MINUTES

MONTANA HOUSE OF REPRESENTATIVES
54th LEGISLATURE - REGULAR SESSION

JOINT SUBCOMMITTEE ON EDUCATION & CULTURAL RESOURCES

Call to Order: By **Chairman Royal C. Johnson**, on January 19, 1995, at 8:00 AM

ROLL CALL

Members Present:

Rep. Royal C. Johnson, Chairman (R)
Sen. Daryl Toews, Vice Chairman (R)
Rep. Don Holland (R)
Sen. Greg Jergeson (D)
Rep. Mike Kadas (D)
Sen. Arnie A. Mohl (R)

Members Excused: None

Members Absent: None

Staff Present: Sandy Whitney, Legislative Fiscal Analyst
Curtis Nichols, Office of Budget & Program Planning
Paula Clawson, Committee Secretary

Please Note: These are summary minutes. Testimony and discussion are paraphrased and condensed.

Committee Business Summary:

Hearing: University of Montana - Units & Techs:
Montana Bureau of Mines and Geology
Montana Forest and Conservation Experiment Station

Executive Action: None

UNIVERSITY OF MONTANA-MONTANA TECH
BUREAU OF MINES AND GEOLOGY

{Tape: 1; Side: A}

Lindsay Norman, Ph.D., Chancellor, Montana Tech of the University of Montana, said the Bureau of Mines and Technology has programs that go beyond mines and minerals which include groundwater assessment, earthquake monitoring and geothermal potential.

{Tape: 1; Side: A; Approx. Counter: 104}

John Steinmetz, Ph.D., Director, Montana Bureau of Mines and Geology, gave an overview of the Montana Bureau of Mines and Geology (Bureau). **EXHIBIT 1** The location of the Bureau on the Montana Tech campus provides a symbiotic relationship - the Bureau helps Montana Tech students through on-the-job training and Montana Tech resources and research are shared with the Bureau. Among the various funding sources are sales & services, which are primarily the sale of maps and publications as well as analytical chemical services.

The underlying mission of the Bureau is "service to the citizens of Montana." Groundwater assessment priorities are established based on immediate water needs of an area and the vulnerability of the groundwater sources. Currently 550 monitoring sites have been established with the goal of having 1,000 sites established within the next few years. The groundwater information center receives about 100 inquiries monthly and tries to steer well location away from areas at risk, especially where groundwater is recharging.

The Bureau is working with the United States Geological Survey to re-map Montana, which has not been done since 1955. The project should be completed by 2001. The new map will be the foundation for all of the Bureau's work, which will help local planning bodies and other special interests in areas such as mineral development, land slide risks, factory locations, etc. The new map will also be easily updated with new computer technology in cartography.

{Tape: 1; Side: A; Approx. Counter: 752; Comments: Continue on Tape 1; Side B}

The Bureau earthquake monitoring system has been able to give communities some advanced warning about possible earthquake activity and monitored 1000 earthquakes in Montana in 1994. Other programs in the Bureau, which has about 50 programs total, include monitoring of abandoned mines and geothermal activity; radon inventory of homes; and a collaborative study with other units of the Montana University System and the United States Department of Energy on oil reservoirs in Montana.

Future goals of the Bureau include raising the visibility of the agency by increasing publications and public outreach. The Bureau is committed to educating the citizens of Montana to the state's geologic wonders and resources. The operating expenses of the Bureau are higher on ratio than other university units because of the intensive concentration on field work, which requires per diem and travel expenses as well as sample analysis costs. The Bureau is requesting a supplemental budget enhancement of $93,602 each year of the biennium to hire two FTE who will work in the computer-technology area of mapping. The Bureau of Mines and Geology has a reputation for unbiased analysis and for follow-through from the conception of a project

to completion. With the continued support of the legislature the Bureau will strive to maintain its reputation and continue to serve the citizens of Montana.

{Tape: 1; Side: B; Approx. Counter: 858; Comments: Continue on Tape 2; Side A}

REP. DON HOLLAND asked the Bureau to explain RIGWAT funding addressed in SB46. **Dennis McKenna, Groundwater Assessment Program Leader, Bureau of Mines and Geology,** explained that in 1992 funding up to $666,000 per year, based on the percentage to the RIT, was authorized by the legislature for groundwater assessment projects and renamed RIGWAT. Due to an oversight, the language of the act was not changed to reflect legislative intent and RIGWAT has only gotten about $400,000 per year from RIT proceeds. SB46 will change the language to reflect legislative intent.

SEN. DARYL TOEWS asked how the Bureau was tied in with Montana Tech. **Dr. Norman** answered the Bureau is completely financially separated from Montana Tech; the Bureau even pays rent to Montana Tech. The Bureau and Montana Tech work cooperatively together in providing opportunities for student training and sharing research.

SEN. TOEWS asked if school districts are part of the groundwater assessment monitoring sites and if this was duplicative with U.S. Conservation Service programs. **Dr. Steinmetz** said the groundwater project is not set up to directly assist school districts or municipalities. The Bureau ground water project is not duplicative with the U.S. Conservation Service programs because the Bureau works on a state-wide basis.

SEN. GREG JERGESON asked if the Bureau works cooperatively with local conservation districts on establishing recharge projects and sharing information. **Tom Patten, Montana Bureau of Mines and Geology,** explained there are two programs for recharge - the monitoring program, which is a state-wide project, and local recharge programs, which do work cooperatively with the conservation districts including sharing personnel and joint public awareness meetings.

REP. MIKE KADAS asked why there is a 25% increase in operating expenses from FY94 base to FY96 operating. **John Dunstan, Montana Bureau of Mines and Geology,** answered that in FY94 the Bureau was short about $160,000 in RIGWAT funds and for FY96 and FY97 the full $666,000 budget is being restored. When RIGWAT funds came in short, personnel were not reduced but operating costs were cut back.

REP. KADAS questioned the supplemental for mapping services upgrade. Supplementals are usually for programs that were already authorized but not realized, rarely for the expansion of an existing program in current fiscal year. **Dr. Norman** said the word supplemental is confused - this is in the category of

special needs, which are special requests over and above the normal budget that would come out of the Montana University System's special needs budget for FY96 and FY97, not FY95.

SEN. ARNIE MOHL confirmed with **Dr. Steinmetz** that the Bureau uses the state pay plan of 2.5% for salary increases.

CHAIRMAN ROYAL JOHNSON asked how the Bureau's requested budget got cut to the current Governor's budget request. **Mr. Dunstan** said the Bureau's requested budget had a 2.5% salary increase and a 5% operating increase, which was submitted through the Montana University System. The budget got changed through the budgeting process of the University System.

CHAIRMAN JOHNSON asked if the problem with the Department of Natural Resources RIGWAT funding has been straightened out since the last legislative session. **Marvin Miller, Montana Bureau of Mines and Geology,** answered that currently SB46 is on Senate floor to correct language to the original legislative intent to put 2.2% of metal mine tax money into the RIGWAT account. SB46 will also take care of the $132,000 in arrears as well as FY94's emergency account. **Mr. Patten** said the Bureau adjusted its budget and shut down the program in FY95 when it became known that metal mine tax money wasn't going to appear. The Governor's emergency grant paid back $120,000 overspent in FY94 and kept FY95 going with the assumption that SB46 will cover FY95 tax monies. As the original bill was written it only covered RIGWAT tax but the intent was for the legislation to cover both RIGWAT and metal mine taxes. To date the metal mine taxes have gone into the trust account.

HEARING ON MONTANA FOREST AND CONSERVATION EXPERIMENT STATION

{Tape: 2; Side: B

Ray Murray, Associate Provost of Research, University of Montana-Missoula, explained that the Montana Forest and Conservation Experiment Station (MFCES) was created by the legislature and is housed and administered by the University of Montana-Missoula. MFCES benefits from private gifts, particularly of land. MFCES also works with private companies that contribute to economic development in Montana. Many students work with MFCES, particularly in the cooperative education programs.

{Tape: 2; Side: B; Approx. Counter: 260}

Perry Brown, Dean of University of Montana School of Forestry and Director of MFCES, presented an overview of the Montana Forest and Conservation Experiment Station. **EXHIBITS 2 and 4**

MFCES is attached to the School of Forestry at the UM-M and works closely with the School of Forestry particularly in the areas of

public education and a cooperative arrangement for international resource management with the United States Peace Corp. MFCES is a very productive program in helping the people of Montana make land-management decisions through one-on-one consulting, workshops and publications. MFCES prepared the productivity system and base mapping for the Department of Revenue to use when the 1991 legislature reformed the base of forest land taxation to reflect productivity. Among the many land and fund grants MFCES has received, the Plum Creek gift enabled MFCES to establish its National Resources Management speakers series.

{Tape: 3; Side: A}

The research programs of MFCES are very mission oriented, including the area of managing second growth forests. As natural resource management issues come to the forefront, MFCES is addressing these issues with increased projects and publications.

Almost 70% of the MFCES budget comes from grants and contracts, but this revenue is very close to its maximum. Increasingly, research partners are asking for non-federal and non-corporate matches for funding dollars. The federal McIntyre-Stennis grant is a 1:1 proportional match across the country; the more state funds Montana supplies the more match dollars McIntyre-Stennis provides. Grant expenditures are leveling off because MFCES has stretched its funding about as far as possible. Currently almost 90% of the budget is in personal services as salary increases and inflation takes their toll. The 1995 budget, adjusted for inflation, has about 75% of the spending power of the 1983 budget. MFCES faculty are split with the School of Forestry; about 2/3 of their salary is from the School of Forestry which has tuition to fund salary increase; the remaining 1/3 of salary is from MFCES which does not have tuition to make up salary increases.

MFCES is proposing to launch a research program to study the resources and opportunities on private forest lands in Montana. **EXHIBIT 3** The requested budget for this program is $34,230 each year of the biennium.

{Tape: 3; Side: A; Approx. Counter: 673

REP. WILLIAM REHBEIN, Former Interim Dean of the School of Forestry of the University of Montana-Missoula, said the School of Forestry and MFCES has a dynamic faculty. The focus of MFCES is to emphasize how to best serve the people of Montana. There has been a notable increase in outside grants and contracts in recent years. With current salary levels it is difficult to attract faculty to MFCES and the School of Forestry, but through the collaborative bargaining process there will be substantial increases in faculty salary, although MFCES does not have tuition to fund the increases in their portion of faculty salaries.

{Tape: 3; Side: A; Approx. Counter: 930; Comments: Continue on Tape 3; Side B}

SEN. MOHL asked if MFCES shares information and research with state and federal forestry departments. **Dean Brown** responded that a great deal of MFCES work depends on partnerships with the Fish and Wildlife Department, Conservation Districts and State Department of Forestry. Information, study sites and personnel are shared among the projects.

CHAIRMAN JOHNSON asked how much MFCES receives from bed tax money. **Dean Brown** said the revenue is not in the charts in the handouts but is approximately $169,000 per year.

SEN. MOHL asked if de-earmarking bed tax money would effect MFCES. **Dean Brown** answered that it would probably be detrimental to MFCES.

SEN. MOHL clarified with **Dean Brown** that the MFCES budget is separate from the School of Forestry Budget.

ADJOURNMENT

Adjournment: This meeting adjourned at 10:55 AM.

ROYAL C. JOHNSON, CHAIRMAN

PAULA CLAWSON, SECRETARY

RCJ/pc

[THIS MEETING WAS RECORDED ON THREE 60-MINUTE TAPES]

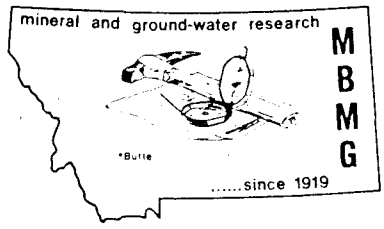
EDUCATION

Joint Appropriations Subcommittee

ROLL CALL DATE 1/19/95

NAME	PRESENT	ABSENT	EXCUSED
Rep. Royal Johnson, Chairman	✓		
Rep. Mike Kadas	✓		
Rep. Don Holland	✓		
Sen. Daryl Toews	✓		
Sen. Greg Jergeson	✓		
Sen. Arnie Mohl	✓		

EXHIBIT 1
DATE 1-19-95
SB



Montana Bureau of Mines and Geology

A Department of Montana Tech
of
The University of Montana

Legislative Testimony

before the

Education Subcommittee

54th MONTANA LEGISLATURE

(comb-bound)

EXHIBIT 2
DATE 1-19-95
SB

MONTANA FOREST AND CONSERVATION EXPERIMENT STATION OF THE SCHOOL OF FORESTRY

THE UNIVERSITY OF MONTANA MISSOULA

BUDGET HEARING

JANUARY 19, 1995
HELENA, MONTANA

PERRY J. BROWN
DEAN AND DIRECTOR

ROBERT D. PFISTER
ASSOCIATE DIRECTOR

DONALD F. POTTS
ASSOCIATE DEAN

SCHOOL OF FORESTRY

some facts for FY 1995

33 Instruction and Research Faculty

1000 Students--about 890 undergraduates and 110 graduates

1/11 or 9% of all students at UM-Missoula

15.6 Faculty FTE on UM General (Teaching) Funds

10.8 Faculty FTE on MFCES and ITRR Funds

6.6 Faculty FTE on Grant, Contract, Gift and CE Funds
(during 9 month academic year)

Student to Instruction Faculty Ratio is 64/1

$4,788,310--Approximate Total Budget
$808,713--UM General Instruction
$909,310--State Supported Research
$3,070,000--Estimated Grants, Gifts, Contracts

$10,010,875--Currently Under Contract

28,000 Acre Lubrecht Experimental Forest

3,400 Acre Bandy Experimental Ranch

EXHIBIT 2
DATE 1-19-95

SCHOOL OF FORESTRY PROGRAMS

INSTRUCTION
(BS,MF,MS,Ph.D.)

RESEARCH

CONTINUING EDUCATION

SPECIAL PROGRAMS

SCHOOL OF FORESTRY

ACADEMIC PROGRAMS

UNDERGRADUATE PROGRAMS

Bachelor of Science in Forestry

Bachelor of Science in Recreation Management

Bachelor of Science in Wildlife Biology

Bachelor of Science in Resource Conservation

GRADUATE PROGRAMS

Master of Forestry

Master of Science in Forestry

Master of Science in Recreation Management

Master of Science in Wildlife Biology

Master of Science in Resource Conservation

Doctor of Philosophy

EXHIBIT 2
DATE 1-19-95

CONTINUING EDUCATION

programs in many different areas such as

Ecosystem Management

Unevenaged Silviculture

Forest Biometrics

Remote Sensing

Outdoor Recreation

Wilderness Management

Wildlife Management

SPECIAL PROGRAMS

Bolle Center for People and Forests

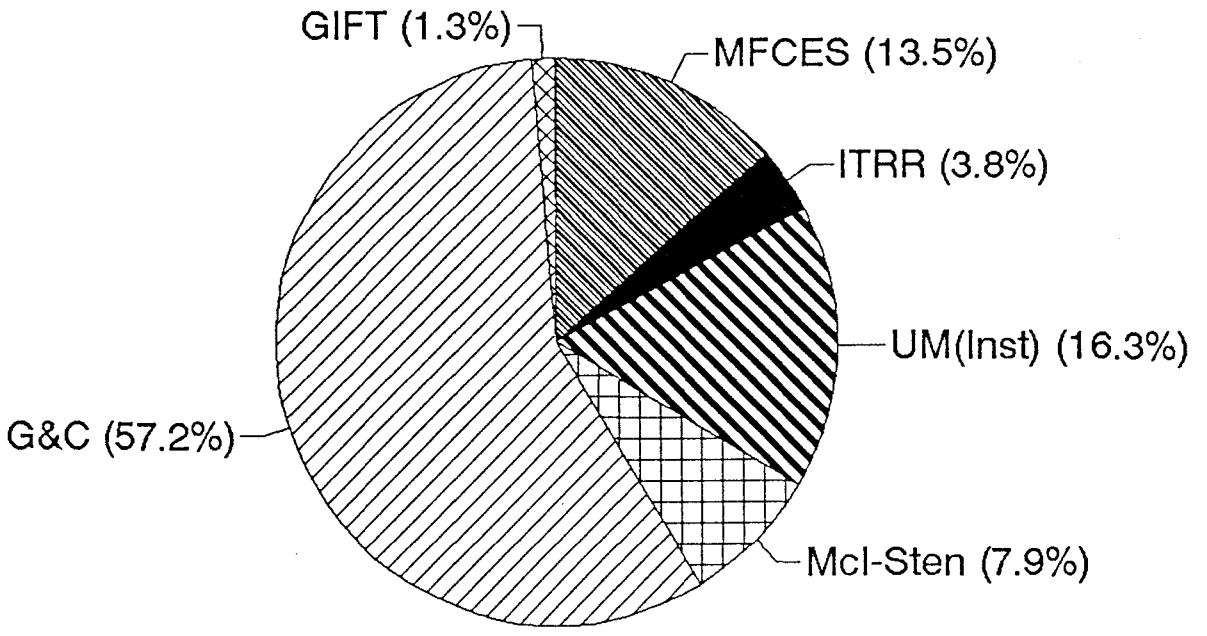
Wilderness Institute

Boone and Crockett Professorship

International Resource Management

EXHIBIT 2
DATE 1-19-95

TOTAL SCHOOL OF FORESTRY REVENUE
F.Y. 1994 - $5,243,983



MFCES BIENNIAL HIGHLIGHTS

149 Different Projects--8.6/Research FTE

75 Research Partners

213 Total Publications--12.25/Research FTE

Montana Forest Land Taxation Project

Bitterroot Ecosystem Management Project

Boone and Crockett Partnership

GIS Laboratory

Bolle Center for People and Forests

Plum Creek Gift

EXHIBIT 2
DATE 1-19-95

RESEARCH PROGRAMS

Mission Oriented Research Program

Institute for Tourism and Recreation Research

Wilderness Institute

Numerical Terradymics Simulation Group

Montana Riparian and Wetland Association

The Inland Northwest Growth-and-Yield Cooperative

Research Facilities

Lubrecht Forest

Bandy Ranch

Boone and Crockett Theodore Roosevelt Memorial Ranch

MFCES PROJECT AREAS

Ecology and Ecosystems 30 projects

Fire Ecology and Management 6 projects

Wildlife Ecology and Management 16 projects

Silviculture and Stand Management 12 projects

Water, Riparian and Wetland Resources 21 projects

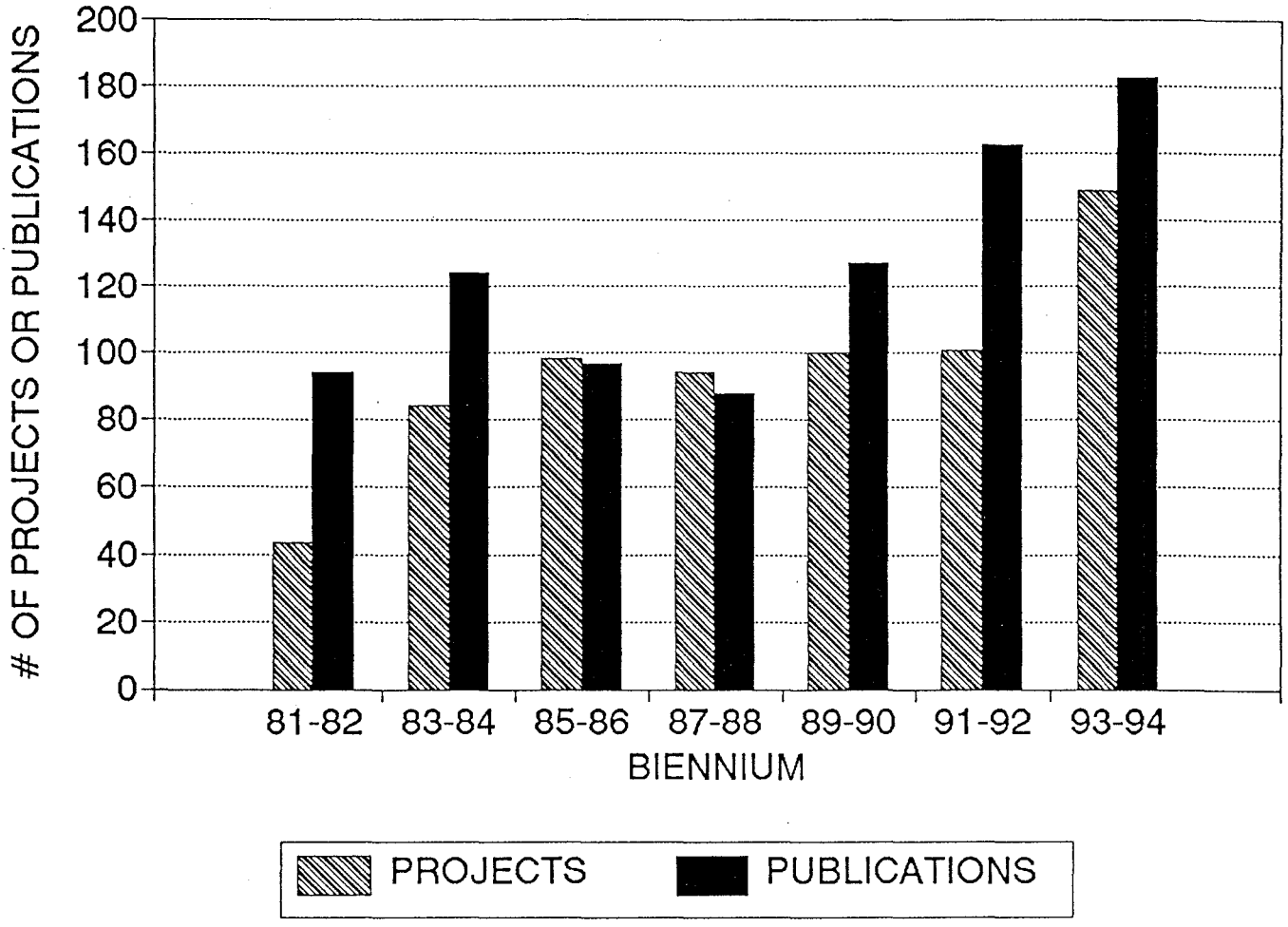
Recreation, Tourism and Wilderness 17 projects

Economics, Management and Policy 21 projects

Modeling and Managment Info. Systems 26 projects

EXHIBIT 2
DATE 1-19-95

THE MFCES BIENNIAL REPORT - TOTAL # ONGOING PROJECTS AND PUBLICATIONS



SCHOOL OF FORESTRY RESEARCH REVENUE
F.Y. 1994 - $4,317,016

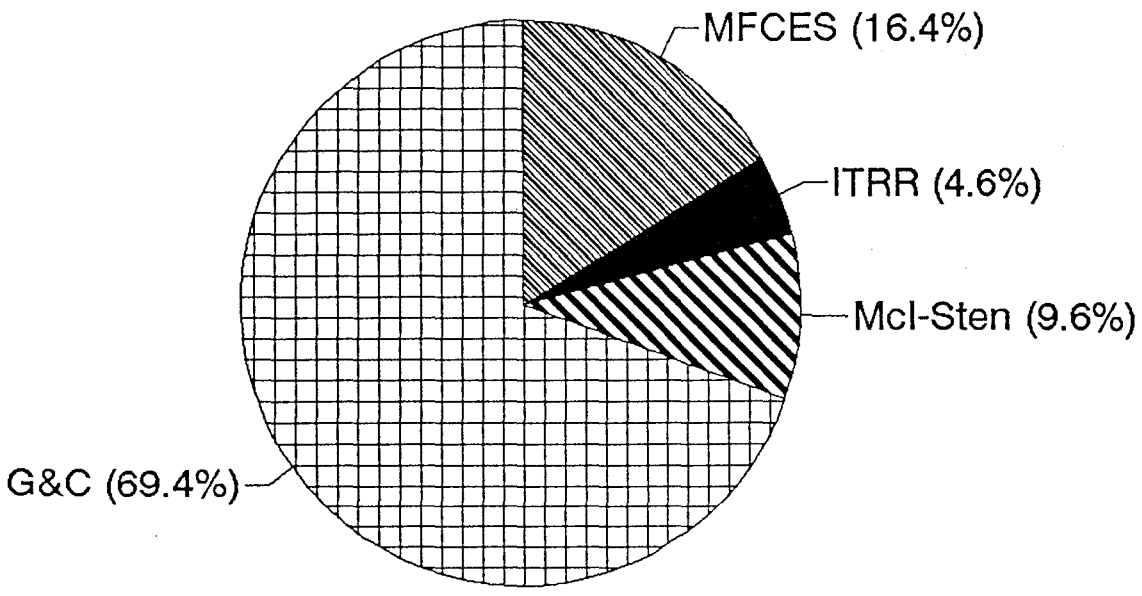
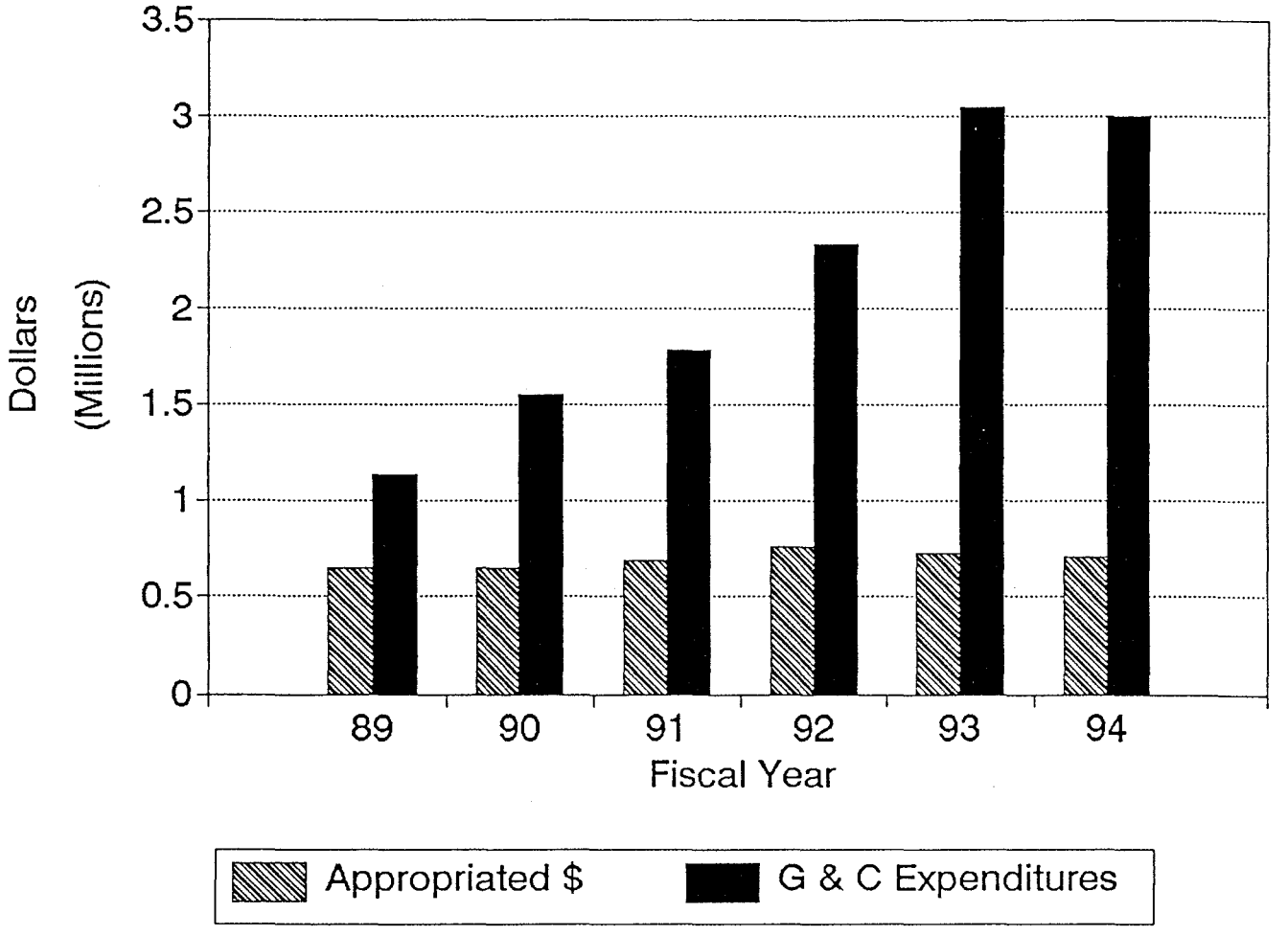


EXHIBIT 2
DATE 1-19-95

Appropriated Dollars and Annual Grant and Contract Expenditures



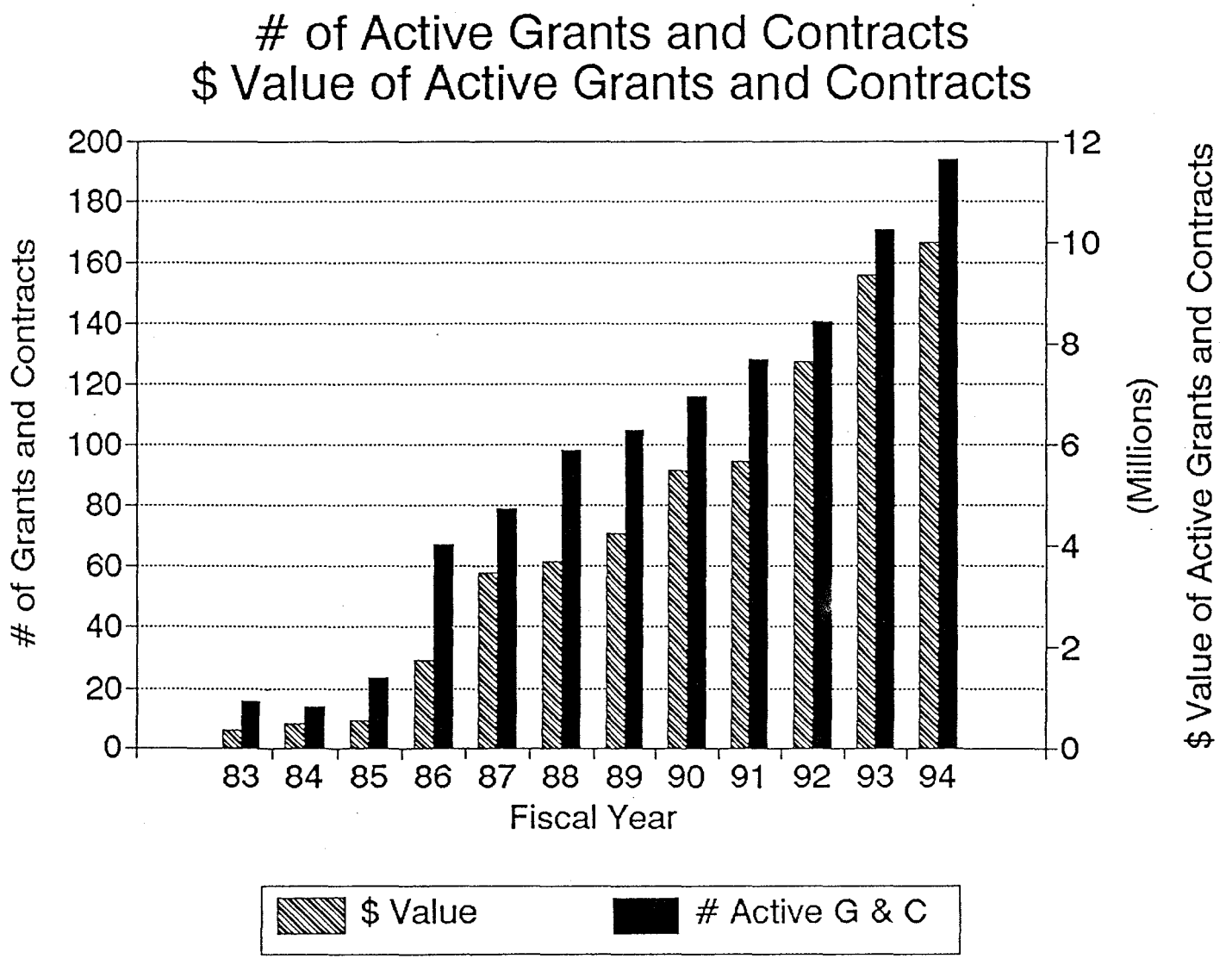
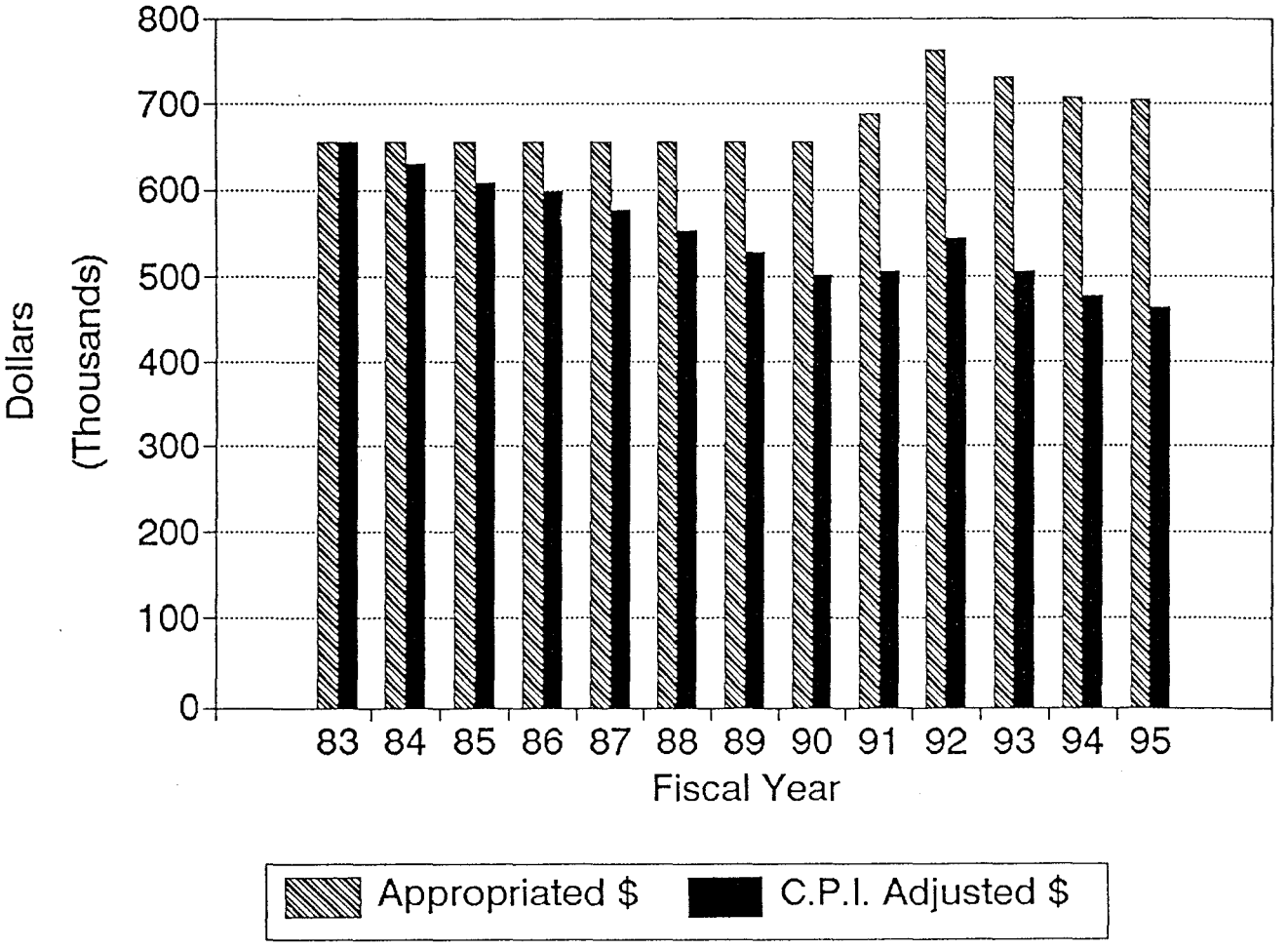

# of Active Grants and Contracts
$ Value of Active Grants and Contracts
# of Grants and Contracts
$ Value of Active Grants and Contracts
(Millions)
200
180
160
140
120
100
80
60
40
20
0
12
10
8
6
4
2
0
83
84
85
86
87
88
89
90
91
92
93
94
Fiscal Year
$ Value
# Active G & C

EXHIBIT 2
DATE 1-19-95

The Effects of Inflation: Appropriated Vs. C.P.I. Adjusted $ (1983 base)



EROSION OF THE MFCES BUDGET: TOTAL APPROPRIATION VS. PERSONNEL COSTS

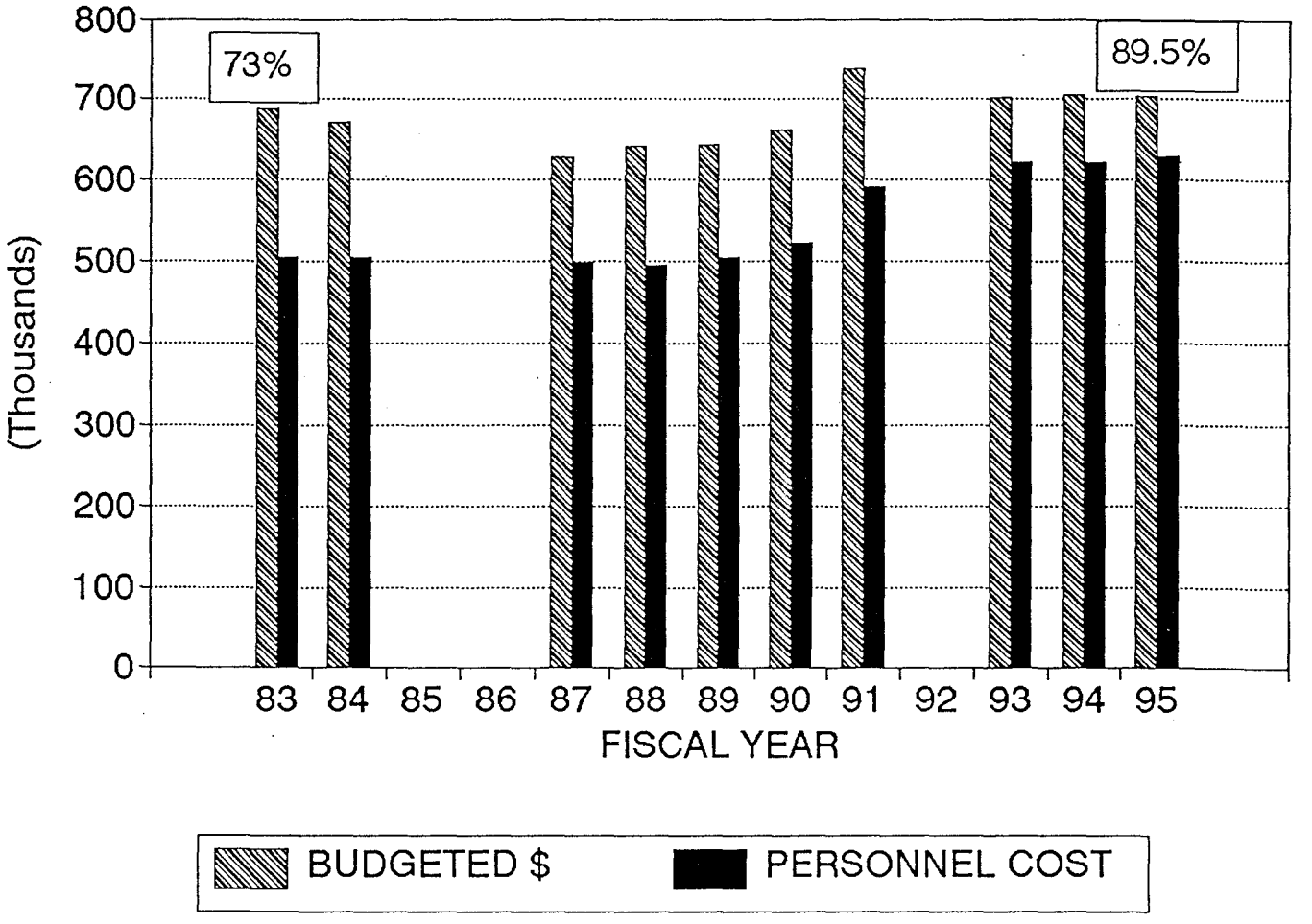
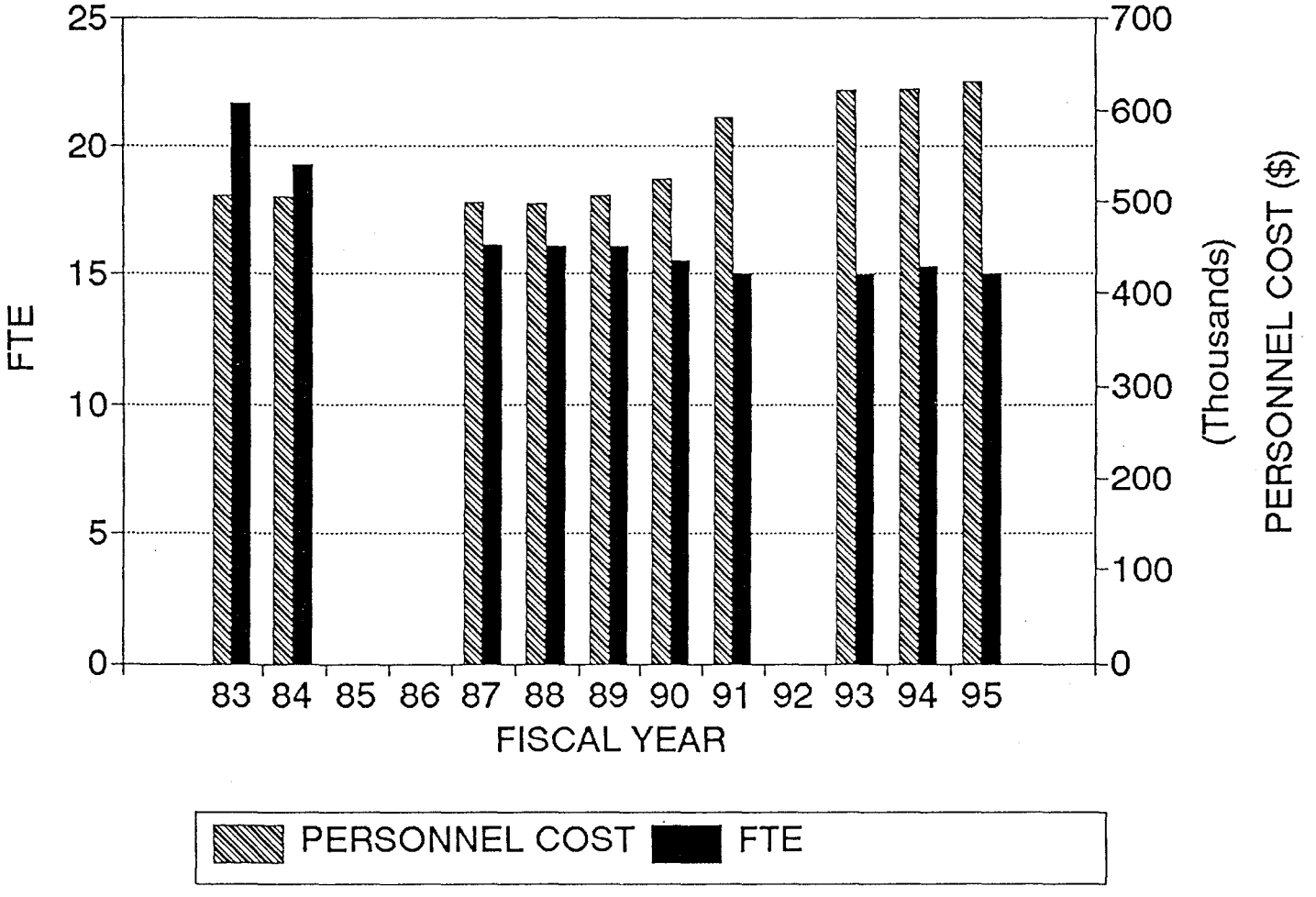


EXHIBIT 2
DATE 1-19-95

TOTAL COST OF PERSONNEL SERVICES AND MFCES BUDGETED FTE



MFCES NEEDS FY/1996/1997

Inflation Increases

FY 1996 $733,360
FY 1997 $762,696

Inflation and Catch-up Increases

To 1985 Level
FY 1996 $982,752
FY 1997 $1,022,062

To 1990 Level
FY 1996 $825,608
FY 1997 $858,632

Some New Program and Position Needs

Private Forest Land Management
$40,000 (.33 FTE) or $150,000/year (1.25 FTE)

Forest Health Research
$40,000/year (.33 FTE)

Human Dimensions Research
$40,000/year (.33 FTE)

EXHIBIT 2
DATE 1-19-95

NEW PROGRAMS AND POSITIONS

Private Forest Land Management

Forest lands in Montana represent a rich variety of types and potentials and the mixed ownership pattern cutting across these types presents interesting challenges for management and policy. Increasingly the private forest lands in Montana are becoming more important in an era of integrated forest and other ecosystem management. They are supplying a larger proportion of timber products, while at the same time providing critical habitat for wildlife and recreationists, and scenery for residents and tourists. Knowing what exists on private forest lands, how land owners envision managing those lands, and how the lands fit into a mosaic of public and private forest lands are more important than ever before.

The MFCES proposes launching a program of research to begin to understand better the resources and opportunities on private forest lands in the State. A first effort is to begin developing information regarding the resource condition of these lands based upon remotely sensed and on-site collected and verified information. Such information then would be incorporated in a resource mapping and assessment program so that analyses and implications of various management, land use, and tax and other policy changes can be estimated and placed in the context of all forest lands. Overtime such information would be linked with the forestry component of the MSU administered Extension Service so that timely information could be transmitted to land owners to facilitate their land management activities. Such information also would be useful in facilitating resolution of land use disputes and in providing a more complete knowledge base for understanding the total forest land base in Montana.

There are two alternatives for starting this program. One is to begin slowly with an initial effort supporting a portion of an existing faculty member (.33 FTE), a graduate student and some operating funds. The second is to move aggressively into this program to get the data base and GIS maps developed quickly so that more sophisticated analyses can be undertaken. This more aggressive approach would require the hiring of a new Assistant Professor and support of existing faculty (1.25 FTE), the support of several graduate students, at least two of whom are doctoral students, hiring several summer field workers, and a substantial operating budget. This more aggressive program would allow the development of baseline data in a couple of years, and thus opportunities for policy analysis soon, rather than the slower development envisioned under the more modest proposal. The approximate costs under the two options are $40,000 and $150,000 per year.

MFCES NEW PROGRAMS AND POSITIONS

Forest Health

Montana and the whole Rocky Mountain region are facing major issues in forest health. It is a topic instrumental in discussions of ecosystem management, forest productivity and forest preservation. Currently the MFCES has no faculty specializing in this area and thus no faculty to interact with other ecosystem researchers and to guide students investigating the many important forest health issues in the region. Adding expertise in this area would enable establishment of a cooperative research program with the Forest Service and other land managing partners, would enable increasing interdisciplinary ecosystem management research among School of Forestry faculty and others, and would enable attracting a new group of graduate students, particularly Ph.D. students. The proposal is to add a .33 FTE Assistant Professor line in the area of Forest Health and to establish a base budget for forest health research.

Human Dimensions in Natural Resources

Human issues are at the core of natural resource policy, management and conflict. They are inherent in many of the MFCES programs including those dealing with recreation, wildlife, and forest and range resources. Currently the MFCES has no faculty specifically cutting across disciplinary lines in pursuit of human dimensions information and integration in ecosystem management. The recreation faculty in MFCES and the one policy faculty member contribute to this need, but do not have it as primary responsibility. There is no one representing this area in the wildlife research group. Adding expertise in this area would enhance capabilities and programs in a number of ways. It would enable the building of research programs focused on the integration of social information into ecosystem management, it would enhance the collaboration among recreation and wildlife faculty in recreation and wildlife user research, it would help strengthen a developing thrust of the School of Forestry by providing a professor as the focal point for this area of inquiry with a consequence of increasing graduate students, especially Ph.D. students. The proposal is to add a .33 Assistant Professor line in the area of Human Dimensions of Natural Resources and to establish a base budget for human dimensions research.

EXHIBIT 3
DATE 1-19-95
SB

MT FOREST AND CONSERVATION EXPERIMENT STATION

Forest lands in Montana represent a rich variety of types and potentials and the mixed ownership pattern cutting across these types presents interesting challenges for management policy. Increasingly, the private forest lands in Montana are becoming more important in the era of integrated forest and other ecosystem management. They are supplying a larger proportion of timber products, while at the same time providing critical habitat for wildlife and recreationists, and scenery for residents and tourists. Knowing what exists on private forest lands, how land owners envision managing those lands, and how the lands fit into a mosaic of public and private forest lands are more important than ever before.

The MFCES proposes launching a program of research to begin to understand better the resources and opportunities on private forest lands in the State. A first effort is to begin developing information regarding the resource condition of these lands based upon remotely sensed and on-site collected and verified information. Such information then would be incorporated in a resource mapping and assessment program so that analyses and implications of various management, land use, and tax and other policy changes can be estimated and placed in the context of all forest lands. Over time, such information would be linked with the forestry component of the MSU-administered Extension Service so that timely information could be transmitted to land owners to facilitate their land management activities. Such information also would be useful in facilitating resolution of land use disputes and in providing a more complete knowledge base for understanding the total forest land base in Montana.

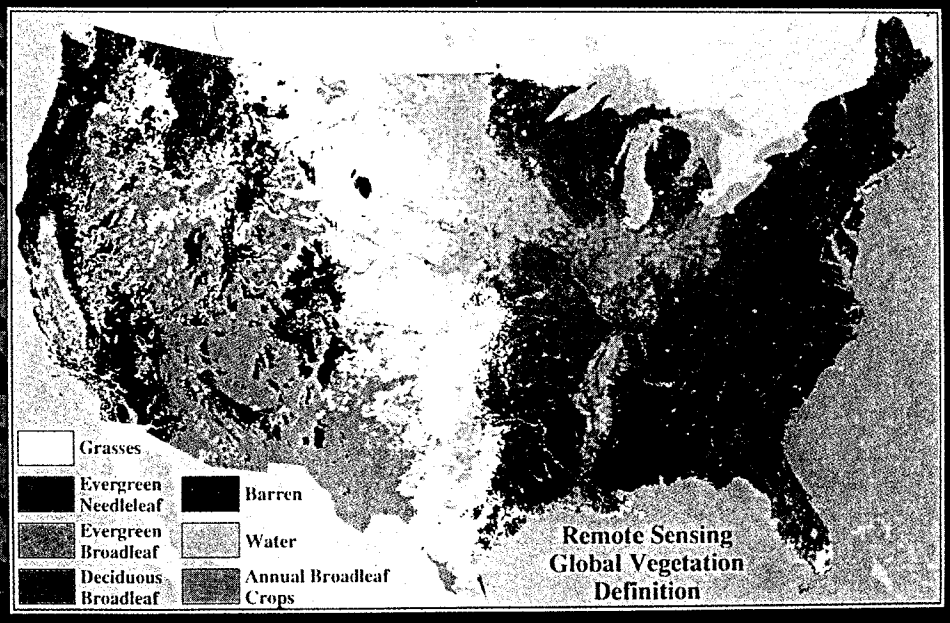
The proposed budget increase is the following:

	FY 1996	FY 1997
Research Faculty	$11,500	$11,500
Research Assistants	16,140	16,140
Employee Benefits	2,690	2,690
Operating Expense	1,900	1,900
Equipment	2,000	2,000
TOTAL	$34,230	$34,230

Frazdoc.077

EXHIBIT 4
DATE 1-19-95
SB

Montana Forest and Conservation Experiment Station



1993-1994 Biennial Report

HOUSE OF REPRESENTATIVES
VISITORS REGISTER

_____ SUB-COMMITTEE DATE 1/19/95

BILL NO. _____ SPONSOR(S) _____

PLEASE PRINT PLEASE PRINT PLEASE PRINT

NAME AND ADDRESS	REPRESENTING	Support	Oppose
John C. Steinmetz	MT Bur. Mines & Geology		
PERRY J. BROWN	Montana Forest & Conservation Experiment Station		
[signature]	NRIS / MSC Groundwater Assessment		
Pete Joseph	MFT		
Marvin Miller	MT. Bur of Mines & Geology.		
[signature]	MBMG		
[signature]	UM - Missoula		
DENNIS MCKENNA	MBMG		
Tom Patton	MBMG		

PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.

HR:1993
wp:vissbcom.man
CS-14