NREAD/JIW/jvc
6280/1
31 MAR 1983

Mr. J. E. Easley
Department of Economics and Business
North Carolina State University
Post Office Box 5576
Raleigh, North Carolina 27650

Dear Sir:

The enclosed salinity and water temperature data is forwarded, as requested in your letter of 22 September 1981 for the period May 1981 - November 1982.

Also, the Base Water Quality Control Laboratory will continue to monitor salinity at these points, provided your office furnishes the necessary equipment. However, as was the case with the equipment your office provided during the period of April 1982 - November 1982, the base will not accept responsibility for either normal wear and tear or accidental loss or damage to the equipment furnished by your office.

Any questions regarding this matter should be forwarded to Mr. J. I. Wooten, Director, Natural Resources and Environmental Affairs Division, telephone (919) 451-2083/1690.

Sincerely,

J. T. MARSHALL
Colonel, U. S. Marine Corps
Assistant Chief of Staff, Facilities
By direction of the Commanding General

Encl

Blind copy to:
SupvChem

* Note 1

	RWO1			RWO2			RWO3		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY
MAY 81	20°C	–	–	21°C	–	–	21°C	–	–
JUN81	26°	–	–	26°	–	–	27°	–	–
JUL 81	32°	–	–	33°	–	–	32°	–	–
AUG 81	23°	–	–	24°	–	–	24°	–	–
SEP 81	27°	–	–	27°	–	–	26.5°	–	–
OCT 81	20°	–	–	21°	–	–	20°	–	–
NOV 81	17.5°	–	–	18°	–	–	17.5°	–	–
DEC 81	10°	–	–	8°	–	–	8°	–	–
JAN 82	5°	–	–	5.5°	–	–	3°	–	–
FEB 82	11°	–	–	10.5°	–	–	11°	–	–
MAR 82	13°	–	–	13°	–	–	14°	–	–
APR 82	14°	2	14	14.5°	5	6	15°	8	8
MAY 82	21°	4	14	23°	8	10	21.5°	10	14

ENCLOSURE

* Note 1

	RWO1			RWO2			RWO3		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY
JUN 82	26°	10	14	26°	15	15	26°	16	18
JUL 82	29°	4	6	30°	8	12	29.5°	10	14
AUG 82	27°	2	4	29°	2	7	29°	8	10
SEP 82	26°	11	15	26°	19	19	26°	19	19
OCT 82	23°	12	14	24°	16	16	24°	16	17
NOV 82	13°	0	16	12.5°	14	18	15°	16	18

* Note 1 : River Monitoring Data, Camp Lejeune, North Carolina

* Note 1

	RWO4			RWO5			RWO6		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY
MAY 81	20°C	–	–	19.5°C	–	–	19°C	–	–
JUN 81	27°	–	–	28°	–	–	28°	–	–
JUL 81	31°	–	–	31°	–	–	31°	–	–
AUG 81	25°	–	–	25°	–	–	25°	–	–
SEP 81	27°	–	–	27°	–	–	27°	–	–
OCT 81	20°	–	–	20°	–	–	20°	–	–
NOV 81	17.5°	–	–	17.5°	–	–	18°	–	–
DEC 81	8°	–	–	8.5°	–	–	8°	–	–
JAN 82	5°	–	–	4°	–	–	5°	–	–
FEB 82	11°	–	–	11°	–	–	11°	–	–
MAR 82	13°	–	–	13.5°	–	–	14°	–	–
APR 82	14°	10	10	14.5°	12	20	14.5°	20	22
MAY 82	22°	14	16	21°	16	20	20.5°	26	28

* Note 1

	RWO4			RWO5			RWO6		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY
JUN 82	26°	20	22	25.5°	22	24	25.5°	26	26
JUL 82	29°	14	16	29°	20	20	28.5°	30	30
AUG 82	28°	8	10	28°	12	14	28°	20	20
SEP 82	25°	20	16	25°	20	20	25°	25	22
OCT 82	23°	16	20	23°	18	24	23°	25	27
NOV 82	14°	16	16	14°	21	21	14°	24	23

* Note 1 : River Monitoring Data, Camp Lejeune, North Carolina

* Note 1

	RWO7			RWO8			RWO9		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURCACE SALINITY	BOTTOM SALINITY
MAY 81	19°C	-	-	19°C		-	19°C	-	-
JUN 81	27°	-	-	27°	-	-	27°	-	-
JUL 81	ND*	-	-	ND*	-	-	ND*	-	-
AUG 81	25°	-	-	25°	-	-	25°	-	-
SEP 81	27°	-	-	27°	-	-	27°	-	-
OCT 81	21°	-	-	21°	-	-	22°	-	-
NOV 81	18.5°	-	-	18.5°	-	-	18.5°	-	-
DEC 81	9°	-	-	10°	-	-	8°	-	-
JAN 82	6°	-	-	6°	-	-	8°	-	-
FEB 82	10°	-	-	10.5°	-	-	11°	-	-
MAR 82	13°	-	-	11.5°	-	-	14.5°	-	-
APR 82	14°	30	33	15°	29	31	14.5°	28	28
MAY 82	19°	32	34	19°	32	34	20°	32	32

* Note 1

	RWO7			RWO8			RWO9		
	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY	TEMP	SURFACE SALINITY	BOTTOM SALINITY
JUN 82	25°	32	33	25°	35	35	25°	33	33
JUL 82	28°	36	36	28°	36	36	28.5	31	31
AUG 82	28°	28	28	27.5°	3 2	32	28°	30	30
SEP 82	25°	28	31	27°	35	35	26°	34	34
OCT 82	24°	35	35	24°	34	34	24°	34	34
NOV 82	14.5°	29	30	14°	30	30	15°	30	30

* Note 1 : River Monitoring Data, Camp Lejeune, North Carolina

* NO DATA

ROUTING SLIP SEP 2 8 1981

	ACTION	INFO	INITIAL
BMO		✓	M
ABMO		✓	
ADMIN		✓	
ENVIRON AFF	✓		
F&A BRANCH			
MAINT NCO			
M&R			
OPNS			
PROP			
TELE			
UMACS			
UTIL			
SECRETARY			

COMMENTS:

Jerbear
Let's talk
M

ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

DATE 25 Sep 81

TO:

[BASE MAINT O]	DIR, QUARTERS & HOUSING
PUBLIC WORKS O	DIR, BOQ/BSQ
COMM-ELECT O	BASE FIRE CHIEF
MOTOR TRANSPORT O	

ATTN: _____

(1) Attached is forwarded for ~~info~~/action.

Provided for comments and proposed actions.

2. Please initial, or comment, and return all papers to this office.

3. Your file copy.

K. P. Mullen

"LET'S THINK OF A FEW REASONS
WHY IT CAN BE DONE"

HEADQUARTERS, MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

Date_____

From: Chief of Staff
To: Fae

Subj:

Perhaps NRAE should handle a proposed response.

AGRICULTURAL EXTENSION SERVICE

NORTH CAROLINA STATE UNIVERSITY | AT RALEIGH

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

EXTENSION ECONOMICS AND BUSINESS
BOX 5576 ZIP 27607

September 22, 1981

737-2885

Major General C. G. Cooper
Commanding General
Marine Corps Base
Camp Lejeune
Jacksonville, NC 28542

Dear Major General Cooper:

I am working on a research project that has as one objective the improvement of yields from four North Carolina fisheries. We are attempting to develop bioeconomic models of the four fisheries, operationalize those models and install them on the computer system of the N. C. Division of Marine Fisheries -- the state agency charged with managing our fisheries. One of the primary goals of the modeling is to develop tools with which sensitivity analyses can be conducted on the effects of alternative management decisions, that is, to test the effects of a proposed policy on catch and/or revenue from a fishery prior to instituting that policy. One of these fisheries is the New River shrimp fishery.

One of the necessary ingredients of the modeling is an accurate description of effort -- vessels, catch rates, and fishing time -- expended in a fishery. While we have effort data on commercial vessels fishing the New River, we do not have those data on non-commercial vessels, and we need your help. If you could help us put together these effort data, we would be most grateful.

One possibility of obtaining counts of shrimp vessels by size class would be to make use of satellite photographs (Priority: 1980, 1981, 1978-79). Our understanding is that these photos are sufficiently detailed that we could scale them and do intermittent vessel counts through the shrimp seasons (primarily summer and fall). We would like such vessel counts as often as twice a week (day and night), or as often as available. While I realize that satellite photos of our bases are not public information, could we get cropped photos of just the river? If that is not possible could someone in intelligence do the vessel counts for us? Finally, in connection with the vessel counts, we would like to be ready next year for aerial counts and access to conduct some periodic surveys of fishermen (to ask about hours fished, catch rates, etc., of the non-commercial boats). If we cannot obtain satellite photos, could your pilots take some high altitude photos while on regular flights? We then would have a series of vessel counts through the season, and could combine those numbers with our personal surveys of the fishermen.

We have two other requests that are less complicated. One concerns water quality parameters necessary for the biological work. Through the N. C. Division of Environmental Management (DNER), we have obtained water quality parameters currently collected by Mr. Wooten's office on base. However, these parameters do not include salinity, which is an important variable in shrimp production. Would it be possible to have salinity collected at the usual sampling stations? I have talked with Mr. Wooten, and he informs me that it would not be much, if any, trouble to collect salinity while sampling other water quality variables at their seven sampling stations.

Finally, we would like to send someone down to the Air Station to collect weather data, initially for 1978-81. I talked with Major Sirmans in July about collecting those data, and he indicated no problem.

Any assistance that you can give us will be appreciated, particularly on the vessel counts. I will be happy to meet with you or your staff to further discuss our project (funded by the UNC Sea Grant Program). It is a significant effort involving three principle investigators and two graduate students. One student hopes to develop a Ph.D. dissertation out of our New River shrimp work. Hence, the work is important to us, and we believe that it will contribute to improving long term harvests from the resource. Thank you, and I look forward to hearing from you.

Sincerely yours,

J. E. Easley Jr.

J. E. Easley, Jr.
Extension Economist

JEEjr/vyt

Easley

AGRICULTURAL EXTENSION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
N. C. STATE UNIVERSITY AT RALEIGH
RALEIGH, NORTH CAROLINA 27607

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U.S.MAIL

Major General C. G. Cooper
Commanding General
Marine Corps Base
Camp Lejeune
Jacksonville, NC 28542

20

RALEIGH, NC 27611
23 SEP 1981
PM