



# Cape Fear Anadromous Survey

Kyle Rachels

April Boggs

Cape Fear River Partnership

25 May 2022



# Objectives

- 2022 season: Feb 24 – May 5
- Relative abundance
- Size structure
- Age structure
- Parentage-based tagging

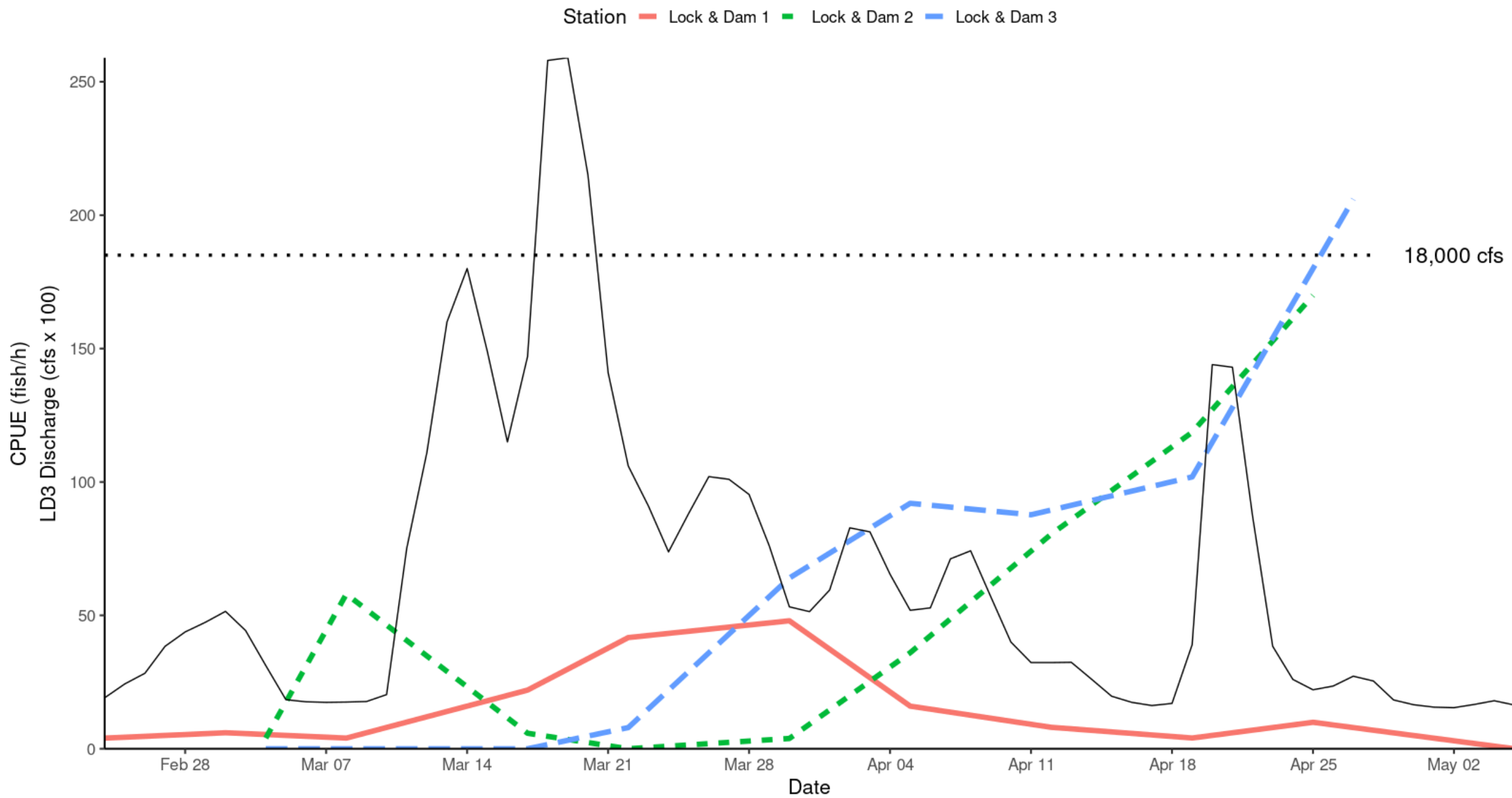




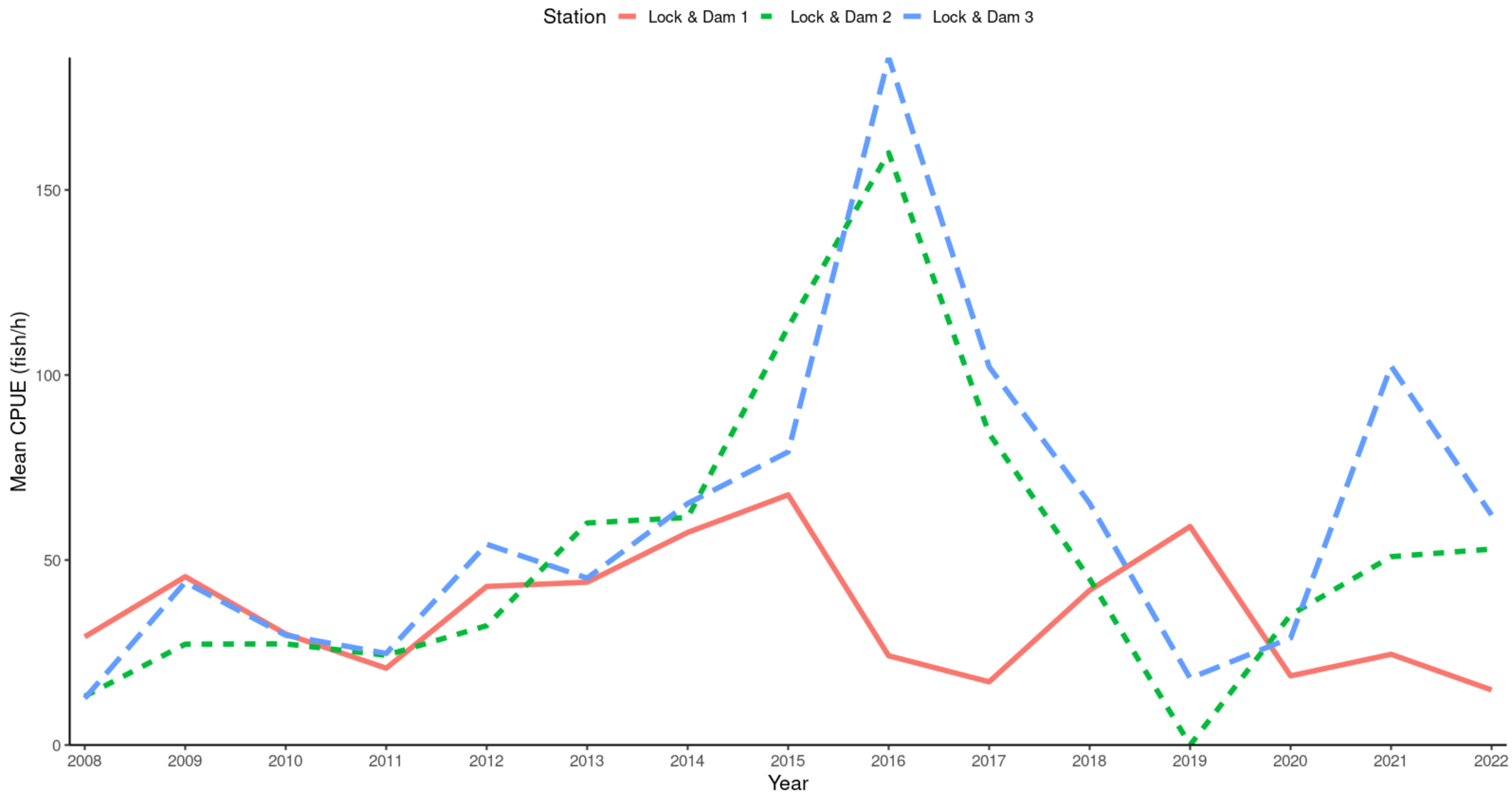


*North Carolina Wildlife Resources Commission*

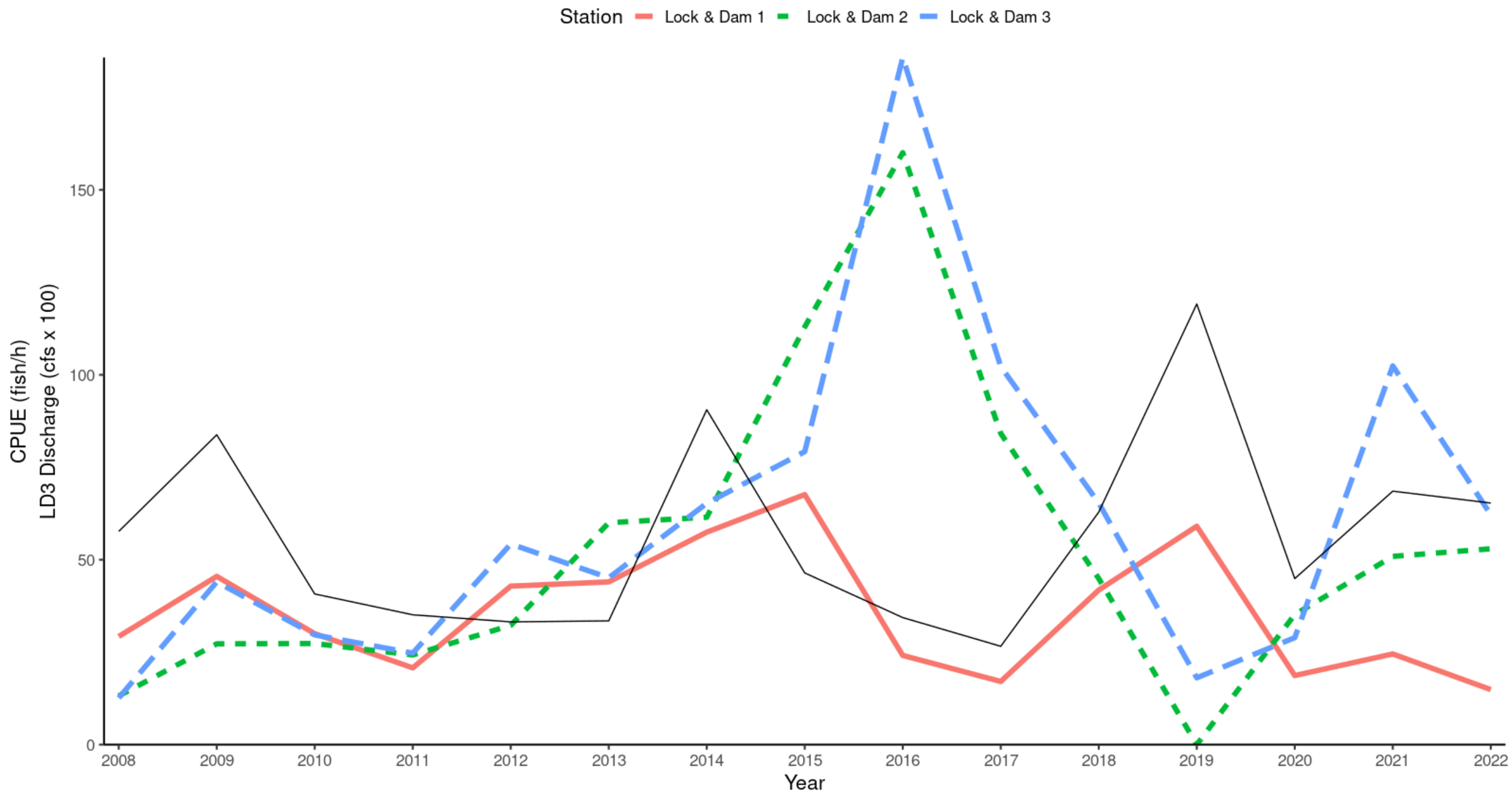
# American Shad



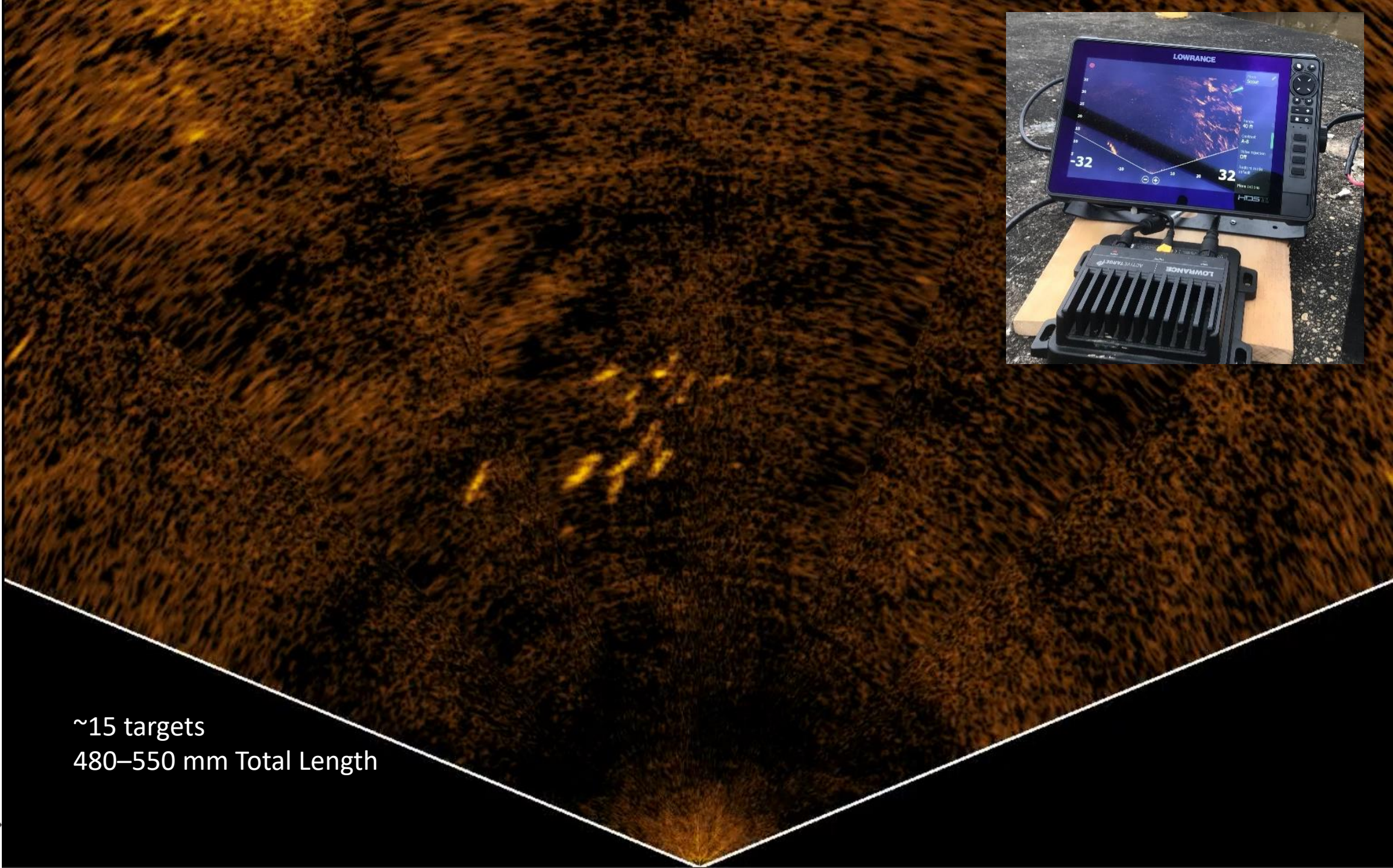
# American Shad



# American Shad





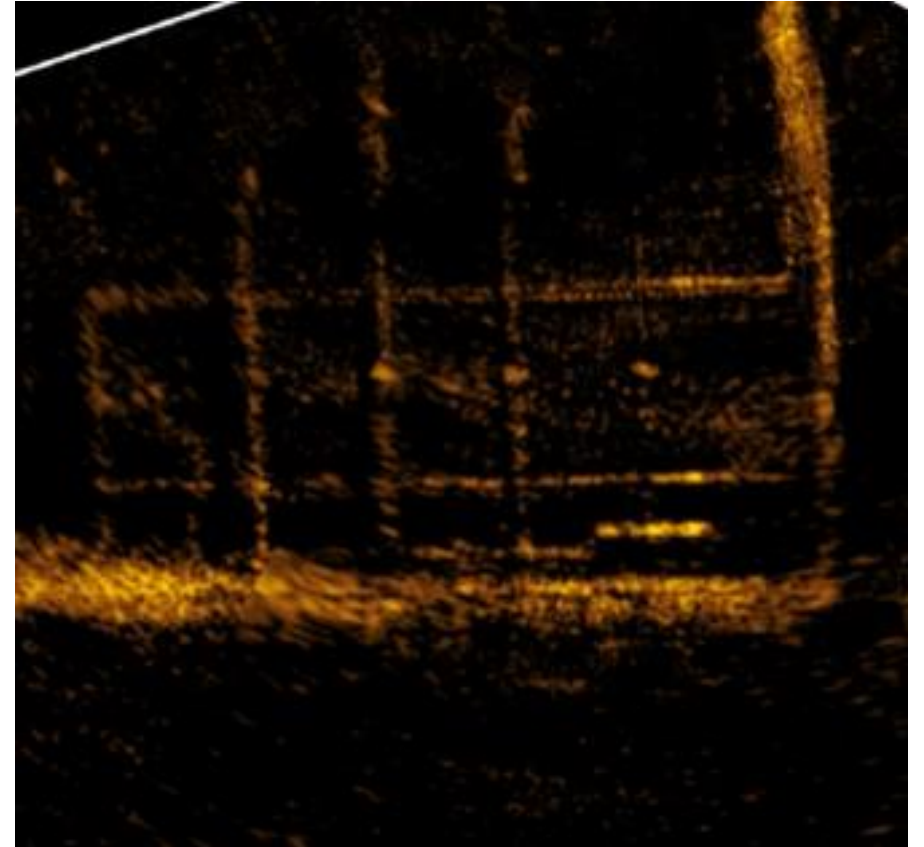
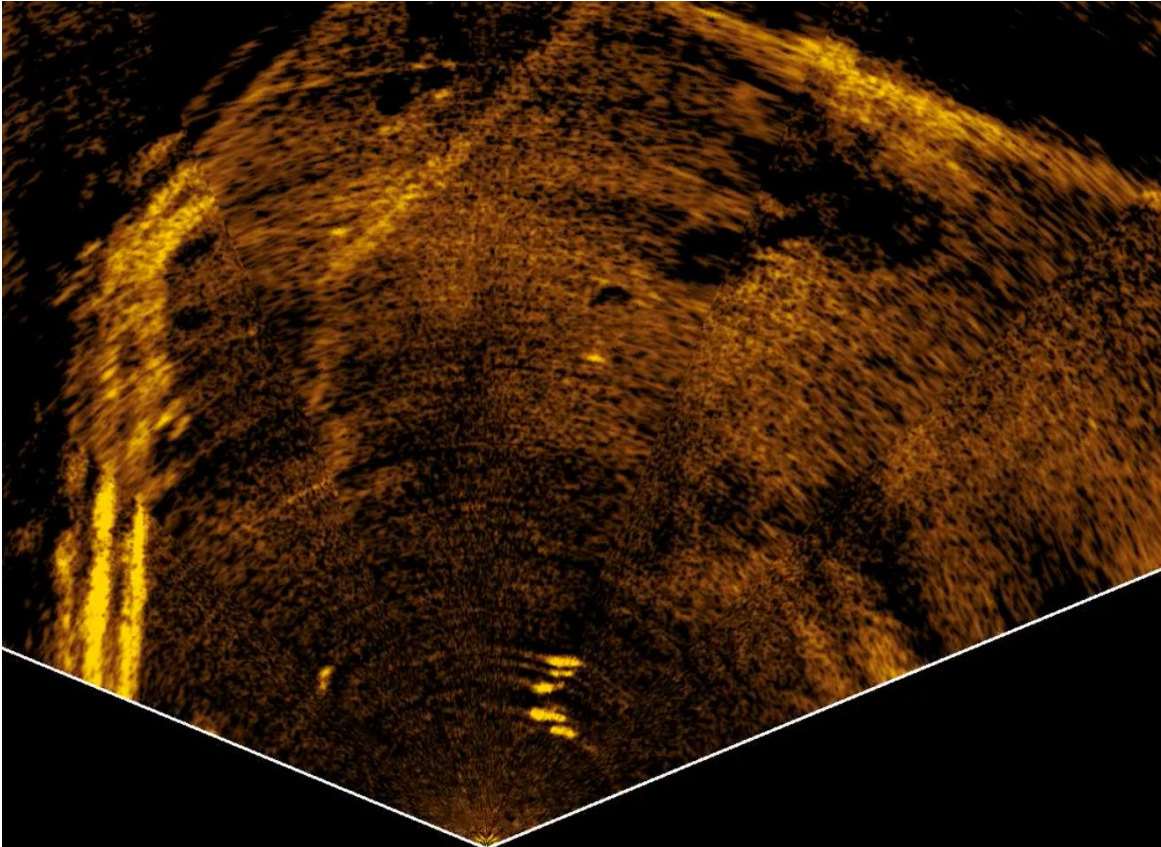


~15 targets  
480–550 mm Total Length





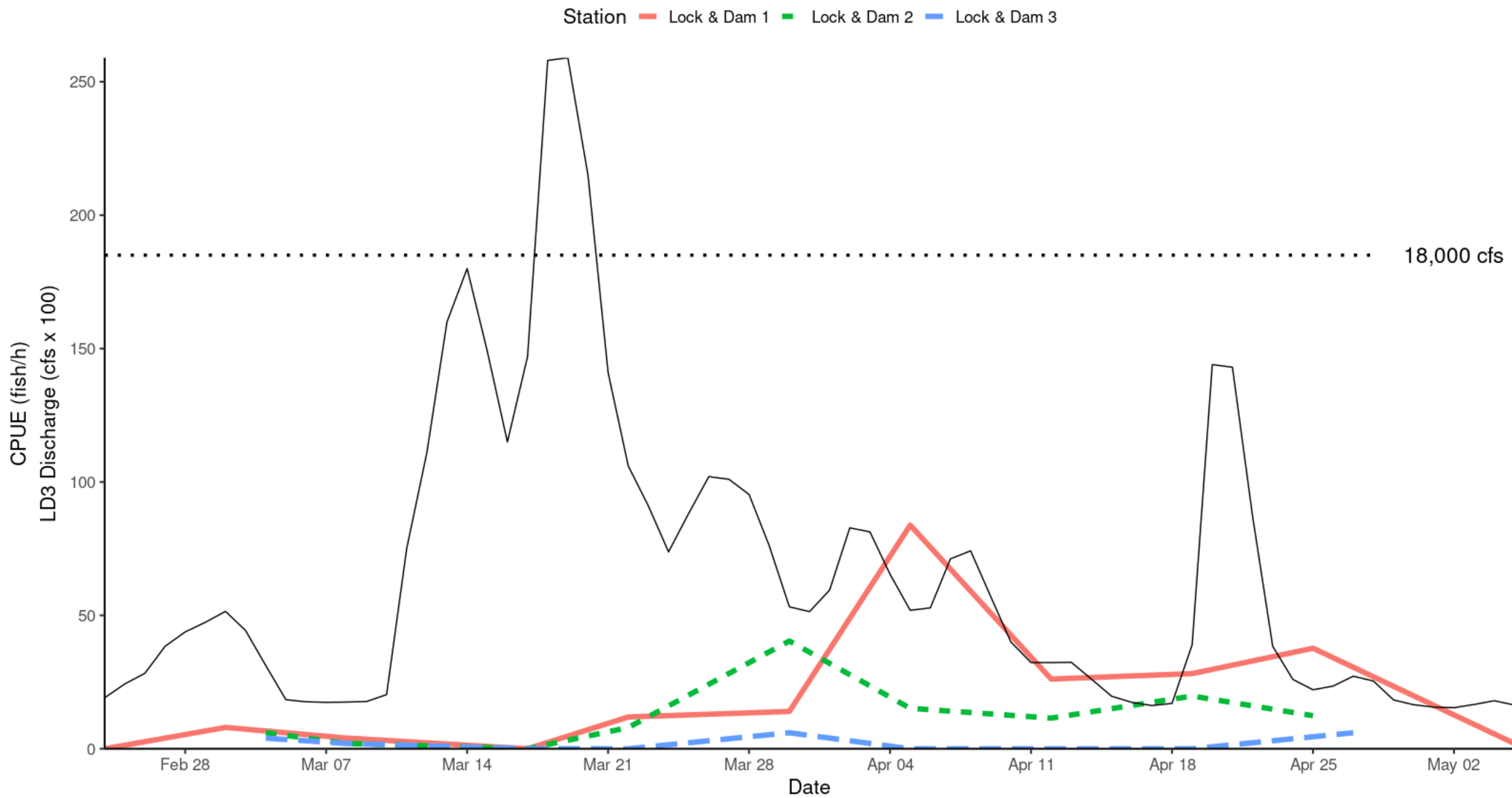
# Gate Valve Locking







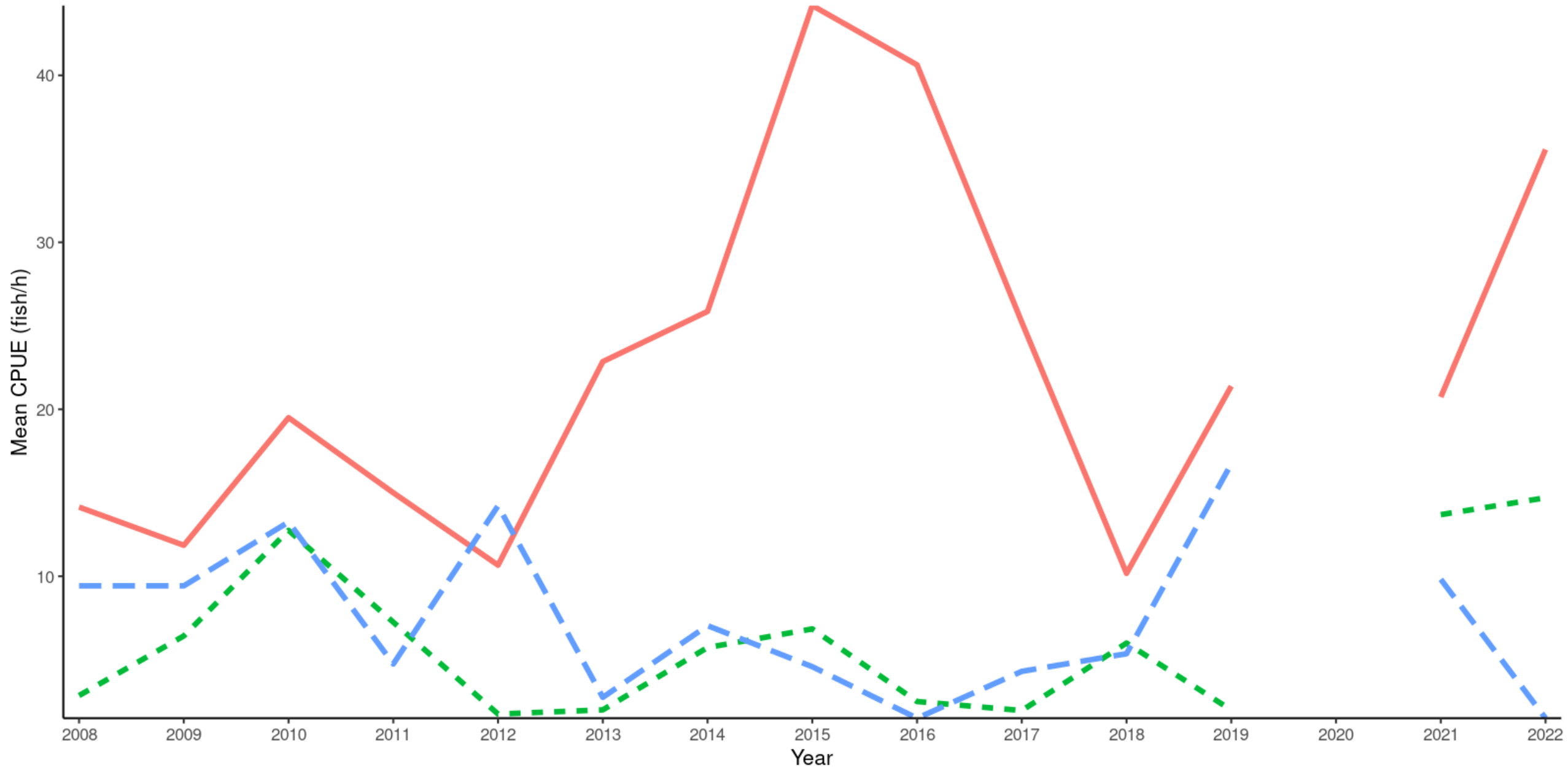
# Striped Bass





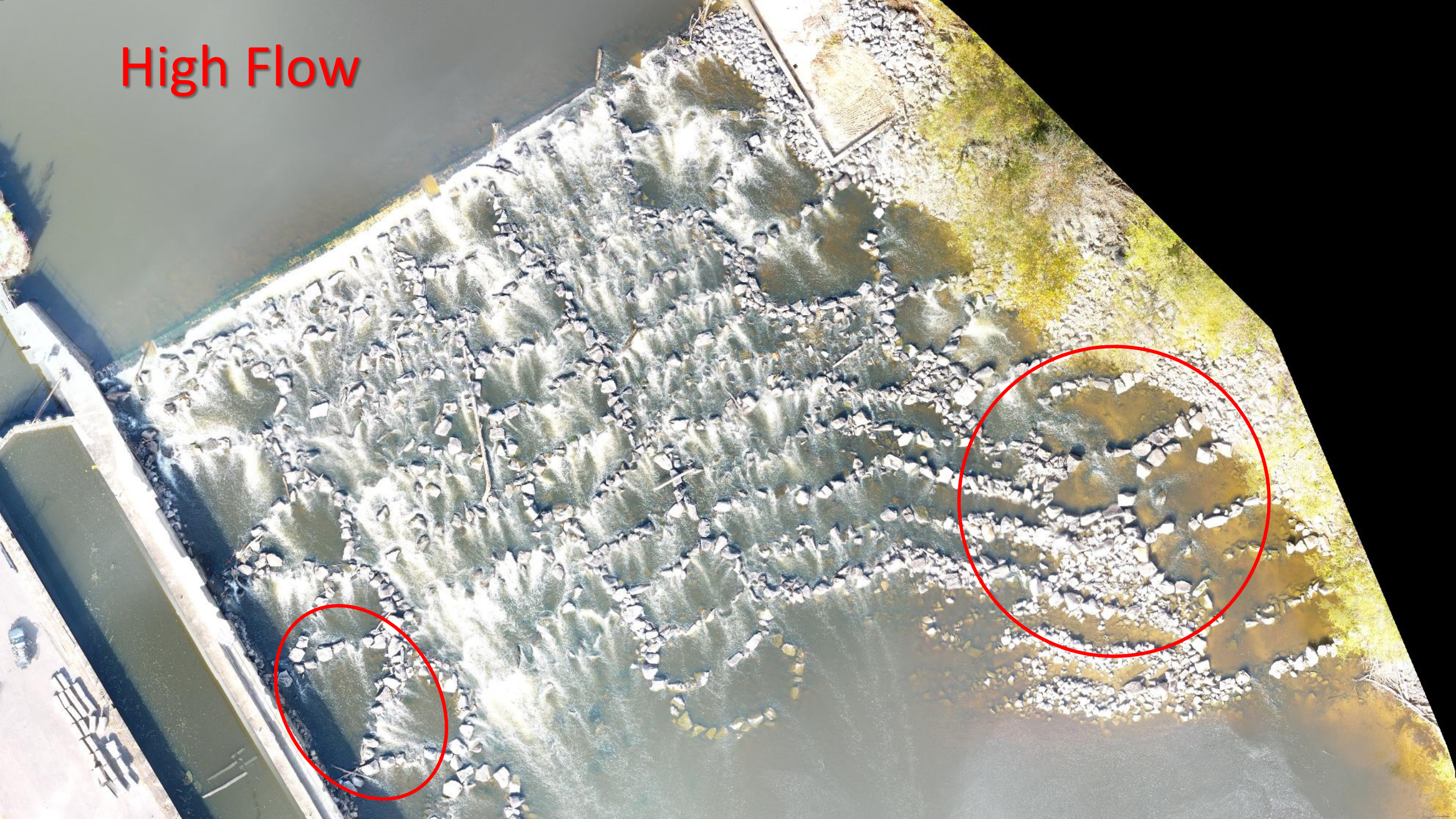
# Striped Bass

Station Lock & Dam 1 Lock & Dam 2 Lock & Dam 3



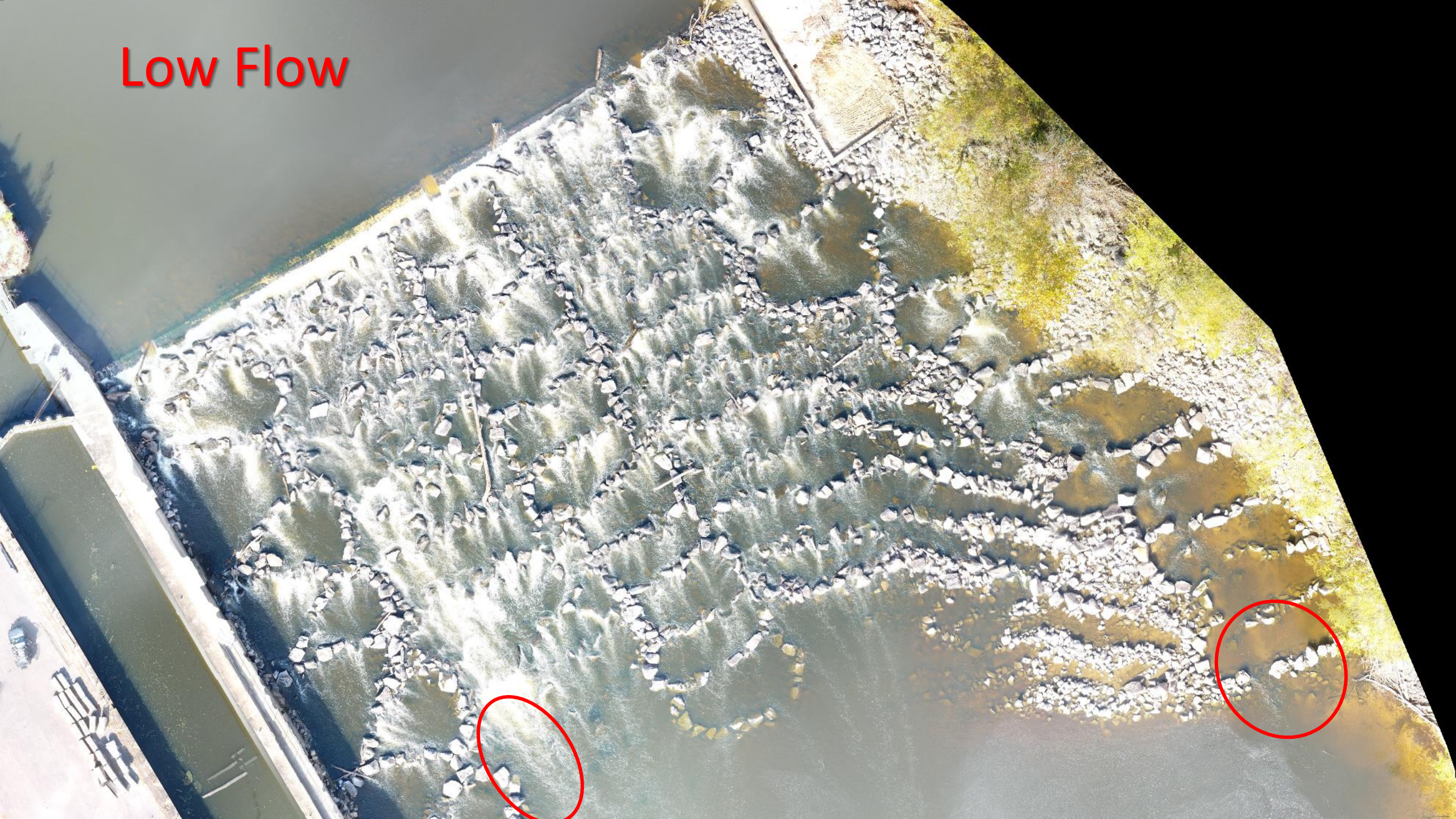


High Flow





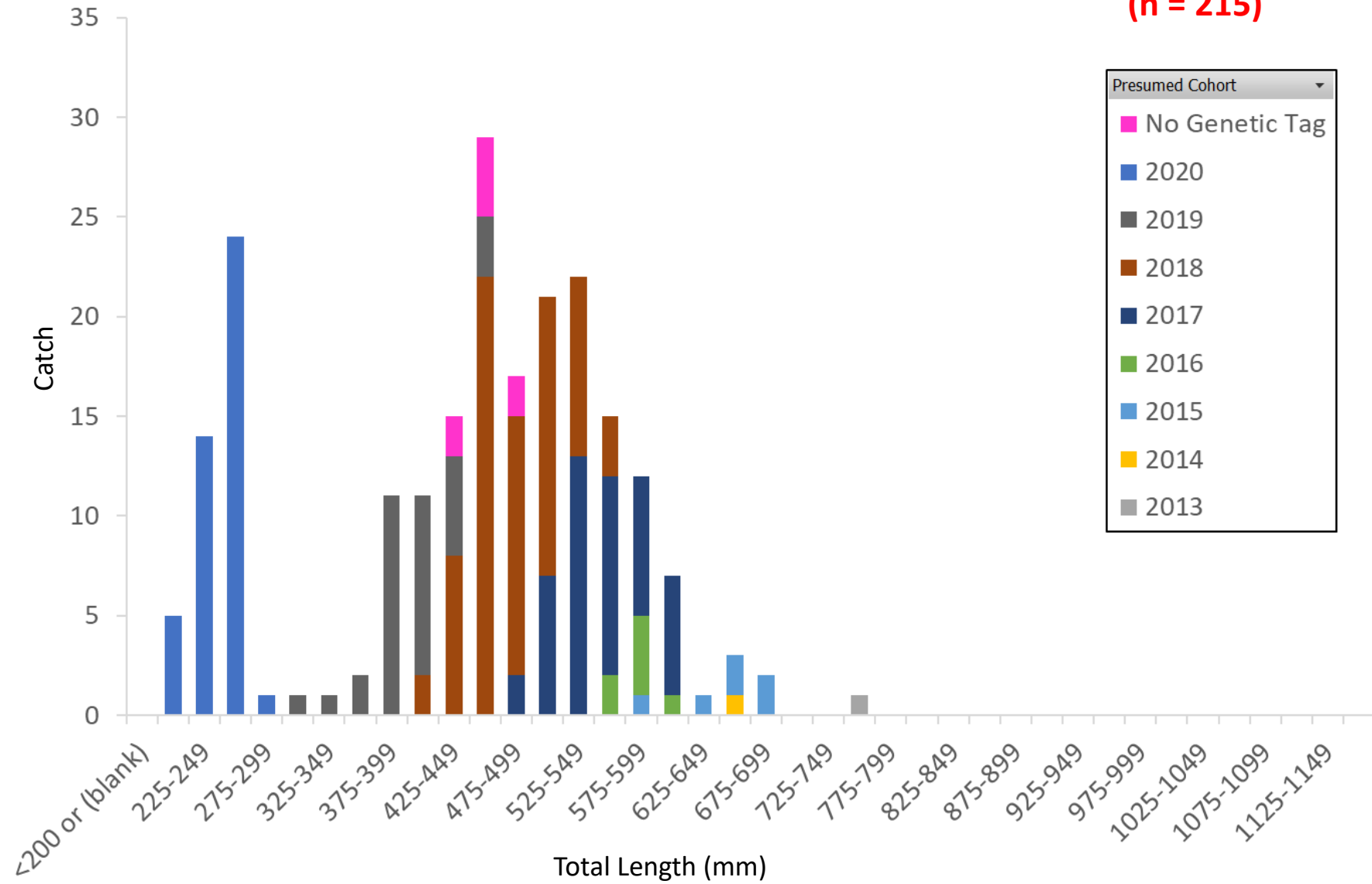
Low Flow





## 2021 Striped Bass

**96% Hatchery Origin  
(n = 215)**







# Questions?

Kyle Rachels

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252-548-4938

	Northeast Cape Fear River		Cape Fear River		B. E. Jordan Reservoir
Year-Class	Phase-I	Phase-II	Phase-I	Phase-II	Phase-I
2001	94,083	-	90,149	-	35,000
2002	50,000	-	50,000	-	70,000
2003	151,873	-	104,775	-	70,000
2004	50,000	-	50,000	172,055	70,000
2005	54,500	-	54,500	-	70,000
2006	84,125	-	80,450	102,283	70,000
2007	79,690	-	80,376	-	70,000
2008	190,460	-	395,226	92,580	70,000
2009	51,750	-	166,812	112,674	70,000
2010	-	-	-	210,105	70,000
2011	-	-	-	130,665	70,000
2012	12,384	-	45,000	127,070	100,000
2013	-	-	-	195,882	100,000
2014	-	-	211,726	141,752	100,000
2015	-	-	-	116,011	78,000
2016	-	-	-	70,734	78,000
2017	-	-	-	154,024	100,000
2018	-	-	-	101,254	128,164
2019	-	-	-	105,405	120,000
2020	-	-	-	73,038	120,000
2021				79,427	*
Totals	818,865	25,962	1,714,949	2,190,307	1,863,294





# 2015-2019 Parentage-Based Tagging

## 944 samples

- 353 (Hatchery) originally stocked as phase-I fish (1-2 inches)
- 368 (Hatchery) originally stocked as phase-II fish (5-7 inches)
- 107 (Hatchery) unknown size-at-stocking
- 109 unknown origin
- 7 Hybrids or contaminated



Contribution of River and Reservoir Stocked Fish by Sample Site

