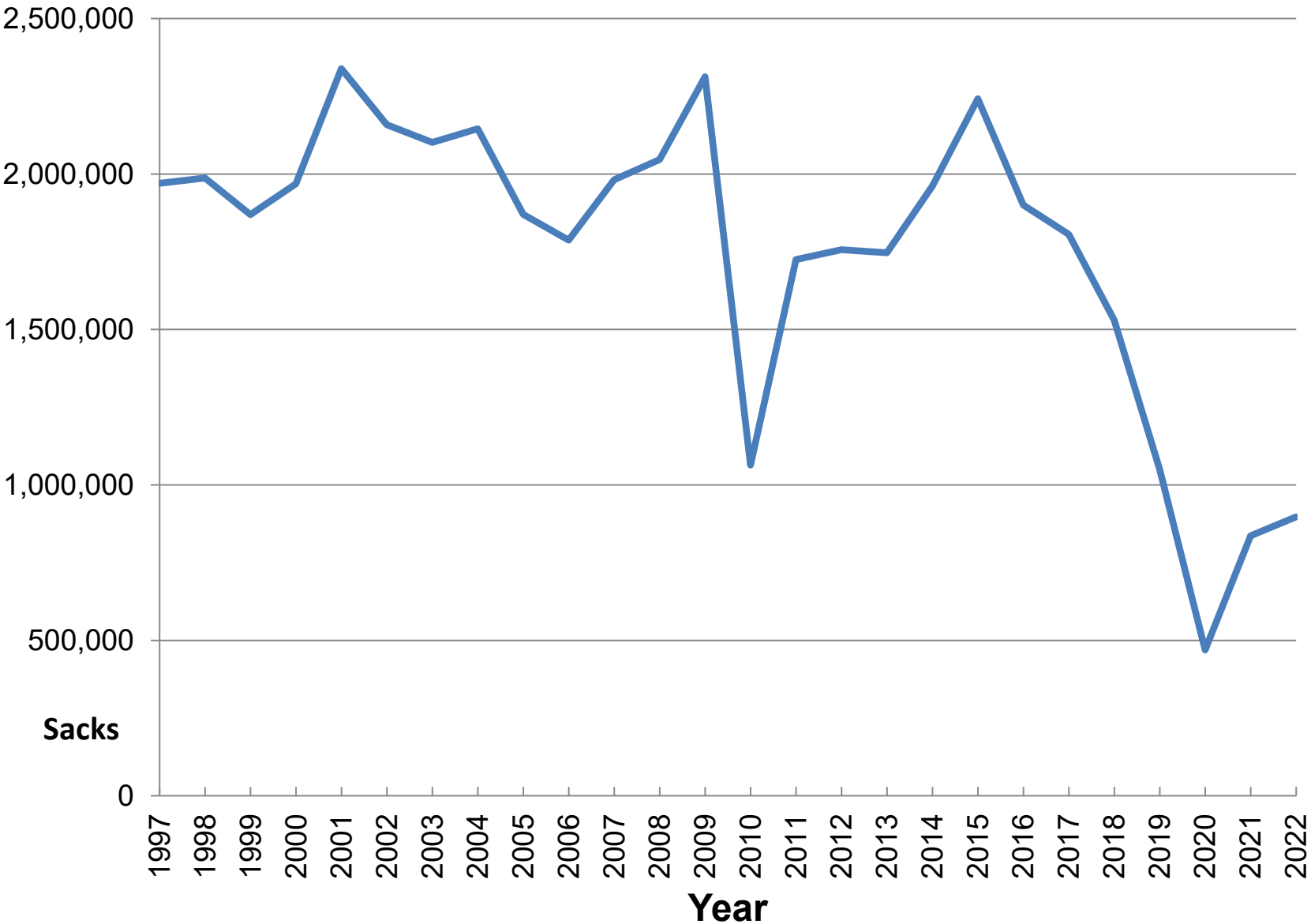


2023 Public Seed Grounds Oyster Stock Assessment and 2023/2024 Season Recommendations

Robert Caballero | GSMFC | October 17, 2023

Historical Louisiana Commercial Oyster Landings

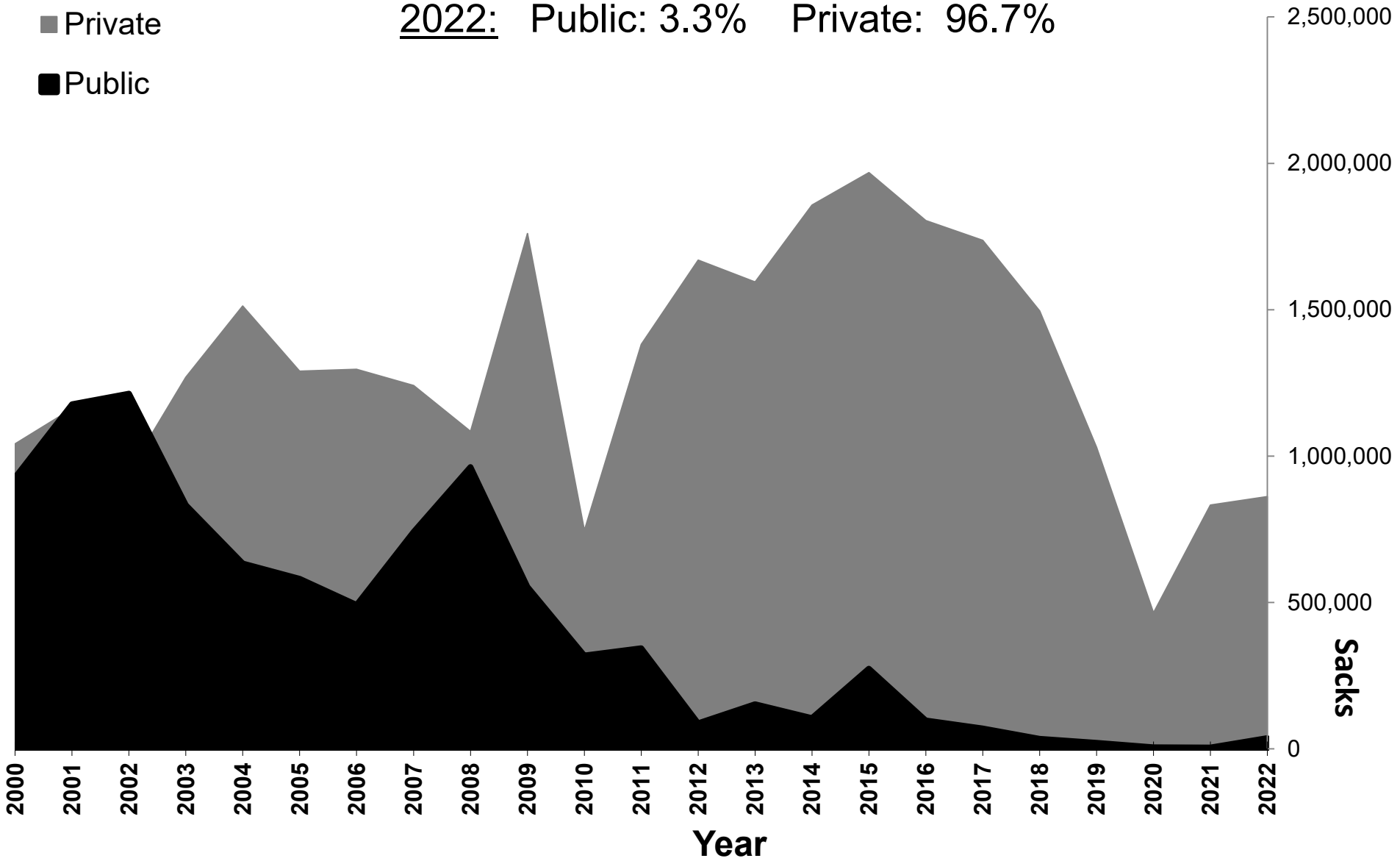


Oyster Commercial Landings: Public vs. Private

2022: Public: 3.3% Private: 96.7%

■ Private

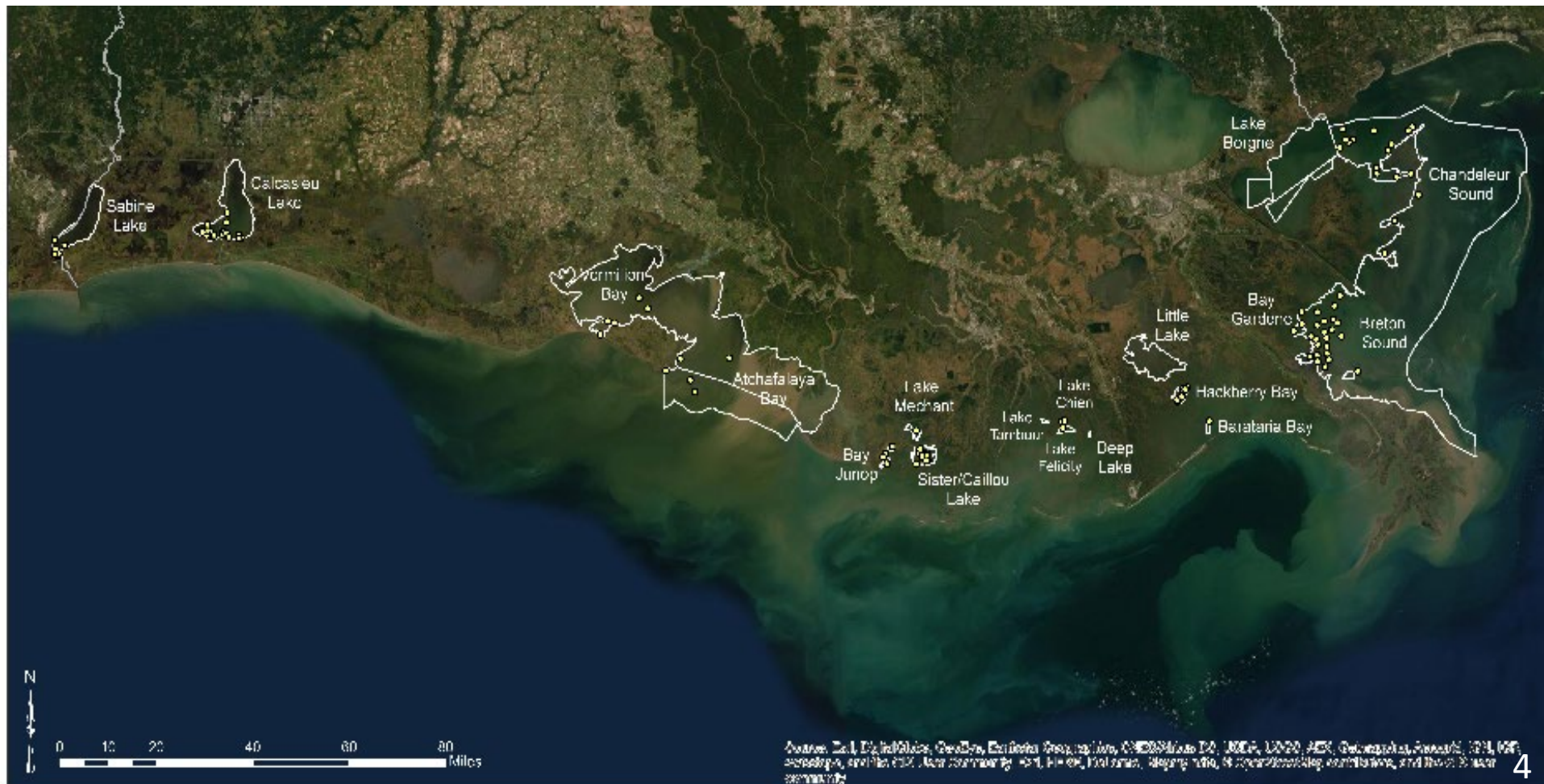
■ Public



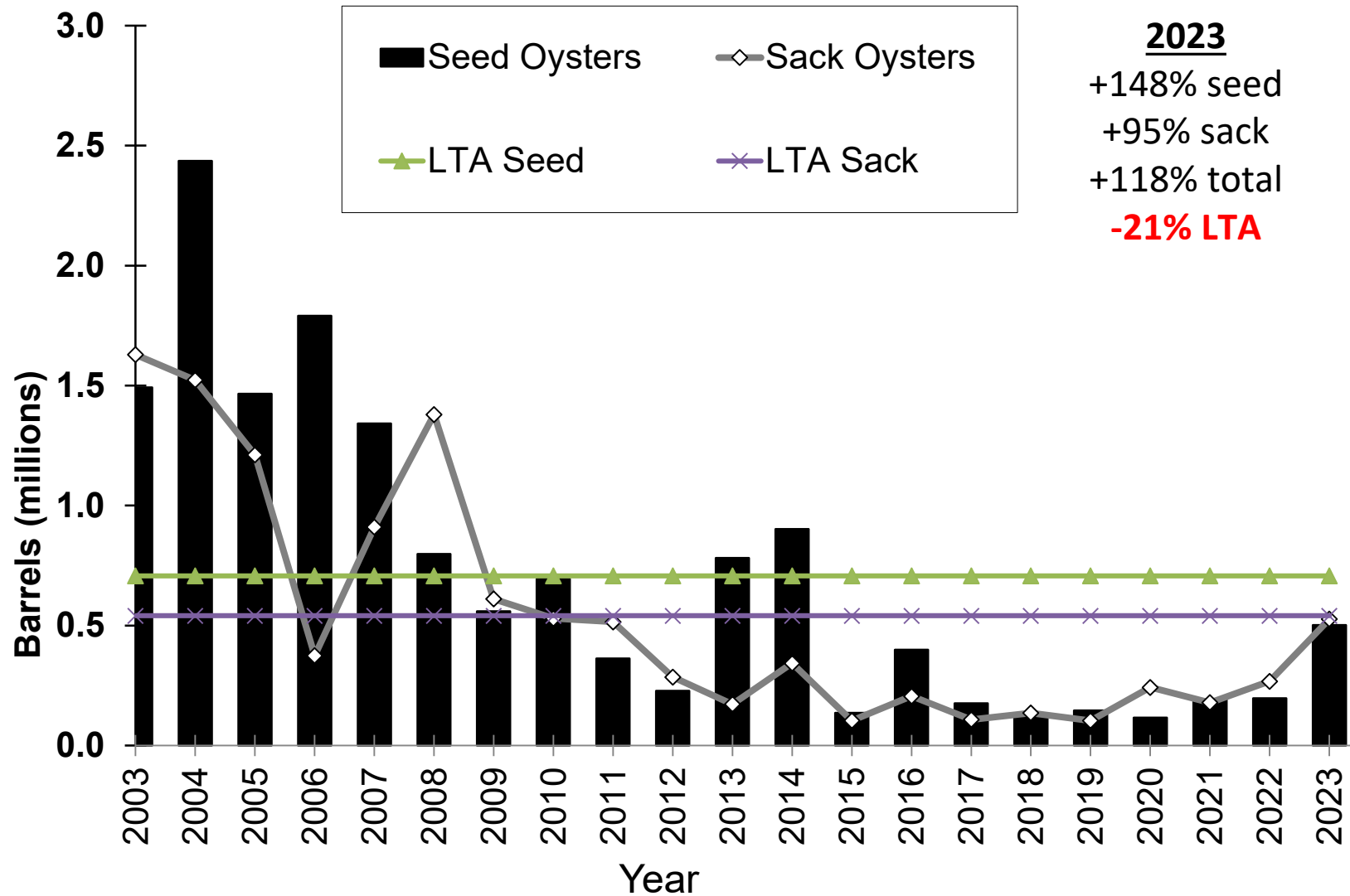
Note: Long-term average (2003 to 2022) for private landings is 1,344,642 sacks. LTA for public landings is 316,772 sacks.

LDWF Stock Assessment Sampling

- Sampling performed in July 2023
- 115 sampling sites visited
- 575 total m² samples collected
- Side Scan Sonar data
- Extrapolate Density of Oysters per Reef



Public Seed Grounds Stock Assessment Results: Seed vs. Sack



2023
 +148% seed
 +95% sack
 +118% total
-21% LTA



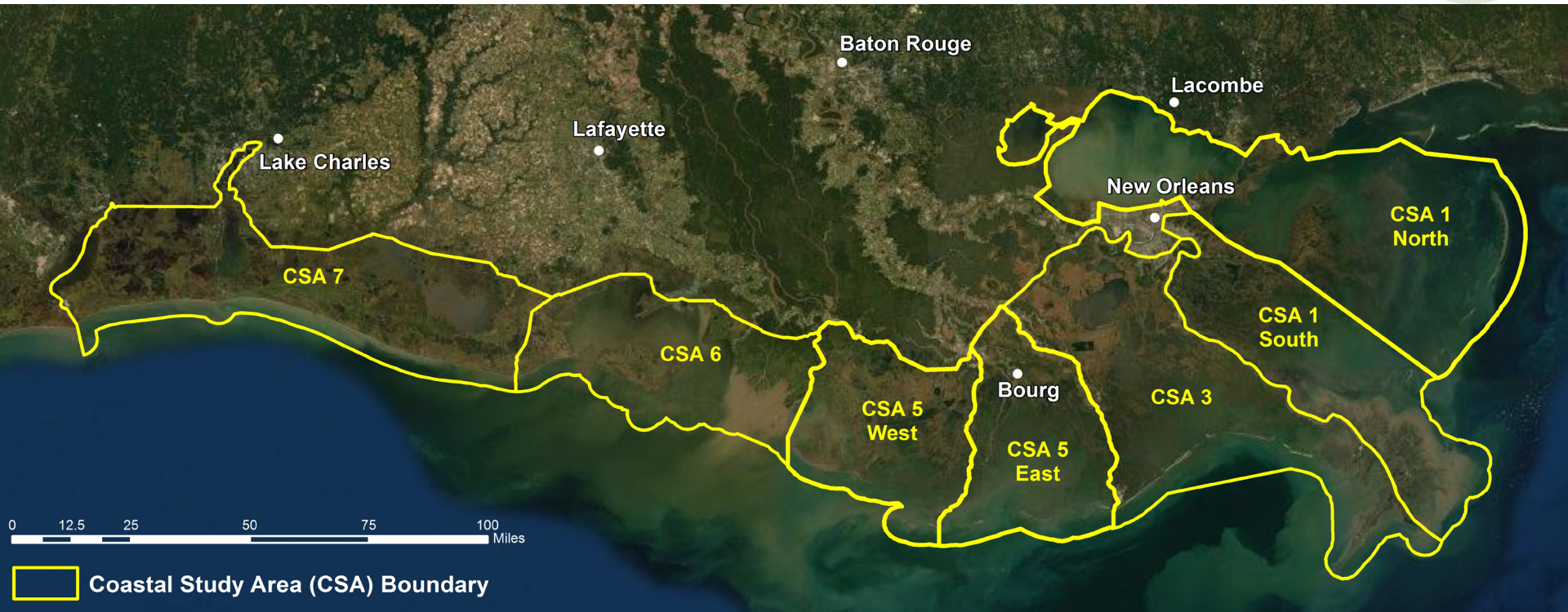
Excludes Sabine Lake

LTA: 2003-2023

PRELIMINARY DATA - SUBJECT TO CHANGE

LDWF Office of Fisheries - Marine Fisheries Section

Coastal Study Areas (CSAs)



Coastal Study Area (CSA) Boundary

The Louisiana Department of Wildlife and Fisheries (LDWF) makes no representations of warranties whatsoever, whether express, implied, statutory or otherwise, as to the quality and accuracy in producing this map or data set. The user should be aware that the information on which it was based may have come from any of a variety of sources, which are of varying degrees of accuracy. Therefore, LDWF cannot guarantee the accuracy of this map or data set, and shall not be liable to any other person, party or entity as a result of any reliance on this map or data set and/or any information contained herein or interpreted herefrom. Further, LDWF does not accept any

Louisiana Department of Wildlife and Fisheries
Map produced December 2, 2020

Source: Esri, DigitalGlobe, GeoEye, Earthstar/GeoGraphics, CNES/Airbus DS, USDA, USGS, AEY

CSA	Description	CSA	Description
1 North	Lake Borgne/MS Sound	5 West	Sister Lake/Bay Junop/Lake Mechant
1 South	East of MS River, South of MRGO	6	Vermilion Bay/Atchafalaya
3	Hackberry/Barataria Bay	7	Calcasieu Lake
5 East	Lake Chien/Felicity		

2023 Public Ground Oyster Stock Assessment

Availability in barrels (1 barrel = 2 sacks)

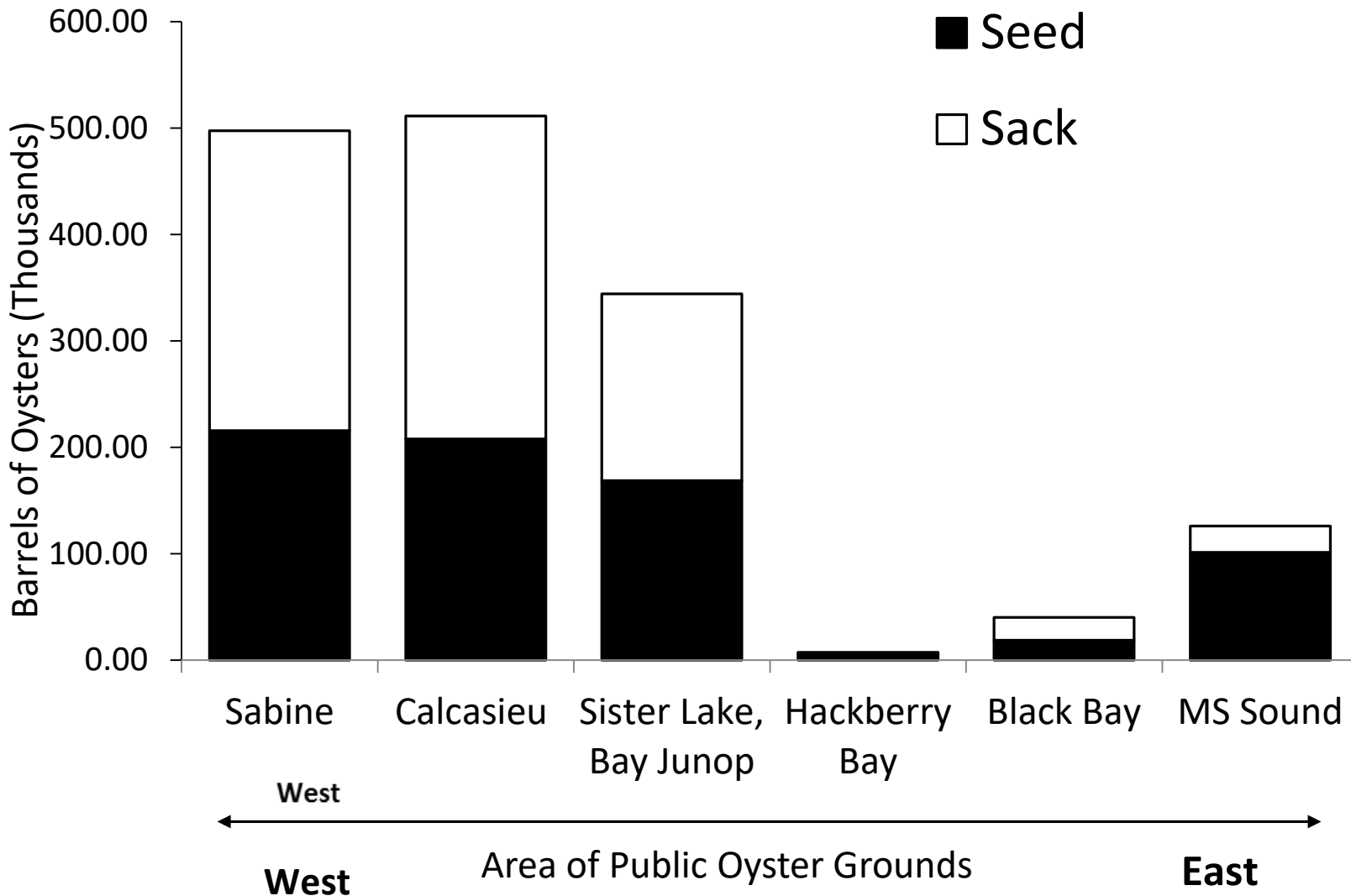
GREEN = Increase, RED = Decrease compared to 2022 (% LTA is 20 years)

Area	Seed	Sack	Total	Total %	% LTA
East of MS River, North MRGO	101,273.8	24,842.4	126,116.2	279%	-66%
East of MS River, South MRGO	18,631.7	21,436.3	40,068.0	-31%	-87%
Little Lake, Barataria, Hackberry Bay	5,901.7	1,348.0	7,250.7	-58%	-34%
Lake Chien /Felicity	0	0	0	0%	-100%
Sister Lake	166,731.0	175,484.7	342,215.7	259%	111%
Mechant/ Bay Junop	1,888.5	38.7	1,927.2	-75%	-45%
Calcasieu - East Side	26,499.3	14,351.8	40,851.1	52%	19%
Calcasieu - West Cove	181,223.2	289,342.1	470,565.3	101%	
Statewide Totals	502,149.2	526,845	1,028,994.2	118%	-21%

2023 Statewide Oyster Availability

2023 Stock Assessment Quick Facts

- Calcasieu Lake West Cove has the largest amount of market oysters

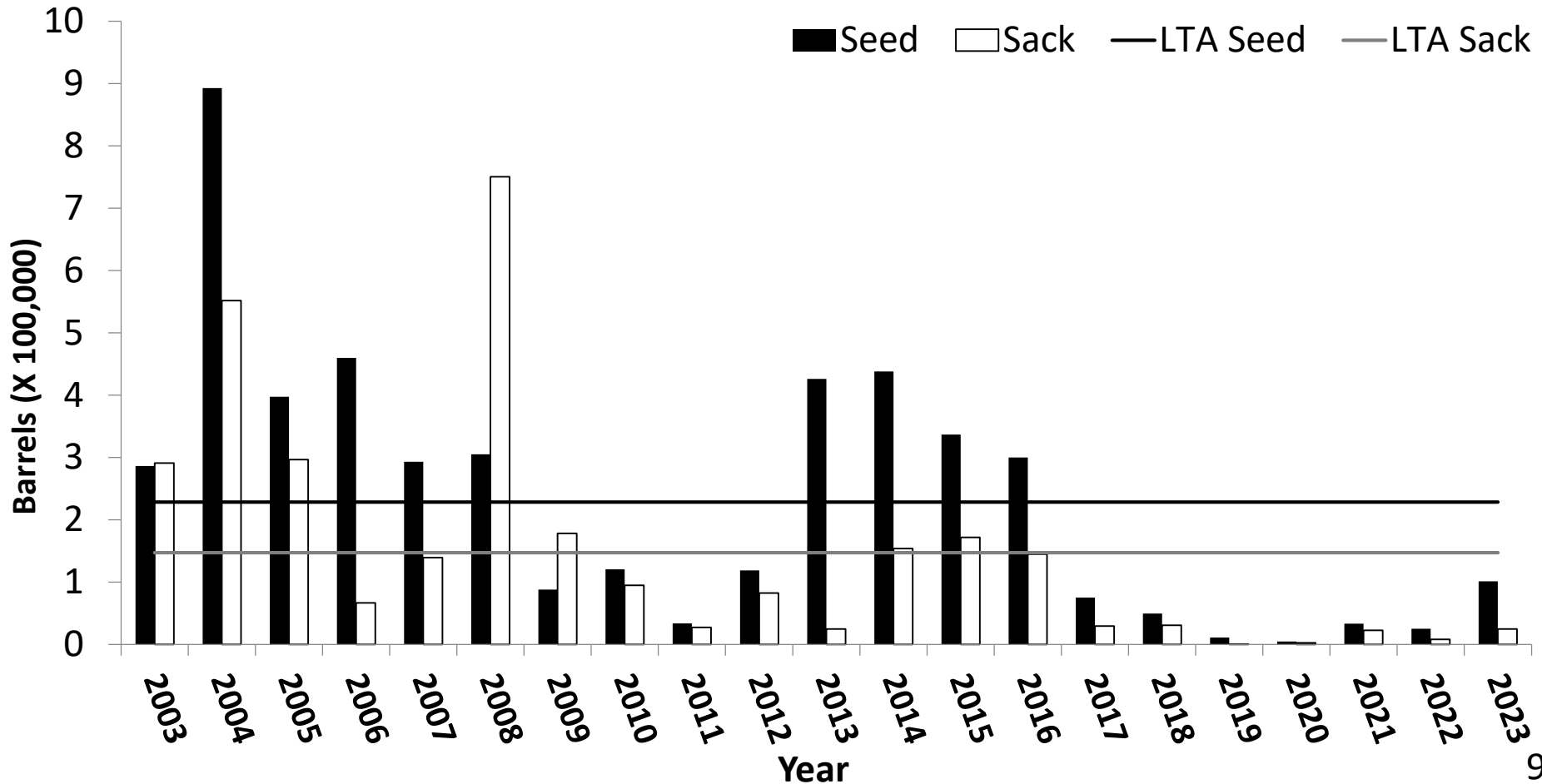
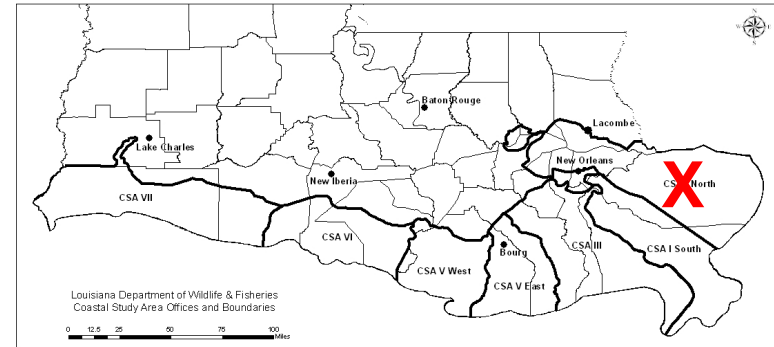


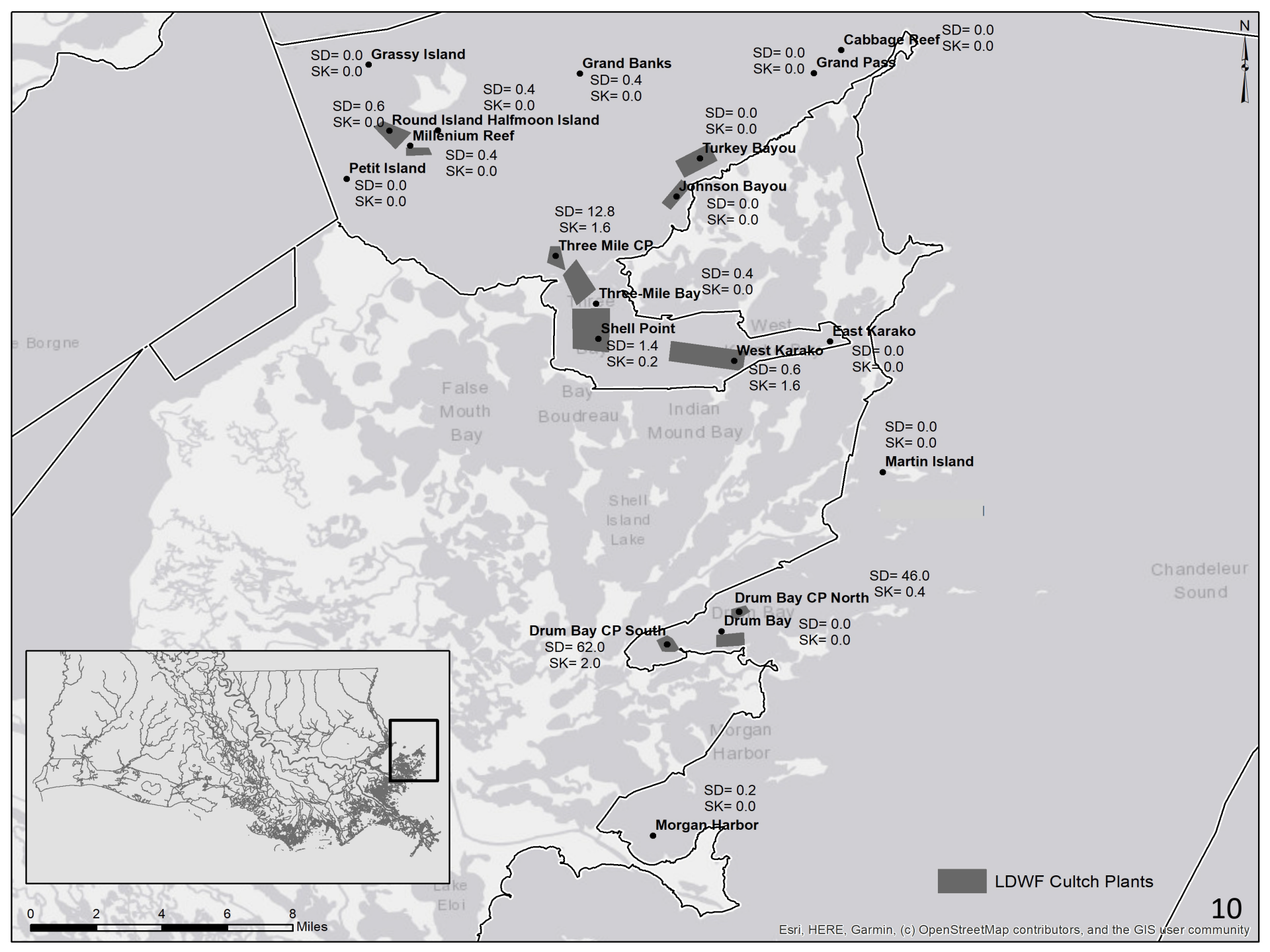
CSA 1 – North

(Lake Borgne/MS Sound area)

Quick Facts

- Extensive mortality event in 2019
- Increase in stock from 2022
- Large increase in seed on 2022 Drum Bay CPs





N

LDWF Cultch Plants

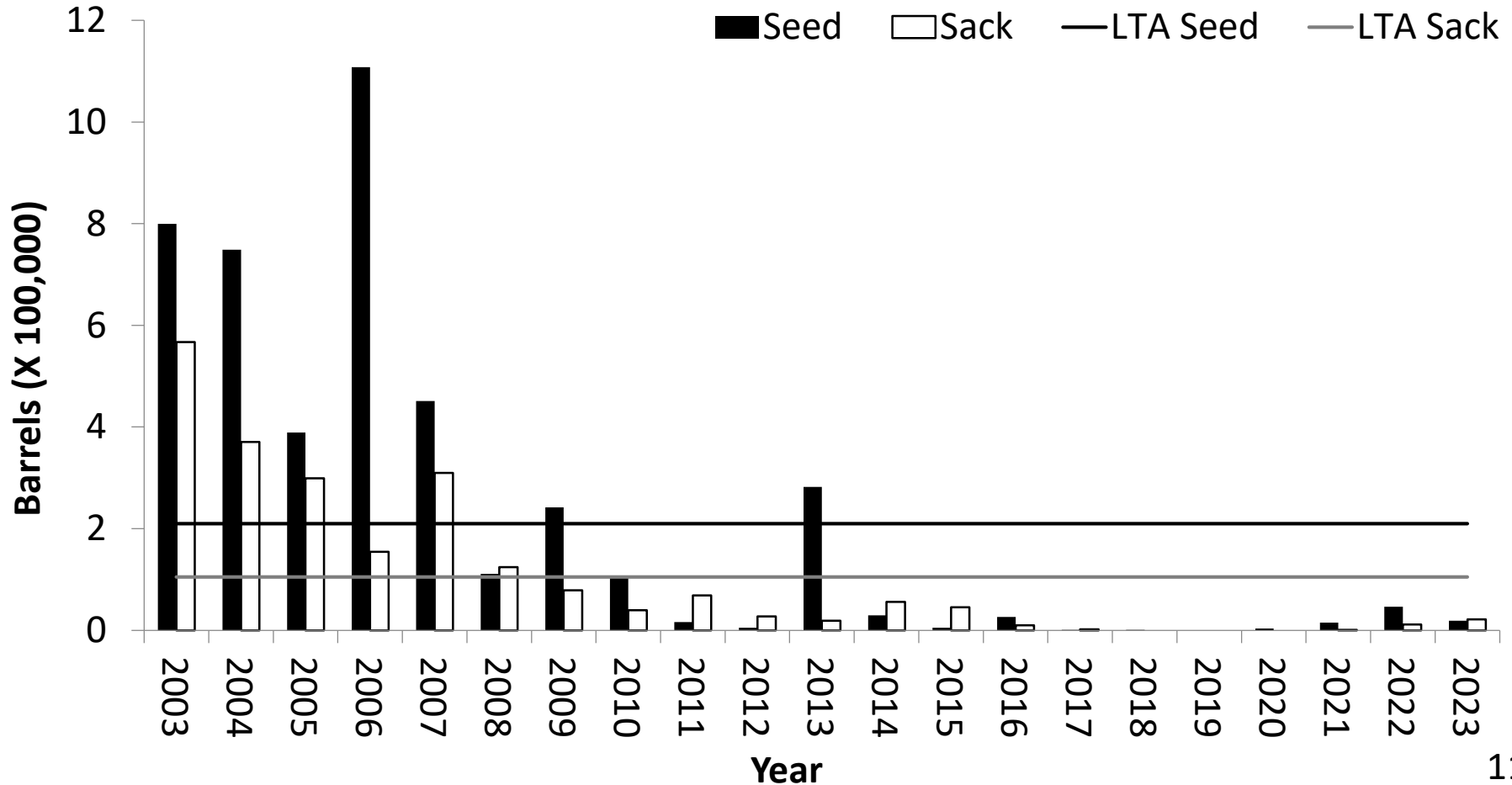
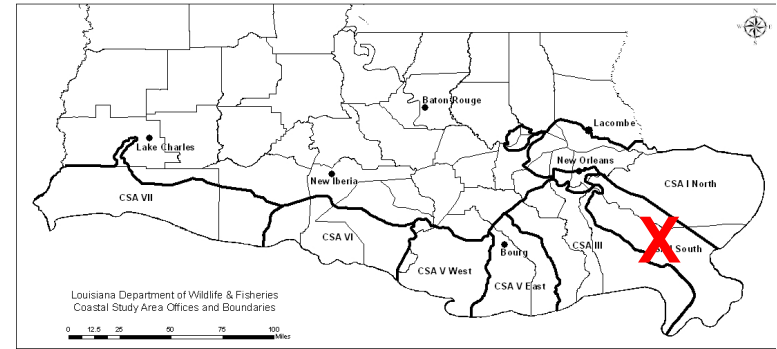
0 2 4 6 8 Miles

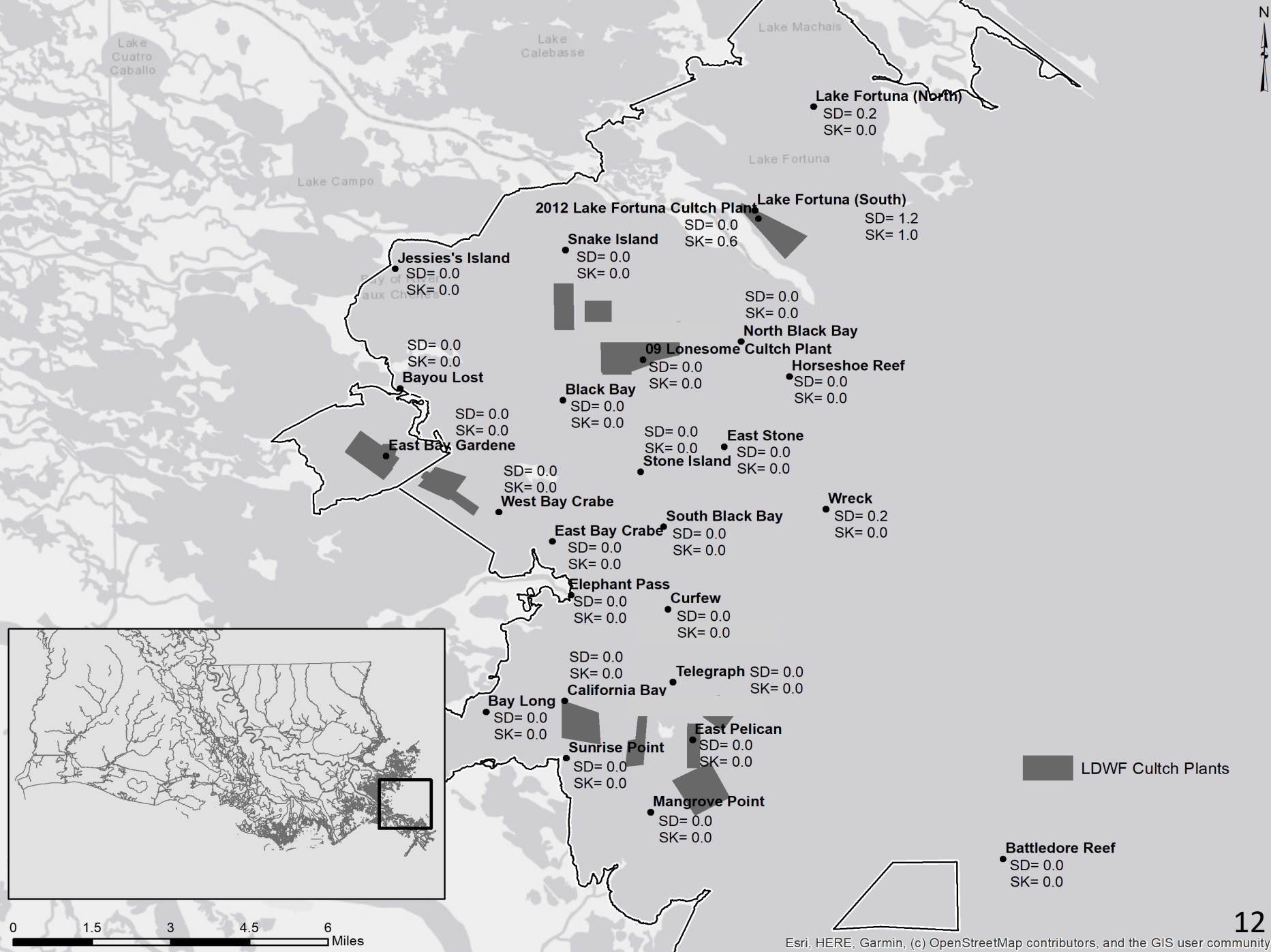
CSA 1 – South

(Black Bay, Bay Gardene, Lake Fortuna)

Quick Facts

- Few seed and sack resource found
- Some seed to market growth since last season



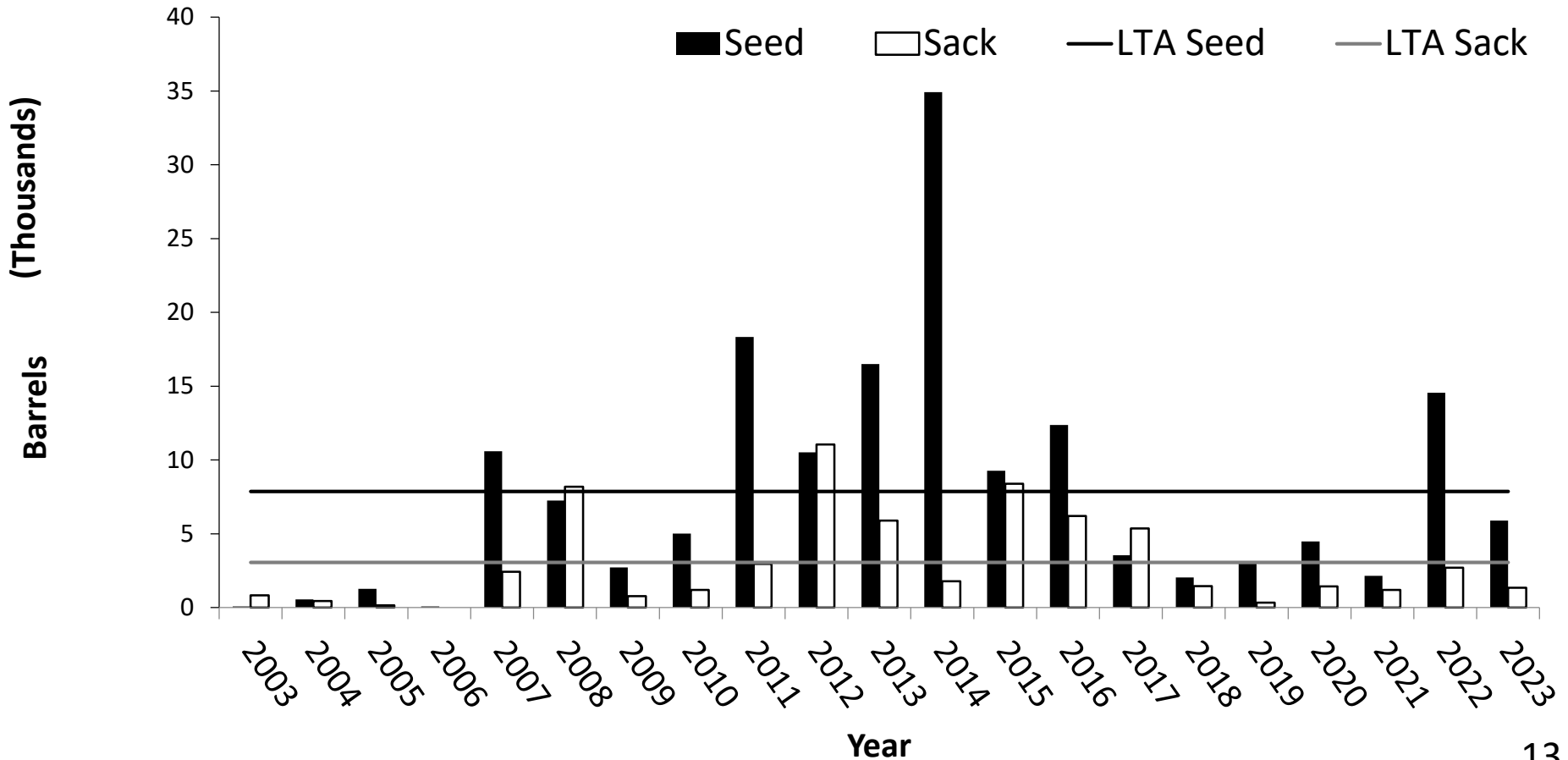
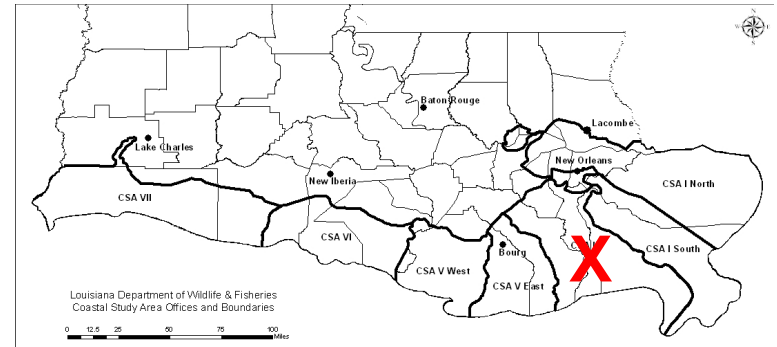


CSA 3

(Little Lake, Hackberry, Barataria Bay)

Quick Facts

- Opened in 2022-23 season: Biennial Seasons
- Decline in stock from last season





Upper Hackberry
2012 Hackberry Bay CP
SD= 4.8
SK= 0.4

2008 Hackberry Bay CP
SD= 1.8
SK= 0.8

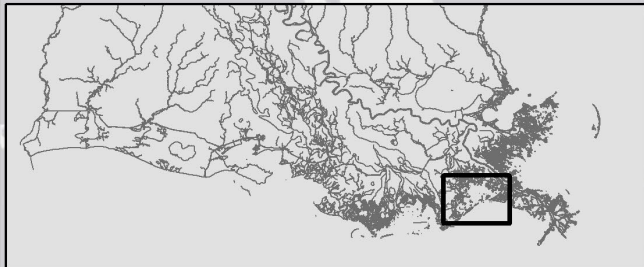
2014 Hackberry Bay CP
SD= 0.0
SK= 0.0

2004 North Cultch Plant
SD= 0.0
SK= 0.0

Middle Hackberry
SD= 0.0
SK= 0.0

Lower Hackberry
SD= 0.0
SK= 0.0

2004 South Cultch Plant
SD= 0.0
SK= 0.0



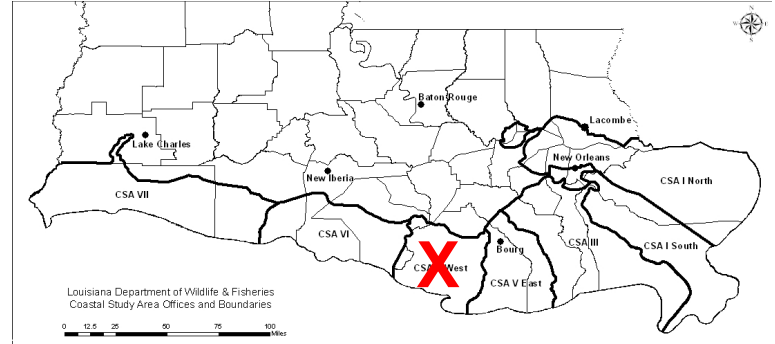
Barataria Bay Cultch Plant
SD= 0.0
SK= 0.0

LDWF Cultch Plants

Natural Reef Area

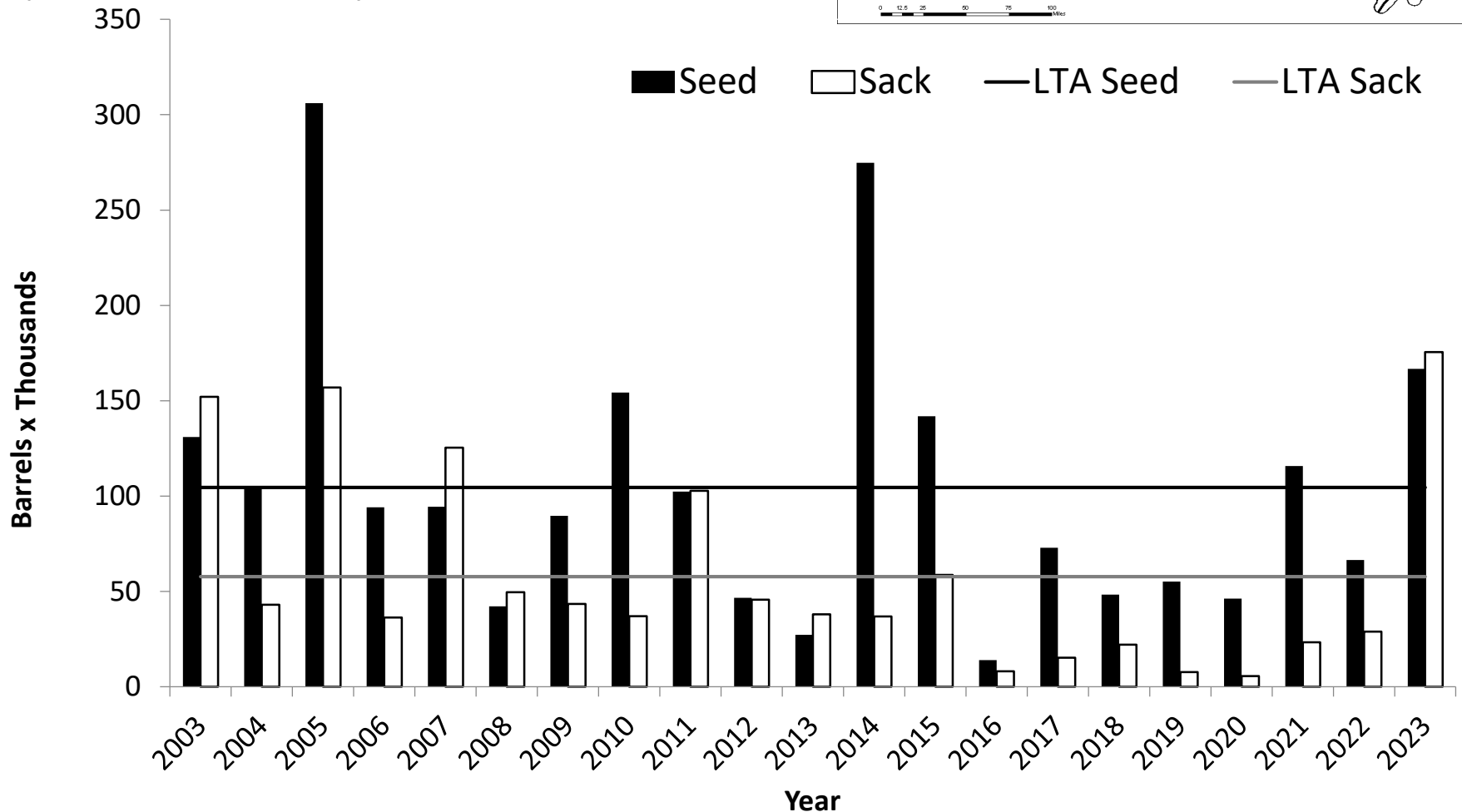
0 0.5 1 1.5 2 Miles

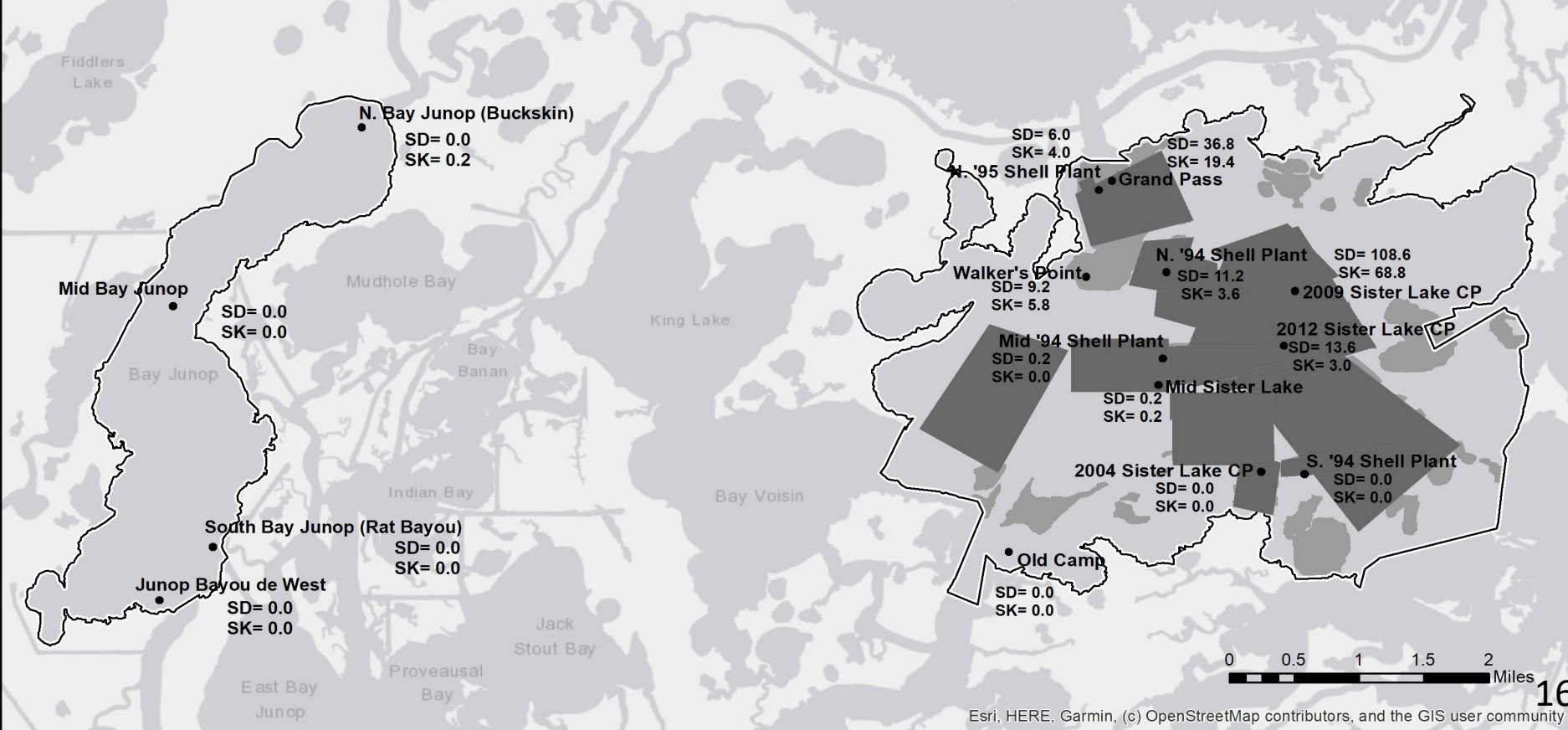
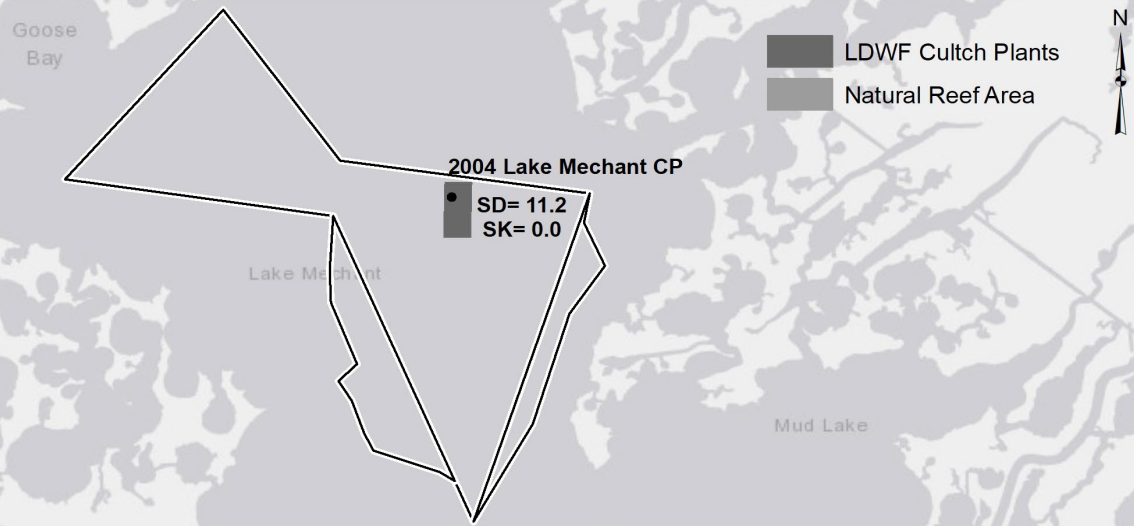
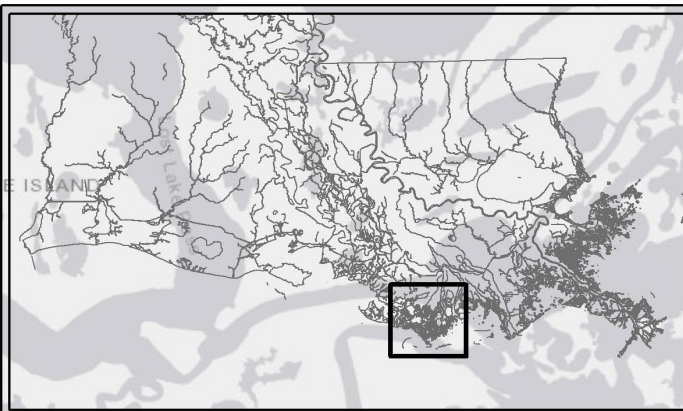
CSA 5W (Sister Lake)



Quick Facts

- Season opened in 2021/2022 in Sister Lake
- 5 day season in 2023, due to abundant resource
- 2021 Sister Lake Cultch Plant will open
- Very little resource in Bay Junop and Lake Mechant



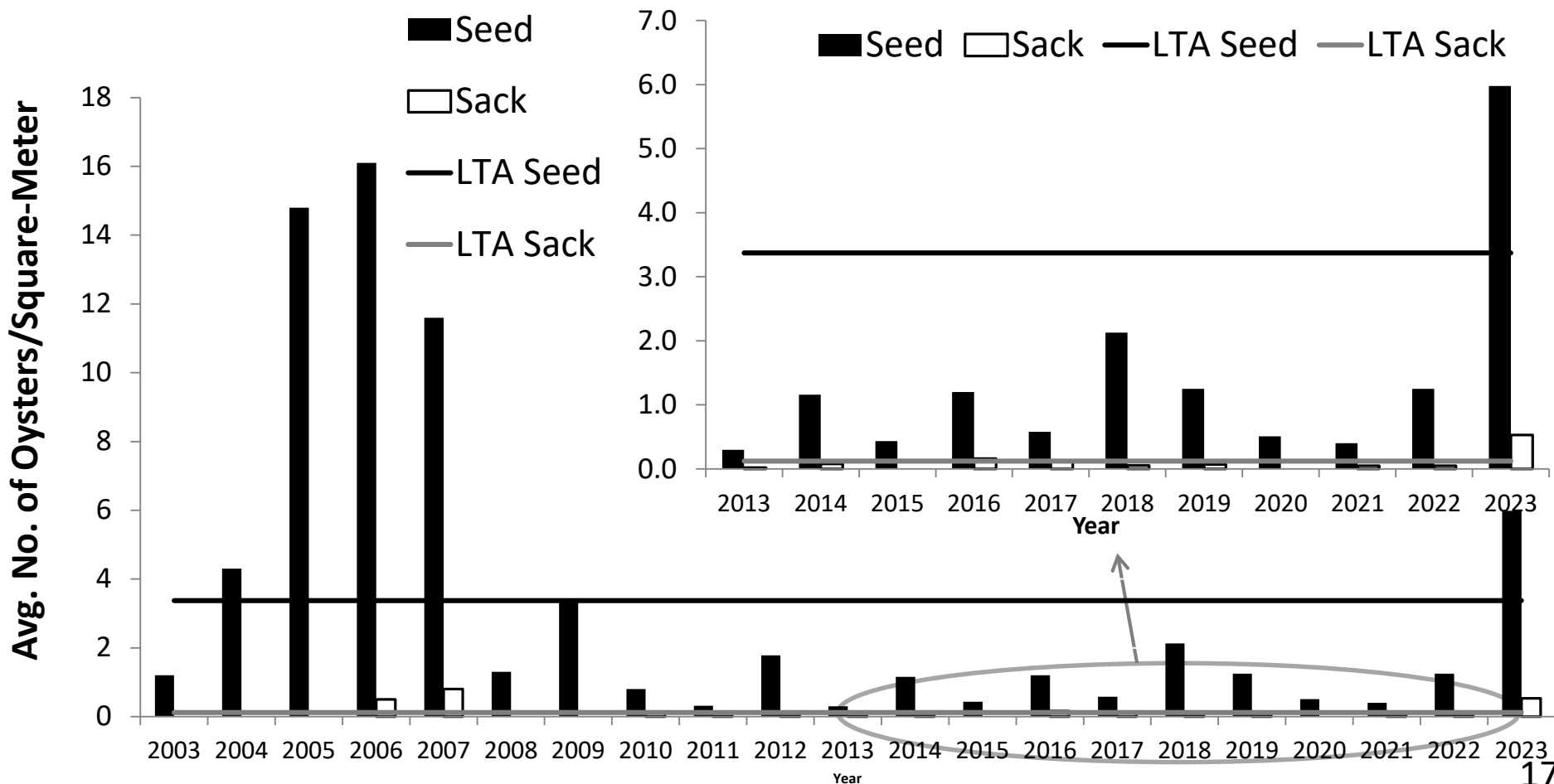


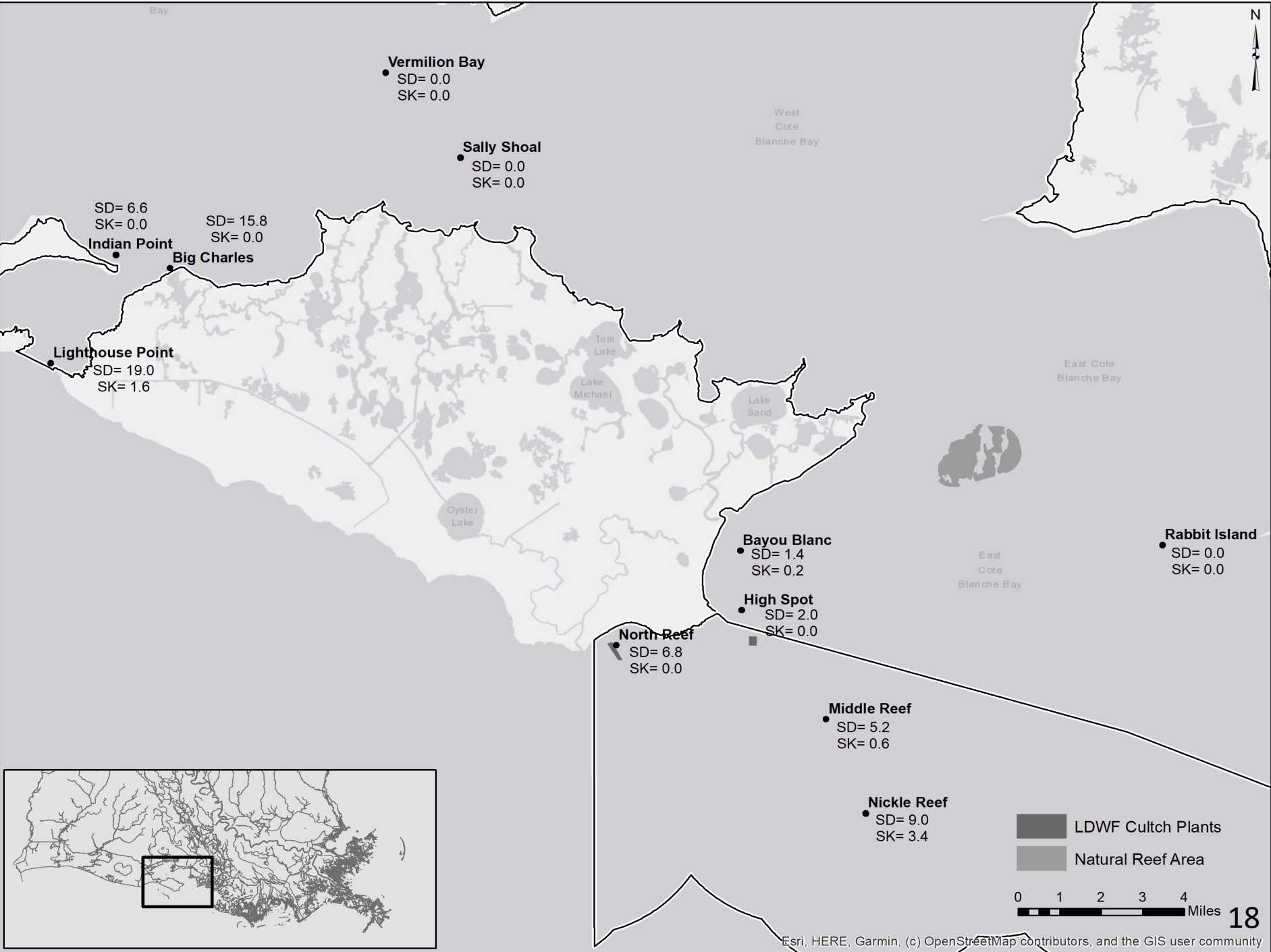
CSA 6 (Vermilion-Atchafalaya Bay)



Quick Facts

- Reef acreages unknown in the area
- Many years of freshwater input
- Spat and seed has grown due to higher salinity this year
- Monitor LDH closure lines for this Basin

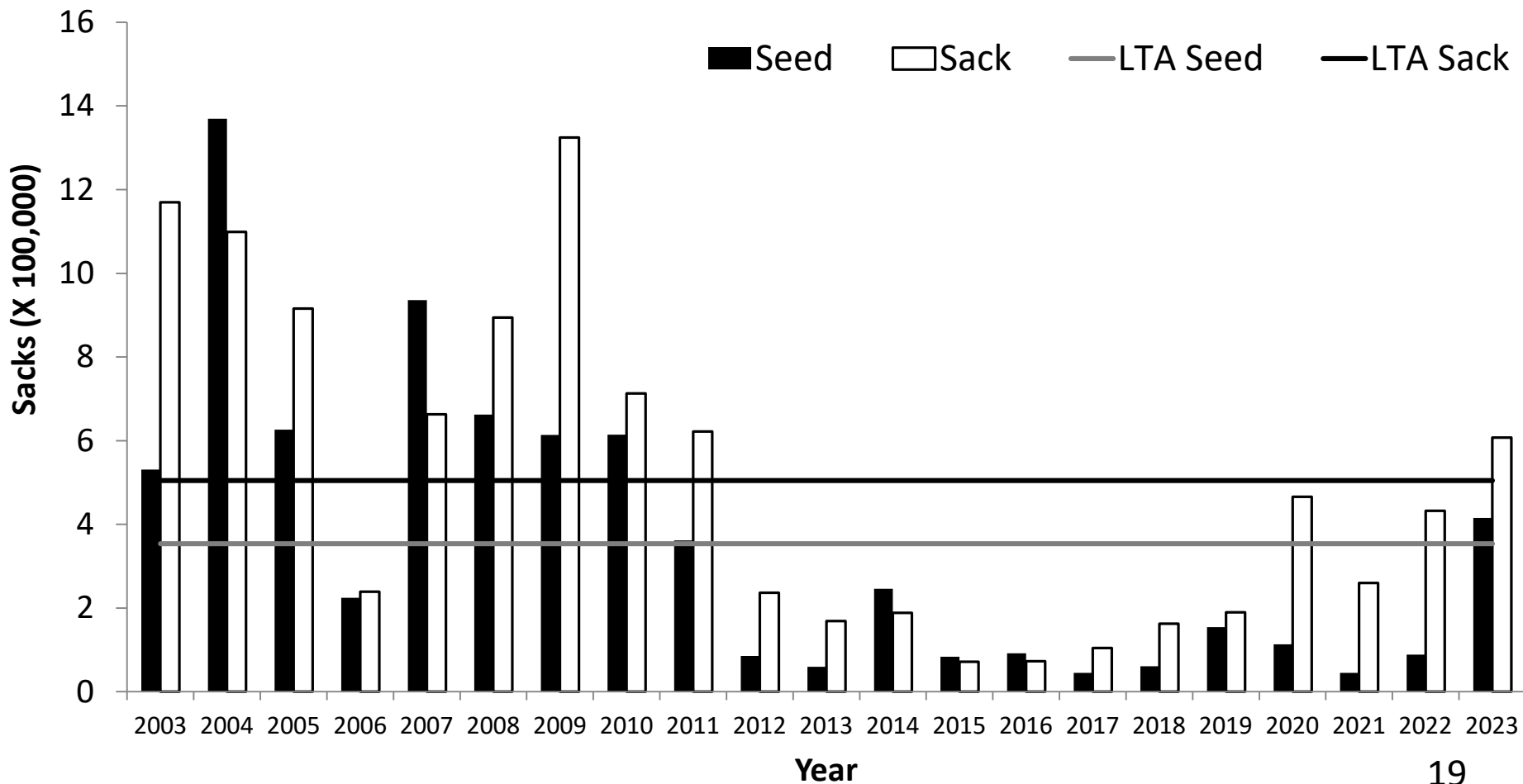
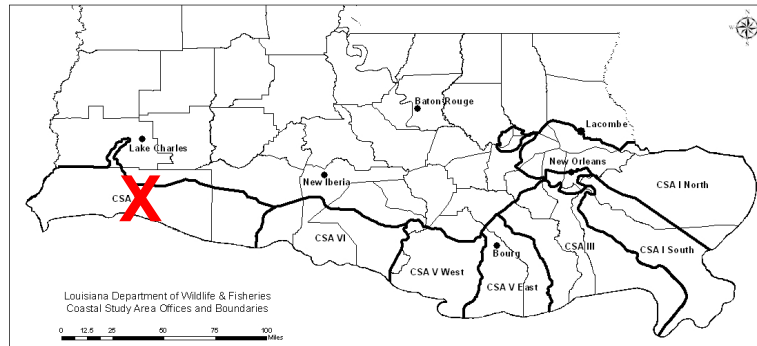


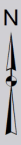
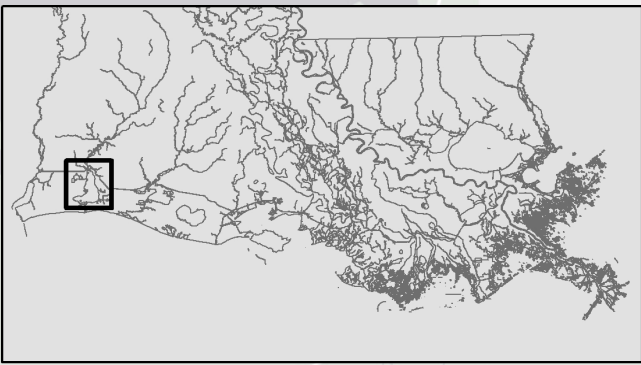


CSA 7 (Calcasieu Lake)

Quick Facts

- Stock passed the 20 year LTA
- The Fall of 2023, new cultch plant coming (East Cove)





Calcasieu Lake

GA-29

GA-30

2015 West Cove Cultch Plant
• SD= 2.0
SK= 2.8

SD= 4.0
SK= 5.2
Northwest Rabbit Island

West Cove Central
• SD= 17.8
SK= 9.4

Northeast Rabbit Island
• SD= 2.0
SK= 7.4

West Rabbit Island ND
• SD= 20.6
SK= 13.8

SD= 0.0
SK= 0.0
West Cove Transplant

Southeast Rabbit Island
• SD= 0.6
SK= 1.8

SD= 0.0
SK= 0.0
Big Washout

Middle of Lake
SD= 0.0
SK= 0.0

Little Washout
• SD= 0.8
SK= 1.6

Cheniere Reef
SD= 108.8
SK= 9.8

SD= 4.4
SK= 0.8

2009 Cultch Plant
• SD= 0.2
SK= 0.8

Lambert's Reef
• SD= 85.4
SK= 1.4

2015 Lambert's Cultch Plant
SD= 85.4
SK= 1.4

Calcasieu Ship Channel

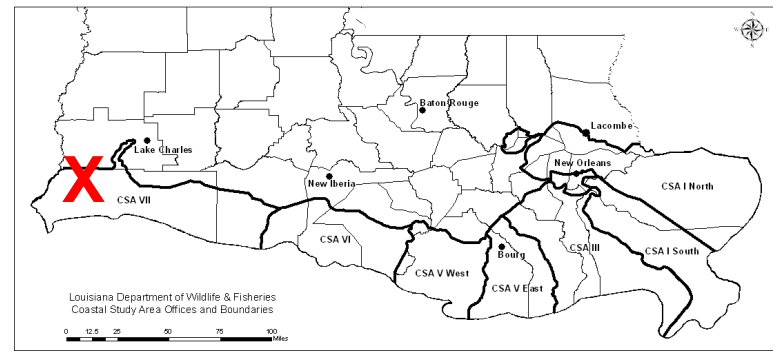
East Fork

Calcasieu Lake

LDWF Cultch Plants
Natural Reef Area

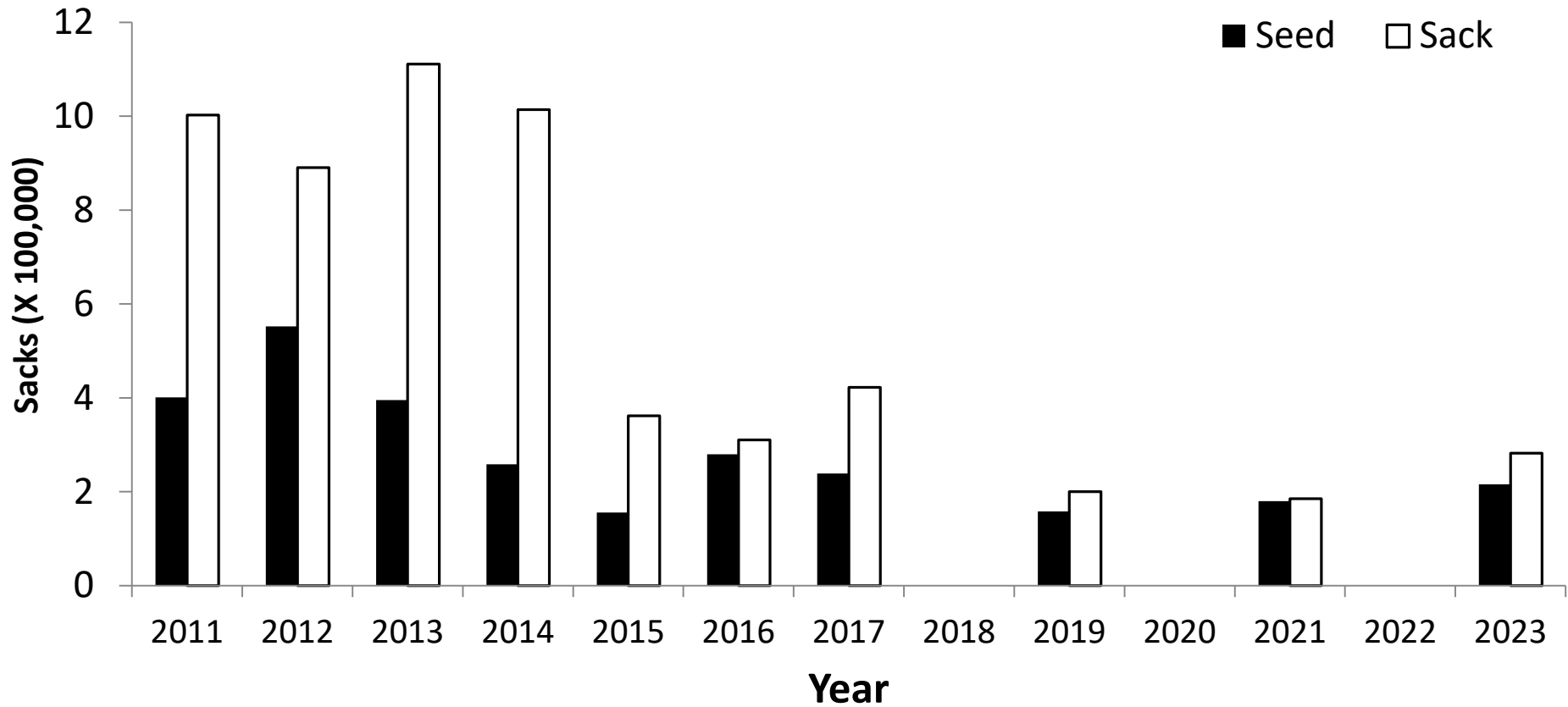


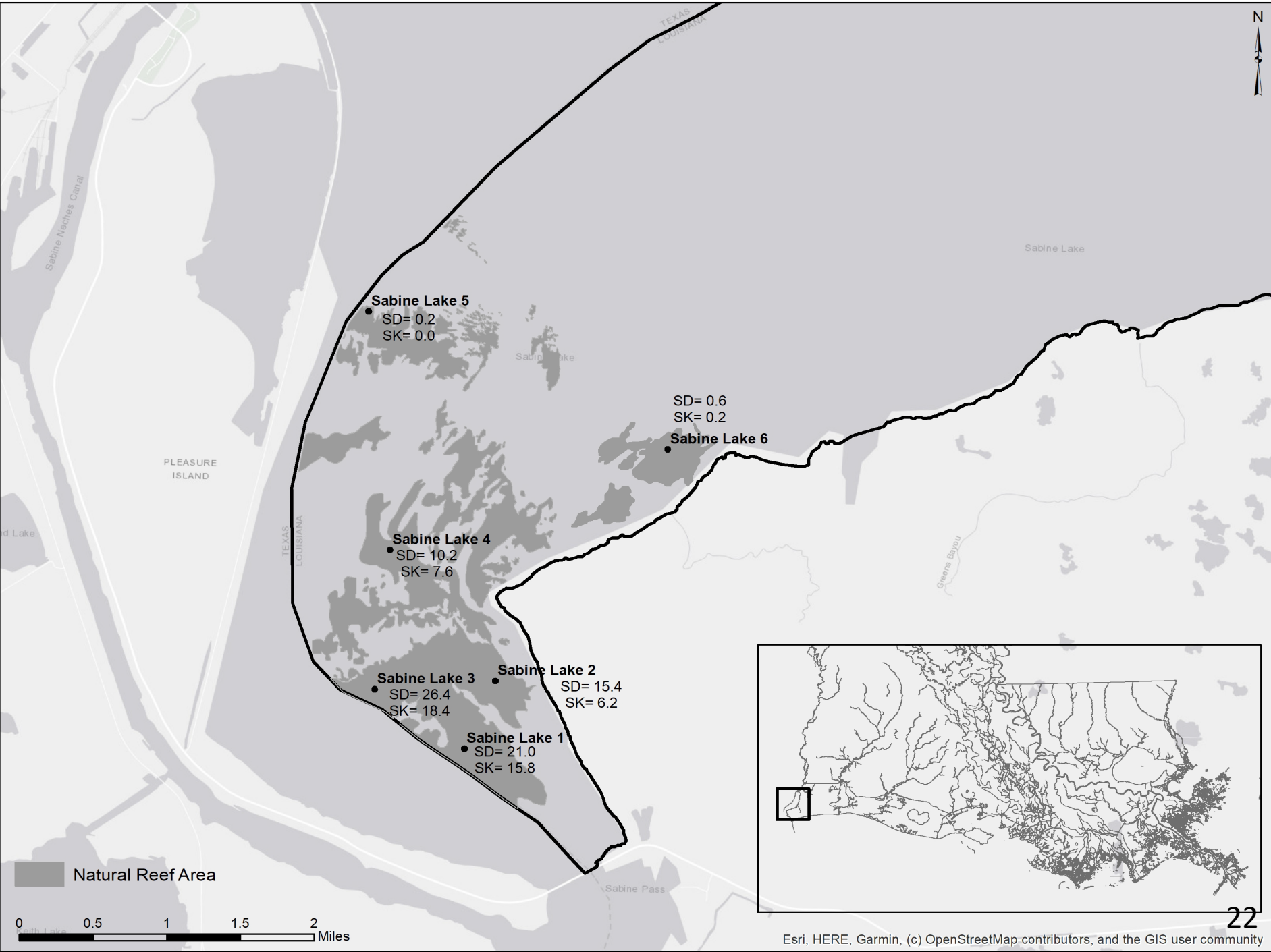
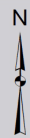
CSA 7 (Sabine)



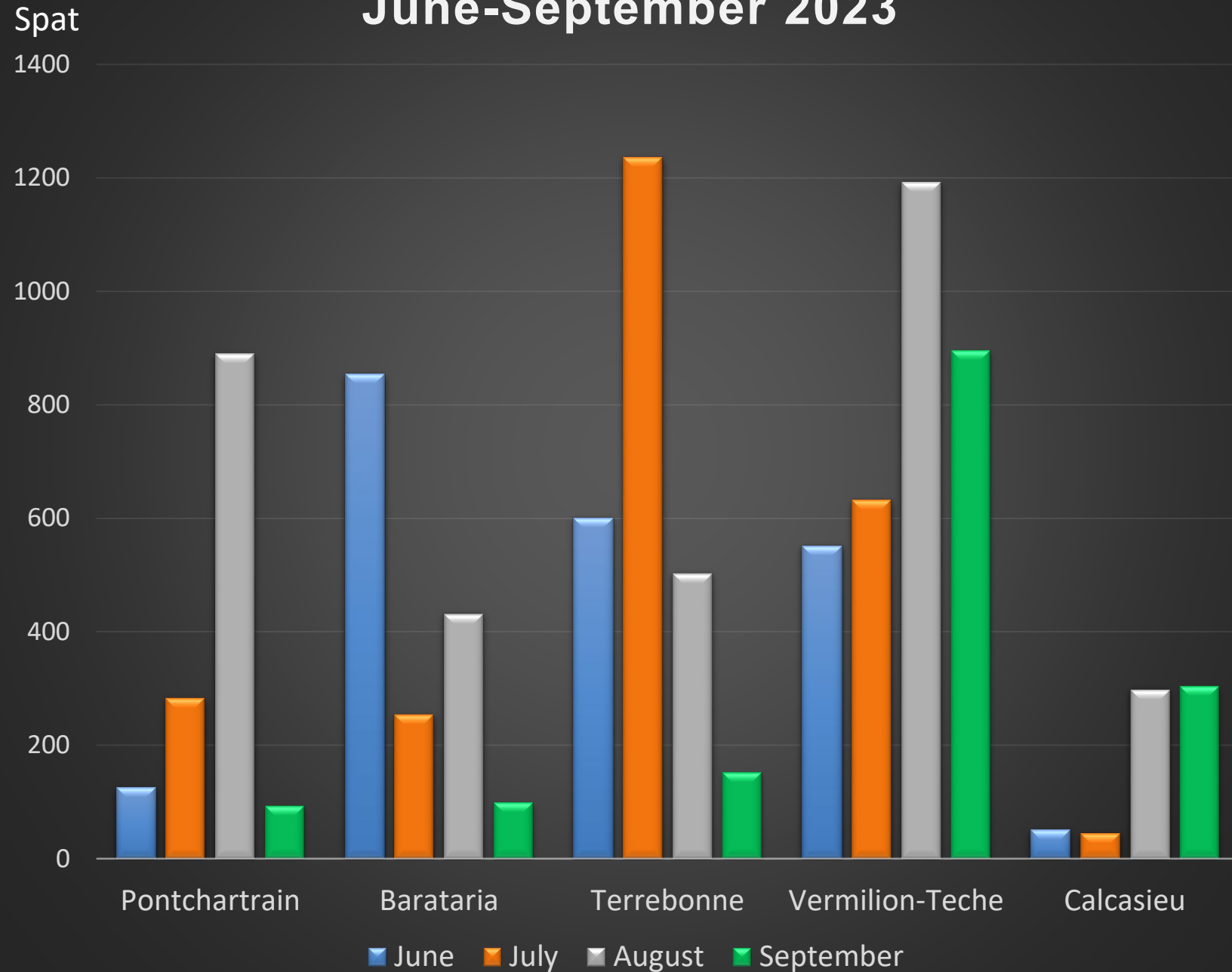
Quick Facts

- Closed to harvest
- 2021-2023 19.8% Seed increase
- 2021-2023 52.4% Market increase





Oyster Recruitment by Basin June-September 2023



2023/2024 LDWF Oyster Season

Area/Public Ground	Season Recommendation	Limit
East of MS River, North of MRGO, South of MRGO Sacking only	Open November 13, 2023 (Closes April 1, 2024)	30 sacks/vessel/day* <i>New cultch plant area closed</i>
Sister Lake, Vermilion /Atchafalaya Bay Bedding	Open October 09, 2023 (One day bedding only)	No more than 15% of non-living material allowed in bedding loads
Sister Lake Sacking	Open October 10, 2023 (Closes October 30, 2023)	30 sacks/vessel/day (take and possession)
Vermilion /Atchafalaya Bay Sacking	Open November 13, 2023 (Closes April 1, 2024)	30 sacks/vessel/day (take and possession)
Lake Tambour, Chien, Felicity, Deep Lake, Little Lake, Barataria Bay, Bay Junop, Lake Mechant, Hackberry Bay	No Season	No Season
Calcasieu Lake ** (West Cove)	Open October 15, 2023	15 sacks/vessel/day (take and possession)
Calcasieu Lake ** (East Side)	Open January 1, 2024	5 sacks/vessel/day (take and possession)

* The possession limit shall be twice the daily limit, East of MS River **Possession for entire Lake no more than 15 sacks/vessel/day



Louisiana Public Oyster Seed Areas 2023 - 2024 Oyster Season

Gulfport



Slidell

MISSISSIPPI
LOUISIANA

MRGO

CSA 1 North:
No Bedding
Sacking Only November 13 - April 1, 2024
30 Sack Limit
2 Day Possession Limit

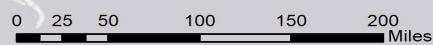
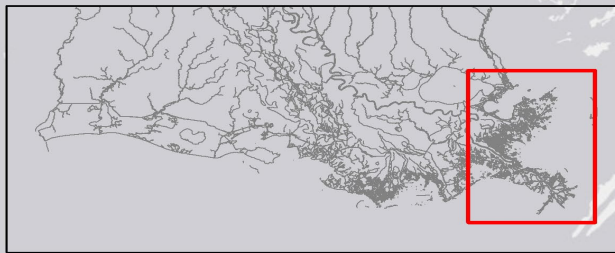
Drum Bay Cultch Plants Closed
All Broodstock Reefs Closed

CSA 1 South:
No Bedding
Sacking Only November 13 - April 1, 2024
30 Sack Limit
2 Day Possession Limit

All Broodstock Reefs Closed

Areas designated as "open" may be closed by the Louisiana Department of Health (LDH) for public health reasons. Consult the LDH Molluscan Shellfish Program for more information

 **Broodstock Reefs & Drum Bay Cultch Plants CLOSED**

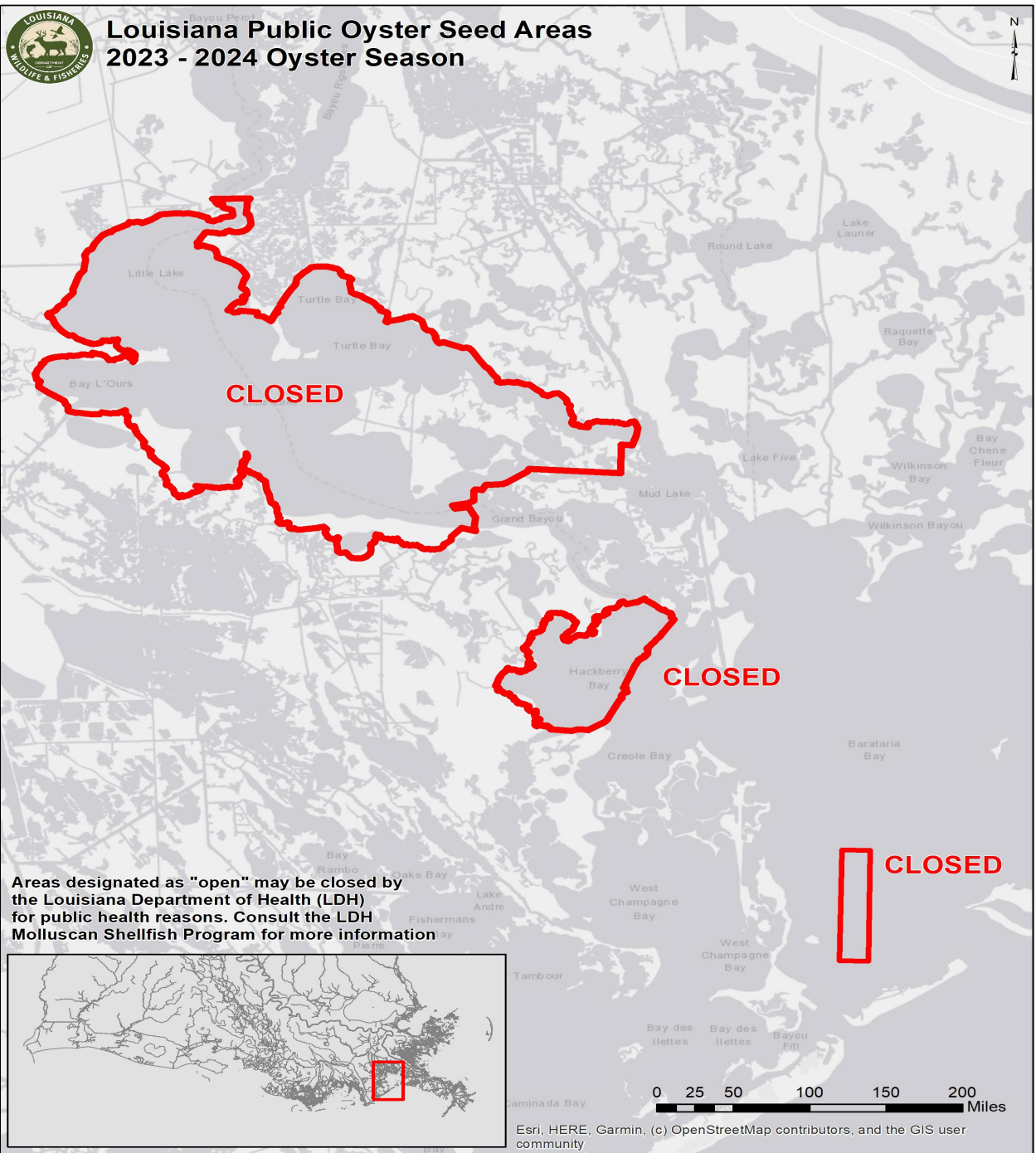


Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

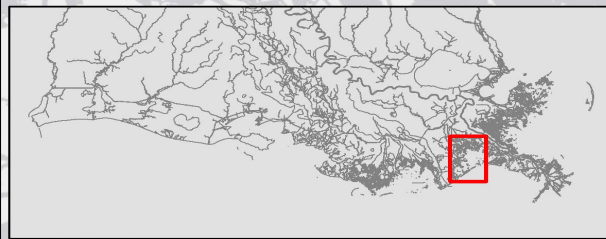




Louisiana Public Oyster Seed Areas 2023 - 2024 Oyster Season



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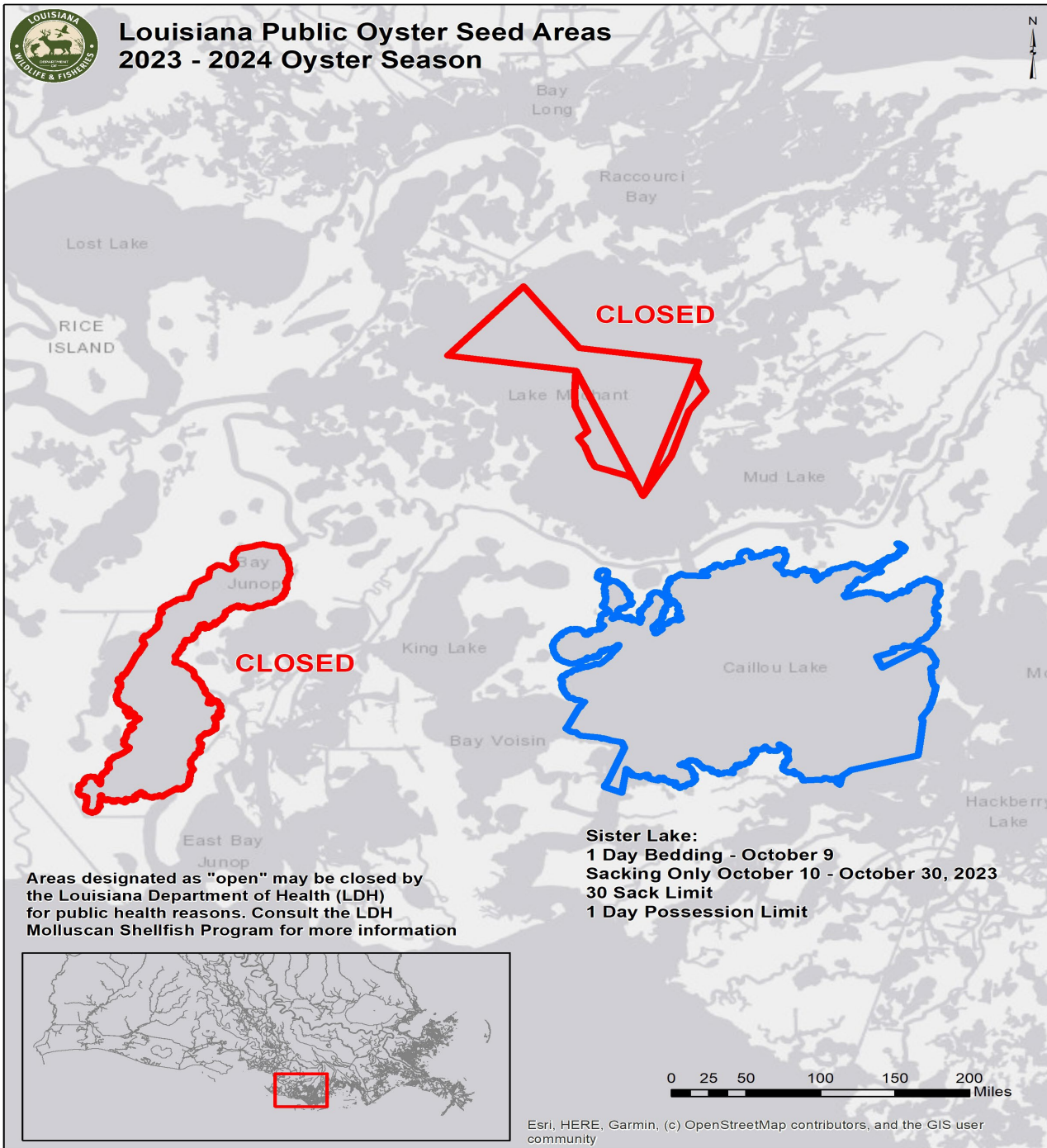


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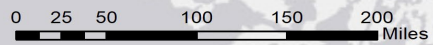
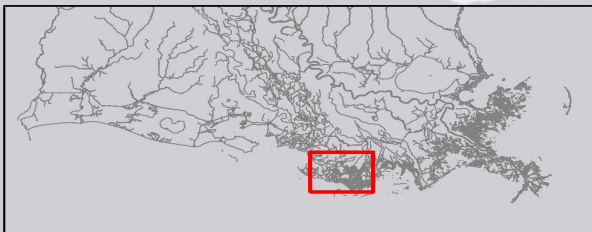


Louisiana Public Oyster Seed Areas 2023 - 2024 Oyster Season



Areas designated as "open" may be closed by the Louisiana Department of Health (LDH) for public health reasons. Consult the LDH Molluscan Shellfish Program for more information

Sister Lake:
1 Day Bedding - October 9
Sacking Only October 10 - October 30, 2023
30 Sack Limit
1 Day Possession Limit

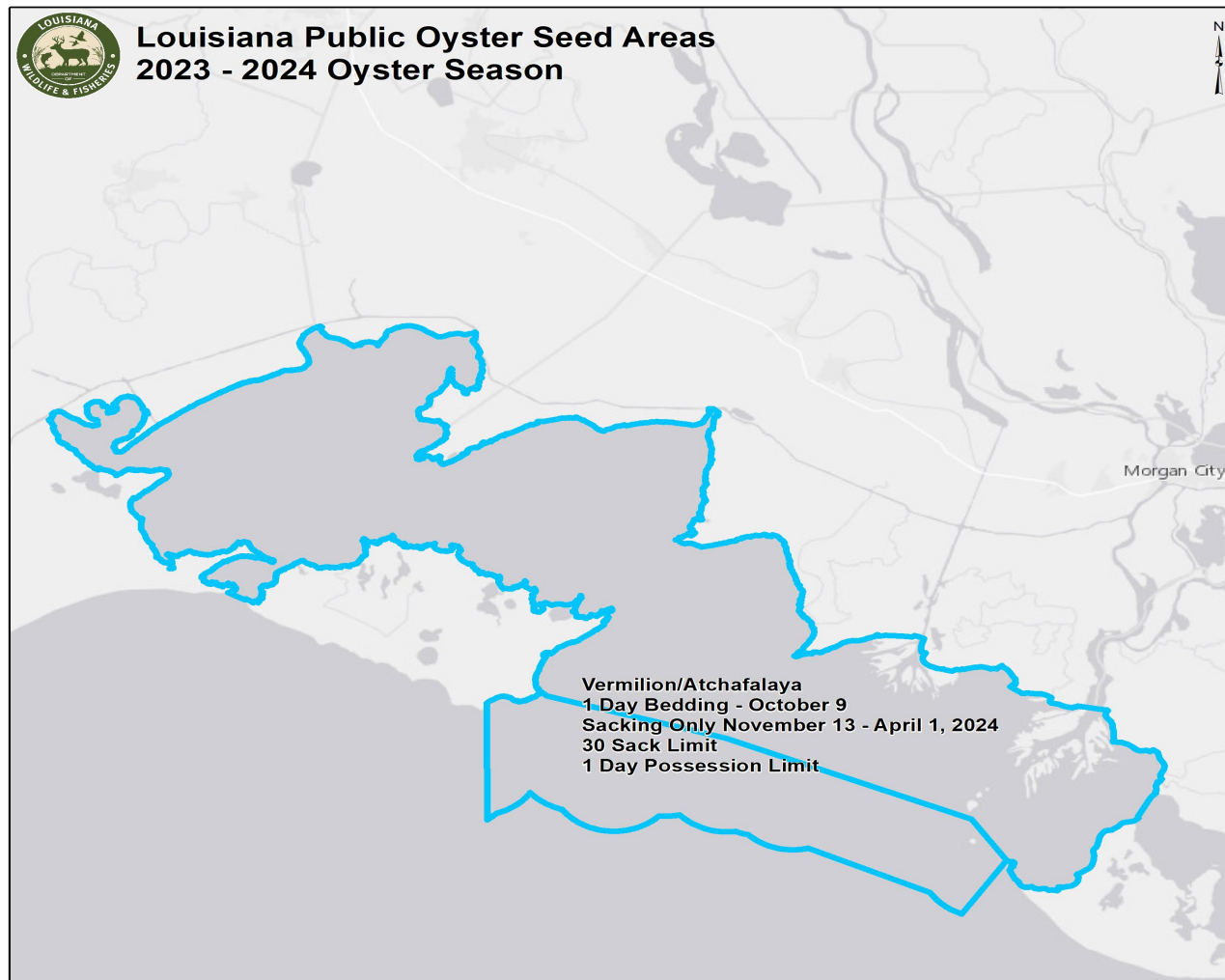


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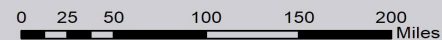


Louisiana Public Oyster Seed Areas 2023 - 2024 Oyster Season



Vermilion/Atchafalaya
1 Day Bedding - October 9
Sacking Only November 13 - April 1, 2024
30 Sack Limit
1 Day Possession Limit

Areas designated as "open" may be closed by the Louisiana Department of Health (LDH) for public health reasons. Consult the LDH Molluscan Shellfish Program for more information

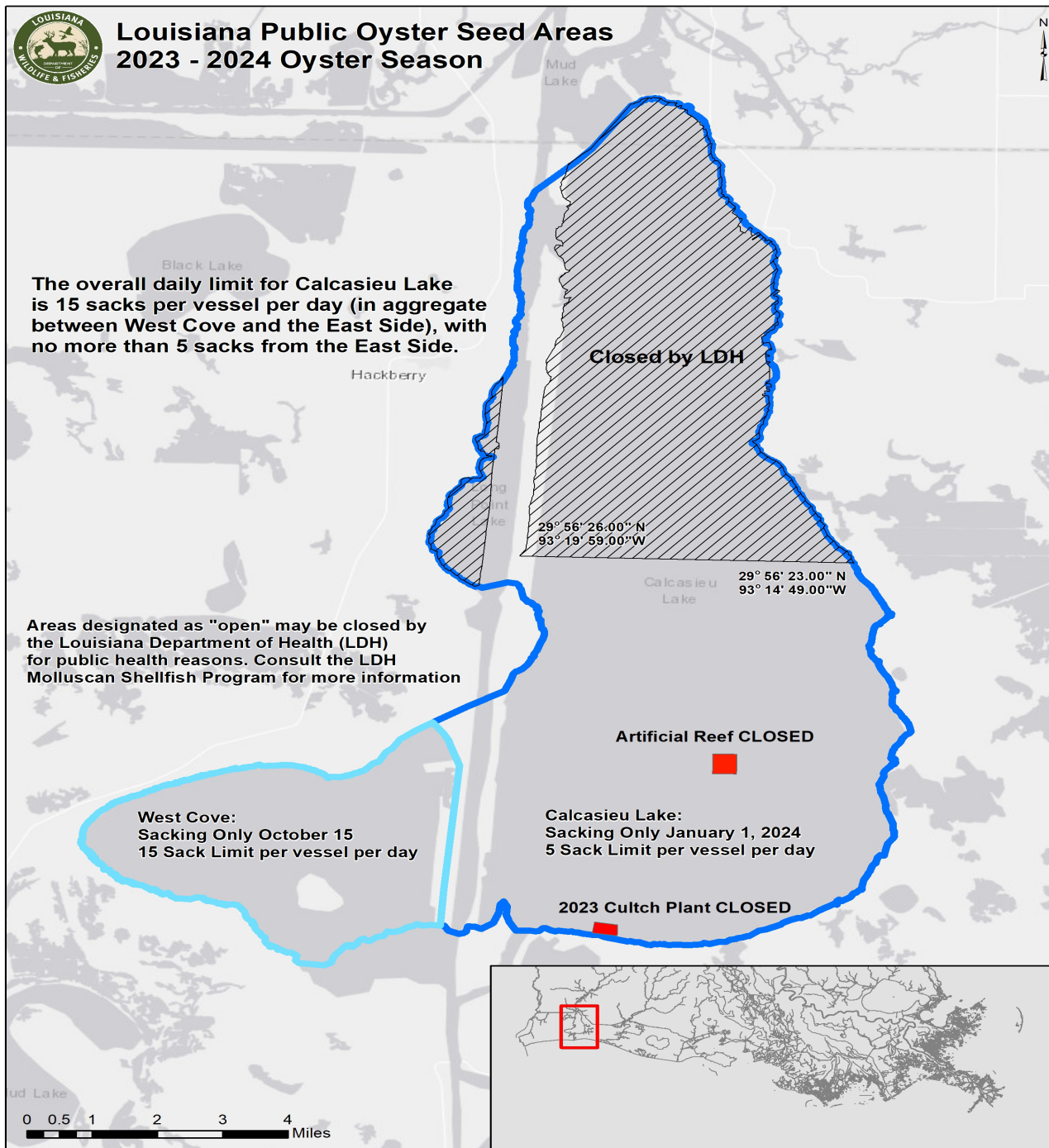


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Louisiana Public Oyster Seed Areas 2023 - 2024 Oyster Season



Oyster Harvest Closure Criteria

Louisiana Oyster Fishery Management Plan (2016)

1. Biological sampling indicates the presence of a recent successful ***spat set*** in an area with a high probability of survival in the absence of fishing
2. Harvest fraction exceeds ***50 percent*** of available oyster resource in an area
3. Harvest fraction exceeds ***15 percent*** of available oyster resource in Calcasieu Lake
4. Harvest exceeds the thresholds established by the ***Shell Budget Model***
5. CPUE during market harvest falls below 30 sacks per day in an area
6. *Enforcement issues*
7. Significant mortality reduces oyster stock size



2023/2024 LDWF Oyster Season Harvest amounts

Area/Public Ground	Shell Budget (sacks)	50% FMP 15% Calcasieu (sacks)
East of MS River, North of MRGO, South of MRGO Sacking only	27,486 14,145	21,285 21,436
Sister Lake, Vermilion /Atchafalaya Bay Bedding	41,091 1,387	166,731 7,199
Sister Lake Sacking	148,828	175,484
Vermilion /Atchafalaya Bay Sacking	2,660	4,530
Lake Tambour, Chien, Felicity, Deep Lake, Little Lake, Barataria Bay, Bay Junop, Lake Mechant, Hackberry Bay	No Season	No Season
Calcasieu Lake ** (West Cove)	67,733	86,802
Calcasieu Lake ** (East Side)	3,260	4,305 31

Additional Oyster Season Regulations

- For seed bedding, **Greater than 15 percent of non-living reef material in bedding loads is prohibited.** All vessels must allow on-board inspection and sampling of seed oyster loads by LDWF biologists and/or Enforcement agents.
- All vessels **seed bedding** on the open public oyster seed grounds shall not have sacks or other containers typically used to hold oysters on board the harvest vessel.
- **Daily sack limit** of oysters per vessel.
(**2 day possession limit** for East of the Mississippi River.)
- **Daily sack limit** for **Calcasieu Lake** shall not exceed **15 sacks** of oysters per vessel per day in aggregate between **West Cove and the East Side**, with no more than **5 sacks** coming from the **East Side** per day.

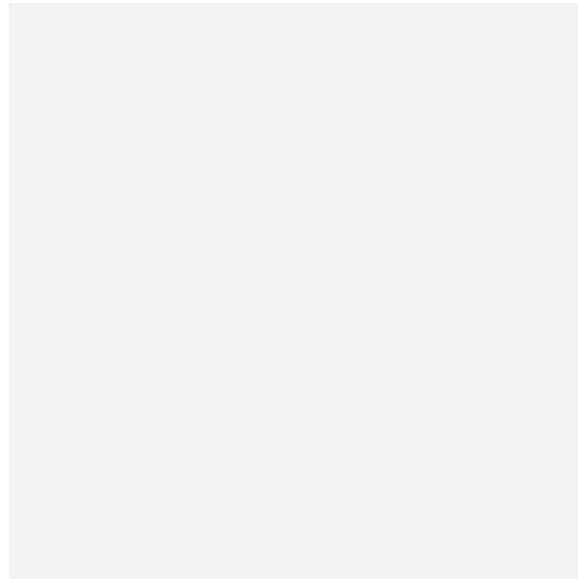


Additional Regulation – Reporting Requirements



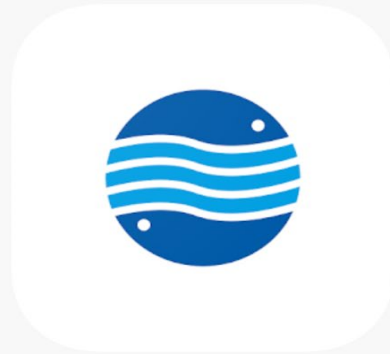
- Report harvest information to LDWF before 9 pm each day fished.
- Information needed: Captain's name, oyster harvester number, vessel number, the total number of sacks harvested that day, total barrels of seed removed, and the LDH Harvest area.
- Electronic Reporting will be done through ereporting application by Shellcatch through your smart phone.
- The registration requires name, commercial fisherman license, and type of license to register. Then the fisherman will add their vessels.
- This reporting does not substitute for trip ticket reporting.
- Call in option will still be available.





E-Reporting Walk-Through

Download from App/ Google Play Store



eReporting



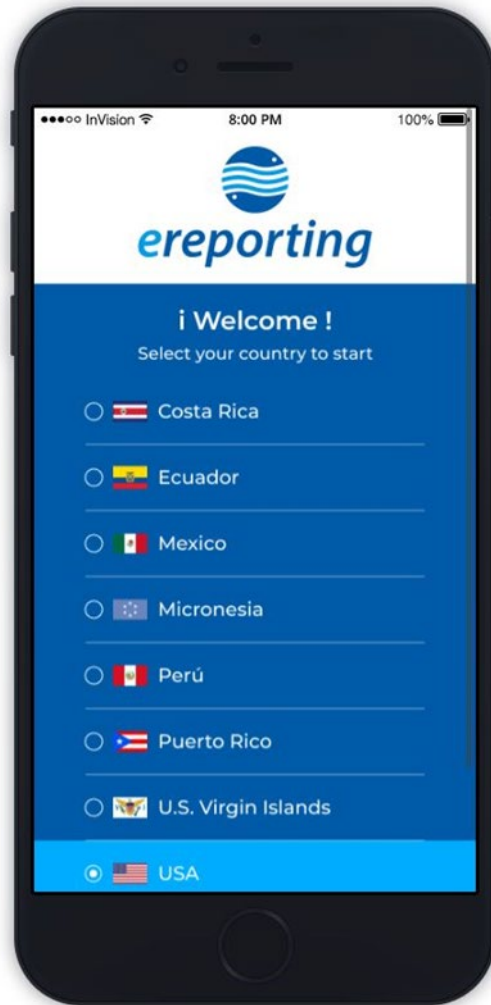
Google Play



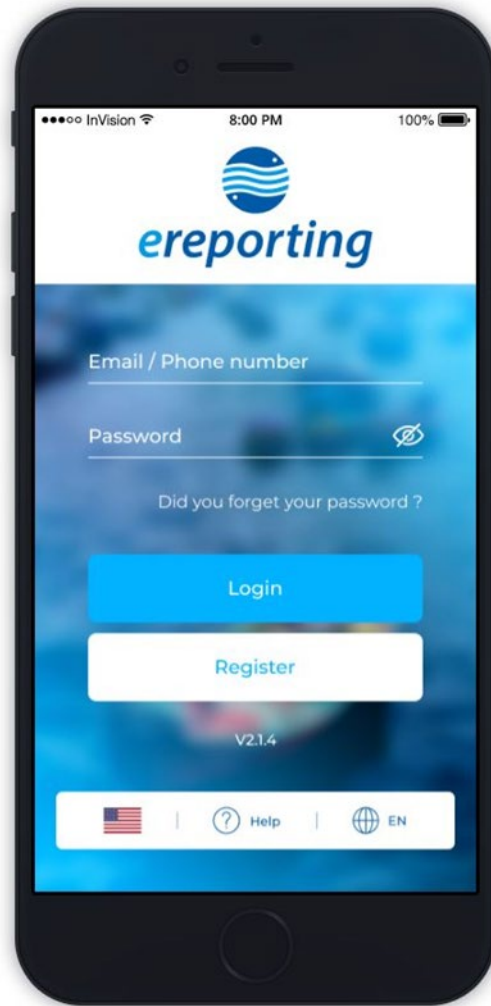
App Store



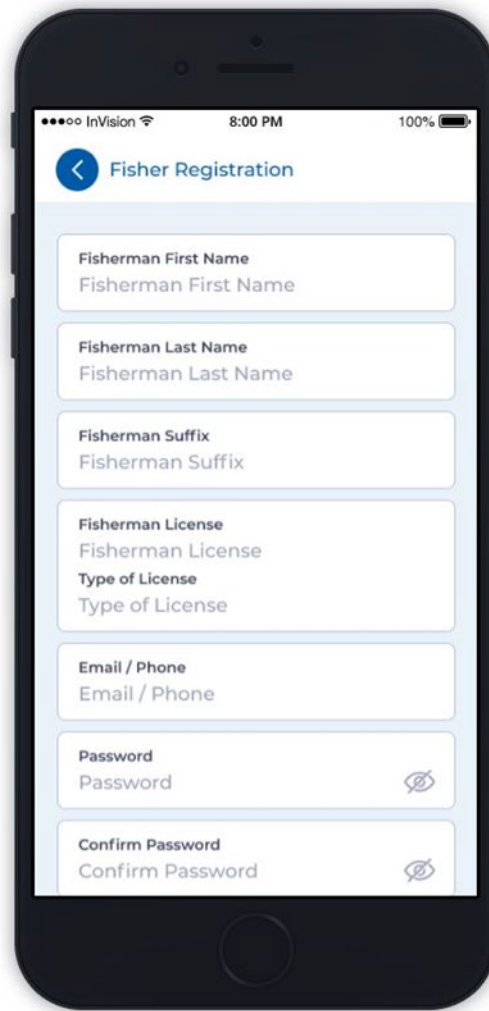
User Signup



User Registration



User Registration



The image shows a smartphone screen displaying a registration form titled "Fisher Registration". The form is divided into several sections, each with a title and a text input field. The sections are: "Fisher Registration" (with a back arrow), "Fisher Registration" (with a back arrow), "Fisherman First Name", "Fisherman Last Name", "Fisherman Suffix", "Fisherman License" (with "Type of License" below it), "Email / Phone", "Password" (with an eye icon for visibility), and "Confirm Password" (with an eye icon for visibility). The status bar at the top shows "InVision", "8:00 PM", and "100%" battery.

Fisher Registration

Fisherman First Name

Fisherman Last Name

Fisherman Suffix

Fisherman License

Type of License

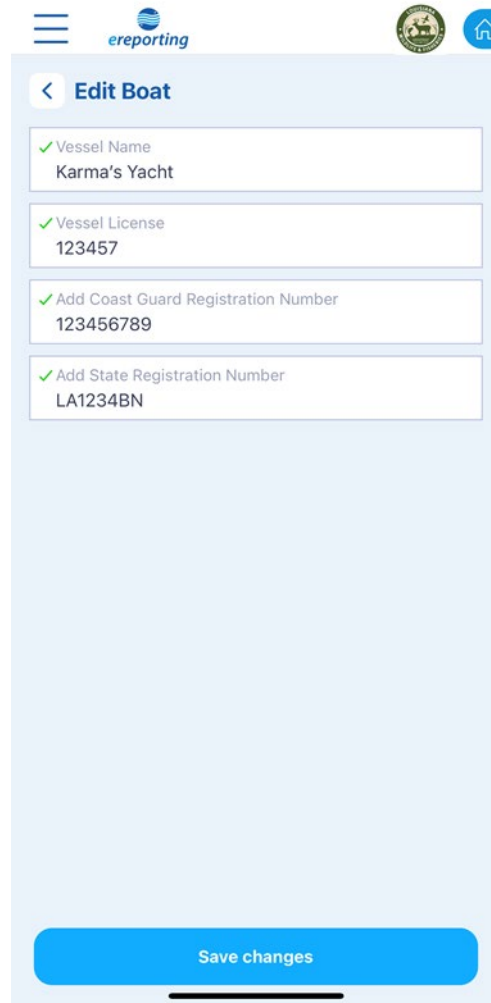
Email / Phone

Password

Confirm Password



Vessel Information



The image shows a mobile application interface for editing vessel information. At the top, there is a navigation bar with a hamburger menu icon, the 'ereporting' logo, a circular seal, and a home icon. Below the navigation bar is a title bar with a back arrow and the text 'Edit Boat'. The main content area contains four input fields, each with a green checkmark icon and a label: 'Vessel Name' with the value 'Karma's Yacht', 'Vessel License' with the value '123457', 'Add Coast Guard Registration Number' with the value '123456789', and 'Add State Registration Number' with the value 'LA1234BN'. At the bottom of the screen is a large blue button labeled 'Save changes'.

ereporting

< Edit Boat

✓ Vessel Name
Karma's Yacht

✓ Vessel License
123457

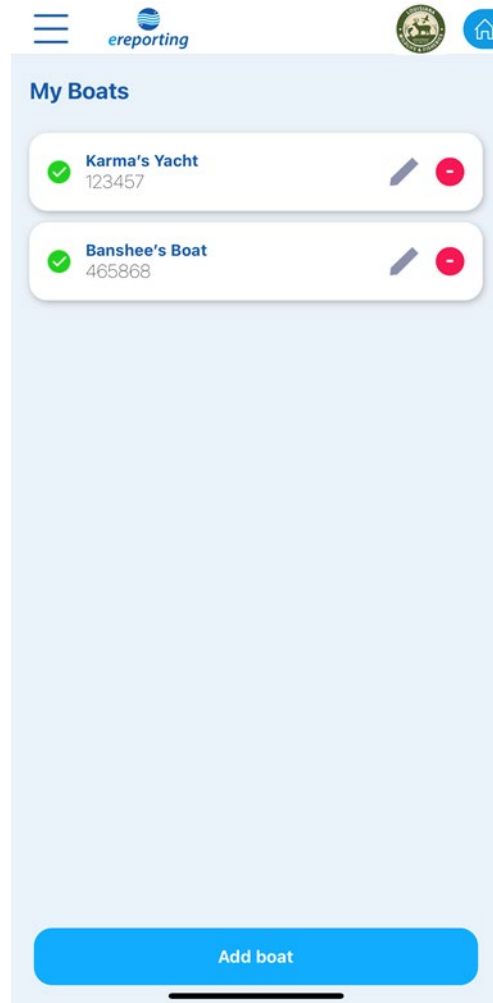
✓ Add Coast Guard Registration Number
123456789

✓ Add State Registration Number
LA1234BN

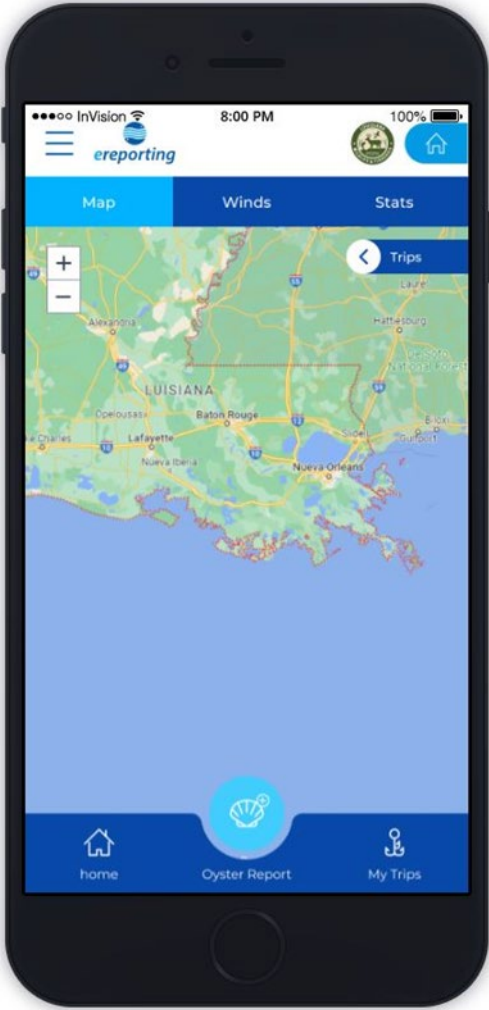
Save changes



Vessel Information



Trip Information



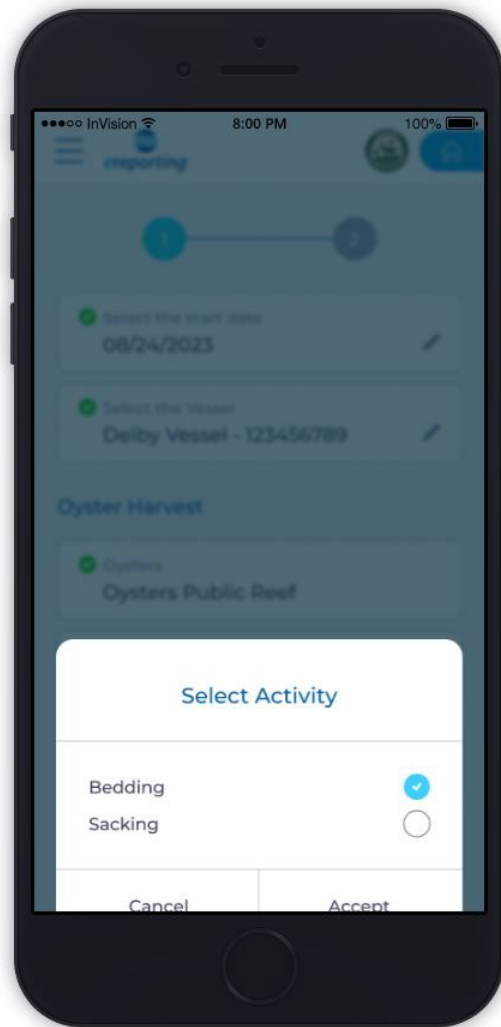
Trip Information

The image shows a smartphone screen with the 'e-reporting' app. At the top, the status bar shows 'InVision', signal strength, '8:00 PM', and '100%' battery. The app header includes a menu icon, the 'e-reporting' logo, a state seal, and a home icon. Below the header is a progress indicator with two steps, '1' and '2', where '1' is highlighted in blue. The main content area consists of several input fields, each with a green checkmark icon on the left and an edit icon on the right:

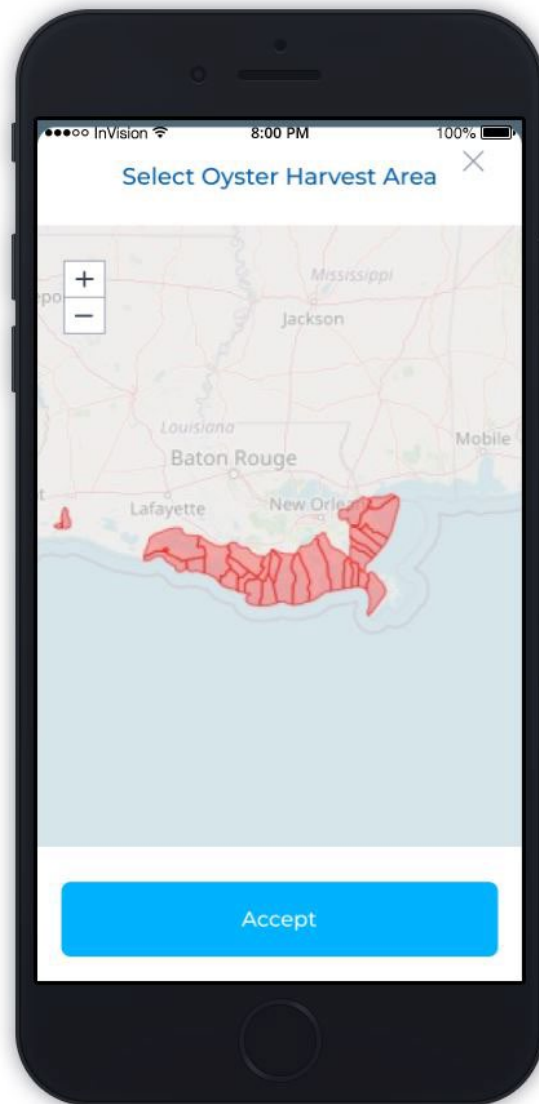
- Select the start date:** 08/24/2023
- Select the Vessel:** Deiby Vessel - 123456789
- Oyster Harvest:**
 - Oysters:** Oysters Public Reef
 - Select Activity:** Select Activity (dropdown menu)
 - Area Harvested:** Area Harvested
 - Quantity:** Quantity



Trip Information



Trip Details



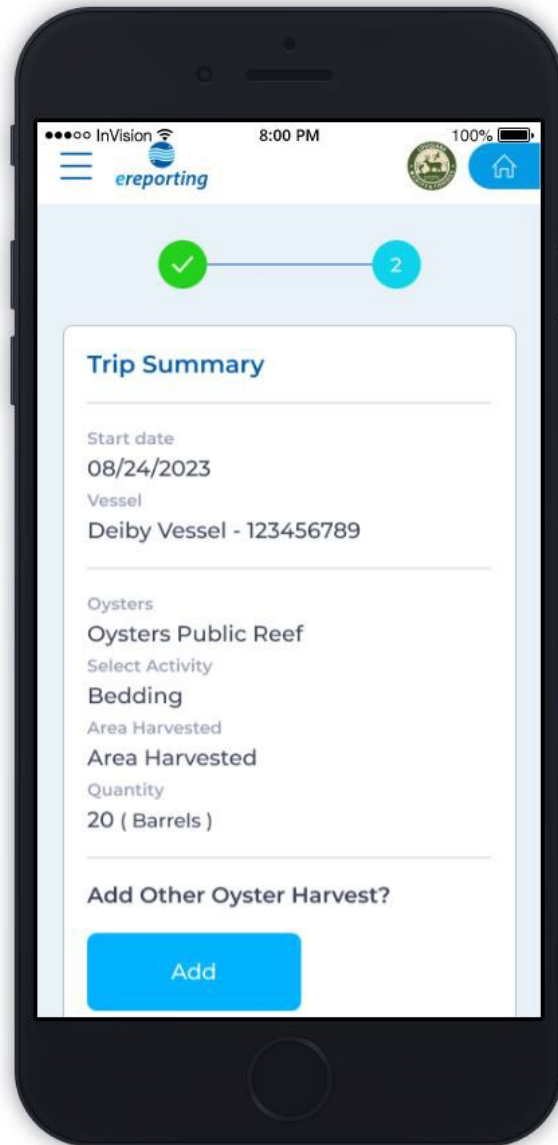
Trip Details

The image shows a smartphone displaying the 'Trip Details' app interface. The status bar at the top shows 'InVision' as the carrier, '8:00 PM' time, and '100%' battery. The app header includes a hamburger menu, the 'ereporting' logo, the Louisiana state seal, and a home button. A progress indicator shows two steps, with step 1 highlighted in blue. The main content area contains several input fields, each with a green checkmark icon on the left and an edit icon on the right:

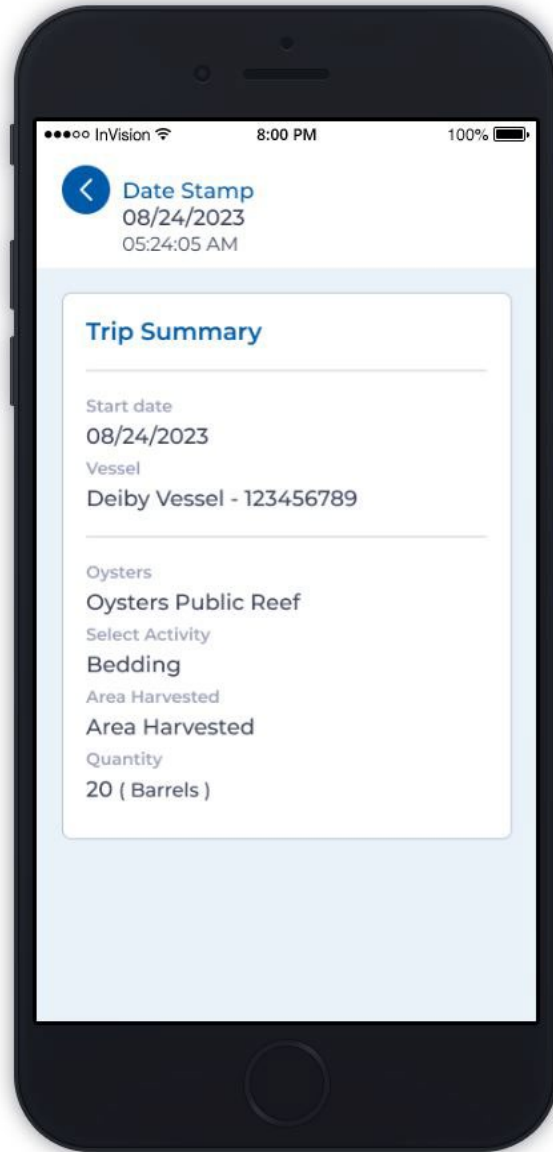
- Select the start date:** 08/24/2023
- Select the Vessel:** Deiby Vessel - 123456789
- Oyster Harvest:**
 - Oysters:** Oysters Public Reef
 - Select Activity:** Bedding (with a dropdown arrow)
 - Area Harvested:** Area Harvested
 - Quantity:** 20 (Barrels)



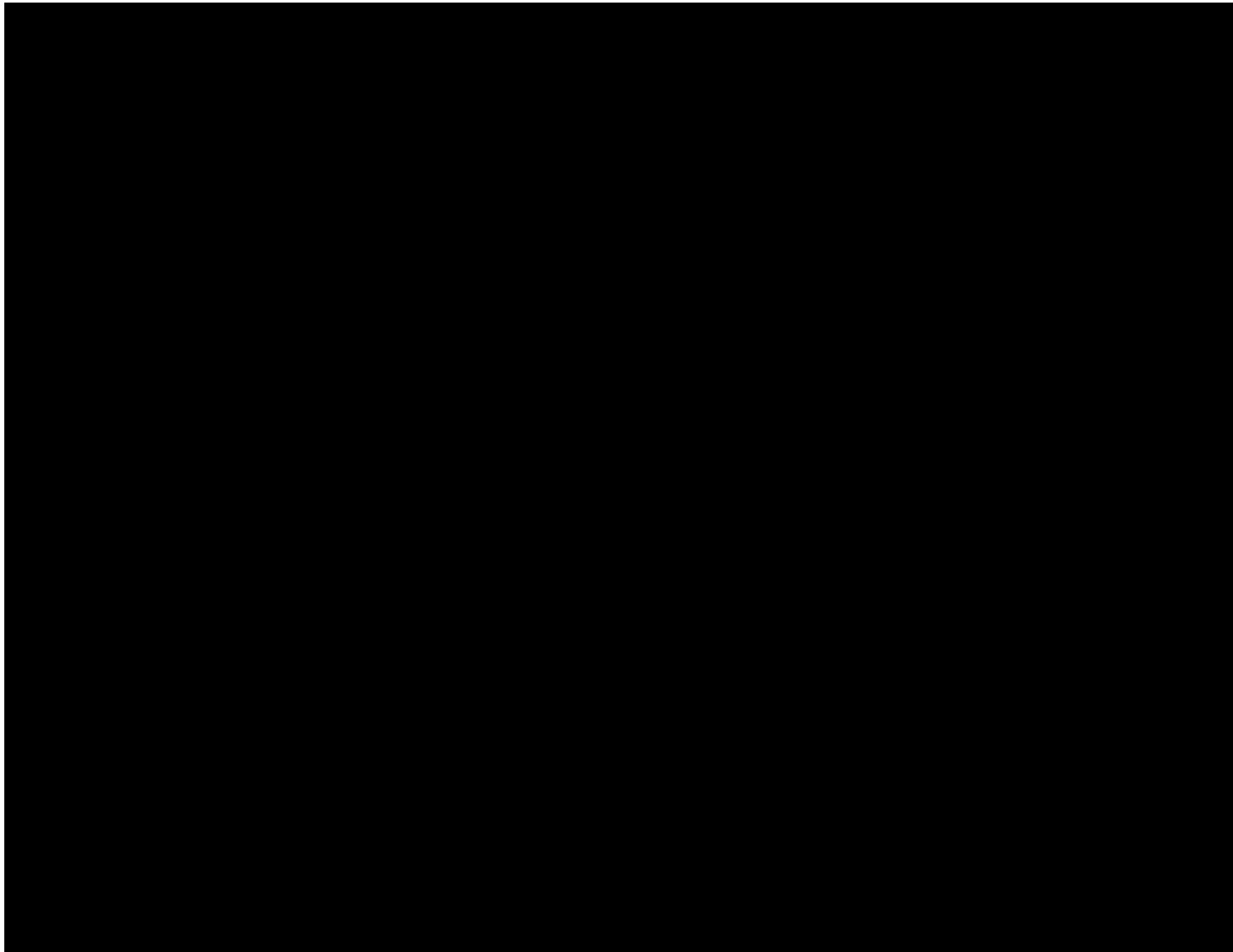
Trip Summary



Trip Summary



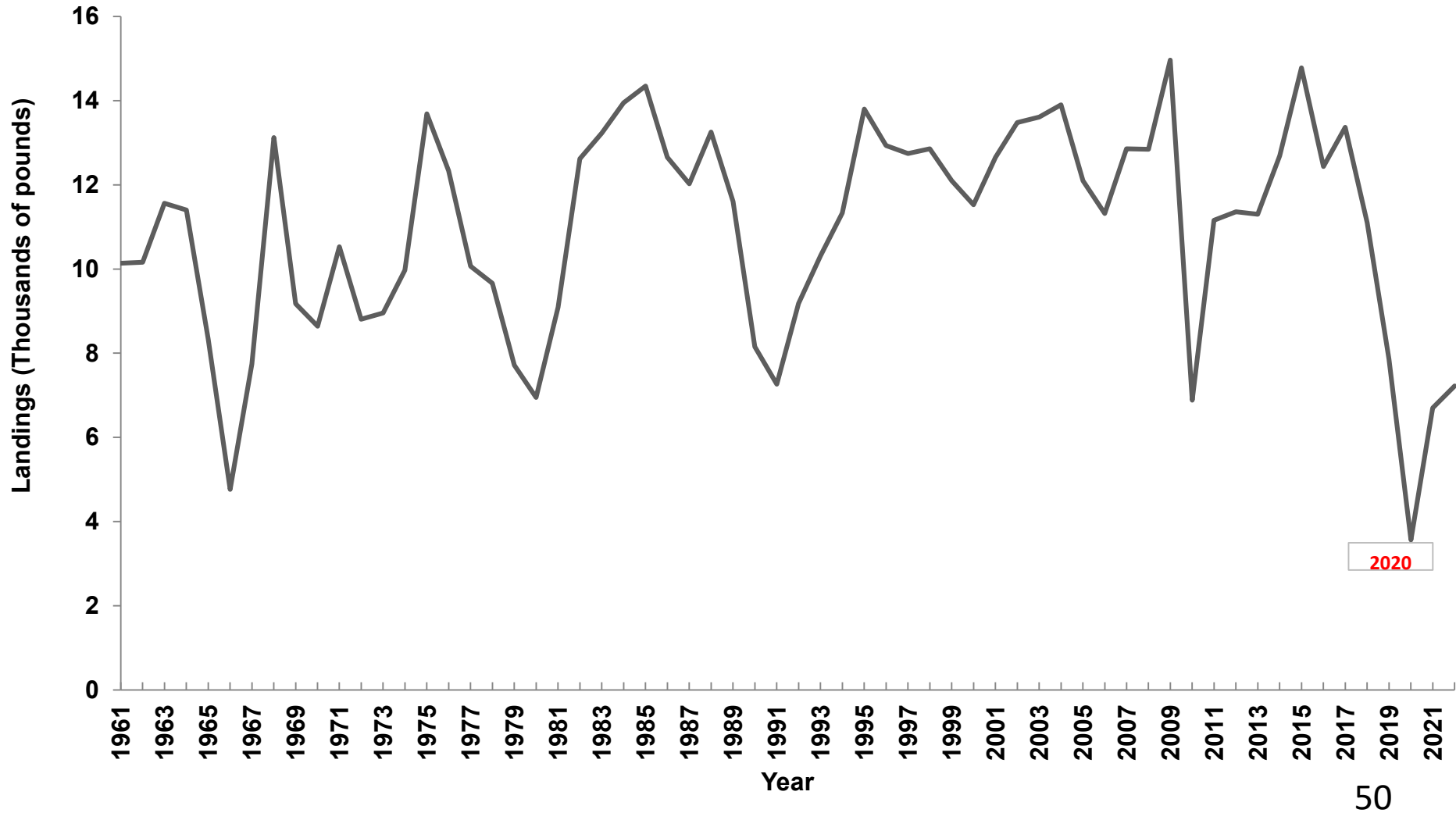
eReporting Walk-Through



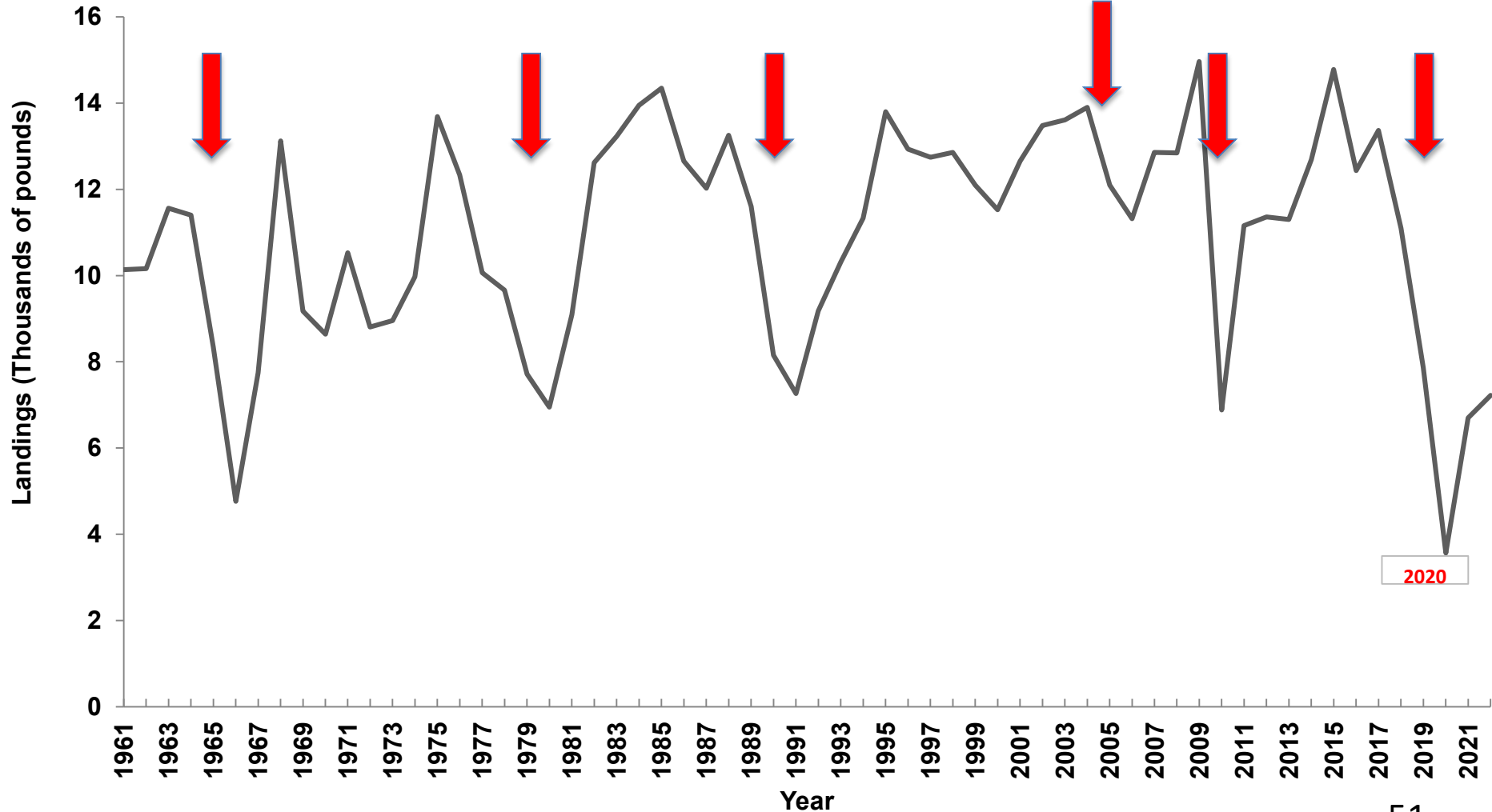


Louisiana Historical Oyster Data

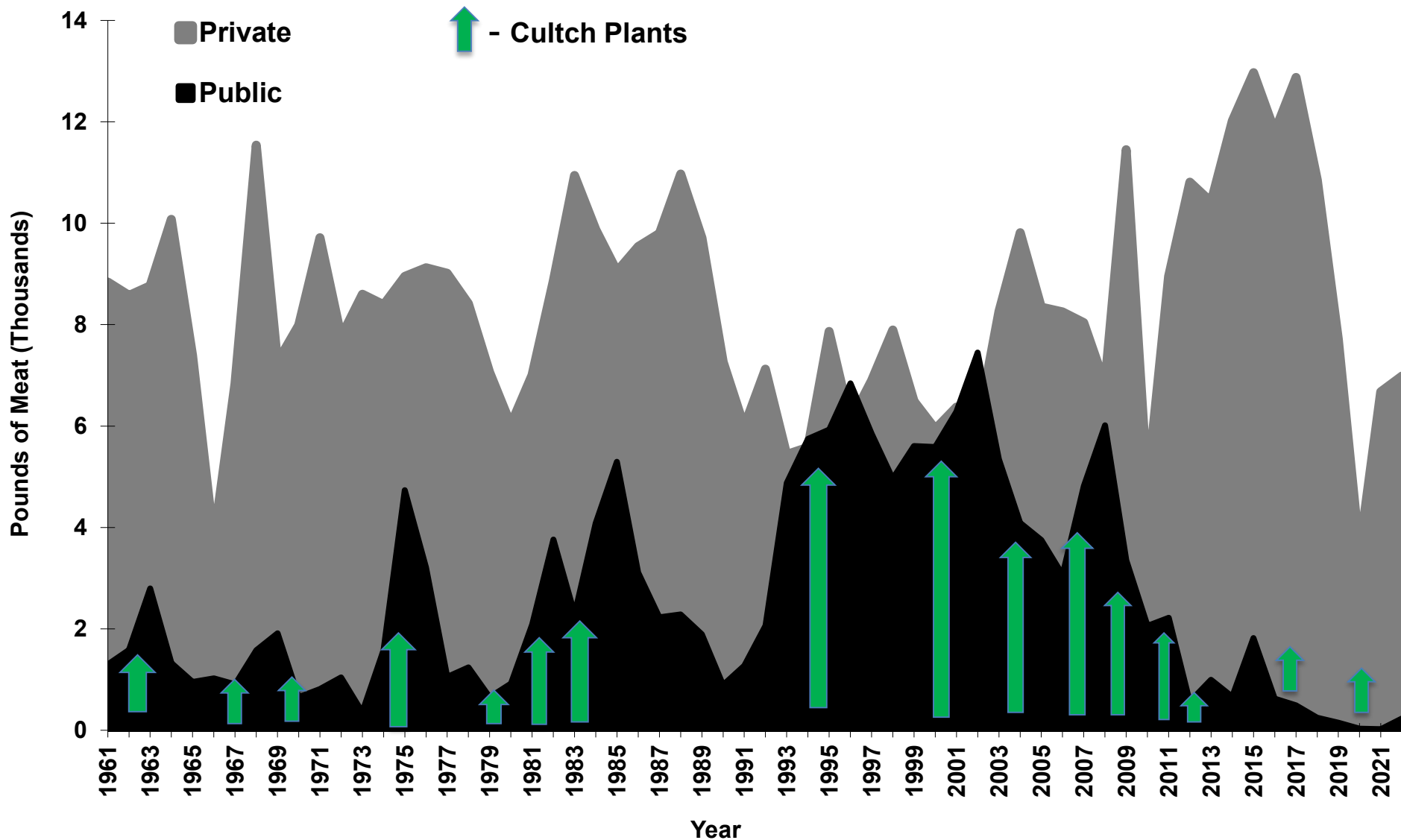
Historical Louisiana Commercial Oyster Landings



Negative Impacts

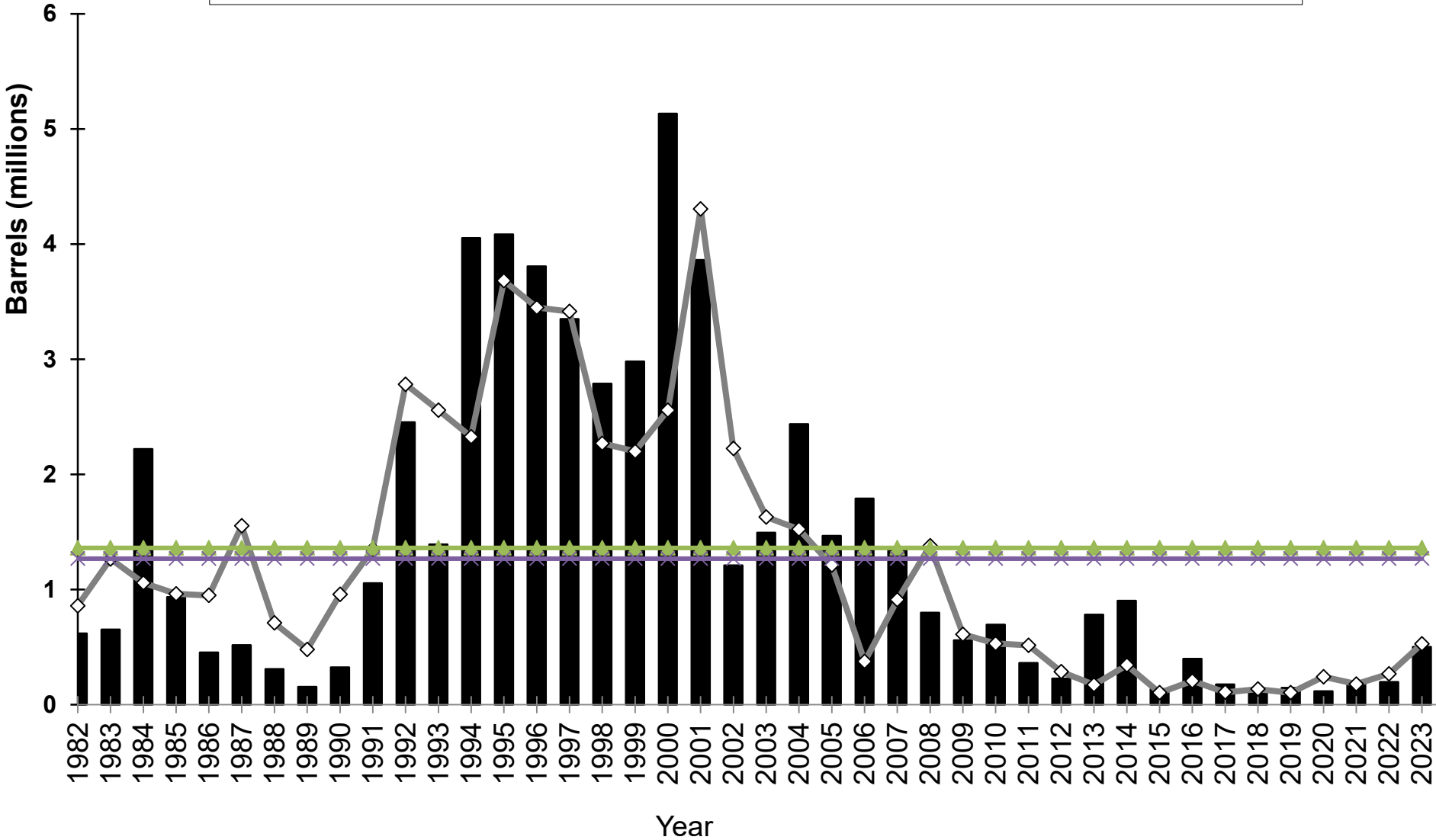


Oyster Commercial Landings: Public vs. Private



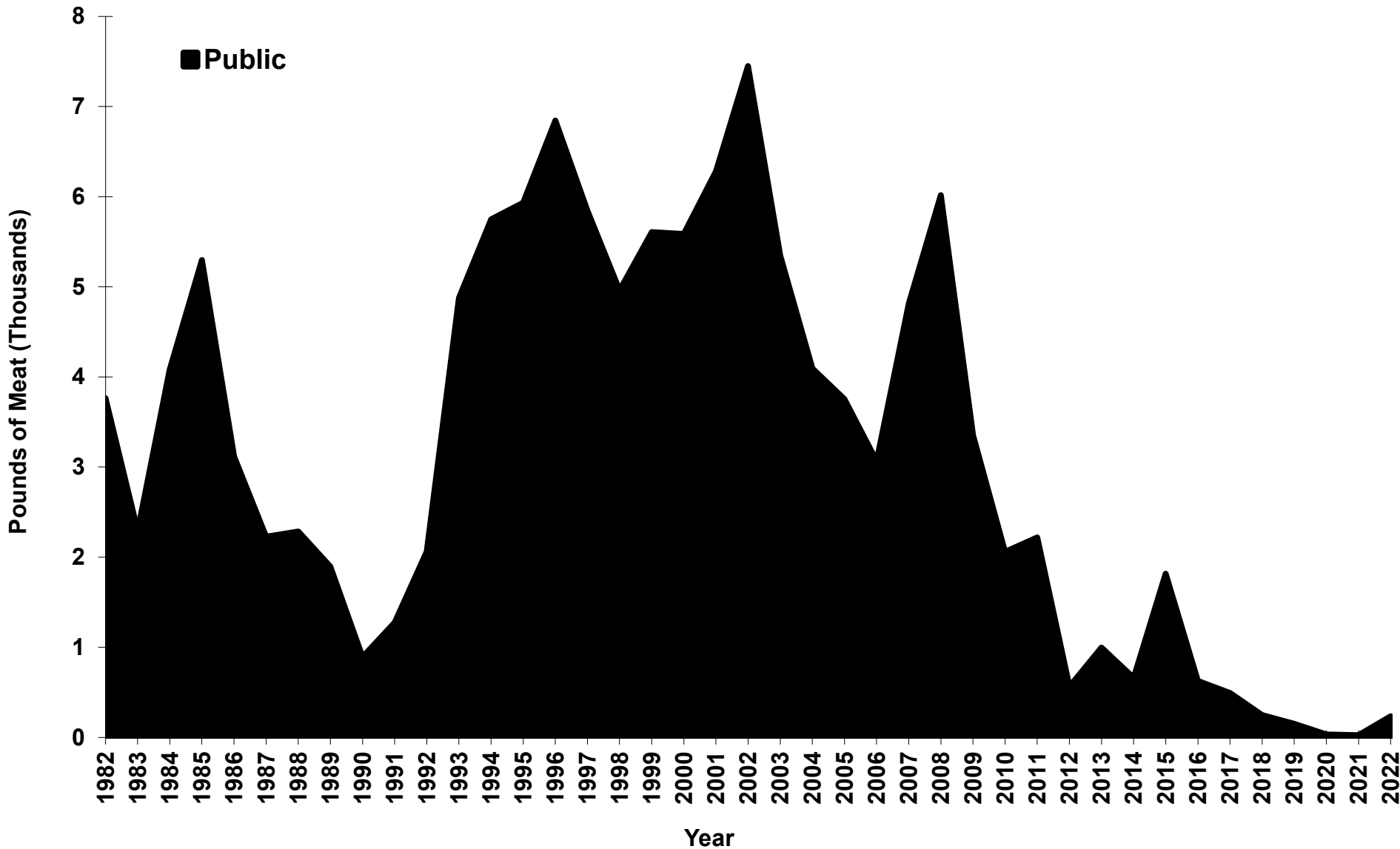
Note: Long-term average (2001 to 2020) for private landings is 9 million pounds. LTA for public landings is 2.7 million pounds.

Public Seed Grounds Stock Assessment Results: Seed vs. Sack



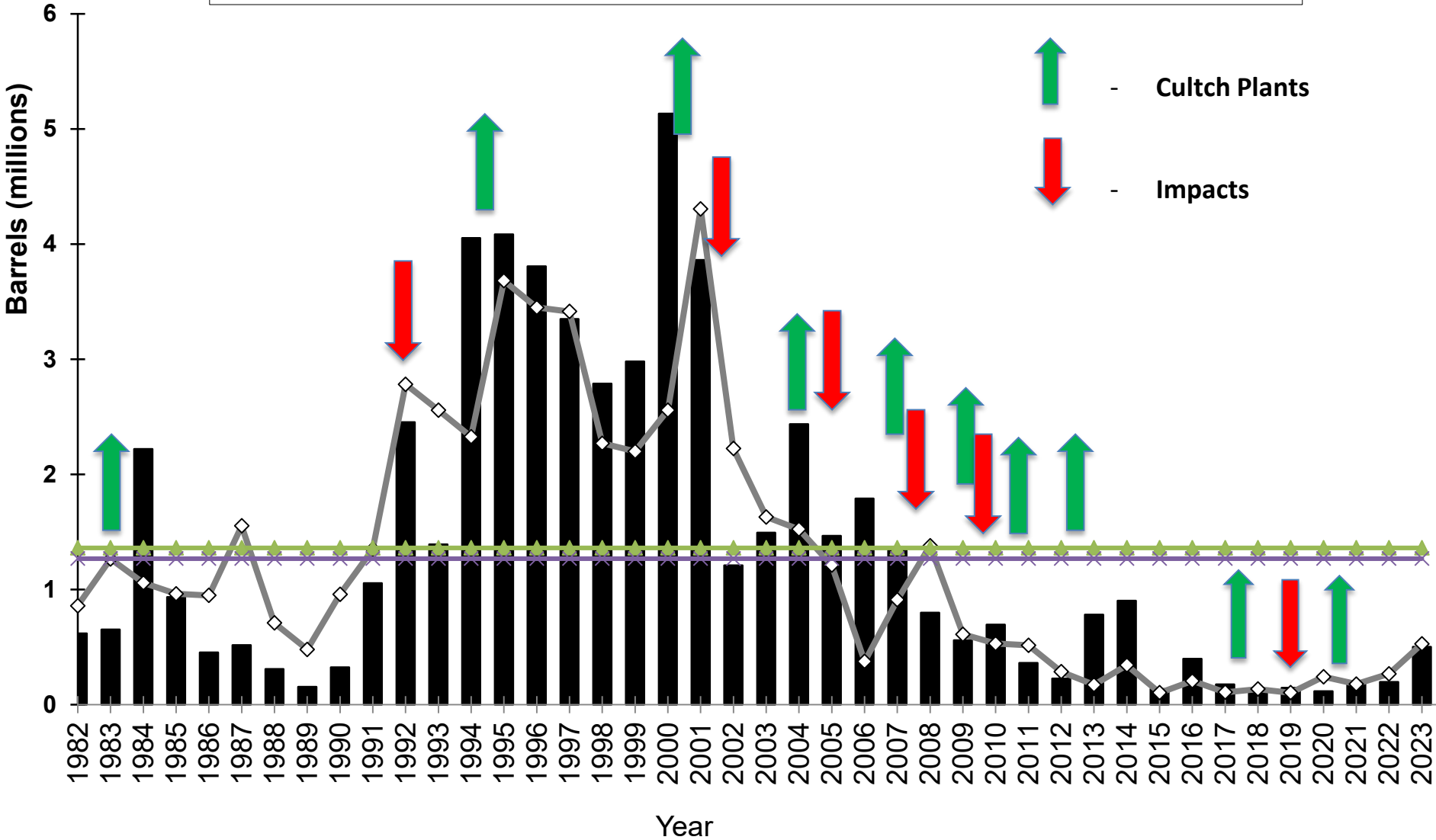
NOTE: 2000-2004 includes CSA I data revision. **Excludes** Sabine Lake

Oyster Commercial Landings for Public Grounds



Note: Long-term average (2001 to 2020) for private landings is 9 million pounds. LTA for public landings is 2.7 million pounds.

Public Seed Grounds Stock Assessment Influences: Seed vs. Sack



NOTE: 2000-2004 includes CSA I data revision. **Excludes** Sabine Lake

QUESTIONS?



Robert Caballero
LDWF Oyster Program
504-286-4054
rcaballero@wlf.la.gov

