AI King Crab Update

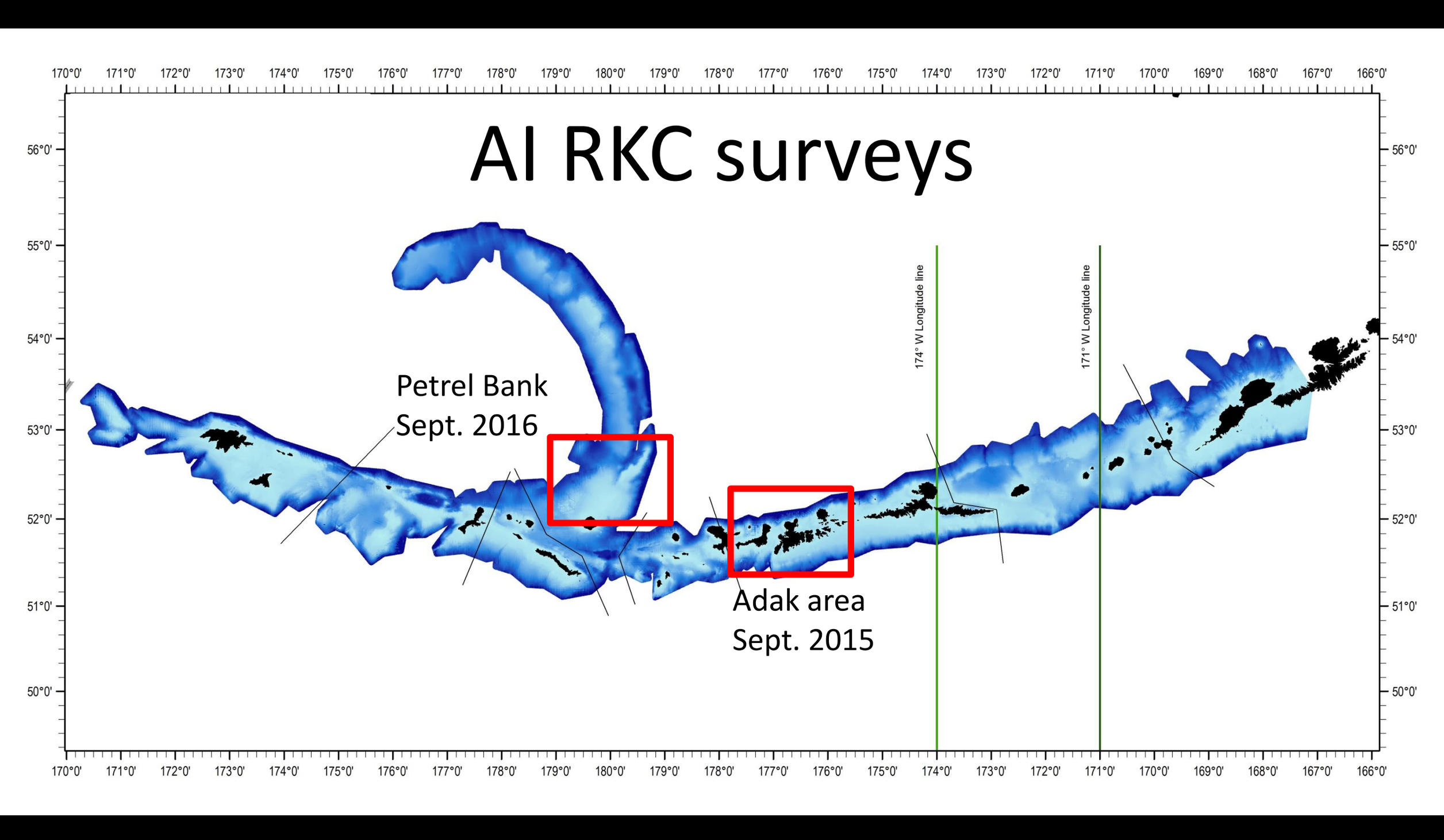
AI RKC Survey

- Adak area (completed)
- Petrel Bank (Sept. 2016)

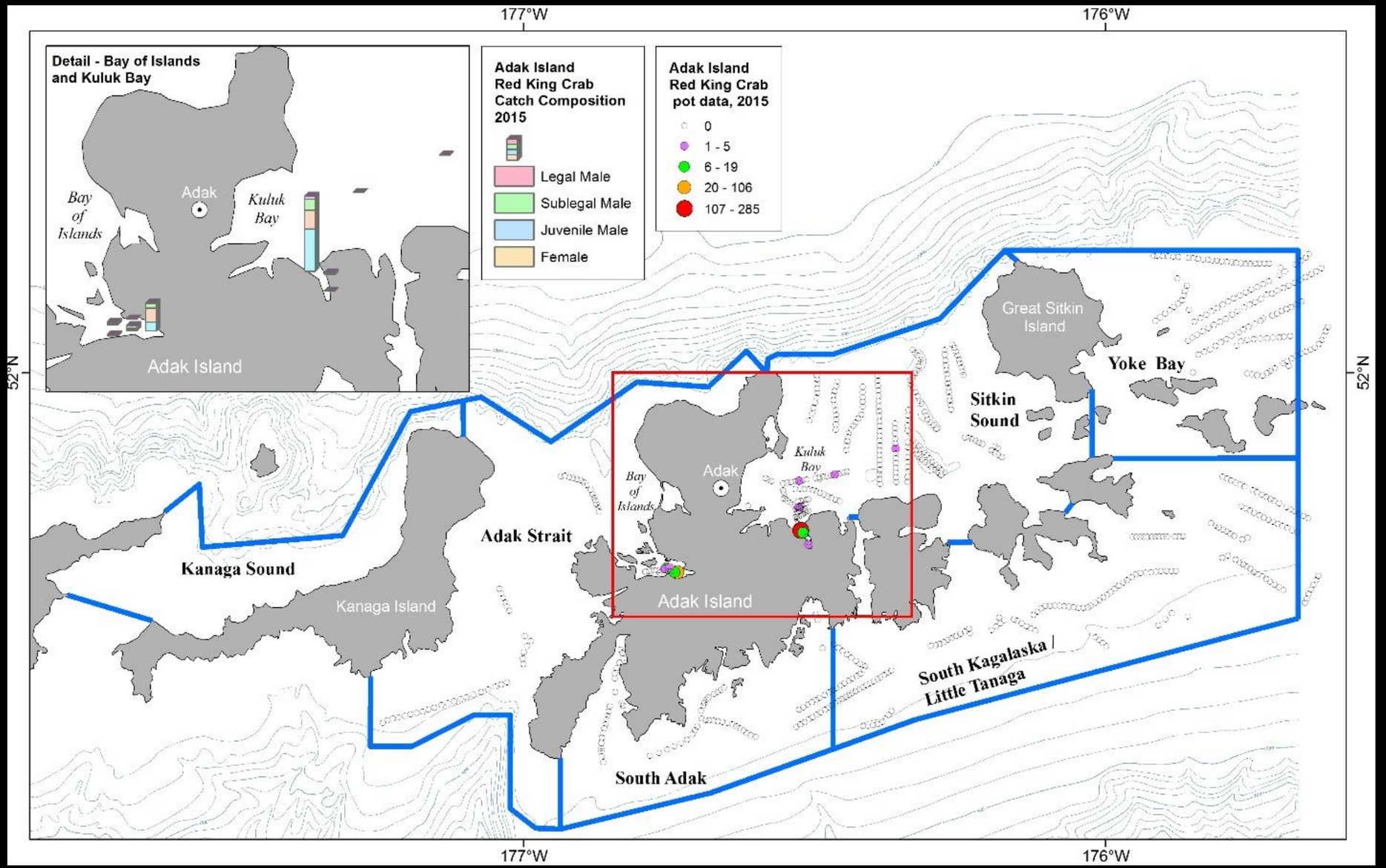
AI GKC Cooperative Survey

- EAG Aug. 2015, EAG + WAG 2016

AI GKC Genetic Stock Structure


AI RKC surveys
Petrel Bank
Sept. 2016
Adak area
Sept. 2015
174° W Longitude line
171° W Longitude line
170°0' 171°0' 172°0' 173°0' 174°0' 175°0' 176°0' 177°0' 178°0' 179°0' 180°0' 179°0' 178°0' 177°0' 176°0' 175°0' 174°0' 173°0' 172°0' 171°0' 170°0' 169°0' 168°0' 167°0' 166°0'
56°0'
55°0'
54°0'
53°0'
52°0'
51°0'
50°0'

Adak RKC Survey



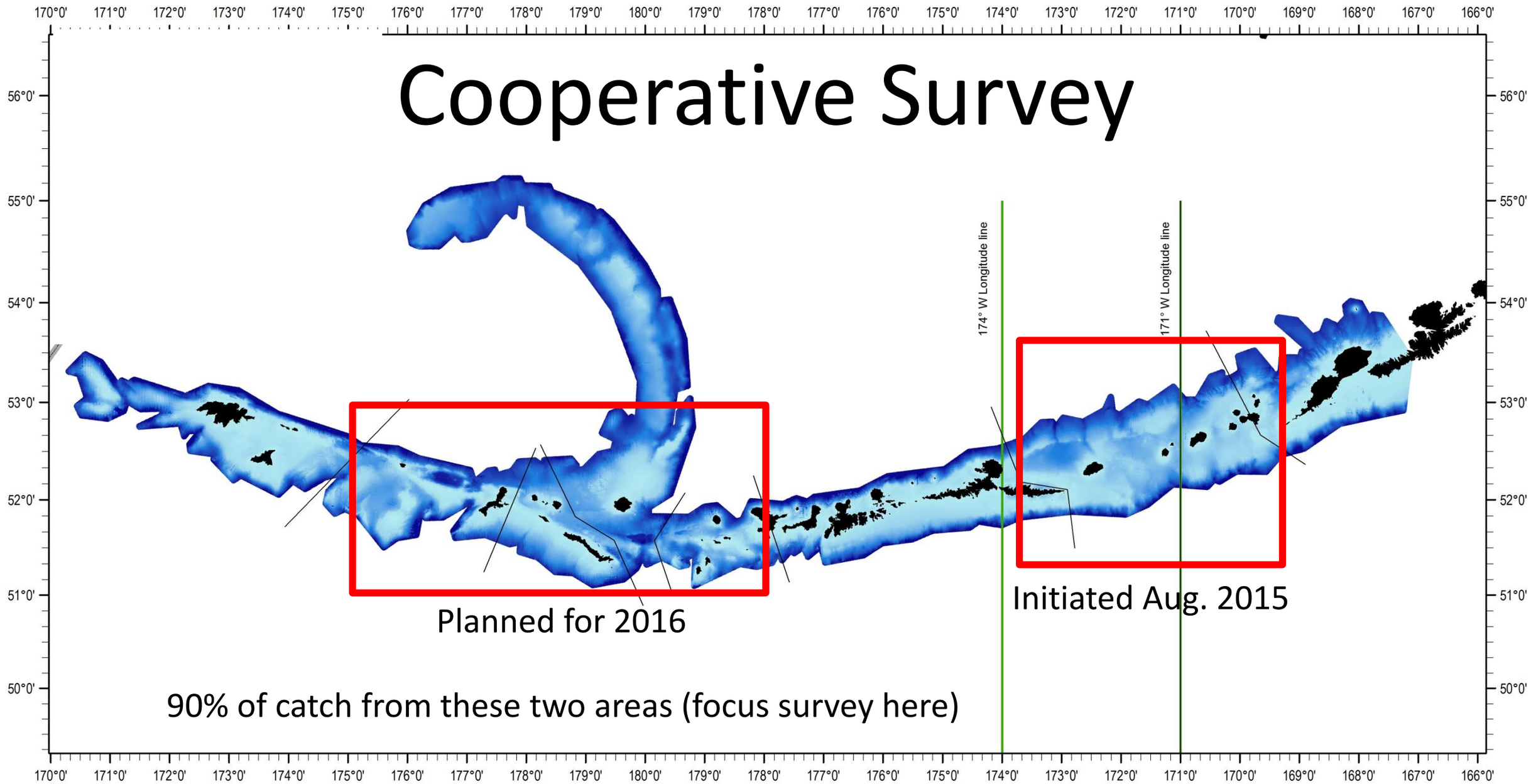
n = 730 potlifts

442 Total RKC caught
88% caught in 2 pots

23 Legal RKC
(0.32crab/pot)
52% Legals in 1 pot

Genetic samples
(to be processed)

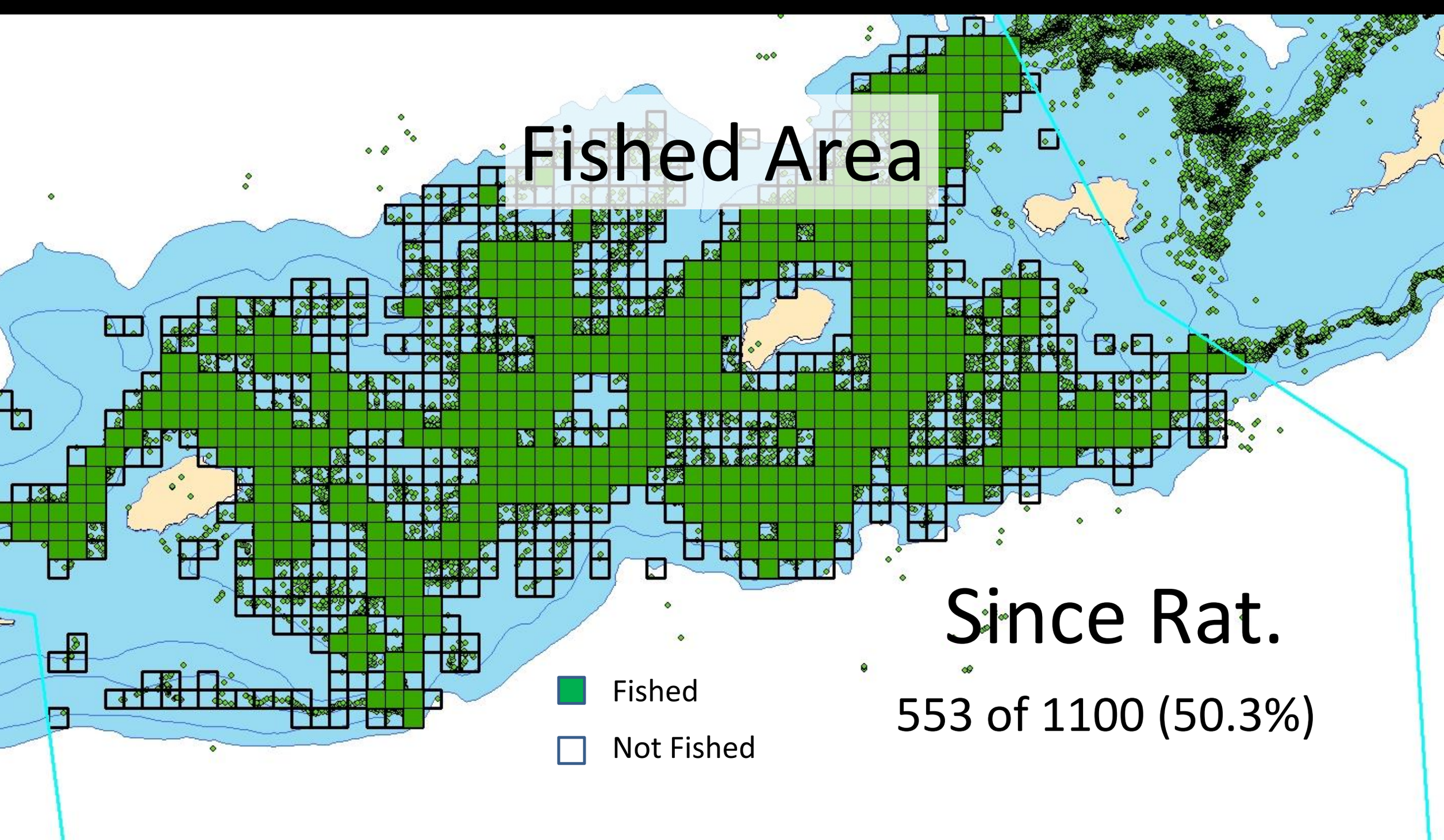
Cooperative Survey

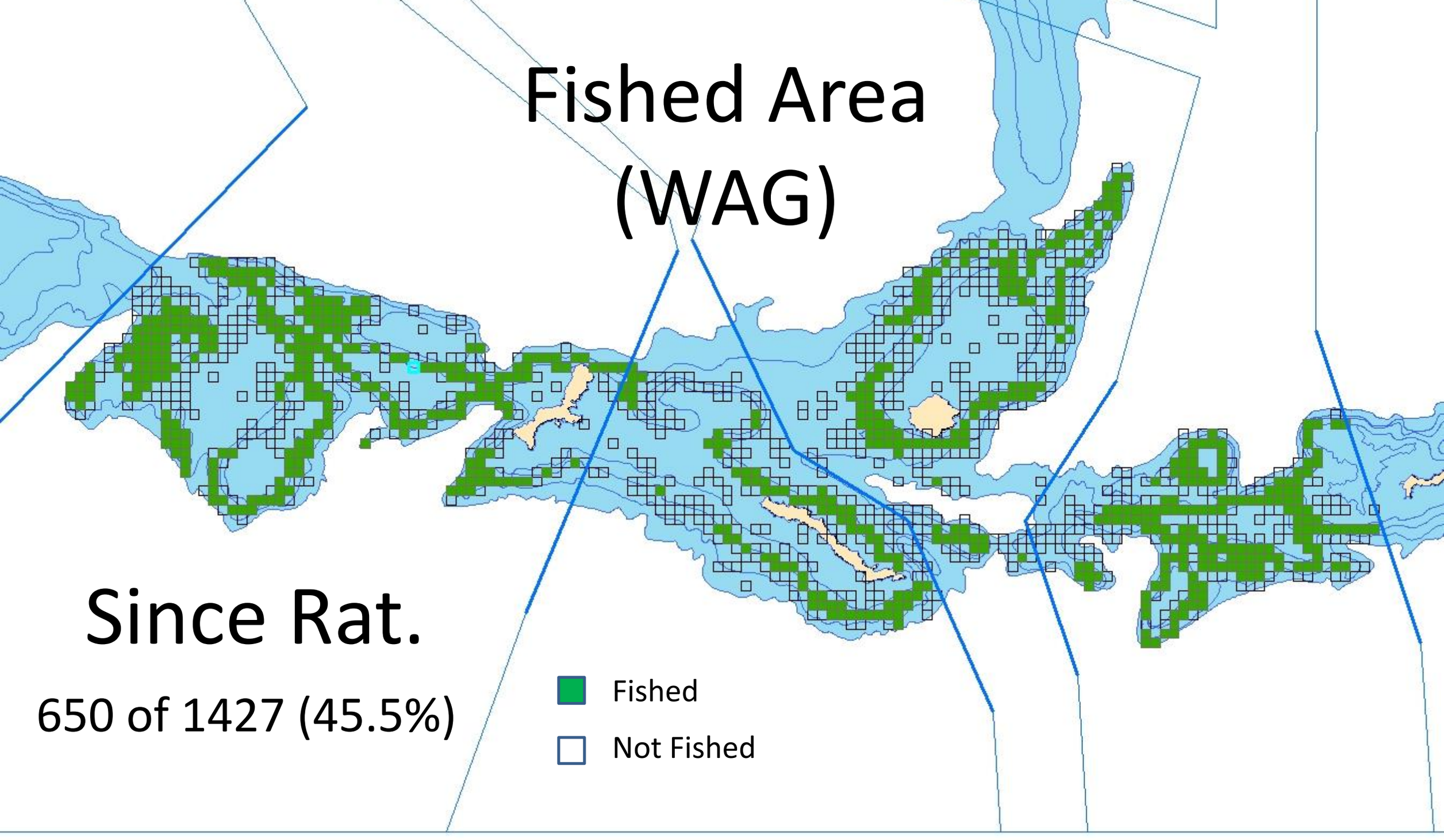


Cooperative Survey

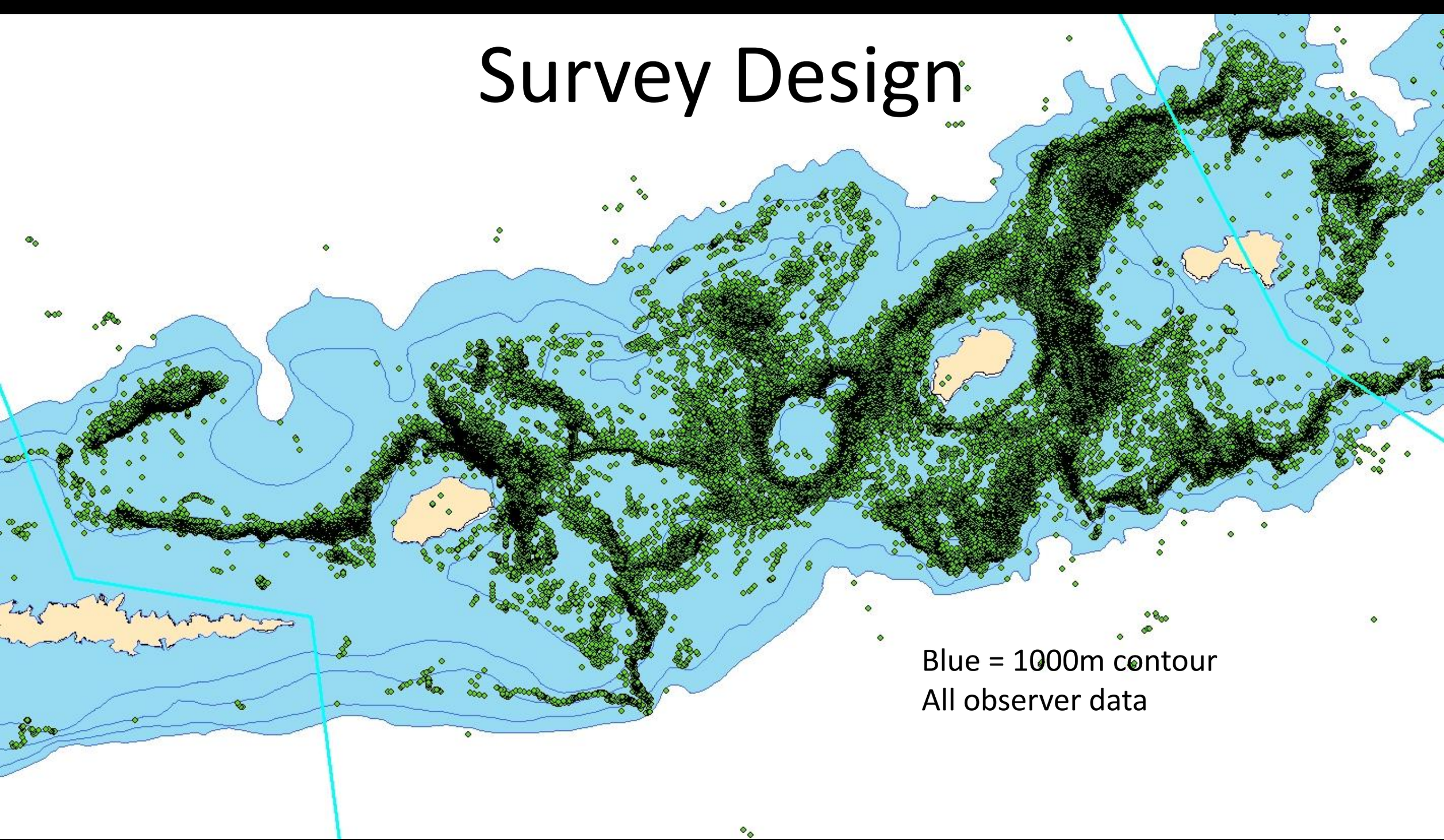
Goals:

Increase spatial extent
Reduce potential for hyperstability of CPUE
Initiate consistent time series
Provide cost effective method


Fished Area
Since Rat.
553 of 1100 (50.3%)
Fished
Not Fished

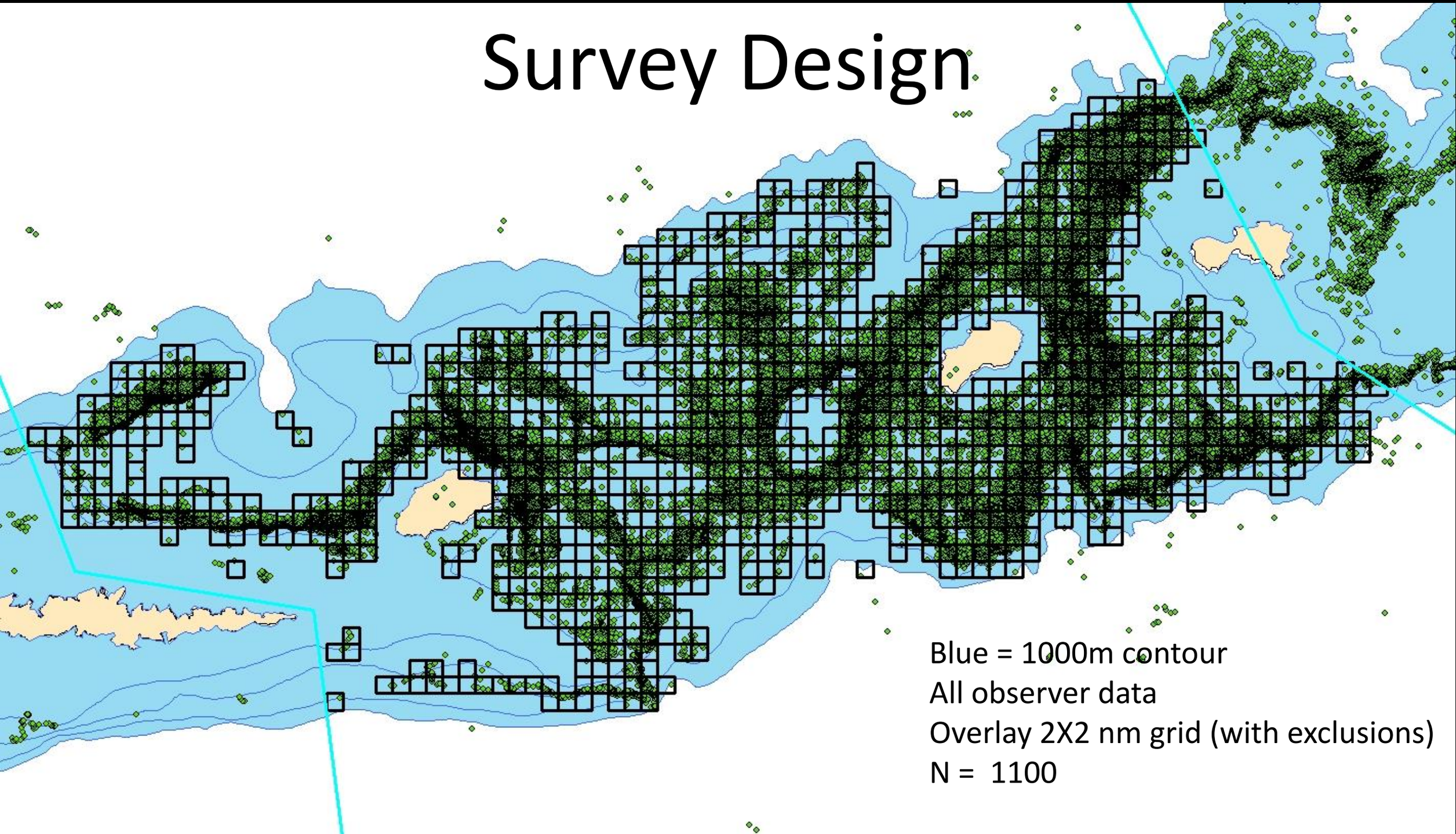

Fished Area
(WAG)
Since Rat.
650 of 1427 (45.5%)
Fished
Not Fished

Survey Design



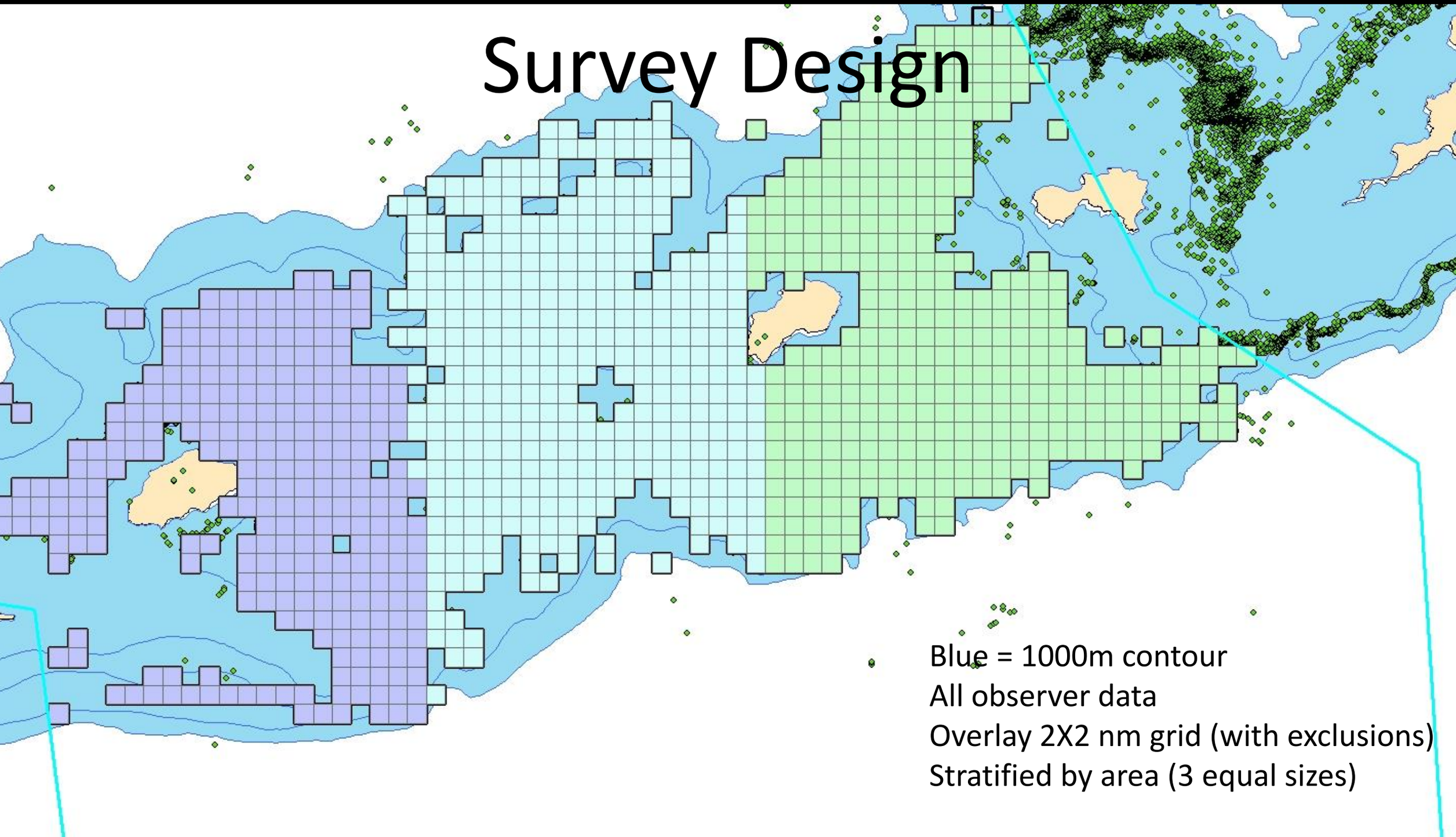
Blue = 1000m contour
All observer data

Survey Design



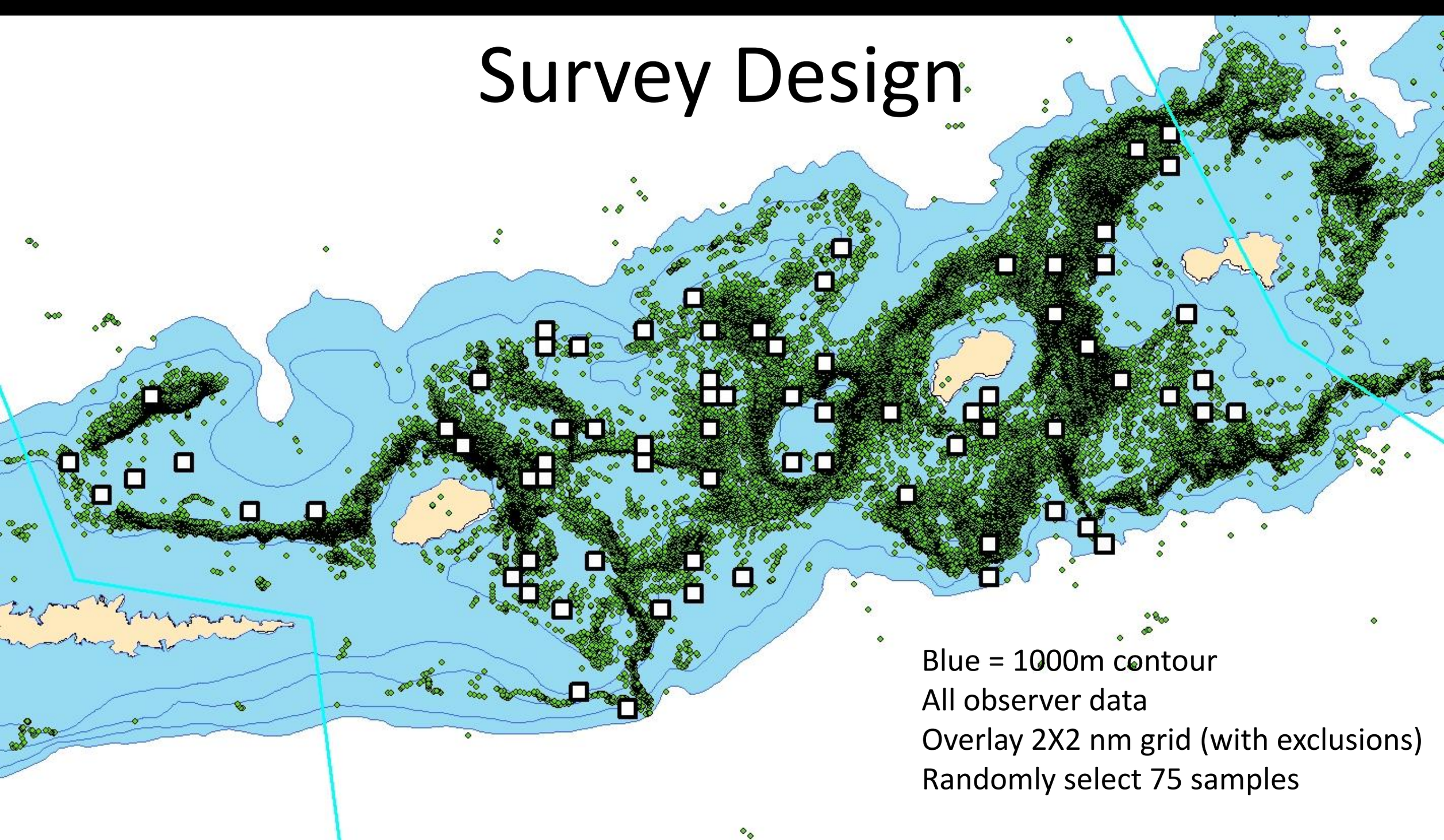
Blue = 1000m contour
All observer data
Overlay 2X2 nm grid (with exclusions)
N = 1100

Survey Design



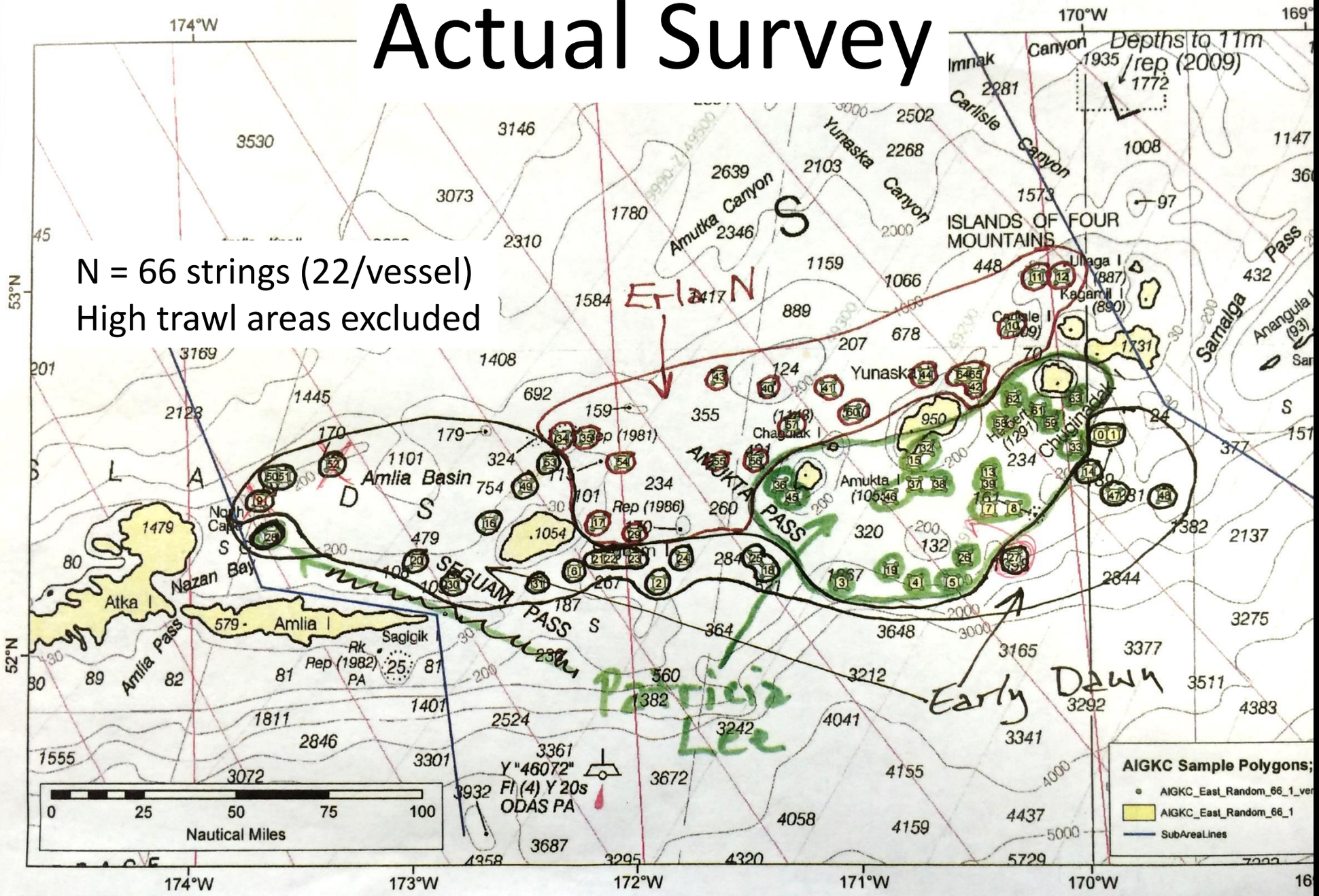
Blue = 1000m contour
All observer data
Overlay 2X2 nm grid (with exclusions)
Stratified by area (3 equal sizes)

Survey Design



Blue = 1000m contour
All observer data
Overlay 2X2 nm grid (with exclusions)
Randomly select 75 samples

Actual Survey



Early Results

Early Dawn: 1 staff, 20 strings, 5 pots/string
5666 Total crab, 2077 measured
Lost one string to Trawl fleet (2 others recovered)

Erla N: 2 staff, 19 strings, 5 pots/string
4352 Total crab, 1414 measured

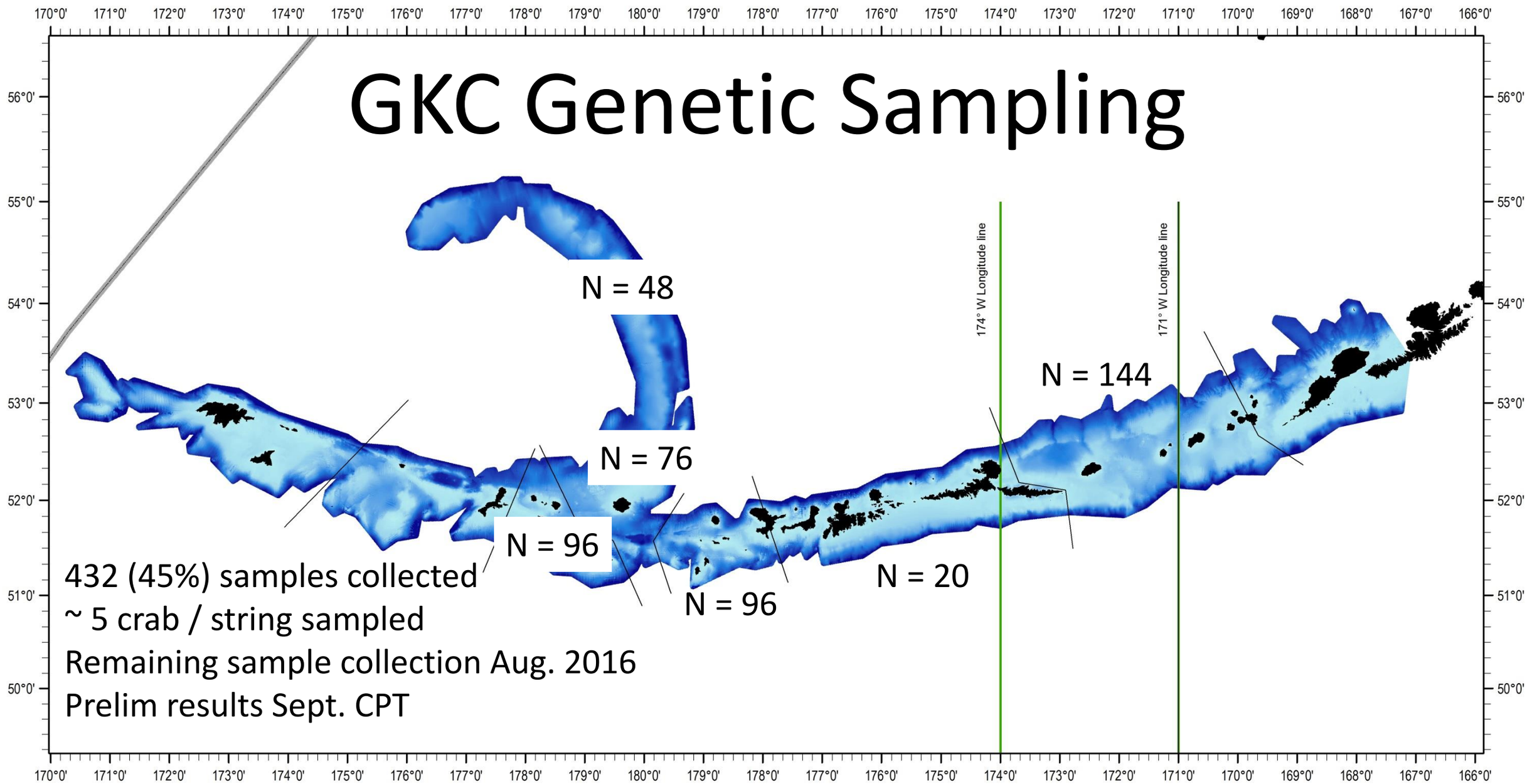
Patricia Lee: 2 staff, 18 strings, 7 pots/string
5497 Total crab, 2382 measured

n = 57 strings (321 pots)

Next Steps

Examine within and among string variability
(sample size estimates)
Explore better stratification options
(Skipper, Habitat, Effort)
Initiate in WAG (Aug. 2016)
Incorporate small-mesh pots
(Spatial variability in selectivity)

GKC Genetic Sampling



432 (45%) samples collected
~ 5 crab / string sampled
Remaining sample collection Aug. 2016
Prelim results Sept. CPT