



*filed in publication*  
UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE

Northeast Fisheries Service  
Woods Hole, MA 02543

March 11, 1986

TO: Dr. Bruce B. Collette  
FROM: Jon A. Gibson *JAG*  
SUBJECT: A-76 Review of Technical Publishing and Editorial Services

Since the National Marine Fisheries Service reorganized the Northeast Fisheries Center in 1976, there has not been a Center-level technical publishing program. Technical publishing has been and continues to be the responsibility initially of the Center's Laboratory Directors, and later of the Center's Division Chiefs. Reflecting these historical and contemporary circumstances, the types and degrees of editorial and graphic support provided to Center authors in the production of technical manuscripts varies from facility to facility and from program to program.

To help in the analysis and evaluation of this decentralized approach to providing editorial and graphic support services, the following description of the Center's technical publishing activities is broken down into three categories: (1) the procedures used by Center employees to produce technical publications, (2) the kinds and numbers of technical publications being produced by Center employees, and (3) the Center personnel providing editorial and graphic support services in this technical publishing activity.

#### Procedures

In August 1985, the Center adopted a new policy for technical manuscript review (see Attachment 1) in order to achieve "operational uniformity" among facilities and programs. This policy also covers oral presentations that will be eventually published in a "transactions" or "proceedings." In establishing the policy, the Center assumed that each manuscript would become a public document, and thus must be scientifically sound, grammatically correct, and consistent with existing policies. To assure such quality, the policy sets forth guidelines for peer review within the Center's primary-level programs (i.e., Divisions), as well as guidelines for peer review from other Divisions when deemed appropriate. A Division Chief may request review of a sensitive or technically complex manuscript by knowledgeable scientists outside the Center, but before any manuscript can be submitted for publication, it must first be approved by the Division Chief and then by the Center Director. A flow chart (see Attachment 2) for each step in the review process is maintained for every manuscript.

To achieve the necessary quality to gain the required approvals, each manuscript -- depending upon its intended message, audience, medium, and effect -- will receive various degrees of three kinds of support services: (1) technical and general editing; (2) scientific, statistical, geographical, and general illustrating; and (3) scientific and general photography.

With respect to editing, the Center's scientific staff conducts the large majority of the technical editing of the Center's manuscripts. Selected manuscripts targeted for the NOAA Technical Memorandum NMFS-F/NEC series do receive technical editing by a GS-1083-11 Technical Writer-Editor (Fishery Biology) who administers the subject series for the Center. All manuscripts originating from the Fishery Ecology Division's Experimental Biology Branch also receive technical editing by a GS-1083-9 Technical Publications Editor (Fishery Biology). The Center's scientific staff also conducts much of the general editing of the Center's manuscripts. All manuscripts originating from the Fishery Ecology Division's Marine Pathology Branch, from those elements of the Fishery Ecology Division's Ecosystem Dynamics Branch located at the Narragansett Laboratory, and from those elements of the Conservation & Utilization Division located at the Woods Hole Laboratory, do receive general editing by one of the Center's three GS-1087-5/6 Editorial Assistants (Typing). In addition, the Center historically has either hired on contract, or employed on a temporary basis, technical editors to assist in the production of special publishing projects. All manuscripts targeted for anonymously peer-reviewed journals further receive some level of technical editing consistent with the standards and specified procedures of the editor of the target journal.

With respect to illustrating, Center personnel conduct approximately 90 percent of these activities; private vendors conduct about 10 percent. Four personnel (three GS-1020-10/11 (Scientific) Illustrators and one GS-1060-7 Photographer), stationed at four Center Laboratories (National Systematics, Sandy Hook, Narragansett, and Woods Hole) perform about 80 of the 90 percent of illustrating done internally. These personnel occasionally will use private vendors themselves for one of two reasons: (1) the Center doesn't have the physical capabilities or technical skills for a very unusual or highly specialized illustration; or (2) the demand for illustrating services exceeds the supply of resident illustrators, and the services to be vended don't require the specialized knowledge of fisheries terms, expressions, symbols, formulae, etc., which the Center's resident illustrators have acquired. The Center's scientific, non-graphic arts staff performs about 10 of the 90 percent of illustrating conducted internally. These staff provide their own services for one of two reasons: (1) they have access to computer graphics for producing statistical or geographical illustrations, and the media in which they will publish -- nearly always informal -- are compatible with the lesser quality of lettering and numbering produced by computer graphics; and (2) they are at a Center Laboratory (Oxford, Milford, or Gloucester) which has no resident illustrator but does have illustrating facilities and equipment, and the skills required for the particular illustrative materials are simple or elementary. When Center personnel at the latter three Laboratories have need for illustrating services which cannot be met by access to illustrators at the other Center Laboratories, by access to computer graphics, or by use of their own skills, then they also will use private vendors.

With respect to photography, each Center Laboratory has photographic facilities of differing complexities and capabilities. However, only three Laboratories (Woods Hole, Narragansett, and Sandy Hook) have personnel with responsibilities and duties for providing photographic services (two GS-1020-10 (Scientific) Illustrators and one GS-1060-7 Photographer). These three individuals handle virtually all photographic tasks (except color photography

for which there is little demand) at their respective Laboratories, and occasionally handle tasks which are beyond the physical facilities and technical skills of the Center's scientific staff at the other Laboratories.

In summary, the policy of the Center in providing resident editing, illustrating, and photographic services has, as indicated above, been to: (1) permit the Center's scientific staff to perform for themselves those tasks which they are technically capable of performing; (2) use resident experts to perform those tasks which are beyond the technical abilities of the scientific staff, and which require the specialized fisheries knowledge gained through close and continuing contact with scientific staff; and (3) to contract out those tasks which are beyond the physical facilities and technical skills of the resident experts, as well as those tasks which occur during high-demand periods and, at the same time, are simple/general enough not to require those graphic arts procedures specialized to the fisheries field.

### Publications

The Center annually produces approximately 235 technical manuscripts which are subsequently published. Approximately 100 of these manuscripts can be considered formal, i.e., except for the NOAA Technical Memorandum NMFS-F/NEC medium, the media in which these manuscripts are published receive anonymous peer review. NOAA states that the NOAA Technical Memorandum NMFS-F/NEC medium can be listed among formal media even though it does not receive anonymous peer review. Of these approximately 100 formal publications, approximately 70 are published in non-NOAA media and approximately 30 are published in NOAA media. Of the 30 or so NOAA formal publications, about 10 each are published in the Fishery Bulletin and the NOAA Technical Memorandum NMFS-F/NEC, and roughly 5 each are published in Marine Fisheries Review and NOAA Technical Report NMFS.

Approximately 135 of these manuscripts can be considered informal, i.e., these manuscripts receive only Center-based supervisory and managerial review. Of these approximately 135 informal publications, about 55 are published in non-NOAA media and 80 are published in NOAA media. Of the approximately 55 non-NOAA informal publications, approximately 25 are published in the International Council for the Exploration of the Sea Committee Memorandum, approximately 10 in the Northwest Atlantic Fisheries Organization Scientific Council Research Document, and approximately 20 in other media. Of the approximately 80 NOAA informal publications, about 45 are published in the Woods Hole Laboratory Reference Document, approximately 20 in the Sandy Hook Laboratory Report, approximately 10 in the Narragansett Laboratory Reference Document, approximately 1 in the Sandy Hook Laboratory Technical Series Report, and approximately 4 in other media.

Table 1 lists the approximate numbers of technical manuscripts annually published in various media categories. Table 2 describes the purpose, content, format, issues, copies, users, and distribution of Center-administered NOAA media.

### Personnel

The Center has nine employees in positions which have formal responsibilities and duties supporting in some way the Center's technical

publishing activities. Other Center employees may provide services from time to time which support the publishing activities, but their activities along these lines are neither formalized enough nor significant enough to warrant their consideration during any review of the Center's technical publishing activities. Table 3 lists the work locations, specific programs, grade levels, position titles, and work statuses of each of these nine employees. Table 4 then lists these employees in a matrix of work locations and specific programs, also noting each employee's cost to the Center in terms of personal services.

Information has been gathered both directly and indirectly on those employees in order to evaluate the nature and extent of their role in the Center's technical publishing activities. Attachment 3 is a copy of the memo from the Center Director to these nine employees which announces the A-76 study of the Center's technical publishing activities and of the role of these employees in such activities. Attachment 4 is a copy of the memo which requests from each of these employees information on the kinds, amounts, recipients, and examples of services which they provide. Attachments 4-13 are copies of the responses of these employees to the aforementioned memo. Also appended to each of these responses is a copy of the employee's position description. Following are brief summaries of the material in Attachments 4-13. These summaries are for introduction only; the responses of the employees themselves should be relied upon for any analysis and evaluation of roles and contributions.

Mr. Jon A. Gibson

He is a full-time permanent GS-1083-11/6 Technical Writer-Editor (Fishery Biology) working for the Center's Program Support Staff, Information Services Section, at the Woods Hole Laboratory. He devotes about 30 percent of his time to technical writing and editing services, about 50 percent to information services, and about 20 percent to managerial, supervisory, and administrative services. The technical writing and editing services are performed for employees of all of the Center's programs and facilities, and principally for the NOAA Technical Memorandum NMFS-F/NEC series. These employees produced about 8-10 issues of this series each year.

Ms. Rita S. Riccio

She is a full-time permanent GS-1083-9/10 Technical Publications Editor (Fishery Biology) working for the Center's Fisheries Ecology Division, Experimental Biology Branch, Physiological Ecology Investigation, at the Milford Laboratory. She devotes about 40 percent of her time to technical editing services, about 40 percent to executive secretarial services, and about 20 percent to foreign language translation services. The technical editing services are performed for the employees of the Experimental Biology Branch who produce about 10-20 formal publications each year, most dealing with cellular and organism-level studies.

Ms. B. Jane Swann

She is a full-time permanent GS-1087-6/8 Editorial Assistant (Typing) working for the Center's Fishery Ecology Division, Marine Pathology Branch, Invertebrate Pathology Investigation, at the Oxford Laboratory. She devotes

about 30 percent of her time to editorial assistance, about 40 percent to executive secretarial services, about 20 percent to financial management services, and about 10 percent to scientific assistance. The editorial assistance is performed for the employees of the Marine Pathology Branch who produce about 5-15 formal publications each year, most dealing with cellular-level studies. Branch employees also produce several oral presentation abstracts and several professional meeting proceedings each year.

Ms. Gwendolyn L. Kelley

She is a full-time permanent GS-1087-5/10 Editorial Assistant (Typing) working for the Center's Conservation and Utilization Division, Population Dynamics Branch, Mid-Atlantic Offshore Fisheries Resources Investigation, at the Woods Hole Laboratory. She devotes about 60 percent of her time to typing and some editorial assistance in respect to technical manuscripts, about 25 percent to typing in respect to non-technical matter, and about 15 percent to clerking services. Typing, with some editorial assistance, of technical manuscripts is performed for employees of the Conservation and Utilization Division stationed at the Woods Hole Laboratory who produce about 15-30 formal publications and about 30-40 informal publications each year, most dealing with population-level studies.

Ms. Jennie K. Dunnington

She is a full-time permanent GS-1087-5/7 Editorial Assistant (Typing) working for the Center's Fisheries Ecology Division, Ecosystems Dynamics Branch, Plankton Ecology Investigation, at the Narragansett Laboratory. She devotes about 85 percent of her time to typing and some editorial assistance in respect to both technical manuscripts and non-technical matters, and about 15 percent to executive secretarial services. Typing, with some editorial assistance, of technical manuscripts is performed for employees of the Division's Plankton Ecology, Recruitment Processes, and Apex Predators Investigations stationed at the Narragansett Laboratory, as well as for the NOAA/NMFS Antarctic Planning Office also at Narragansett. These employees produce about 10-15 formal publications and about 20-30 informal publications each year, most dealing with population and ecosystem-level studies.

Ms. Keiko H. Moore

She is a full-time permanent GS-1020-11/5 Scientific Illustrator working for the National Systematics Laboratory. She devotes about 90 percent of her time to scientifically illustrating whole specimens or dissected parts of marine animals, and about 10 percent to foreign language translation services. The scientific illustrating is performed for employees of the National Systematics Laboratory who produced about 10-15 formal publications each year, with about 75 percent of those publications requiring accompanying illustrations.

Ms. Michele R. Cox

She is a full-time permanent GS-1020-10/5 Illustrator working for the Center's Environmental Processes Division, Environmental Assessment Branch, Benthos Investigation, at the Sandy Hook Laboratory. She devotes about 75 percent of her time to scientific, geographic, and statistical illustrating

services, and about 25 percent to photographic, display, and audiovisual services. The illustrating services are performed primarily for employees at the Sandy Hook Laboratory and secondarily for employees in the Center and Region. Sandy Hook Laboratory employees produce about 25-35 formal publications and 20-30 informal publications each year, most dealing with organism and population-level biological and environmental studies; about 80 percent of these publications require accompanying illustrations.

Ms. Lianne D. Armstrong

She is a part-time permanent (35 hours per week) GS-1020-10/4 Scientific Illustrator working for the Center's Environmental Processes Division, Physical Oceanography Branch, Marine Climatology Investigation, at the Narragansett Laboratory. She devotes about 75 percent of her time to scientific, geographical, and statistical illustrating services, and about 25 percent to photographic, display, and administrative services. The illustrating services are performed primarily for employees at the Narragansett Laboratory and secondarily for employees of the Ecosystem Dynamics Branch, Fisheries Ecology Division, at other Center facilities. These employees produce about 20-25 formal publications and about 20-30 informal publications each year, most dealing with population and ecosystem-level biological and environmental studies, and about 80 percent of those publications requiring accompanying illustrations.

Ms. Brenda F. Figuerido

She is a full-time permanent GS-1060-7/3 Photographer working for the Center's Fisheries Ecology Division, Ecosystems Dynamics Branch, Food Chain Dynamics Investigation, at the Woods Hole Laboratory. She devotes about 25 percent of her time to scientific, geographical, and statistical illustrating services, and about 75 percent to photographic, audiovisual, and archive services. These services are performed primarily for employees at the Woods Hole Laboratory and secondarily for employees at other Center facilities. The Woods Hole Laboratory employees produce about 30-50 formal publications and about 30-60 informal publications each year, most dealing with population-level studies, and about 50 percent of those publications requiring Ms. Figuerido's services.

Table 1

Formal		100
Non-NOAA		70
NOAA		30
	Fishery Bulletin	10
	<u>NOAA Technical Memorandum NMFS-F/NEC</u>	10
	<u>Marine Fisheries Review</u>	5
	<u>NOAA Technical Report NMFS</u>	5
Informal		135
Non-NOAA		55
	International Council for the Exploration of the Sea Committee Memorandum	25
	<u>Northwest Atlantic Fisheries Organization Scientific Council Research Document</u>	10
	Others	20
NOAA		80
	Woods Hole Laboratory Reference Document	45
	Sandy Hook Laboratory Report	20
	<u>Narragansett Laboratory Reference Document</u>	10
	<u>Sandy Hook Laboratory Technical Series Report</u>	1
	Others	4
TOTAL		235

Table 2

Descriptor	HOAA Technical Memorandum HMF5-F/NEC	Sandy Hook Technical Series Report	Woods Hole Laboratory Reference Document	Sandy Hook Laboratory Report	Narragansett Laboratory Reference Document
Purpose:	to provide an outlet for technical information needed by researchers and managers but unsuitable for peer-reviewed journals (e.g., large data-to-analysis ratio, limited audience, timely distribution)	to provide outlet for summarized biological and fisheries information on Mid-Atlantic living marine resources needed by researchers and managers	to periodically document ongoing research and to document one-time studies, many are prepublication documents	to periodically document ongoing research and to document one-time studies	to periodically document ongoing research, and to list publications and reports by Laboratory authors
Content:	data reports of long-term or large-area studies, synthesis reports for major resources or habitats, annual reports of assessment or monitoring programs, technical manuals for field and lab studies, findings or recommendations reports of task forces or working groups, and summary reports of technical workshops	species synopses reports and reports on ecological and social factors affecting fisheries	primarily stock assessments	primarily habitat assessments	primarily fishery ecology studies
Format:	offset lithography of typewritten or typeset copy and of line or continuous-tone art, separate green-colored heavyweight covers, and saddle stitch or perfect binding	offset lithography of typewritten copy and line or continuous-tone art, separate blue-colored heavyweight covers, and saddle stitch or perfect binding	photocopied type-written copy with line art, self-covered white paper, stapled in upper left corner	photocopied type-written copy with line art, self-covered white paper, stapled in upper left corner	photocopied type-written copy with line art, self-covered white paper, stapled in upper left corner



Table 2 (cont.)

Descriptor	NOAA Technical Memorandum NMFS-F/HEC	Sandy Hook Technical Series Report	Woods Hole Laboratory Reference Document	Sandy Hook Laboratory Report	Narragansett Laboratory Reference Document
Issues:	about 10 per year	about 1 per year	about 45 per year	about 20 per year	about 10 per year
Copies:	from 100 to 1000 per issue	500 per issue	about 25-100 per issue	about 25 per issue	about 25 per issue
Users:	researchers and managers	researchers and managers	researchers	researchers	researchers
Distribution:	per attached distribution list and per program funding the issue	per Sandy Hook Laboratory mailing list	per programmatic mailing lists and per authors	per mailing list developed for each issue	per mailing list developed for each issue

<u>Recipient</u>	<u>No. of Copies</u>	<u>Note</u>
Library of Congress	4	Required
Commerce Office of Publications	1	Required
National Technical Information Service	11	Required
NOAA Library & Information Services Division	2	Required
NOAA National Environmental Data Referral Service Office	1	Required
NMFS Scientific Publications Staff	1	Required
NOAA Assistant Administrator for Fisheries	1	Complimentary
NOAA Deputy Assistant Administrator for Science & Technology	1	Complimentary
NMFS Policy & Planning Staff	1	Complimentary
Northeast Regional Director	1	Complimentary
Northeast Region Management Division Chief	1	Complimentary
Northeast Region Services Division Chief	1	Complimentary
Northwest & Alaska Fisheries Center Director	1	Complimentary
Southwest Fisheries Center Director	1	Complimentary
Southeast Fisheries Center Director	1	Complimentary
Northeast Fisheries Center Director	1	Complimentary
Deputy Center Director	1	Complimentary
Research Planning & Coordination Staff Chief	1	Complimentary
Research Planning & Evaluation Section Chief	1	Complimentary
Program Analyst	1	Complimentary
Coordination Section Chief	1	Complimentary
Marine Recreational Fisheries Coordinator	1	Complimentary
Aquaculture Coordinator	1	Complimentary
Fishery Management Coordinator	1	Complimentary
Estuarine Projects Coordinator	1	Complimentary
Program Support Staff Chief	1	Complimentary
Technical Memorandum Coordinator	1	Complimentary
Conservation & Utilization Division Chief	1	Complimentary
Fisheries Ecology Division Chief	1	Complimentary
Environmental Processes Division Chief	1	Complimentary
National Systematics Laboratory Director	1	Complimentary
Gloucester Laboratory Director	1	Complimentary
Woods Hole Laboratory Officer-in-Charge	1	Complimentary
Woods Hole Laboratory Library	1	Complimentary
Narragansett Laboratory Officer-in-Charge	1	Complimentary

(cont.)

<u>Recipient</u>	<u>No of Copies</u>	<u>Note</u>
Milford Laboratory Officer-in-Charge	1	Complimentary
Milford Laboratory Library	1	Complimentary
Sandy Hook Laboratory Officer-in-Charge	1	Complimentary
Sandy Hook Laboratory Library	1	Complimentary
Oxford Laboratory Officer-in-Charge	1	Complimentary
Oxford Laboratory Library	1	Complimentary
Spanish Oceanographic Laboratory at Vigo	1	Complimentary
New England Marine Advisory Service Coastal Information Center	1	Exchange Agreement
Canadian Department of Fisheries & Oceans Library - Ottawa	1	Exchange Agreement
" " " " " - St. John's	1	Exchange Agreement
" " " " " - Halifax	1	Exchange Agreement
" " " " " - St. Andrews	1	Exchange Agreement
Bedford Institute of Oceanography	1	Exchange Agreement
South Africa Sea Fisheries Research Institute	1	Exchange Agreement

Table 3

Laboratory	TDP <sup>(1)</sup>	Task	Name	Grade	Series	Title	Status
Woods Hole	006	8L1C5B50	B. Figuerido	GS-7/3	1060	Photographer	FTP
Woods Hole	156	8L1C3AKL	J. Gibson	GS-11/6	1083	Technical Writer-Editor (Fishery Biology)	FTP
Woods Hole	210	8L1C3A70	G. Kelley	GS-5/10	1087	Editorial Assistant (Typing)	FTP
Narragansett	084	8L1A4BG0	L. Armstrong	GS-10/4	1020	Scientific Illustrator	PTP
Narragansett	014	8L1A6B5M	J. Dunnington	GS-5/7	1087	Editorial Assistant (Typing)	FTP
Millford	037	8L1A4250	R. Riccio	GS-9/10	1083	Technical Publications Editor (Fishery Biology)	FTP
Sandy Hook	208	8L1A424E	M. Cox	GS-10/5	1020	Illustrator	FTP
Oxford	204	8L1A4200	B. Swann	GS-6/8	1087	Editorial Assistant (Typing)	FTP
Systematics	080	8L1A3AN0	K. Moore	GS-11/5	1020	Scientific Illustrator	FTP

(1) Refer to the attached listing of Center programs and their corresponding TDP numbers.

NORTHEAST FISHERIES CENTER  
CURRENT YEAR OPERATING PLANS, FY 1986

Table of Contents

<u>CENTER COMPONENT</u>		<u>PAGE NO.</u>
<u>PROGRAM SUPPORT STAFF</u>		
020	General Support	A
105	Fishery Industry Information, Basic Fishery Statistics/Economic Information	B
105.01	Information Analysis and Dissemination: Data Management	B
156	Public Information and Education	C
<u>RESEARCH PLANNING AND COORDINATION STAFF</u>		
200	Research Planning and Coordination	D
<u>SPECIAL PROJECT</u>		
201	Interactive Analysis: Fisheries/Environmental Data	E
<u>NATIONAL SYSTEMATICS LABORATORY</u>		
080	Systematics of Fishes and Crustaceans	F
<u>FISHERIES ECOLOGY DIVISION</u>		
<u>Ecosystems Dynamics Branch</u>		
006	Food Chain Dynamics	G
009	Apex Predators Ecology	H
012	Recruitment	I
014	Plankton Ecology	J
031	Ichthyoplankton Assessment	K

NORTHEAST FISHERIES CENTER  
CURRENT YEAR OPERATING PLANS, FY 1986

CENTER COMPONENT

PAGE NO.

Experimental Biology Branch

037	Physiological Ecology	L
089	Genetics and Life History	M
202	Microbiology	Mc

Marine Pathology Branch

203	Fish Pathology	N
204	Invertebrate Pathology	O

Manned Undersea Research & Engineering Technology Branch

010	Fisheries Engineering	P
017	Manned Undersea Research and Technology	Q

CONSERVATION AND UTILIZATION DIVISION

Population Dynamics Branch

209	New England Offshore Fishery Resources	R
210 & 210.01	Mid-Atlantic Offshore Fishery Resources	S
211	Coastal/Estuarine Fishery Resources	T

Population Biology Branch

004	Resource Surveys	U
212	Fisheries Biology	V

Fishery Statistics & Economics Branch

131	Fisheries Statistics	W
152	Fisheries Economics	XYZ

NORTHEAST FISHERIES CENTER  
CURRENT YEAR OPERATING PLANS, FY 1986

<u>CENTER COMPONENT</u>		<u>PAGE NO.</u>
<u>Resource Utilization Branch</u>		
213	Fisheries Technology	A
214	Fisheries Chemistry	B
<u>ENVIRONMENTAL PROCESSES DIVISION</u>		
<u>Physical Oceanography Branch</u>		
008	Fisheries Oceanography	C
084	Marine Climatology	D
<u>Chemical Processes Branch</u>		
205	Environmental Chemistry	E
206	Coastal Dynamics	F
<u>Environmental Assessment Branch</u>		
207	Environmental Analysis	G
208	Benthos	H
<u>NORTHEAST REGIONAL OFFICE</u>		I

Table 4

Laboratory	Programs <sup>(1)</sup>					
	RPCS	PSS	CUD	FED	EPD	NSL
Gloucester						
Woods Hole		Gibson (34.3K)	Kelley (20.9K)	Figuerido (21.2K)		
Narragansett				Dunnington (19.3K)	Armstrong (23.6K)	
Milford				Riccio (31.6K)		
Sandy Hook					Cox (30.3K)	
Systematics						Moore (33.3K)
Oxford				Swann (22.1K)		
FTE's:	0	1	1	4	1.8	1
\$'s(K):	0.0	34.3	20.9	94.2	53.9	33.3
			$\Sigma$ FTE's:	8.8		
			$\Sigma$ \$'s(K):	236.6		

(1) RPCS = Research Planning and Coordination Staff, PSS = Program Support Staff, CUD = Conservation and Utilization Division, FED = Fisheries Ecology Division, EPD = Environmental Processes Division, and NSL = National Systematics Laboratory.