#### MINUTES

# MONTANA HOUSE OF REPRESENTATIVES 51st LEGISLATURE - REGULAR SESSION

## SUBCOMMITTEE ON EDUCATION

Call to Order: By Chairman Peck, on February 1, 1989, at 8:00

a.m.

ROLL CALL

Members Present: All

Members Excused: None

Members Absent: None

Staff Present: Keith Wolcott, Senior Fiscal Analyst,

Sandra Whitney, Associate Fiscal Analyst

Joe Williams, Budget Analyst, OBPP CLaudia Johnson, Committee Secretary

Announcements/Discussion: None

## HEARING ON MONTANA TECH

Tape No. N1/:1:000

Presentation and Opening Statement: Rep. Fritz Daily, House District 69, addressed the Subcommittee and offered support for Montana Tech's budget, and to offer several items in the budget he would like the Subcommittee to view: 1) Business Degree had been lost and would like to have it reinstated. It had been the largest program when it had The background for Engineers relies very heavily been cut. on the accounting programs. Rep. Daily commented there are a lot of small mines in Montana at this time and the operators of the mines do the accounting for those mines, and 2) Bureau of Mines. Rep. Daily commented on the mine flooding, and said they are within 6 months of having the ground water contaminated on the west side of Butte Silver The Berkeley Pit is within 7 years of contaminating the groundwater in Butte Silver Bow. When the Butte Silver Bow groundwater is contaminated, it will contaminate the whole Deer Lodge Valley and on down to the Columbia River. The EPA and Department of Health in the state of Montana have not been able to accomplish the controlling of the contamination.

- Rep. Daily closed stating this is not Butte's problem, but the Northwest and Montana problem. Rep. Daily strongly urged the Subcommittee to support the funding for Montana Tech and the programs they need.
- Dr. Lindsay D. Norman, President of Montana Tech, briefly outlined their principal concern for Montana Tech. See Exhibit 1.
- Dr. Norman presented Montana Tech's situation; at this time they are in much better shape than they were 2 years ago at this time. They have had 2 straight years of enrollment increases, and the national reputation of the campus is at an all time high.
- Dr. Norman stated that the cost is higher to not have the business program than it does to have one to train remaining students. He Addressed Mt. Tech's increasing level of specialization, Dr. Norman commented that Mt. Tech is the most specialized unit of our higher education system. With the loss of the Business Degree which in effect subsidized some 300 students last year who literally subsidized the higher cost engineering programs at MT. Tech and they are in the process of losing that subsidy factor. They cannot dispose of the business faculty because they are required by Engineering accreditation to still teach finance to the engineering students. There are no savings involved and the net cost per student will go up.
- Dr. Norman stated that Montana Tech is the most specialized minerals engineering school in America. Dr. Norman said "because of the nature of the business they operate on Montana Tech campus, where their principle constituency is the minerals, mining, and energy industry, they follow the economic cycle very closely, if they're up, so is Montana Tech, and when down, like it has been since 1981 so is Montana Tech. But now the school will be able to see some resurgence. The net result of decisions that have been made in this decade. Circumstances in the School of Mines are such that they have not been able to reap the harvest when the mining and minerals industry is on the upswing and when on the downswing the tendency is to pack the budgetary and operating funds in because that is when the revenues are down in the state. Twenty-five percent of the revenue collected in the state is from the mining, minerals, and energy industry".
- Dr. Norman stated as Montana Tech becomes more specialized, the need for funding to operate a demonstrated high quality engineering school has tended to be that of a four year general curriculum college and they have not seen the

funding they need to operate to operate it that way.

- Dr. Norman gave figures of comparisons showing Montana Tech very underfunded compared with comparable schools elsewhere.
  - 1). Instructional Expenditures----67% of peer avg.
  - 2). Instructional Support-----66% of peer avg.
  - 3). Student Support------68% of peer avg.
  - 4). Libraries, Research, etc., are similar.
- Dr. Norman asked the Subcommittee for a budget to just catch-up by closing the gap about twenty-five percent for the 1991 biennium. Dr. Norman didn't feel the LFA submission accomplished this objective.
- Dr. Norman addressing specific formula factors and budget line
   items:
- 1). Student Enrollments: On the use of the last two years Dr.
  Norman felt it very valid and logical and plans to be within that figure, maybe five to ten percent over.
- 2). Student/Faculty Ratio: Dr. Norman stated this factor is the most out of line for Montana Tech compared to their peers. MT. Tech's current SFR is 17.32, 50 percent higher than the peer average of 11.6. Dr. Norman's goal is 14 percent as opposed to their peer number of 11.6. He would like to see the SFR go to 16 percent in FY 1990 and 15 percent in FY 1991.
- 3). Faculty Salaries: Dr. Norman commented this is the most sensitive indicator of our support for higher education. Salaries are clearly in need of adjustment and must increase at least \$4,000 in FY 1990 and more in FY 1991 to prevent competitive offers of peers. Dr. Norman also stated the salaries of the administrative and professional staff are even worse when compared to the national peers with whom they compete. Dr. Norman stated the past funding practices and decisions have led to Tech being the most inequitably funded campus in Montana and does not support the percentage-of-base funding idea.
- 4). Research: Dr. Norman totally supports the 100 percent indirect cost, and urged the Committee's support of it also.

(680)

5). Physical Plant: Dr. Norman stated that by using current level projections Mt. Tech would lose some \$150,000 from

this year's appropriated level. Recognizing that not spending current appropriations does not mean a lesser need. Over the past  $2\frac{1}{2}$  years they have been faced with a 12 percent or more reduction in operating funds. Dr. Norman stated the price of his decision was a 10 percent reduction in administrative staff, library cuts, elimination of capital expenditures for most instructional needs, and severely restricted faculty development funds.

- With the budget transfer taken away from the Physical Plant had an immediate impact on their care and maintenance of Tech's facilities;
- 1). Campus Security was reduced 20 percent or \$12,000.
- 2). Four maintenance engineers were laid off last summer, plus one custodian.
- 3). Deferred maintenance increased by some 25 percent.
- 4). No preventive maintenance has been preformed in the past 2 years.
- 5). Lab. and classroom renovation/repair has not occurred except where health and safety was at risk.
- Dr. Norman requested that Mt. Tech's Plant Operation and Maintenance funding be set at or near the \$1.63 million appropriated by the 50th Legislative session.
- 6). Scholarships and Fellowships: Dr. Norman stated the last appropriated budget reduced state scholarship dollars by some 37 percent. He said they expended about \$373,000 in FY 1987, and \$262,000 in FY 1988. Their request for scholarships is for \$266,000 each year of the next biennium, a level that would be about current with actual expenditures this year and last year, but 30 percent below FY 1987 spending.
- 7). Revenue Sources: The initial executive budget overstated this revenue source about \$51,000 each year of the biennium because average collections for FY 87 and 88 were used. The LFA projections also estimate on the high side by some \$23,000 per year. Dr. Norman noted only 19 percent out-of-state enrollment in Spring 1987 and to date of only 11 percent out-of-state. Mt. Tech's estimate for actual tuition and fee revenue that will be collected is \$1.7 million.

- Questions From Subcommittee Members: Rep. Marks asked Dr.

  Norman why the loss of the out-of-state students? Dr.

  Norman replied that the loss of confidence in Montana after the 50th Legislature, and the adverse publicity and concern of quality and stability. There has been a decline in minerals schools because of the concern of a career in that field. Dr. Norman commented they have the largest freshman petroleum engineering class in the country and the largest mining engineering program in America.
- Rep. Nathe asked Dr. Norman if the twenty Chinese students came to Mt. Tech? Dr. Norman replied they not only came they now have a second delegation from the People's Republic of China. Dr. Norman stated MT. Tech was chosen by the PR of C two years ago as the official graduate training educational institution for that country in minerals and energy disciplines. He stated they have around 15 to 25 students per year.
- Sen. Nathe asked Dr. Norman how it came about they lost 37 percent of their scholarships from last session. Rep. Peck asked if it was from the entitlement, and did not remember cutting anyone that much from last session? Dr. Norman stated that it was because of enrollment numbers. Dr. Krause stated it is primarily because of the relationship scholarships and fellowships have on enrollment.
- Dr. Norman stated that last year approximately 20 percent of the total enrolled students at Mt. Tech were enrolled in a business administration degree, these 373 students were taking a finance type degree, he stated it cost \$3,000 per FTE to train a business student and \$5,000 to \$6,000 per FTE per year for engineering students.
- Rep. Peck stated that Dr. Norman had made a point regarding the need to increase faculty salaries and the need for more faculty. Rep. Peck wanted to know how they balance the two in terms of the appropriations and which comes first, Dr. Norman stated the formula if absent his first priority would be faculty salaries, but in terms of formula considerations, getting a student/faculty ratio that would accurately depict the situation that not only occurs at our peer institutions but what should exist at our institutions in Montana.
- Rep. Peck asked Dr. Norman about the faculty salaries of \$4,000 for FY 90 and more for FY 91, and wanted to know if that meant more than the \$4,000 or additional from the first year? Dr. Norman stated the support formula faculty salary is now \$29,996 from this past budget and he would like to see that increase \$4,000 and then another increment in the second year of the budget, but not the same amount of the

\$4,000, but make it comparable to the AAUP of \$35,000 to \$36,000.

- Dr. Norman commented on indirect costs and stated if this legislature were to approve the retention of 100 percent of indirect research costs he would like to see that money returned 100 percent to the support of the research program which would include graduate students and laboratories.
- Sen. Nathe asked Dr. Norman about the library funding? Dr. Norman stated they have cut some \$80,000 to \$90,000 out of about a \$400,000 budget which will really hurt them because Montana Tech has the only patent repository in a five state area.

## HEARING ON BUREAU OF MINES

Tape No. N1\2:550

# Presentation and Opening Statement:

Dr. Ed Ruppel, Director of Bureau Mines and Geology of Montana Tech. The Bureau has adjusted to the budget reductions of 1986 and 1987 by reductions in personnel and operating costs, and by reducing their projects and programs. The Bureau FTE level has been reduced to about 26.4 from 1986 appropriated level of 32.4 and as a result the Bureau has been able to retain a reasonable amount of flexibility. In FY 88 the Bureau of operations were further restricted by the requirement they set aside \$35,000 in operating funds in anticipation of further budget cuts, the funds were later released for purchases of equipment. See Exhibit 2.

- Dr. Ruppel stated the Bureau shares many of the problems discussed by Dr. Norman in the above testimony. Dr. Ruppel stated there are a number of areas that are in critical shape for the Bureau's long term health and effectiveness. The staff reduction's in the last  $2\frac{1}{2}$  years have severely limited the Bureau's ability to respond to new needs and opportunities for research and Montana mineral deposits and energy resources ground water.
- Dr. Ruppel stated the Bureau needs small and selective increases in the scientific staff. The problem of salaries affects the Bureau the same as the rest of state government. Dr. Ruppel anticipates the continuing loss of younger hydro geologists due to low salaries compared to their peers.
- Dr. Ruppel speaking of the 1991 biennium budget on page 4 of Exhibit 2. Dr. Ruppel commented on the LFA current level and recommended the Bureau alternative budget of \$35,000

that was placed in a contingency fund in FY 1988 in anticipation of budget cuts and was later expended on equipment. The LFA current level budget notes the higher level of equipment expenditure and recommends the Bureau operations be accordingly reduced by about \$35,000 a year. Dr. Ruppel stated the Bureau was trying to be prudent in a responsible manner and asked for the \$35,000 to be restored for FY 1991 the same as FY 1988.

- Questions From Subcommittee Members: Sen. Nathe asked Dr. Ruppel why the Department of Health is doing a lot of analytical study on water when they have the bureau lab.? Dr. Ruppel replied the bureau lab primarily analyzes for inorganic materials in ground water and the Dept. of Health tests organic materials plus other materials but they work very closely with the Bureau.
- Rep. Peck asked Dr. Ruppel about the \$35,000 being set aside anticipating budget cuts and then spending it on equipment and if the LFA is recommending reduction of the \$35,000, Rep. Peck wanted to know where it was originally? Dr. Ruppel replied it was originally in the operating budget.

# (056)

- List of Testifying Proponents: Dr. David Toppen, Vice President for Academic Affairs on Research for Montana Tech, followed Dr. Ruppel with a presentation which defines and describes the budget modification requests that have been submitted to the Subcommittee by the Bureau of Mines and the Mt. Tech. See Exhibit 3. Dr. Toppen also referred to a copy distributed last Tuesday by the Commissioner for the program modification request for a Water Resources Research Center. See Exhibit 3a. He stated the system has elected to address through the office of the Commissioner and through the three research campuses; University of Montana, Montana State University and Montana Tech.
- Modification requests under college category; Instructional Program: replacement of aged surveying equipment purchased a dozen years ago. There will be matching funds provided by the National Science Foundation. The request is for the state of Montana to match the funds from the federal to obtain critical equipment. The college would like the allocation of the \$48,330 for FY 90 instead of waiting until FY 91.
- 2). Library Support: The \$82,500 for FY 90 and \$85,000 for FY 91, reflect Montana Tech's concerns with one critical issue for library support. The issue is inflation and the serial's acquisition for the library as a technical institution.

- 3) Physical Plant: The request of \$31,000 for FY 91 is for a portable man lift.
- Dr. Toppen asked that the allocation of the 100 percent indirect costs of \$54,392 be returned back to the campuses. Their intent for the return of the indirect cost is for support of their research program, to initiate research and to turn a small portion of the indirect costs back to the originating department as an enticement and inducement to carry out further research.
- Dr. Toppen speaking on budgetary mods for the Bureau of Mines and Geology: 1) Hydrology Database; referring to Exhibit 3A, Water Research. Several areas of emphasis; biological research which is carried out at the University of Montana, at Yellow Bay. 2) Hazardous Waste research is carried out through Montana Tech faculty, and MSU and the Bureau of Mines are involved in hazardous materials. In the budgetary mod requests, the Analytical Center costing \$950,000 the second year of the FY 91 biennium addresses the concerns in the state for the need for 1 analytical center. The U of M, MSU, Montana Tech, the Bureau of Mines, the Water Research Center and the Biological station at Yellow Bay have all agreed to coordinate all water research projects through the Commissioner and create 1 center focal point for analytical studies, so e.q. a farmer will have only one number to call.
- Dr. Toppen stated at this time they cannot fully certify EPA capabilities at all levels because of obsolete equipment.
- Dr. Toppen stated in order to maintain creditability with Hazardous Materials they will need \$160,000 for the second year of the biennium for information that the state and federal agencies are requiring for potential hazardous substances in groundwater.

# Questions from the SubCommittee Members:

- Sen. Nathe asked Dr. Toppen if faculty members that write books, do the units get anything back to put back into the libraries like royalties? Dr. Toppen stated they do not support any faculty that writes a book unless he is willing to share a portion of the royalties with them and it is Montana Tech's intent if there are any royalties it will go back into the library.
- Rep. Peck asked Dr. Krause if there was a Regent's policy regarding royalties? Dr. Krause replied there is a policy on copy rights and patents. Dr. Krause stated MSU informed him they have 8 patents, but he doesn't know if they will make any money and if they do, a certain percent of that would go back into research and development funds for that institution.

- Rep. Marks stated he felt the water data is being duplicated and wanted to know if it could be checked into. Rep. Peck asked Keith Wolcott to check it out with EQC.
- Sen. Jacobson asked Dr. Norman if the Ag. Experimental station and Extension service knew they were not a part of the agreement of the six and six percent, do they still share joint appointments at the colleges? Dr. Norman replied that was correct, but they do not have anyone on their campus that is a part of the six plus six percent agreement.
- Rep. Peck asked Dr. Norman if they were organized? Dr. Norman stated they do not have collective bargaining on campus. Dr. Norman stated that half of the Bureau of Mines staff are tenured members of the faculty that do contribute to the instructional side of the Montana Tech business as well as the Bureau of Mines. Dr. Norman said that money would have to be included in any faculty pay increase, and the net cost to the budget would be approximately \$80,000 per year.
- Sen. Hammond asked Dr. Krause if the 6 mill levy came into the 6 units? Dr. Krause stated it doesn't go to the Ag. Experimental Station, Coop. Station, the Forestry and neither does the tuition income. Each of these programs are outside of the formula budget total.

(965)

Rep. Peck asked Dr. Krause about the six plus six percent plan that is mentioned all of the time and is the language the same in all four of the campuses where they have negotiated agreements? Dr. Krause replied it isn't the same but very similar the language means the same. Rep. Peck asked Dr. Krause if he had a copy of the language and what it dictates? Dr. Krause replied he would get a copy of all four agreements for Rep. Peck.

Tape 01\2:000

Rest of Tape O1/2 was discussion between the Subcommittee Members about the agenda for their meeting at Montana Tech.

There being no further business the Subcommittee was adjourned.

#### **ADJOURNMENT**

Adjournment At: 9:48 a.m.

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REP. Ray Peck, Chairman

RP/cj

2721.min

# DAILY ROLL CALL

DATE \_\_\_\_\_\_ SUBCOMMITTEE

			<del>                                     </del>
NAME	PRESENT	ABSENT	EXCUSED
REP. RAY PECK, CHAIRMAN	V		
SEN. SWEDE HAMMOND, VICE CHAIRMAN			
SEN. PAUL BOYLAN	V		
SEN. JUDY JACOBSON	W		
REP. MIKE KADAS	V		
REP. BOB MARKS			
SEN. DENNIS NATHE			
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Form CS-30A Rev. 1985 BUDGET TESTIMONY FEBRUARY 1, 1989 Lindsay D. Norman

EXHIBIT	
DATE Jeb1	1989
HB MT Tech	

- I. INTRODUCTION -- APPRECIATION BREVITY WELCOME CAMPUS VISIT
  - -- WILL FOCUS EXCLUSIVELY ON BUDGETARY CONCERNS
  - -- TECH FIRST, WITNESSES, BUREAU, PROGRAM MODS
  - -- TECH ON MUCH BETTER FOOTING THIS TIME AROUND ENROLLMENT, REPUTATION, SUCCESS STORIES VISIT
- II. PRINCIPAL CONCERN -- NUMEROUS ACTIONS TAKEN TO FURTHER STRENGTHEN

  TECH'S SPECIALIZATION -- BUSINESS DEGREE -- IMPACT ON COSTS.

  CURRENTLY THE MOST SPECIALIZED OF ALL MINERALS ENGINEERING

  SCHOOLS IN AMERICA OF WHICH THERE ARE A DWINDLING FEW (25 OR 30 TO ABOUT 6 TODAY). (EXPLAIN "MOST SPECIALIZED"--CYCLES)

IMPORTANCE OF TECH - TO MONTANA 25% REVENUE

- MAJOR ECONOMIC GROWTH AREA
- CAMPUS REPUTATION--2,000 PRESIDENTS USNWR

YET, AS TECH BECOMES MORE AND MORE SPECIALIZED, THE FUNDING TO OPERATE A DEMONSTRATED, HIGH QUALITY ENGINEERING SCHOOL IN THE PAST BIENNIUM OR TWO, SEEMS TO HAVE GRAVITATED TO THAT NEEDED FOR A 4-YEAR GENERAL COLLEGE CURRICULUM. IT WOULD SEEM THAT WE HAVE ENTERED OR ARE ENTERING A SITUATION WHERE EVERYONE INVOLVED WITH CRITICAL DECISION MAKING FOR TECH MAY BE TRYING TO "HAVE IT BOTH WAYS," WHERE DEMANDS FOR TECH TO BECOME MORE NARROWLY FOCUSED INCREASE ON THE ONE HAND AND FUNDING TO RUN THE REMAINING HIGHER COST PROGRAMS ARE DECREASED ON THE OTHER HAND. NOWHERE IS THAT MORE OBVIOUS THAN WHEN ONE EXAMINES RELEVANT PEER DATA.

INSTEAD OF HOLDING WITH OUR PEERS IN RECENT YEARS, TECH HAS TAKEN A DECIDED BACKWARD FINANCIAL STEP. ALTHOUGH WE MAY CHALLENGE THE ABSOLUTE ACCURACY OF ALL THE RECENTLY COLLECTED PEER DATA, OBVIOUS BALLPARK COMPARISONS DO SIGNAL THE FACT THAT TECH IS PERHAPS THE MOST GROSSLY COMPARED CAMPUS IN MONTANA WHEN COMPARED WITH COMPARABLE SCHOOLS ELSEWHERE.

INSTRUCTIONAL EXPENDITURES -- 67% OF PEER AVERAGE
INSTRUCTIONAL SUPPORT -- 66% OF PEER AVERAGE
STUDENT SUPPORT -- 68% OF PEER AVERAGE
LIBRARIES, RESEARCH, ETC., SIMILAR

EVEN IF ONE ASSUMES AN ERROR FACTOR OF 20% OR SO IN THESE COMPARISONS,
THE NUMBERS CANNOT BE ADJUSTED TO REFLECT ANYTHING EVEN CLOSE TO PEER
EQUITY. AND THAT DEFICIENCY WILL ONLY GROW WORSE AS TECH'S PROGRAMS ARE
FORCED TO BECOME EVEN MORE SPECIALIZED THIS BIENNIUM. AS NOTED EARLIER,
WE NOW EVEN FACE GROSS PEER INEQUITY WITH OUR DEGREE PROGRAMS, LET ALONE
OUR FINANCING.

THE REGENTS' BUDGET SUBMISSION DOES ATTEMPT TO DEAL WITH PART OF THE INEQUITY FOR TECH. COMPLETE PEER EQUITY WOULD ENTAIL ANNUALLY SOME 4 OR 5 MILLION NEW GENERAL FUND DOLLARS FOR TECH OR ABOUT \$9 MILLION OVER THE BIENNIUM.

I AM THE FIRST TO RECOGNIZE THAT SUCH A STAGGERING AMOUNT OF MONTANA TAX
DOLLARS IS NOT ONLY WISHFUL THINKING, BUT IT ALSO WOULD BE AN ACT OF
GROSS INSENSITIVITY TO OTHER STATE NEEDS ON MY PART IF I WERE TO ASK FOR

THIS AMOUNT. I INSTEAD HOPE THAT THIS COMMITTEE IN RECOGNIZING TECH'S FUNDING PROBLEMS, CAN RECOMMEND A FAIR CATCH-UP OF NEW DOLLARS OVER THE NEXT COUPLE OF BIENNIA TO KEEP TECH COMPETITIVE AND EVEN ALIVE IN THE YEARS AHEAD. I BELIEVE THE REGENTS' BUDGET PROPOSAL WILL BEGIN TO ACCOMPLISH THIS OBJECTIVE BY CLOSING THE GAP SOME 25% IN THE 91 BIENNIUM; THE LFA SUBMISSION CLEARLY DOES NOT. MY 25% CLOSURE NUMBER OF COURSE WRONGLY ASSUMES THAT TECH'S PEERS REMAIN THE SAME, BUT IT WOULD BE A LONG OVERDUE START ON GETTING THE COLLEGE BACK ON A FINANCIALLY SOUND AND COMPETITIVE FOOTING.

NOW IF I MAY, I WOULD LIKE TO ADDRESS SPECIFIC FORMULA FACTORS AND BUDGET LINE ITEMS.

STUDENT ENROLLMENTS -- USING LAST TWO YEARS FAIR AND LOGICAL; BECAUSE I PROJECT BIENNIUM ENROLLMENT TO BE WITHIN 5% OF THIS NUMBER, MOST LIKELY OVER, I AM ENTIRELY SATISFIED WITH THIS APPROACH.

STUDENT/FACULTY RATIO -- THIS FACTOR IS PERHAPS THE MOST OUT-OF-LINE WITH OUR PEERS. OUR CURRENT SFR OF 17.32 IS SOME 50% HIGHER THAN OUR PEERS. MY GOAL IS REALISTICALLY NOT COMPLETE EQUITY, BUT RATHER SOMETHING NEAR 14 AS OPPOSED TO OUR PEER NUMBER OF 11.6. ALTHOUGH I WOULD VERY MUCH LIKE TO SEE SOME POSITIVE CORRECTION IN THE RATIO THE FIRST YEAR OF THE NEXT BIENNIUM, A PLANNED REDUCTION IN THE SFR OVER THE NEXT COUPLE BIENNIA MUST BE ACCOMPLISHED. IDEALLY, I WANT TO SEE THE SFR GO TO 16.00 IN FY1990 AND TO 15.00 IN FY1991 IN VIEW OF THE GREATER SFR GAP THAT MUST BE CLOSED FOR TECH WHEN COMPARED TO THE OTHER MONTANA UNITS.

FACULTY SALARIES - PERHAPS THE MOST SENSITIVE AND MAYBE SIGNIFICANT INDICATOR OF OUR SUPPORT FOR HIGHER EDUCATION, THIS FACTOR IS PROBABLY ALSO THE ONE FOR WHICH PEER DATA IS THE MOST ACCURATE. USING WHATEVER MEASURE OR SURVEY YOU CHOOSE, SALARIES ARE CLEARLY IN NEED OF ADJUSTMENT. THIS NEED IS ESPECIALLY TRUE AT TECH, WHERE WE HAVE LITERALLY BEEN PRICED OUT OF THE MARKET FOR ENGINEERING FACULTY.

NOTE: 70% INCREASE: MOST 40% OR SO.

WITHOUT RELIANCE ON PEER DATA, BUT JUST USING AAUP DATA WHICH DOES NOT FACTOR IN COMPLETELY THE VERY SPECIALIZED NATURE OF TECH'S FACULTY, 5000 TECH'S AVERAGE, FORMULA FACULTY SALARY MUST INCREASE AT LEAST \$4,000 IN FY90 AND MORE IN FY91 TO JUST PREVENT OUR COMPETITIVE SITUATION FROM REALLY FALLING OFF THE CLIFF.

AS AN ASIDE, I NOTE TO YOU THAT ADMINISTRATIVE AND PROFESSIONAL STAFF
SALARIES AT TECH SUFFER EVEN WORSE WHEN COMPARED TO THE NATIONAL
MARKETPLACE IN WHICH WE COMPETE. WE CANNOT OVERLOOK THESE GLARING
SHORTFALLS WHETHER THEY BE FOR LIBRARIANS, PLACEMENT OFFICIALS, STUDENT
COUNSELORS, RESEARCHERS, OR THE HOST OF OTHER DEDICATED, HARD WORKING
PROFESSIONALS WHO KEEP OUR CAMPUSES RUNNING OR CONTRIBUTE TO THE OVERALL
EDUCATIONAL EFFORT. IT IS IN THIS VEIN THAT I ASK YOUR FULL AND CAREFUL
DELIBERATION ON THE VARIOUS SUPPORT CATEGORIES--BOTH INSTRUCTIONAL AND
GENERAL.

AGAIN PAST FUNDING PRACTICES AND DECISIONS HAVE LED TO TECH BEING THE MOST INEQUITABLY FUNDED CAMPUS. WE DO NOT SUPPORT THE PERCENTAGE OF

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BASE FUNDING IDEA BECAUSE OF THE OBVIOUS AND I MIGHT ADD MISLEADING BASE LEVELS THAT WOULD BE EMPLOYED. TO ME, IT WOULD BE AN ERROR COMPOUNDED BY AN ERROR IF THAT METHOD WERE USED.

RESEARCH -- ONLY NOTE HERE RELATES TO INDIRECT COSTS THAT WE ALL HOPE WILL BE FULLY RETAINED THROUGH ACTION BY THIS LEGISLATIVE SESSION.

PHYSICAL PLANT -- THIS BUDGET LINE COULD BE MY BIGGEST HEADACHE AND ONE
OF MY OWN MAKING. USING CURRENT LEVEL PROJECTIONS, TECH WOULD LOSE SOME
\$150 THOUSAND OR MORE FROM THIS YEAR'S APPROPRIATED LEVEL FOR OUR
PHYSICAL FACILITIES.

DOES THIS LOWER EXPENDITURE LEVEL ACCURATELY REFLECT TECH'S PHYSICAL PLANT NEEDS? MOST CERTAINLY NOT. RECOGNIZING THAT NOT SPENDING OUR CURRENT APPROPRIATION IMPLIES A LESSER NEED, I MUST TELL YOU WHY THAT HAS OCCURRED. THE ANSWER IS QUITE STRAIGHT FORWARD. FACED WITH MORE THAN A 12% REDUCTION IN OPERATING FUNDS OVER THE PAST 2-1/2 YEARS, I CONSCIOUSLY COMMITTED TO MAINTAINING TECH'S INSTRUCTIONAL PROGRAM AS BEST I COULD. IN ESSENCE, I DECIDED TO KEEP OUR ACADEMIC DELIVERY SYSTEM IN TACT AS WELL AS HOLD OUR ACCREDITATION TOGETHER (ABET MINIMUMS).

THE PRICE OF THIS DECISION, WHICH I WOULD MAKE AGAIN IF CALLED ON, WAS A 10% REDUCTION IN ADMINISTRATIVE STAFF, LIBRARY CUTS, ELIMINATION OF CAPITAL EXPENDITURES FOR MOST INSTRUCTIONAL NEEDS, AND SEVERELY RESTRICTED FACULTY DEVELOPMENT FUNDS. BUT EVEN THESE CUTS WERE INSUFFICIENT TO BALANCE OUR OPERATING BUDGET. HENCE, THE PHYSICAL PLANT FUNDS FELL PREY TO OUR EFFORTS TO MAINTAIN EXCELLENCE IN THE CLASSROOM.

THE BUDGET TRANSFER AWAY FROM THE PHYSICAL PLANT HAD AN IMMEDIATE IMPACT ON OUR CARE AND MAINTENANCE OF TECH'S FACILITIES. FOR EXAMPLE,

-L CAMPUS SECURITY WAS REDUCED 20% OR \$12,000.

- 160
- FOUR MAINTENANCE ENGINEERS WERE LAID OFF LAST SUMMER, PLUS ONE CUSTODIAN.
- DEFERRED MAINTENANCE INCREASED BY SOME 25%. UNFORTUNATELY, OUR MAINTENANCE PROBLEM IS A CUMULATIVE ONE, WHICH WE CURRENTLY ESTIMATE WOULD COST OVER \$500,000 TO CORRECT; THE PROBLEM CAN ONLY GET WORSE AS TIME GOES BY.
- -- NO PREVENTIVE MAINTENANCE WAS PERFORMED IN THE PAST 2 YEARS; ONLY BREAK-DOWN MAINTENANCE WAS ACCOMPLISHED.
- LABORATORY OR CLASSROOM RENOVATION/REPAIR HAS NOT OCCURRED EXCEPT WHERE HEALTH AND SAFETY WAS AT RISK.

I NOW ASK THIS COMMITTEE TO CONSIDER THE IMPLICATIONS OF MAINTAINING THE STATUS QUO IN OUR PHYSICAL PLANT BUDGET. AND IF YOU AGREE WITH ME THAT WE CANNOT ALLOW TECH'S FACILITIES TO DETERIORATE FURTHER AND THAT A MAINTENANCE DOLLAR SPENT NOW WILL SAVE MANY FUTURE DOLLARS, THEN I TO REQUEST THAT TECH'S PLANT OPERATION AND MAINTENANCE FUNDING BE SET AT OR NEAR THE \$1.63 MILLION APPROPRIATED BY THE 50TH LEGISLATIVE SESSION.

SCHOLARSHIPS & FELLOWSHIPS HERE TECH HAD THE REVERSE SPENDING PROBLEM
FROM THE PHYSICAL PLANT. THE LAST APPROPRIATED BUDGET REDUCED STATE
SCHOLARSHIP DOLLARS BY SOME 37%. THAT ACTION LEFT ME IN A HUGE
DILEMMA--DO I TELL ONE OUT OF EVERY THREE RECIPIENTS OF FINANCIAL AID
THAT THEY WILL GET NO FURTHER SUPPORT? FOR MOST OF THESE MONTANA
STUDENTS SUCH A DECLARATION WOULD HAVE BEEN TANTAMOUNT TO ENDING THEIR
HIGHER EDUCATION.

HERE AGAIN, MY CONSCIOUS CHOICE WAS TO NOT DENY EDUCATIONAL ACCESS, BUT TO START A LONG-TERM PHASE DOWN IN TECH'S FINANCIAL AID SPENDING. IN SET 1987, WE EXPENDED ABOUT \$373,000; IN FY88 ABOUT \$262,000; AND THIS YEAR SPENDING SHOULD BE BETWEEN \$230,000 AND \$260,000, NECESSITATING AN INWARD TRANSFER OF FUNDS OF \$25 TO \$50,000--FROM THE PHYSICAL PLANT APPROPRIATION.

DISCUSSIONS WITH MY FINANCIAL AID OFFICE REVEAL THAT WE HAVE ABOUT

BOTTOMED OUT WHERE ANY FURTHER CUTS IN SCHOLARSHIPS AND FELLOWSHIPS WILL

HAVE DRAMATIC ADVERSE IMPACT ON TRULY NEEDY AND ELIGIBLE MONTANA

STUDENTS. THEREFORE, OUR REQUEST FOR SCHOLARSHIPS IS FOR \$266,000 EACH

YEAR OF THE NEXT BIENNIUM--A LEVEL THAT WOULD BE JUST ABOUT CURRENT WITH

ACTUAL EXPENDITURES THIS YEAR AND LAST YEAR, BUT 30% BELOW FY87 SPENDING.

# REVENUE SOURCES

WE HAVE BUT ONE CONCERN ON THE REVENUE SIDE OF OUR BUDGET AND THAT DEALS WITH THE PROJECTED TUITION AND FEE INCOME. THE INITIAL EXECUTIVE BUDGET OVERSTATED THIS REVENUE SOURCE BY ABOUT \$51,000 EACH YEAR OF THE BIENNIUM BECAUSE AVERAGED COLLECTIONS FOR FY87 & 88 WERE USED. THE LFA PROJECTIONS ALSO ESTIMATE ON THE HIGH SIDE BY SOME \$23,000 PER YEAR.

THIS DISCREPANCY ARISES PRINCIPALLY FROM TECH'S DECLINING OUT-OF-STATE ENROLLMENTS AND FEE COLLECTIONS. AS EVIDENCE, I NOTE TO YOU A 19% OUT-OF-STATE ENROLLMENT IN SPRING 1987 AND TODAYS' NON-MONTANA ENROLLMENT OF ONLY 11% OF TECH'S STUDENTS--A DROP OF ABOUT 16% IN STUDENTS AND IN CORRESPONDING FEE COLLECTIONS. TECH'S ESTIMATE FOR ACTUAL FEE REVENUE THAT WILL BE COLLECTED IS \$1.7 MILLION.

DATE Feb 1, 1989 HB Bureau of Mines

MONTANA BUREAU OF MINES AND GEOLOGY

BUDGET

# Bureau of Mines and Geology - Budgets

# 1989 Biennium Budget

The actual unrestricted budget for the Bureau of Mines and Geology for Fiscal Year 1988 was \$1,278,505, and the current unrestricted budget for Fiscal Year 1989 is \$1,286,523. These figures include \$45,967 actual FY88 AND \$53,000 budgeted FY89 State Special Revenue, which is anticipated agency generated revenue mainly from sales of maps and publications. They also include \$60,000 per year administrative charges paid by the Bureau to the Montana College of Mineral Science and Technology.

The Bureau moved aggressively in the 1989 Biennium to resolve the problems of General Fund reductions in the 1987 Biennium, by staff reductions, by reducing operations costs, and by reducing or recessing projects and programs. As a result, the Bureau FTE level was reduced to 26.43 from the Fiscal Year 1986 appropriated level of 32.41. In Fiscal Year 1988, additional budgetary restraints were imposed in anticipation of further budget cuts, and about \$35,000 was set aside until it became clear that no further budget cuts were expected. These funds were then used for delayed purchases of capital equipment. (See LFA Current Level Budget, p. F48)

1991 Biennium Budget
Comparison of Executive Budget and LFA Current Level Budget

	Executi	ve	LFA Current	Level
	FY90	FY 91	FY90	FY91
Personal Services	\$ 880,164	\$ 880,753	\$ 898,863	\$ 899,457
Operations	332,517 <sup>1</sup>	333,518 <sup>1</sup>	333,529 <sup>1</sup>	334,530 <sup>1</sup>
Equipment	41,400	45,000	23,000	25,000
TOTAL	\$1,254,081	\$1,259,271	\$1,255,392	\$1,258,987
Biennium	\$2,513,	352	\$2,514,379	

LFA over Executive - \$1,027

# Includes \$60,000 College transfer

As noted by the Legislative Fiscal Analyst, the Executive Budget includes vacancy savings of 2 percent, compared with no vacancy savings in the LFA Current Level Budget. The difference totals \$35,428 over the biennium. Also, the Executive Budget includes \$86,400 for equipment over the biennium, compared with \$48,000 in the LFA Current Level Budget. The difference amounts to \$38,400.

# Fund Sources (LFA Currrent Level)

	<u>FY88</u>	FY89	<u>FY90</u>	FY91
General Fund	\$1,232,850	\$1,233,523	\$1,202,392 <sup>2</sup>	\$1,205,987 <sup>2</sup>
State Special 1	45,607	53,000	53,000	53,000
TOTAL	\$1,278,817	\$1,286,523	\$1,255,392	\$1,258,987

- Mainly from Bureau sales of reports and maps
- 2. The Legislative Fiscal Analyst notes:

"The budget decreased 1.97 percent from the 1989 biennium to the 1991 biennium. This is due primarily to funding operating expenses at the level incurred for fiscal 1988 and equipment at the appropriated level rather than the higher level expended by shifting personal service and operating expense funds to equipment in fiscal 1988."

In response to the LFA comment, the initial budgeted amount for equipment in fiscal 1988 was \$22,075; the amount actually expended was \$60,849, for a difference of \$38,774. As noted elsewhere in this testimony, the extra funds expended for equipment above the budgeted amount were set aside in a contingency fund in anticipation of further Executive budget cuts in addition to budget cuts totaling \$157,668 in fiscal years 1986 and 1987. Late in Fiscal Year 1988 it was clear that no Executive budget cut was planned, and the contingency funds could be released. Bureau operations curtailed earlier in the fiscal year could only partly be restored, and the funds accordingly were expended for equipment not purchased because of budget cuts in fiscal years 1986 and 1987.

The reductions proposed in the LFA Current Level Budget therefore amount to a penalty imposed for fiscal prudence and responsibility in fiscal 1988 and earlier years. I would ask that these funds, about \$35,000 per year, be restored to the Bureau operations budget, making the General Fund appropriated levels as follows:

General Fund	FY90 \$1,237,392	FY91 \$1,240,987
State Special	53,000	53,000
TOTAL	\$1,290,392	\$1,293,987

This is the recommended alternative budget.

arison of Montana Bureau of Mines and Geology Budgets for MY86 (actual), MY87 (actual), MY88 (actual), MY89 (to 1/89)

and the state of the state of

LPA Current Level FY90-91 and Bureau Recommended Alternative FY90-91 Executive FY90-91

Series Special   \$1,534,030   \$1,232,850   \$1,233,523   \$1,201,081   \$1,206,271   \$1,202,392   \$1,205,987   \$1,240,997		Actual FY86	Actual FY87	Actual FY88	(to-1/69) FY89	Exe FY90	Executive FY91	FY90	LFA , FY91	Bureau Alternative FY90 FY91	necommended eau Alternativ O FY91
1       53,000	Beginning General Fund	\$1,488,331	\$1,534,030	\$1,232,850	\$1,233,523	\$1,201,081	\$1,206,271	\$1,202,392	\$1,205,987	\$1,237,392	•
\$1,541,331 \$1,587,030 \$1,285,850 \$1,286,523 \$1,254,081 \$1,259,271 \$1,255,392 \$1,258,987 \$1,290,392 \$1,474,042 \$1,390,651 \$1,232,850	State Special		53,000	53,000	53,000	53,000	53,000	53,000	53,000	53,000	•
\$1,474,042 \$1,390,651 1 \$2,302 43,897 \$1,526,344 \$1,434,548 \$ 14,289 \$ 143,379	Total	\$1,541,331	\$1,587,030	\$1,285,850		\$1,254,081	\$1,259,271	\$1,255,392	\$1,258,987	\$1,290,392	.  0
\$1,474,042 \$1,390,651 1 \$2,302 43,897 \$1,526,344 \$1,434,548 \$ 14,289 \$ 143,379				•							
1 52,302 43,897 \$1,526,344 \$1,434,548 \$ 14,289 \$ 143,379	Ending General Fund	\$1,474,042	\$1,390,651	\$1,232,850	1			to the state of th		1	
\$1,526,344 \$1,434,548 \$ 14,289 \$ 143,379	State Special	52,302	43,897	45,967							
\$ 14,289	Total	\$1,526,344	\$1,434,548	\$1,278,817							
\$ 14,289 \$											•
	Budget Cur	\$ 14,289	\$ 143,379								

The Bureau also receives restricted Federal, State, and other grants and contracts not included above. Restricted grants and contracts in Fiscal Year 1988 totaled about \$900,000 and included \$98,500 for studies of mobility of agricultural chemicals in groundwater, funded through the Department of Natural Resources and Conservation (HB7). Other sources of restricted funds included the U. S. Environmental Protection Agency (through the Montana Department of Health and Environmental Services), for various studies of groundwater and mine wastes in the Butte area and elsewhere; the U. S. Geological Survey for groundwater and water quality studies, for preparation of a new State geologic map, and for the National Coal Resource Data System; and other Federal and State agencies, counties and municipalities, water districts, and other groups. In all, the Bureau works about 20 different cooperators, and through fund-matching contracts nearly doubles the amount of research that could be done on appropriated funds alone.

Reductions in scientific staff have directly affected the Bureau's ability to seek Federal and other cooperative funds, contracts or grants, however, either because these programs commonly require matching salary and operational funds on a 50/50 basis, or because the Bureau no longer has geologic and hydrologic scientists trained in disciplines required for new programs. Bureau General Funds are now matched almost to the limit, and significant new cooperative contracts can only be sought as replacements for existing contracts

# Impact of Budget Cuts

The Bureau of Mines and Geology moved aggressively to resolve the problems of reduced General Fund support in Fiscal Year 1987 through reductions in staff and parallel reductions in travel, communications and other operations. As a result. the Bureau maintained operational flexibility, but at a diminished level from that of earlier years. Field investigations in some topical areas were reduced or terminated. Planned expansion of the earthquake studies program and related studies of young faults were reduced, studies of landslides have been recessed except in areas being studied for other reasons, and research on Montana coal distribution, quality and hydrogeology has been substantially reduced. reductions in landslide and coal studies have been further impacted by the loss of significant Federal support for such work; Federal programs for landslide hazards have been set aside on the grounds that landslides are a State problem, and Federal support for studies on coal is restricted to very limited funding for continuation of the National Coal Resource Data System. Most research on metallic mineral deposits has been recessed until the Bureau can again hire an appropriately trained and experienced economic geologist. The Bureau capability of quickly responding to taxpayer requests for information has been impaired by staff reductions, and was severely strained during the dry season of 1988: information requests were kept current at the expense of new data acquisition and entries into the Groundwater Information System. Other computer data files on mineral resources, coal resources and deep groundwater have either been continued on a reduced basis or recessed.

As noted earlier, the search for other Federal, State or other restricted funding to support continuing and new research on Montana geologic and hydrologic problems is limited by the lack of available matching funds. The Bureau has a very high success rate in attaining restricted funds, but current and proposed outside funding projects have already required almost complete matching of the diminished Bureau staff and leave little flexibility for seeking new funds.

Nonetheless, Bureau scientists are involved in more and better research on Montana geologic and hydrogeologic problems than ever before, and their productivity continues to increase. The 50 current research projects in the Bureau, conducted by about 25 scientists, are a clear indication of the vitality and dedication of the Bureau staff. Each of these projects is discussed in the Bureau Biennial Report (Open-File Report 203). Research planned for the 1990-1991 Biennium is outlined in an attached summary (Appendix 2).

#### PROGRAM MODIFICATIONS

The Bureau of Mines and Geology and Montana Tech jointly have proposed two Program Modifications, one to establish an Analytical Center for Mineralogic and Hydrogeologic Resources, and one to expand Bureau and College capabilities for dealing with inquiries about groundwater contamination and hazardous substances in groundwater. Funding is requested in Fiscal year 1991, including \$950,000 principally for capital purchases of modern analytical equipment for the Analytical Center, and \$160,000 for personal services and capital equipment support for Hazardous Substances in Groundwater Research.

The Bureau also has requested additional funds to support the Groundwater Information Center. The Groundwater Information Center has been largely supported by non-General Fund sources in the past, but these sources do not provide the continuing support necessary to respond to increasing numbers of requests for information and, at the same time, to keep this and other data files current with new well logs, water quality data, and other resource data. Additional funds in the amount of \$48,287 are requested for Fiscal Year 1991 mainly for additional personnel. All three of these Budget Modification requests are included in the Montana University System Program Modification Request for Water Research, Information and Education Programs.

Equipment funds in the amount of \$72,700 have been requested for replacement of ageing and worn-out equipment used principally in groundwater studies and in the analytical laboratory in support of groundwater studies.

Summary texts for the Program Modification Requests and the list of replacement equipment are attached (Appendix 3).

# BUREAU OF MINES AND GEOLOGY

# PROGRAM MODIFICATION REQUEST

litte of kequest:	Analytical Center for Mineral and Hydrogeologic Resources
Program:	Joint Request: Montana Bureau of Mines and Geology and Montana College of Mineral Science and Technology
Type of Request:	Workload New ServicesX Funding Modification
ABSTRACT:	
ment of an Analyticentral location of equipment and exist instructional programmer technical programmer.	he Montana Bureau of Mines and Geology jointly propose the establish cal Center for Mineral and Hydrogeologic Resources. Housed in a n the Montana Tech campus, the Center will be comprised of both new ting analytical instrumentation already in use in the research and rams of the College and the Bureau. Along with existing Bureau al staff, two additional professionals will support the Center n of the Chief Chemist.
expertise devoted throughout the Sta	ovide all Montana with analytical services capability and research to effective monitoring and use of water and mineral resources te. Critical analytical techniques that are necessary for ground-and environmentally sound minerals management programs will at last

BUDGET REQUEST: Fiscal Year 1991 \$950,000

# BUREAU OF MINES AND GEOLOGY

# PROGRAM MODIFICATION REQUEST

Title of Request:	Hazardous Substances in Groundwater Research
Program:	Joint Proposal: Montana Bureau of Mines and Geology and Montana Tech - Division of Environmental and Natural Sciences
Type of Request:	Workload X New Services Funding Modification
ABSTRACT:	
groundwater research increase in requests contamination (or postate and Federal agas part of the State Program Modification Division and the Colthose who require daboth office and on-son-site sampling and for non-site specific	e Hydrology Division of the Montana Bureau of Mines, involved in throughout the State of Montana, are experiencing a substantial of for information dealing with groundwater availability and otential for contamination). Requests come from a variety of gencies involved in hazardous substance clean-up or in assessment to Mini-Superfund and abandoned mine reclamation. The requested a provides funding for personnel to enable the Bureau's Hydrology clege's Division of Environmental and Natural Sciences to assist at regarding hazardous substances in groundwater by providing (1) site information, (2) equipment and supplies to conduct limited analysis, (3) travel to sites around the State and (4) support to research including means to determine the fate and substances in the unsaturated zone, methods of isolation of heavy

BUDGET REQUEST: Fiscal Year 1991

and toxic metals from mine waste and enhanced recovery of such metals.

\$160,000

#### BUREAU OF MINES AND GEOLOGY

# PROGRAM MODIFICATION REQUEST

Title of Request: Hydrology Database Technical Support

Program: Montana Bureau of Mines and Geology

Type of Request: Workload X New Services Funding Modification

## ABSTRACT:

The Groundwater Information Center is a service program in the Hydrology Division of the Montana Bureau of Mines and Geology. Answering requests for groundwater information from across the state, the Center has responded to several thousand requests in 1988. The information compiled and distributed by the Groundwater Information Center comes from Bureau projects, from other state agencies such as the Department of Natural Resources and Conservation, and the U. S. Geological Survey and from other sources. Personnel and operational support for entering and organizing water data from so many other agencies and groups come mostly from non-general fund sources, but these funds are always short term and do not provide a level of continuous support required to keep current with the arrival of well log, water quality and mineral resources data. This request constitutes a plan for the establishment of state funded data entry support for the Bureau of Mines and Geology data bases, thereby providing timely access to critical groundwater information.

BUDGET REQUEST: Fiscal Year 1991 \$42,287

# ACENCY BASE

			TO SECULATE THE PROPERTY OF TH
AGENCY: NUMBER	5105	AGENCY NAME Montana Co	Montana College of Mineral Science & Jecunology
PROGRAM NUMBER	11	(-3	Independent Operations - Montana Bureau of Mines & Geolog
CONTROL VARIABLE		CONTROL VARIABLE NAME	
		•	

		. ' '
NUESTED BIENNIUM 1991	\$25,000.00	\$25,000.00
REQUESTED 1991 BIENNI	\$ 4,000.00 6,000.00 25,000.00 6,500.00 4,000.00 1,000.00 1,600.00 1,000.00 2,000.00 1,000.00 1,000.00 1,000.00 6,000.00	\$72,700.00
FY 88 Actual Amount		
JUSTIFY CURRENT LEVEL SERVICE EXPENDITURES	Mercury Analyzer Cyanide Analyzer Cyanide Analyzer Olympus Microscope Vickers Microscope Vickers Microscope Recorder Clocks Generator, 3 Phase Augers, 4 inch, 5 feet long, 10 at \$100.00 Motor for 15 HP pump Specialized Coring Equipment Peristaltic Pump Field PH meters, 2 at \$800.00 Field SC meters 2 at \$650.00 Submersible pump 2 HP Transducer System Replacement Down Hole Retrieval Implements Core Barrel and Adaptors 16 Button Digitizing Cursor Computer Replacement for Tektronics 4025 Terminal Plotter, PC Driven GTCO or HP 36" x 48"	
Object of Expend.	3116 3116 3116 3122 3122 3199 3199 3122 3122 3122 3122	
Item Number"	2. 7. 4. 3. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	

\* Sequentially number each item.

Pri ritize justification listing when provided for equipment.

EXHIBIT Goes WEX 2
DATE
HB.

## BUDGET TESTIMONY

Representative Peck; Members of the Committee:

I am Dr. Ed Ruppel, Director of the Montana Bureau of Mines and Geology and State Geologist of Montana. I appreciate this opportunity to discuss the Bureau of Mines and Geology budget - I will restrict my discussion this morning to budget alone, but I look forward to a fuller discussion of the Bureau's work on Friday when you visit the Montana Tech campus.

The Bureau has adjusted to the budget reductions of 1986 and 1987 by reducing personnel, by parallel reductions in operating costs, and by reducing or recessing projects and programs. The Bureau FTE level has been reduced to 26.43 from the 1986 appropriated level of 32.41, and the Bureau has been able to retain a reasonable amount of operational flexibility to respond to the calls that are made on use. In Fiscal 1988, Bureau operations were further restricted by the need to set aside about \$35,000 of operations funding in anticipation of further budget cuts late in the fiscal year. When these budget cuts were clearly not to be made - the funds were released for equipment purchases. I would like to touch on this subject again later, because it affects budget considerations for the 1991 biennium.

The Bureau shares many of the problems discussed by Dr. Norman, and there are a number of areas that are critical for the long-term health and effectiveness of the agency.

#### 1. Staff reductions - -

The reductions in scientific staff in the last 2 1/2 years severely limit Bureau abilities to respond to new needs and opportunities for research on Montana mineral, energy, and groundwater resources. In addition, the Bureau cannot seek significant new cooperative contracts beyond those now being worked on because of matching requirements; we are now matched almost to the limit, and can seek only replacement contracts. We ultimately will need small and selective increases in the Bureau scientific staff, principally in mining and economic geology, hydrogeology, and in petroleum/natural gas geology. (Expand briefly on this).

#### 2. Salaries - -

The problem of competitive and equitable salaries is one we share with the rest of the University System and with many other State agencies.

We must compete nationally for scientific personnel, and the continuing salary freeze has severely eroded our ability to attract and keep the best scientists. The problem is particularly acute for hydrogeologists; the Bureau has lost three hydrogeologists to much higher paying jobs in the last year, and probably will continue to lose younger hydrogeologists unless we can offer at least marginally competitive salaries. In addition, Bureau scientists are employed on 12 month contracts for roughly the same or somewhat lower dollar amounts than our academic colleagues receive on 9 month contracts. To achieve true equity with

those on teaching faculty contracts would require about 20 percent increase in salaries for the Bureau professional staff, above and beyond other equity adjustments. The salary freeze affects the entire Bureau staff, of course - clerks and typists as well as scientists, and is becoming a major problem in morale.

# 3. The Analytical Laboratory

The Bureau Analytical Laboratory supplies essential, high quality analytical data to 30 water projects in the Bureau, and to other State and Federal agencies. But we are doing this with equipment that is 10 years or more old and is increasingly obsolete. We have repaired and replaced equipment and added new equipment as we can, but the lab clearly is in need of major renovation.

4. The Bureau has experienced substantial increases in requests for information on groundwater supplies and on hazardous substances in groundwater, and we are finding it difficult to respond to such inquiries on a timely basis and at the same time keep up with acquisition of new data and data entries into the GWIC.

Proposals to correct some of these problems are included in the University System Proposal for Groundwater Research, and are the subject of Dr. Toppen's comments on Montana Tech-Bureau program Modification Requests.

Turning to the 1991 Biennium budget, I would like to comment briefly on the LFA Current Level Budget, and on the Recommended Bureau Alternative Budget. As I mentioned before, about \$35,000 was placed in a contingency fund in Fiscal 1988, in anticipation of budget cuts, and was later expended for equipment. This was equipment that we had not been able to replace in earlier years, because of budget cuts. It was to late in the Fiscal Year to restore it to operations. The LFA Current Level Budget notes this higher level of equipment expenditure, and recommends that the Bureau operations budget be accordingly reduced by about \$35,000 per year. I would suggest that the Bureau was trying to utilize the funds in a prudent and fiscally responsible manner, and would ask that they be restored to give a Bureau budget that is essentially level with the budgets of Fiscal 1988 and 1989.

Budgets are summarized on page 4 of the budget information - which shows on the left the actual Bureau budgets through the current fiscal year, the Executive and LFA Current Level budgets for the 1991 Biennium, and the Bureau recommended alternative with operating funds restored to levels current now.

Thank you.

BUDGET MODIFICATION REQUESTS:

# Montana College of Mineral Science and Technology and The Montana Bureau of Mines and Geology

Instructional Program:

Replacement of aged surveying equipment - matching funds will be provided by National Science Foundation (committed pending appropriation).

\$48,330 (1991)

Library Support:

Serials and Acquisition Support -Tech's request for additional support for critical library functions.

\$82,500 (1990) \$85,000 (1991)

Physical Plant:

Critical Equipment - consisting of portable man lift, scaffolding, small, on-campus, fuel efficient vehicle and welding equipment.

\$31,000 (1991)

Indirect Costs - Tech's generated indirects.

\$54,392 (1990) \$54,392 (1991)

Bureau of Mines and geology -----

Hydrology Database:

Groundwater Information Center - 500 support to enable prompt and accurate answers to more than 1900-10-15 questions received annually by the Bureau's Ground Water Information Center.

\$48,287 (1991)

Bureau Equipment:

Critical equipment - absolutely required to enable ongoing service and functions within the Bureau.

\$87,600 (1990) and \$72,000 (1991)

College and Bureau, Joint Requests -----

Organized Research:

Analytical Center for Mineral and Hydrological Resources - State-wide facility supporting research and instructional programs of both the Bureau of Mines, the College and the other units of the Montana
University System University System.

\$950,000 (1991)

Hazardous Materials - Coordinated with MSU, this request provides the Bureau with the capability to provide information on request to provide information on request to state and federal agencies requiring potential hazardous substances in groundwater.

\$160,000 (1991)

	1990	1991	biennium
COLLEGE	\$136,892	\$218,722	\$355,614
BUREAU	\$ 87,600	\$120,287	\$207,887
JOINT REQUESTS		\$1,110,000	\$1,110,000

goes 6/Ex 3,2/1/89

MONTANA STATE UNIVERSITY
PROGRAM MODIFICATION REQUEST FORM
1990 - 1991 BIENNIUM

TITLE: Water Resources Research Center

AMOUNT: Fiscal 1990 \$152,725 Fiscal 1991 \$126,415

PROGRAM: Research
TYPE: New Services

#### ABSTRACT:

It is proposed to fund a program within the University System that will provide research, information management and education outreach to assist water users, managers and policy makers in Montana. The overall program will have elements at the University of Montana Biological Station, Montana College of Mineral Science and Technology, and Montana State University. The program will be coordinated through the Montana University System Water Resources Center consistent with policy established by representatives from the University System and the executive and legislative branches of state government. An Interagency Water Research Policy Advisory Board would be appointed and operate under the auspices of the Commissioner of Higher Education to provide guidance to the program. A modified Water Center Advisory Committee would be asked actively assist the Director in establishing priorities. An additional role for the Center Director and staff will be to seek supplementary resources for water research by pursuing grants and contracts and other funding opportunities.

## OBJECTIVE(S) OF MODIFICATION:

The proposed program element is to establish a Water Research Policy Advisory Board and expand the role of the current Water Center Advisory Committee and the Montana Water Resources Center that helps govern the research and educational efforts of the Water Resource Research Center. Funds are included (\$25,000) in FY 1990 for the Water Research Policy Advisory Board to issue an RFP for development of a statewide water policy plan.

# PROGRAM MODIFICATION REQUEST FORM 1990 - 1991 BIENNIUM

TITLE: Water Research Center Program

BUDGET:	1990	1991
FTE	2.00	2.00
Personal Services Contract Faculty Professional GTA/GRA Classified Others-Ed Specialist Benefits	\$ 60,000 \$ 9,000 \$ 8,500 \$ 17,825	\$ 63,000 \$ 9,000 \$ 8,500 \$ 18,515
Subtotal Pers. Services  Operations Contracted Services Supplies Communications Travel Other Operations	\$ 95,325 \$ 35,000 \$ 4,000 \$ 3,400 \$ 4,000 \$ 6,000	\$ 99,015 \$ 10,000 \$ 4,000 \$ 3,400 \$ 4,000 \$ 6,000
Subtotal Operations Capital	\$ 52,400 \$ 5,000	\$ 27,400
Total Budget	<u>\$152,725</u>	<u>\$126,415</u>

## PROGRAM MODIFICATION DESCRIPTION:

# BACKGROUND

The Water Resources Center is the only state entity serving a research coordination function. The Center has served principally as the Montana institute responsible for coordinating the dispersal of the limited federal water research dollars currently available for general water research (as opposed to money available for specific research programs). With an advisory board comprised of agency, public and university representatives, the Center is probably best situated at present to make recommendations concerning water research. Traditionally, however, the advisory board itself has not served a coordinating function beyond that of recommending projects for Center funding.

PROGRAM MODIFICATION REQUEST FORM 1990 - 1991 BIENNIUM

TITLE: Water Research Center Program

Along with other research centers nationwide, Montana's Water Resources Center was authorized and funded by Congress. The most recent enabling legislation — the "Water Resources Research Act of 1984" — provides that, subject to approval of the Secretary of Interior, each state may establish a water resources research and technology "institute," center, or equivalent agency. The legislation contemplates that the institutes are to be housed at a land grant college, though the state legislature may designate another institution.

This federal mandate has met with limited success in Montana, perhaps because of inadequate funding and staffing. Current direct funding for Montana's center consists of an annual state contribution of \$15,000 and a contribution of about \$100,000 from the U.S. Geological Survey. The Center also receives some part-time staff assistance from Montana State University/Cooperative Extension Service.

The Water Policy Committee and members of the University System began review of water research in February 1988. A panel of water research experts discussed the value of water research to Montana and the role water research can play in assisting the legislature, executive agencies, and the private sector.

In addition to internal meetings, the university system conducted three meetings concerning water research during the spring and summer of 1988 -- a preliminary discussion in May; a symposium in June; and a tour in July of Montana State University's water research facilities.

Based on these findings, this program modification proposes to:

l Establish an Interagency Water Research Policy Advisory Board. The board would operate under the auspices of the Commissioner of Higher Education and would be staffed by the Water Resources Center. Members would include three representatives from Executive branch agencies appointed by the Governor; vice presidents of research at the University of Montana, Montana State University, and the Montana College of Mineral Science and Technology; legislative representatives of the Water Policy Committee and Long-Range Planning subcommittee; and three private sector representatives.

The board would: a) Set research goals; b) determine priority research areas and identify research entities; c) identify available and potential funding sources; d) review research programs for consistency with the policy; e) submit a biennial research plan for funding to the legislature; and f) serve as an advocate for the research program.

# PROGRAM MODIFICATION REQUEST FORM 1990 - 1991 BIENNIUM

TITLE: Water Research Center Program

- 2) Expand the scope of the current Water Center Advisory Committee. The committee would be asked to a) identify state agencies and informational needs; b) review programs of state agencies and the university system for consistency with those needs; c) give research priorities according to the needs; and d) identify areas where coordination could help maximize benefits or conserve resources.
- 3) Expand the role of the Montana Water Resources Center. The expansion would be required because the Center would provide staff for the policy Advisory Board and the Water Center Advisory Committee, and would write biennial plans and reports. In addition, the Center would continue to serve as a clearinghouse (newsletter, information service, water forum), and would work to establish training programs for public school teachers and adults. Finally, the Center would review the potential for a coordinated graduate center program in water resources with the University of Montana, Montana State University, and the Montana College of Mineral Science and Technology.

To fund this endeavor, existing resources would be employed to finance those parts of the program that are already performed by existing entities and additional funding would be requested from the Legislature for new efforts.

2/1/89 Extension Service

Representative Ray Peck, Chairman Joint Education Sub-Committee Capitol Station Helena, MT 59620

Dear Representative Peck,

I'm writing in support of the budget for the College of Apriculture, Extension, and Research at Montana State University. I'm concerned about the Cooperative Extension Service in general and the 4-H program in particular.

The 4-H program provides an essential service in preparing our youth for adult life. More and more children from outside the traditional family farm are becoming involved in 4-H and gaining exposure to the values of agriculture life. This generation will be making tomorrow's decisions, so it is increasingly important for them to understand the family farm operation.

The information age is clearly upon us, and the Extension Service has served well as a clearinghouse of ever changing knowledge. Electronics will play a large role in education now and certainly in the near future; however we feel today's recipients respond better to the personal contact provided by the Extension Agent.

Your help in keeping these vital programs intact would be preatly appreciated.

Sincerely,

Jerry Brobst PD Box 786 Bigfork, MT 59911



Office of the President

2/1/89

Western Montana College

January 30, 1989

Representative Ray Peck Chair, Education Subcommittee State Capitol Station Helena, MT 59620

Dear Ray:

Plans are finalized for your visit Friday, February 3, to Western Montana College. Montana Tech will arrange for your Committee and others to have a lunch prepared to be eaten en route to Dillon. We estimate you will leave Montana Tech around 12:15 p.m. and be in Dillon by 1:30. We have scheduled the afternoon as follows:

1:30 - 2:30 -- Budget presentation and campus presentation (combined)

2:30 - 3:30 -- Open forum for faculty, students, and interested community members.

3:30 - 4:30 -- Tour of facilities

The sessions will be held in the Lewis and Clark room of Mathews Hall.

In the evening, Western will play Northern in both men's and women's basketball. Both games will be for the conference lead. If you or any of the Committee wish to stay for these games, just let us know and we will make the necessary arrangements.

We are looking forward to hosting you this Friday.

Sincerely,

W. Michael Easton

Provost



Western Montana College Dillon, Montana 57725

-(01053-7151 TAOMONEWSSE: Jan. 29, 1989

Dear Mr. Marks:

Thank you for the opportunity to speak before the public forum on education funding in Bozeman yesterday. My remarks may have sounded harsh, but having taught at MSU for seven years, and being a taxpayer, I am sickened by many of the wasteful and fraudulent practices that persist at that school when the state can ill afford the burden. I believe that the primary purpose of MSU is to provide a quality undergraduate education to the students of Montana. I do not think that this capability should be compromised for any reason! The MSU administration has been doing everything it can to promote "research", engaging in wholesale efforts to increase graduate school enrollment. The undergraduate programs, and especially those that terminate with a B.S. degree, have suffered greatly under this policy.

I find it very difficult to write about the inequities and inefficiencies of MSU, because I believe it is an excellent school. But I feel that the present funding system leaves the University president with too much control over how funds are used, and the people of Montana have too little opportunity to air their concerns. Sadly enough, the products of the school, the students, are largely ignored by administration and faculty while they are here and many ultimately leave the state forever upon graduation. I want to restate my opinion that while more funding is always nice to have, perhaps a redistribution of available funds, combined with a renewed focus on some very basic goals, would do much to ease the current financial pressure. I feel the members of the Legislature should have more control over how school funds are spent, thus giving the people a vehicle by which to express their particular satisfactions or complaints.

Attached is a list of various conditions I have noticed, but in their review I find that the problems I touch on are too broad cont'd.

to catalog easily. I would be happy to discuss anything I know with you or any of your colleagues if that would be of help.

Thank you for your attention.

Sincerely,

Martin Watters

Martin Westland

8379 S. 19th

Bozeman, Mont. 59715

(406) 587-0075 or (406) 586-2272

Two sheets attached.

- (1) Undergrad labs and staff, and in some cases, entire curricula, are being reduced or eliminated to release resources for grad students. These grad students receive considerably more state funding per FTE than an undergrad, and they can be used to teach, thus freeing profs for research. A high percent of the grad students are not U.S. citizens and have very poor communication skills. This creates serious problems in the classroom when they attempt to teach.
- (2) Much good lab equipment has been leased out, removed from service, or simply scrapped. This has left large gaps in our basic education capability. Hundreds of thousands of dollars are spent in a race to stay current in computers, while fifty year old machine tools are gradually worn out with no thought toward replacement.
- (3) Promotion and tenure is based almost exclusively on research achievements. A prof who is committed to instruction is not rewarded, and in fact new hiring policies tend to screen out all but those who are research oriented.
- (4) Instructors committed to full time teaching carry considerably more load than the average prof doing "research". Some instructors have been scheduled to teach two labs, in two separate locations, concurrently.
- (5) Non-tenured instructors and classified staff are the first to be laid off in a budget decline. These are the people who are most helpful to the undergrads. Therefore, in a shallow budget decline the grad programs feel little or no effect. In a severe decline, higher level profs and administrators begin to protest as they are forced to "pick up" the undergrad load. (There is a pervasive, unofficial attitude among some administrators and profs that MSU would be a great place to work if it weren't for the students.)
- (6) It is primarily room availability that governs the true "student/faculty ratio". Classroom crowding can be alleviated cont'd.

by running more sections, but this requires faculty to put in more time. The manpower is available. Desire, sense of mission, and leadership is not. (No one is watching except the students, and they are already "in the system". I got in trouble with my department head for running an extra section from 5 to 7 PM.)

- (7) High percentages (30%+) of students have been failed in junior and senior level classes to delay graduation, thus keeping enrollment high. The "D" policy, WP and WF grades can be used to essentially take a student's money and still force him to repeat a class. Super-tuition for architecture students and special tuition reducing programs for out of state students are examples of unfair management policies. Montana's young people should not become pawns when they enroll at MSU.
- (8) University funding efforts in behalf of the "Tech Park" and Museum, while both noble causes, seem to detract from efforts to support our basic educational programs.

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PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.