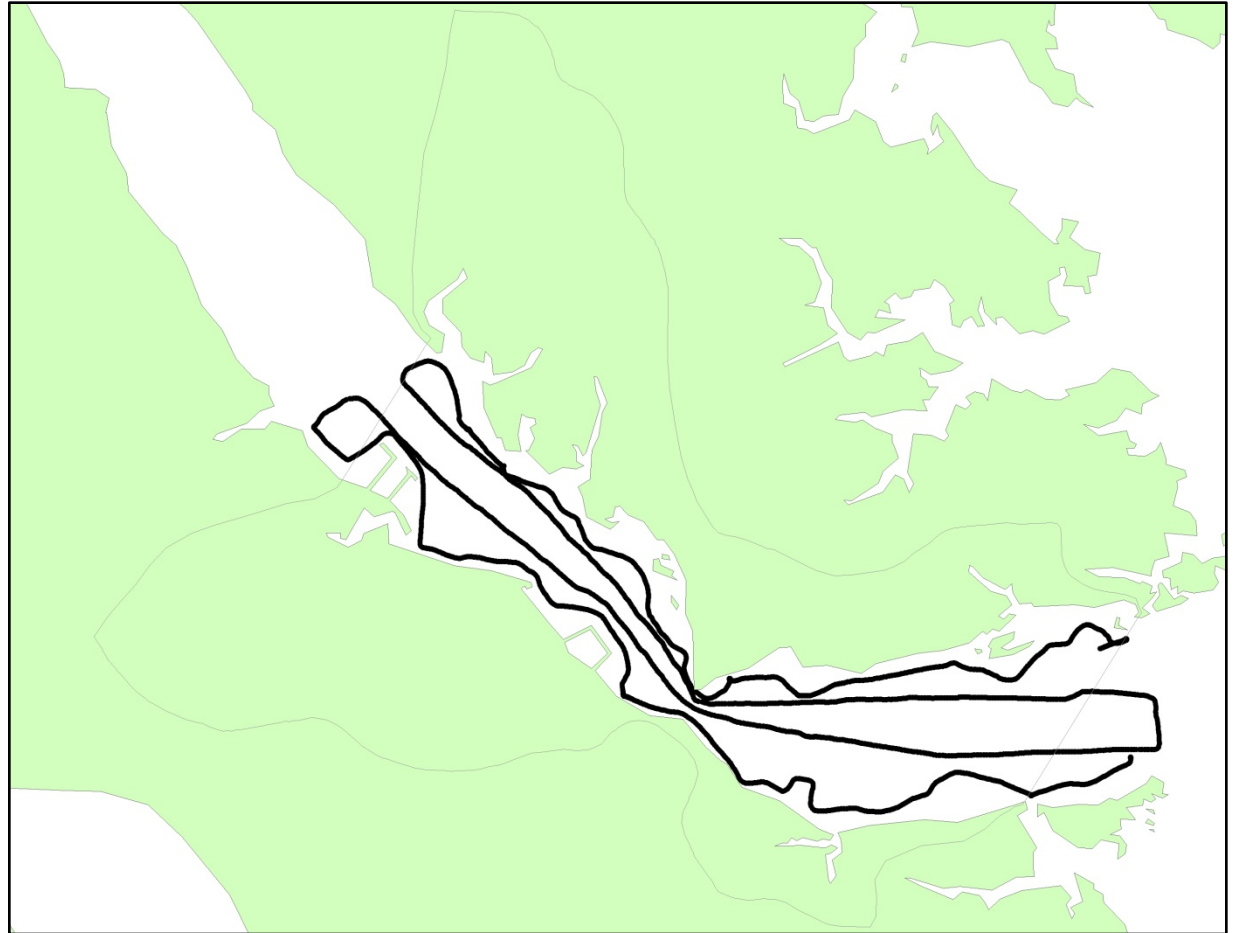
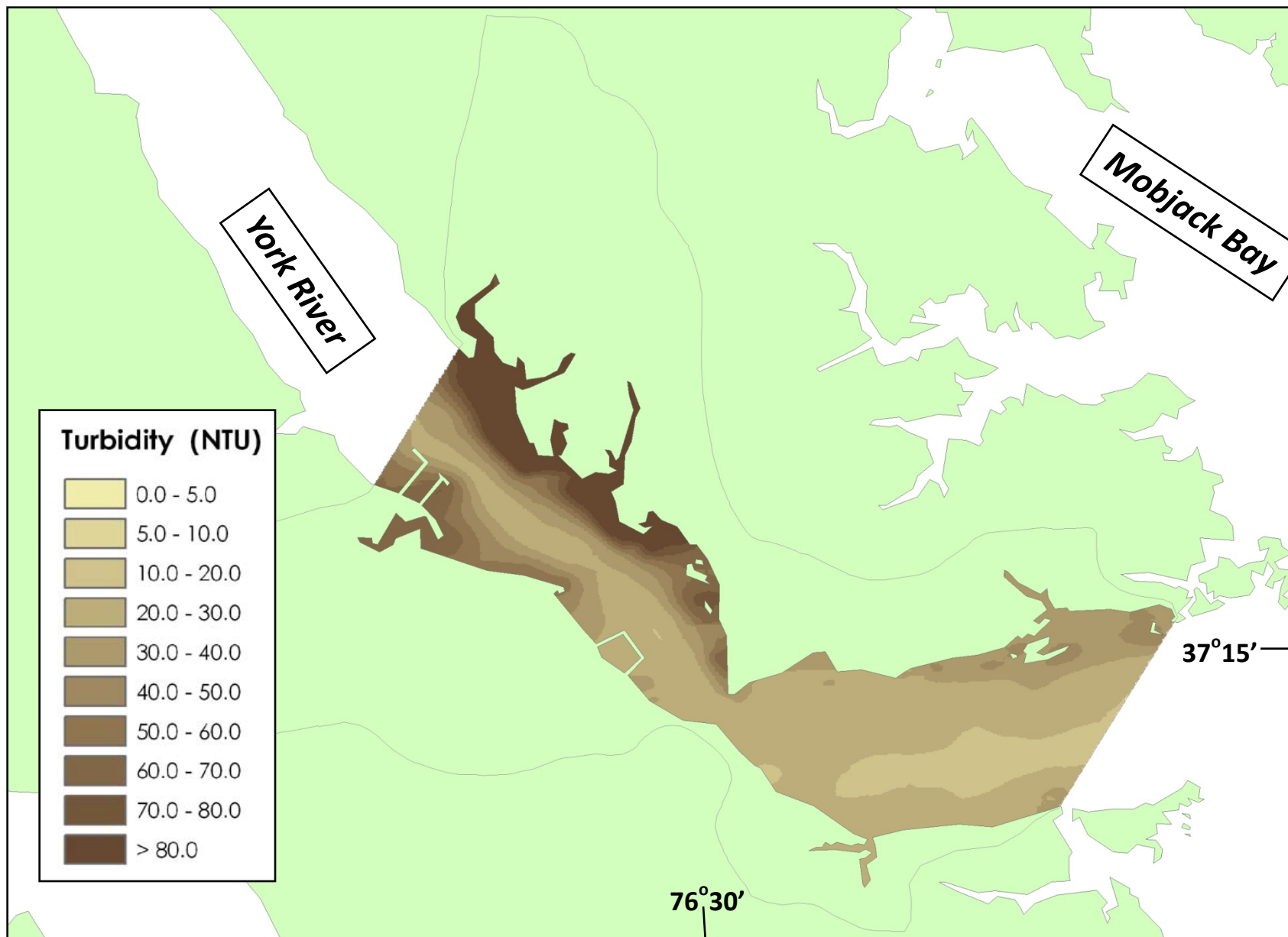


Next steps in K_d regressions for water clarity assessments

David Parrish (VIMS, CBNERR)

2003 Cruise Track - YRKPH





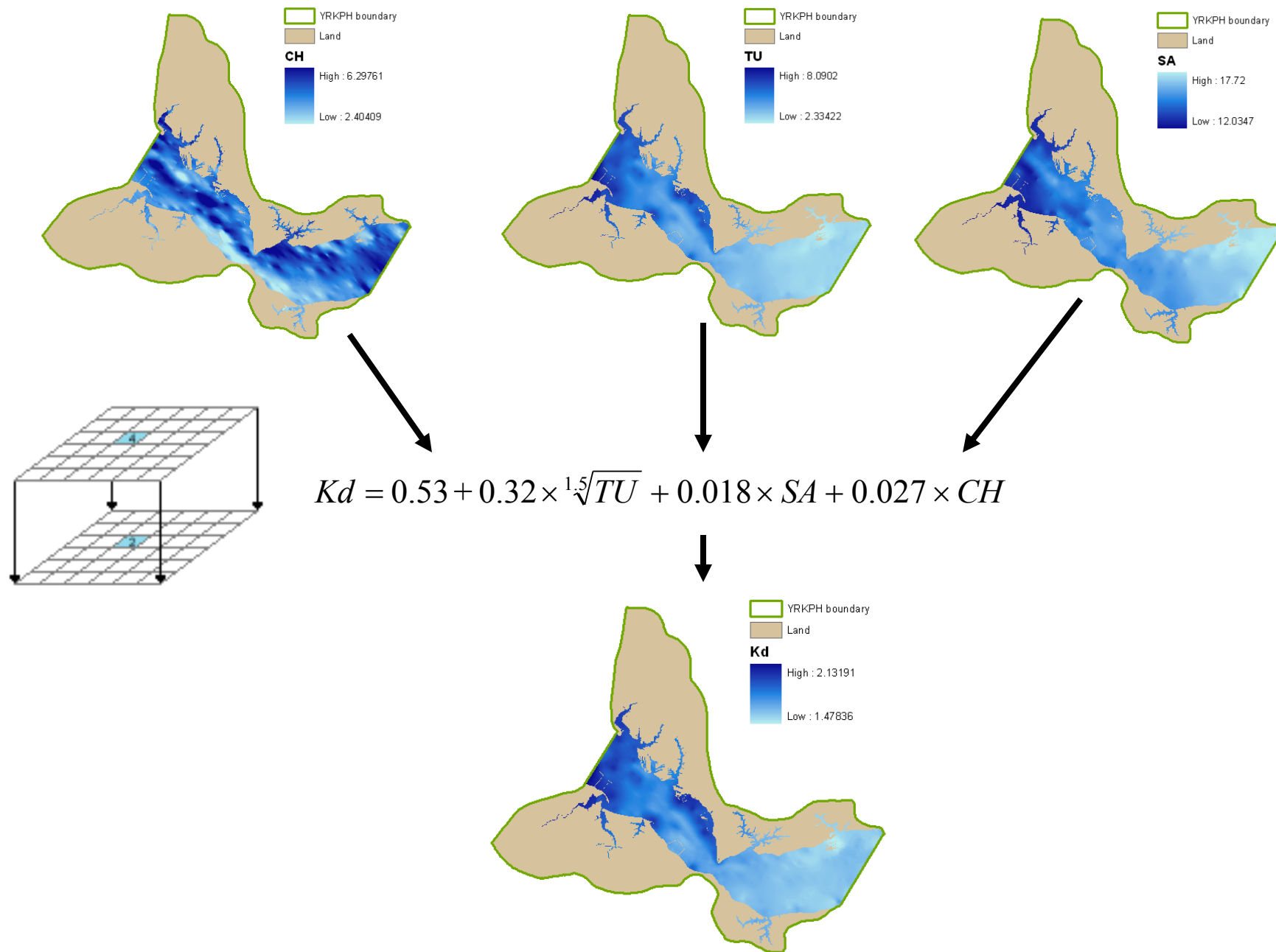
Kd Regression

- For Segments MPNOH, MPNTF, CHKOH, JMSPH, JMSOH, JMSMH, JMSTF1, JMSTF2, APPTF:

$$Kd = 1.192674757 + 0.295620722 \times \sqrt[1.5]{TU} - .056160407 \times SA + .000274598 \times CH$$

- For Segments LYNPH, PMKOH, PMKTF, YRKPH, YRKMH, PIAMH:

$$Kd = 0.5275793536 + 0.3193475331 \times \sqrt[1.5]{TU} + 0.0176700982 \times SA + 0.0271723238 \times CH$$

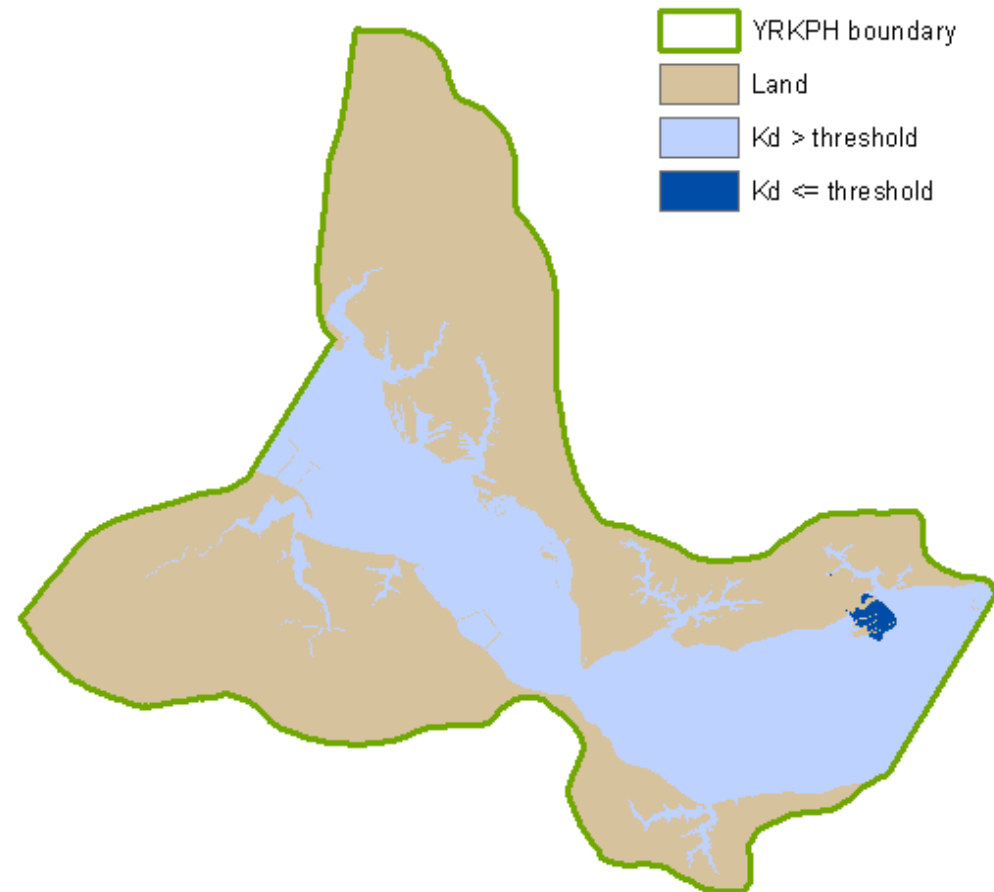
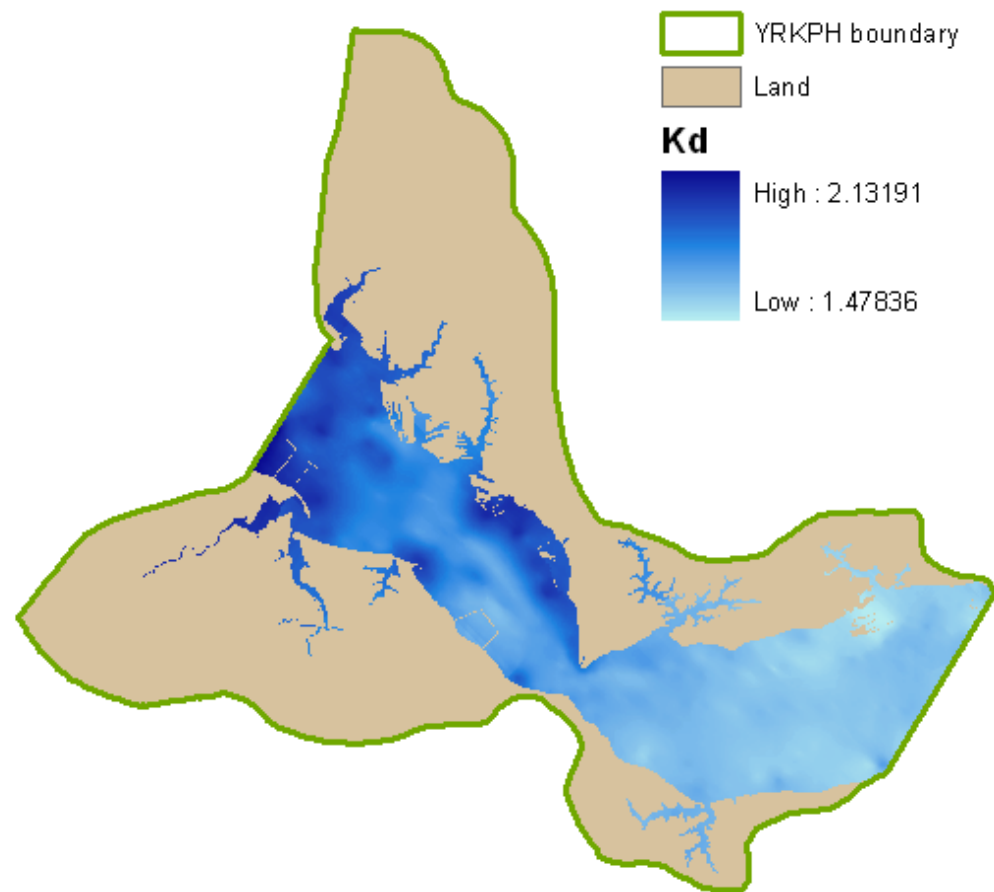


Kd Threshold

PLL	Zones	
	0-1m	1-2m
0.22	1.51	0.76
0.13	2.04	1.02

$$PLW = 100 \times e^{-Kz}$$

Polyhaline – Mesohaline: 22% PLL
Oligohaline - Tidal Fresh: 13% PLL



Water Clarity Assessment Results

Cb Segment	Year	Total Acres	WCA Goal*	WCA	Attain?	WCA Goal / Area (%)	WCA / WCA Goal (%)
jmsmh	2007	26554	500	10524	yes	1.9	2104.8
jmsmh	2008	26554	500	8222	yes	1.9	1644.4
yrkph	2007	7138	6982	7	no	97.8	0.1
yrkph	2008	7138	6982	279	no	97.8	4.0
	WCA = Water Clarity Attainment Acreage						

[illegible]