Critical background

* Summer was not as wet or hot this year as last
* September hurricane, Christmas eve storms last year and January storms this year mixed the water column and helped facilitate cooler late fall and winter water temps than we’ve seen since winter 2018-2019.

Ecosystem indicator report ideas

* Overwinter temperature and precipitation linked to tomcod nearshore abundance
  + More this year—did better with cooler temps and little precip
* Overwinter temperature linked to mummichog and silverside spawn timing
  + Later this year—did worse with cooler temps
  + Visually identified gravid mummichogs and silversides in July, “dip” in length tied to YOY recruitment to net happened much later in the year
* Smaller (numbers) average catches of herring and sandlance (historic low)

Cool shit

* Single, random catches: moonfish, saury
* Repeated catches: white perch, crevalle jack, permit at QBC
* White mullets still persistent in QBC data—shallow, sheltered areas only

Sections:

New Species: Rastergrid of pres/absence, blue crabs and shore crabs

Emergent Trends: tomcod and temp, length-frequency and temp for silversides and mummis, growth and temp for silversides and herring (highlight student project)

Ecosystem change: physical changes

Insights and commentary: extratropical storms, bottom temperatures

Prioritize: growth (Courtney), tomcod, southern orphans raster

eDNA: bubble plots for SFF