



# Examining foraging habitat quality for a coastal shorebird

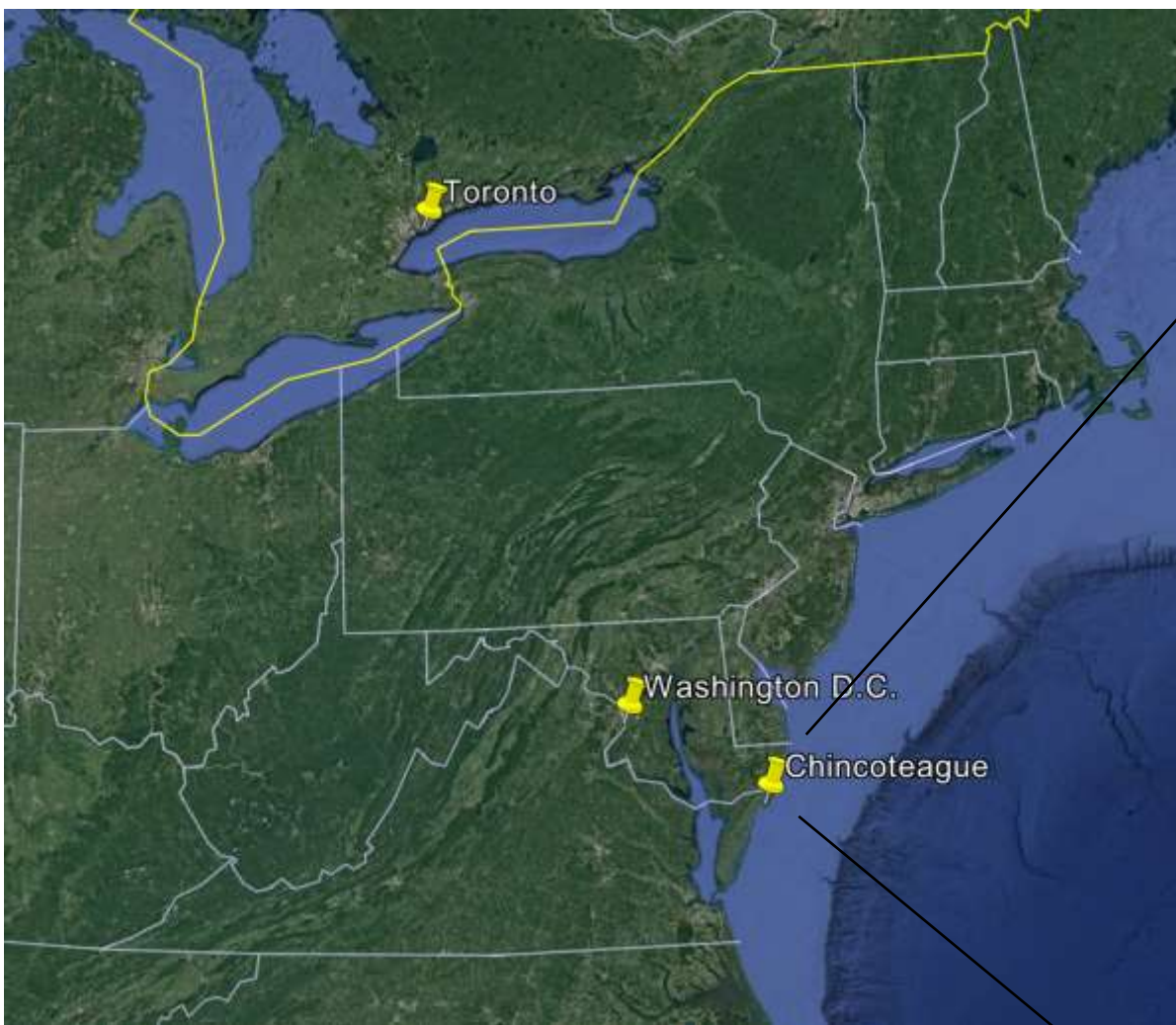
Lyn Brown & Erica Nol

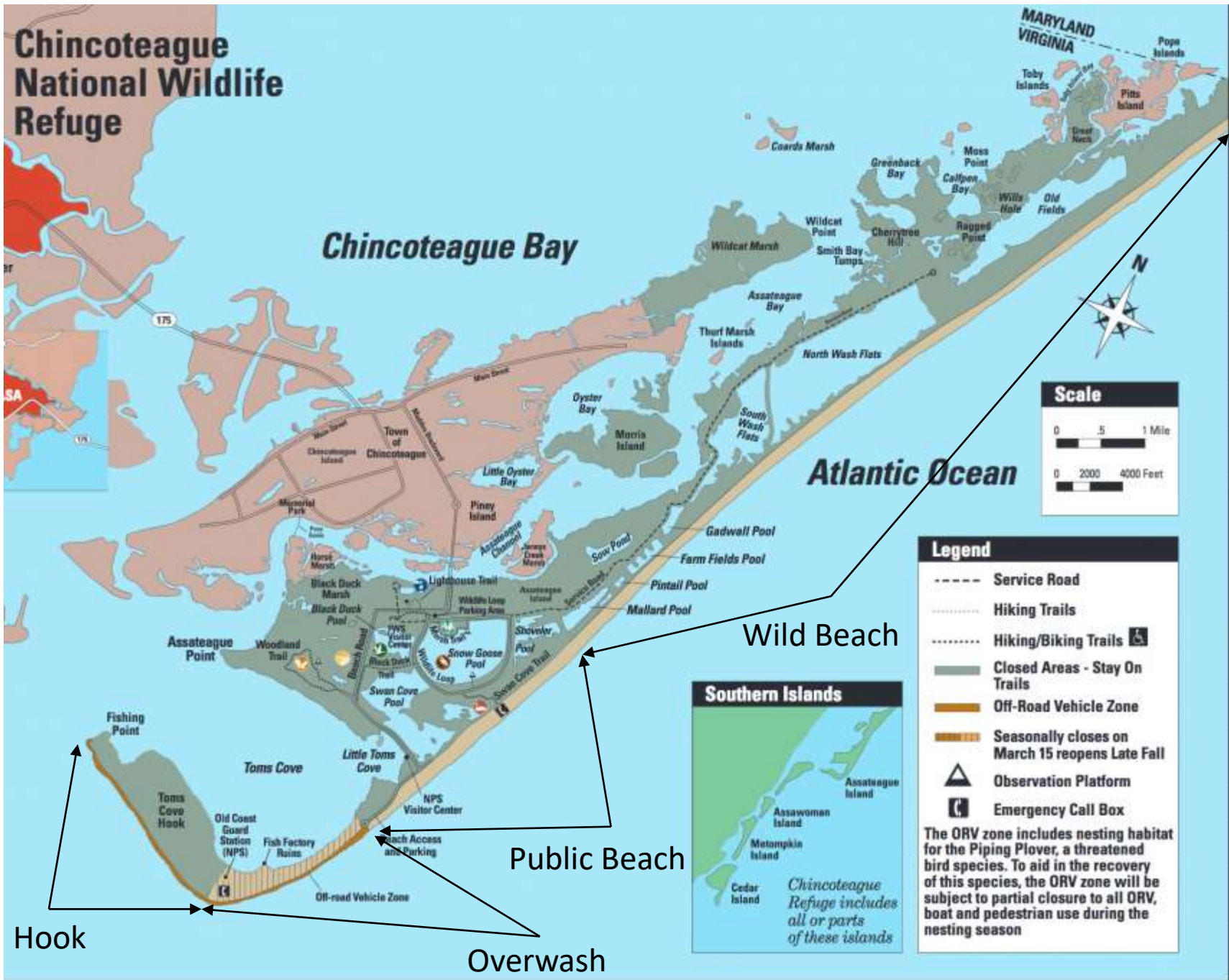
Photo credit: Kathy Reeves

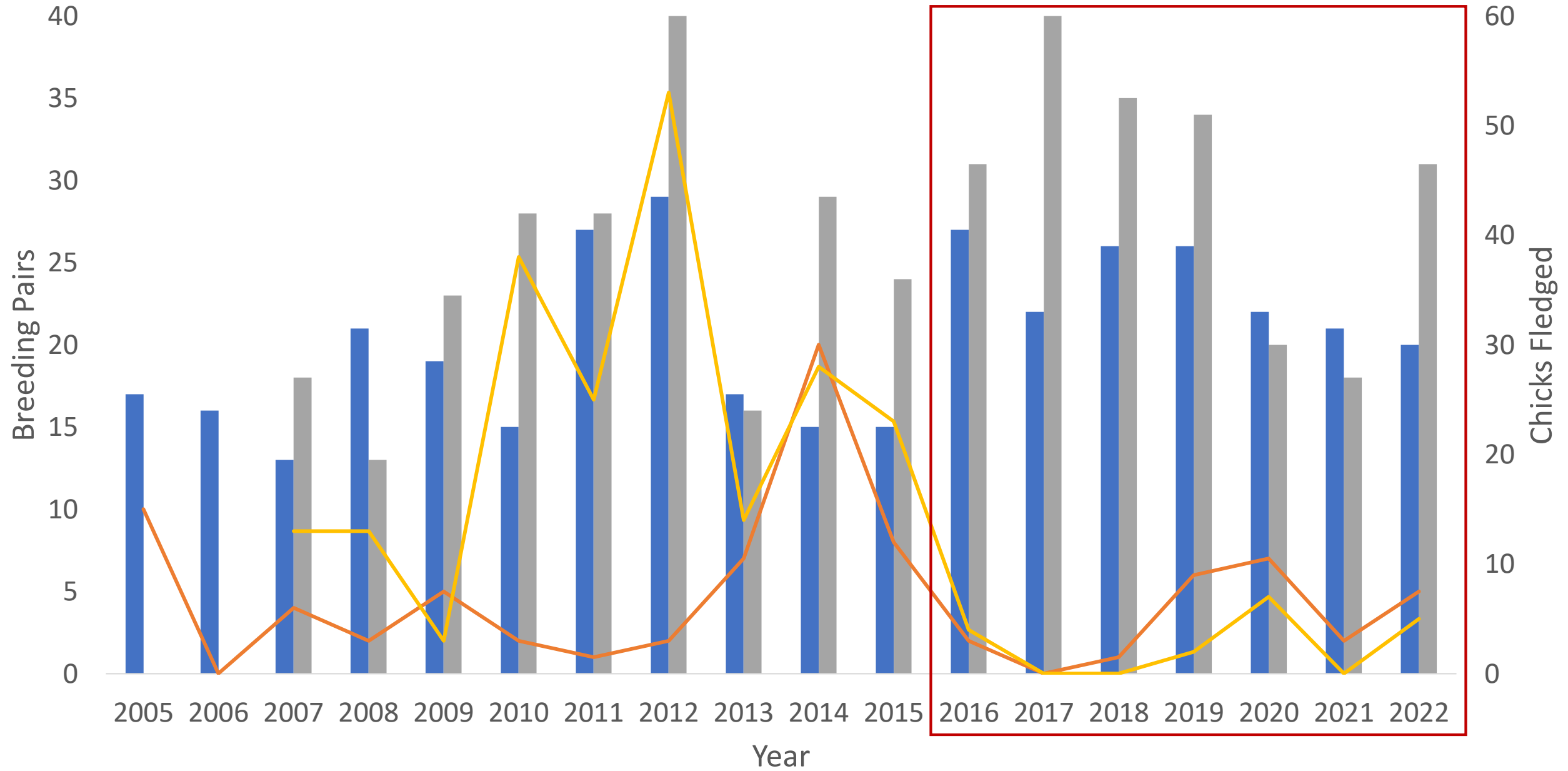
# American Oystercatcher breeding success and foraging





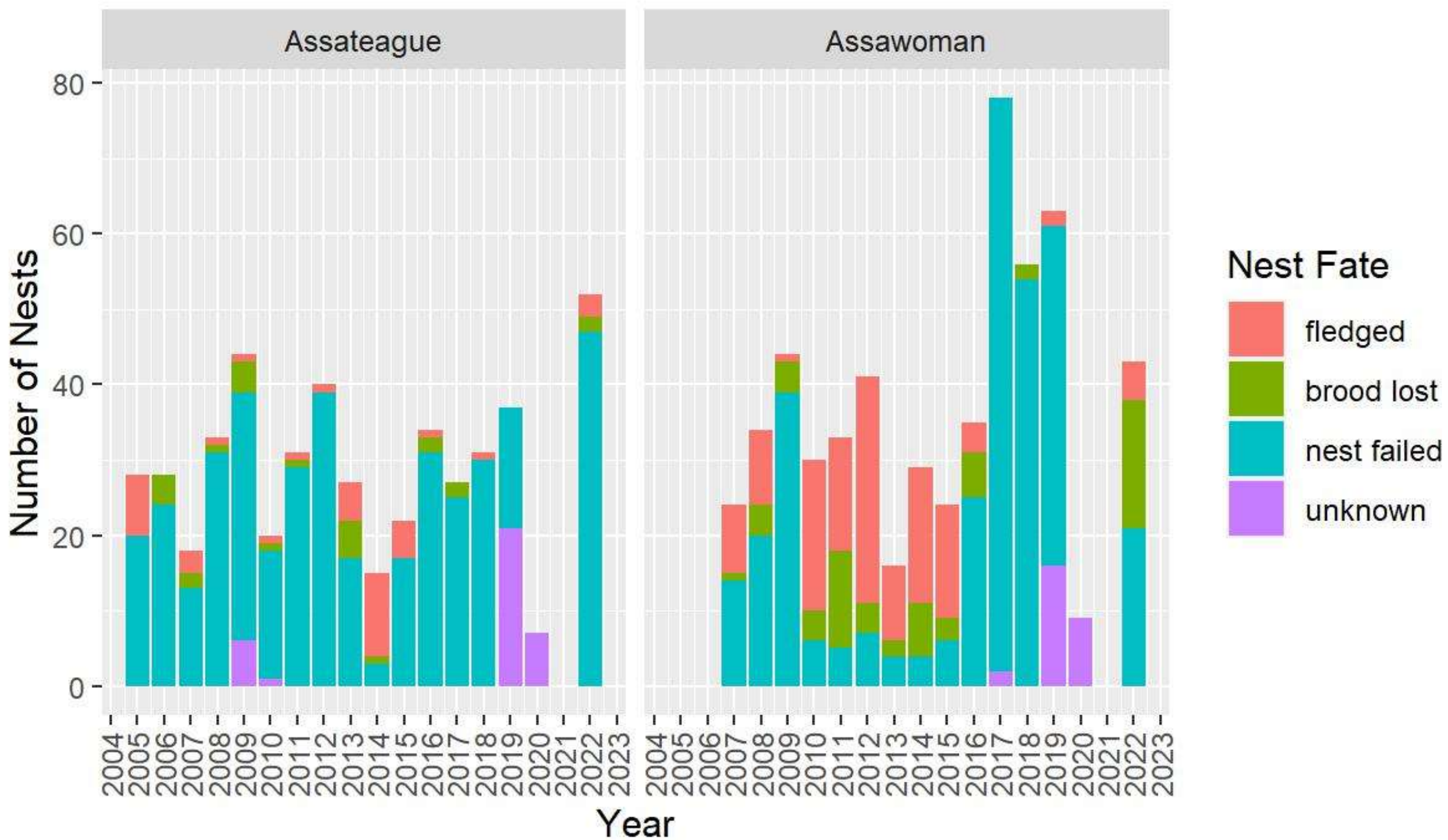






■ Assateague Breeding Pairs   
 ■ Assawoman Breeding Pairs  
— Assateague Chicks Fledged   
 — Assawoman Chicks Fledged





### Assateague

### Assawoman

% of Nests Failed

100  
75  
50  
25  
0

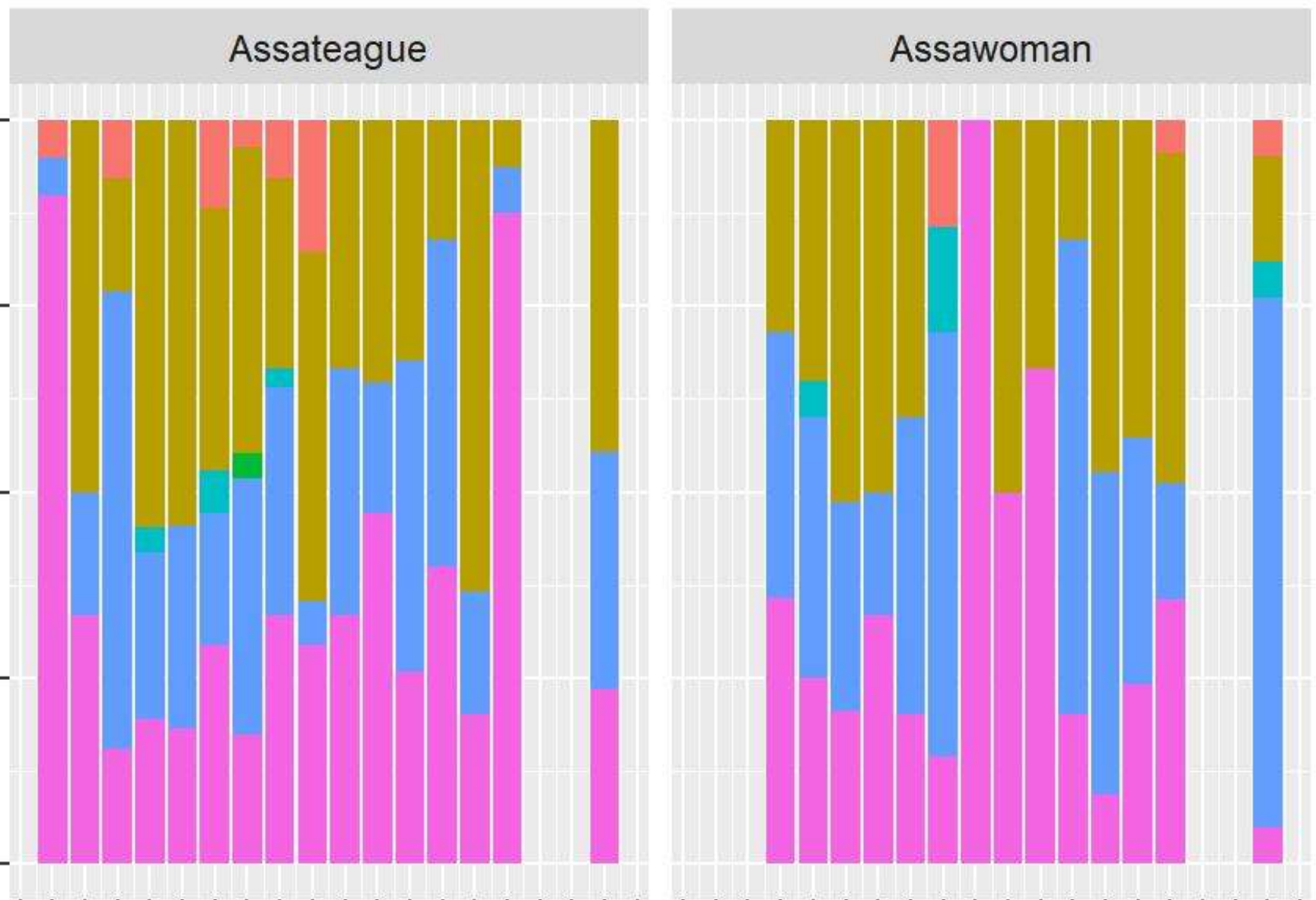
### Failure Cause

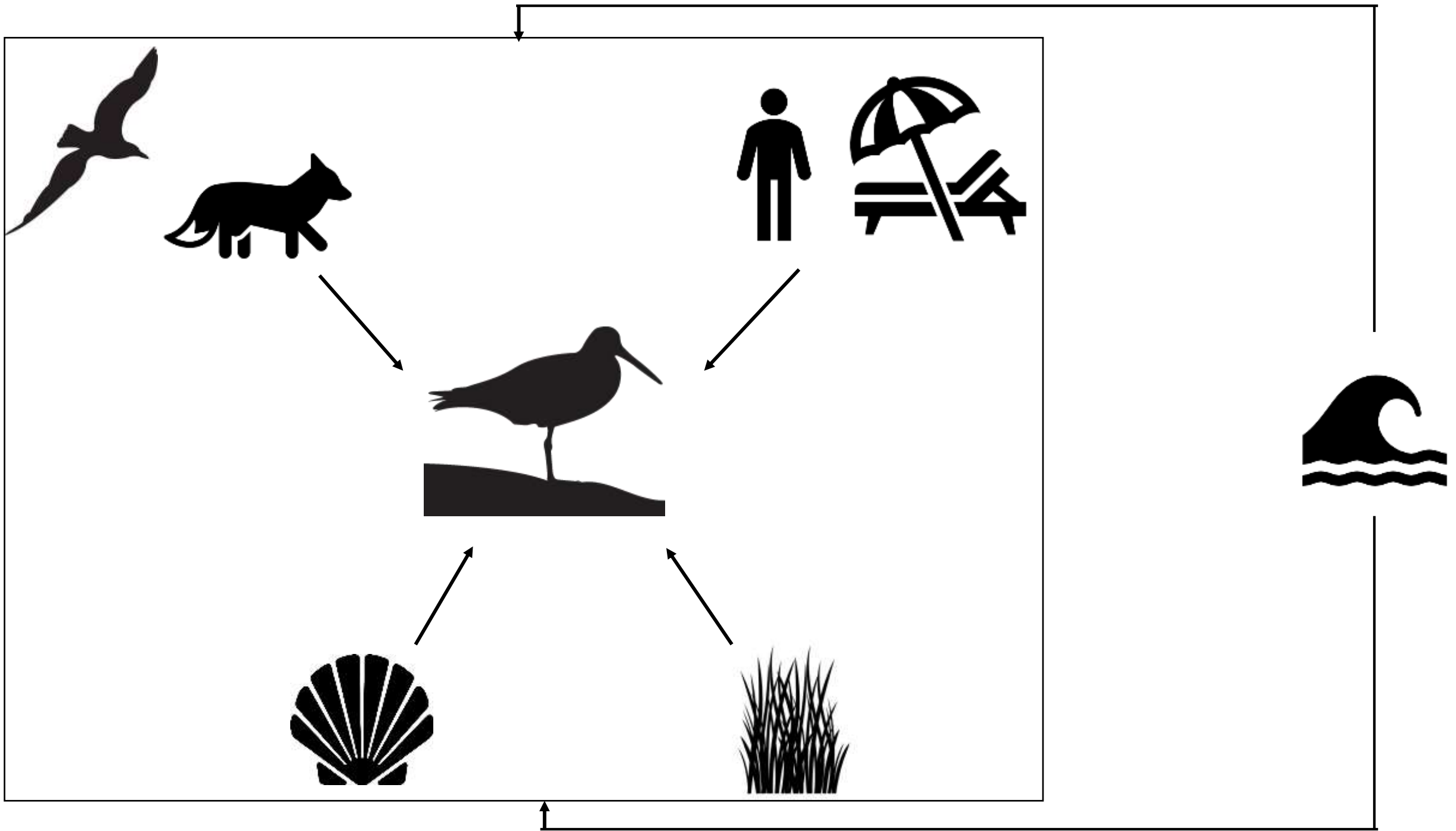
- abandoned
- depredated
- human take
- infertile
- overwash
- unknown

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

Year













- How do AMOYs use the foraging habitat during the breeding season?
- What is the quality of that foraging habitat?



# Methods

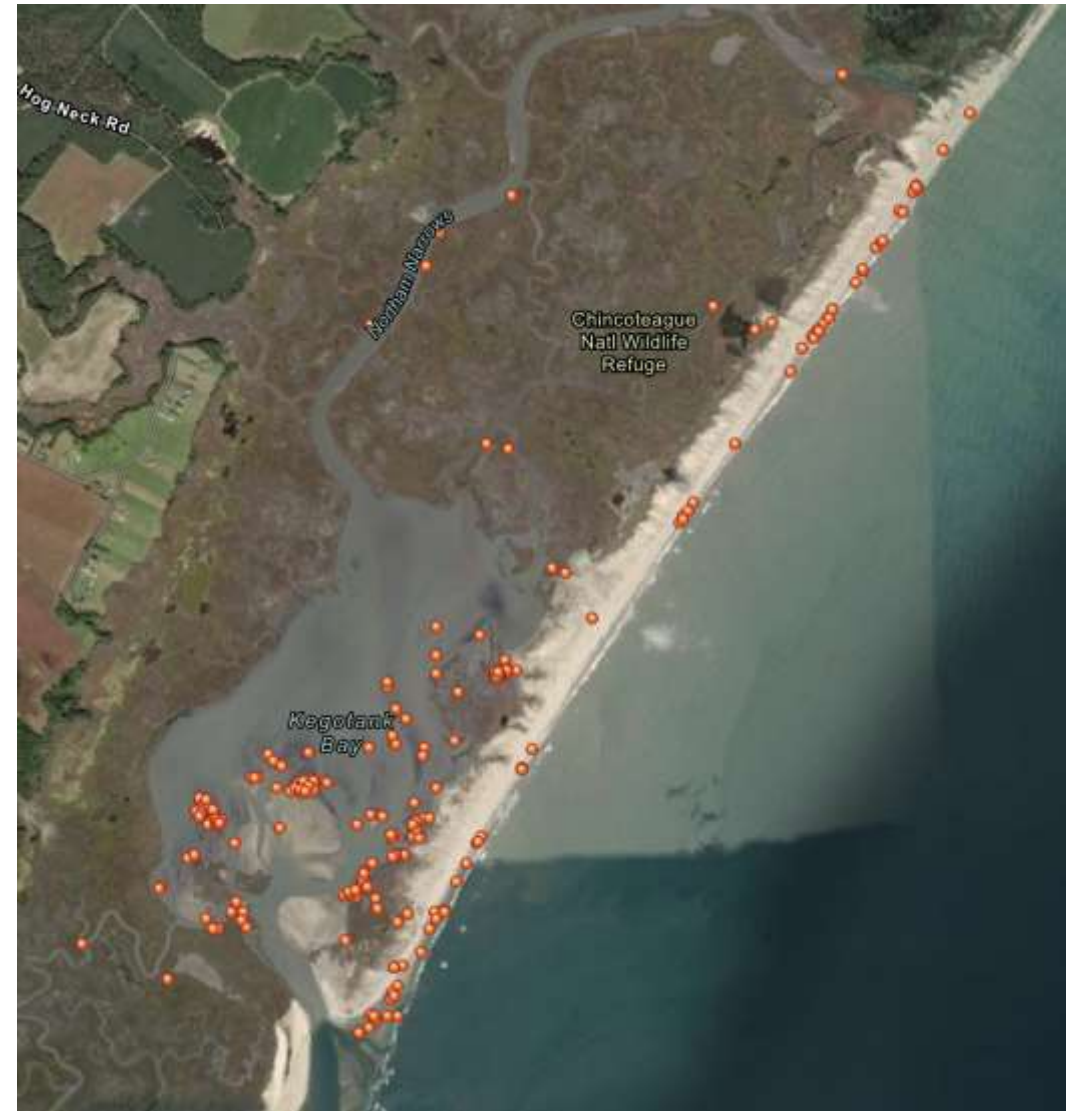
N = 400

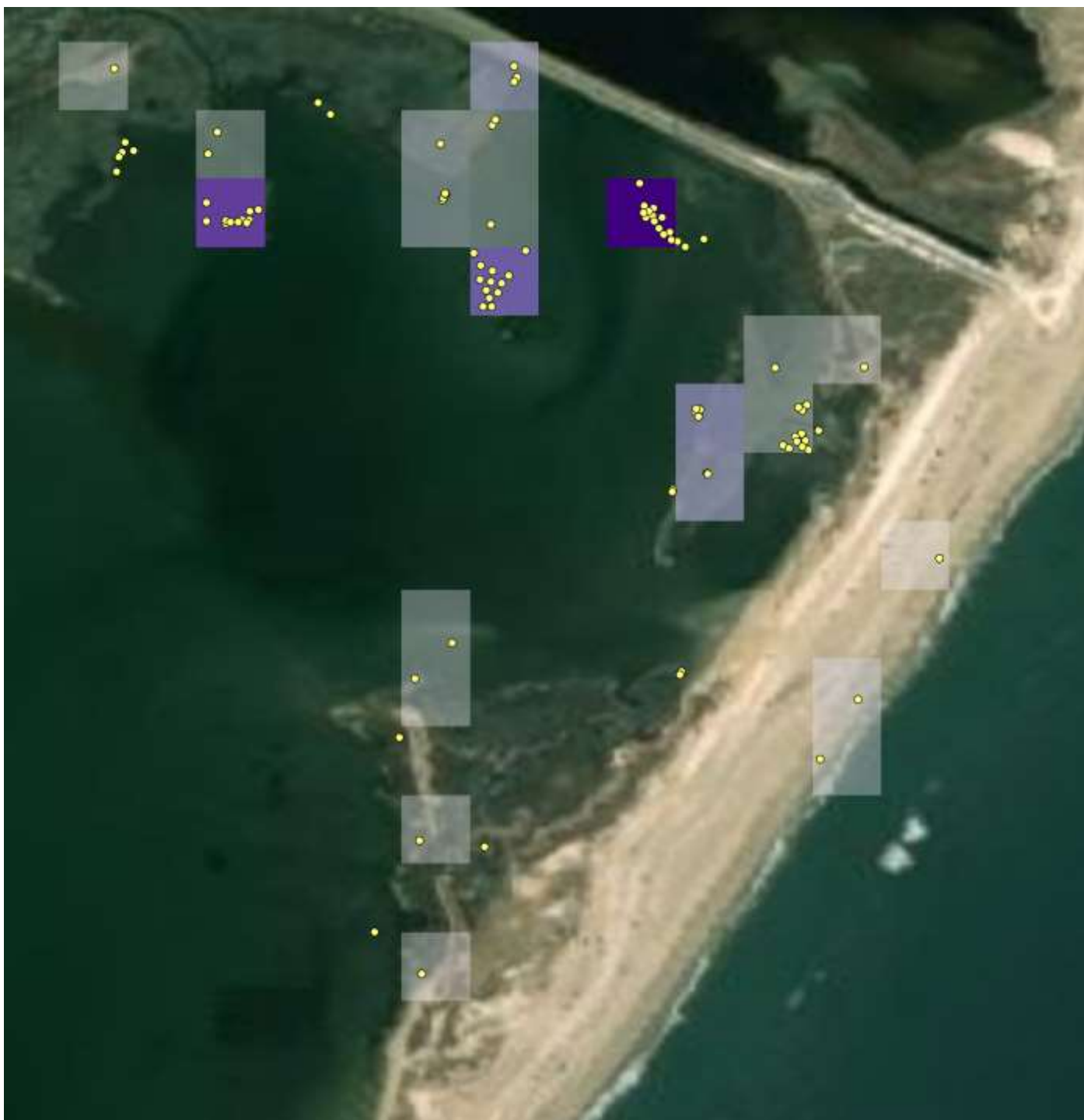
- Foraging location
- Prey capture attempts
- Prey species eaten and size
- Amount fed to chicks



# Results

# Feeding Locations















# Chick Provisioning

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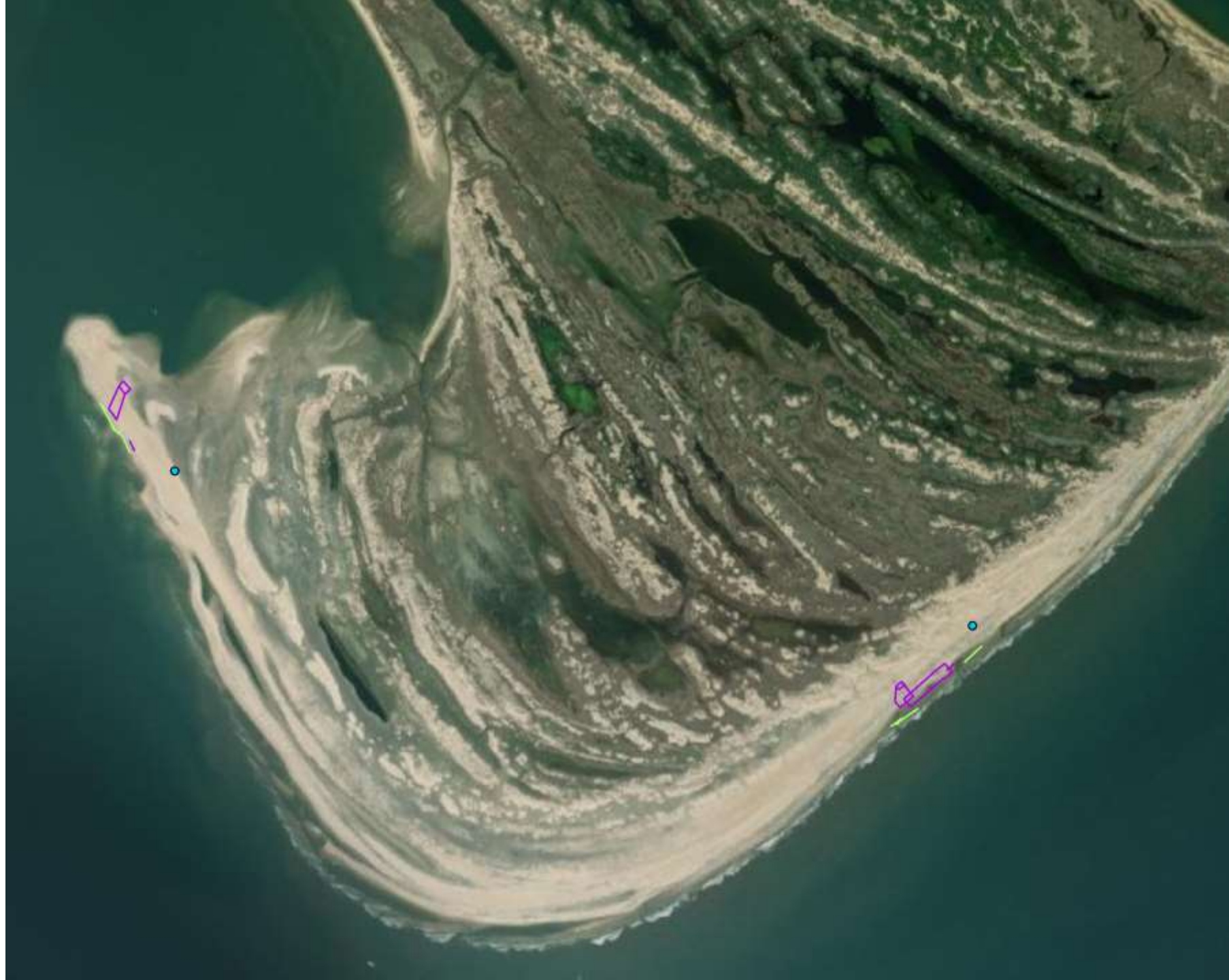
☑ AMOY\_2022Nests



☑ ChickRearing2022



☑ ChickFeeding2022



☑ AMOY\_2022Nests



☑ ChickRearing2022



☑ ChickFeeding2022





# Environmental Sampling



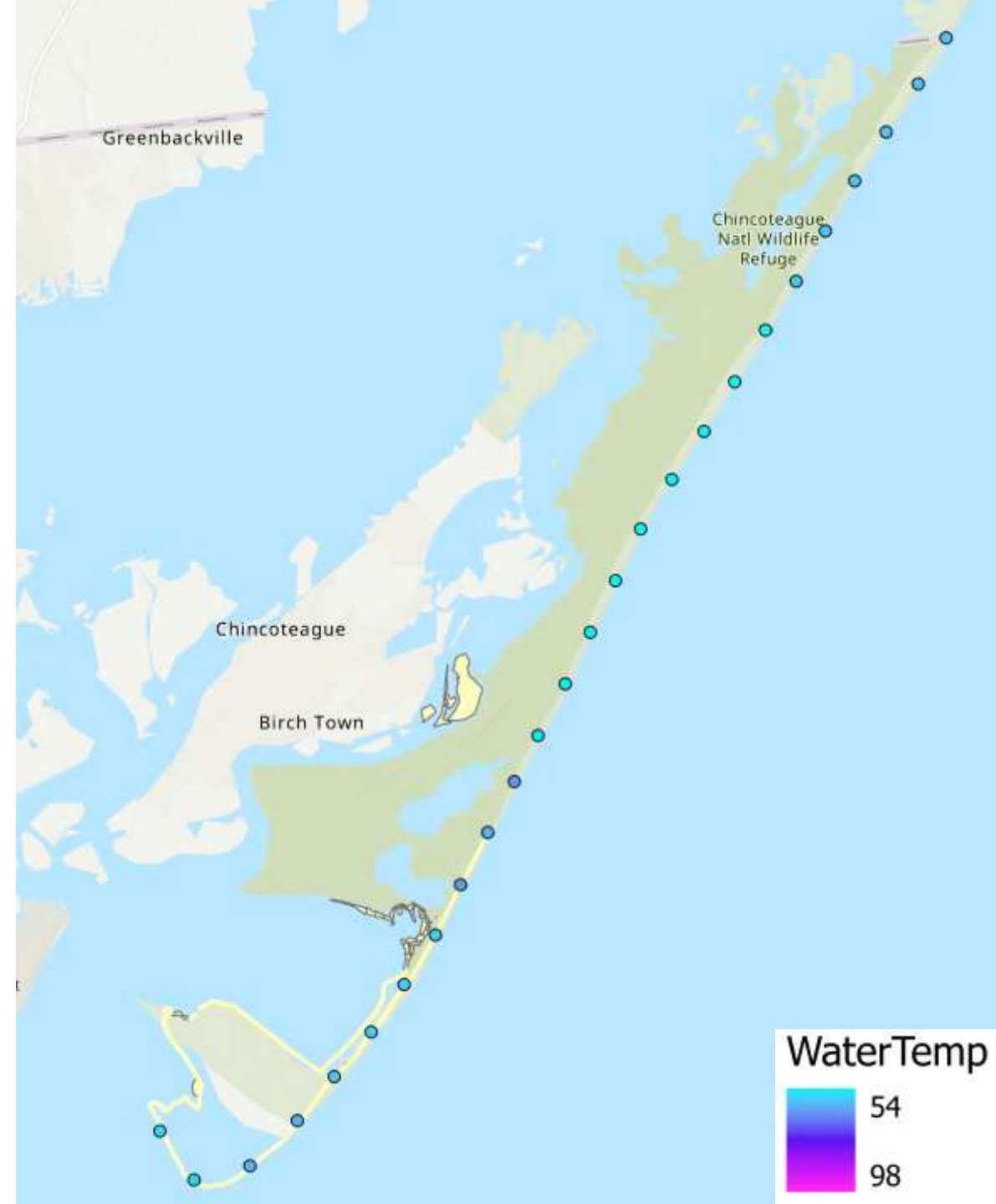
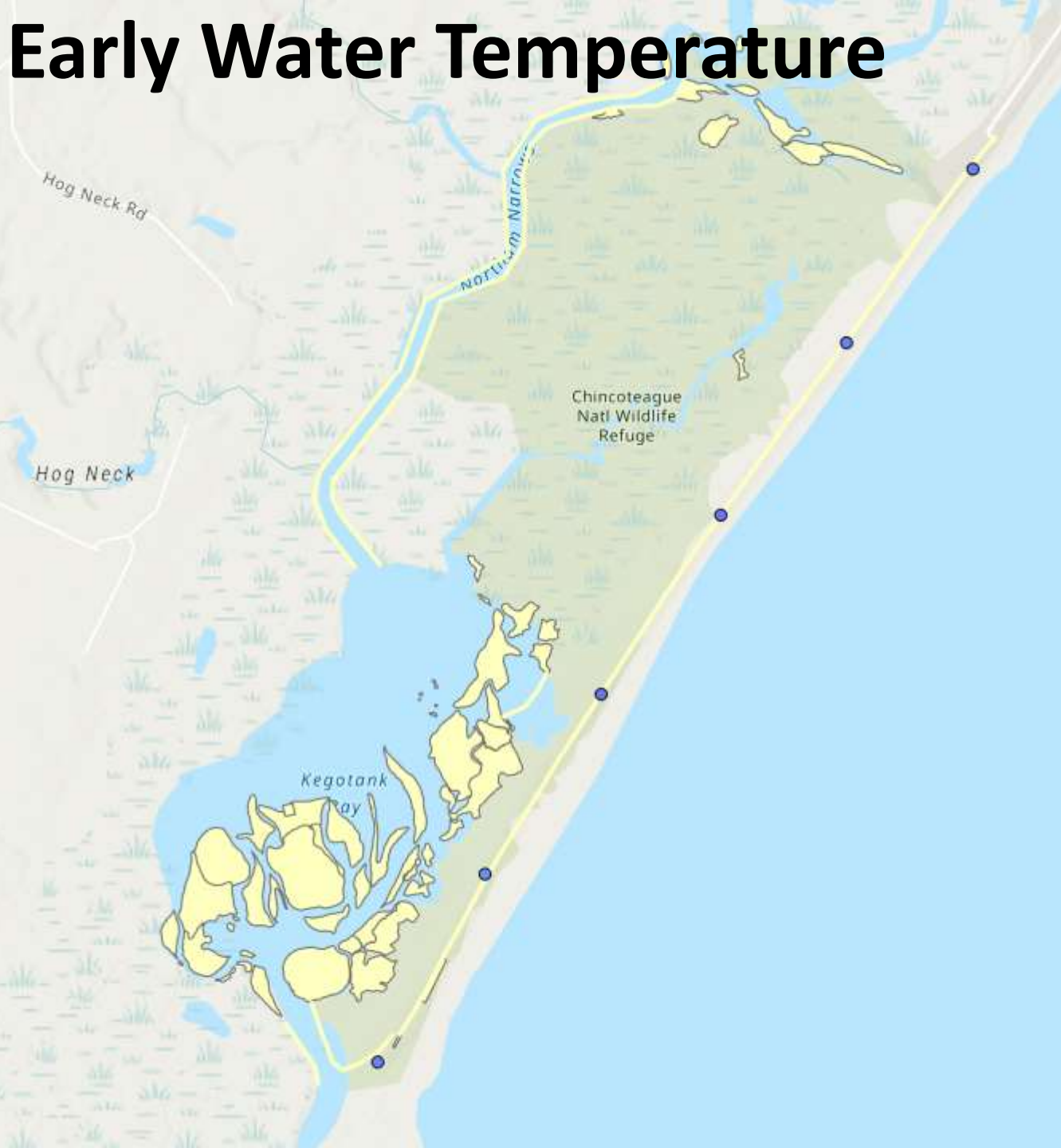
## 2022 averages for YSI and Chla based on island

<b>Island</b>	<b>Temp*</b>	<b>Pressure*</b>	<b>DO<sup>NS</sup></b>	<b>SPC<sup>NS</sup></b>	<b>Salinity*</b>	<b>Chla***</b>	<b>N</b>
Assateague	81.1	730.2	85.0	46,222.6	30.0	3.4	40
Assawoman	77.0	730.7	80.9	48,596.4	31.7	8.7	51



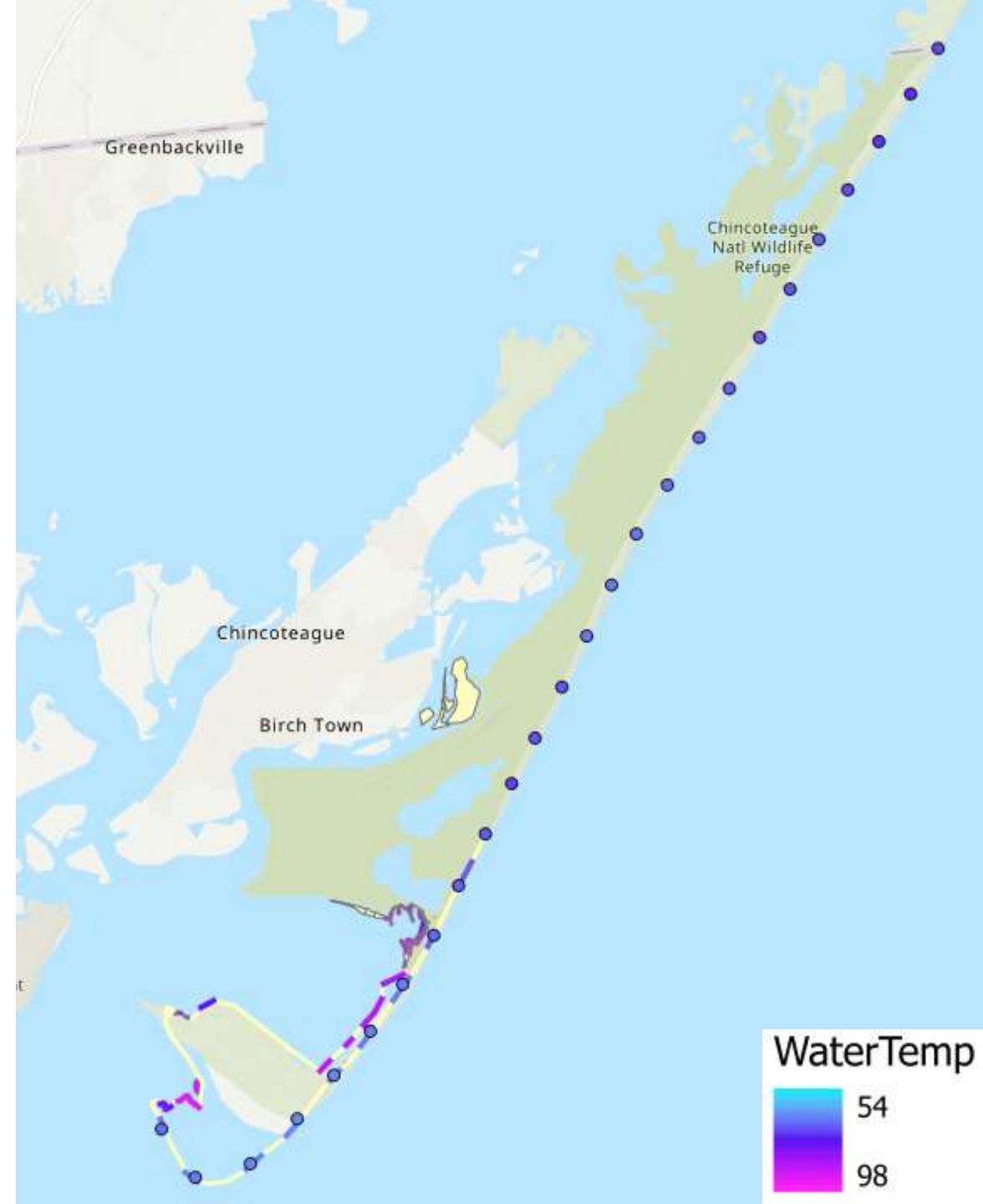
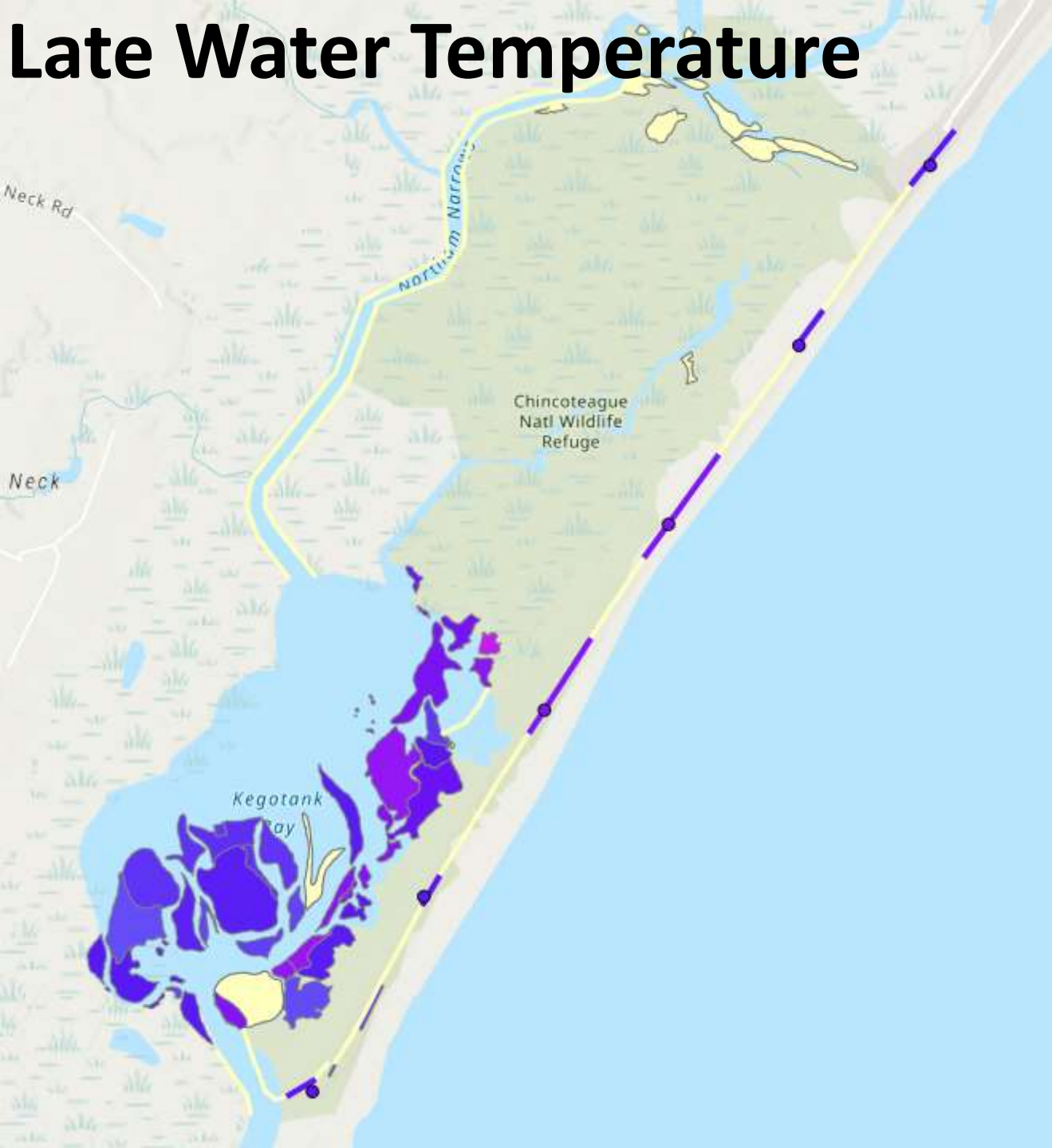
# Water Temperature

# Early Water Temperature

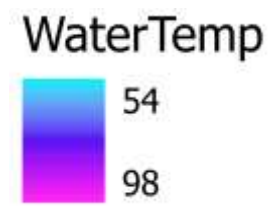
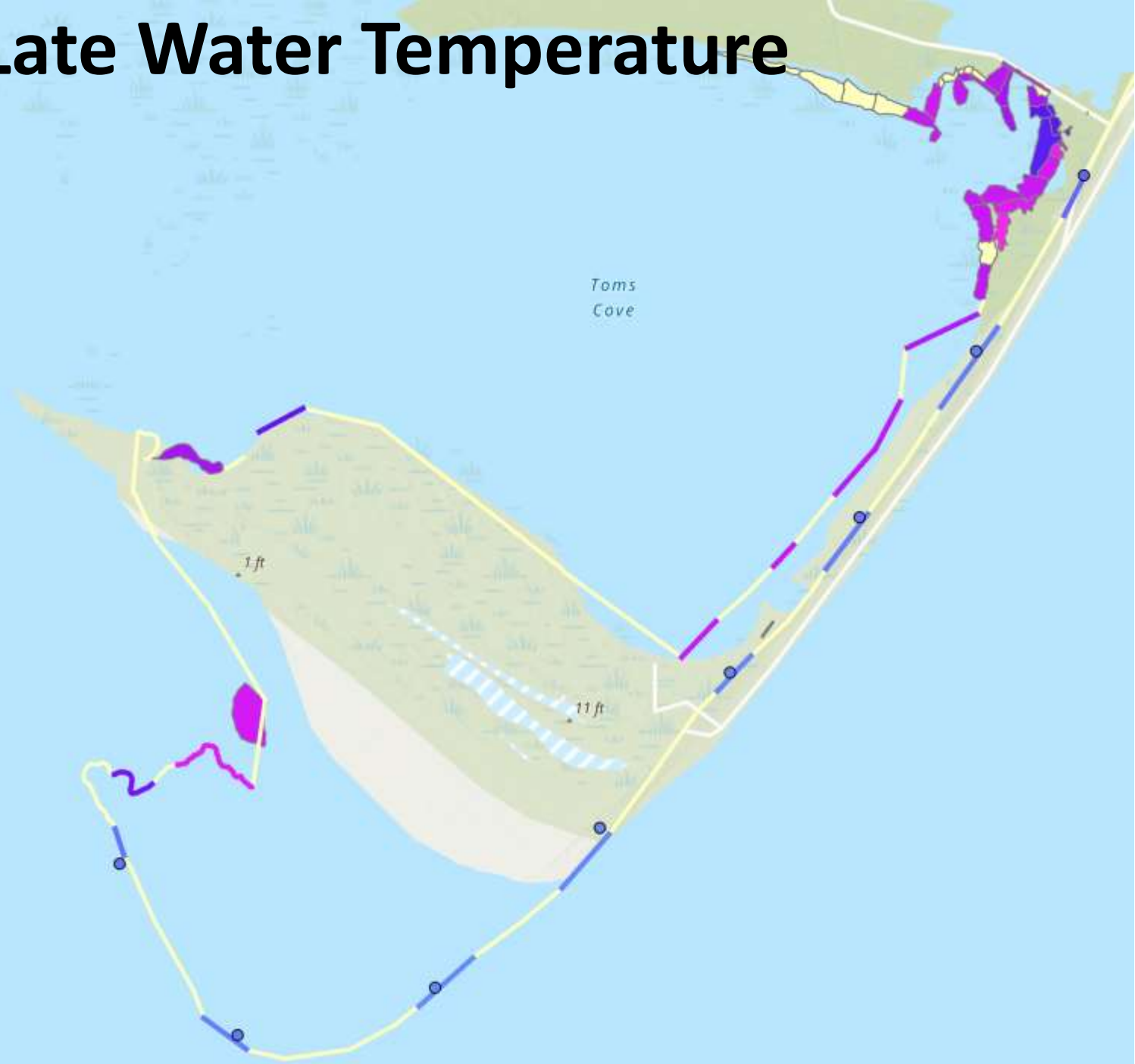




# Late Water Temperature



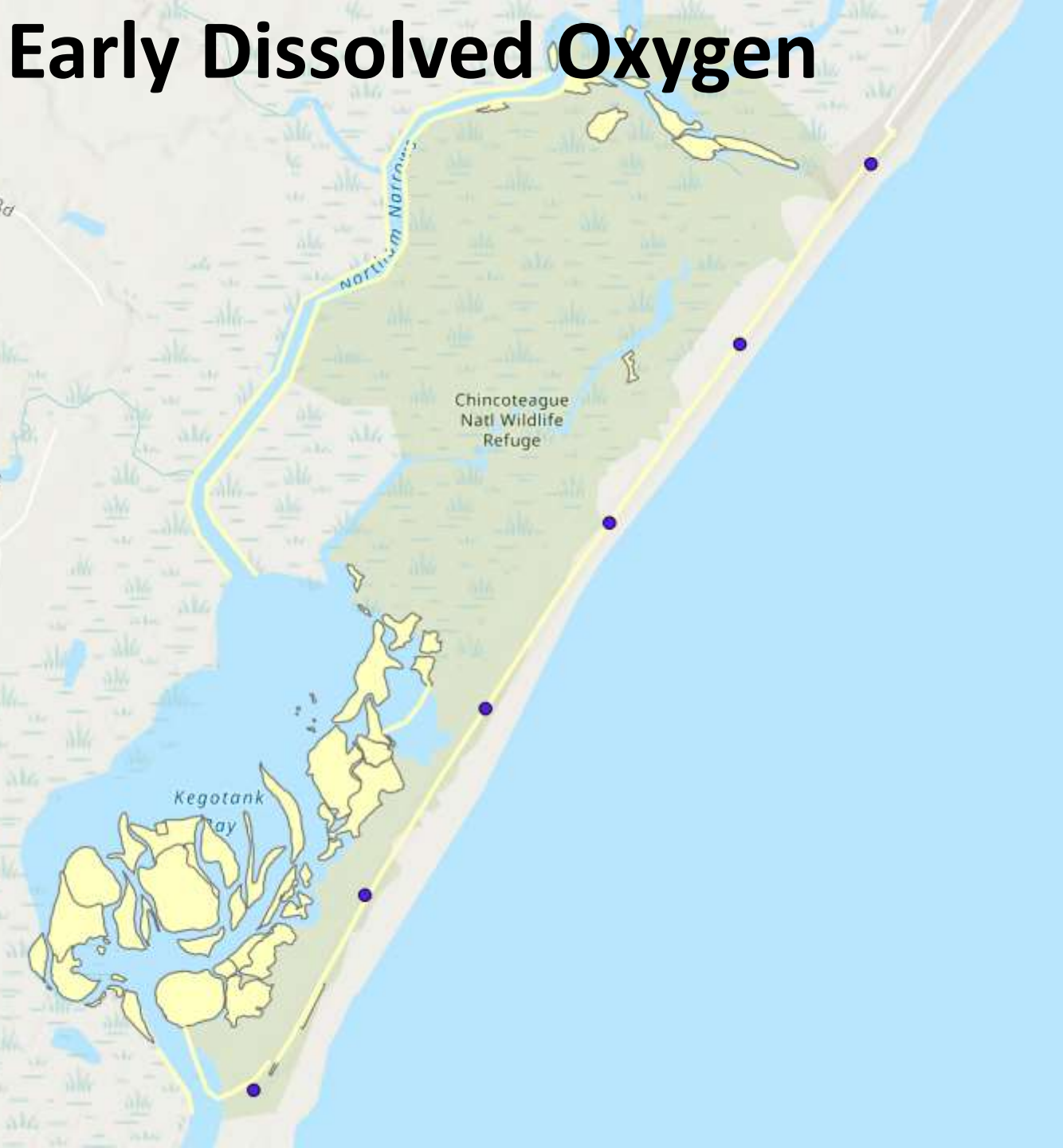
# Late Water Temperature

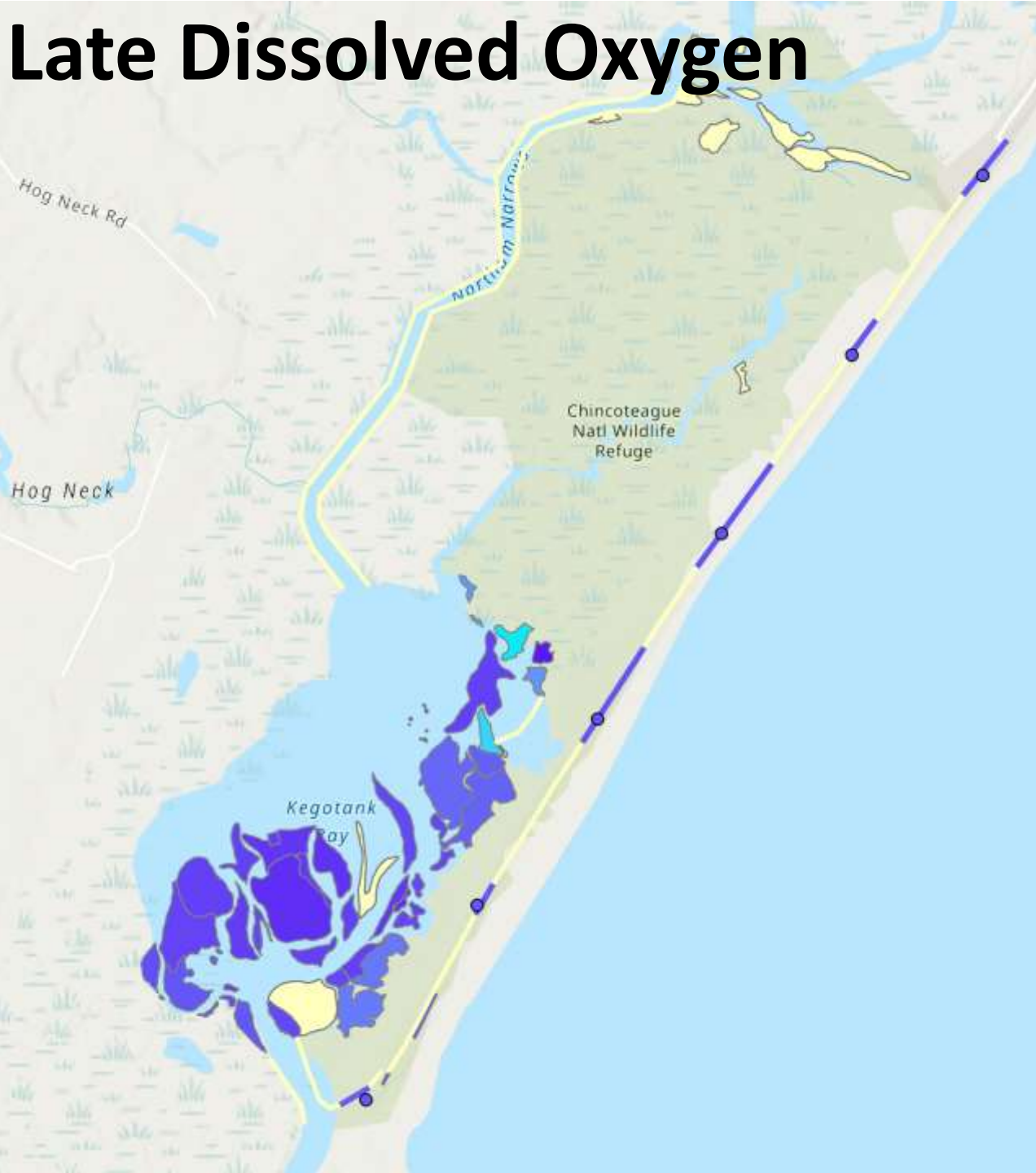




Dissolved Oxygen

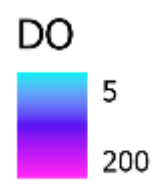
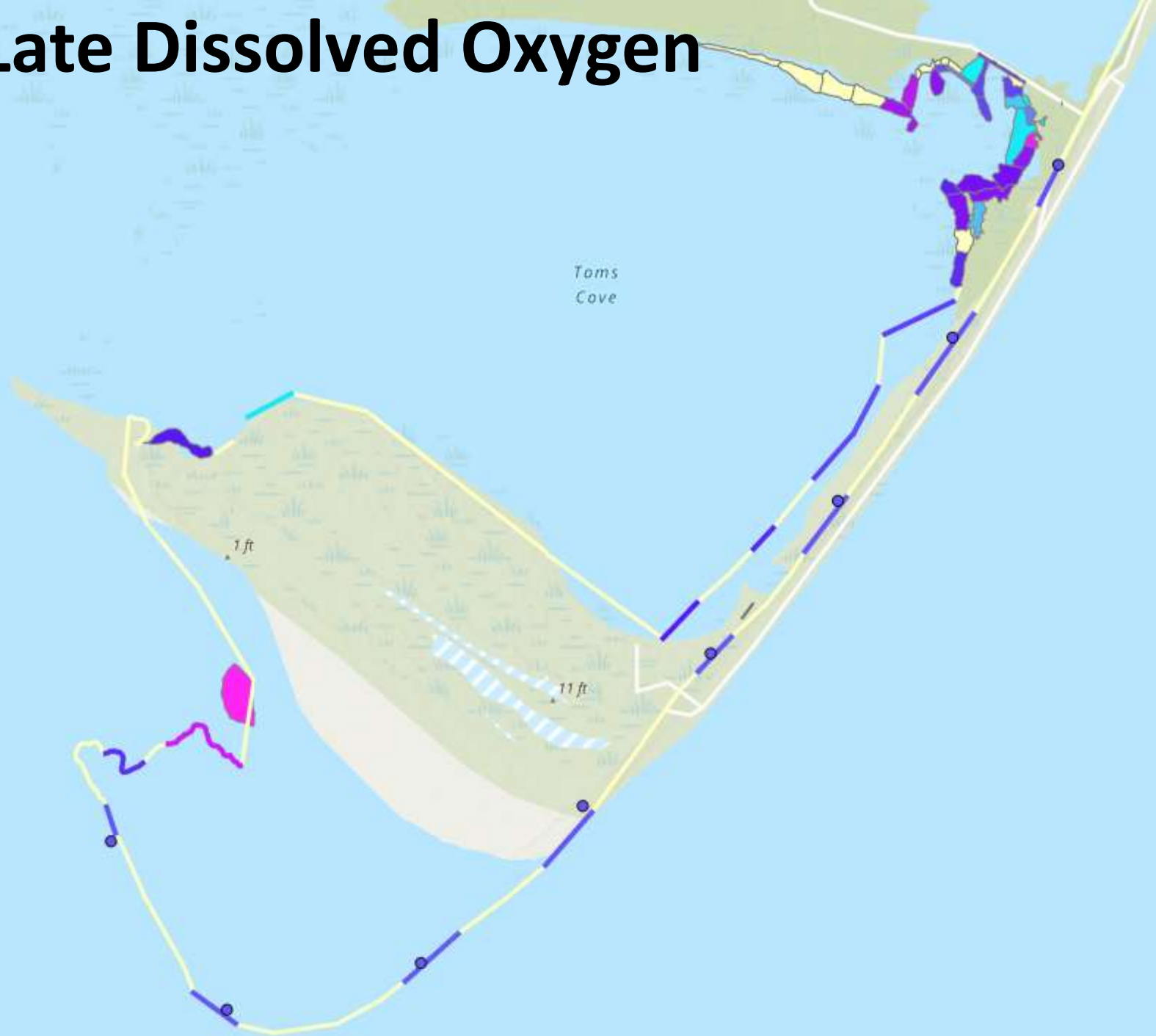
# Early Dissolved Oxygen





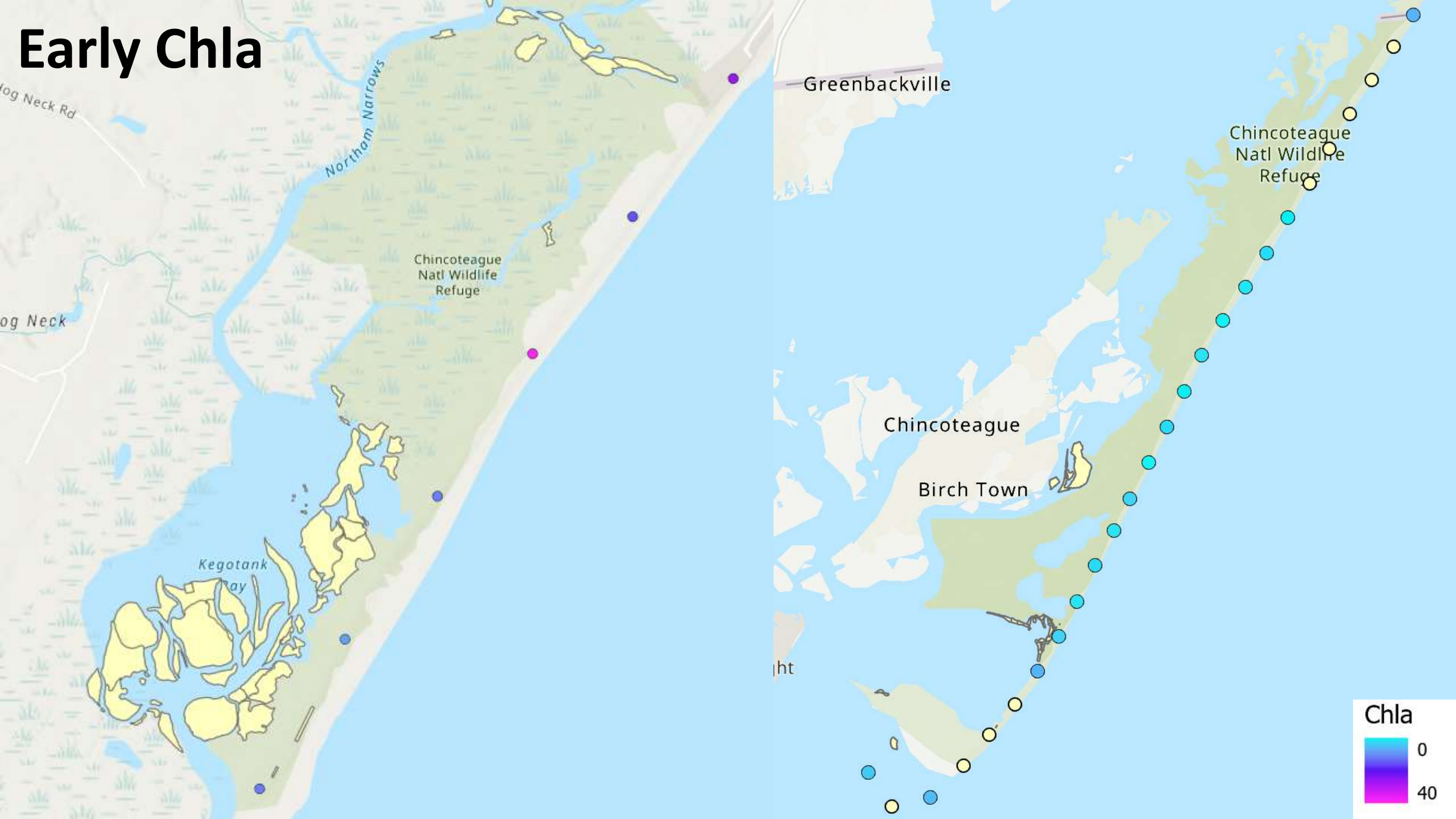


# Late Dissolved Oxygen



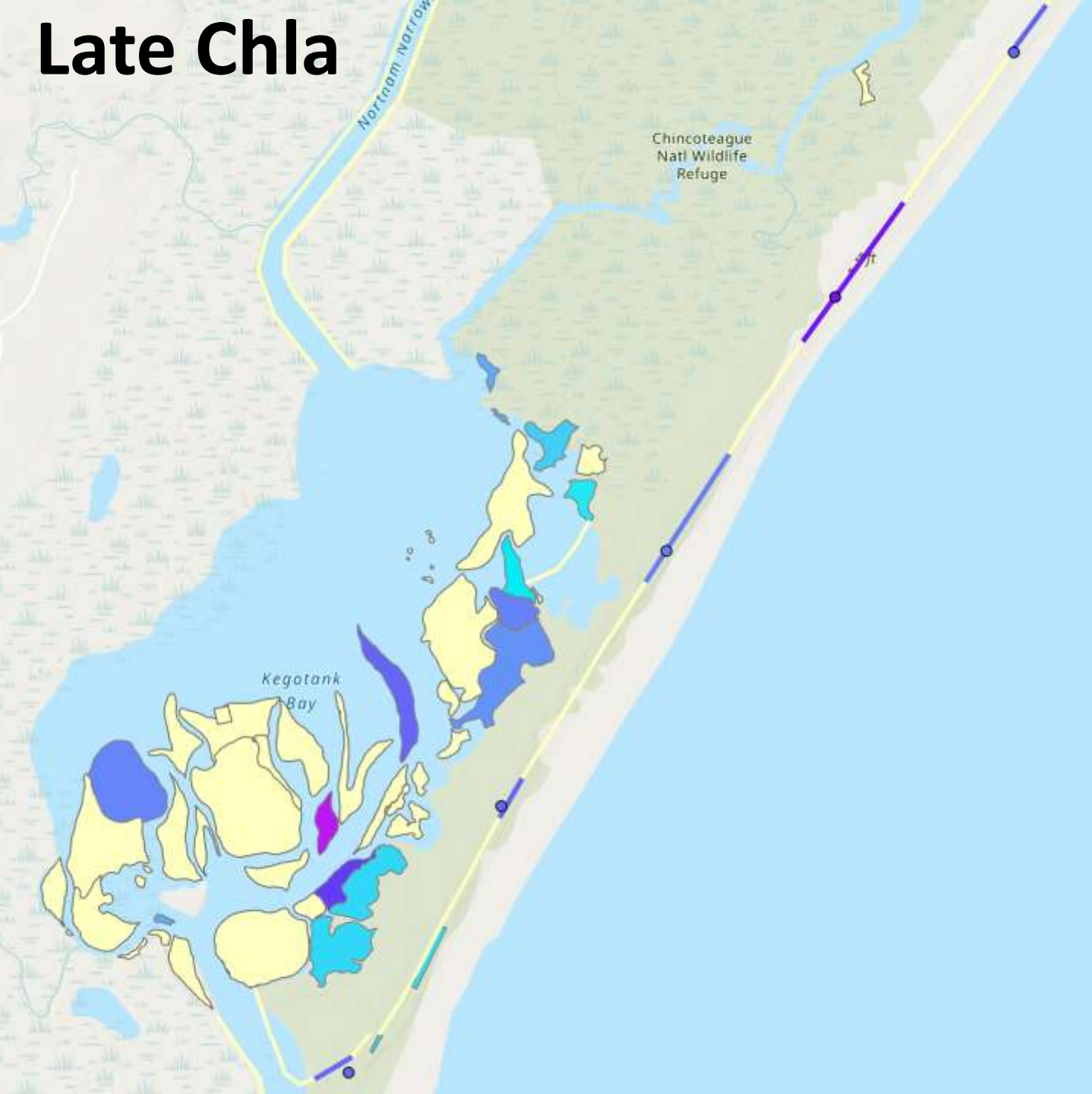
Chla

# Early Chla



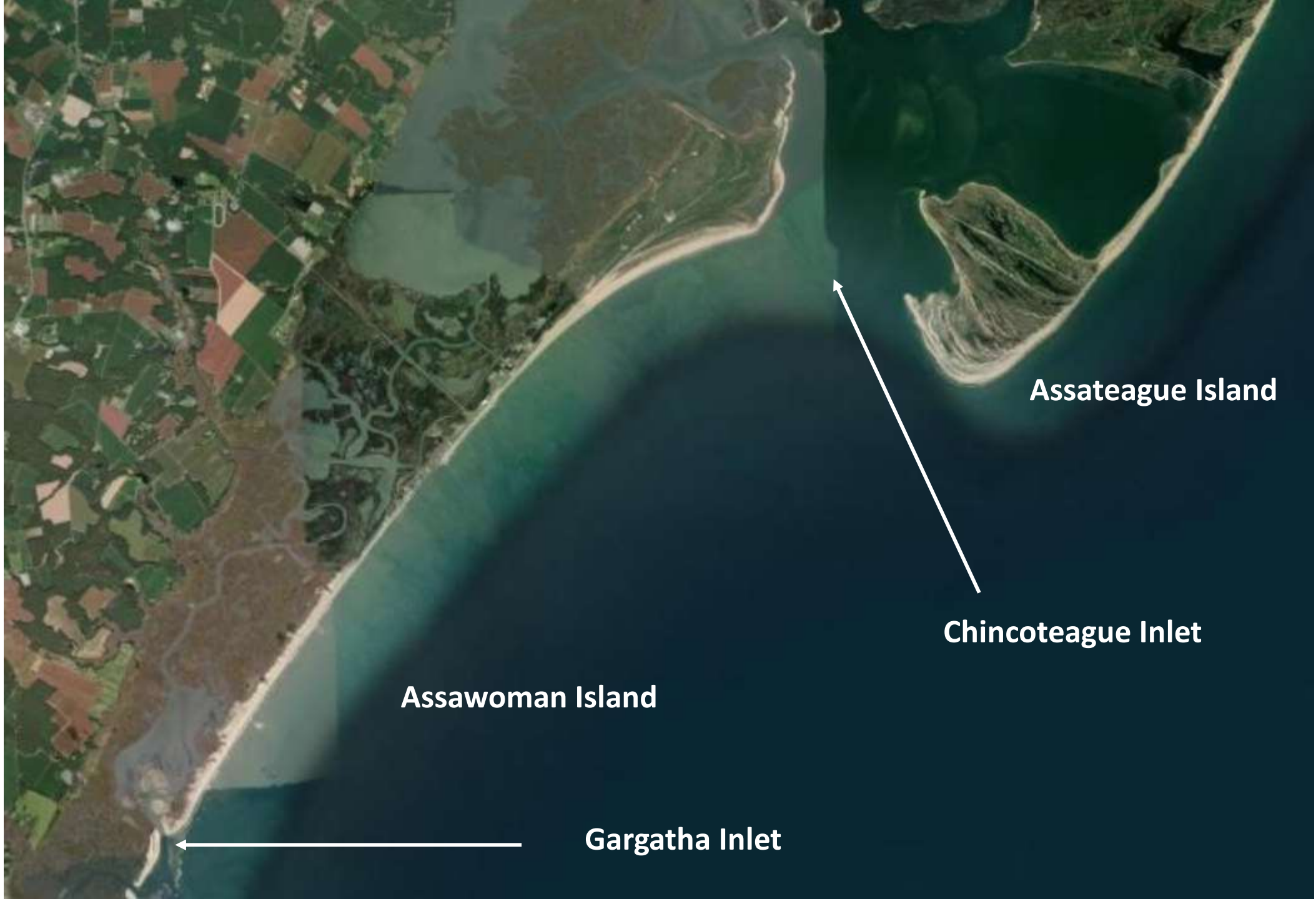


# Late Chla



# Late Chla





Assawoman Island

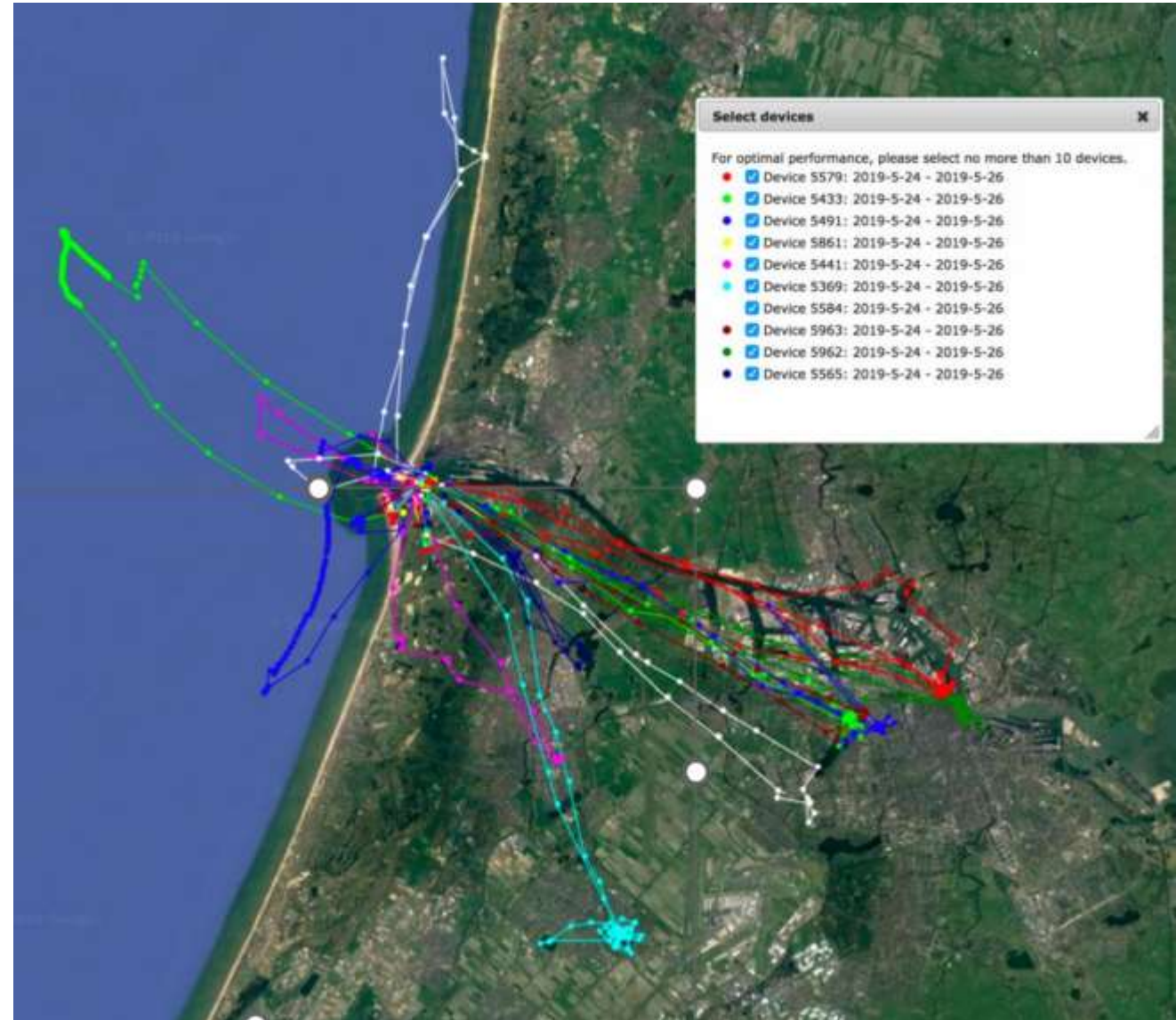
Assateague Island

Chincoteague Inlet

Gargatha Inlet



# Next Steps





# Acknowledgements

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# Questions?



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