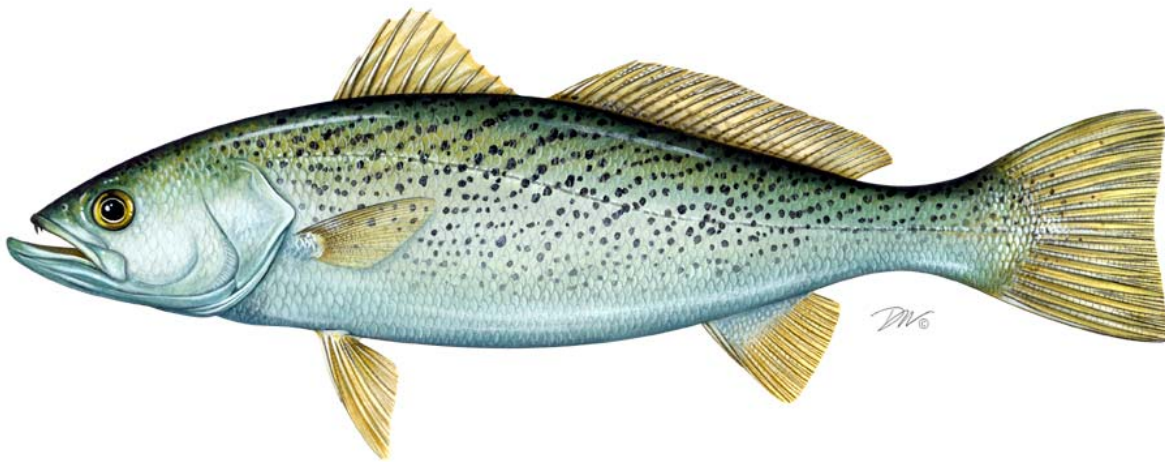


**REVIEW OF THE
INTERSTATE FISHERY MANAGEMENT PLAN FOR**

**WEAKFISH
(*Cynoscion regalis*)**

2008 FISHING YEAR



Weakfish Plan Review Team

Joe Cimino, Virginia Marine Resources Commission
Rick Cole, Delaware Division of Fish and Wildlife
Wilson Laney, United States Fish and Wildlife Service
Erin Levesque, South Carolina Department of Natural Resources
Nichola Meserve, Atlantic States Marine Fisheries Commission, Chair
Lee Paramore, North Carolina Division of Marine Fisheries

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I. Status of the Fishery Management Plan

The Atlantic States Marine Fisheries Commission (Commission) adopted its first Fishery Management Plan (FMP) for Weakfish in 1985. Amendment 1 to the FMP (1992) unsuccessfully aimed to improve the status of weakfish. Amendment 2 (1995) resulted in some improvement to the stock, but several signs indicated that further improvement was necessary. Thus, Amendment 3 (1996) was implemented to increase the sustainability of the fishery. Addendum I to Amendment 3 was approved in 2000 in order to extend the management program until the next amendment was implemented.

Amendment 4 was approved in 2002. The goal of Amendment 4 is to utilize interstate management so that Atlantic coastal weakfish recover to healthy levels that will maintain commercial and recreational harvest consistent with a self-sustaining spawning stock and to provide for restoration and maintenance of essential habitat (ASMFC 2002). The management objectives are to:

- 1) establish and maintain an overfishing definition that includes target and threshold fishing mortality rates and a threshold spawning stock biomass to prevent overfishing and maintain a sustainable weakfish population;
- 2) restore the weakfish age and size structure to that necessary for the restoration of the fishery;
- 3) return weakfish to their previous geographic range;
- 4) achieve compatible and equitable management measures among jurisdictions throughout the fishery management unit, including states' waters and the federal EEZ;
- 5) promote cooperative interstate research, monitoring, and law enforcement necessary to support management of weakfish;
- 6) promote identification and conservation of habitat essential for the long term stability in the population of weakfish; and
- 7) establish standards and procedures for both the implementation of Amendment 4 and for determination of states' compliance with provisions of the management plan.

Amendment 4 established target and threshold fishing mortality rates and a threshold spawning stock biomass level to determine overfishing and overfished stock status. The amendment requires states to implement recreational and commercial management measures to achieve annual fishing mortality targets. Some management measures are specified (e.g., minimum size limit, minimum mesh size, bycatch limit), while the amendment provides the states flexibility in implementing other regulations (e.g., trip limits, area or season closures). States may request implementation of alternative management plans with conservationally equivalent measures. States deemed to have insignificant landings were exempt from the recreational and commercial requirements, with the exception of the bycatch reduction device requirements.

The Commission adopted Addendum I to Amendment 4 (2005) to replace the biological sampling program in section 3.0 of Amendment 4. In response to a significant decline in stock abundance and increasing total mortality since 1999, the Commission approved Addendum II to Amendment 4 (2007) to reduce the recreational creel limit and commercial bycatch limit, and set landings levels that when met will trigger a re-evaluation of management measures. Addendum III to Amendment 4 (2007) altered the bycatch reduction device certification requirements in Section 4.2.8 of Amendment 4 for consistency with the South Atlantic Fishery Management

Council's Shrimp FMP. The Commission approved Addendum IV to Amendment 4 in 2009 to respond to the results of the 2009 benchmark stock assessment (additional information is provided in Section VI. Status of Management Measures and Issues).

Weakfish are managed under this plan as a single stock throughout their coastal range. All Atlantic coast states from Massachusetts through Florida and the Potomac River Fisheries Commission have a declared interest in weakfish. See Table 1 for a summary of state-by-state regulations in 2008.

II. Status of the Stock

The weakfish stock is depleted and overfishing is not occurring (NEFSC 2009a, NEFSC 2009b). In general, weakfish biomass has declined to an all time low, total mortality is currently high, and non-fishing mortality has increased in recent years. Given this situation, recent fishery removals (landings and dead discards combined) represent a significant proportion of the remaining biomass and further exacerbate the stock decline.

Between 1982 and 1990, age 1+ weakfish biomass¹ declined drastically from 113.1 million pounds to 17.6 million pounds (Figure 1). Overfishing was the main cause of this decline, with fishing mortality (F) accounting for about 60-90% of total mortality (fishing plus natural mortality) during the period. Fishing mortality² peaked at 1.01 in 1989, but with the implementation of management measures in the early to mid-1990s, F declined to 0.24 in 1995 and biomass responded favorably by increasing to a peak of 62.1 million pounds in 1996 (Figure 1). While F remained relatively stable (between 0.26 and 0.58) after that time, the stock began another drastic decline in 2001 to the time-series low of 10.8 million pounds in 2008. However, the contribution of fishing mortality to total mortality was substantially reduced during this period; from 2004-2007 only 10-20% of total mortality is attributed to fishing mortality. Conversely, natural mortality has risen substantially since 1995 (Figure 1), and factors such as predation, competition, and changes in the environment are thus believed to be having a stronger influence on recent weakfish stock dynamics than fishing mortality. Bycatch and under-reported catches would have to be much greater than those estimated, growing from about 3-4 times the estimates in 1996 to 15-20 times in the most recent years, to account for the biomass decline. Thus far, there is no evidence available of an Atlantic coast fishery capable of generating additional unreported weakfish discards of this magnitude.

These estimates of age 1+ biomass are roughly comparable to spawning stock biomass due to the biology of weakfish (most fish are mature at age one). The 2008 estimate of age 1+ biomass is below the Amendment 4 SSB threshold of 31.8 million pounds (and the stock's spawning potential – 3% of an unfished stock – is also below the 20% spawning potential threshold adopted in Addendum IV). While the F estimates above are not comparable to the target and threshold rates in Amendment 4, the trend indicates a stable and modest fishing mortality. Thus, while the stock biomass is depleted, overfishing is not occurring.

¹ Biomass estimates are for January 1 stock size. All mortality rates are also based on January 1 stock size.

² F estimates are based on age 1+ biomass and are therefore affected by partial recruitment and can not be comparable to the F target and threshold in Amendment 4 which are for fully recruited ages only.

Despite the decline in age 1+ biomass, young-of-year relative abundance appears to have remained in a productive pattern; however, 2006 was one of the lowest years on record and 2008 was low relative to the pattern of recruitment since 1996 (Figure 2). While inter-annual variability is common in juvenile indices, fluctuations in the recent time series appear more pronounced than in earlier years. Conflicting trends in age-0 indices and age 1+ biomass suggest the emergence of a demographic bottleneck (strong young-of-year indices do not translate into high biomass).

III. Status of the Fishery

At 1.14 million pounds, the total coastwide landings of weakfish in 2008 are the lowest on record from at least 1982 (Table 2). Total landings dropped 22% from the 2007 landings of 1.46 million pounds, and 80% from the ten-year (1998-2007) average of 5.77 million pounds. The commercial fishery (470,630 pounds) accounts for 41% of the total 2008 landings, and the recreational fishery (665,943 pounds) for 59% (Table 2).

Commercial Fishery

Commercial data are cooperatively collected and compiled by the National Marine Fisheries Service (NMFS) and state fishery agencies from state mandated trip-tickets, landing weigh-out reports from seafood dealers, federal logbooks, shipboard and portside interviews, and biological sampling of catches. Landings from the NMFS Fisheries Statistics Division are used within this report unless a state reports alternative values in its compliance report to the Commission, in which case these values are used (see notes for Table 3).

Between 1982 and 2008, coastwide commercial weakfish landings have ranged from the high of 21.1 million pounds in 1986 to the low of 470,630 pounds in 2008 (Table 3). Since 1988, the overall trend is declining except for during the period of 1990-1998 when landings hovered between 6.1 and 9.1 million pounds (Figure 3).

North Carolina (36%), Virginia (36%), and New Jersey (12%) landed the three largest shares of the 2008 coastwide commercial weakfish landings, as they have done since 1982, although not always in the same order (Table 3, Figure 4).

The dominant commercial gears in 2008 were gill nets, haul seines, trawls, and pound nets (about 52%, 15%, 12% and 10% of the total commercial landings, respectively; NMFS 2009). There has been a shift in the dominant source of landings from trawls in the 1950s-1980s to gill nets in the 1990s-present. The majority of commercial landings tend to occur in the fall and winter months, presumably as the fish congregate to migrate to over-wintering grounds in the South Atlantic (Hogarth and others 1995).

Recreational Fishery

Recreational catch statistics are collected by the NMFS. Effort data is collected through telephone interviews. Catch expansions are based on angler interviews and biological sampling conducted by trained interviewers stationed at fishing access sites. All recreational data in this report are from the NMFS Fisheries Statistics Division (2009).

Since 1982, coastwide recreational landings have ranged from the high of 11.4 million pounds in 1983 to the low of 562,613 pounds in 2007 (Table 4). Landings averaged 7.8 million pounds from 1982-1988, before falling to 2.1 million pounds in 1989. Annual recreational landings generally fluctuated between one and four million pounds from 1990 to 2002, before dropping below one million pounds in 2003 (Figure 3). Landings have averaged 892 thousand pounds (or 760 thousand fish) the last five years (Table 5), and are estimated at 665,943 pounds (506,483 fish) in 2008. The number of fish released alive by anglers has remained above 1 million fish since 1993, peaking at over 5 million in 1996, and decreasing to 1.9 million fish in 2008 (Table 6, Figure 5).

New Jersey anglers have nearly consistently harvested the most weakfish by pounds along the coast. In the 1980s and 1990s, anglers in Delaware, Maryland, and Virginia often took the next largest shares of the recreational total largest amount. In the 2000s, New Jersey anglers still lead in the harvest, whereas anglers in Virginia and North Carolina tend to take the second and third largest amounts (Tables 4 and 5). In 2008, New Jersey anglers landed 51% of the coastwide harvest, followed by North Carolina anglers with 21% and New York anglers with 17% (by pounds; Figure 6).

The recreational fishery catches weakfish using live or cut bait, jigging, trolling, and chumming. The vast majority of recreationally harvested weakfish are caught in state waters (97% in 2008 by pounds). In 2008, nearly all recreationally harvested fish were caught from private or rental boats (92%) or from shore (5%). Ninety-seven percent of the harvest occurred May-December.

IV. Status of Assessment Advice

An assessment was completed in 2009 by the Weakfish Stock Assessment Subcommittee (NEFSC 2009a, NEFSC 2009b) and peer reviewed by the 48th Stock Assessment Review Committee (Sullivan et al. 2009) at the 48th Northeast Regional Stock Assessment Workshop (SAW). The assessment includes fishery data and survey indices through 2007.

As recommended by previous review panels, an age-structured VPA was used to evaluate trends in population parameters. This model provided reasonable estimates of fishing mortality and biomass from 1981-2001 with estimates converging regardless of the terminal year of the model; however, estimates from 2002 onward were subject to excessive bias when adding additional years of data, making them unusable for analysis. An alternative approach using an index-based model (where relative values are estimated from harvest and survey data and then scaled to absolute values based on results from the early, stable part of the VPA time series) was developed. Two surplus production models were also included in the assessment because these could include additional sources of mortality, such as predation, competition, and environmental factors. The peer review panel endorsed using, on an interim basis, the index-based model for estimating biomass and fishing mortality, weakfish relative spawning stock biomass projections, and a biomass threshold approximating 20% of unfished SSB. The review panel recommended that the SAS develop additional methods to analyze the stocks in the next assessment.

V. Status of Research and Monitoring

Fishery-Independent Data

Young-of-year indices of relative abundance are provided by Rhode Island, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, and Florida. Connecticut, New Jersey, Delaware, North Carolina, Georgia, and Florida provide age-0+ or 1+ indices of relative abundance. The Northeast Fisheries Science Survey Groundfish Trawl Survey also produces an age-structured index for the Mid-Atlantic coast, while the Southeast Area Monitoring and Assessment Program (SEAMAP) survey produces another for the South Atlantic Coast. The Northeast Area Monitoring and Assessment Program (NEAMAP) began spring and fall surveys between Martha's Vineyard and Cape Hatteras in the fall of 2007, and will provide an index in the future. The Chesapeake Bay Multispecies Monitoring and Assessment Program (ChesMMAP), which began in 2002, collects data on relative abundance, length, weight, age, sex, and trophic interactions in the Bay. See Table 9 for the indices provided in the 2008 compliance reports.

Fishery-Dependent Data

The coastal states and the NMFS collect data on commercial and recreational landings. Addendum I to Amendment 4 requires the collection of otoliths and lengths to characterize the catch; the number of samples required is based on the magnitude of each state's fisheries. Each spring, the states are required to submit biological sampling plans, and each fall, through the compliance reports, the states are required to provide the actual sampling levels completed. See Section VII for more information.

VI. Status of Management Measures and Issues

Fishery Management Plan

No changes were made to the management plan in 2008.

Addendum IV to Amendment 4 was approved in November 2009, and is due to be implemented by May 2010. In response to the 2009 stock assessment results, the addendum's purpose is to implement more appropriate biological reference points given recent stock dynamics and to reduce the level of fishery removals without creating unnecessary bycatch waste, thus poisoning the stock for recovery should natural mortality decrease. Addendum IV requires all states in the management unit (including those that are *de minimis*) to implement a recreational creel limit no greater than 1 fish, commercial trip and bycatch limits no greater than 100 pounds, and a finfish trawl fishery allowance for undersized fish no greater than 100 fish. The addendum adopted threshold and target maximum spawning potential levels of 20% and 30% for determining overfished/depleted stock status. The biological sampling requirements under Addendum I are unchanged, and all regulations previously enacted to protect weakfish and reduce bycatch are to remain effective.

No additional amendments or addenda are under development.

Florida Management Area and Landings Data

In November 2009, the Management Board approved a proposal from Florida to reduce the state's weakfish management area to a small area in northeast Florida where pure weakfish are

known to occur based on genetics data. The revision is intended to address the misidentification of weakfish, sand seatrout, and their hybrids, and the consequential law enforcement issue. Inside the newly established weakfish management area (likely including Nassau and Duval counties only), any fish that resembles weakfish will be considered weakfish for enforcement purposes, both for commercial and recreational limits. Outside the weakfish management area, all fish that resemble weakfish will be considered sand seatrout.

As a result of the approved proposal, the commercial and recreational landings data provided in Florida's 2009 compliance report represent the best estimate of pure weakfish landings in the state. Commercial landings data from Florida's trip ticket program and recreational landings from the NMFS's Marine Recreational Fisheries Statistics Survey include only weakfish landed in Nassau and Duval counties, as revised on the basis of the genome proportions within the *Cynoscion*-complex found in the counties (48% weakfish in Nassau County and 17% in Duval County). The landings tables and figures in this report use the landings as reported by Florida.

De Minimis Status

Amendment 4 permits states to request *de minimis* status if, for the last two years, their combined average commercial and recreational landings (by weight) constitute less than 1% of the coastwide commercial and recreational landings for the same two year period. The *de minimis* threshold for 2008, calculated with 2007 and 2008 harvest data, is 12,984 pounds.

Four states requested *de minimis* status in their 2009 compliance reports: Florida, Georgia, Connecticut, and Massachusetts. Each of these states has had a previous *de minimis* request approved and qualify for continued *de minimis* status (Florida 0.21%; Georgia 0.37%, Connecticut 0.11%, and Massachusetts 0%).

Additionally, it should be noted that South Carolina did not request continued *de minimis* status because its contribution to the two-year coastwide average landings is 2.6%. South Carolina has been *de minimis* since 1997, including during 2004-2008 despite having landings above the 1% threshold. *De minimis* status was requested and granted those five years because of uncertainty in recreational harvest estimates and the effect of declining harvest in the northern part of the species range on the state's contribution to the coastwide total.

If any *de minimis* state were to lose its designation as such, the state would be required to implement the regulatory and monitoring requirements from which it were previously exempt. In the case of South Carolina at this particular time, the only new requirements would be the sampling requirements in Addendum I; South Carolina has no commercial weakfish fishery and is required to implement the recreational regulations in Addendum IV regardless of *de minimis* status. The state would be required to submit a monitoring plan to collect 3 otoliths per total metric tons of harvest in 2010. Based on 2008 harvest, the projected requirement is 27 otoliths. Although not required to at the time, South Carolina submitted and initiated a sampling plan in 2009 in anticipation of no longer being granted the *de minimis* exemption.

The Board approved the *de minimis* requests from Florida, Georgia, Connecticut and Massachusetts on February 2, 2010.

Addendum II Management Triggers

Addendum II established two management triggers that would require the Board to consider modifying management measures if reached. Commercial management measures are to be re-evaluated if coastwide commercial landings exceed 80% of the mean commercial landings from 2000-2004, or 2.99 million pounds. Commercial and recreational management measures are to be re-evaluated if any single state's landings exceed its five-year mean by more than 25% in any single year.

The 2008 coastwide commercial landings are 470,630 pounds, thus the first trigger has not been exceeded. The second trigger was not met in any state (Table 7). Only New York and Georgia's 2008 landings increased from their 2003-2007 average, but only by 5 and 7%, respectively. The Board determined that it was not necessary to consider changes to the management plan on February 2, 2010.

In 2010, the recreational and commercial management measures in Addendum IV replace those in Addendum II. However, the Plan Review Team will continue to include an evaluation of the two management triggers as they provide perspective on the magnitude of fishery landings (but hitting a trigger will not require Board reconsideration of the management measures).

VII. Implementation of FMP Compliance Requirements for 2008

Mandatory compliance elements for 2008 were provided by Amendment 4 and its three addenda.

Regulatory Requirements

The management program includes regulatory requirements for non *de minimis* states as follows:

- Recreational management measures including maximum creel limits and minimum size limits (see Addendum II to Amendment 4)
- Commercial management measures including minimum size limits, minimum mesh size limits, trip limits, bycatch limits, closed seasons and areas, and bycatch reduction device requirements (see Section 4.2 of Amendment 4, and Addendum II)

The PRT finds all states to have implemented the plan's compliance requirements. New York failed to reduce its bycatch limit from 300 lbs to 150 lbs as required under Addendum II by October 29, 2007, but did implement this requirement in late 2008. The Management Board was made aware of the delayed implementation date in October 2008 and took no action.

See Table 1 for a summary of state commercial and recreational regulations in 2008. The open season starting dates in Delaware and Maryland changed slightly in 2008 to account for calendar day differences; harvest days are consistent with Amendment 4.

Monitoring Requirements

Addendum I implemented monitoring requirements for non *de minimis* states as follows:

- Maintenance of at least the 2005 level of recreational sampling of individual lengths through the Marine Recreational Fisheries Statistics Survey;
- Collection of six individual fish lengths for each metric ton of weakfish landed commercially;

- Collection of three individual fish ages for each metric ton of total weakfish landed, with a maximum of 1000 ages annually per state.

Table 8 provides the otolith and length collection requirements for 2008. These are based on the best available 2008 landings data provided to the Commission by the NMFS and the states. Table 8 also provides the number of otoliths and lengths collected by the states in 2008. Three states did not fulfill the requirements of Addendum I: Rhode Island (otoliths and lengths), New York (otoliths), and New Jersey (otoliths). The states report funding issues, personnel shortages, and limited landings as the causes for inadequate sample numbers.

Addendum I specifies that if the Board determines that a state has not successfully implemented the required biological sampling program the state will be prohibited from harvesting weakfish until it develops, and the Board approves, a plan to collect the required samples the following year. Each state has submitted a sampling plan for 2009 that has been approved by the Board. The Board may also choose to forward a recommendation of non-compliance to the Policy Board for consideration.

The Board did not recommend finding any states out of compliance on February 2, 2010.

VIII. Recommendations of the Plan Review Team

Management Recommendations

- That the Board consider the *de minimis* requests from Massachusetts, Connecticut, Georgia, and Florida.
- That the Board consider the compliance of Rhode Island, New York, and New Jersey with the monitoring requirements in 2008.
- That the Technical Committee and Stock Assessment Subcommittee explore alternative assessment methods for the next benchmark stock assessment and continue to compile the input data for the interim assessment model should an update assessment be requested prior to the next benchmark assessment.

Research Recommendations

Biological

High Priority

- Collect catch and effort data including size and age composition of the catch, determine stock mortality throughout the range, and define gear characteristics. In particular, increase length-frequency sampling in fisheries from Maryland north.
- Derive estimates of discard mortality rates and the magnitude of discards for all commercial gear types from both directed and non-directed fisheries. In particular, quantify trawl bycatch, refine estimates of mortality for below minimum size fish, and focus on factors such as distance from shore and geographical differences.
- Conduct an age validation study.
- Identify stocks and determine coastal movements and the extent of stock mixing, including characterization of stocks in over-wintering grounds (e.g., tagging).
- Conduct spatial and temporal analysis of the fishery independent survey data. The analysis should assess the impact of the variability of the surveys in regards to gear, time of year, and geographic coverage on their (survey) use as stock indicators.

- Analyze the spawner recruit relationship and examine the relationships between parental stock size and environmental factors on year-class strength.

Medium Priority

- Biological studies should be conducted to better understand migratory aspects and how this relates to observed trends in weight at age. Test for individual growth difference and the geospatial pattern, as well as the geospatial pattern of the catch rate surveys.
- Define reproductive biology of weakfish, including size at sexual maturity, maturity schedules, fecundity, and spawning periodicity. Continue research on female spawning patterns: what is the seasonal and geographical extent of "batch" spawning; do females exhibit spawning site fidelity?
- Continue studies on mesh-size selectivity, particularly for trawl fisheries.
- Continue studies on recreational hook-and-release mortality rates, including factors such as depth, warmer water temperatures, and fish size in the analysis. Studies are needed in deep and warm water conditions. Further consideration of release mortality in both the recreational and commercial fisheries is needed, and methods investigated to improve survival among released fish.

Low Priority

- Develop a coastwide tagging database.

Social/Economic

- Assemble socio-demographic-economic data as it becomes available from ACCSP.
- Detailed information on production activities (e.g., fishing effort and labor used by gear, vessel characteristics, areas fished, etc.) and costs and earnings for the harvesting and processing sectors.
- Information on retail sales and demand for weakfish in order to estimate the demand and economic benefits of at-home and away-from home consumption of weakfish.
- Development of bio-economic models that link the underlying population dynamics to the economic aspects of the commercial and recreational fisheries.
- Distribution of weakfish to the various markets and across states.
- Information on the margins of various stages of processing and marketing also need to be obtained; this information is necessary to construct mathematical models that can be used to estimate the economic impacts of management and regulation.
- A directed data collection program for weakfish including the same variables presently collected by NMFS in support of MRFSS and by the economic add-on. Data collected includes information on travel distance, mode of angling, expenditures, area fished, catch on previous trips, and other information.
- Development of commercial decision-making or behavioral models to explain how fishers might respond to various regulations.
- Estimation and assessment of consumer (net economic benefits to consumers) and producer (net economic benefits or profits to producers) surplus; the sum of consumer and producer surplus is a measure of the net economic value to society of a good or service.
- Development of input/output models for all states having commercial weakfish activity, or alternatively, full-blown economic impact models, which might consist of input/output models or General Equilibrium models.
- Determination of the economic value derived from recreational angling including the economic value of a catch and release fishery

Habitat

- Conduct hydroponic studies to delineate weakfish spawning habitat locations and environmental preferences (temperature, depth, substrate, etc.) and enable quantification of spawning habitat.
- Compile existing data on larval and juvenile distribution from existing databases in order to obtain preliminary indications of spawning and nursery habitat location and extent.
- Document the impact of power plants and other water intakes on larval, post larval and juvenile weakfish mortality in spawning and nursery areas, and calculate the resulting impacts on adult stock size.
- Define restrictions necessary for implementation of projects in spawning and overwintering areas and develop policies on limiting development projects seasonally or spatially.

XI. References

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X. Figures

Figure 1. Estimated weakfish age 1+ biomass, fishing mortality, and natural mortality (NMFS 2009a, NMFS 2009b).

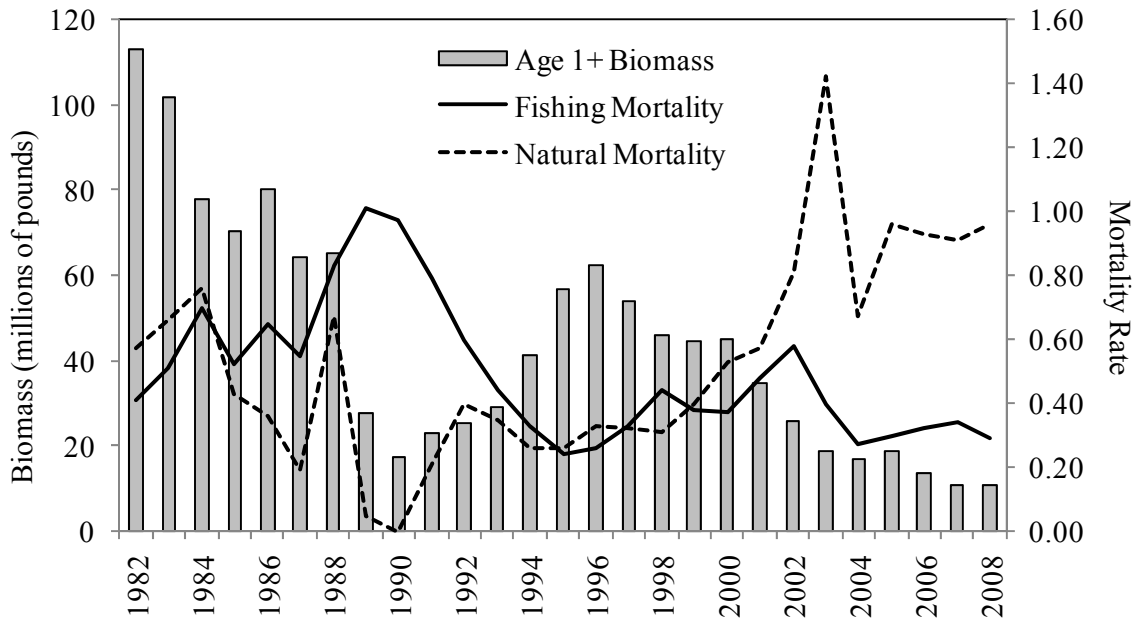


Figure 2. Age-0 weakfish indices of relative abundance (2009 State Compliance Reports). Indices are standardized into the same units. The solid line represents the mean of the indices; 2008 Rhode Island value missing from mean.

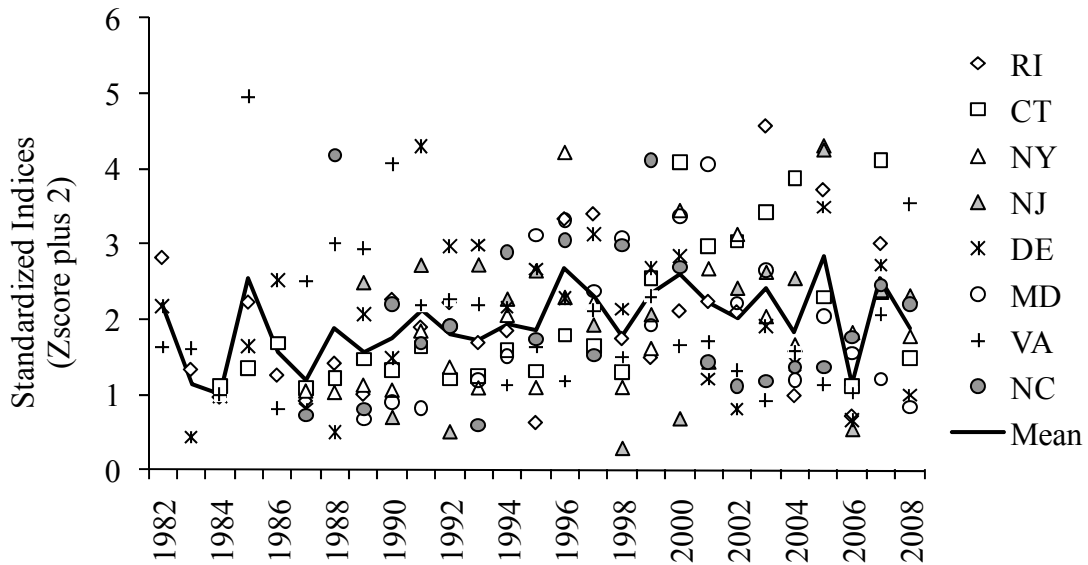


Figure 3. Commercial and recreational weakfish harvest (pounds), 1982-2008 (see Tables 3 and 4 for source information and values)

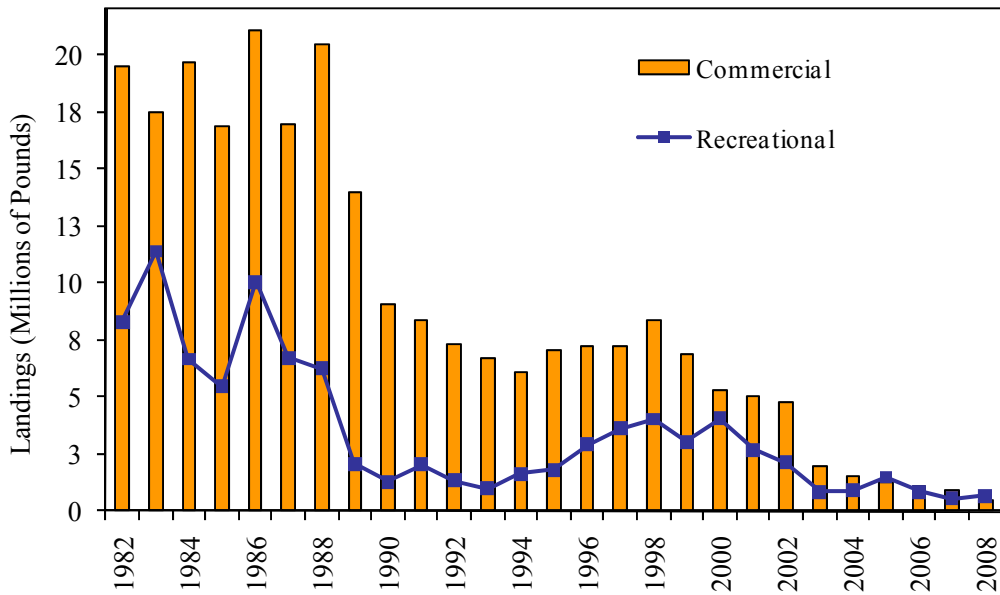


Figure 4. Commercial weakfish landings (pounds) by state, 2005-2008 (see Table 3 for source information and values)

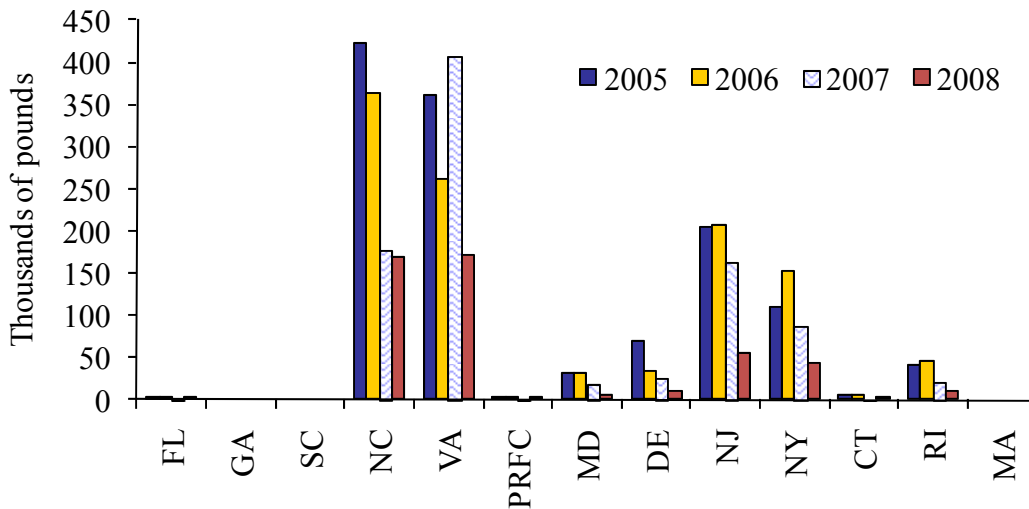


Figure 5. Recreational weakfish harvest and releases (number of fish), 1982-2008 (see Tables 5 and 6 for source information and values)

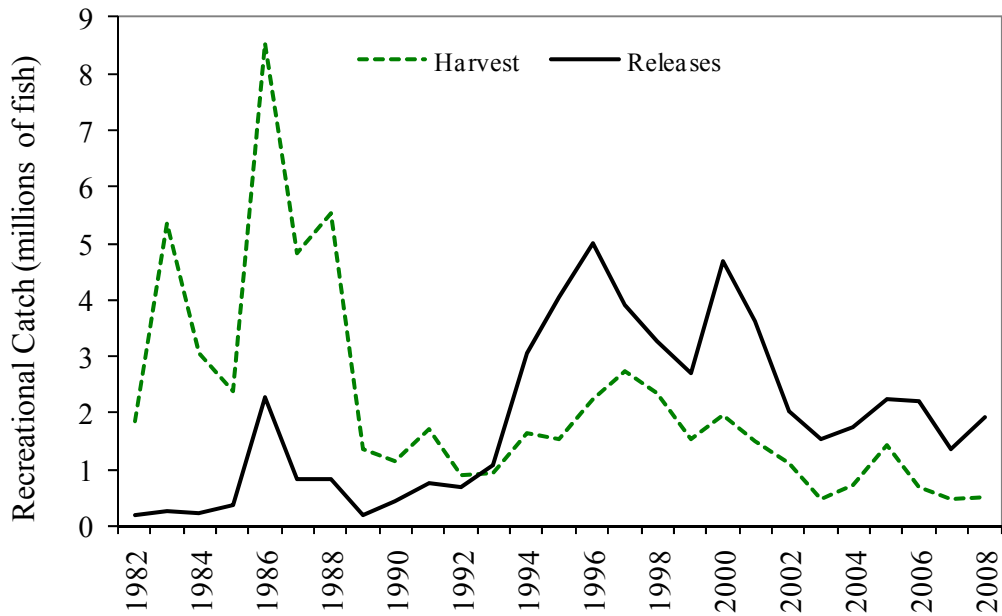
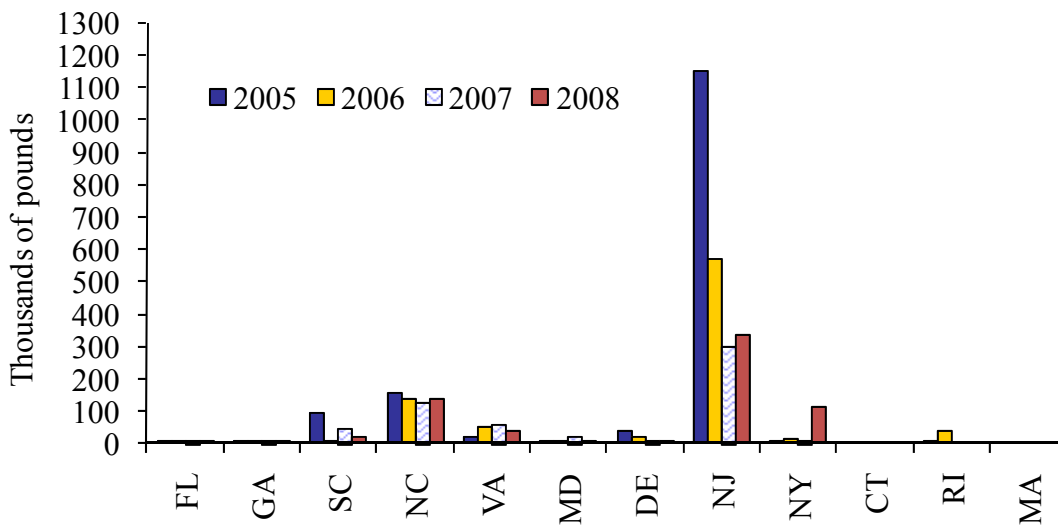


Figure 6. Recreational weakfish landings (pounds) by state, 2005-2008 (See Table 4 for source information and values)



XI. Tables

Table 1. Summary of state regulations for weakfish in 2008

| State | Commercial | Recreational |
|-------|--|---------------------------------------|
| MA | 16"; open 1/1-12/31. | 16", 6 fish |
| RI | 16"; open 6/1-6/30 & 8/7-11/8. Trawl: codend mesh \geq 4.5" diamond or 4.0" square. 150 lb bycatch limit & 50% bycatch rule (except hook and line: 0 lb bycatch). | 16", 6 fish |
| CT | 16"; open 1/1-12/31. | 16", 6 fish |
| NY | 16" (12" dressed & 10" filleted); open 4/1-6/24 & 8/28-11/15. Trawl: codend mesh size \geq 4.5" diamond or 4.0" square. Gill & trammel net: mesh \geq 3.5" stretched. 150 lb bycatch limit & 50% rule (except hook & line: 0 lb bycatch). | 16" (12" dressed, 10" fillet), 6 fish |
| NJ | Gill net: 13"; open 1/1-5/20 & 9/3-10/19 & 10/27-12/31; mesh \geq 3.25" stretched except 2.75 - 3.25" allowed within 2nm for permitted fishermen doing monthly reporting. Otter trawl: 13" 1/1-8/31 & 12" 9/1-12/31; open 1/1-7/31 & 10/13-12/31; mesh \geq 3.75" diamond or 3.375 square. Pound net: 13"; open 1/1-6/6 & 7/1-12/31. 150 lb bycatch limit & 50% rule. Hook & line: 13", 6 fish, open 1/1-12/31. | 13", 6 fish |
| DE | Gill net: 12"; only nets with stretch mesh \geq 3.125" allowed in water 4/1-6/30, none permitted weekends and legal holidays 5/10-9/30. Drift gill net: open 1/1-12/31 except 34 specified days of gear out of water in May and June. Anchor gill net: open 1/1-5/9 and 10/1-12/31, otherwise gear out of water. Hook & line: 13"; unlimited possession 4 days/week during 5/1-10/31, 6 fish creel limit all other times. | 13", 6 fish |
| MD | 12". Ocean trawl: open 10/17-12/29 except Saturdays & Sundays. Ocean other gears: open 3/26-4/25 & 9/3-11/14 except Sundays. Chesapeake Bay all gears: open 8/5-9/30. Gillnet: mesh \geq 3.0" stretched. Trawl: mesh \geq 3.375" square or 3.75" diamond. 150 lb bycatch limit & 50% rule (except hook & line: 0 lb bycatch) | 13", 6 fish |
| PRFC | 12"; open 7/28-12/31; 150 lb bycatch limit & 50% rule for certified pound nets with approved cull panels, and 0 lb bycatch for all other gears. Pound net: limited entry. | 12", 6 fish |
| VA | Gill net: 12"; open 3/16-5/13 & 10/21-12/30. Pound net: no minimum size; limited entry; open 4/1-4/30 & 5/23-9/12 unless exempted by license forfeit. Haul seine: no minimum size; open 4/16-6/10 & 8/21-9/24. Out of state trawl: 12" except 300 undersized fish allowed; open 4/1-9/25; codend mesh \geq 3.0". Hook & line: 12"; open 1/1-12/31. 150 lb bycatch limit (per licensee, 450 lb per vessel maximum), 50% rule. | 12", 6 fish |
| NC | 12" except 10" for long haul seines & pound nets in internal waters 4/1-11/15; open 1/1-12/31. Gill net: mesh \geq 2.875" stretch. Flynet: gear requirements & area closure south of Cape Hatteras. Long haul seine: culling panel requirement south of Bluff Shoal. 150 lb bycatch limit & 50% rule. BRDs in shrimp trawls. Hook & line: 6 fish. | 12", 6 fish |
| SC | 12", 10 fish. BRDs in shrimp trawls. | 12", 10 fish |
| GA | 13", 6 fish. BRDs in shrimp trawls. | 13", 6 fish |
| FL | 12". BRDs in shrimp trawls. | 12", 4 fish |

Table 2. Comparison of commercial and recreational Atlantic coast weakfish landings (see Tables 3 and 4 for source information and state-specific landings)

| Year | Recreational Landings (lbs) | Commercial Landings (lbs) | Total Landings (lbs) | % Commercial |
|-------------|------------------------------------|----------------------------------|-----------------------------|---------------------|
| 1982 | 8,285,323 | 19,493,321 | 27,778,644 | 70% |
| 1983 | 11,391,635 | 17,485,501 | 28,877,136 | 61% |
| 1984 | 6,655,261 | 19,652,279 | 26,307,540 | 75% |
| 1985 | 5,467,698 | 16,833,896 | 22,301,594 | 75% |
| 1986 | 10,043,641 | 21,097,068 | 31,140,709 | 68% |
| 1987 | 6,705,462 | 16,947,925 | 23,653,387 | 72% |
| 1988 | 6,244,994 | 20,431,283 | 26,676,277 | 77% |
| 1989 | 2,069,062 | 14,018,067 | 16,087,129 | 87% |
| 1990 | 1,293,187 | 9,087,481 | 10,380,668 | 88% |
| 1991 | 2,051,533 | 8,381,774 | 10,433,307 | 80% |
| 1992 | 1,349,200 | 7,332,282 | 8,681,482 | 84% |
| 1993 | 995,410 | 6,689,118 | 7,684,528 | 87% |
| 1994 | 1,650,411 | 6,120,441 | 7,770,852 | 79% |
| 1995 | 1,813,279 | 7,060,567 | 8,873,846 | 80% |
| 1996 | 2,908,627 | 7,216,860 | 10,125,487 | 71% |
| 1997 | 3,628,760 | 7,237,666 | 10,866,426 | 67% |
| 1998 | 4,026,244 | 8,400,173 | 12,426,417 | 68% |
| 1999 | 3,047,216 | 6,863,765 | 9,910,981 | 69% |
| 2000 | 4,046,525 | 5,345,618 | 9,392,143 | 57% |
| 2001 | 2,684,146 | 5,007,329 | 7,691,475 | 65% |
| 2002 | 2,135,034 | 4,770,229 | 6,905,263 | 69% |
| 2003 | 843,357 | 1,983,239 | 2,826,596 | 70% |
| 2004 | 891,399 | 1,540,456 | 2,431,855 | 63% |
| 2005 | 1,490,205 | 1,250,239 | 2,740,444 | 46% |
| 2006 | 848,282 | 1,104,031 | 1,952,313 | 57% |
| 2007 | 562,613 | 897,531 | 1,460,144 | 61% |
| 2008 | 665,943 | 470,630 | 1,136,573 | 41% |

Table 3. Commercial landings (pounds) of weakfish by state, 1982-2008 (Source: NMFS 2009, except as noted below table)

| Year | FL | GA | SC | NC | VA | PRFC | MD | DE | NJ | NY | CT | RI | MA | Total |
|------|---------|-------|-----|------------|-----------|---------|---------|-----------|-----------|-----------|--------|---------|--------|------------|
| 1982 | 176,203 | 596 | 443 | 12,052,232 | 1,856,920 | 307,230 | 249,297 | 1,294,500 | 2,073,500 | 1,257,100 | 25,600 | 176,800 | 22,900 | 19,493,321 |
| 1983 | 117,720 | 2,749 | | 10,233,734 | 2,483,777 | 119,394 | 390,227 | 901,800 | 2,172,700 | 850,000 | 42,800 | 163,700 | 6,900 | 17,485,501 |
| 1984 | 923 | 862 | | 12,990,726 | 2,022,123 | 90,166 | 325,279 | 782,400 | 2,751,600 | 484,500 | 31,300 | 167,600 | 4,800 | 19,652,279 |
| 1985 | 7,747 | 82 | | 9,821,188 | 2,014,376 | 72,666 | 316,320 | 990,817 | 3,030,100 | 386,200 | 28,200 | 163,100 | 3,100 | 16,833,896 |
| 1986 | 9,162 | 75 | | 14,309,372 | 1,886,254 | 116,197 | 337,064 | 723,444 | 3,208,600 | 359,900 | 13,700 | 127,600 | 5,700 | 21,097,068 |
| 1987 | 11,719 | 189 | | 11,508,389 | 1,722,441 | 265,942 | 328,510 | 577,735 | 2,094,100 | 329,100 | 29,500 | 78,600 | 1,700 | 16,947,925 |
| 1988 | 13,283 | | | 15,091,878 | 1,383,218 | 96,765 | 832,636 | 530,603 | 2,332,800 | 124,500 | 2,400 | 19,400 | 3,800 | 20,431,283 |
| 1989 | 21,376 | | 113 | 10,115,747 | 1,001,324 | 28,653 | 731,313 | 543,741 | 1,458,500 | 103,500 | 2,300 | 9,600 | 1,900 | 14,018,067 |
| 1990 | 17,433 | 33 | | 5,802,159 | 1,192,321 | 18,510 | 416,130 | 625,006 | 968,318 | 19,924 | 1,281 | 24,646 | 1,720 | 9,087,481 |
| 1991 | 21,344 | | | 5,308,574 | 1,047,106 | 13,798 | 153,632 | 503,289 | 1,174,181 | 111,629 | 21,300 | 25,009 | 1,912 | 8,381,774 |
| 1992 | 24,655 | | | 4,862,551 | 532,482 | 19,961 | 384,999 | 362,042 | 940,695 | 168,087 | 3,500 | 30,277 | 3,033 | 7,332,282 |
| 1993 | 19,580 | | | 4,309,249 | 1,049,946 | 37,828 | 141,926 | 195,216 | 834,446 | 88,379 | 1,477 | 9,991 | 1,080 | 6,689,118 |
| 1994 | 27,835 | | | 3,489,929 | 1,264,263 | 28,958 | 223,288 | 262,263 | 695,280 | 99,470 | 11,000 | 18,155 | | 6,120,441 |
| 1995 | 5,609 | | | 4,113,260 | 1,448,372 | 38,138 | 64,829 | 291,010 | 867,262 | 172,431 | 6,431 | 52,690 | 535 | 7,060,567 |
| 1996 | 387 | | | 3,977,633 | 1,487,069 | 99,493 | 97,068 | 317,317 | 822,041 | 365,307 | 6,937 | 43,522 | 86 | 7,216,860 |
| 1997 | 875 | | | 3,561,060 | 1,521,517 | 35,239 | 144,659 | 558,910 | 1,036,470 | 336,752 | 10,958 | 31,171 | 55 | 7,237,666 |
| 1998 | 952 | | | 3,354,008 | 1,796,487 | 81,744 | 221,048 | 552,947 | 1,804,618 | 496,403 | 14,482 | 77,074 | 410 | 8,400,173 |
| 1999 | 779 | | | 2,617,580 | 1,610,484 | 68,749 | 192,750 | 441,176 | 1,291,319 | 489,935 | 22,172 | 126,271 | 2,550 | 6,863,765 |
| 2000 | 448 | | | 1,869,042 | 1,311,298 | 68,574 | 145,918 | 328,269 | 1,071,428 | 352,832 | 7,920 | 189,362 | 527 | 5,345,618 |
| 2001 | 1,201 | | | 1,960,324 | 1,124,707 | 44,219 | 153,865 | 190,093 | 837,550 | 578,797 | 6,774 | 109,568 | 231 | 5,007,329 |
| 2002 | 394 | | | 1,828,150 | 1,129,158 | 57,818 | 79,734 | 164,064 | 863,088 | 513,977 | 10,223 | 122,781 | 842 | 4,770,229 |
| 2003 | 288 | | | 848,822 | 454,841 | 5,273 | 31,215 | 91,195 | 340,269 | 144,416 | 3,059 | 63,337 | 524 | 1,983,239 |
| 2004 | 192 | | | 685,463 | 325,832 | 1,986 | 50,519 | 48,905 | 204,587 | 178,414 | 6,206 | 38,284 | 68 | 1,540,456 |
| 2005 | 553 | | | 421,779 | 361,874 | 1,004 | 30,983 | 70,788 | 205,692 | 109,861 | 6,118 | 41,587 | | 1,250,239 |
| 2006 | 337 | | | 363,078 | 261,619 | 689 | 32,417 | 34,429 | 206,450 | 152,867 | 7,012 | 45,133 | | 1,104,031 |
| 2007 | 888 | | | 175,579 | 406,392 | 20 | 18,060 | 24,570 | 162,656 | 86,656 | 1,910 | 20,800 | | 897,531 |
| 2008 | 996 | | | 170,469 | 171,153 | 74 | 5,815 | 11,185 | 55,949 | 44,275 | 1,012 | 9,702 | | 470,630 |

Notes: FL: state-reported landings 1984-present (NMFS-reported landings limited to Nassau and Duval Counties and adjusted on the basis of the genome proportions of weakfish within the Cynoscion-complex in those counties' waters). NC: state-reported landings 1994-present. VA: NMFS-reported landings minus the PRFC-reported harvest landed in VA 1982-1992; state reported landings 1993-present (exclude Potomac River harvest). PRFC: agency-reported landings 1982-present (fish caught in Potomac River and landed in MD and VA). MD: state-reported landings 1982-present (exclude Potomac River harvest). DE: state-reported landings 1985-present. NJ: state-reported landings 2005-present. CT: state-reported landings 1995-present. RI: SAFIS landings 2005-present.

The 2008 and 2007 FMP Reviews include a 2006 estimate of 8,501 lbs in MA; these landings were misidentified as weakfish.

Table 4. Recreational landings (pounds) of weakfish by state, 1982-2008 (NMFS 2009, except as noted below table)

| Year | FL | GA | SC | NC | VA | MD | DE | NJ | NY | CT | RI | MA | Total |
|------|--------|--------|---------|---------|-----------|-----------|-----------|-----------|---------|--------|---------|--------|------------|
| 1982 | 48,137 | | 14,786 | 276,047 | 2,994,879 | 2,127,679 | 1,330,769 | 613,223 | 725,194 | | 154,609 | | 8,285,323 |
| 1983 | 9,190 | 12,165 | 4,515 | 338,100 | 738,671 | 1,215,376 | 2,205,140 | 6,080,018 | 164,227 | 12,976 | 588,805 | 22,452 | 11,391,635 |
| 1984 | 9,719 | | 5,150 | 189,031 | 850,169 | 254,962 | 1,279,594 | 3,987,542 | 51,464 | 11,358 | | 16,272 | 6,655,261 |
| 1985 | 578 | 3,422 | 105,151 | 184,485 | 508,980 | 898,313 | 1,102,095 | 1,876,608 | 638,913 | 17,269 | 131,884 | | 5,467,698 |
| 1986 | 2,661 | 12,621 | 44,185 | 417,470 | 2,032,394 | 2,406,643 | 1,598,932 | 3,184,095 | 242,217 | 61,281 | 41,142 | | 10,043,641 |
| 1987 | 1,205 | 9,491 | 23,781 | 710,002 | 647,692 | 831,615 | 1,072,198 | 3,353,362 | 51,830 | 4,286 | | | 6,705,462 |
| 1988 | 2,349 | | 1,841 | 359,606 | 1,677,694 | 1,679,702 | 1,664,477 | 833,198 | 26,127 | | | | 6,244,994 |
| 1989 | 2,933 | 8,175 | 5,963 | 139,979 | 424,463 | 344,658 | 521,648 | 575,110 | 46,133 | | | | 2,069,062 |
| 1990 | 1,466 | 961 | 11,186 | 63,420 | 256,690 | 388,662 | 207,131 | 358,457 | 4,317 | | 897 | | 1,293,187 |
| 1991 | 2,142 | 5,597 | 25,210 | 99,824 | 280,075 | 278,176 | 427,778 | 896,800 | 35,931 | | | | 2,051,533 |
| 1992 | 1,350 | 1,014 | 40,459 | 27,363 | 206,710 | 121,403 | 232,204 | 677,811 | 19,824 | 908 | 20,154 | | 1,349,200 |
| 1993 | 2,899 | 12,791 | 6,929 | 78,982 | 89,992 | 173,952 | 291,627 | 312,839 | 18,889 | 6,510 | | | 995,410 |
| 1994 | 3,934 | 783 | 25,163 | 149,159 | 142,265 | 300,831 | 319,491 | 706,206 | 2,579 | | | | 1,650,411 |
| 1995 | 1,146 | 21,283 | 22,875 | 72,412 | 211,494 | 141,511 | 419,527 | 898,564 | 24,467 | | | | 1,813,279 |
| 1996 | 454 | 5,060 | 4,980 | 79,317 | 194,485 | 185,074 | 690,121 | 1,730,055 | 19,081 | | | | 2,908,627 |
| 1997 | 1,734 | 34,356 | 1,728 | 165,032 | 463,652 | 188,339 | 734,800 | 1,817,034 | 220,718 | 1,367 | | | 3,628,760 |
| 1998 | 508 | 690 | 11,288 | 192,210 | 839,245 | 377,820 | 616,422 | 1,910,868 | 63,298 | 9,808 | | 4,087 | 4,026,244 |
| 1999 | 2,245 | 1,614 | 4,383 | 161,291 | 399,588 | 544,474 | 484,157 | 1,374,169 | 63,058 | 6,371 | 5,866 | | 3,047,216 |
| 2000 | 2,943 | 3,503 | 6,312 | 87,926 | 496,205 | 696,662 | 635,339 | 1,916,093 | 164,525 | 35,095 | 1,922 | | 4,046,525 |
| 2001 | 1,323 | 2,983 | | 158,423 | 373,206 | 567,625 | 172,969 | 1,251,150 | 151,584 | 4,883 | | | 2,684,146 |
| 2002 | 1,576 | 683 | 50,141 | 82,747 | 295,397 | 174,064 | 243,156 | 1,213,557 | 58,627 | 11,285 | 3,801 | | 2,135,034 |
| 2003 | 580 | 1,327 | 4,306 | 161,474 | 215,522 | 24,698 | 57,866 | 333,690 | 37,106 | 3,536 | 2,379 | 873 | 843,357 |
| 2004 | 948 | 11,153 | 118,352 | 273,683 | 102,629 | 43,576 | 6,726 | 315,101 | 19,231 | | | | 891,399 |
| 2005 | 2,719 | 7,659 | 94,205 | 157,977 | 20,439 | 8,814 | 39,438 | 1,149,891 | 606 | | 8,457 | | 1,490,205 |
| 2006 | 2,075 | 3,305 | 8,014 | 139,392 | 51,749 | 575 | 19,292 | 571,589 | 13,766 | | 38,525 | | 848,282 |
| 2007 | 2,706 | 3,847 | 46,103 | 125,459 | 55,580 | 19,434 | 4,204 | 297,138 | 8,142 | | | | 562,613 |
| 2008 | 961 | 5,853 | 21,296 | 139,368 | 39,293 | 2,194 | 4,054 | 338,913 | 114,011 | | | | 665,943 |

Notes: FL: state-reported landings 1983-present (NMFS-reported estimates limited to Nassau and Duval Counties and adjusted on the basis of the genome proportions of weakfish within the Cynoscion-complex found in those counties' waters).

Table 5. Recreational landings (numbers) of weakfish by state, 1982-2008 (NMFS 2009, except as noted below table)

| Year | FL | GA | SC | NC | VA | MD | DE | NJ | NY | CT | RI | MA | Total |
|------|--------|--------|---------|---------|-----------|-----------|-----------|-----------|---------|--------|--------|-------|-----------|
| 1982 | 40,161 | | 17,342 | 200,045 | 715,892 | 440,146 | 217,821 | 104,066 | 88,234 | 11,769 | 18,614 | | 1,854,090 |
| 1983 | 7,742 | 17,209 | 6,807 | 387,871 | 354,846 | 595,286 | 1,009,899 | 2,857,093 | 36,934 | 6,363 | 74,608 | 2,732 | 5,357,390 |
| 1984 | 13,026 | | 7,836 | 489,468 | 782,848 | 104,057 | 593,107 | 1,026,043 | 20,133 | 1,561 | | 2,237 | 3,040,316 |
| 1985 | 959 | 4,811 | 61,788 | 217,671 | 505,223 | 305,799 | 365,693 | 812,839 | 89,538 | 2,874 | 17,092 | | 2,384,287 |
| 1986 | 3,412 | 18,130 | 78,315 | 611,363 | 2,418,046 | 1,947,394 | 914,489 | 2,500,622 | 34,582 | 7,315 | 4,595 | | 8,538,263 |
| 1987 | 1,696 | 10,802 | 18,841 | 624,160 | 1,015,413 | 824,883 | 638,342 | 1,666,619 | 7,447 | 777 | | | 4,808,980 |
| 1988 | 2,521 | | 1,834 | 438,148 | 2,297,053 | 1,163,766 | 974,712 | 642,032 | 13,215 | | | | 5,533,281 |
| 1989 | 3,745 | 8,245 | 6,810 | 190,193 | 357,864 | 226,505 | 254,170 | 303,289 | 6,436 | | | | 1,357,257 |
| 1990 | 1,953 | 2,273 | 8,027 | 91,300 | 286,458 | 370,528 | 179,837 | 216,385 | 3,057 | | 407 | | 1,160,225 |
| 1991 | 3,041 | 4,954 | 19,616 | 140,826 | 351,947 | 221,242 | 366,464 | 545,665 | 28,072 | 18,695 | | | 1,700,522 |
| 1992 | 1,820 | 1,751 | 23,501 | 35,490 | 265,645 | 137,260 | 100,561 | 311,659 | 5,282 | 434 | 9,624 | | 893,027 |
| 1993 | 3,932 | 14,752 | 7,360 | 106,737 | 108,392 | 238,768 | 235,312 | 203,915 | 12,610 | 2,460 | | | 934,238 |
| 1994 | 5,403 | 718 | 46,858 | 177,965 | 169,740 | 332,846 | 300,211 | 591,571 | 1,872 | | | | 1,627,184 |
| 1995 | 1,463 | 22,437 | 29,897 | 62,475 | 226,682 | 88,695 | 406,730 | 671,850 | 22,310 | | 1,568 | | 1,534,107 |
| 1996 | 944 | 5,413 | 5,695 | 90,704 | 193,861 | 183,408 | 633,920 | 1,104,251 | 16,320 | | | | 2,234,516 |
| 1997 | 1,926 | 44,202 | 2,039 | 184,954 | 557,809 | 162,900 | 647,529 | 1,028,334 | 112,986 | 517 | 1,415 | | 2,744,611 |
| 1998 | 651 | 718 | 15,838 | 191,181 | 463,525 | 290,051 | 455,603 | 920,558 | 21,392 | 2,183 | | 618 | 2,362,318 |
| 1999 | 2,714 | 1,679 | 3,941 | 127,163 | 229,209 | 340,096 | 224,307 | 583,883 | 18,347 | 1,606 | 2,296 | | 1,535,241 |
| 2000 | 3,276 | 4,181 | 5,585 | 71,247 | 286,752 | 475,348 | 311,553 | 760,279 | 42,406 | 7,342 | 712 | | 1,968,681 |
| 2001 | 1,542 | 3,316 | | 158,605 | 175,872 | 302,719 | 72,451 | 736,069 | 28,126 | 715 | 2,301 | | 1,481,716 |
| 2002 | 1,842 | 852 | 90,245 | 90,170 | 178,110 | 100,467 | 121,884 | 492,876 | 24,962 | 1,796 | 1,420 | | 1,104,624 |
| 2003 | 774 | 1,573 | 4,162 | 153,753 | 86,112 | 41,048 | 20,124 | 151,101 | 9,234 | 443 | 298 | 109 | 468,731 |
| 2004 | 1,195 | 9,815 | 153,589 | 237,395 | 103,181 | 29,645 | 6,967 | 183,649 | 7,596 | | | | 733,032 |
| 2005 | 2,151 | 5,764 | 129,575 | 163,265 | 30,346 | 22,164 | 19,031 | 1,053,005 | 359 | | 1,009 | | 1,426,669 |
| 2006 | 2,272 | 3,501 | 7,123 | 153,696 | 58,814 | 470 | 11,158 | 417,527 | 9,123 | | 3,297 | | 666,981 |
| 2007 | 2,425 | 4,712 | 71,230 | 114,332 | 44,624 | 10,316 | 4,182 | 209,310 | 7,120 | | | | 468,251 |
| 2008 | 997 | 5,909 | 25,794 | 137,564 | 29,016 | 2,590 | 4,212 | 269,858 | 30,543 | | | | 506,483 |

Notes: FL: state-reported landings 1983-present (NMFS-reported estimates limited to Nassau and Duval Counties and adjusted on the basis of the genome proportions of weakfish within the Cynoscion-complex found in those counties' waters).

Table 6. Recreational releases (numbers) of weakfish by state, 1982-2008 (NMFS 2009, except as noted below table)

| Year | FL | GA | SC | NC | VA | MD | DE | NJ | NY | CT | RI | MA | Total |
|------|-------|--------|---------|---------|-----------|-----------|-----------|-----------|---------|-------|-------|----|-----------|
| 1982 | 3,387 | | | 44,134 | 126,514 | 2,139 | 12,712 | 1,695 | | | | | 190,581 |
| 1983 | 567 | 173 | | 10,560 | 45,565 | 15,642 | 8,912 | 155,116 | 15,870 | | | | 252,405 |
| 1984 | 177 | | 1,561 | 17,381 | 202,791 | 8,934 | 1,163 | 4,464 | | | 5,214 | | 241,685 |
| 1985 | 212 | 152 | 3,279 | 2,138 | 82,071 | 12,114 | 2,085 | 246,284 | | | | | 348,335 |
| 1986 | 606 | | 2,873 | 354,095 | 692,462 | 327,841 | 9,637 | 895,044 | 4,556 | | | | 2,287,114 |
| 1987 | 384 | 89 | | 71,659 | 233,441 | 299,172 | 46,064 | 182,019 | 1,266 | | | | 834,094 |
| 1988 | 17 | 4,196 | | 109,489 | 484,782 | 155,255 | 59,980 | 5,144 | | 634 | | | 819,497 |
| 1989 | | | 1,019 | 34,074 | 52,191 | 53,148 | 13,924 | 22,841 | 1,980 | | | | 179,177 |
| 1990 | 71 | | | 20,669 | 198,948 | 142,055 | 41,765 | 32,863 | 570 | | | | 436,941 |
| 1991 | 943 | | | 11,457 | 361,768 | 40,349 | 65,685 | 238,646 | 33,046 | 2,108 | | | 754,002 |
| 1992 | 1,045 | 362 | 4,598 | 27,052 | 244,817 | 71,040 | 61,886 | 249,846 | 8,362 | | 98 | | 669,106 |
| 1993 | 1,493 | 840 | 267 | 52,468 | 245,211 | 225,510 | 255,968 | 281,450 | 20,995 | | | | 1,084,202 |
| 1994 | 1,007 | 21,588 | | 147,616 | 652,571 | 583,059 | 560,999 | 1,051,931 | 45,537 | 1,013 | | | 3,065,321 |
| 1995 | 1,355 | 572 | | 154,008 | 939,970 | 178,937 | 1,088,353 | 1,613,831 | 81,236 | | 98 | | 4,058,360 |
| 1996 | 780 | 307 | | 188,263 | 814,573 | 492,402 | 1,567,046 | 1,859,049 | 84,990 | | 780 | | 5,008,190 |
| 1997 | 2,958 | | 2,938 | 209,122 | 1,404,092 | 323,653 | 897,625 | 975,280 | 90,549 | 1,213 | 163 | | 3,907,593 |
| 1998 | 1,251 | 1,468 | 329 | 131,537 | 1,244,949 | 461,518 | 613,544 | 778,180 | 29,836 | 360 | 1,921 | | 3,264,893 |
| 1999 | 2,818 | | 13,616 | 149,377 | 818,959 | 753,266 | 372,479 | 551,283 | 35,459 | | 8,436 | | 2,705,693 |
| 2000 | 5,551 | 12,895 | 15,869 | 346,212 | 935,594 | 1,209,290 | 465,496 | 1,605,024 | 68,531 | 1,285 | 931 | | 4,666,678 |
| 2001 | 2,541 | 13,537 | | 886,943 | 633,443 | 737,240 | 227,214 | 1,064,609 | 69,123 | | 358 | | 3,635,008 |
| 2002 | 2,113 | 9,540 | 1,019 | 336,709 | 888,337 | 286,182 | 101,282 | 350,810 | 62,803 | | 1,932 | | 2,040,727 |
| 2003 | 1,556 | 21,212 | 1,966 | 153,563 | 504,129 | 180,827 | 39,314 | 631,438 | 7,286 | 1,233 | | | 1,542,524 |
| 2004 | 3,530 | 12,249 | 107,177 | 240,298 | 528,200 | 132,087 | 79,238 | 607,393 | 40,254 | 5,470 | 248 | | 1,756,144 |
| 2005 | 3,009 | 29,623 | 56,663 | 241,674 | 266,879 | 55,270 | 110,717 | 1,279,930 | 193,556 | | | | 2,237,321 |
| 2006 | 6,084 | 6,149 | 21,917 | 295,415 | 456,270 | 57,394 | 120,930 | 1,231,102 | 11,732 | | | | 2,206,993 |
| 2007 | 1,794 | 19,890 | 90,224 | 148,938 | 172,068 | 106,308 | 18,811 | 581,435 | 200,574 | | 1,574 | | 1,341,616 |
| 2008 | 520 | 13,229 | 105,401 | 127,333 | 314,118 | 30,260 | 61,364 | 1,254,625 | 26,851 | | | | 1,933,701 |

Notes: FL: state-reported landings 1983-present (NMFS-reported estimates limited to Nassau and Duval Counties and adjusted on the basis of the genome proportions of weakfish within the Cynoscion-complex found in those counties' waters).

Table 7. Evaluation of the Coastwide Management Trigger (Section 3.3.1 of Addendum II to Amendment 4): percent change of each state's 2008 total landings to its five-year (2003-2007) mean total landings

| | FL | GA | SC | NC | VA | PRFC | MD | DE | NJ | NY | CT | RI | MA |
|-----------|-------|-------|--------|---------|---------|-------|--------|--------|---------|---------|-------|--------|-------|
| 2003-2007 | 2,257 | 5,458 | 54,196 | 670,541 | 451,295 | 1,794 | 52,058 | 79,483 | 757,413 | 150,213 | 5,568 | 51,700 | 293 |
| 2008 | 1,957 | 5,853 | 21,296 | 309,837 | 210,446 | 74 | 8,009 | 15,239 | 394,862 | 158,286 | 1,012 | 9,702 | 0 |
| % change | -13% | 7% | -61% | -54% | -53% | -96% | -85% | -81% | -48% | 5% | -82% | -81% | -100% |

Table 8. Biological sampling of weakfish in 2008, Massachusetts-Florida (Sampling requirements are based on Addendum I to Amendment 4 and 2008 landings data; values in the “samples completed” column in red, bold font do not meet sampling requirement)

| | Samples Required | | Samples Completed | | Fisheries Sampled |
|------|------------------|---------|-------------------|----------|---|
| | Otoliths | Lengths | Otoliths | Lengths | |
| MA* | 0 | 0 | 0 | 0 | NA |
| RI | 13 | 26 | 0 | 0 | NA |
| CT* | 1 | 3 | 0 | 0 | NA |
| NY | 215 | 120 | 119 | 486 | commercial (GN, TR, PN) |
| NJ | 537 | 152 | 430 | 938 | commercial (GN, H&L, PN, TR), otolith count includes samples from TR survey |
| DE | 21 | 30 | 159 | 409 | commercial (GN, H&L); additional 669 otoliths available from TR survey |
| MD | 11 | 16 | 94 | 135 | commercial (PN, TR) |
| PRFC | 0 | 0 | 0 | 0 | NA |
| VA | 286 | 466 | 366 | 1,944 | commercial (GN, PN, HS, TR, additional 334 otoliths not aged); additional otoliths available from TR survey |
| NC | 422 | 464 | 483 | 3,275 | commercial (HS, GN, TR, PN, BS), otolith count includes samples from recreational and GN/TR surveys |
| SC* | 29 | 0 | 0 | 0 | NA; otoliths available from TR surveys; voluntarily submitted 2009 sampling plan, intend to collect recreational otoliths |
| GA* | 8 | 0 | 6 | 6 | recreational (not aged) |
| FL* | 3 | 3 | 0 | 9 | commercial |

* *de minimis* in 2008; not required to conduct sampling; sample numbers provided to show from what states were exempt
 NA=not applicable, GN= gill net, TR=trawl, PN=pound net, H&L=hook and line, HS=haul seine, BS=beach seine

Table 9. Indices of relative weakfish abundance reported in the 2008 state compliance reports

| Yr | RI Tr | CT Tr | CT Tr | NY Tr | NJ Tr | NJ Tr | DE Tr | DE Tr | DE Tr | MD Tr | MD Tr | VA Tr | NC Tr | NC Gn | GA Tr | FL Tr | FL Tr |
|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|----------|---------|
| | Coast | LIS | LIS | Coast | DE Bay | Ocean | DE Bay | Inland | DE Bay | ChesBay | Coast | ChesBay | Pamlico | Pamlico | Coast | Jax | IR&Jax |
| | YOY | YOY | 1+ | YOY | YOY | 1+ | YOY | YOY | 1+ | YOY | YOY | YOY | YOY | 1+ | 0+ | YOY | 1+ |
| | #/tow | GM#/tow | GM#/tow | AM#/tow | GM#/tow | GM#/tow | GM#/tow | GM#/tow | GM#/tow | #/nm | GM#/tow | GM#/ha | GM#/tow | #/tow | #/set | #/obs hr | med/tow |
| 1980 | 17.16 | * | * | * | * | * | 4.15 | * | * | * | * | * | * | * | * | * | * |
| 1981 | 36.44 | * | * | * | * | * | 5.98 | * | * | * | * | * | * | * | * | * | * |
| 1982 | 19.55 | * | * | * | * | * | 11.49 | * | * | * | * | * | * | * | * | * | * |
| 1983 | 3.13 | * | * | * | * | * | 4.47 | * | * | * | * | * | * | * | * | * | * |
| 1984 | 5.03 | 1.00 | 0.55 | * | * | * | 6.67 | * | * | * | * | * | * | * | * | * | * |
| 1985 | 19.18 | 6.19 | 0.24 | * | * | * | 9.25 | * | * | * | * | * | * | * | * | * | * |
| 1986 | 2.00 | 13.17 | 0.24 | * | * | * | 12.79 | 1.14 | * | * | * | * | * | * | * | * | * |
| 1987 | 1.31 | 0.63 | 0.11 | 1.50 | * | * | 5.82 | 1.26 | * | * | * | * | 12.14 | * | * | * | * |
| 1988 | 10.86 | 2.90 | 0.06 | 0.20 | * | * | 4.73 | 0.81 | * | * | * | 8.13 | 101.50 | * | * | * | * |
| 1989 | 1.17 | 8.69 | 0.02 | 6.90 | * | 1.64 | 11.11 | 2.20 | * | 0.44 | 0.87 | 11.74 | 14.20 | * | * | * | * |
| 1990 | 25.53 | 5.56 | 0.08 | 2.30 | * | 1.19 | 8.73 | 2.95 | * | 0.95 | 1.72 | 4.46 | 50.20 | * | * | * | * |
| 1991 | 25.41 | 11.95 | 0.31 | 56.50 | 2.20 | 1.42 | 20.07 | 5.87 | 31.43 | 0.78 | 1.89 | 3.16 | 36.96 | * | * | * | * |
| 1992 | 14.51 | 3.03 | 0.18 | 23.40 | 3.40 | 1.39 | 14.72 | 2.51 | 23.83 | 3.24 | 1.81 | 6.78 | 42.71 | * | * | * | * |
| 1993 | 7.50 | 4.08 | 0.12 | 4.40 | 2.85 | 1.25 | 14.79 | 0.63 | 80.10 | 1.59 | 0.91 | 5.81 | 8.70 | * | * | * | * |
| 1994 | 15.17 | 11.19 | 0.06 | 70.90 | 2.86 | 2.62 | 11.47 | 1.47 | 206.50 | 2.33 | 1.84 | 2.51 | 68.06 | * | * | * | * |
| 1995 | 0.26 | 5.21 | 0.70 | 4.70 | 4.10 | 2.90 | 13.49 | 4.24 | 150.00 | 5.95 | 4.44 | 5.95 | 38.21 | * | * | * | * |
| 1996 | 124.67 | 15.23 | 0.56 | 220.40 | 7.39 | 2.30 | 12.13 | 1.18 | 233.80 | 6.40 | 3.18 | 7.26 | 72.07 | * | * | * | * |
| 1997 | 88.83 | 12.38 | 0.89 | 82.40 | 15.66 | 2.53 | 15.40 | 2.07 | 110.40 | 4.28 | 3.06 | 6.81 | 32.79 | * | * | * | * |
| 1998 | 13.51 | 5.02 | 0.28 | 4.80 | 6.89 | 0.76 | 11.35 | 1.35 | 102.07 | 5.87 | 2.80 | 7.60 | 70.44 | * | * | * | * |
| 1999 | 3.68 | 30.93 | 0.39 | 40.50 | 24.92 | 1.45 | 13.51 | 1.99 | 92.56 | 3.26 | 2.76 | 6.78 | 99.90 | * | * | * | * |
| 2000 | 9.38 | 63.31 | 0.30 | 167.10 | 7.10 | 1.86 | 14.14 | 1.64 | 179.12 | 6.54 | 2.34 | 8.35 | 62.99 | * | * | * | * |
| 2001 | 19.33 | 40.09 | 0.52 | 113.70 | 15.05 | 0.93 | 7.56 | 1.53 | 80.70 | 8.10 | 2.56 | 5.09 | 30.30 | 1.42 | * | 0.29 | 0.01 |
| 2002 | 8.40 | 41.35 | 0.16 | 145.20 | 19.70 | 1.84 | 5.96 | 1.31 | 144.98 | 3.92 | 0.61 | 6.93 | 22.00 | 1.40 | * | 0.69 | 0.03 |
| 2003 | 198.00 | 49.41 | 0.07 | 69.80 | 3.10 | 0.09 | 10.44 | 2.44 | 65.78 | 4.89 | 5.64 | 9.23 | 23.93 | 1.22 | 105.44 | 1.03 | 0.03 |
| 2004 | 1.88 | 58.98 | 0.21 | 43.90 | 8.42 | 1.58 | 8.39 | 3.32 | 48.88 | 1.62 | 3.39 | 6.66 | 28.75 | 1.32 | 94.42 | 1.63 | 0.04 |
| 2005 | 128.93 | 25.86 | 0.12 | 226.50 | 21.22 | 1.49 | 16.82 | 3.84 | 29.00 | 3.55 | 4.98 | 5.69 | 28.76 | 1.24 | 32.08 | 1.34 | 0.04 |
| 2006 | 0.36 | 1.05 | 0.29 | 55.10 | 12.25 | 0.42 | 5.35 | 1.60 | 106.31 | 2.41 | 1.50 | 6.34 | 39.09 | 0.92 | 79.96 | 0.40 | 0.03 |
| 2007 | 36.10 | 63.93 | 0.06 | 92.12 | 25.54 | 1.52 | 13.7 | 2.98 | 43.16 | 1.60 | 2.32 | 5.35 | 56.8 | 0.43 | 159.64 | 0.24 | 0.03 |
| 2008 | 0.55 | 9.07 | 0.08 | 51.5 | 7.86 | 1.57 | 6.74 | 1.02 | 45.94 | 0.79 | 0.23 | 5.77 | 50.3 | 0.49 | 75.55 | 0.79 | 0.02 |