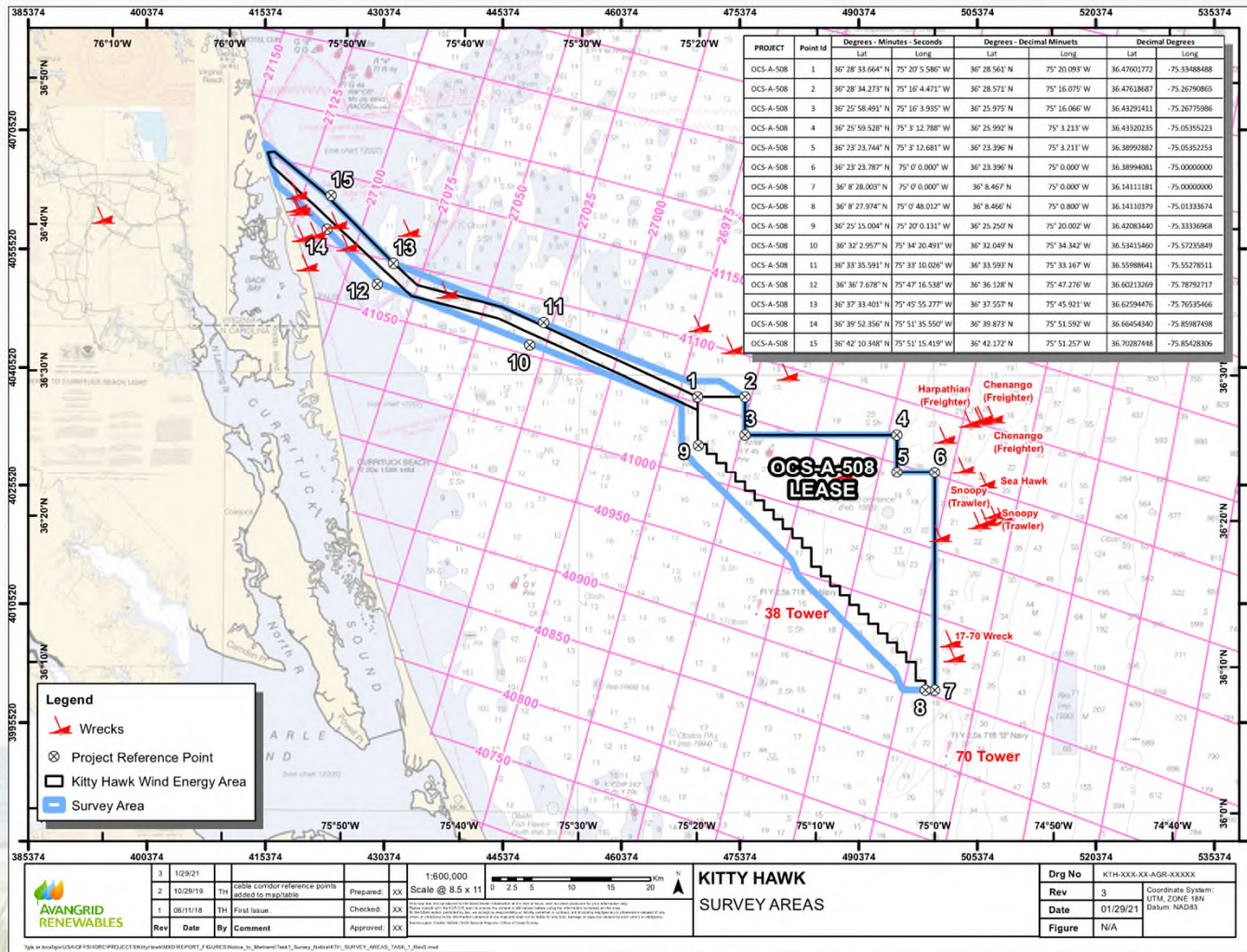


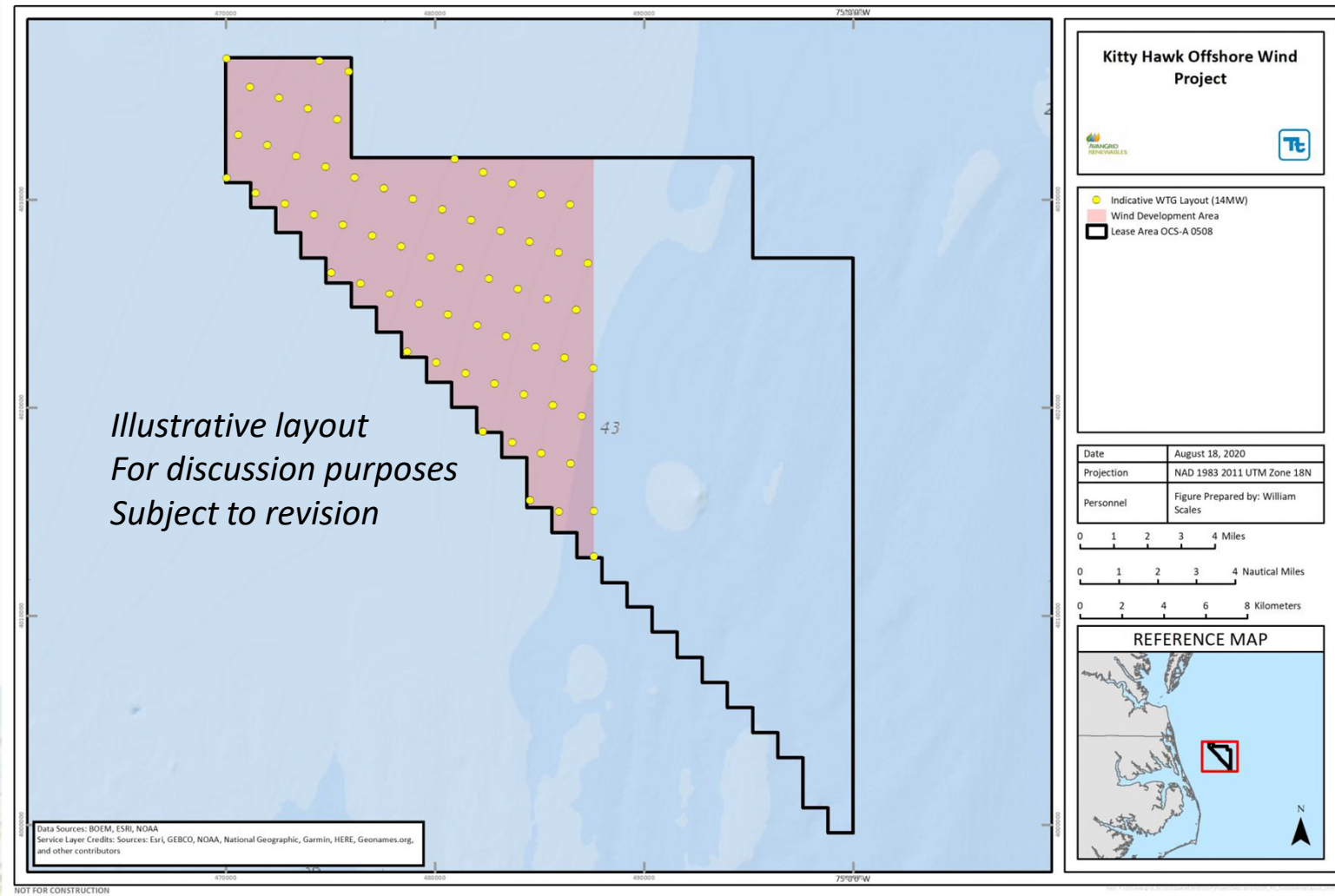


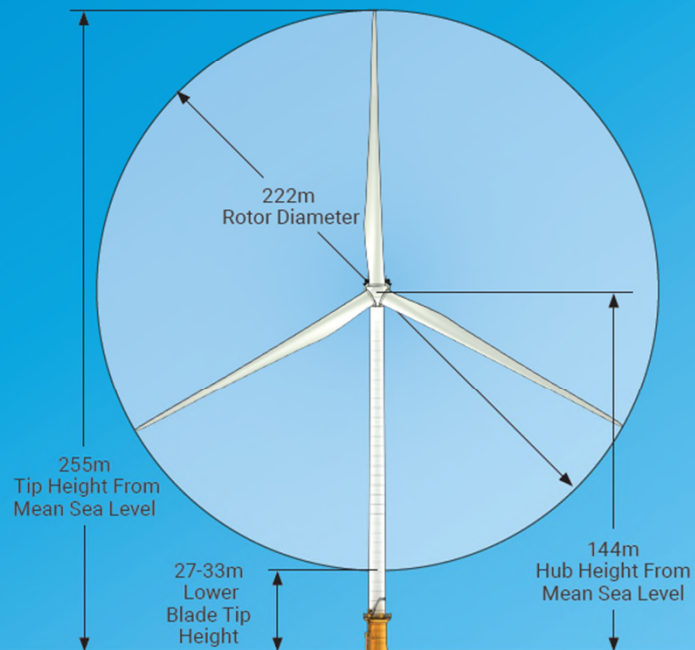
**Fisheries Evaluation
SAFMC Habitat & Ecosystem Advisory Panel**

April 16, 2021

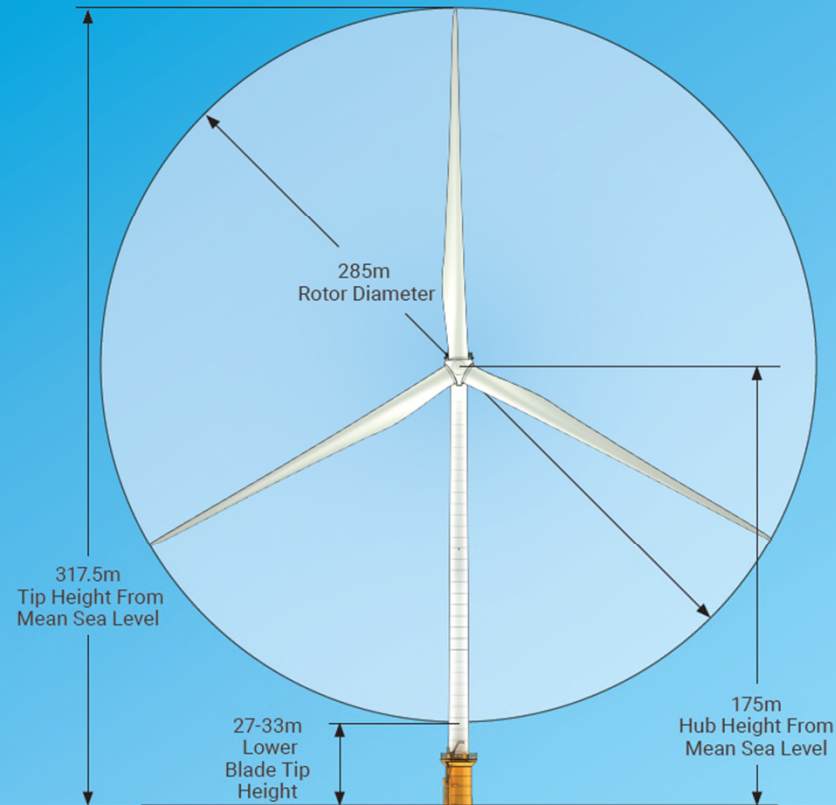


DRAFT Layouts- 14 MW WTGs (60 Turbines)





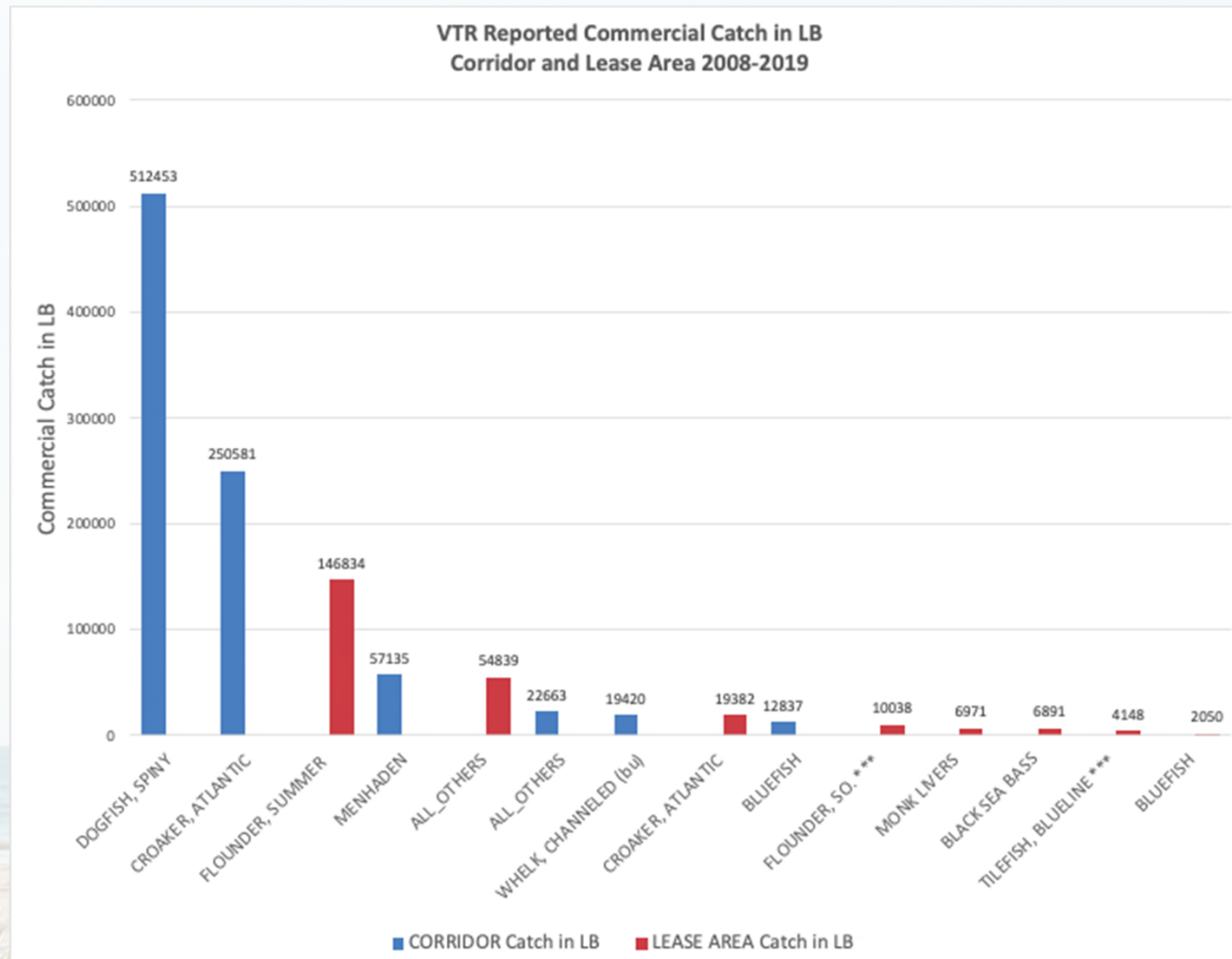
14MW Wind Turbine Generator

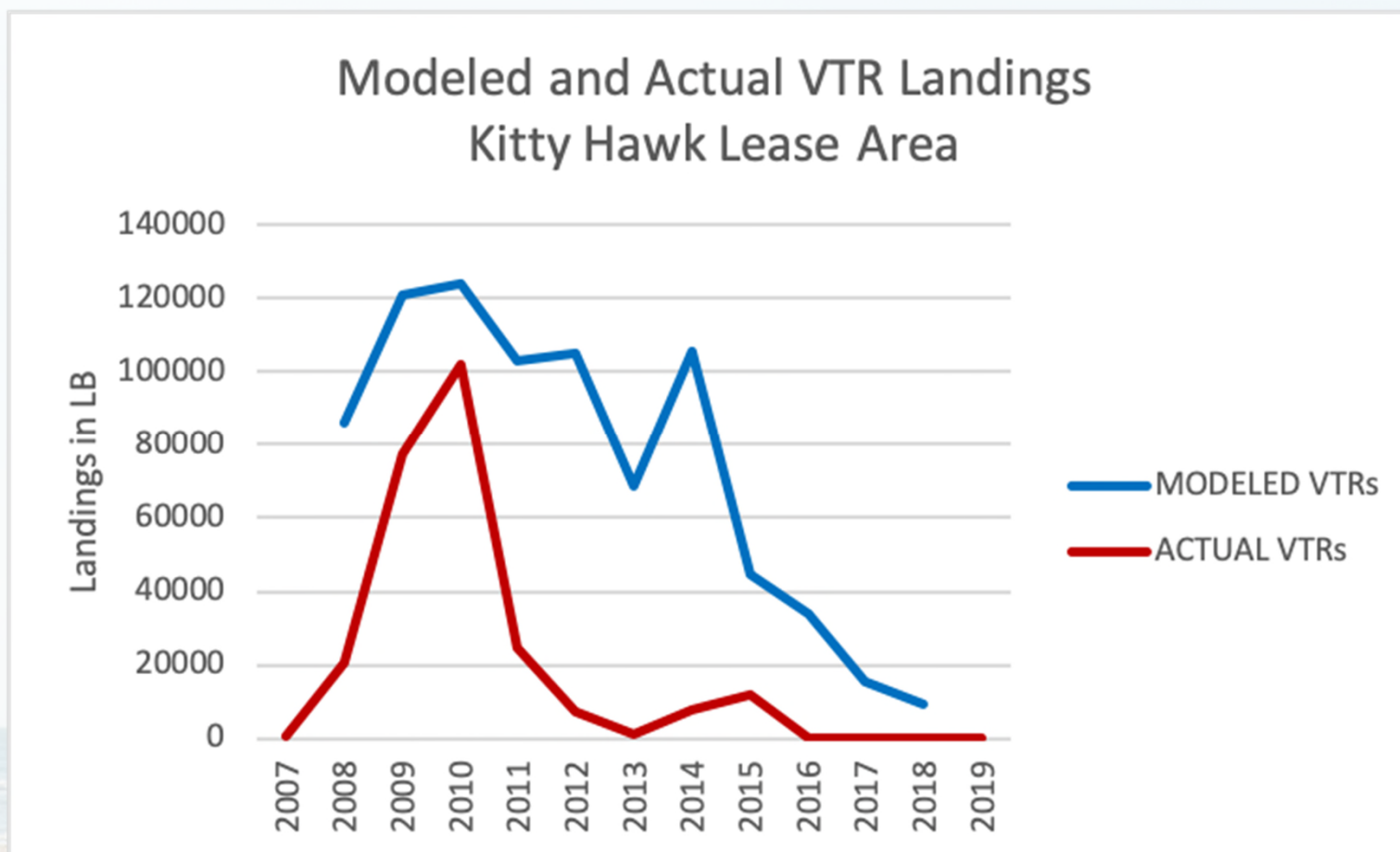


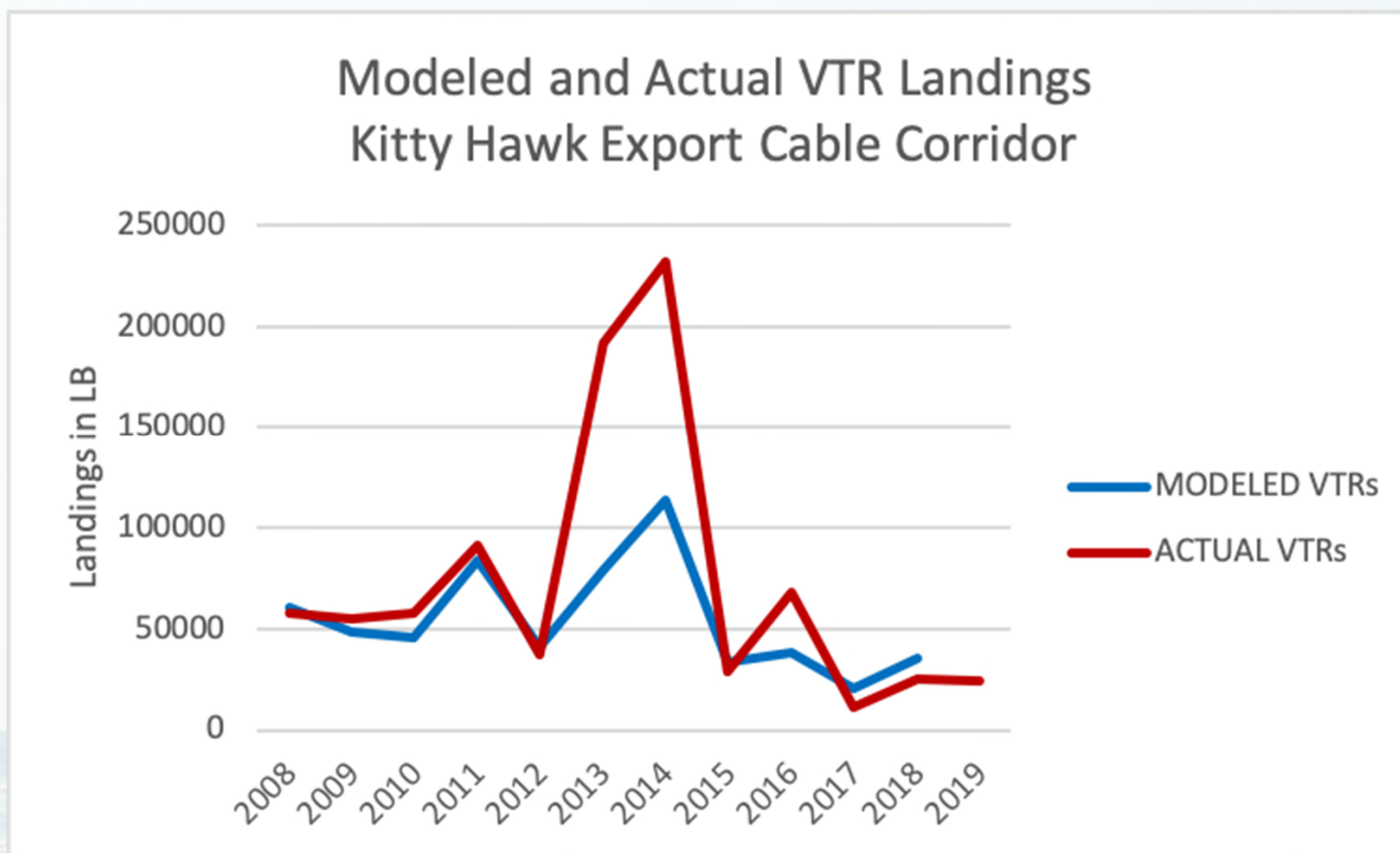
20MW Wind Turbine Generator

Wind Development Area (Lease OCS-A 0508)	Key Project Components
Water depths (Lease Area)	Up to 38.5 m (126 ft)
Lease Area Size	49,536 ha (122,406 ac)
Wind Development Area	19,814 ha (48,962 ac)
Approximate Capacity (delivery into grid)	800 MW
WTG Capacity	Up to 20 MW
Number of turbines	Up to 60 (with 2 alternates); spacing and layout under development, based on met data, engineering, and stakeholder input on site-specific conditions
Minimum Clearance Distance (MSL to Lower Blade Tip)	27 to 33 m (89 to 108 ft)
Foundation type	Monopiles; 3- or 4-Legged Jacket Pile; 3- or 4-Legged Jacket on Suction Caisson
Number of Electrical Service Platforms	1
Length of offshore export cable	Up to 111 km (60 nm) – two collocated cables within corridor
Inter-array cable voltage	66 kV
Export cable voltage	275 kV
Length of onshore export cable	9.2 km (5.7 mi)
Onshore substation	Corporate Landing in Virginia Beach, Virginia

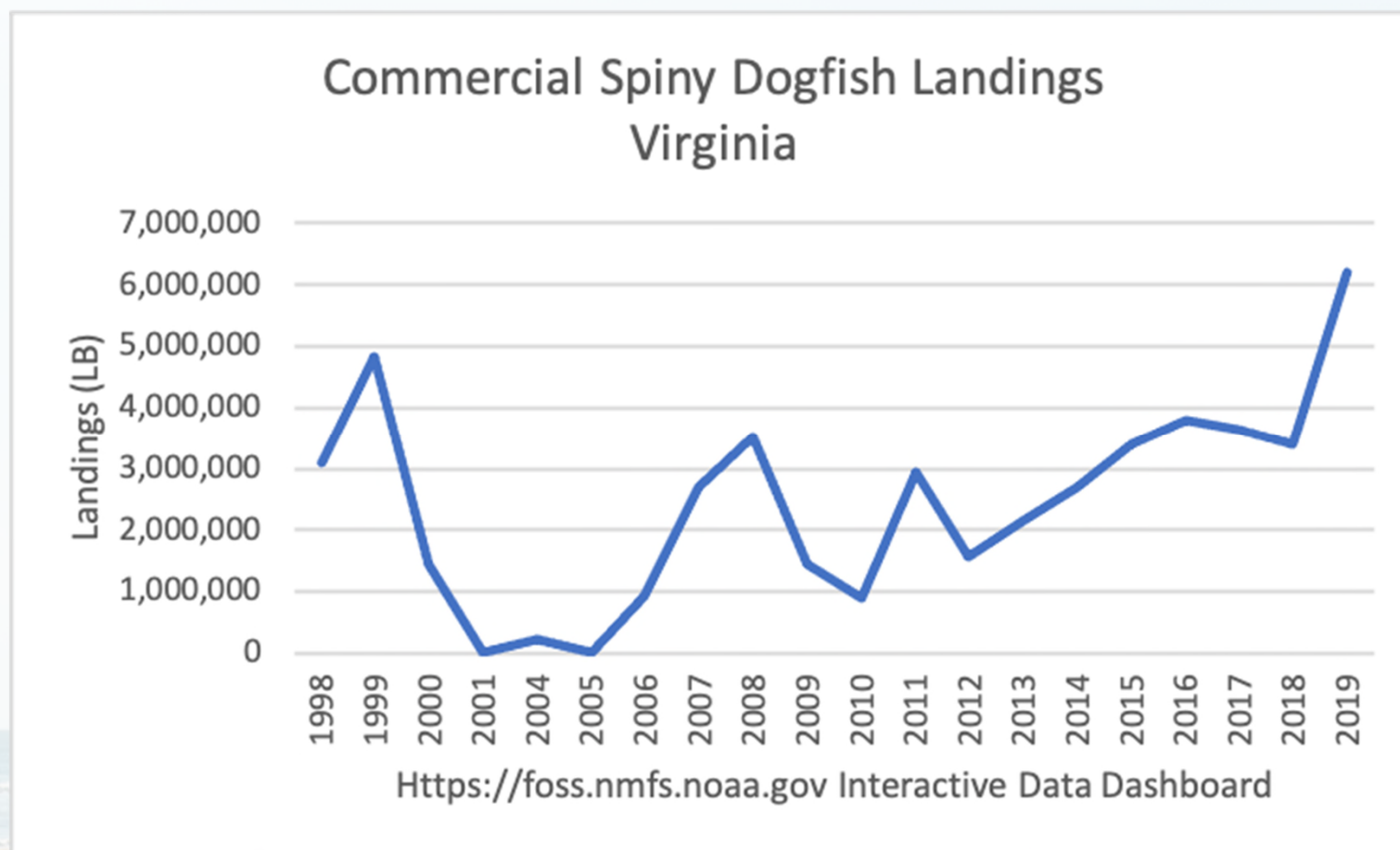
VTR Reported Commercial Catches from Export Cable Corridor and Lease Area 2008 - 2019



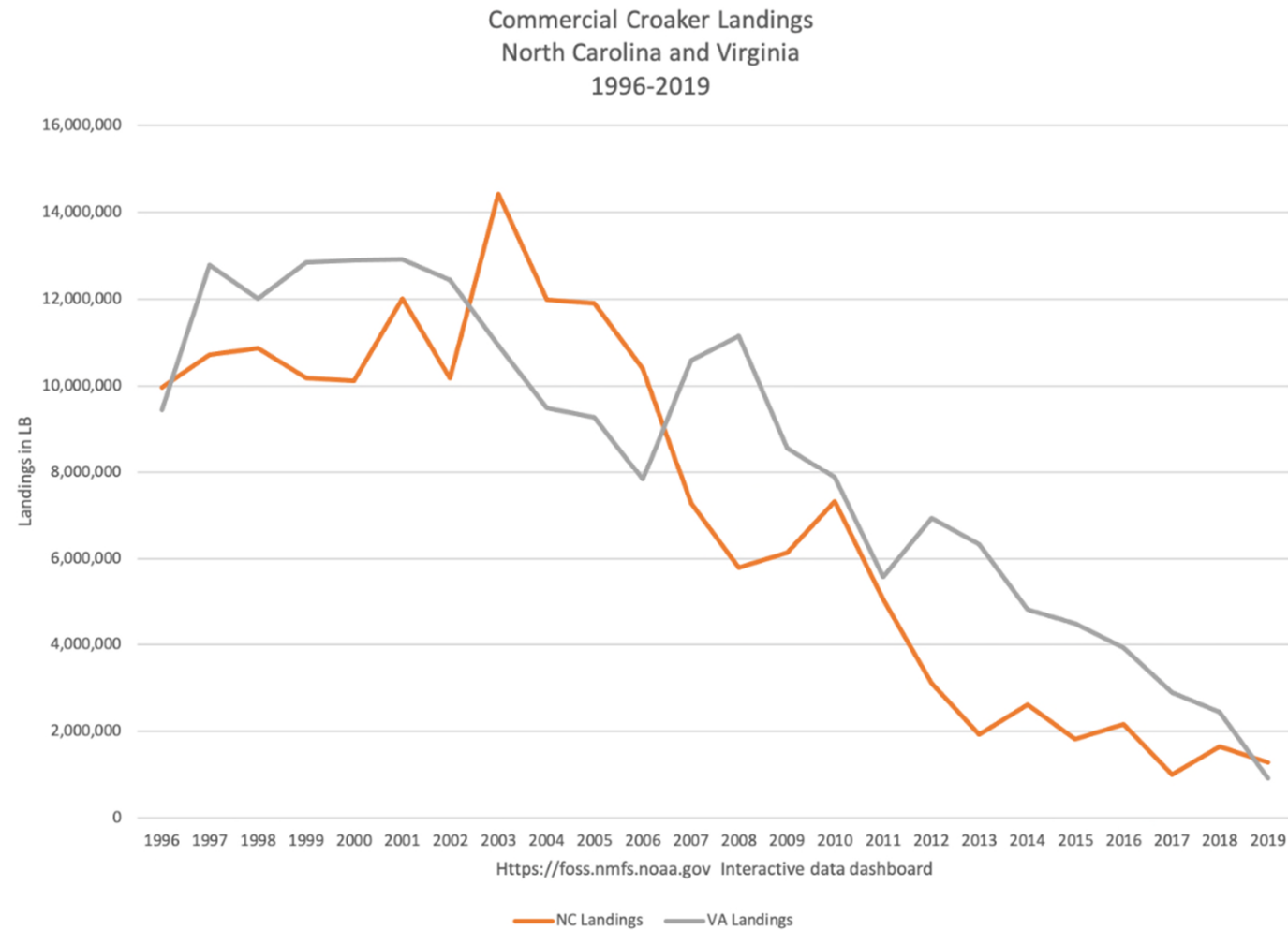


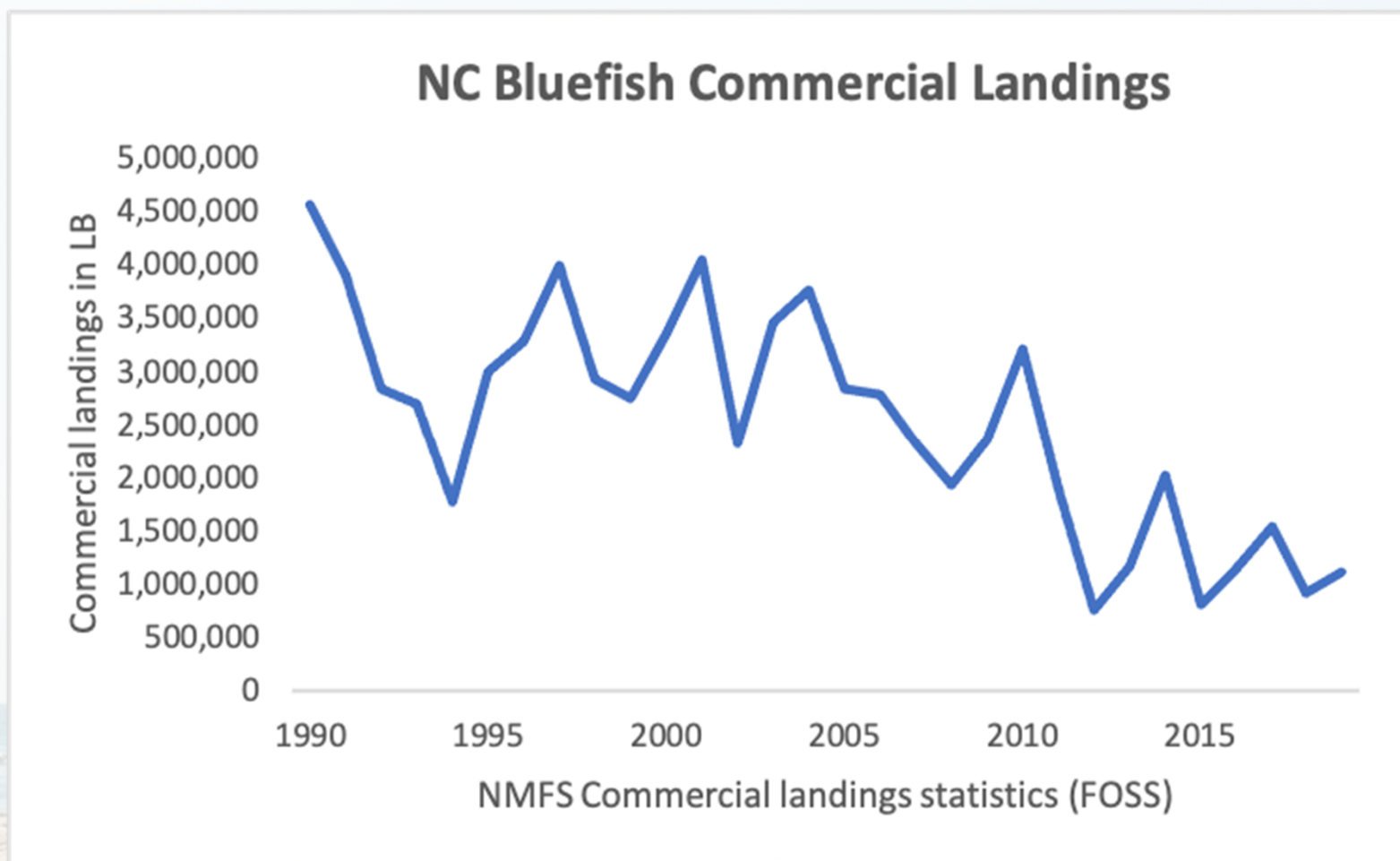


Commercial Spiny Dogfish Landings-VA



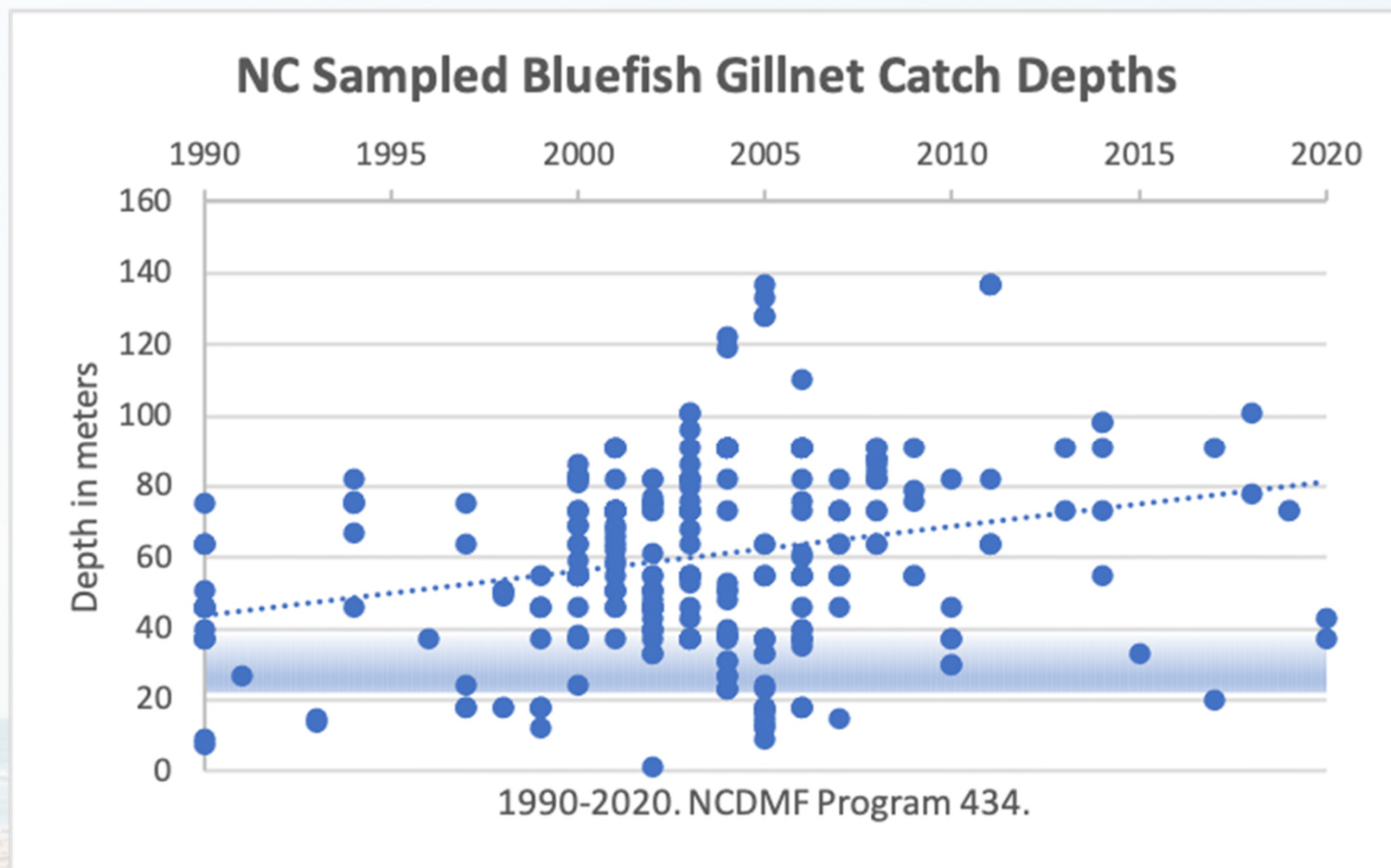
Commercial Atlantic Croaker Landings-NC & VA





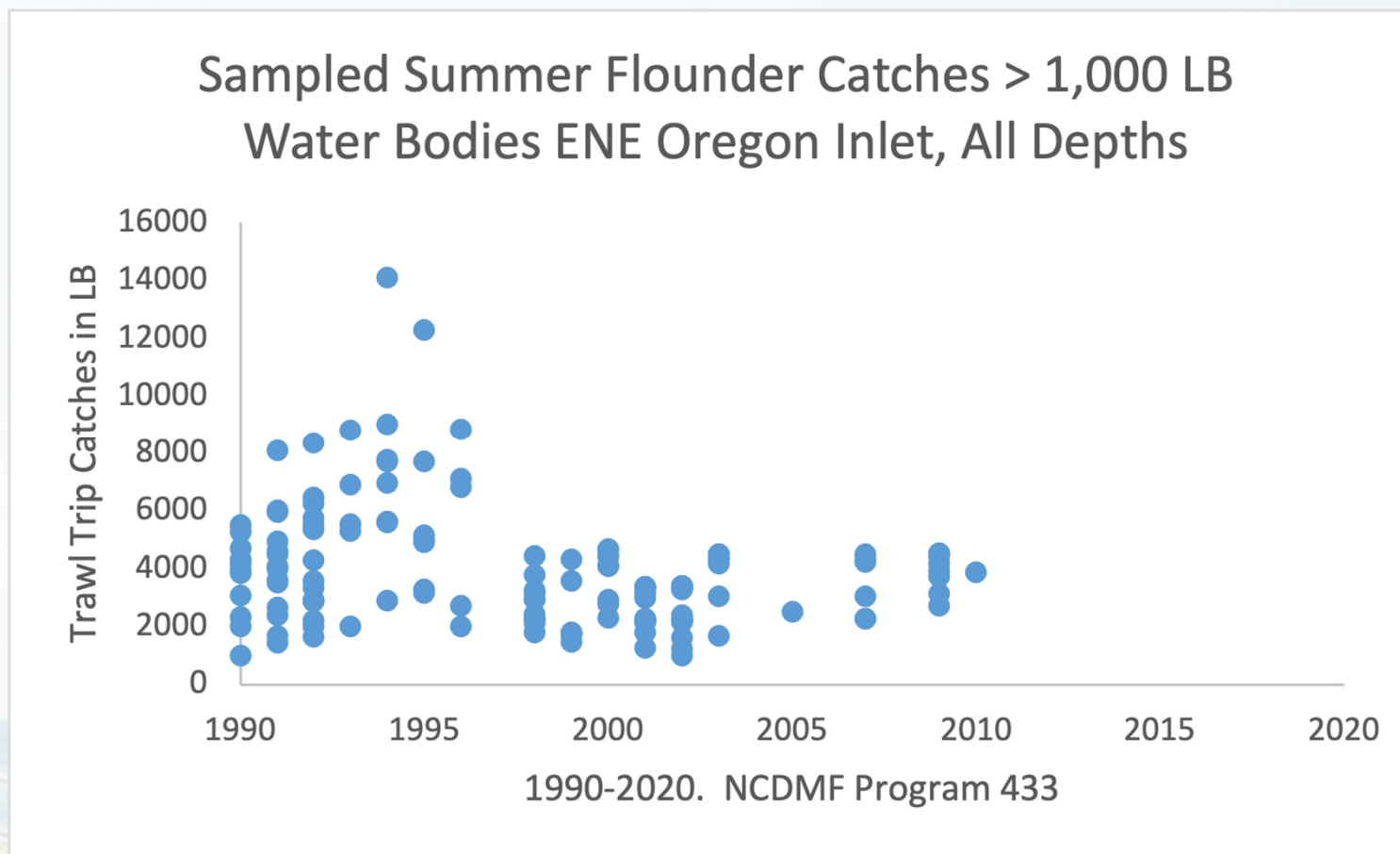
Internal Use

NC Sampled Bluefish Gillnet Catch Depths 1990-2020

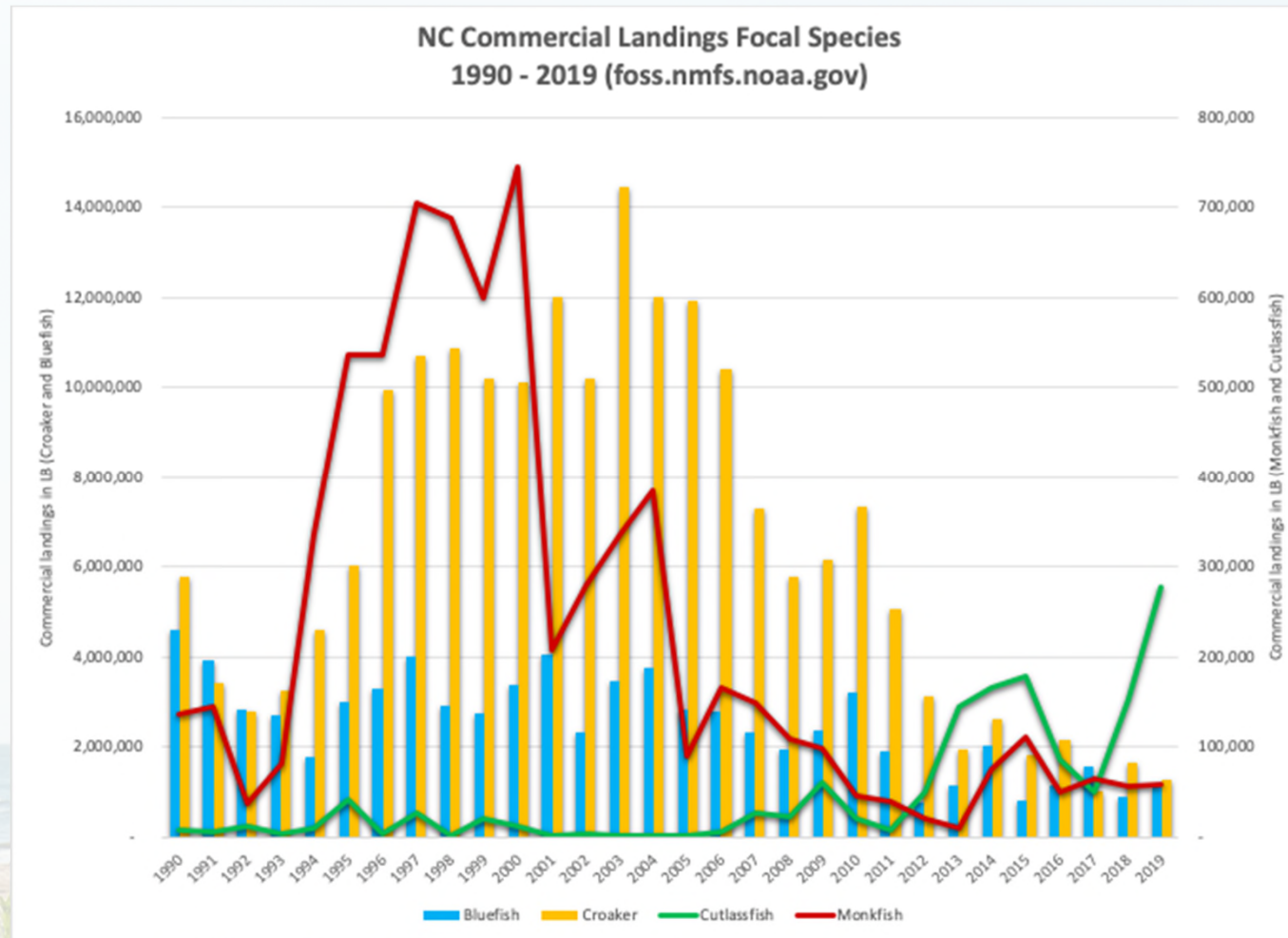


Internal Use

NC Sampled Trawl Catches of Summer Flounder >1,000 LB, 1990-2020



Trends in NC Commercial Landing of 4 Focal Species



Internal Use

Northeast Fisheries Observer Program (NEFOP):

- 1994-2020
- 28 trawl trips, 93 tows, most recent 2012
- 3 drop net trips, 10 sets
- The top species kept on observed trips from the **Lease Area** (by weight) were summer flounder, bluefish, and monkfish

Species	Weight Landed (lbs)	Weight Landed (kg)
Summer Flounder	46,150	20,933
Bluefish	3,620	1,642
Monkfish	1,717	779
Atlantic croaker	500	227
Black Seabass	177	80
Whelk (Conch)	101	46
Weakfish	59	27
Squid (longfin)	58	26
Knobbed Whelk	20	9

Northeast Fisheries Observer Program (NEFOP):

- 1994-2019
- 133 gillnet trips, 212 sets
- 8 trawl trips, 14 tows, most recent 2010
- The top species kept on observed trips from the **Offshore Export Cable Corridor** (by weight) were spiny dogfish, Atlantic croaker, and striped bass

Species	Weight Landed (lbs)	Weight Landed (kg)
Spiny Dogfish	74,245	33,677
Atlantic Croaker	19,426	8,811
Striped Bass	8,730	3,960
Summer Flounder	3,990	1,810
Smooth Dogfish	2,929	1,329
Bluefish	1,251	567
Atlantic mackerel	264	120
Menhaden	264	120
Spanish Mackerel	212	96

- Northeast Area Monitoring and Assessment Program (NEAMAP)
- Inshore Survey: Offshore Export Cable Corridor
- 2007 - 2019

Species	Scientific Name	Count	Pounds (lbs)	Biomass (kg)
Atlantic croaker	<i>Micropogonias undulatus</i>	476,233	75,138	34,082
Spot	<i>Leiostomus xanthurus</i> <i>Lacepede</i>	434,872	49,031	22,240
Clearence skate	<i>Raja eglanteria</i>	13,232	42,368	19,218
Weakfish	<i>Cynoscion regalis</i>	337,052	40,724	18,472
Kingfish/ Sea mullet	<i>Menticirrhus americanus</i>	83,920	21,314	9,668
Striped anchovy	<i>Anchoa hepsetus</i>	531,440	14,932	6,773
Butterfish	<i>Peprilus triacanthus</i>	119,799	9,601	4,355
Scup	<i>Stenotomus chrysops</i>	111,216	7,604	3,449
Silver perch	<i>Bairdiella chrysoura</i>	56,453	4,039	1,832
Longfin inshore squid	<i>Doryteuthis pealeii</i>	32,462	3,082	1,389
White shrimp	<i>Litopenaeus setiferus</i>	53,743	2,994	1,358
Atlantic menhaden	<i>Brevoortia tyrannus</i>	36,797	2,950	1,338
Spotted hake	<i>Urophycis regia</i>	26,661	1,636	742
Atlantic cutlassfish	<i>Trichiurus lepturus</i>	15,191	472	214
Bay anchovy	<i>Anchoa mitchilli</i>	66,596	379	172

Source: VIMS

Internal Use

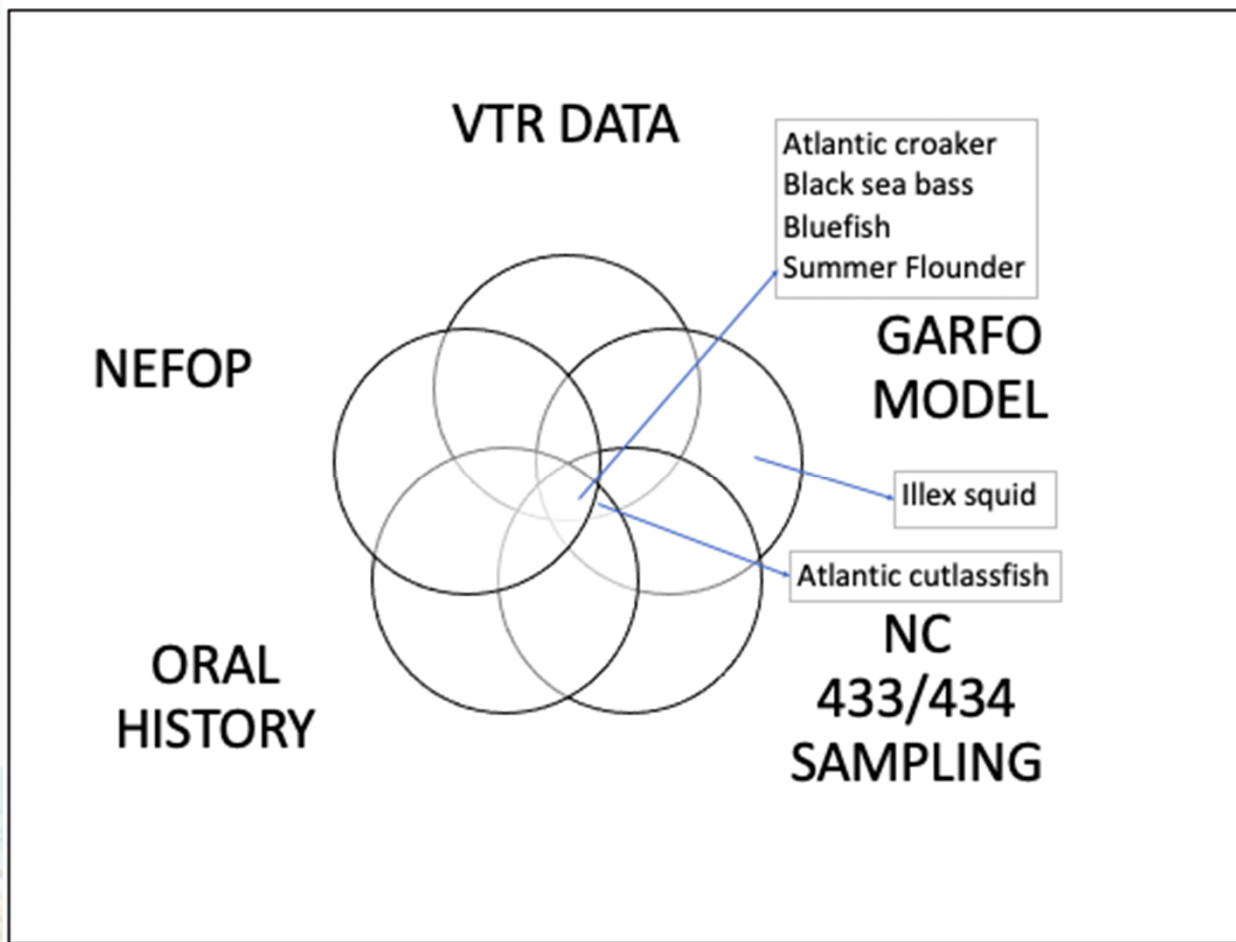
NEFSC Bottom Trawl Survey Data

- Fall Bottom Trawl Survey data since 1963, 37 tows
- Spring Bottom Trawl Survey data since 1968, 27 tows

Top 10 Species - FALL SURVEY		Top 10 Species- SPRING SURVEY	
Species	Weight (kg)	Species	Weight (kg)
Atlantic Croaker	960	Spiny Dogfish	3,313
Spiny Butterfly Ray	457	Clearence Skate	174
Spot	430	Butterfish	173
Butterfish	372	Winter Skate	107
Roughtail Stingray	366	Longfin Squid	82
Scup	306	Horseshoe Crab	70
Striped Anchovy	242	Atlantic Mackerel	60
Longfin Squid	242	Atlantic Sturgeon	54
Bluntnose Stingray	152	Summer Flounder	49
Spotted Hake	143	Goosefish	44

Internal Use

Comparison Across Fisheries Data Sources- Lease Area



Internal Use

Commercial Fisheries Oral Histories

- Trawl
- Drop (gill) Net
- Anchored Gill-net
- Conch Pot
- Conch Dredge
- Shrimp Trawl
- Drop Pot
- Hook and Line



Internal Use

Fisheries Feedback, Questions, and Concerns

- Access—Yes, FAQ's
- Trawl Tow Directionality
- Cable Burial and EMF—CBRA



Internal Use

- Next Steps:
 - Socializing fisheries data, project details, illustrative layout with commercial and recreational fishermen
 - Continuing to collect specific inputs on fishing history or fishery details
- Available for fisheries briefings (virtual or in-person, individual) and any fisheries questions:

Rick Robins - Fisheries Liaison Officer, Kitty Hawk

rick@fathomedgelimited.com

757.876.3778

kittyhawkoffshore.com/fisheries

- Fisheries FAQs
- Fisheries Notices
- Real-time weather and sea state information

Internal Use