



Addendum to Lipcius and Seitz Proposals:

Utility of Alternative Oyster Reefs to Enhance Production of Recreational Fish

P.I.: R.N. Lipcius

Prey Availability and Enhanced Production of Artificial Reefs for Recreational Fish

P.I.: R.D. Seitz

Original Total of 2 Budgets = \$ 199,643 + \$ 45,944 = \$ 245,587

Revised Total of 2 Budgets = \$ 156,071 + \$ 64,430 = \$ 220,501

Total Reduction of 2 Budgets = \$ 25,086

In response to the advice of the Recreational Fishing Advisory Board, PIs Lipcius and Seitz have made the following adjustments to the budget and scope of work for the proposals:

- 1) **Total Cost:** Total cost of the two proposals for VMRC is now \$220,501, a reduction of \$25,086.
- 2) **Personnel:** For the two projects, we have eliminated one staff member (the student) and changed to budget for two full-time technicians, one dedicated to the Lipcius project (a more experienced technician capable of diving) and one dedicated to the Seitz project (a lower-level technician). Both technicians will work together to accomplish all tasks.
- 3) **Vessel and travel charges:** Vessel charges for the Seitz portion have been reduced to 24 days (6 days on each of four sites), with only 4 total days of the more expensive vessel necessary for box coring (\$125/day, total of \$500) plus 20 days of a privateer (\$90/day, total of \$2300), which reduces vessel costs by \$1450. In addition, fuel charges were reduced by \$300. With the reduced field days, travel charges were also reduced by \$269. Though the number of sites has increased, the boat trips and personnel will be combined for the two proposals to reduce costs. On the Seitz proposal, we also eliminated the publication costs of \$500 per year that will be covered by other funds.
- 4) **Construction charges:** In the Lipcius proposal, reef materials were reduced by \$20,000 because we are collaborating with Mike Myers (see accompanying letter of commitment) to construct reefs at each of four sites. Because of this collaboration, subcontract construction charges were also reduced by \$2,000.

- 5) **Changes to scope of work: Deployment at Four Sites:** The advisory board suggested increasing the number of sites so that we can better discern environmental conditions that are best for reef success. Our scope of work has changed so that we will deploy reefs at additional sites (Poquoson and Mobjack Bay) in conjunction with Mike Myers. These two sites are in addition to one in Linkhorn Bay and one in Broad Bay, for a total of four reef sites.
- 6) **Changes to scope of work: Fish stomachs used from nets:** In response to comments from the advisory board, our main method of collecting fish for stomach-content analysis will be from circular nets. As available, fish guts will be collected from recreational fishers fishing directly on reefs.
- 7) **Changes to scope of work: Location of reef structures:** Each reef type will be located > 5ft from the next type to allow independent assessment of success of each reef type (but close enough for logistics of deployment and diver surveys).

Personnel salaries are for the coordination and conduct of the work. As leveraging, the salaries of two other staff and two graduate students will be covered under other grants. We have applied the allowable 30% fringe for faculty and 7.65% for hourly staff. We request 24 days of boat time on a VIMS vessel (large privateer) for sampling the reefs (\$2880) plus fuel (listed in supplies). Supply costs include reef building materials, sampling materials (\$16,000), some SCUBA gear that will be used in this project and in future projects, software for the video system, and miscellaneous supplies. Supplies also include vessel fuel at \$50 fuel per day for 24 days. Travel includes trucks for trailering boats from the VIMS main campus to field sites on the Lynnhaven Bay at 41 miles one-way ($0.58 \text{ per mile} \times 2 \text{ ways} = \$47/\text{day}$) for 24 days. In addition, we request \$28,000 for a video system critical to estimate fish production, and which will be used in subsequent years with additional artificial fish reefs. The subcontract is for a small barge to deploy the reefs at the two locations (\$12,000). Indirect costs are charged at the rate of 25% with 20% match, with the exception of service center charges (vessels) and equipment. Total costs are \$156,071

VMRC Recreational Fish/Oyster Reef

R.N. Lipcius, PI

	mon	monthly sal	VMRC	VIMS
Salaries				
Lipcius, PI - 1 mon	1	8,583	8,583	
Marine Scientist1 (BS level) - 12 mon	12	2,833	33,996	
Fringe, 30% salaries			12,774	
Supplies				
SCUBA supplies and accessories (\$8,000); Reef materials (\$16,000); miscellaneous field supplies (\$4,500); Software (\$1200)			29,700	
Travel				
Metings and Field sites - ~275 miles RT @\$.58/mile VIMS truck; tolls; Lodging; Per diem			5,500	
Vessel Rental				
Rental - \$120/day x 24 days	24	120	2,880	
Subcontract				
Deployment of reefs on site			12,000	
Equipment - 1 underwater video system for fish production estimation @ 28,000				
			28,000	
Facilities & Administrative Costs				
			22,638	23,511
Total			156,071	23,511
Grand Total				179,582



COMMONWEALTH of VIRGINIA

L. Preston Bryant, Jr.
Secretary of Natural Resources

Marine Resources Commission

*2600 Washington Avenue
Third Floor
Newport News, Virginia 23607*

Steven G. Bowman
Commissioner

October 26, 2006

MEMORANDUM VIA FAX

TO: R. N. Lipcius
Dept. of Fisheries
Virginia Institute of Marine Science

FROM: M. H. Meier *M.H.M.*
Virginia Marine Resources Commission
Fisheries management Division
Artificial Reef Program

RE: Program cooperation with Lipcius & Seitz proposals, items "L" and "M" on the current list of RFAB proposals.

Per our telephone conversation on October 24th, 2006, the Artificial Reef Program would look forward to cooperating with the referenced proposals by providing space on permitted reef sites for placement of experimental structures.

Cc:
Original to Sonya Davis, VMRC
Jack Travelstead, VMRC
Rob O'Reilly, VMRC

An Agency of the Natural Resources Secretariat

Web Address: www.mrc.virginia.gov

Telephone (757) 247-2200 (757) 247-2292 V/TDD Information and Emergency Hotline 1-800-541-4646 V/TDD



DEPARTMENT OF THE ARMY
NORFOLK DISTRICT CORPS OF ENGINEERS
FORT NORFOLK 803 FRONT STREET
NORFOLK VIRGINIA 23510-1096

October 26, 2006

Planning and Policy Branch

Ms. Sonya Davis
Virginia Marine Resources Commission

Dear Ms. Davis:

The USACE Norfolk District confirms our commitment to collaborate with the Virginia Institute of Marine Science in accomplishing the research and construction objectives outlined in the proposals submitted to the Virginia Recreational Fishing Development Fund of the Virginia Marine Resources Commission entitled:

“Utility of Alternative Reefs to Enhance Production of Recreational Fish and Oyster Simultaneously” (PI: Romuald N. Lipcius), and

“Prey Availability and Enhanced Production of Artificial Reefs for Recreational Fish and Native Oysters” (PI: Rochelle D. Seitz).

David Schulte will work with Drs. Lipcius and Seitz and other participants to help accomplish the research and construction objectives.

If you have any questions or need additional information, please contact Mr. Dave Schulte of my staff at 757-201-7007 or via e-mail at david.m.schulte@usace.army.mil.

Sincerely,

Mark T. Mansfield
Chief, Planning and Policy Branch



CHESAPEAKE BAY FOUNDATION

*Resource Protection
Environmental Education*

October 23, 2006
VMRC
Recreational Fishing License Board

To Whom it May Concern:

The Chesapeake Bay Foundation is highly supportive of the following two proposals:

“Utility of Alternative Reefs to Enhance Production of Recreational Fish and Oyster Simultaneously” by Romuald N. Lipcius

and

“Prey Availability and Enhanced Production of Artificial Reefs for Recreational Fish and Native Oysters” by Rochelle D. Seitz.

These proposals are exemplary of a cooperative approach to artificial fish reef restoration involving federal, state and local agencies, VIMS, the community, recreational anglers, and environmental organizations such as CBF. We expect there to be direct and measurable benefits of the reefs in Linkhorn Bay, Broad Bay, Mobjack Bay and the York River to the local community, to recreational anglers, and to the environment.

As evidence of our support of these projects, CBF will provide in-kind support with personnel time and use of our vessel.

Sincerely,

A. Thomas Leggett, Jr.
Virginia Oyster Restoration and Fisheries Scientist