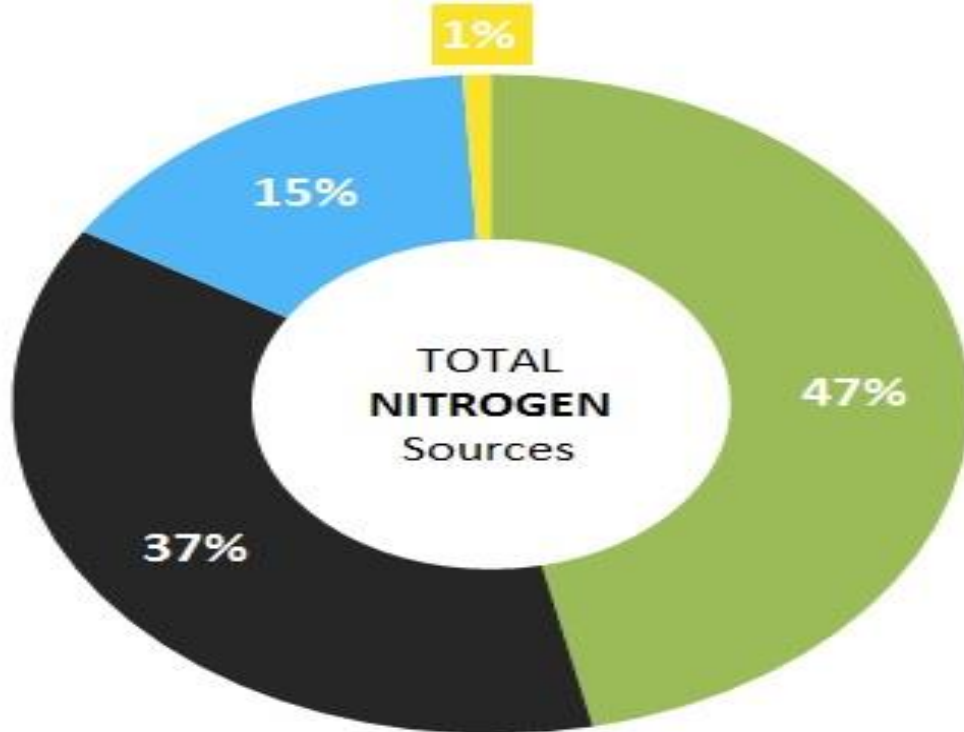


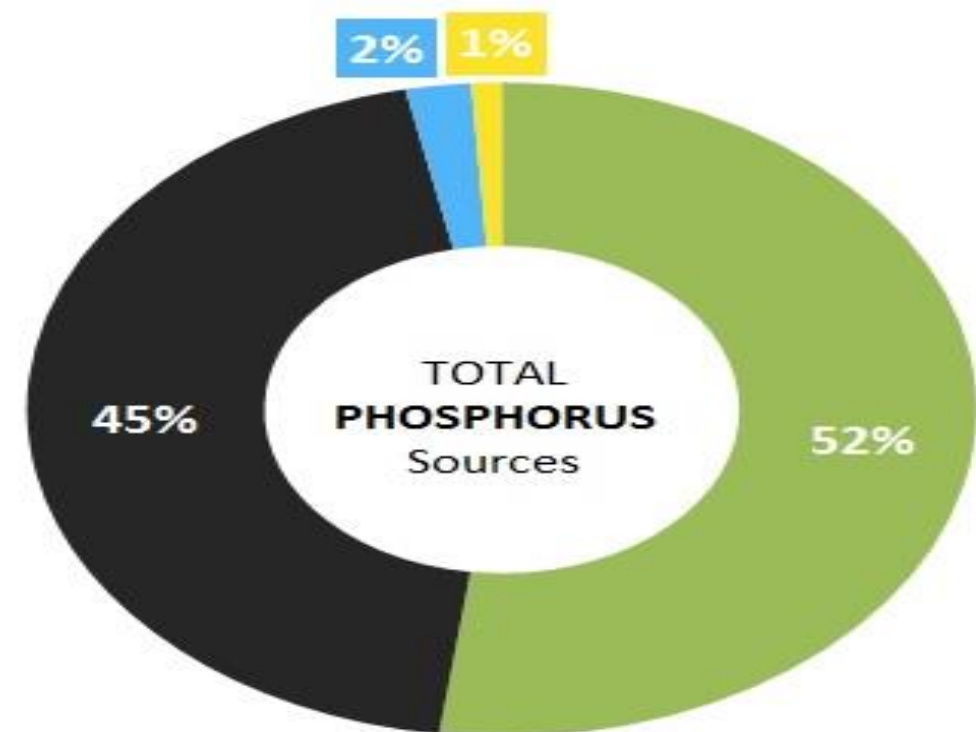


Muck Flux – Dredging Update

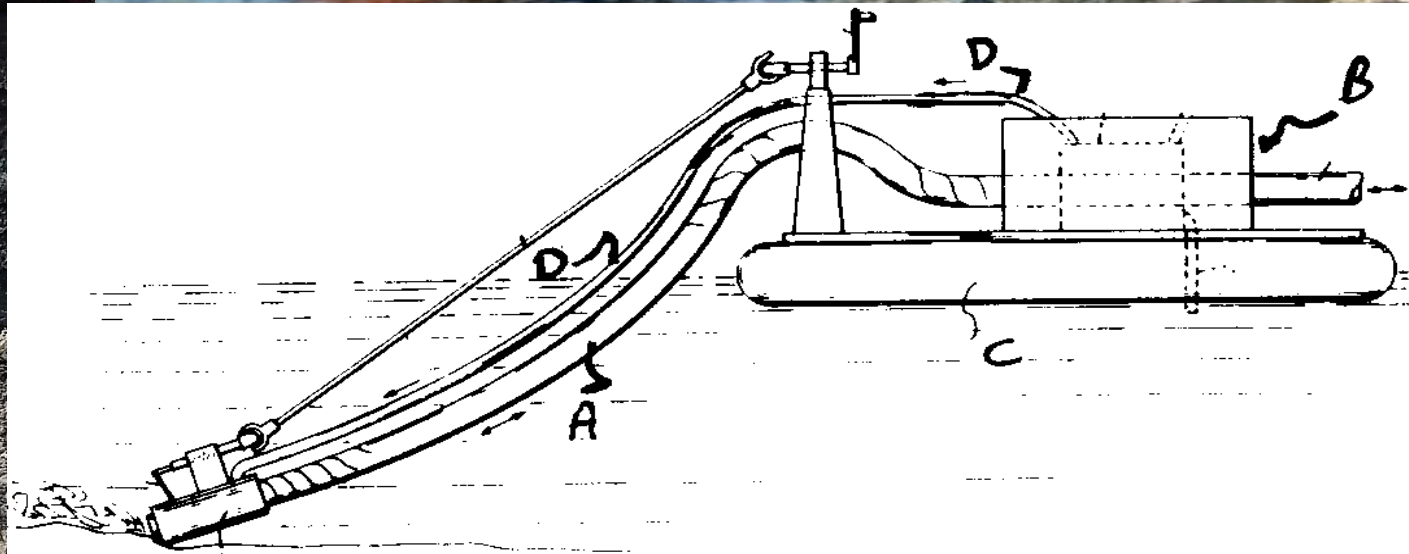
External Pollution Sources Versus Muck Flux in the IRL



- Atmospheric deposition
- Point Sources
- Muck flux



- Excess fertilizer, Stormwater runoff, Reclaimed water high in nutrients, Septic systems



Turkey Creek

216,000 c

APPROXIMATE SEDIMENT THICKNESSES

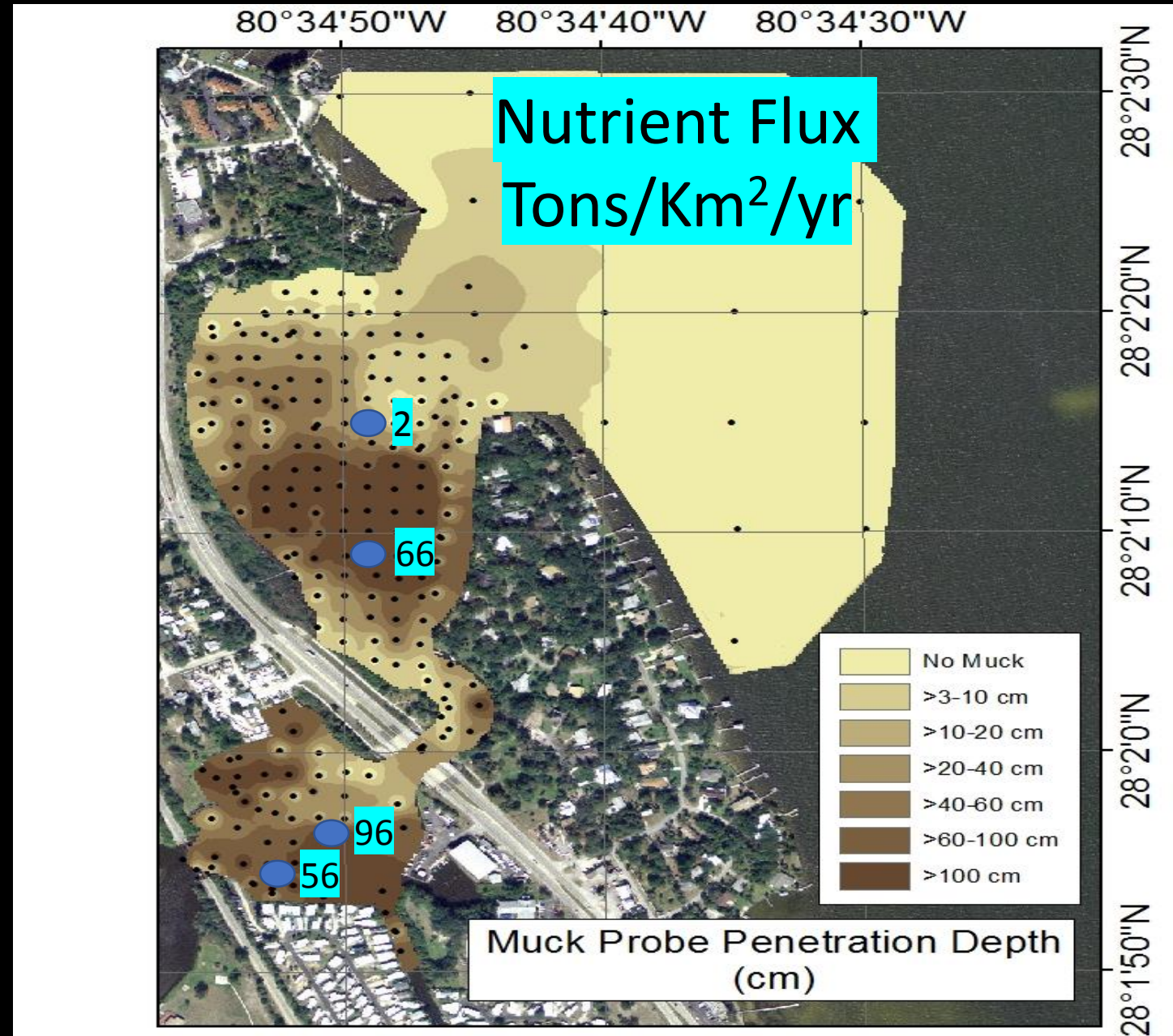
Max. Thickness	Min. Thickness	Avg. Dpt	Color
>14.00	>12.00	17.00-18.00	Dark Blue
12.00	10.00	13.00-15.00	Blue
10.00	8.00	10.00-12.00	Light Blue
8.00	6.00	8.00-10.00	Green
6.00	4.00	6.00-8.00	Yellow
4.00	2.00	4.00-6.00	Orange
2.00	0.00	2.00-4.00	Red

Fluxes

Before dredging

(October 2015 – February 2016)

	N Flux (Tons/km ² /yr)	P Flux (Tons/km ² /yr)
Sand	2.2	0.6
Muck	73 ± 39	20 ± 9.3
Overall	55 ± 21	15 ± 12

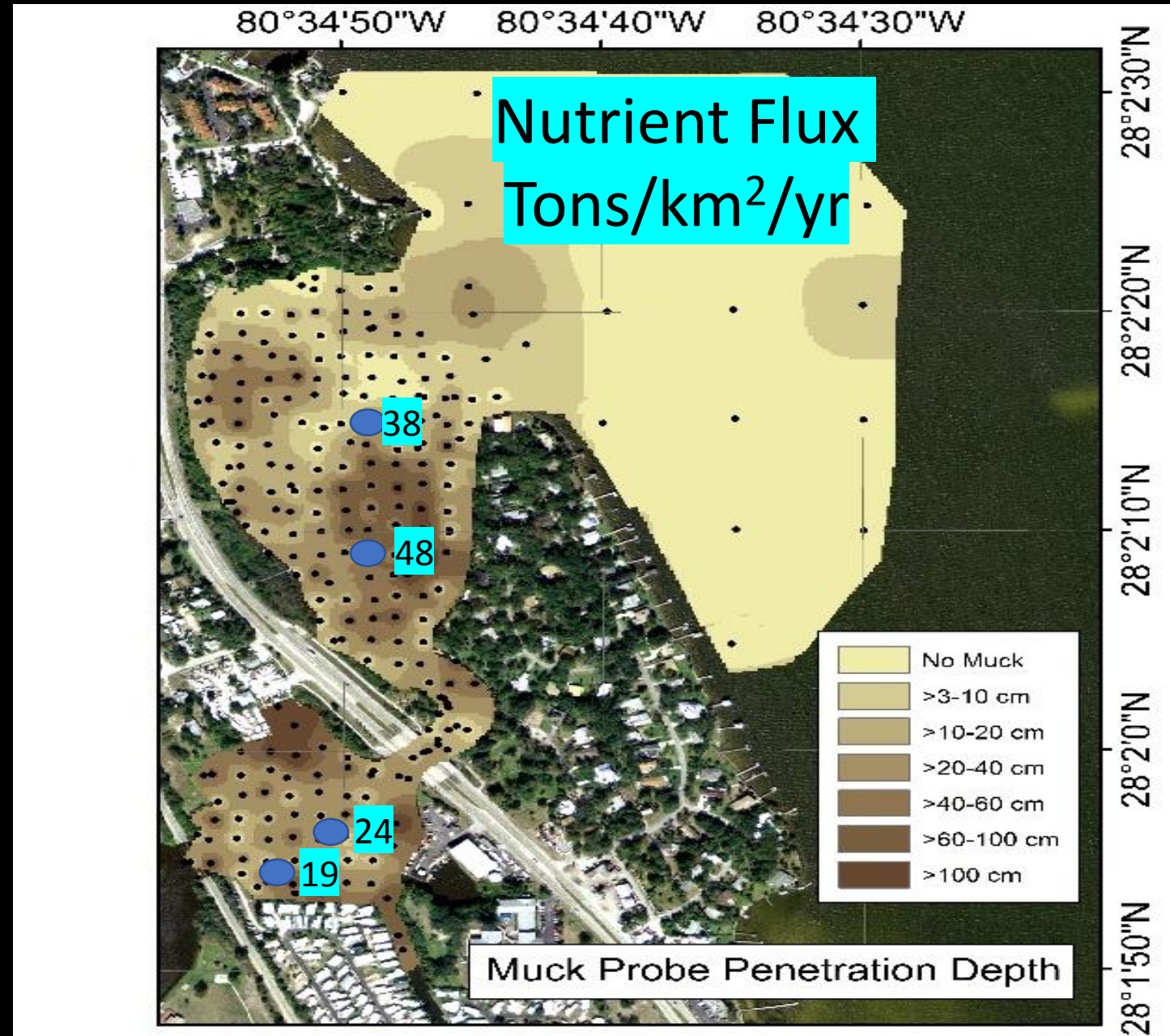


Fluxes

After dredging

(October 2015 – February 2016)

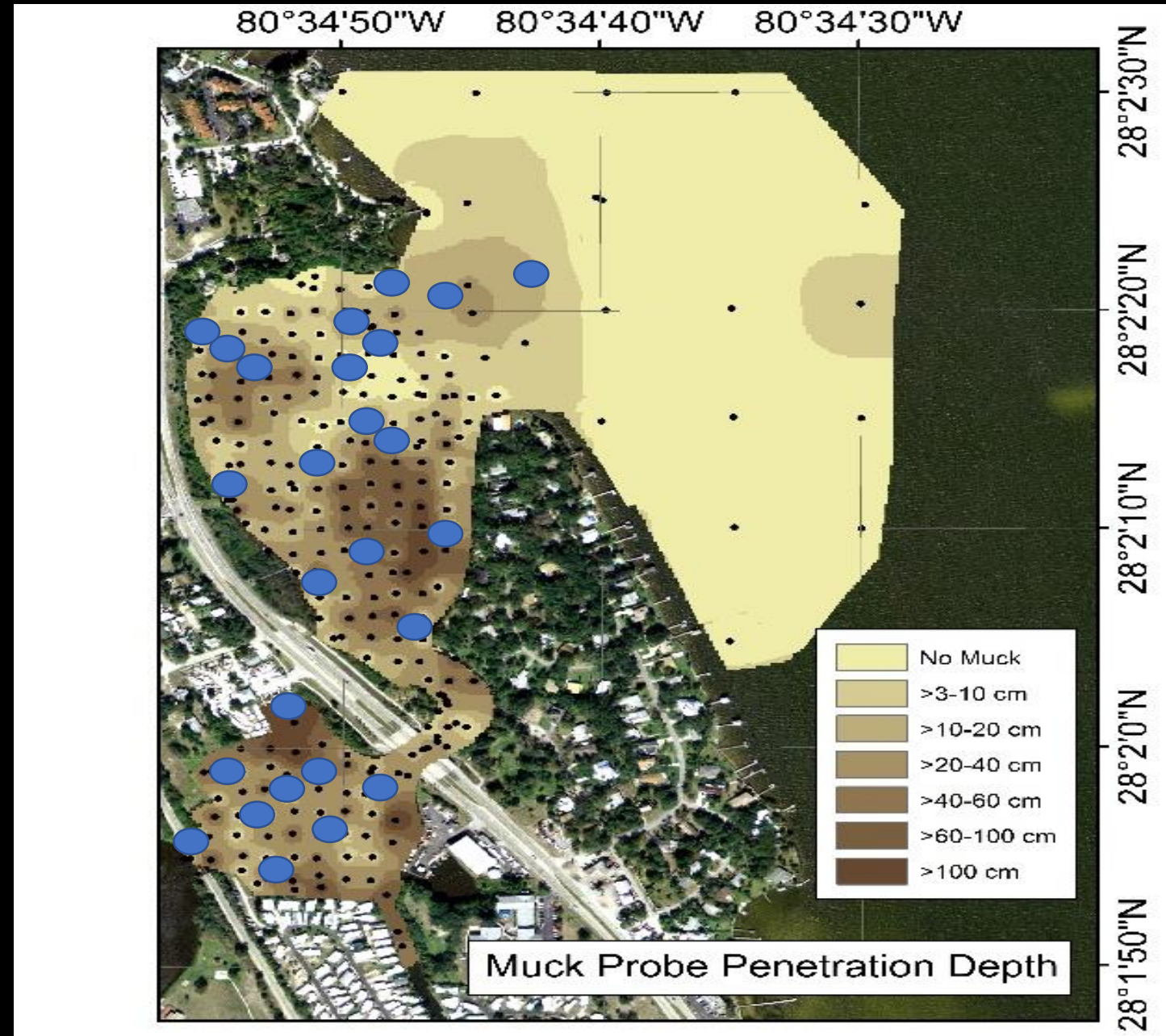
	N Flux (Tons/km ² /yr)	P Flux (Tons/km ² /yr)
Sand	-	-
Muck	32 ± 14	7 ± 4
Overall	-	-



After dredging 28 sites

(October 2015 – February 2016)

	N Flux (Tons/km ² /yr)	P Flux (Tons/km ² /yr)
Sand	2.9 ± 3.9	0.1 ± 0.2
Muck	22 ± 30	2.9 ± 3.9
Overall	19 ± 29	2.5 ± 3.8

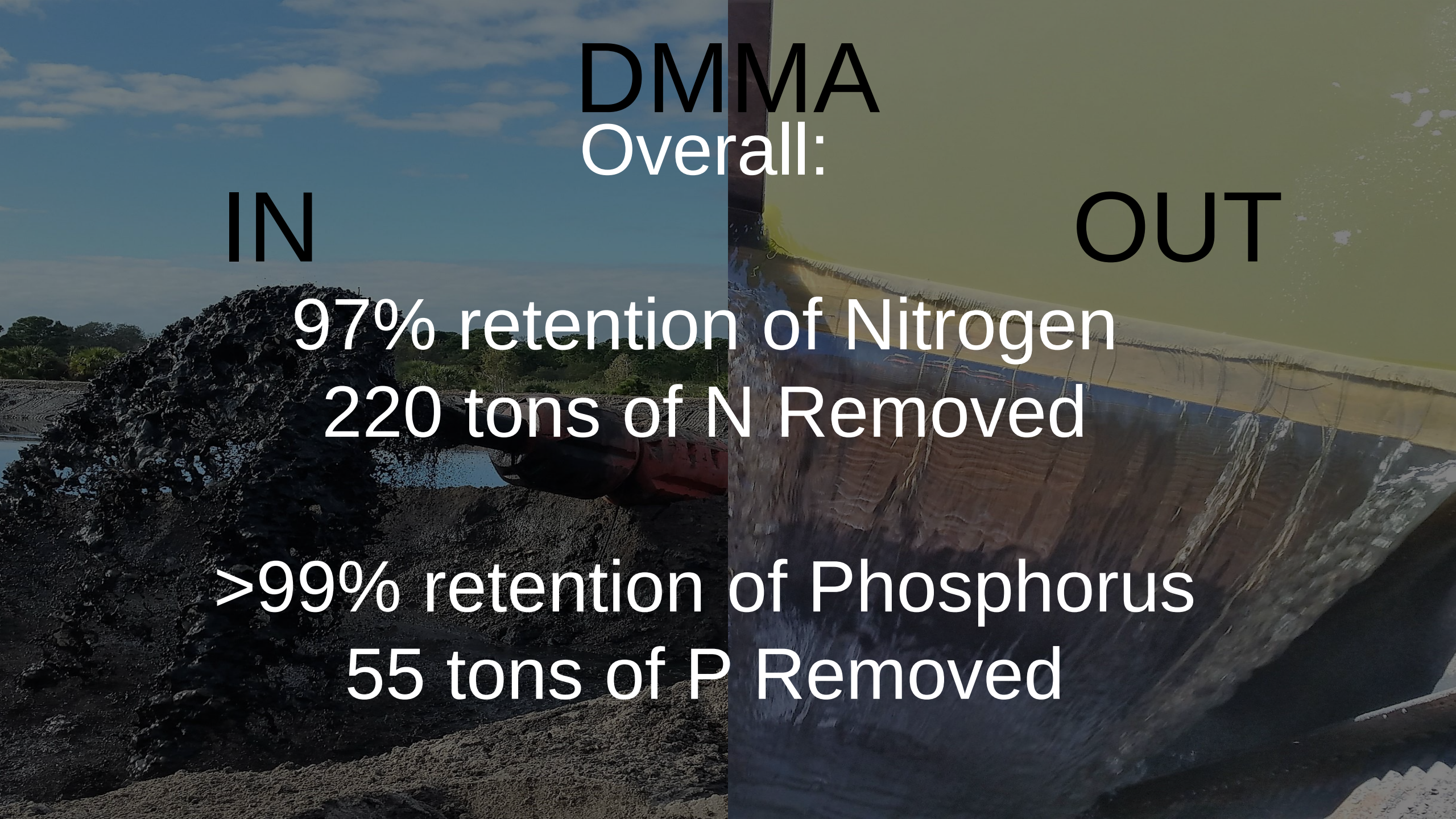


IN

DMMA

OUT

Overall, >99% retention of solids



DMMA
Overall:

IN

OUT

97% retention of Nitrogen
220 tons of N Removed

>99% retention of Phosphorus
55 tons of P Removed