characterized by rural farms and undeveloped tracts, to one dominated by residential home sites and developments. In 1960, seventy three percent of the town land was undeveloped and residential property accounted for less than 4% of the total land area. By 1994, only 34% of the land was undeveloped, and 24% was assessed as residential (Southampton Town 1999). Today, the area including Hampton Bays is a relatively undifferentiated space of sprawling residential developments that link what were once distinct hamlet centers. Few open, undeveloped spaces exist in Southampton. Since the 1980s, various town zoning laws have been implemented in order to preserve open space through the creation of large lots. These measures have not prevented development or protected agricultural uses of the land.

Southampton has also witnessed a growth in the full-time resident population that complements the housing development. The population grew 21.5% between 1990 and 2000 (44,976 to 54,625). In Hampton Bays, the population grew by nearly 55% in the same time period, from 7,893 to 12,211. The age structure of Southampton and Hampton Bays includes an increasing number of elderly, which suggests a trend towards becoming a retirement community. Over 16% of both the town and hamlet populations is 65 years of age and older. Income figures for Southampton and Hampton Bays indicate that the populations are relatively affluent, with median household incomes of \$53,887 and \$50,161 respectively (which is roughly 20% higher than the national average of \$42,151). The unemployment rate is correspondingly low - 2.75% in Hampton Bays and 2% in Southampton Town.

The income figures do not include those second home owners who do not report Hampton Bays as their year-round residence. The second home industry is one of the driving forces behind the area's economy. There is evidence that the population of second home owners is becoming increasingly more permanent, spending more time in the region and placing a greater demand on local services. The concomitant conversion of seasonal properties into primary residences has the potential to inflate housing and property costs. In 2000, the median house value of specified owner-occupied homes in Southampton was \$245,400 (U.S Census 2000). This number was lower for Hampton Bays - \$178,000. The shortage of affordable housing in the area is one of the notable consequences of this development (Southampton Town 1999). The housing crisis is reflected in the declining service industry sector of the economy. Despite the area's dependence on seasonal tourism, the service industry has contracted. This may be due, in part, to the inability of employees in the service sector to afford local housing (ibid.).

These trends are of particular interest in examining the future of the commercial fishing industry. The Town of Southampton's Comprehensive Plan predicts that the expansion of

residential housing properties and population growth will occur "primarily along the coastal regions of Southampton at Hampton Bays, Shinnecock Inlet and in the coastal portions of town located to the east." The warning is not unlike an unwelcome weather forecast for fishermen at sea. The very center of the commercial fishing industry is landfall for the storm of development bearing down on Southampton. Local industry representatives have noticed a change in public opinion and support. According to one long-time industry participant:

The town supported the growth of the industry and dredged the inlet. They have been very supportive until recently. Now what started out as quaint is considered to be an eyesore. Once they gentrify they want the f***ing natives out!

He explained how there have been complaints about the decrepit state of the dock area and the smells associated with packing operations. Reportedly the town is considering legislation that would penalize owners of properties that are deemed to be eyesores. The cooperative dock has been the target of the town's Beautification Committee. According to reports, the property owner received a summons to court issued as part of an attempt to have the property condemned. Many fishermen feel that the wealthy land owners despise commercial operations because of the supposed negative effect they have on property values. As one fisherman put it, "The idea of a living fishing community does not go hand in hand with rising property values." Higher taxes associated with gentrification also place an extraordinary burden on fishing operations. According to one informant, the taxes on one of the dock properties exceed \$40,000 a year.

Similar sentiments and worries were voiced by others in the community. A local bayman described how everyone wants to build their homes closer to the water, and their docks further out into the bay. Some complain about the baymen working in front of their homes. He does not want his grandson to devote himself to the life of a waterman because of the changes taking place in the community and the uncertain future of fishing and shellfishing.

Despite the gloomy outlook shared by a number of fishermen, other industry representatives feel safe from the forces of gentrification and development, while some actively embrace it. The barrier island and beach that surrounds the working waterfront near Shinnecock Inlet is owned by Suffolk County and cannot be developed. It provides some measure of security to know that residential condominiums cannot be raised next door to a commercial operation. A few individuals feel that economic development and population growth favor the area seafood markets, providing a larger, wealthier clientele. Others involved in the commercial industry have developed their own service oriented enterprises that take advantage of seasonal tourism and the second home industry. The owner of one commercial dock, for example, operates a restaurant and recreational marina. Despite the security that some feel, there is a danger that development pressures will lead to the erosion of commercial infrastructure. The private plots on which the industry infrastructure is built can be developed. One area property owner said that

someone might be convinced to sell off dock property if the offer is right, putting the fleet in jeopardy.

Not all area economic development is disruptive to commercial fishing. The Town Trustees are investigating the feasibility of developing an aquaculture industry in the Shinnecock and Moriches Bay systems. A consulting firm hired to study the potential of raising bay scallops and oysters in enclosed pens recommended a plan. The plan calls for the designation of two or three deep water wintering areas (each 40 acres) and two 10 acre nursery zones in shallow water for Shinnecock Bay, and one or two wintering zones and a nursery zone in Moriches (Wright 2003). Baymen in Hampton Bays are already raising oysters in pens seeded with spat from New England.

Environment

Residents of Hampton Bays and the Town of Southampton have witnessed a number of environmental calamities that have wreaked havoc on commercial fishing. One of the most obvious disasters has been the overall decline in the productivity of area bays including the southern coastal estuaries and the northern Peconics system. Algal blooms of *Aureococcus anophagefferens*, otherwise known as the brown tide, have devastated the bay scallop populations over the years since they first poisoned the ecosystem in 1985. Some believe that the brown tide phenomenon is ultimately caused by nitrogen starvation that prevents the growth of beneficial algae (Drumm 1998). According to this theory, the nutrient depletion, which has been an ongoing process since the massive oyster harvests of the early 1900s that includes the effluent control measures that were instituted in the mid-1900s, is responsible for the overall decline in shellfish productivity from 1910 to the present. While there is evidence for a long-term decline in shellfish productivity, the most damaging effects have been experienced since the appearance of the brown tides in 1985. Since that time, the brown tides have devastated eelgrass populations and crippled the area's multimillion-dollar bay scallop industry. Scallop harvests immediately declined following the first brown tide bloom in 1985. Harvests improved during the mid-1990s, but yields were a paltry one-tenth of the annual harvests brought in during the early 1980s. The decline all but eliminated the family scalloping operations that characterized community activities during the fall and winter. The age-old Blue Point oyster company went out of business in 1998 due to the excessive length of time needed to grow shellfish to marketable size. Research into the problem is ongoing. The Peconic Estuary Program, an element of the US Environmental Protection Agency, National Estuary Program, is working towards solutions with community members, advisors, Trustees, and administrators. Local baymen expressed a deep concern for returning the marine environment to a healthy, productive state. According to one bayman, the brown tide is just one among many threats to the health of the bays: "Waterfront development has hurt clamming. It puts pollutants into the bay with those chemicals that they put on their lawns. There are only half a dozen clambers here now." He also noted how these threats compromise the role of the bay as a nursery for many fish species.

Among commercial fishermen who participate in the Atlantic fisheries, siltation of the Shinnecock Inlet is a significant environmental problem. The channel and the inlet

require dredging, in addition to the dredging that is needed to maintain slip space for fishing vessels. According to one informant, it is very difficult and costly to obtain a dredge permit.

Fisheries Management

Fisheries management is one of the most contentious issues among commercial fishermen in Hampton Bays. Many feel that ill-designed, overlapping regulations are responsible for the ailing commercial industry of the area. According to some informants, the cumulative impacts of regulations over the years make it difficult to discuss the effects of any single action. "They are all so interlocking and all affect the businesses together. There are too many laws - you don't know what you can and cannot do. Even enforcement officers don't know what they are." Another fisherman described how difficult it is to keep up with the many-layered and ever-changing laws: "I can't keep up with all of this [regulation]. I get a stack of mail every day with new regulations. You can't go out and come back without breaking the law."

Despite the combined influences of many regulatory policies across time, a number of specific management measures are noted for their negative effects on the local fleet. Quotas on Mid-Atlantic species such as porgy, sea bass, and fluke (summer flounder) have had particularly deleterious consequences according to commercial fishermen. The quotas on summer flounder, for example, have encouraged a derby-style fishery that floods the market with product as soon as the fishery opens, driving down prices. Low prices are considered important for re-establishing consumer interest in a fish that may have been unavailable to the consumer for extended periods of time. Prices usually rise only when the season is winding down. This form of management is said to disrupt markets and encourage consumers to go elsewhere for a steady supply of product.

Reductions in the days at sea for groundfish permit holders have been difficult for a number of Shinnecock fishermen. Many of the local dragger captains were provided incentives to move into 'underutilized' fisheries such as whiting in order to reduce pressure on groundfish. Those who transferred effort from groundfish to other species found themselves with a smaller days at sea allowance due to the implementation of a 'use it or lose it' management policy that limited the days at sea among those who had spent less time fishing for groundfish in previous years. Those boats that went into the whiting fishery are especially imperiled as a result of declining abundance of whiting.¹¹ Among those draggers that have continued to groundfish, a recent regulation requiring a shift from a 6" bag to a 6.5" bag has necessitated new expenditures that some feel are an added burden.

Limits on *loligo* squid are problematic among the Shinnecock draggers, many of which depend heavily on the *loligo* fishery. The 2,500 pound trip limit that is triggered when 75% of the quota is caught is typically imposed when the supply of squid is high and the price is low - approximately \$0.35/pound. A \$0.12/pound shipping fee, coupled with a

¹¹ Some fishermen stated that the declines in whiting are due to higher average water temperatures that have driven the schools further north.

smaller trip limit and high fuel costs leaves little profit for the boat at the end of the day. One dragger captain explained that his boat consumes 20 gallons of fuel per hour and many trips exceed 15 hours, requiring an expenditure of over \$300 in fuel alone. "It does not make trips worth it."

One inshore dragger captain explained his predicament. At 60 years of age he is considering the prospect of retirement. In the past, he was able to invest approximately \$10,000 each year in a retirement fund. Presently, however, he cannot make enough money to maintain his boat and contribute to his retirement fund. While he would like to get out of fishing, he believes that the option to retire has been eliminated by over-regulation. "Look around at these boats - guys cannot make enough to keep them up properly because of all the regulations." Besides, the value of a boat depends on the permits that it carries. "Boats are worthless without them, but permits lose value with more and more regulations." The inability to maintain the fleet creates safety at sea problems which are exacerbated by horsepower restrictions coupled with the need to steam further and stay out longer to make ends meet.

A number of local fishermen would like to see the implementation of an individual quota system that would allow fishermen to keep what they catch rather than engage in regulatory discard, which most feel is a travesty and a waste. One fisherman explained that this system would benefit both small and large vessels because they fish at different times with different gear. According to him, it would also keep markets supplied consistently, provide fishermen with more flexibility in determining their activities, and offer fishermen more certainty about the future which would have a positive effect on recruitment.

Local industry participants are also concerned about the adversarial relationship between the industry and enforcement officials. Fishermen explained that enforcement officials "make honest, hardworking people look like criminals." Some described how the level of force used in conducting enforcement activities is far out of proportion with the task at hand: "We face heavy enforcement with guns and helicopters. I had six officers with guns board my boat and make me haul back. All of this for eleven boxes of fish! All the money it takes to regulate me and I come in with eleven boxes of fish!" Others described how the strict enforcement limits recruitment to the industry - not because people want to break the law, but because the complexity of regulations makes it virtually unavoidable.

Management is also considered to be a stumbling block to the successful recovery of the bay fisheries. According to one industry representative, New York's Department of Environmental Conservation repeats the mantra that over-fishing is the problem. He explained that regulation and enforcement are considered to be the solution to environmental problems, and that the state lacks the leadership necessary for proactive problem solving.

Resilience and Representation

The resilience of the commercial fishing industry in Hampton Bays is threatened by the cumulative effects of fisheries management and the forces of gentrification that are sweeping the area. Fishermen used to adapt to changes in fish availability by shifting focus from species to species. According to industry representatives, this adaptability has been eroded by stringent catch quotas in combination with other management measures.

Commercial fishermen expressed a sense of disenfranchisement and alienation from the processes that are affecting them. Many questioned the future viability of the industry and their own ability to weather the economic hardships, citing the lack of recruitment to the industry and the difficulties experienced by those who are still clinging to this way of life. One fisherman asked:

Who would want to do this? Ten years ago you could make \$50-70,000 now you can make \$25-35,000. Out at 4:30 A.M. and working until 7:00, 8:00 or 9:00 P.M. A 15 hour day is typical. More regulations mean more hours in the ocean and more fish I have to kill by making more tows. To make me go into the ocean every day to kill fish for a few bucks is wrong.

Some expressed an interest in getting out of the business. One boat owner has been trying to sell his boat for over a year. The 20% reduction in groundfish days at sea, coupled with overall instability of the industry eliminated the incentive to buy boats. Banks are hesitant, if not entirely unwilling, to loan money for boats. The investment in a boat has become a liability for many owners confronted by the high cost of insurance, maintenance, and operation. These problems are compounded by the difficulty of finding and retaining quality crew members.

Many fishing families are plagued by numerous social problems that feed on the insecurity and unpredictable horizons associated with the current fishing industry. According to one long time resident and industry participant, suicide and divorce among fishermen is high. He attributes this to the despair and hopelessness intrinsic to an over-regulated fishing industry that has created the conditions for drug and alcohol abuse. "When you pull out the support in a culture from under people with few alternatives and little money it leads to major problems. There is no social support or job retraining in the area. Today those in their mid-forties are working harder than ever to survive and they have children to feed."

While many share a bleak outlook on the future of the industry, there are those who are determined to succeed regardless of the hardships: "I thought feeding the public was a good job to get into and so I learned the trade. For 15 years this is what I have done. I learned a trade - like going to college - you stay with your profession." This fisherman explained that there are few other options open to those who have spent their lives working on the water. Some local fishermen have been operating out of New Jersey in order to make ends meet. Those boats with New Jersey permits have been able to take advantage of larger trip limits. The wife of one Shinnecock fisherman explained that her husband and his crew have been running out of Point Pleasant, NJ because they are allowed to land 1,000 pounds of fluke in contrast to the 100 pound limit in New York.

"Bluefish are also wide open in New Jersey - they have much more liberal quotas there right now. The bad part is that he has to be away from home."

Shinnecock fishermen participate in a number of organizations that lobby for the industry and represent commercial fishermen at the state and federal level. The Long Island Commercial Fishing Association (LICFA), which represents a diversity of gear types, is active in promoting commercial fishing in Hampton Bays and across Long Island. The Executive Board of LICFA is composed of members from all fishing gear types across Long Island. The New York Seafood Council is also active in promoting the commercial industry of Hampton Bays. The goal of the New York Seafood Council, which was officially incorporated in 1991, is to coordinate seafood marketing and seafood industry promotion. Council membership is comprised of individuals, businesses, and organizations that participate in the harvest, process, sale and distribution of seafood. There is also a Southampton Town Baymen's Association that serves the interests of the inshore watermen.

The level of participation and involvement among local fishermen in these organizations varies. One commercial fisherman said that some are active while others have abandoned the process altogether due to frustration and the feeling of powerlessness. "Some feel it is more productive to hit yourself in the head with a rock - at least you will fall down eventually. Going to the meetings is no good. They do what they want. Politics should not play the role that it does." Others concurred with this statement, pointing out the lack of representation that New York fishermen have on the New England Fisheries Management Council, which controls whiting and groundfish - key species for area trawlers.¹² One dragger captain noted that New England groundfishermen receive compensation for lost days at sea, but New York groundfishermen do not because they lack representation on the Council and because the state of New York does not support the industry. "We have no politicians in our corner." Many expressed the belief that the sportfishing industry has the money and political power to sway policy. Speaking of the diminished political, economic and social power of commercial fishing, one commercial fisherman baldly stated, "I don't matter to this area in the summer."

A representative of the New York Seafood Council expressed frustration at the lack of participation among the area watermen. He explained that the purpose of the Council was to spread the word about the importance of the industry and to instill hope and a dedication to the future of the seafood industry. Now, however, "there is a hopelessness about the seafood industry, and people are moving out and getting out of the business." Referring to the environmental problems associated with the Peconic Bay system, he stated that resource declines have been met with inaction among most bay harvesters. Rather than fight for the recovery of the resources, many just walked away.

¹² In 2003, a bill was introduced to the US Congress that would give New York a seat on the New England Fisheries Management Council. The legislation, known as the New York Fair Fishing Act, is intended to address the lack of representation that New York commercial fishermen have on the council that makes decisions on species that are critical to New York.

The problem is that the industry never invested itself. As the catches declined, the industry backed down. When the carrying capacity declined, the baymen walked away and went to other jobs. We went from over one thousand baymen to less than three dozen full-time baymen on the entire East End.

He opined that the baymen who left the water were there simply to make a living and not to follow a way of life, which is necessary for the future of the industry. "In order to be invested you have to contribute to all aspects of development and marketing." Those who are still working the bays are involved in the Southampton Town Baymen's Association and some serve as Trustees on the Board of Trustees of the Freeholders and Commonalty of the Town of Southampton.

Industry representatives offered a number of suggestions for empowering the industry and sustaining a way of life that has become threatened. The state and local governments should curb development and work towards reducing the burdensome taxes associated with rising property costs. Some feel that a 'farmer's market' for fishermen could assist primary producers by eliminating the middle man and reducing the influence of powerful fish buyers. Most agree that negative public perception of commercial fishing is a significant obstacle to maintaining support that needs to be addressed through education and awareness campaigns. The Southampton Comprehensive Plan acknowledges these concerns and calls for a study to determine the feasibility of a farmers' and baymen's market with adequate infrastructure to support local sales. The plan also recommends the development of fisheries education and awareness programs to highlight the importance of commercial fisheries and their role in maintaining the economy, society, and cultural identity of the region (Southampton Town 1999).

B. Recreational Fishing

Gentrification and Economic Development

Economic development accompanied by the rapid transformation of the landscape from rural to residential has generally aided the growth of the sportfishing industry in Hampton Bays. The tourism industry coupled with the second home building boom has brought many recreational fishermen and boaters to the area and increased the demand for slip space, chartering services, bait and tackle, and related infrastructure. The development and gentrification has come with a price. Some locals who participate in the sportfishing industry are worried that their children will not be able to stay in the area and continue family businesses. One business owner explained: "The property values are pushing us out. How can someone live here on \$30,000 a year? We are being pushed out by the city slickers. My kids won't be able to buy a house here."

In addition to exorbitant property values, the emphasis on residential zoning has stifled the growth of waterfront businesses. As one local put it, "It is more profitable to sell out a marina site to residential developers, and so you go from 40 boats to four." Waterfront

houses and condominiums with private slip space have come to dominate certain areas, squeezing out the sportfishing infrastructure. In addition, business owners complain that it is extremely challenging to obtain zoning permits to build, expand, and dredge marinas. This difficulty is compounded by the cost of taxes and maintenance. A marina owner stated that, "It is easier to sell property than to go through the process. Taxes are high and so are maintenance costs." Some feel that the environmental regulations governing the permitting process are too stringent and unfairly applied. For example, a marina owner claimed that the town is using wood treated with chromated copper arsenate (CCA) in the repair of the commercial dock, despite banning its use among recreational marinas. He also claimed that the county built a creosote bulkhead in the Quogue Canal without a permit. "I guess they are exempt from their own regulations."

Others welcome the measures that the town has taken to limit the development of waterfront areas. They cite the need to keep areas free from development in order to protect the environment and the aesthetics that are so appealing to visitors. During one interview, a charter captain pointed to a small area of marsh:

"You see that little strip of grass? It is important because that is why people come here. It's all about space. But some around here cry that the town will not let them develop it. It's all about space. What people don't realize is that fishing is intimately tied to the aesthetics of the East End. Once that is gone, people will not come."

Environment

For most in the sportfishing industry, the long-term maintenance of healthy fish stocks is a paramount concern. Having fish to catch is the cornerstone of the industry. The socioeconomic health of the Hampton Bays community is inextricably tied to the health of the surrounding waters and their productivity. This recognition is reflected in the importance assigned to environmental concerns in Southampton Town's Comprehensive Plan, and the ire that environmental protections raise among some local businessmen. The Plan includes many goals intended to foster environmentally-sound development and improve water quality including the establishment of conservation and marine sanctuary zones along coastal areas; reduction of pollution in the surface water; stormwater abatement; protection of shoreline habitat; and the careful planning of marina construction (Southampton Town 1999). The brown tide phenomenon described above has taken a toll on the community and encouraged a sense of stewardship. The Town Trustees, many of whom have connections to the commercial bay fisheries, continue to promote the health and sustainability of local waters.

Sportfishermen also expressed concern over the impact of short-term environmental problems related to the weather. High winds, thunderstorms, and heavy seas all have a negative effect on the area industry. In 2002, the profitability of the fall fishing season was significantly reduced as a result of consistently bad weather. A party boat captain expressed frustration over inaccurate weather forecasting: "Meteorologists are my biggest

problem. If they put a lightning bolt symbol on their five-day forecast it will scare off my clients."

Fisheries Management

Representatives from the sportfishing industry of Hampton Bays did not raise any significant concerns over fisheries management. In fact, most interviewees praised the management policies that have "brought back" the striped bass populations. The attitude toward fisheries management among sportfishermen in Hampton Bays was very relaxed. Statements such as "regulations have not had much effect on my business," were common. One informant who operates a fishing-oriented marina said that the bag limits are too restrictive: "We would like to keep more than one striped bass and the fluke limit of seven is too small."

The captain of a full-time party boat disagreed, explaining that the bag limits and size limits are not problematic. Referring to fluke, he explained that they have plenty of larger fish in the area waters, and the bag limit is enough to satisfy customers. Closed seasons, however, can prevent him from fishing when the fish are available. "Last year fluke opened on May 2nd, but I could've gone earlier and would have had clients."

There is no readily apparent reason why participants in the sportfishing industry of Hampton Bays differ so markedly from those in other ports who have a much more negative attitude toward fisheries management. It may be a reflection of the fact that there are fewer full-time charter captains who depend on fishing to make a living. It may simply be that fisheries management has not taken away anything that is important to participants in the local fisheries. As the owner of a local marina explained, "The fishing regulations do not affect recreational fishing here to a great extent because the public will take a lot before they mobilize."

Resilience and Representation

Participants in the sportfishing industry of Hampton Bays are said to be less politically active than those in certain other ports. There is no association that represents the collective interests of the local for-hire fleet. An attempt to form a charter boat association failed, roughly one decade ago, due to conflicts within the ranks and a lack of interest. The three full-time captains who currently work in Hampton Bays do attend fisheries management meetings and participate in the process, but few of the part-time captains are said to be concerned.

Two fishing clubs, including the Shinnecock Angler's Society and the Shinnecock Marlin and Tuna Club (SMTC), primarily function as social organizations but do lobby for the sportfishing industry. Of the two, the SMTC is the most politically active. The Recreational Fishing Alliance National Advisory Board includes a member of the SMTC. The SMTC is also a member of the "New York Rail Cars for New York Waters Coalition," which advocates the use of obsolete stainless steel Long Island Railroad cars for the construction of reef sites in New York waters.

The sportfishing industry in Hampton Bays is not as large or as diverse as the industry that is embedded in Montauk, which may make it less resilient to certain negative impacts. The for-hire fleet features only three full-time boats, including one party boat. While the fall and spring provide some of the best fishing action, recreational activity in Hampton Bays is concentrated during the summer. The facilities for shore-based angling are limited and the potential for growth in the marina sector is constrained by the dwindling space available for expansion, coupled with permitting restrictions designed to limit environmental impacts. Finally, there is comparatively less political activity among participants in the local industry.

Despite these characteristics, the sportfishing industry in Hampton Bays is a viable and important component of the community's economic and social life. The limits on growth may very well protect the future of the industry by maintaining the aesthetics and sustaining the environment that attract so many visitors to the area. The access that is provided by the Shinnecock Inlet and the Shinnecock Canal will undoubtedly secure sportfishing's role in the community for the foreseeable future. The economic and social integration of area businesses with other ports such as Montauk also support the continued sustainability of the local sportfishing industry.

**Appendix 1: Port Activity by Gear Type and Landings, % Pounds and % Value, Hampton Bays/Shinnecock NY 1994-2001;
Source: NMFS Weighout**

Ngear	Gearcode	1994		1995		1996		1997		1998		1999		2000		2001	
		% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value
010	LLB	0	0	0	0	0.3	1	2	3	3	7	1	4	1	2	2	5
020	HND	0.03	0.1	0.1	0.4	0.3	0.4	0.3	0.5	0.1	0.4	0.3	1	0.4	1	0.5	1
040	LLP	1	2	1	6	0.3	2	0.3	1	0.3	1	0	0	0.15152	0.8	0.2	0.5
050	OTF	61	67	54	56	71	71	78	75	84	74	86	79	88	78	85	77
070		0.03	0.04	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2
100	GNS	5	6	2	2	4	7	9	9	11	12	10	12	8	11	10	12
102		0	0	0.001	0.002	0	0	0	0	0	0	0	0	0	0	0	0
131		0	0	0.01	0.2	0.0002	0.002	0.002	0.03	0	0	0	0	0	0	0	0
132	DRS	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	0.003	0.1
140		0	0	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0	0
142		0.01	0.1	0.1	0.1	1	1	1	1	1	1	2	2	1	2	1	1
170	PTM	1	3	1	4	0	0	0	0	0	0	0	0	0	0	0	0
181	PTF	0.1	0.2	0.01	0.02	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.0	0.1
182		0	0	0.00167	0.0074	0	0	0	0	0.00132	0.0057	0	0	0.00337	0.0072	0.00293	0.0062
183	PTW	0.01	0.02	0.00	0.00	0.01	0.01	0.01	0.02	0.00	0.01	0	0	0.0004	0.0003	0	0
200	PTL	0.04	0.07	0	0	0.03	0.09	0.005	0.021	0.004	0.02	0	0	0.001	0.003	0	0
210		0.1	0.1	0.002	0.01	0.1	0.2	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.2	0.1	0.3
222		0	0	0	0	0	0	0	0	0.005	0.01	0.01	0.02	0	0	0	0
230		0	0	0	0	0	0	0	0	0.001	0.002	0	0	0	0	0	0
231		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0005	0.001
250	RAK	0.01	0.1	0.02	0.2	0.1	0.7	0.2	1.8	0.01	0.02	0.01	0.02	0.6	3.6	0.4	2.4
251		0	0	0	0	0	0	0	0	0	0	0	0	0.001	0.003	0	0
300	PTC	0	0	0	0	0	0	0.001	0.0002	0.001	0.001	0	0	0.1	0.1	0.0004	0.0004
301		0.1	0.1	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0
322		0.03	0.03	0.1	0.2	0.03	0.1	0.1	0.2	0.01	0.03	0.3	0.4	0.02	0.05	0.1	0.1
350	OTB	0	0	0	0	0	0	0	0	0	0	0.1	0.5	0.05	0.1	0.3	0.1
382		0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0
400	DRC	31	18	43	31	22	15	9	6	0	0	0	0	0	0	0	0
410		0.1	0.4	0.03	0.2	0.1	1	0	2	0	0	0	0	0.1	1	0.2	1
411		0	0	0	0	0	0	0	0	0	0	0.01	0.01	0.001	0.001	0	0
999	OTH, MIX	0.4	1.5	0.01	0.004	0	0	0	0	0.4	3	0	0	0	0	0	0

Appendix 1 Gear Codes:

Ne gear	Gear Name
10	LONGLINE, BOTTOM
20	HANDLINE
40	LONGLINE, PELAGIC
50	TRAWL, OTTER, BOTTOM, FISH
70	HAUL SEINE, BEACH, COMMON
100	GILL NET, FIXED OR ANCHORED, SINK, OTHER/NK SPECIES
102	GILL NET, STAKE, OTHER
131	DREDGE, SCALLOP, BAY
132	DREDGE, SCALLOP, SEA
140	POUND NET, OTHER/NK SPECIES
142	POUND NET, FISH
170	TRAWL, OTTER, MIDWATER PAIRED
181	POTS + TRAPS, FISH
182	POTS + TRAPS, EEL
183	POTS + TRAPS, CONCH
200	POT/TRAP, LOBSTER OFFSH NK
210	POT/TRAP, LOBSTER INSH NK
222	SHOVELS
230	BY HAND, OTHER/NK SPECIES
231	BY HAND, OYSTERS
250	RAKES, OTHER/NK SPECIES
251	RAKES, OYSTER
300	POTS + TRAPS, CRAB OTHER
301	POTS + TRAPS, BLUE CRAB
322	FYKE NET, FISH
350	BEAM TRAWL, OTHER/NK SPECIES
382	DREDGE, CLAM
400	DREDGE, SURF CLAM + OCEAN QUAHOG
410	TONGS AND GRABS, OTHER/NK SPECIES
411	TONGS AND GRABS, CLAM
999	UNKNOWN

Appendix 2: Port Activity by Species Landed, % Pounds and % Value, Hampton Bays/Shinnecock, NY, 1994-2001

Species	1994		1995		1996		1997		1998		1999		2000		2001	
	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value	% pound	% value
OTH	8	6	7	4	9	5	8	4	15	6	9	5	6	6	7	5
WHT	21	18	23	21	35	27	31	22	38	23	24	15	12	9	21	11
MNK	1	3	1	2	3	8	3	7	4	8	4	9	3	7	7	10
FLN	2	2	1	1	2	4	5	9	3	4	6	9	4	6	7	8
PEL	4	3	3	3	7	5	6	4	7	5	6	5	7	4	7	4
FF	3	5	3	5	5	9	4	7	5	8	5	9	3	6	8	8
TUN	1	4	2	10	0.4	1	1	1	1	1	0.4	0.3	0.2	1	0.1	0.3
FLK	1	4	2	6	2	5	2	5	2	7	3	8	2	7	3	8
DOG	0	0	0	0	0	0	0.03	0.01	0.02	0.01	8	2	11	3	0.3	0.1
LOB	0	0	0.001	0.003	0.05	0.3	0.1	0.4	0.1	0.3	0.1	1	0.04	0.2	0.03	0.1
SCL	0	0	0.02	0.1	0.01	0.03	0.05	0.2	0.02	0.03	0.1	1	1	2	3	8
SQL	28	34	18	17	14	18	29	29	23	27	32	33	50	43	34	31
SHF	0.2	0.5	0.03	0.3	0.2	1	0.4	3	0.3	3	0.0002	0.0003	0.4	3	0.3	2
OQ	31	18	43	31	22	15	9	6	0	0	0	0	0	0	0	0
SWD	0.1	1	0.1	1	0	1	0	1	0	0	0	0	0	0	0	0
EEL	0.0002	0.0004	0.001	0.01	0.002	0.002	0.00005	0.0001	0.001	0.004	0.0001	0.0001	0.0001	0.0001	0	0
TIL	0.001	0.002	0.004	0.01	0.34	1	2	3	3	8	1	4	1	3	3	6

Species Codes:

- OTH** Species other than those listed below
- WHT** whiting (silver hake)
- MNK** monkfish
- FLN** flounders: winter flounder, witch flounder, yellowtail, american plaice, sand-dab, flounders, southern flounder
- PEL** pelagics: bluefish, butterfish, king mackerel, menhaden
- FF** finfish: atlantic croaker, scup, black sea bass, weakfish, striped bass, spot
- TUN** tuna: bluefin tuna, big eye tuna, albacore tuna, yellowfin tuna
- FLK** summer flounder
- DOG** dogfish
- LOB** lobster
- SCL** scallop
- SQL** squid: loligo and illex
- SHF** shellfish: blue crab, horseshoe crab, panaeid shrimp, quahogs, conches, channeled whelk, oysters
- OQ** ocean quahog and surf clam
- SWD** swordfish
- EEL** American eel
- TIL** tilefish

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