VIMS | WILLIAM & MARY
VIRGINIA INSTITUTE OF MARINE SCIENCE

New Construction: Oyster Research Hatchery - $19,000,000

- This project is for construction of a new 22,000 SF state-of-the-art oyster research hatchery that will house space for oyster restoration, genetic research, industry and economic development, and education and training.

- The present Oyster Hatchery, built in 1975, is a 6,550 SF, two story building constructed of cinder blocks located in the flood zone of the VIMS Boat Basin. The hatchery not only suffers from its age and numerous repairs, but is also victim to salt-water deterioration. In fact, the building was not originally intended for hatchery operations but outfitted later as a small-scale production hatchery before becoming a breeding center in the late 1990s.

- Despite a world-class program in breeding technology, Hatchery facilities at VIMS are seriously lagging compared to peer hatcheries in North Carolina, Maryland, and New Jersey.

- Aquaculture is one of the leading economic development opportunities for *Chesapeake Bay*. The Aquaculture Genetics and Breeding Technology Center (ABC, established by the 1997 General Assembly) addresses the requirements of industry for a more profitable enterprise through a breeding and applied research program. The hatchery is seminal to all other breeding activities, which include labs, nursery operations, and four experimental oyster farms that are staffed with technicians, students, and trainees. ABC does not sell seed or larvae, but enables industry to meet this demand by providing the best available brood stock.

- A new hatchery would allow the ABC to further expand the frontiers of shellfish breeding. For example, through breeding, disease tolerance is now manageable during the grow-out phase, allowing ABC to concentrate on 1) improving growth, meat yield, and hatchery traits, and 2) perfecting genetic techniques for spawnless (sterile) oysters that further increase yield.

- In order for ABC to continue its unprecedented successes and for Virginia to maintain leadership in oyster breeding and shellfish aquaculture in general, a new state of the art hatchery is critical.

- The ABC is the most extensive oyster breeding program in the world, and contributes to the visibility of research in Virginia. Our products are transferred directly to industry through our brood stock distribution program, the hallmark of our center. In 2005, we provided about 400 brood stock oysters to industry. By 2012, we provided approximately 10,000, not including thousands of tetraploids. This demand will only grow given the annual 20% rate of growth for oyster culture. It is noteworthy that 95% of the oysters produced by Virginia's commercial industry derive from VIMS' ABC selected lines.