Pilot Algal Floway at VIMS: Research Goals

Characterize basic production parameters

- algal growth, productivity
- seasonal variation
- variation with temperature, light, etc.
- saline conditions

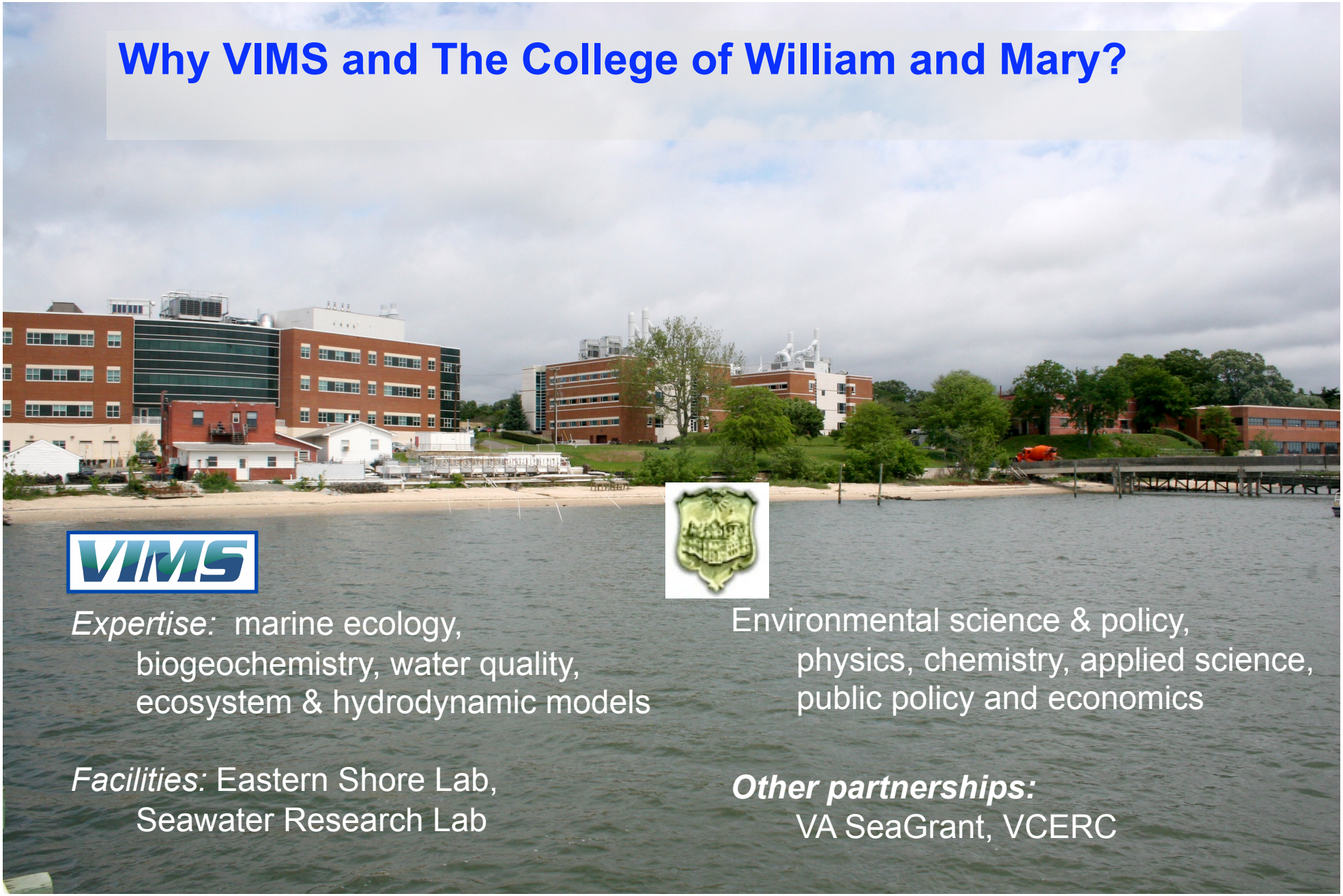
Environmental remediation potential

- resource (N and P) use
- contaminant sequestration

Understand factors influencing variability

- algal community
- gross biochemical composition
- lipid content and composition

Why VIMS and The College of William and Mary?



Expertise: marine ecology, biogeochemistry, water quality, ecosystem & hydrodynamic models

Facilities: Eastern Shore Lab, Seawater Research Lab

Environmental science & policy, physics, chemistry, applied science, public policy and economics

Other partnerships:
VA SeaGrant, VCERC

Summary: Advantages of ATS Approach

	ATS	Other
Simple design	Yes	No
Algal biomass	High	?
Cost	Low	High
Species adapted to local environment	Yes	No
Risk of viral or bacterial infection	Low	High

Summary: VIMS/W&M Algal Energy Plan

Wild algae don't create problems—they solve them

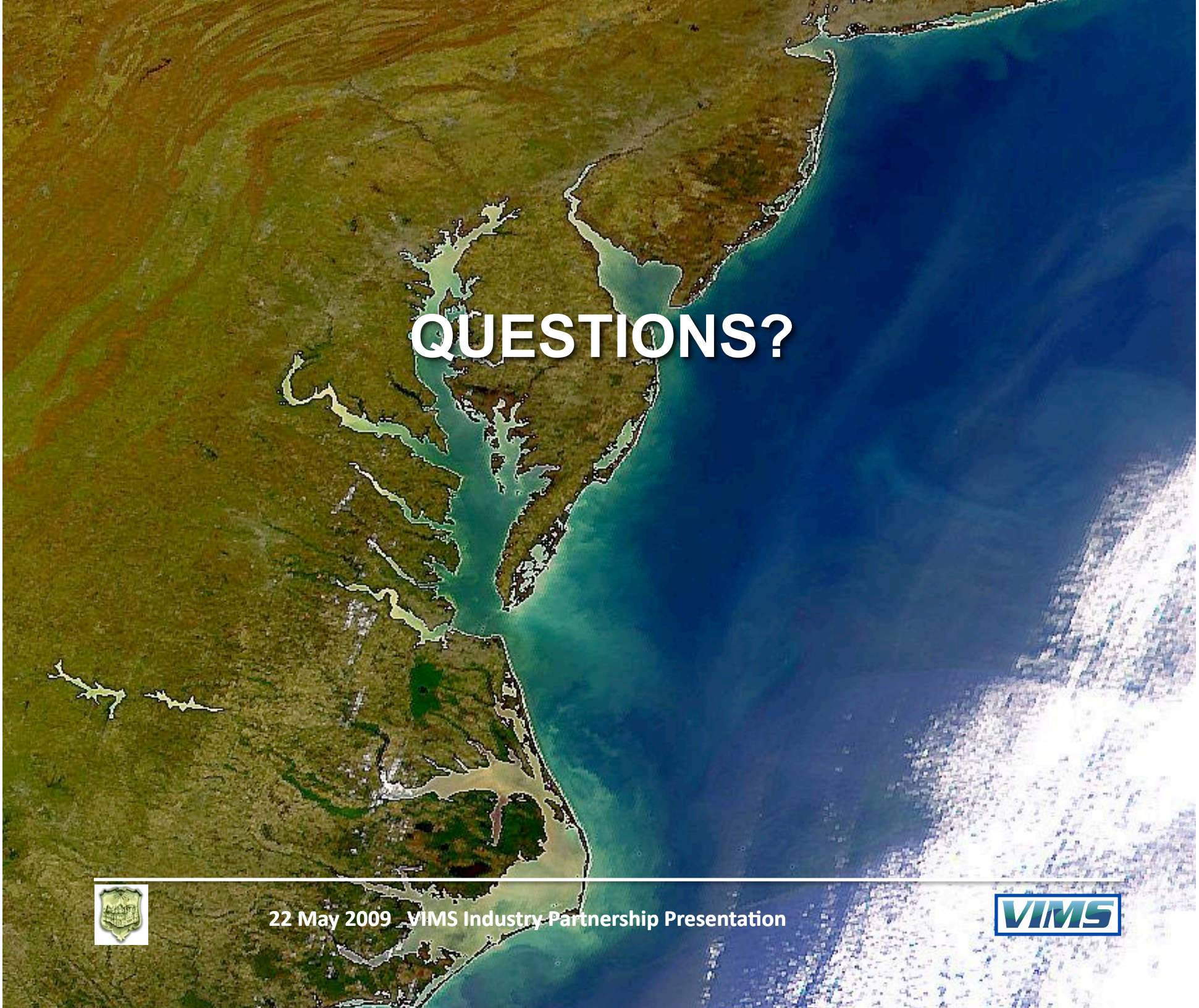
Combining fuel production and environmental clean-up
is the key to making algal biofuel profitable.

ATS harnesses 3 billion years of experimentation

Diverse wild algae community (ATS) is key
to low cost, stable, resilient biofuel production.

ATS promises exciting & potentially profitable applications

in integrated biofuel production and environmental clean-up


QUESTIONS?