

Spotted Seatrout



Draft Rule
May 1, 2019



Florida Fish and Wildlife Conservation Commission

Version 1

This presentation provides a summary of proposed draft rules to amend the Florida Fish and Wildlife Conservation Commission's (FWC) spotted seatrout (seatrout) regulations [68B-37, Florida Administrative Code (FAC)] in order to improve both the status of seatrout stocks and angler satisfaction throughout the state.

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Photo courtesy of Jeff Naylor

Outline

- Background
- Stock assessment
- Non-fishing impacts to seatrout
- Management philosophy
- Angler input
- Staff recommendation



Photo courtesy of Matt Smith

In this presentation, staff will provide background information on seatrout and the recreational fishery, review stock assessment results and non-fishing impacts to seatrout, and discuss the current management philosophy and angler input. Staff will also present a series of proposed draft rules to improve the seatrout fishery statewide.

Background

- One of Florida's most popular inshore fisheries
- Primarily recreational: 98% of harvest
- Supports small, regional commercial fisheries
 - Minimal impact on fish populations
- Management success story
 - Overfished in the 1970s and early 1980s
 - Successfully rebuilt, closely monitored
- Dependent on aquatic vegetation as habitat
- Little movement between estuaries
- Susceptible to environmental changes



Photo courtesy of Jerry McBride

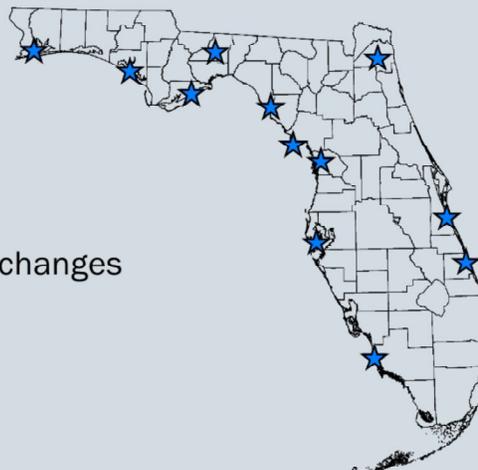
Seatrout is one of Florida's most popular inshore fisheries. Although the seatrout fishery is primarily recreational (averaging 98% of harvest statewide), the species also supports small, regional commercial fisheries throughout the state. These commercial fisheries have minimal impact on populations but are an important economic resource to those that harvest them. Because of the limited scale of the commercial fishery, this presentation will focus on management of the recreational component of the fishery.

Seatrout has been a fisheries management success story for Florida. In the 1970s and early 1980s, overharvest led to seatrout population declines throughout Florida. Through regulation, the populations were successfully rebuilt from their overfished state. The agency has dedicated research efforts to seatrout monitoring since that time to ensure that Florida can continue to offer Florida fishermen a high quality seatrout fishery. These research efforts informed the previous stock assessment, which was positive. Thus, in 2012 the Commission relaxed both recreational and commercial regulations.

Relative to some of Florida's other inshore fisheries, seatrout are particularly dependent on aquatic vegetation, such as seagrasses, for juvenile nurseries and foraging sites throughout their life. In the absence of seagrasses, seatrout will also use the submerged portion of other vegetation types such as marsh grasses or mangroves. Because there is little movement of seatrout between estuaries, they are also susceptible to local environmental changes like seagrass loss, declining water quality, and harmful algal blooms (HABs) that impact individual estuaries.

Recent Timeline

- Localized concerns from anglers in recent years
- July – Aug. 2017: 12 public workshops
 - 218 attendees, 250+ online comments
- Nov. – Dec. 2018: Angler satisfaction survey
 - Over 2,600 responses
- 2019: Updated stock assessment finalized
- Today: Draft rule for recreational management changes



In recent years, staff has heard localized concerns about the status of the seatrout fishery from several areas around the state. Following a draft stock assessment by FWC's Fish and Wildlife Research Institute (FWRI) in 2017, staff held public workshops to gather stakeholder feedback on the fishery, including 12 in-person public workshops and a virtual workshop available online, which resulted in 218 workshop attendees and over 250 online comments. In 2018, staff gathered additional feedback by conducting an online angler satisfaction survey, with over 2,600 responses. To date, staff has received more than 1,200 online comments on this round of management efforts for this fishery.

In early 2019, FWRI finalized an updated stock assessment. Today, staff is presenting draft rule proposals for long-term management changes based the assessment results and the feedback gathered.

Current Regulations

- Managed regionally (4 zones)
 - Habitat, population, and fishery differences

Recreational Regulations

- Slot limit: 15-20 inches (one over 20 in. allowed)
- Regional bag limits
 - NW: 5, SW and SE: 4, NE: 6
 - Based on past assessments, fishery differences
- Open year-round since 2012

Commercial Regulations

- Slot limit: 15-24 inches
- Trip limits: 75 fish per harvester, max of 150 per vessel
- Open seasons: 5-6 months during summer and fall



Seatrout are managed regionally in four zones: Northwest (NW), Southwest (SW), Southeast (SE), and Northeast (NE). These zones were chosen based on differences in seatrout population, local habitat, and how the seatrout fishery operates. The regional regulations are tailored to address the results of past stock assessments and regional biological and social needs.

Recreationally, seatrout have a harvest slot size limit of 15-20 inches, with an allowance for an angler to harvest one fish over 20 inches within their bag limit each day. The daily bag limit differs regionally and is five in the NW, four in the SW and SE, and six in the NE zone. The fishing season has been open year-round since 2012, when previous winter closures were eliminated by the Commission.

The commercial fishery has a harvest slot size limit of 15-24 inches (with no allowance for harvest above the slot limit), and a trip limit of 75 fish per harvester with a maximum of 150 fish per vessel. Commercial seasons are open for 5-6 months during the summer and fall and specific season dates vary between regions.

2019 Stock Assessment

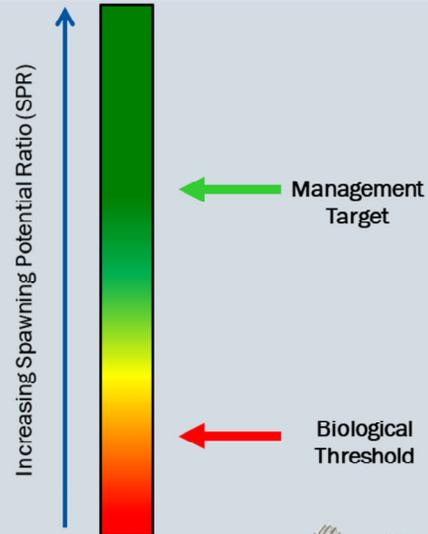
- Includes data through 2017
- Evaluates status of stock relative to current management target: **35% SPR**

SPR = Spawning Potential Ratio

- Ratio of mature fish in current population compared to unfished state
- Management target maintains stock well above biological threshold
 - Allows for harvest as food fish



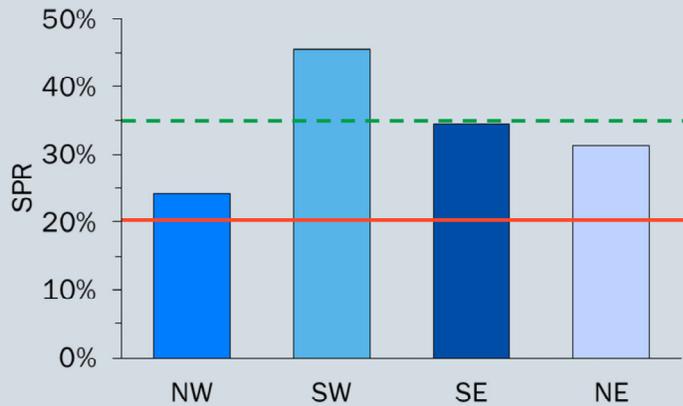
SPR measures stock productivity and fishing-related impacts



The 2019 seatrout stock assessment includes data through 2017 and evaluates the status of the stock in each management zone relative to the Commission's current management target of 35% spawning potential ratio (SPR). SPR is the ratio of mature fish in the population under the current fishing pressure compared to the mature fish expected for the same population with no fishing, and provides a metric for the impact of fishing on a stock.

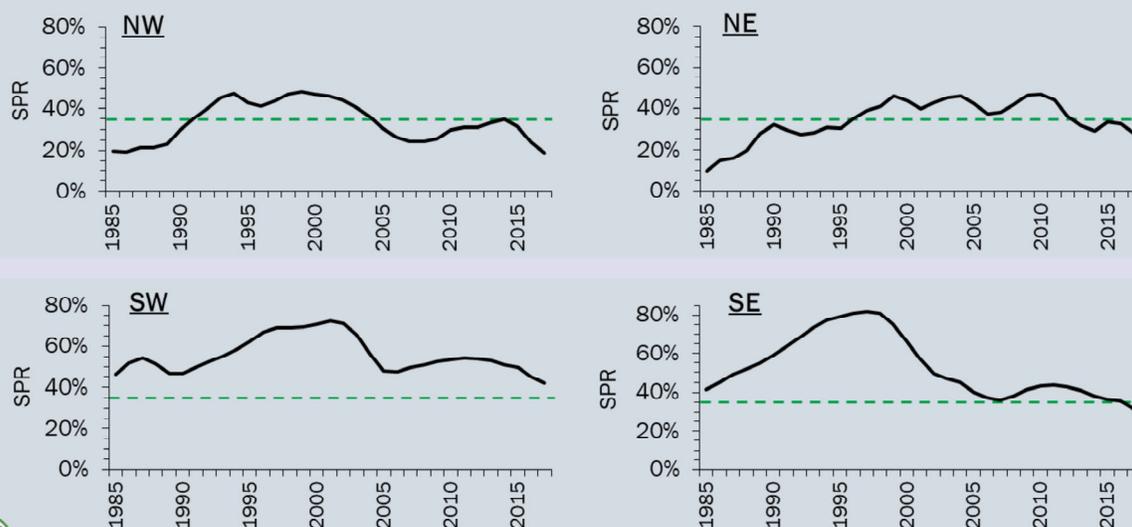
In general, staff is not concerned about compromising the sustainability of seatrout populations unless the SPR falls below the biological threshold of 20% SPR, at which point there may not be enough eggs produced to sustain the population. However, the Commission chose a management target of 35% SPR in order to maintain the stocks well above that biological threshold. This target provides a healthy fishery, while still allowing ample opportunity to harvest seatrout as food. Since the SPR metric may not account for non-fishing impacts, the higher management target also provides for a cushion against uncertainty and periodic environmental events such as red tides and habitat losses.

2019 Stock Assessment Results



The figure on this slide compares the current status of the seatrout stock by management zone, based on the results of the 2019 assessment. The figure shows the mean SPR averaged over the last three years of the assessment. The results of the 2019 seatrout stock assessment show that only the Southwest management zone is achieving FWC's management target of 35% SPR (green dashed line). The Southeast management zone is nearly meeting the management target while the Northwest and Northeast management zones are below the management target. However, all four management zones are exceeding the biological threshold of 20% SPR (red solid line), which means that seatrout populations statewide are capable of sustaining themselves under the current levels of fishing pressure and harvest.

2019 Stock Assessment Results (continued)



The 2019 assessment also reports the SPR for each of the four management zones over time, allowing us to see trends in the stock status. Like the figure on the previous slide, the green dashed lines show the 35% SPR management target.

The top two figures on this slide indicate that both the NW and NE zones have been at or below the Commission's management target for multiple years. The bottom two figures show that while both the SW and SE zones have been above the management target throughout most or all of the time series, but that the SE zone dropped below the target in recent years.

The recent downward trend in SPR in all regions signals management changes are likely needed to ensure a high quality fishery that meets FWC's targets throughout the state.

Non-fishing Impacts

- Seagrass loss
 - Indian River Lagoon (IRL)
 - Florida Bay
 - Biscayne Bay
- Harmful algal blooms (HABs)
 - Brown tide in IRL (2012, 2016)
 - Red tide in Panhandle, IRL, and frequent in SW zone
- Water quality



These impacts may be localized



As mentioned earlier, seatrout are vulnerable to environmental impacts such as habitat loss, harmful algal blooms (HABs), and poor water quality. These types of environmental impacts may occur statewide but typically occur at smaller scales within one or more management zones. Several environmental events have affected popular seatrout fishing areas in recent years. Of particular concern is the loss of seagrass habitat, which seatrout use as nursery and foraging habitat. Examples of areas that have experienced significant habitat loss are the Indian River Lagoon (IRL), Florida Bay, and Biscayne Bay. In the northern IRL, over half of the seagrass beds (roughly 40 thousand acres) have been lost since 2009. This has resulted in the northern IRL having its lowest seagrass coverage on record.

HABs occur statewide but have affected some areas significantly in recently years. Brown tides in the IRL have been responsible for poor water quality and seagrass loss. Red tides have the potential to cause substantial seatrout mortality and have occurred in recent years in the Panhandle, IRL, and most frequently in part of the SW seatrout management zone. Past red tides have caused localized reductions in seatrout abundance in the SW zone, and the 2017-Feb. 2019 red tide event may have had similar impacts to populations in affected areas.

While poor water quality is a driver for seagrass loss, water quality alone can also impact seatrout. For example, in areas of large freshwater influxes like the St. Lucie River estuary, rapid changes in salinity can affect the survival and spawning of seatrout.

Impacts from these environmental factors and events may be localized and therefore may not be detected at the regional scale of the stock assessment. Although seatrout are managed conservatively at a regional scale, these localized impacts can have a large impact on the angler satisfaction in affected areas.

Management Philosophy

- Manage for 35% SPR
- Focus on angler values and satisfaction
 - Food and sport
 - High catch rates
 - Catching harvestable fish
 - Large fish
- Providing a quality fishery within the environmental conditions available



Photo courtesy of Shawn Waite



As discussed previously, the Commission manages seatrout with a management target of 35% SPR. In addition to the SPR target, seatrout is also managed to maximize angler satisfaction in a fishery with diverse angler values. Recreational anglers target seatrout for both food and sport. They may value both high catch and retention rates, or catching large fish as a priority.

In many areas of the state, habitat and water quality limitations challenge FWC's ability to ensure seatrout populations reach high abundances. However, using the fisheries management tools available, staff strive to provide a quality fishery within the environmental conditions available.

Angler Input

- Fishery reported to be good to average in NW and NE, and average to poor in SW and SE
 - Different than stock assessment results
- Support for new regulations if needed to maintain seatrout stocks
- Most support for
 - Prohibiting harvest of above-slot fish
 - Prohibiting harvest by guides
 - Reducing bag limits
- Some support for reinstating winter closures in NW
- General opposition to size limit changes



Photo courtesy of Amy Bueschel

To summarize the angler input received from the public workshops and stakeholder survey conducted, anglers reported the fishery to be good or average in the NW and NE zones, but average or poor in the SW and SE zones. These measures of angler satisfaction do not match the stock assessment results.

Overall, anglers from all zones supported new or modified regulations if needed to maintain or improve seatrout stocks. Regulation changes that received the most public support included prohibiting harvest of above-slot fish (fish over 20 inches long), prohibiting harvest by guides when on a for-hire trip, and reducing bag limits. There was also some support for reinstating winter closures, particularly from portions of the NW zone. Anglers were generally opposed to changes to the size limit.

Recommended Management Approach

Maintain a sustainable fishery

- Address regions not meeting 35% SPR target
 - Reduce harvest where needed

Improve angler satisfaction

- Provide continued harvest opportunities
- Increase catch rates through reduced harvest
 - Reduce bag limits
 - Eliminate harvest by professional guides on for-hire trips
- Conserve large fish
- Create a special fishing experience in areas where poor habitat limits seatrout abundance



Photo courtesy of Mark Worley

Based on the results of the stock assessment and angler input received, staff recommends the following management approach. Staff recommends maintaining a sustainable, robust fishery by addressing the zones that are not currently meeting the 35% SPR target. Based on the stock assessment results, staff recommends reducing harvest in these zones in order to improve the stock status and meet the Commission's management target.

Staff also recommends managing the seatrout fishery for improved angler satisfaction, which would require improvements statewide but especially within the SW and SE zones. While continuing to provide harvest opportunities, staff recommends pursuing increased angler catch rates by ensuring there are additional seatrout in the water for fishermen to catch. This could be accomplished through reduced bag limits and eliminating harvest by professional guides while on for-hire trips. Staff also recommends taking additional steps to conserve large seatrout which provide a particularly good fishing experience, especially in areas where limited habitat inhibits increases in seatrout abundance and catch rates. This action would make the most out of the current environmental state of compromised estuaries by creating a special fishing experience focused on large fish.

Proposed Draft Rules

Statewide

- *Reduced bag limits*
 - *NW: 5 to 3 fish*
 - *SW: 4 to 3 fish*
 - *SE: 4 to 2 fish*
 - *NE: 6 to 5 fish*
- *Prohibit guides from keeping a bag limit on a for-hire trip*

NW only: *reinstate Feb. winter closure*

SW and SE: *prohibit harvest above 20 inches*



The proposed draft rules would modify 68B-37, FAC, to reduce the recreational bag limits from 5 to 3 seatrout in the NW zone, from 4 to 3 seatrout in the SW zone, from 4 to 2 seatrout in the SE zone, and from 6 to 5 seatrout in the NE zone. The proposed draft rules would also prohibit guides from keeping a bag limit while on a for-hire trip statewide.

In the NW management zone, the proposed draft rules would further reduce harvest by reinstating the previous February winter closure.

The proposed draft rules would also prohibit harvest of fish above 20 inches in the SW and SE zones where angler satisfaction is lower.

Harvest Regulations Proposal



Statewide

- Prohibit harvest by guides
- Slot size limit: 15-20"

NW

- Bag: 3 fish
- Winter closure: Feb.
- One over 20 inches allowed

SW

- Bag: 3 fish
- No harvest over 20 inches

NE

- Bag: 5 fish
- One over 20 inches allowed

SE

- Bag: 2 fish
- No harvest over 20 inches



Note: no proposed changes to commercial regulations

This map provides a snapshot of proposed harvest regulations for spotted seatrout and includes both regulations that would be maintained as well as staff's proposed changes.

As a reminder, there are no proposed changes to regulations for the small commercial fisheries that operate around the state.

Staff Recommendation

Approve the proposed draft rules to improve the spotted seatrout fishery throughout the state

- Reduce recreational bag limits statewide: NW and SW = 3, SE = 2, NE = 5
- Prohibit guides from keeping a bag limit when on a for-hire trip (statewide)
- Re-establish a recreational winter closure in February in the NW zone
- Remove allowance to keep 1 fish above the slot limit in SW and SE zones

If approved and directed, return for a final public hearing at the July 2019 Commission meeting



Photo courtesy of Tindl Rainey



Recommendations are in addition to shorter-term, red tide-related changes in the SW zone

Staff recommends approving the proposed draft rules to recover spotted seatrout stocks to the management target and provide high-quality fisheries throughout the state. Staff recommends reducing the recreational bag limits to three fish in the NW and SW zones, two fish in the SE zone, and five fish in the NE zone.

Staff also recommends prohibiting guides from keeping a bag limit on for-hire trips statewide, re-establishing a recreational winter closure for the month of February in the NW zone, and removing the allowance to harvest one fish above the slot limit in the SW and SE zones.

If approved and directed, staff will return for a final public hearing at the July 2019 Commission Meeting.

Short-term changes to management of seatrout in areas affected by prolonged red tide discussed separately during this Commission meeting would also apply.