

# Bay Scallops



Draft Rule Hearing  
February 20, 2019



Florida Fish and Wildlife Conservation Commission

Version 2

This presentation summarizes the adaptive management changes to bay scallop regulations in recent years, stakeholder feedback, and updates on Gulf and Pasco counties. This presentation also summarizes proposed draft rules that would establish long-term changes for the recreational fishery in state waters from Franklin through Hernando counties beginning in 2020, and proposed short-term management changes for Gulf and Pasco counties to be implemented on an annual basis by Executive Order (EO). Proposed long-term changes would amend the Florida Fish and Wildlife Conservation Commission's (FWC) bay scallop regulations in 68B-18, Florida Administrative Code (FAC).

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Cover photo courtesy of Tyler Jones, UF/IFAS Florida Sea Grant  
Unless otherwise noted, images throughout the presentation are by FWC.

## Outline

- Biology and distribution
- Current regulations
- Recent season structure changes
- Stakeholder feedback and fishery considerations
- Proposed changes for most of the harvest area
- Pasco County
- St. Joseph Bay (Gulf County)



Photo: Carol Lyn Parrish

Staff will provide an overview of bay scallop biology and distribution in Florida, current bay scallop regulations as they exist in rule, recent season structure changes that were implemented on a trial basis for the 2017-2019 seasons, stakeholder feedback and fishery considerations, proposed long-term changes for most of the allowable harvest area, as well as regional considerations and proposed short-term management changes for Pasco and Gulf counties.

## Recreational Bay Scallop Fishery

- Popular recreational fishery in the Big Bend and eastern Panhandle
  - Family-friendly activity
- Economically important to Florida communities
  - Season timing affects economic impacts

**Adaptive management strategy:** Balancing community and stakeholder desires with the sustainability of scallop populations



The bay scallop fishery in Florida is a popular, family-friendly, recreational activity throughout the Big Bend and eastern Panhandle. This fishery is also an important economic driver for many coastal communities. Modifications to bay scallop season dates may cause economic impacts for local communities, as well as impact the local scallop population. Based on feedback we received from a variety of community leaders, the greatest economic impact from scalloping occurs toward the beginning of the season in the Big Bend, while Gulf County communities rely more heavily on scallop-related economic impacts later in the season as the summer tourism wanes.

In recent years, FWC has taken an adaptive approach by managing the bay scallop fishery to balance community and stakeholder desires for this fishery with the sustainability of scallop populations. These short-term management changes have been made annually by EO.

Photo credit (left and right): Carol Lyn Parrish

## Biology and Distribution

- Most spawning occurs between September and January
  - Peak spawning occurs after the harvest season
- Life span in Florida: ~1 year
  - Particularly susceptible to environmental events
  - Abundance is highly variable

### Distribution

- Historical: West Palm Beach to Pensacola
- Current: Pine Island to St. Andrews Bay

### Monitoring efforts

- Long-term juvenile and adult monitoring
- Short-term targeted research



Peak bay scallop spawning in Florida occurs between September and January, with the majority of scallops spawning after the harvest season closes.

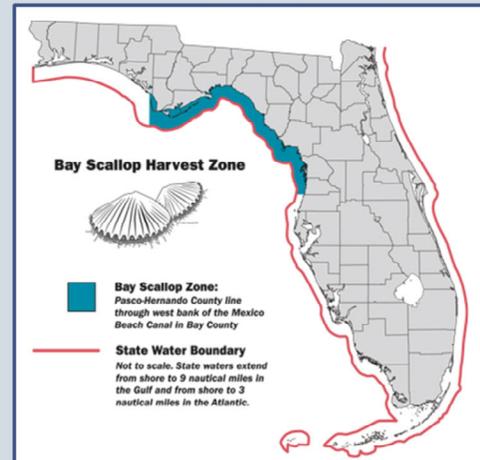
In Florida, bay scallops have an average life span of approximately one year, and they are particularly susceptible to both short- and long-term environmental events such as changes in salinity, algal blooms, and habitat loss. Because of their short life span and susceptibility to environmental changes, bay scallop abundance can be highly variable from year-to-year.

Historically, bay scallops were found along the Atlantic and Gulf coasts of Florida, ranging from West Palm Beach to Pensacola. Today, bay scallops in Florida are primarily found along the Gulf Coast from Pine Island Sound (Lee County) to St. Andrews Bay (Bay County), but are most abundant in the Big Bend.

FWC bay scallop routine monitoring efforts began in 1992 and include monthly juvenile recruitment and pre-season adult abundance surveys. In 2018, FWC implemented a series of targeted pilot studies to evaluate harvest-related aspects of the fishery in an effort to better evaluate the impacts of harvest on bay scallop populations. This short-term research included post-season abundance surveys to estimate in-season bay scallop mortality as well as additional research conducted in Dixie and Taylor counties that included estimating fishing effort using aerial vessel counts and dockside interviews and evaluating changes in scallop size and the number of scallops per bag limit from early to late in the season.

## Scallop Regulations

- **Allowable harvest zone (in rule):** Mexico Beach Canal to Hernando – Pasco county line
  - Recreational harvest only
- **Daily bag limit:**
  - 2 gallons whole scallops in shell, or
  - 1 pint scallop meat (shucked)
- **Daily vessel limit:**
  - 10 gallons whole scallops in shell, or
  - ½ gallon scallop meat (shucked)
- **Current season (in rule):**
  - Saturday before July 1 (or July 1 when it falls on a Saturday) through Sept. 24



2017-2019 seasons set by Executive Order

Bay scallop management began in 1985 and has been periodically modified since then in response to a variety of changes in the fishery that ranged from declines in scallop distribution and densities in some areas to signs of local recovery in other areas. Since 2002, the allowable harvest zone has included all state waters from the west bank of Mexico Beach Canal in Bay County to the Hernando – Pasco county line, with only recreational harvest allowed.

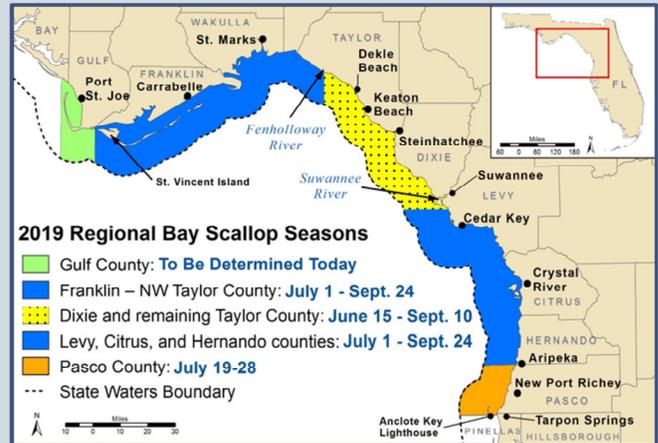
The daily bag limit for scallops throughout the allowable harvest zone has been two gallons of whole scallops (in the shell) or one pint of scallop meat (shucked) per person since 1995. In addition, no more than 10 gallons of whole scallops, or one half gallon of scallop meat may be possessed on any vessel, regardless of the number of harvesters aboard.

As currently established in rule, the recreational harvest season is set to open each year on the Saturday before July 1 (or on July 1, if it falls on a Saturday) and continues through Sept. 24. This season was implemented in late 2014 following a series of minor shifts in the season dates each year for several years, and was intended to ensure that the season always opened on a weekend, maximizing recreational harvest opportunities. However, the season for 2017-2019 did not follow this rule. Instead, regionally-specific bay scallop seasons were established each of those years by EO.

# Regionally-Specific Season Structure

## Adaptive management strategy

- Established annually via EO
  - **2017**: 4 regions with varying dates
    - Maximized economic benefits
  - **2018**: Modified based on public feedback
    - Extended harvest into Pasco County
  - **2019**: Same structure as 2018
    - Gulf County season discussion today
- Worked with communities and stakeholders to establish long-term management plans



In 2016, the Commission directed staff to review scallop management statewide. Staff held a series of informal meetings with community leader in December 2016 to gather community-level feedback on the future of bay scallop management. Based on the feedback received, the Commission implemented a regionally-specific season structure on a trial-basis where the entire allowable harvest area, which traditionally has been managed as a single unit, was divided into regions with differing season start and end dates. This adaptive management approach was aimed at balancing the management desires of local communities with the sustainability of bay scallop populations and was established annually from 2017-2019 by EO.

For the 2017 season, the allowable harvest area was divided into four regions with varying season dates that maximized regional economic benefits based on community feedback. Following the 2017 season, staff held a series of public workshops to gather stakeholder feedback on the season structure. Based on requests from these workshops, the Commission approved a slightly modified season structure for 2018, established a 10-day trial season in state waters of Pasco County for the first time since 1994, and approved implementing the same structure in 2019 pending no unforeseen changes in the bay scallop fishery. Although the 2019 seasons have been established for a large portion of the open harvest area, the 2019 season for Gulf County, which includes St. Joseph Bay, has not been set so that staff could evaluate potential impacts from the 2018 red tide event and Hurricane Michael. This presentation will cover staff's proposed season 2019 season for Gulf County.

Throughout this adaptive approach, staff has been working with communities and stakeholders to identify a well-balanced, sustainable season structure than can be implemented long-term.

## Stakeholder Feedback

### Stakeholder satisfaction survey: Nov. – Dec. 2018

- Focused on season structure and dates
- Feedback on other aspects of management (e.g., limits, transit)

### Preferred harvest months

- Franklin – Pasco counties: July and August
  - June and September also supported
- Gulf County: August, followed by July and September

### Season structure preference (*regional vs. consistent*)

- Franklin – Pasco: No clear preference
- Gulf County: Prefer regionally-specific season structure



Photo: Carol Lyn Parrish

Recognizing that many participants in the scallop fishery reside outside the Big Bend and eastern Panhandle, staff conducted an online stakeholder satisfaction survey in late 2018. To gather feedback from a broad group of stakeholders, a randomized sub-sample of recreationally licensed Florida fishers and non-resident license holders, as well as Florida-licensed fishing guides, were invited to take the survey (approximately 103,000 people). Staff also provided a version of the same survey that was open to anyone who wanted to participate.

While the primary focus of the survey was to solicit feedback on the recently implemented regional season structure and season dates, survey participants were also provided opportunities to comment on other aspects of bay scallop management such as bag and vessel limits, direct transit provisions, and open-ended comments about the fishery.

Regarding preferred harvest months, most survey respondents that scallop in Franklin through Pasco counties indicated they prefer to harvest during July and August. June and September were also desirable months, but to a much lesser extent. Most Gulf County scallopers indicated they prefer a later season in August followed to a lesser extent by July or September.

Survey participants were also asked whether they preferred a regionally-specific season structure similar to the 2017-2018 seasons or a season structure that has consistent dates across all of the allowable harvest area. There was no clear preference for a particular season structure in Franklin through Pasco counties. However, Gulf County scallopers strongly preferred a regionally-specific season structure.

## Stakeholder Feedback: Season Structure

- Supported doing what is best for scallop populations

### Regionally-specific

- Tailored management
- Flexibility to meet community needs
- Extends season

### Consistent

- Regionally-specific seasons are confusing
- Regional seasons likely increase harvest
- Reduces overcrowding
- Gives everyone the same opportunities at the same time



Survey participants were also given an opportunity to provide feedback explaining why a particular season structure was important to them. In general, there was an overwhelming desire from respondents that FWC do whatever is best for bay scallop populations.

The following details summarize open-ended feedback received regarding preference for a particular season structure.

Nearly all of the respondents who preferred a regionally-specific season structure stated it provides an opportunity to tailor management based on pre-season scallop abundance estimates, scallop biology (e.g., growth, size), environmental factors, and/or the individual needs of communities. Some respondents also supported a regionally-specific season structure because it effectively lengthens the open season for harvesters who are willing to travel to different areas when they are open at different times.

The vast majority of respondents that preferred a consistent season structure stated they felt it would be less confusing. Many respondents cited concerns regarding regulatory boundaries, differing open/closed status, and the inability to transit with scallops from open to closed areas as reasons for confusion. Respondents supporting a consistent season structure also felt that a regionally-specific season structure likely increases the total harvest of scallops as participants travel from one area to another to maximize harvest on opening days. Respondents also stated they supported a consistent season structure because they believe it reduces overcrowding by spreading out the harvest effort and provides an equal opportunity for all participants to harvest scallops at the same time.

## Other Fishery-wide Considerations

### *Economic considerations*

- Benefits of season timing differ across harvest area

### *Impacts of harvesting small scallops*

- Scallops are smaller early in season = higher harvest rates
- Derby-like effect when the season opens

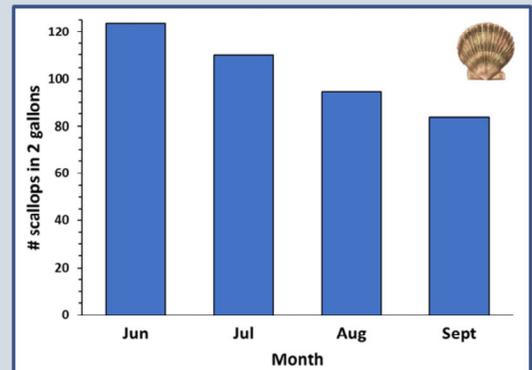
### *Impacts of September harvest*

- Spawning increases in mid to late September
- Effort generally limited in September

**Bag/vessel limits:** Very little support for changes

### *Transit provisions*

- Possession of scallops prohibited in closed areas



There are other important considerations relative to potential regulatory changes for this fishery. The recreational bay scallop season is an important economic driver in coastal communities. In some communities, the greatest economic benefit from scalloping occurs near the beginning of the season, while other communities rely more heavily on scallop-related economic impacts later in the season as the summer tourism season wanes.

Modifications to the season also have the potential to impact local bay scallop populations. Bay scallops grow quickly throughout the year, and therefore tend to be significantly smaller early in the season. The graph illustrates the estimated number of scallops each month in a 2-gallon bag limit. Estimates were based on measurements taken from recreationally-harvested scallops in Dixie and Taylor counties during the 2018 season. This shows a daily bag limit of scallops (2 gallons of whole scallops) in the beginning of the season contains significantly more scallops and can have a greater impact on harvest than a daily bag limit later in the season when scallops are larger. A bag limit in September contains approximately 40% fewer scallops than one harvested in June. The derby-like effect when the season opens in each region also compounds this problem because a greater number of scallops are harvested.

Modifications to the season end dates may also have impacts on local bay scallop populations. Because spawning increases in mid to late September, there is a greater overlap with peak spawning activity the later the season runs. However, harvesting effort is generally limited in September, as participation in the fishery typically wanes as the summer tourism comes to an end.

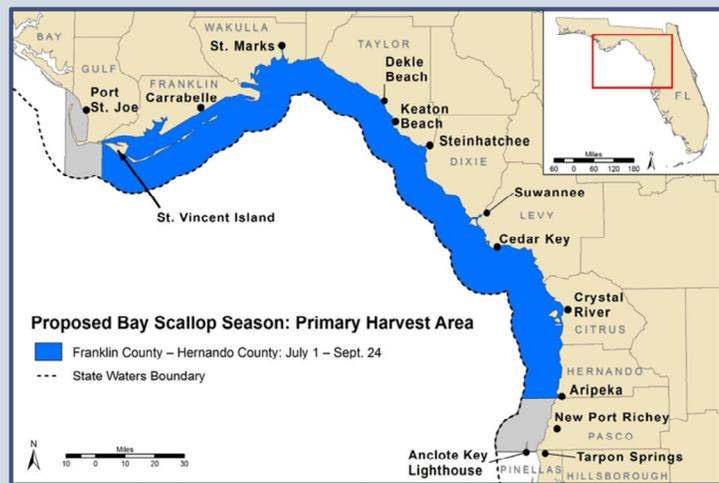
Stakeholders have expressed very little support for changing bag or vessel limits.

Currently, the possession of bay scallops is prohibited in closed areas. Staff has received requests to allow continuous transit of bay scallops through a closed area, similar to what is allowed in some other fisheries.

## Proposed Rules: Primary Harvest Area

- Establish a consistent long-term season for Franklin – Hernando counties
  - July 1 – Sept. 24
  - Effective beginning in 2020
- Allow direct transit across areas not open to harvest

*Creates predictable season that aligns with majority of stakeholder feedback and conserves scallop populations*



Based on the considerable public feedback gathered and other considerations presented here, staff is proposing to modify the Commission’s bay scallop regulations to establish a new long-term season for the majority of the allowable harvest area, where scallops are most abundant.

The proposed draft rules would modify 68B-18.005, FAC, to establish a consistent bay scallop season beginning in 2020 that starts on July 1 and continues through September 24 each year for state waters from the westernmost point of St. Vincent Island in Franklin County to the Hernando – Pasco county line.

The proposed draft rule would also modify 68B-18.008, FAC, to allow the direct and continuous transit of lawfully-harvested bay scallops across areas that are closed to harvest. This transit provision would apply statewide.

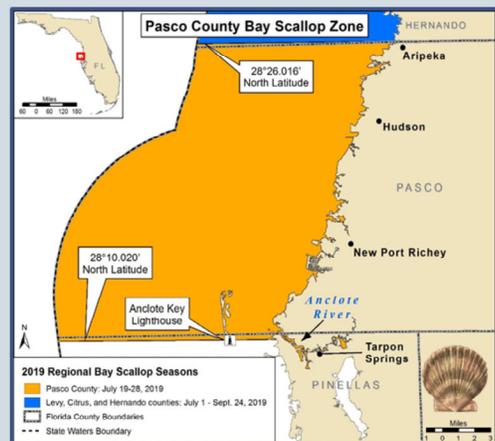
These modifications create a predictable and consistent bay scallop season for most of the scalloping region that aligns with a majority of stakeholder feedback and conserves scallop populations. This proposed season would also apply for all of Gulf County in years when the Commission doesn’t establish a different or shorter season by EO. However, for the immediate future, staff propose setting short-term season dates for both Gulf and Pasco counties each year via Executive Order until long-term seasons are established. The following slides outline the proposed short-term seasons for Pasco and Gulf counties.

## Pasco County

- Closed to harvest since 1994
- 10-day trial season in 2018 and 2019
  - Relatively little impact to local abundance
  - Provided new and exciting opportunities
  - Introduced new people to scalloping

*Staff recommends continuing to set season dates annually by EO*

- Monitor fishery development
- Continue to evaluate management
- **Proposed 2020 season:** July 17-26



In 1994, bay scallop harvest was prohibited in all waters south of the Suwannee River, including Pasco County, in response to concerns about declining scallop abundance. In 2002, the allowable bay scallop harvest area was modified to include all waters north of the Pasco – Hernando county line through the Mexico Beach Canal in Bay County.

In recent years, FWC has received reports of increased numbers of bay scallops in waters off Pasco County and requests to allow some level of harvest in that area. Following a review of biological data that suggested scallop populations in Pasco have continued to recover to similar densities as nearby open areas, and in consideration of stakeholder feedback at the December 2017 Commission meeting, the Commission chose to extend harvest into Pasco County for a limited 10-day trial season in 2018. Post-season FWC bay scallop abundance assessments indicated that the short trial season had little impact on local scallop abundance, and another similar 10-day season was established for 2019.

As part of the 2018 stakeholder satisfaction survey, respondents were asked whether they participated in the Pasco County trial season. Of those that did, many were excited about the new opportunities it provided. Furthermore, opening Pasco County introduced new people to scalloping.

Staff recommends continuing to set the season dates for Pasco County annually by EO. This will allow staff to monitor the development of the fishery in this area and to continue evaluating management needs of this local bay scallop population in order to ensure the sustainability with scallops in the region. Similar to 2018 and 2019, staff propose setting a 10-day season for 2020. As with the 2018 and 2019 seasons, these dates will open waters off Pasco County to harvest on a Friday (July 17) and continue for 10 consecutive days, closing at the end of the day on Sunday, July 26, 2020.

# St. Joseph Bay



## 2015 red tide

- Almost no juvenile scallops detected during peak spawning
- Regulatory action taken and restoration efforts implemented in 2016

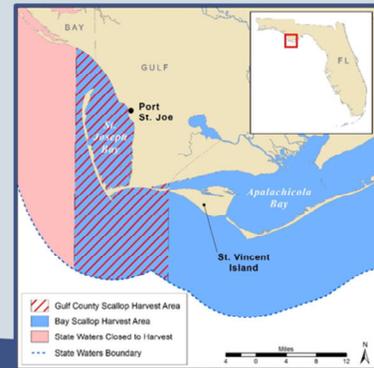
## 2017

- Recruitment: Modest settlement followed by increase in adult density
- Algae bloom prompted human health concerns; season delayed and shortened

## 2018

- Red tide: Season closed 5 days early
- Hurricane Michael: Impacts being evaluated

2019: Season dates under consideration today



Scallop restoration efforts ongoing since 2016

In late 2015, St. Joseph Bay experienced a prolonged red tide event that occurred during the peak scallop spawning period. This negatively impacted spawning and scallop survival and resulted in poor recruitment of juvenile scallops, which subsequently impacted the 2016 adult population. In response, the Commission modified the regulations for the 2016 season in Gulf County by shortening the harvest season to 14 days and reducing the daily bag limit to 40 scallops per person or 200 scallops per vessel, whichever was less. FWC's Fish and Wildlife Research Institute (FWRI) also began extensive bay scallop restoration efforts.

Adult bay scallop abundance surveys completed prior to the 2017 scallop season indicated a small but widespread recovery of scallops in St. Joseph Bay. However, immediately prior to the scheduled opening of the 2017 season, St. Joseph Bay was impacted by another algae bloom. The algae species associated with the 2017 bloom is known to produce a toxin that causes human health issues from the consumption of contaminated shellfish. Because of human health concerns, the 2017 season start was postponed until tests showed scallops were safe for human consumption. The season was open for 16 days. Unlike the 2015 red tide, no negative impacts to scallop populations were expected from the 2017 bloom and stakeholders reported successful scallop trips and large scallops in St. Joseph Bay during the delayed season.

St. Joseph Bay experienced another red tide event in mid-2018. As a precautionary measure, the 2018 season was closed five days early. This was followed by Hurricane Michael, which impacted restoration efforts and may have affected the scallop population as well. Staff therefore delayed establishing a 2019 season for Gulf County until FWRI could evaluate the status of the local scallop population. The following slide includes information on St. Joseph Bay research and monitoring, stakeholder feedback, and staff's proposal for the 2019 Gulf County scallop season.

Ongoing scallop restoration efforts in St. Joseph Bay will continue into 2019.

# St. Joseph Bay 2019 Season



## Research

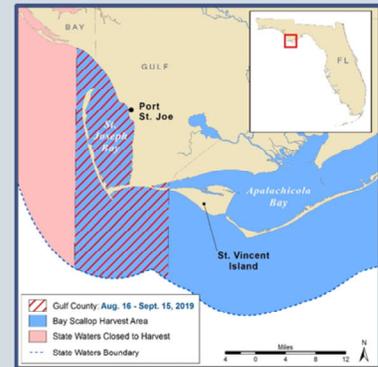
- No adult scallops observed during late 2018 or early 2019
  - Some juvenile settlement
- Adult survey planned for June 2019

## Public workshop: mixed feedback

- Some request to eliminate 2019 season
- Local scalloping opportunities important to many

## Staff recommends a limited 2019 season similar, but shorter, than 2018 season

- Aug. 16 – Sept. 15
- Set season via EO (2019 only)



FWRI researchers revisited St. Joseph Bay in late 2018 to evaluate recent environmental impacts on the bay scallop populations. Post-impact survey methods differed from the scientifically-rigorous, pre-season, abundance surveys. Staff visited a number of locations throughout the bay that have historically held high densities of scallops and also surveyed additional locations based on local knowledge; no adult scallops have been observed at these survey sites during late 2018 or early 2019. However, juvenile scallop monitoring indicates that some juvenile settlement has occurred in the bay since the 2018 red tide bloom and Hurricane Michael. Staff plans to conduct annual pre-season adult abundance surveys in June 2019, which will help characterize the extent of any potential environmental impacts on the local scallop population. Results from these pre-season surveys are expected to be available as early as July 2019.

In early Feb. 2019, staff held a public workshop to gather input on public desires for the 2019 scallop season for Gulf County. Feedback was also received through other means, such as email and FWC's Saltwater Comments webpage. Overall, feedback has been mixed. Some stakeholders prefer not having a 2019 season and cite concern for the lack of adult scallops in St. Joseph Bay. Other stakeholders believe that having the opportunity to go and search for scallops locally is important, both to them personally and economically for the community.

Based on the feedback and available data, staff recommends establishing a limited 2019 season that is similar in structure, but shorter, than the 2018 season. The proposed 31-day season in Gulf County would be set via EO, and would open Aug. 16 and continue through Sept. 15, 2019. Setting the 2019-only season dates for Gulf County by EO allows for flexibility to re-evaluate and adjust for future management needs as the scallop population continues to recover.

## Proposed 2020 Scallop Seasons



This map provides a summary of proposed 2020 seasons for the entire area open to scallop harvest.

Beginning in 2020, the proposed season for Franklin through Hernando counties would open on July 1 and continue through Sept. 24 each year. This would include state waters from the western tip of St. Vincent Island in Franklin County to the Hernando – Pasco county line.

For the immediate future, staff proposes establishing the seasons for Gulf and Pasco counties through short-term modifications that would allow staff to continue monitoring the development of the fishery in Pasco County and provide flexibility to re-evaluate management needs in both Gulf and Pasco counties. The 2020 bay scallop season for Pasco County would be set by today EO to begin on July 17 and continue through July 26 for 2020 only. Discussion of the 2020 season for Gulf County would be delayed to a future date after more information can be collected about the condition of the scallop population in St. Joseph Bay.

## Staff Recommendation

Approve the proposed draft rules to establish a consistent scallop season throughout most of the allowable harvest area beginning in 2020

- Franklin through Hernando counties: July 1 – Sept. 24 each year
- Allow direct transit of scallops across closed areas

*Return for a final public hearing at the May 2019 Commission meeting*

Continue to establish annual seasons for the rest of the harvest area through EO

- Pasco County 2020: July 17-26
- Gulf County 2019: Aug. 16 – Sept. 15

*Return in early 2020 for consideration of long-term Gulf and Pasco county seasons*



Photo: Tyler Jones , UF/IFAS Florida Sea Grant



Staff recommends approving the proposed draft rules to establish a consistent bay scallop harvest season for Franklin through Hernando counties, beginning in 2020, that opens on July 1 and continues through Sept. 24 each year, and to allow the direct transit statewide of bay scallops across areas closed to harvest, provided that the scallops were legally collected in an open area and the harvester does not stop while transiting through any closed areas.

If approved and directed, staff will return for a final public hearing on this portion of the proposal at the May 2019 Commission meeting.

Staff also recommends continuing to establish annual seasons for the rest of the harvest area by EO. For Pasco County, where the 2019 season has already been set, staff recommends establishing a 10-day season for 2020 that begins Friday, July 17, and goes through Sunday, July 26. For Gulf County, staff recommends establishing a 2019 season that begins August 16 and goes through September 15, 2019. Staff plans to return to the Commission in early 2020 to establish future bay scallop seasons for Gulf and Pasco counties and to evaluate potential long-term season dates in these counties.