

# Committee on Financial Affairs Board of Visitors



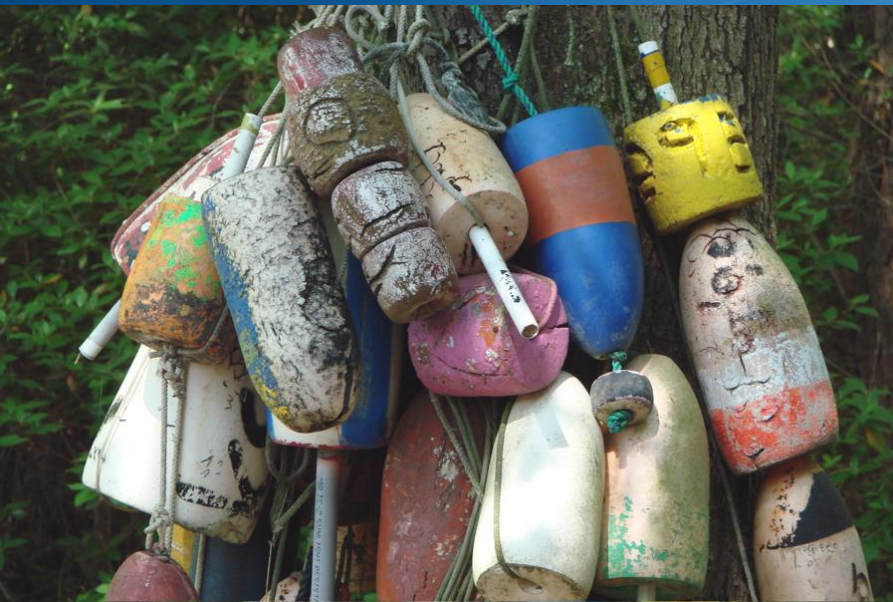
September 18, 2015



# Virginia Institute of Marine Science

## *Important Attributes*

- One of the Country's largest coastal and estuarine-focused institutes (more than 400 employees)
- Serves as a premier research powerhouse for Chesapeake Bay and beyond (over \$85 million in grant awards since FY 2011)
- Named in 33 sections of the Code of Virginia mandating our involvement in natural-resource use and management issues
- Partners with industry to foster relationships that combine science and engineering as well as expedite applications of new technology to practical problems





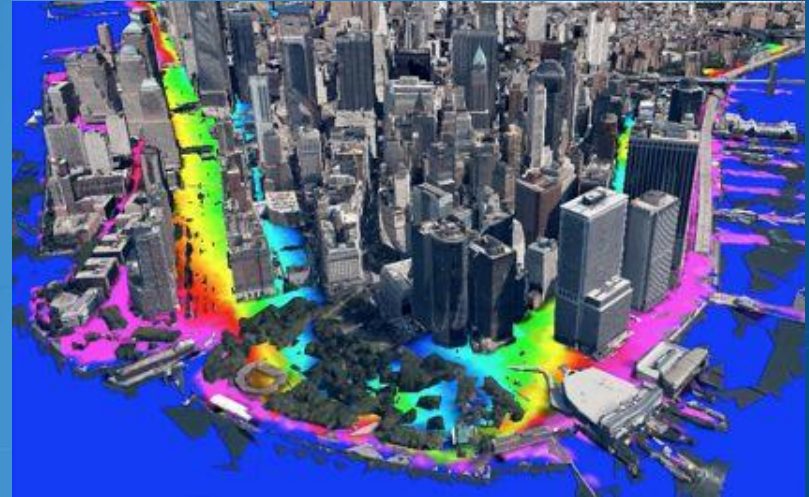
# School of Marine Science

## *Important Attributes*

- The W&M School of Marine Science is embedded within VIMS
- 60 Teaching and Research Faculty and 90 graduate students
- Students paired with Faculty Mentors and undertake leading edge research projects with high impact
- Our students graduate debt free and virtually all obtain jobs in marine and environmental science!



# Six Year Plan 2016-18 through 2020-22



# Progress in prior Six Year Plan

- Received \$500,000 for Fish and Shellfish Surveys!
- Merged High Performance Computing (HPC) unit with W&M IT Department



# Progress in prior Six Year Plan

- ROI on 8 new faculty positions is FANTASTIC! (\$ in Millions)



# Six Year Plan

## Other Relevant VIMS Activities

- Workforce Development
- Economic Opportunities



# Supporting Workforce Development Oyster Aquaculture Training Program

- Six-month hands-on program, focusing on various principles of oyster aquaculture (runs through oyster hatchery season: April – September)
- 4-5 interns selected annually; in its seventh year; funded by an anonymous private donor
- Invaluable experience and knowledge is gained that better positions the interns for employment or bring back increased knowledge to their home hatchery

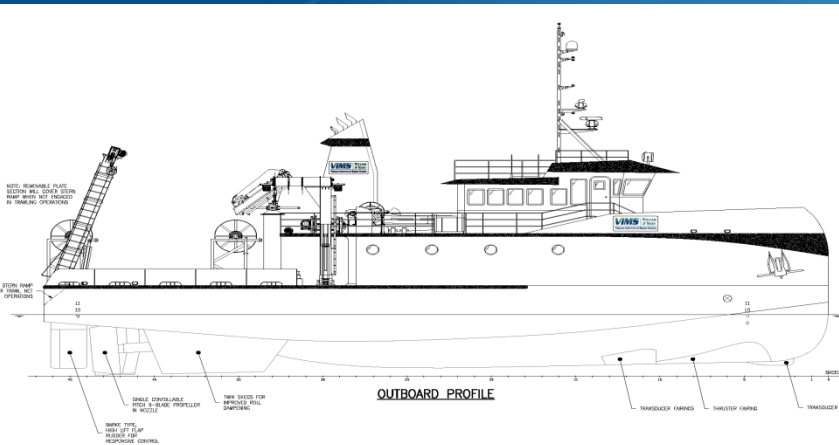
*“I’m so thankful for how many doors it’s opened for me.”*





# Economic Opportunities from VIMS Research

- Aquaculture Genetics and Breeding Technology
- Ocean Observing System Research
- Hydrologic and Watershed Modeling
- Chemical Bio-Sensor Development
- Environmental Assessment of Offshore Energy



# Six Year Plan

## 2016 – 18 Biennium

Priority	Strategy	2016-17	2017-18
1	Increase Faculty and Staff Salaries	\$698,972	\$1,431,490
2	O&M for new facilities	\$0	\$974,430
3	Support Graduate Financial Aid	\$325,000	\$325,000
4	Create the Center for Sea Level Rise and Coastal Resiliency	\$446,786	\$470,260
5	Enhance Chesapeake Bay Water Quality Modeling and Monitoring	\$909,353	\$765,755
6	Systematic Survey of Virginia Seafloor for Energy and Mineral Resource Interests	\$504,188	\$509,530
7	Management of Marine Diseases	\$348,481	\$357,748
8	Monitoring of Bay Grasses	\$260,382	\$265,161
9	Develop and support new management and policy approaches at state and local governments	\$419,189	\$431,997
10	Implement a post-graduate Commonwealth Coastal and Marine Fellowship program	\$299,138	\$306,873
11	Expand institutional collaborations	No Cost	No Cost
12	Continue to operate as a year round facility	No Cost	No Cost

# Six Year Plan

## *Op Six Comments*

### General:

- Provide information about your institution's involvement with the higher education centers (New College Institute, Roanoke Higher Education Center, Southern Virginia Higher Education Center, Southwest Higher Education Center and Institute for Advanced Learning and Research). Please include information such as courses offered, enrollment information, course completions, collaborations, etc.
- VIMS has collaborations with New College Institute. We have offered an online course titled "Sea Level Rise and Saline Intrusion Into Coastal Habitats" in partnership with NCI and other universities.

### VIMS-Specific:

- None



# Governor's Budget Submission

## (All General Fund Requests)

Priority	Request	2016-17	2017-18
1	Increase Graduate Financial Aid	\$325,000	\$325,000
2	Create the Center for Sea Level Rise and Coastal Resiliency	\$446,786 3.2 FTE	\$470,260 3.2 FTE
3	Enhance CB Water Quality Modeling, Simulation and Modeling	\$909,353 4.6 FTE	\$765,755 4.6 FTE
4	Modernize Campus Information Technology	\$727,543 2.0 FTE	\$227,543 2.0 FTE

# Governor's Budget Request Graduate Financial Aid

- Currently receive \$241,540 in state graduate financial aid
- Internally reallocated \$175,000 to boost PhD program
- Tuition, fees, stipend, and health insurance all covered by either state aid or faculty grants and contracts (over \$1.2 million charged to G/C in FY 15)
- Limited sources of revenue to underpin graduate program
- Increasing the state financial aid by \$325,000 would support up to a 20% enrollment growth for STEM students



# Governor's Budget Request

## Center for Sea Level Rise & Coastal Resiliency

- Partnership between ODU, VIMS, and W&M
- Proactive means for adapting current coastal zone planning to sea level rise
- Provide state-of-the-art flooding predictions during storm events and simulations for planning scenarios
- Utilize integrated data and collaborative processes to develop model templates and toolkits in areas such as infrastructure, public policy, public health, land use, and more
- Currently seeking federal designation as a National Center for Sea Level Rise



**OLD DOMINION**  
UNIVERSITY

IDEA FUSION



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**VIMS** | **WILLIAM & MARY**  
VIRGINIA INSTITUTE OF MARINE SCIENCE





# Water Quality Monitoring & Modeling: Refining the EPA Model

Gauge Effectiveness of  
Public Fund Expenditures



Determine Fate of  
Contaminants



Development of Buoys and  
Biosensors for Remote  
Sampling for TMDLs



# Questions?



Ross Sea Ice Shelf, Antarctica, December 2014

Resolutions 15 and 16 need approval.