MINUTES

MONTANA HOUSE OF REPRESENTATIVES
52nd LEGISLATURE - REGULAR SESSION

SUBCOMMITTEE ON EDUCATION & CULTURAL RESOURCES

Call to Order: By **CHAIRMAN PECK**, on February 4, 1991, at 8:00 am

ROLL CALL

Members Present:
Rep. Ray Peck, Chairman (D)
Sen. Greg Jergeson, Vice Chairman (D)
Sen. Don Bianchi (D)
Rep. Larry Grinde (R)
Rep. Mike Kadas (D)

Members Absent: Sen. H.W. Hammond (R)

Staff Present: Pam Joehler, Senior Fiscal Analyst (LFA)
Mary Ann Wellbank, Budget Analyst (OBPP)
Melissa Boyles, Secretary

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

Announcements/Discussion: **CHAIRMAN PECK** stated that the Chairman of the Appropriations Committee would like the subcommittee to have a hearing on supplementals. **CHAIRMAN PECK** stated there would be time on Wednesday February 5th.

COLLEGE OF MINERAL SCIENCE & TECHNOLOGY

Tape No.1

040
Dr. Norman, Montana Tech, distributed and reveived a handout on Montana Tech. **EXHIBIT 1**

Dr. Norman stated that 20 years ago there were approximately two women on campus, today 50% of the enrollment is women. The average age is 26, and the overall range is from 14 to 74.

Dr. Norman stated that Montana Tech is the most specialized and unique campus in the Montana University System with the least duplication of any. There has been a 39% increase in corporate recruiters over the past two years, and the international relationships are very strong.

Dr. Norman stated that the turnover at Montana Tech is less than any other unit among faculty and staff. The faculty have always

gone the extra mile with the students and continue to do so even though they have taken the smallest pay adjustment of any unit in the system in the past two years.

Dr. Norman stated that Montana Tech has averaged 5% salary increases in the last two years. This compares to the 8 1/2% on the other campuses. The faculty can only live with this difference for so long but they understood and accepted it, because the money wasn't available. Tech will be seeing rather quickly a drop in enrollment. When this does happen Montana Tech is not going to die, the campus will drift along.

Dr. Norman stated that Montana Tech has been put on show cause order and has until the fall of 1992 to make meaningful progress in correcting the ABET problems.

Dr. Norman stated that in 1987 because of high fixed costs, projected enrollment drop and the need to maintain ABET minimum faculty levels in those programs, a 1550 FTE safety net was created. This was not needed at the time because Montana Tech was averaging 1573 and 1581. Montana Tech may be in a similar situation in the next biennium. **Dr. Norman** stated that he endorses the two year enrollment but due to a large enrollment dip in one year, because of the loss of the Business Administration Program and a very large graduating class, Montana Tech is in trouble in the next biennium using the average enrollment that is below the 1550 adopted by this subcommittee four years ago. **Dr. Norman** stated that if the subcommittee approves the Regents funding it would take care of this aberration.

Dr. Norman urged the subcommittee to support Montana Tech as evidence by positive consideration of the Regents Budget Request for Montana Tech. However, should the efforts of the subcommittee fail to come closer to perity with the peers, this committee will have to live with their actions for years to come.

767
REP. KADAS asked if he could have a copy of the accreditation report and asked if Montana Tech lost the incremental funds in the LFA current level from transfers to instruction. **Dr. Norman** said yes.

REP. KADAS stated that the dip in enrollment surprises him but what surprises him as much is the increase in this Fall's enrollment. He asked does Montana Tech anticipate staying at 1611 into the next semester. **Dr. Norman** said that the loss of the Business administration program was 20% of the total student body and following that dip the second largest graduating class in the history of the institution graduated. When there are that many going out, you will see a dip unless you are making up for it on the front end.

REP. KADAS asked what the peer institutions did and were any of

them unique in their actions. **Dr. Norman** said the peer institutions have also seen losses in their enrollment but they didn't cut faculty and they didn't get down to where their accreditation was in jeopardy. As business has gotten better in the mining and energy industry, it is harder and harder to get people to come teach, let alone get one with a Ph.D. **REP. KADAS** asked how the Colorado School of Mines increased their compensation. **Dr. Norman** said the State of Colorado support is $8,000 per FTE compared to Montanas $4,000 per FTE. **REP. KADAS** asked how many full time students the peers serve. **Dr. Norman** said the Colorado School of Mines serves 2,500, New Mexico Tech serves 1,200 and South Dakota serves 1,800.

878
REP. GRINDE asked what other degrees Montana Tech offers. **Dr. Norman** said they have a new degree called Business and Technology Development. This is a degree that seeks to teach technical people at the interface of business and technology. There is also a Computer Science Degree with the allied math and one technical communications degree that is called the Society and Technology Degree. Montana Tech got degree, when the faculty were in place to meet ABET requirements, to teach the liberal arts and humanities. **REP. GRINDE** asked how many of the degrees at Montana Tech are also available at Bozeman. **Dr. Norman** said Computer Science is the only one. **REP. GRINDE** asked if some of the curriculum taught at Montana Tech is available at Bozeman. **Dr. Norman** stated that every engineering degree at Montana Tech is
unique in the Montana University System.

912
CHAIRMAN PECK asked Dr. Norman if he were aware of any other programs in any other state where they take high cost institutions and give you a backer. **Dr. Norman** said he is not aware of anything.

Dr. Norman introduced Julie Bork, Vice President, Associated Students of Montana. **Ms. Bork** said that since she has been at Montana Tech quite a few Professors have left to take higher paying jobs. **Ms. Bork** said she is concerned about Montana Tech's ability to obtain and attract good professors.

Ms. Bork stated that most of the buildings on campus are old and rundown. Industry does not use the equipment that the students are taught on and this puts the students at a disadvantage.

Ms. Bork stated that adequate funding today will only begin to help the problems. Adequate is essential for all schools in the Montana State University System. **Ms. Bork** urged the subcommittee to support the Regents budgeting request.

BUREAU OF MINES AND GEOLOGY

009
Edward T. Ruppel, Director and State Geologist, distributed and reviewed a handout on the Bureau of Mines and Geology. **EXHIBIT 2**

Tape No: 2

CHAIRMAN PECK asked Dr. Ruppel if he has seen any trend relative to ag chemicals in groundwater. **Dr. Ruppel** stated that it is becoming an increasing concern. The Bureau of Mines has six permanent monitoring sites around the state and believe there was a detection of chemical at one site. However, they are just in the stage of starting to look at it. **CHAIRMAN PECK** asked if at this point they would be more concerned with dry or wet land. **Dr. Ruppel** stated that there is potential in both, particularly in the dry land farming area where summer follow was widely practiced.

505
SEN. JERGESON asked if the Bureau of Mines is working with the Ag Experiment Station and the Extension Service on the groundwater studies. **Dr. Ruppel** said they try to share the information with the Experiment Station and the Extension Service.

525
SEN. BIANCHI asked if the Department of Natural Resources proposed a 20 year study on groundwater and several new wells at an annual cost of over 1 million dollars per year. Is the Bureau of Mines involved with this proposal if it were funded. **Dr. Ruppel** said they would be involved.

565
SEN. JERGESON stated that Sen. Lynch had stopped by during the meeting to show support.

CHAIRMAN PECK asked Dr. Norman if there was any further testimony from the Bureau of Mines. **Dr. Norman** said no.

NORTHERN MONTANA COLLEGE

591
William Daehling, President, distributed and reviewed a handout on Northern Montana College (NMC). **EXHIBIT 3**

Dr. Daehling reviewed pages one through four of the campus profile in the 1993 Biennium Budget Request Book. **EXHIBIT 4**

754
Heather Rouse stated that during her four years at NMC the student body has increased in diversity in many areas, including age and areas of study. The student body leadership has strived to provide services, programming and support to an entirely

different student body. The student body at NMC is composed of traditional age students, non-traditional age students with family. Many families have two or more students in college at one time. **Ms. Rouse** said the problems seen at NMC are not new problems nor are they problems that this subcommittee is unaware of. The major problems as the students see them are in the area of funding, faculty salaries and the condition of the facilities. **Ms. Rouse** stated that these are serious problems that have been allowed over the years and urged the subcommittee to support the Regents request to put the Montana Higher Education as a top priority.

827
Dr. Daehling continued to review **EXHIBIT 3**

860
Cliff Meyers stated that he is an NMC graduate and has returned to school to further his education. Taking classes at the NMC campus in Great Falls has enabled him to work part-time. By offering classes Monday through Thursday from 5:00 to 10:30 p.m. the Great Falls campus offers classes designed to fit the needs of working adults. **Mr. Meyers** stated that since his reentry in to the educational system he has gained a new self confidence by proving to himself that his learning skills and capabilities were not lost.

Mr. Meyers stated his family has made many sacrifices in order to make it possible for him to return to school. The program NMC is offering in Great Falls has provided Mr. Meyers an opportunity to achieve his future goals. Even though there are many personal sacrifices and difficulties, with out this program there would be far less chance to achieve personal and professional goals. **Mr. Meyers** urged the subcommittee to consider providing financial support to this new and innovative program in Great Falls.

009
Dr. Daehling stated that comments such as Mr. Meyers tend to lend credibility to the results of the Commission of the 90s study that resulted in the conclusion that Montanans want and need more access to higher education.

Dr. Daehling referred to the campus profile **EXHIBIT 4**

196
REP. STRIZICH stated that he supports NMC, particularly the presence of Northern in Great Falls. The campus in Great Falls has brought the benefit of having a university system to the city and thereby providing access for residents of Great Falls. Not only the students who graduate from high school and can't afford to pay for the cost of living in Bozeman or some other town but to the adults needing to continue their education with out leaving their homes and families to do so. **REP. STRIZICH** stated that the economic growth in Great Falls has been greatly enhanced by the presence of Northern. Northern's presence is valuable to

the present and future of Great Falls. **REP. STRIZICH** encouraged the subcommittee to support the NMC campus in Great Falls.

217
REP. BACHINI stated that in visiting with a number of people from the Great Falls community they are very happy that Northern has come in. The cost is cheaper by Northern being in Great Falls and plays a key role in education in Montana. **REP. BACHINI** stated that he is here in support of the proposals.

231
Dr. Daehling thanked **REP. STRIZICH** and **REP. BACHINI** for taking time in their busy schedules to provide their testimony.

235
Bill Byers reviewed the Financial Profile from the 1993 Biennium Budget Request Book. **EXHIBIT 5**

Mr. Byers stated that NMC goal is the Regents Budget and the implementation of recognition for the Great Falls Program.

350
CHAIRMAN PECK asked if they have a higher ratio of part-time students in Great Falls then on campus. **Mr. Byers** said yes. **CHAIRMAN PECK** asked if their were increased costs dealing with part-time students relative to full-time students. **Mr. Byers** said yes, there would be additional registration and student services. It takes two part-time to make one full-time and they would both require student services, counseling, etc.

362
REP. KADAS asked if NMC wants to use the four quarters in calendar year 1990 to determine the average for Malmstrom/Great Falls instead of using FY89 and FY90 averages. **Mr. Byers** stated that for FY89 none of the new options were offered. In fall and winter of FY90 they were not offered in the summer, and in the fall it was on a limited bases.

REP. KADAS asked if the costs in the Regents MOD request on page 16 of **EXHIBIT 5** reflect the additional students based on the cost of the other Regents proposals that increases in peer catch up and inflation are reflected in these numbers. **Mr. Byers** said they will use the 72 FTE difference times the funding formula calculations. **REP. KADAS** asked what the cost would be just to add the additional FTE at LFA current level. **Ms. Joehler** said it would be $296,000 per year.

417
SEN. JERGESON stated that the Great Falls campus was approved half way through a biennium and asked if there were a better way to have handled it. **Mr. Byers** said it would be difficult without asking for advance funding. It would probably be best to do it prior to starting. If historical data is needed, it would seem we need to start it without the funding, in which case the

institution needs to eat it. There is no good time for accurate data for trying to get a program started. **SEN. JERGESON** asked if campuses have to eat it, does it provide a disincentive for other campuses looking to do the same thing at the communities request. **Mr. Byers** stated that this is something that the unit will have to make priority decisions on and what will meet their needs and goals.

443
CHAIRMAN PECK asked if NMC were able to use the Vo-Tech Center for classrooms, what would be the difference in cost. Above the funding formula NMC is expending $60,000 per year for the site and is not included in the formula. **CHAIRMAN PECK** asked what the arrangement would have been with the Vo-Tech Center versus where NMC is at now. **Mr. Byers** said they pay lease, taxes, insurance, utilities and custodial. The majority of these costs would be picked up by the Vo-Tech Center if NMC were offering courses there.

464
REP. KADAS asked if the Budget MOD is all formula driven. **Mr. Byers** said it is all formula portion.

479
Dr. Daehling stated that the Board of Regents (BOR) took action to standardize when new program proposals can come forward. The BOR will be ready to take action on new program proposals in June and not before, so this gave NMC an opportunity to do some planning. It is up to NMC as the new programs come forward to demonstrate to the Regents what the real costs are going to be.

Dr. Daehling stated that if the Regents request for NMC is granted he hopes that significant progress can be made in a number of areas related to accreditation. Currently NMC does not have any specific National Program Accreditation affiliation. NMC is accredited by the Northwest Association of Schools and Colleges.

Dr. Daehling stated that at the last full accreditation visit in 1987, Northwest Association of Schools recommended strongly that we look at the student services operation and begin funding a number of services provided.

Dr. Daehling said NMC is very enthused about the future and with the subcommittees support of the Regents funding request it can continue to be very proud of NMC and its place in the Montana University System.

677
CHAIRMAN PECK asked if the Tribal Colleges have any effect on the enrollment in terms of getting them to come to NMC versus other colleges. **Dr. Daehling** said they haven't seen a reduction in the number of students. If there was a reduction at all it was seen

in the freshman and sophomore level, those students who tended to have a high attrition rate.

CHAIRMAN PECK asked if NMC has tight rules when accepting or transferring credits. **Dr. Daehling** said that the articulation agreements are underdeveloped at this time, but the objective of NMC is to develop strong articulation agreements.

CHAIRMAN PECK asked if the use of the Interlibrary Loan System (ILLS) is increasing at NMC. **Dr. Daehling** said yes, it is due to the fact that NMC is not able to maintain the number of periodicals as we have in the past. The danger in having to use the ILLS is that the student won't go that extra step to order the material. Therefore, they do not have the latest information available. **CHAIRMAN PECK** asked if there is a fee on the Inter Library Loan. **Dr. Toppen** said there is a charge for the services received to the school but not to the student. There is a state fund that compensates sending institutions $5 per document, manuscript or monograph for their services to other state agencies. **CHAIRMAN PECK** asked who controls the fund. **Dr. Toppen** said he does not know. **Dr. Daehling** stated that NMC currently expends approximately $35,000 per year for WLN expenses.

CHAIRMAN PECK asked if NMC needs to be accredited by both the Northwest Association and NCAD. **Dr. Daehling** said you cannot be considered for accreditation by NCATE if unless you hold a regional accreditation. **CHAIRMAN PECK** asked if a student is a graduate of an accredited institution if it is only Northwest. **Dr. Daehling** said yes. However, teacher certification and reciprocity may have an effect on where that student can go in the rest of the country. **CHAIRMAN PECK** asked if that would vary from state to state. **Dr. Daehling** said yes.

881
SEN. JERGESON asked if the Nursing Program at NMC is that what is being considered for accreditation this winter and spring by the National League of Nursing. **Dr. Daehling** said yes. **SEN. JERGESON** asked what would happen if NMC were granted initial accreditation. **Dr. Daehling** said that since it is an initial accreditation they will delay a decision and ask NMC to do additional work. They would give a time limit of two years to do that, if that is acceptable they would reward accreditation retroactively. This way all of the students who graduated between the time of the initial visit and the final decision can say that they graduated from an accredited institution. **SEN. JERGESON** stated that after meeting with the people from MSU he believes that the new dean of the Nursing Program will be very cooperative. **Dr. Daehling** agreed and feels that the nature of the two programs differs enough that both are needed in the state.

950
SEN. BIANCHI asked how many students are in a two year Nursing Program versus a four year program and how many from the four

year program graduated last year. **Dr. Daehling** stated that last year there was only one Baccalaureate graduated from the program. This year NMC expects four to five graduates and at least 45 at the Associate Degree level.

979
REP. KADAS asked what the current status is of the gymnasium. **Dr. Daehling** said the current facility has extensive problems. The lower gym and swimming pool area has been closed by recommendation of the Department of Architecture and Engineering. On the 18th of February 1991 NMC will be accepting bids for temporary shoring to go into that part of the building to protect the rest of the structure from damage should the roof fail. If this is not done NMC will need to vacate the connecting wing between the gymnasium, swimming pool and the lower gym area. If the roof fails there is danger of the connecting wall pushing into the classroom area and there are locker rooms underneath that need protection. NMC is also at the point of selecting an architech to make some preliminary design work to identify the exact cost of a new facility. NMC will also contract on the side with this Architect to give an estimate of the cost to bring the current facility back on line for a term of seven to eight years and long term 18 to 20 years. **REP. KADAS** asked when the current facility was constructed. **Dr. Daehling** said it came up in stages, the gymnasium was built in 1956, the pool in 1959, and the locker rooms came in 1960.

REP. BARDANOUVE stated that NMC should put together their best plan and come back before the Long Range Building Meeting the first of April. The Long Range Committee will give it the most serious consideration.

CHAIRMAN PECK stated that when this building was constructed it had a lot of Federal money tied to it. **Mr. Byers** stated that when the building was constructed half of the money was put up by the National Guard and they also rented space at $1200 per year after that. The original construction was between $250,000 and $300,000. **CHAIRMAN PECK** stated that he has seen the work of the Architect Design Group in Kalispell and said he was very impressed by their work.

REP. KADAS asked what the Great Falls Campus has expanded to in the last year. **Dr. Daehling** said they added business administration, computer information associate degrees, business technology bachelor degree and professional teacher education. In addition to these courses the institution developed an agreement with Great Falls Vo-Tech and the two technical programs, Computer science and Business, to share course work and not duplicate that course work so students can take some of their work from Great Falls Vo-Tech and transfer it to NMC program and complete the Associate Degree. **REP. KADAS** asked if that were the basis for the two associate degrees. **Dr. Daehling** said they both are because it becomes available to both military personnel and non-military personnel. **REP. KADAS** asked if there are any other

program expansions being contemplated in the near future. **Dr. Daehling** said they are currently looking at a manufacturing technology program. This needs extensive work and planning before coming forward with it. This would be a combination of a Technology Program already on campus and the Bachelors of Business Technology available off campus and being able to combine the two.

114
CHAIRMAN BARDANOUVE asked what the incentive is for NMC to subsidize the education of a military person. **Dr. Daehling** said the military gave NMC an opportunity to take the programs to the Great Falls area and also provided that citizens of Montana with the opportunity to take advantage of the programs taught on base.

SEN. HAWKETT stated that NMC looks at innovative ways of serving technology and the teacher education programs. **SEN. HAWKETT** stated that he highly supports the request made by NMC.

209
CHAIRMAN PECK asked if there were any signs at this point that if the war continues for any length of time, will NMC see a significant decline in enrollment. **Dr. Daehling** said it is a possibility. NMC has already lost 30 FTE to the military. **Keven Carlson** stated that NMC has continued to see enrollment growth despite implementation of the war. The Great Falls School has lost 17 people to the military so far and do not see that impacting the total number. **CHAIRMAN PECK** asked what the spring quarter looks like. **Mr. Carlson** said he does not have those figures.

Dr. Daehling followed up on **REP. BARDANOUVES** inquiry on the Great Falls Program and said that the military people serving in Montana pay in state fees. Secondly, of the figures that Mr. Carlson has indicated, 75 % are non military personnel.

REP. KADAS asked how much is the state paying to educate the students at Malmstrom. **Dr. Daehling** said the state subsidizes the program to a certain degree, however, the federal government pays the student fees. The students are currently charged a $25 per credit fee on top of that for costs of delivering the program.

289
REP. KADAS asked what the relationship was between the Vo-Tech and the Great Falls College pertaining to the claim on the land. **Dr. Daehling** said that NMC is starting to work on the situation. NMC submitted an item at the Board of Regents meeting to change the title of the center from Northern Montana College at Malmstrom to Northern Montana College Center at Great Falls. This would be done with a proviso that should the Montana University System establish a University Center in Great Falls that this would become a part of it. **Dr. Daehling** stated that

meetings will be taking place to further develop articulation and affiliation agreement. **REP. KADAS** asked what type of time frame this would take place in. **Dr. Daehling** said it could be done within a year.
REP. KADAS asked where classes would take place if this affiliation goes ok. **Dr. Daehling** said it would depend on the space available. If an affiliation agreement isn't completed by the Fall Semester it will have to be done soon after.

395
Theresa Reardon, Montana Federation of Teachers, spoke on behalf of the Northern Montana College Federation of teachers, Ms. Reardon went on record in support of adequate funding of Northern and particularly in support of the Regents budget and the recommendations for the Commission of the 90s and beyond. **Ms. Reardon** stated that it is crucial that an appropriation to the University System be included in any pay plan passed during this session.

ADJOURNMENT

Adjournment: 11:40 a.m.

REPRESENTATIVE PECK, Chair

MELISSA J BOYLES, Secretary

RP/mjb

Education Subcommittee

HOUSE OF REPRESENTATIVES
VISITOR REGISTER

Mont Tech Bureau of Mines SUBCOMMITTEE DATE 2-4-91
Northern Mt. College
DEPARTMENT(S) _____ DIVISION _____

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NAME	REPRESENTING	
Marvin Miller	Mont Tech - MBMG	
E.T. Koppel	Mont Tech - MBMG	
John Dunstan	Montana Tech - MBMG	
John DaPrato	"	
Heide Leighty	Montana College Coalition	
Linda E Johnson	MT Tech	
G. Van Ackeren	" "	
Michael J. Donally	" "	
Tom Nau	" "	
Dale A. Apple	MT TECH	
Eddie Baker	MT Tech	
Sandy Snyder	Montana Tech	
Judi Bork	Montana Tech	
STEPHANIE STEPHENSON	MT TECH	
Cynthia Sundberg	Montana Tech	
Patrick McCleary	ASUM	
Bob Hockett	Senate Dist 17	
Don Kittner	Dawson Com College	

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

HOUSE OF REPRESENTATIVES

EDUCATION SUBCOMMITTEE

ROLL CALL DATE 3-4-91

NAME	PRESENT	ABSENT	EXCUSED
REP. RAY PECK, CHAIRMAN	✓		
SEN. GREG JERGESON	✓		
REP. LARRY GRINDE	✓		
SEN. DON BIANCHI	✓		
REP. MIKE KADAS	✓		
SEN. H.W. "SWEDE" HAMMOND		✓	

HR:1991
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EXHIBIT 2
DATE 2-4-91
HB

Testimony to the
Education Subcommittee
on the
Montana Bureau of Mines and Geology

by

Edward T. Ruppel
Director and State Geologist

Highlights of 1991 Biennium

1. Bureau scientists are currently working on about 50 different projects in areas widely distributed across the State. (See attached maps.) The subjects of some of these studies include: agricultural chemicals in groundwater; heavy metals in groundwater; groundwater sources, availability and quality; coal hydrology, coal resources and quality; mineral and energy resources; and geologic hazards, including earthquakes and landslides. Bureau geologists are continuing geologic mapping in many areas, with a primary objective being the preparation of a new State geologic map. Studies of mine flooding and related groundwater contamination continue in the Butte area, as do studies of oil field groundwater contamination, oil field brines, and saline seeps in other regions of the State.

2. The Earthquake Studies Office monitors earthquake activity in seismically-prone southwest Montana through a network of solar-powered remote stations. Data from these stations is continuously telemetered by FM radio links to a central station on the Montana Tech campus, and is recorded on newly acquired digital equipment, as well as on revolving paper drums. New computer programs now make rapid calculations of epicenter locations and depths below ground surface and times of origin of local earthquakes.

3. Almost 50 new reports on Bureau investigations were published or released as open-file reports. These included a report on barite resources in Montana; a major report on long-term hydrologic responses to coal mining in southeast Montana; and a number of geologic maps, coal resource maps, and hydrogeologic maps.

   Bureau scientists and staff also responded each year to almost 10,000 orders, inquiries, and requests for information, and to about 3,000 requests for specific hydrologic or geologic information. In addition, Bureau scientists respond to many less formal requests for hydrologic or geologic information when they are working in project areas or attending local or regional meetings. Most requests for information come from Montana residents, but many also come from elsewhere in the United States and from foreign counties. Clearly, service is a major part of the Bureau's mission.

4. The Bureau Staff Field Agent annually visits most of the operating mines in the State, and prepares an annual report on mining in Montana. In conjunction with this, the Bureau has started a new study that analyzes the effects of mining on the State's economy, and examines the financial costs incurred by mining companies and the local and regional economic benefits.

5. The Groundwater Information Center, a data file containing information on more than 100,000 Montana wells and more than 6,000 chemical analyses of Montana groundwater, has been entered into Bureau computers, and programs have been developed to provide for easy and quick access to information on groundwater across the State.

Ex. 2
2-4-91
Ed. & Cult. Sub.

6. Bureau research included geologic and hydrologic studies under cooperative matching agreements with 20 different cooperators, including Federal and State agencies, counties, towns, conservation districts, and others. These cooperative contracts nearly doubled the amount of work that could have been done on State appropriations alone.

7. Users of geologic and hydrologic information increasingly need data in digital formats. In recognition of this, the Bureau has nearly doubled its computer capabilities, and has acquired Geographic Information System programs that are compatible with those of most State agencies and other users. Because most of the Bureau's work requires precise locations, the Bureau will seek to also add Global Positioning System capabilities in the coming Biennium. Bureau GIS and GPS programs will be available to Montana Tech students for instruction in these expanding technologies.

The Bureau is the principal source of geologic and hydrologic data in Montana, and the only earth-science agency in the State government and the University System that is specifically charged with collecting such data and disseminating it to the public.

Critical areas for Bureau Long-Term Health

1. **Personnel and Salaries**
The Bureau staff of 26.8 FTEs is augmented by about 10 additional employees who are paid from funds generated by cooperative matching contracts, to give a total current staff of 36. Of these, 23 are scientists, geologists, hydrologists, chemists, and a mining engineer, and 13 are supporting computer technicians and clerical, accounting and other staff. Because of its small scientific staff, the Bureau is severely limited in its ability to respond to new needs and opportunities for studies on Montana mineral and energy resources and groundwater.

The Bureau staff should also include:

a) An economic or mineral resources geologist, to provide more extensive studies of metallic mineral resources than are possible now, and to expand geologic mapping in mineralized areas,

b) A petroleum geologist, to expand Bureau research and geologic mapping on Montana oil and gas resources,

c) Additional hydrogeologists, to permit broader, regional studies of this most important of all Montana resources. Bureau limitations are particularly acute here, because our present staff is matched almost to the limit and we cannot seek significant new contracts except as replacements; and because the Bureau, like other State agencies, cannot compete with salaries paid to hydrogeologists elsewhere. The Bureau staff is exceptionally loyal, but opportunities to double or triple salary cause continuing erosion of experienced

hydrogeologists on the staff, and it is difficult to attract qualified replacements.

2. Analytical Laboratory

The Analytical Laboratory supplies essential very high-quality analytical data to 30 water projects in the Bureau, and to several Federal and State agencies. The laboratory consistently ranks in the top 10 percent of similar labs throughout the United States, but it needs major renovation and replacement of increasingly obsolete equipment.

Because the Bureau Analytical Laboratory is a vital asset, both to the Bureau and to the State, the Bureau and College together have proposed that a new Analytical Center for Mineral and Hydrogeological Resources be established at Montana Tech to replace the present laboratory and expand its research and analytical capabilities. The new laboratory would provide critically needed highest quality analytical data and research not available now for Bureau scientists and for other scientists in the University System, State and Federal agencies, industry, and the public.

3. Hazardous Substances in Groundwater

Because of substantial increases in workload, the Bureau has requested additional support for research on hazardous substances in groundwater.

Groundwater contamination from industrial, agricultural, mining and natural sources is of increasing concern in Montana. Bureau hydrogeologists receive more requests for information and help on such contamination problems than we can respond to on a timely basis.

The Next Biennium -- The Future

During FY 92 and 93, Bureau geologists will continue geologic mapping in north-central Montana at scales of 1:250,000 to 1:100,000 in support of the State geologic map project, and will continue more detailed geologic mapping at scales of 1:24,000 to 1:100,000 in parts of southwest Montana leading to compilation of the 1:100,000 Lima quadrangle in FY 1994. The Lima quadrangle also contributes to the State map project, and its completion will initiate the final compilation, in cooperation with the U.S. Geological Survey, of the new State map. The Earthquake Studies Office will continue efforts to expand the present 10 station monitoring network, probably starting with installation of a telemetering station to relay seismic information from the Hebgen earthquake site to recorders in Butte. The Staff Field Agent will continue to broaden understanding of impacts and benefits of mining in the state, and in cooperation with the U.S. Bureau of Mines will begin a new study of the relation of mineralized or potentially mineralized regions and lands withdrawn from mineral entry in the State. He also will continue to visit mines across the State, the program of assistance to operators of small

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mines, and to prepare various informational reports on the status of mining in Montana.

Mineral resource studies will include the continuing National Coal Resource Data System in cooperation with the U.S. Geological Survey; a newly initiated study of Montana zeolites and vermiculite; and continuing studies of chlorite deposits in southwest Montana and their possible relations to deposits of talc and gold.

Bureau hydrogeologists will continue the long-term studies of coal hydrology in southeast Montana, and will continue studies of the extent and intensity of agricultural chemical (pesticides, herbicides, and nutrients) contamination of shallow groundwater across the State, and of mobility of these chemicals in the vadose zone and in groundwater. The conservation and safe development of groundwater for beneficial uses is a major Bureau objective, and a related study of replenishing groundwater resources through modified land use practices in northern Blaine County will be continued in cooperation with the U.S. Bureau of Reclamation. Studies of oil field groundwater contamination and oil field brines will continue at various sites across the State.

Bureau hydrologists will cooperate closely with the Department of Health and Environmental Science and the U.S. Environmental Protection Agency on a variety of studies related to mine flooding and groundwater contamination in the Butte area and other mining areas, and will continue to cooperative studies with the Department of State Lands and the Department of Natural Resources and Conservation.

Many communities across the State call on Bureau hydrologists for help in resolving problems on obtaining adequate supplies of groundwater for municipal services, or in problems of groundwater contamination and saline seeps. The Bureau will continue to provide such help on a timely basis, and will continue to provide technical service, information, and help to individuals, agencies, municipalities and companies throughout Montana. The principal source of needed well and water quality data, the Groundwater Information Center, will be further expanded and made more readily accessible.

These and other projects of the Bureau of Mines and Geology are described in detail in the Biennial Report of the Bureau.

Budget

The actual unrestricted General Fund budget for the Bureau of Mines and Geology for Fiscal Year 1990 was $1,327,915.00, and for Fiscal 1991 is $1,371,924.00. These figures include $43,736.00 actual FY 90 and $53,000.00 budgeted FY 91 State Special Revenue, which is anticipated agency generated revenue mainly from sales of maps and publications. They also include $60,000.00 per year administrative charges paid by the Bureau to the Montana College of Mineral Science and Technology.

Regents budget for the Bureau of Mines and Geology

	Current year	% inc.	1991-1992	% inc.	1992-1993
General Fund	$1,329,925	4%	$1,383,122	4%	$1,438,447
State Special*	$ 53,000		$ 53,000		$ 53,000
Total	$1,382,295		$1,436,122		$1,491,447

*Sales and services

The Regents budget, which proposes an incremental 4 percent increase in the Bureau budget for each of the years of the next biennium, offers the most hope for resolving at least some of the critical problems facing the Bureau, and is the budget recommended by the agency.

This budget provides a reasonably adequate increase in operating funds, and provides some flexibility in managing salaries to overcome problems in retaining the Bureau existing staff.

It does not propose any increases in staff, so the FTE level in the Bureau would remain at 26.8. It would, however, enhance somewhat the opportunities for obtaining increased matching funds, particularly from Federal agencies.

Program Modification Requests

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.

The Analytical Center would be a state-of-the-art facility capable of providing cost effective, timely and exceptionally high quality analyses that are critically needed for assessing mineral and water resources in Montana. It would make available to Montana researchers both analytical techniques and specific analyses that are not available anywhere in the Pacific Northwest.

The Hazardous Substances in Groundwater joint proposal would permit Bureau and Montana Tech scientists to deal with inquiries from concerned Montana residents on groundwater contamination on a more timely and more accurate basis than is possible now. The

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request asks for laboratory equipment to provide specialized analyses of hazardous substances, for needed additional personnel, and for operating funds for site examinations.

Summary texts and supporting documentation for the Program Modification Requests are attached.

Funding requested for the Analytical Center is:

FY 1992 principally for capital purchases of analytical equipment	$875,116
FY 1993 principally for personnel	$ 85,117
Total	$960,233

Funding requested for Hazardous Substances in Groundwater is:

FY 1992 including purchases of specialized laboratory equipment	$185,325
FY 1993 for personnel and operations	$119,994
Total	$305,319

BUREAU OF MINES AND GEOLOGY

PROGRAM MODIFICATION REQUEST

Title of Request: 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 Services _x_ Funding Modification ___

ABSTRACT:

Montana Tech and the Montana Bureau of Mines and Geology jointly propose the establishment of an Analytical Center for Mineral and Hydrogeologic Resources. Housed in a central location on the Montana Tech campus, the Center will be comprised of both new equipment and existing analytical instrumentation already in use in the research and instructional programs of the College and the Bureau. Along with existing Bureau laboratory technical staff, two additional professionals will support the Center under the direction of the Chief Chemist.

The Center will provide all Montana with analytical services capability and research expertise devoted to effective monitoring and use of water and mineral resources throughout the State. Critical analytical techniques that are necessary for groundwater exploration and environmentally sound minerals management programs will at last become available.

BUDGET REQUEST:	**Fiscal Year 1992**	**$875,116**
	Fiscal Year 1993	**$ 85,117**
	Total	**$960,233**

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MONTANA ANALYTICAL CENTER FOR MINERAL AND HYDROGEOLOGIC RESOURCES
Funding Modification

The aim of the proposed Montana Analytical Center for Mineral and Hydrogeologic Resources is to provide a computerized analytical facility which has the capability of expeditiously providing a large volume of timely analytical analyses (of research - grade accuracy and precision) for use in assessing known and potential mineral and water resources in the State of Montana by the collective geoscience professionals at Montana Tech, the designated mineral science unit of the Montana University System.

This proposed analytical facility will greatly enhance evaluation of mineral resource potential in Montana at an annual cost of less than 0.5% of the total mineral taxes received by the State yearly.

1) The facility will provide a large volume of the highest quality analytical data by using modern state-of-the-art equipment. When completely developed, it will provide all types of analytical analyses, including certain sophisticated analytical analyses which are not available anywhere in the northwestern U.S., and which are currently needed in Montana mineral and hydrogeologic research.

2) The facility will provide a Montana mineral and hydrogeologic resources analytical data bank not only for use by researchers in the Montana University System, but also for use by industry, consultants, and state and federal governments and the public at large. It will allow individual researchers to obtain all available data (released for general use upon completion of individual research projects) for a given area or a sought after mineral, rock or element.

3) The facility will eliminate variable quality problems associated with multiple laboratories and will eliminate the need to spend Montana-based dollars outside Montana and the United States for analytical analyses.

ORGANIZATION

The Montana Analytical Center for Mineral and Hydrogeologic Resources will be organized as a division of the Montana Bureau of Mines and Geology and will be housed entirely within a single existing building on the campus of Montana Tech. The Montana Analytical Center for Mineral and Hydrogeologic Resources will provide, as needed, complete analyses for all major types of natural materials including water, silicate rock and soil, and coal/organic fluids. Complete analyses will mean the determination of inorganic constituents (major and trace elements), organic compounds (hydrocarbons, pesticides, etc.) selected isotopes (stable and radiogenic), and surface morphology plus semi-quantitative microanalysis by electron microscope. While many of the analytical techniques will utilize overlapping operations, these endeavors will be principally divided into five major categories within the Analytical Center:

1. Inorganic I - All Fluids and Digested Coal
2. Inorganic II - Silicate Rock and Soil
3. Organic - Coal, and Compounds in Water, Soil and Rock
4. Isotope - All Materials, Light and Heavy Isotopes
5. Electron Microscope - All Solids

During the first biennium (FY92/93) analyses--capabilities of the Montana Bureau of Mines and Geology would be upgraded to state-of-the-art for Inorganic I and II, and Organic sections. Capabilities related to the last two sections, Isotope and Electron Microscope analyses, would be added in subsequent years.

INORGANIC I SECTION

The origin, quantity, quality, and migration of fluids (groundwater, oil, and gas) within the geological frame work is a very important and an integral part of most resource investigations. The hydrodynamics of local and regional flow-systems play a vital role in evaluation, exploration, development, and protection of Montana's water and mineral resources. The proposed Inorganic I section would provide a greatly expanded analysis with much higher accuracy and precision for all investigators coupled with future utilization of reliable data, for regional evaluation; resource planning and management; and assessment of potential long- and short-term environmental impacts.

This laboratory would be capable of analyzing in excess of 100 water samples per week for their inorganic concentrations of Ca, Mg, Na, K, Al, Fe, Mn, SiO_2, Ag, B, Ba, Cd, Co, Cr, Cs, Cu, Li, Mo, Ni, P, Rb, Sr, Ti, Th U, V, Zn, Zr, As, Se, Hg, F, Cl, Br, SO_4, HCO_3, NO_3, and other selected elements as well as pH and conductance. The instrumental procedures will include atomic absorption, anion chromatography and inductively coupled plasma (ICP) mass spectrometry. (This section will also be capable of analyzing 30 coal digest samples per week for total sulphur, sulfur forms, major, minor and trace metals.)

INORGANIC II SECTION
(Silicates-Rare Earths-Precious Metals)

This section would provide very precise, accurate measurements of the concentrations of major element oxides, minor and trace elements, rare earths, and precious metals in rocks and soils. The primary instrumentation will be the inductively coupled plasma mass spectrometer (used in conjunction with the Inorganic I Section), major and trace element concentrations complimented by classical wet chemical analysis for water, carbonate, sulfate, halogen and reduced iron content. The plasma mass spectrometer will also provide analyses of rate earth elements and precious metals in selected samples. The laboratory will also be equipped with an x-ray diffractometer to characterize the crystal structure of selected samples and to identify zeolites and accessory mineral phases.

The laboratory would be capable of analyzing in excess of 100 samples per week for CaO, MgO, SiO_2, AL_2O_3, K_2O, Na_2O, FeO, Fe_2O_3, TiO_2, MnO, P_2O_5, and H_2O. Selected samples (approximately 40 per week) could be analyzed for total sulfur, fluorine, and chlorine; the actual volume would depend upon the composition of the samples being received by this laboratory section within

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any given week. Up to 100 rare earth (La to Lu) or precious metal (Ag, Au, Pod, Pt, Ir, Ru) samples could be analyzed weekly by the inductively coupled plasma mass spectrometer.

ORGANIC SECTION

The combustion energy resources are primarily organic compounds which were one time living organisms. During coal, gas and/or oil genesis, these organisms were subjected to different geological conditions which resulted in formation of extremely complex mixtures of thousands of organic compounds referred to as coal and oil. Careful analysis of the organic composition of coal, oil and gas increases our understanding of coal genesis and oil and gas genesis and migration. These parameters enhance our ability to effectively locate and utilize these resources.

Coal samples would be characterized for moisture, ash, volatile matter, fixed carbon, total sulfur, nitrogen, carbon and hydrogen, heating values, sulfur forms, major, minor and trace metals. The laboratory will be equipped with recently developed (and proved) automated instrumentation for proximate and ultimate analyses providing the capability to analyze up to 50 samples per week for the previously mentioned parameters. Coal samples will also be dissolved in this section with the prepared sample solutions analyzed for metals, sulfur forms and total sulfur in the Inorganic I Section.

In addition to coal, the section will provide qualitative and quantitative analyses of the organic chemical composition of oil, oil shale, saprolite, rock, soil, gas, and water samples. Each type of these complex samples generally requires the development of a separation scheme before the samples can be analyzed. However, for each sample analyzed, as many as several hundred chemical compounds may need to be identified and quantified. In ideal situations where samples are closely related to one another, up to 30 samples can be done per week with 50 or more compounds reported per sample. (In contrast, the procedures used in coal analysis are already established. Development research on coal will primarily increase accuracy and/or efficiency. Moreover, the assessment of total hydrocarbons (non-speciated) plus organic groups like BTEX (Benzens, Toluene, Ethylene, and Xylene) in soils from potential spill areas can be made routinely with much higher throughout.

The primary instrumentation for the noncoal work is a Fourier Transform infrared spectrometer (FT-IR) and a gas chromatograph-mass spectrometer.

TENTATIVE BUDGET ESTIMATE

Personnel	
2 Professional (FY) 37,441	$ 74,882
Benefits (20.5%)	15,351
	$ 90,233
Capital Equipment	
A. Inorganic I Section	
1. Inductively couples plasma mass spectrometer (with Inorganic II Section)	$300,000
2. Anion Chromatograph	15,000
3. Columns for Chromatograph (5 sets)	3,000
	$318,000
B. Inorganic II Section	
4. X-ray Diffractometer (automated)	$ 80,000
5. High Temperature Furnace	10,000
6. Platinum ware	15,000
7. Crusher/Pulverizer	6,000
	$111,000
C. Organic Section	
8. Automated CHN analyzer	$ 35,000
9. Automated proximate analyzer	20,000
10. Microwave Digester	6,000
11. Liquid Chromatograph	25,000
12. Gas Chromatograph Mass Spectrometer	225,000
	$311,000
Instrument maintenance and repair	$ 40,000yr
	$ 40,000/yr
Installation (FY92)	$ 90,000
	$ 90,000
TOTAL	**$960,233**

Note: Equipment costs include essential computers, data integrators and peripherals for each item.

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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 Salaries ___ Funding Modification ___

ABSTRACT:

Montana Tech and the Hydrology Division of the Montana Bureau of Mines, involved in groundwater research throughout the State of Montana, are experiencing an unprecedented number of requests for information dealing with groundwater availability and contamination (or potential for contamination). Requests come from a variety of State and Federal agencies involved in hazardous substance clean-up or in assessment as part of the State Mini-Superfund and abandoned mine reclamation. The requested Program Modification provides funding for personnel to enable the Bureau's Hydrology Division and the College's Division of Environmental and Natural Sciences to assist those who require data regarding hazardous substances in groundwater by providing (1) both office and on-site information, (2) equipment and supplies to conduct limited on-site sampling and analysis, (3) travel to sites around the State and (4) support for non-site specific research including means to determine the fate and characterization of substances in the unsaturated zone, methods of isolation of heavy and toxic metals from mine waste and enhanced recovery of such metals.

BUDGET REQUEST:	**Fiscal Year 1992**	**$185,325**
	Fiscal Year 1993	**$119,994**
	Total Request	**$305,319**

Montana Bureau of Mines and Geology
Hazardous Substance in Groundwater Research
Budget Modification

The Montana Bureau of Mines and Geology, Hydrology Division, involved in groundwater studies throughout the State of Montana, is finding a large increase in information requests dealing with groundwater contamination or its potential. The requests are originating from a number of state and federal agencies involved with hazardous substance cleanup or assessment as a part of the State of Montana's Mini-Superfund and abandoned mine lands reclamation.

The MBMG is the logical source for such entities to make inquiries with because of its broad research program and familiarity with most of Montana's groundwater resources. The MBMG's groundwater research program is augmented to a large percentage by non-general fund monies, which ultimately leads to a substantial strain on division budgets when responding to requests from other parties about such things as sources and quality, etc. of groundwater at sites being assessed for contamination.

The requested budget modification would provide funding for personnel costs to enable the MBMG to assist those who require data about hazardous substances in groundwater by providing both office and on-site support; the purchase of necessary equipment and supplies to carry out any limited monitoring and sampling work needed for site investigations; and travelling costs associated with the above tasks. In addition to providing assistance to the relevant agencies, the MBMG will undertake non-site specific research which will be useful in future site characterization. This research might consist of studies dealing with the fate and degradation of substances in the unsaturated zone, or a method of isolating heavy or toxic metals from mining waste for further processing and enhanced recovery of such metals.

The MBMG is the logical organization to provide this assistance to requesting individuals and agencies because of its affiliation - a department of Montana Tech, the nature of its work, and its understanding of Montana's groundwater and mineral resource problems. The MBMG currently has a cooperative agreement with the Montana Department of Health and Environmental Sciences - Solid waste Bureau - to provide assistance at NPL (Superfund) sites in Montana, and is a participant in Montana Tech's Hazardous Substance Research Center application to the Environmental Protection Agency.

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BUDGET

	First Year	Second Year
Personnel		
Hydrogeologist		
(1.0 FTE (FY)	$ 37,441	$ 39,687
Geological Engineer		
(0.225 FTE (FY)	8,424	8,929
Organic Chemist		
(0.25 FTE (FY)	9,360	9,922
Environmental Engineer		
(0.25 FTE (FY)	9,360	9,922
Benefits	13,240	14,034
Research Assistants	10,000	10,000
	$ 87,825	$ 92,494
Operations		
Repair maintenance	$ 10,000	$ 10,000
Sampling	7,500	7,500
Travel	10,000	10,000
	$ 27,500	$ 27,500
Capital Equipment		
Spectrometer	$ 40,000	
Gas Chromatograph	30,000	
	$ 70,000 (FY92)	
TOTAL	**$185,325**	**$119,994**

Unsolicited comment from Bureau users

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Jan. 14, 1991

Montana Bureau of Mines
College of Mineral Science
Butte, Montana 59701

Edward Ruppel, Director

Dear Mr. Ruppel;

Please consider this a special note of thanks for your reply of Jan 9th, the valuable info it contained and your very helpful cover letter.

I look forward to our sojourn in Montana and with your efficient assistance now in hand, it will make the way easier.

Also to have lunch and a libation with you, if you are available.

Thanking you again,

Sincerely,

Bill Russell

Box 673
Cedar Key, Fla.
32625

PATHFINDER

Pathfinder Gold Corporation
521 E. Mendenhall, Suite B
Bozeman, Montana 59715
(406) 586-7672
FAX (406) 586-7903

January 23, 1991

Dr. Edward T. Ruppel
Director - Montana Bureau
of Mines and Geology
West Park - Main Hall
Butte, MT 59701

Dear Dr. Ruppel,

Please find enclosed a check in the amount of $300. This donation is made on behalf of Pathfinder Mines Corporation and our exploration subsidiary Pathfinder Exploration Corporation. Please direct these funds to your research on economic geology.

Pathfinder recognizes the outstanding job your staff has done and the many contributions the Bureau has made to advancement of the mineral industry in Montana. Please accept this small token of our gratitude and keep up the good work.

Sincerely,

David R. Miller
District Geologist

cc: Governor Stan Stevens

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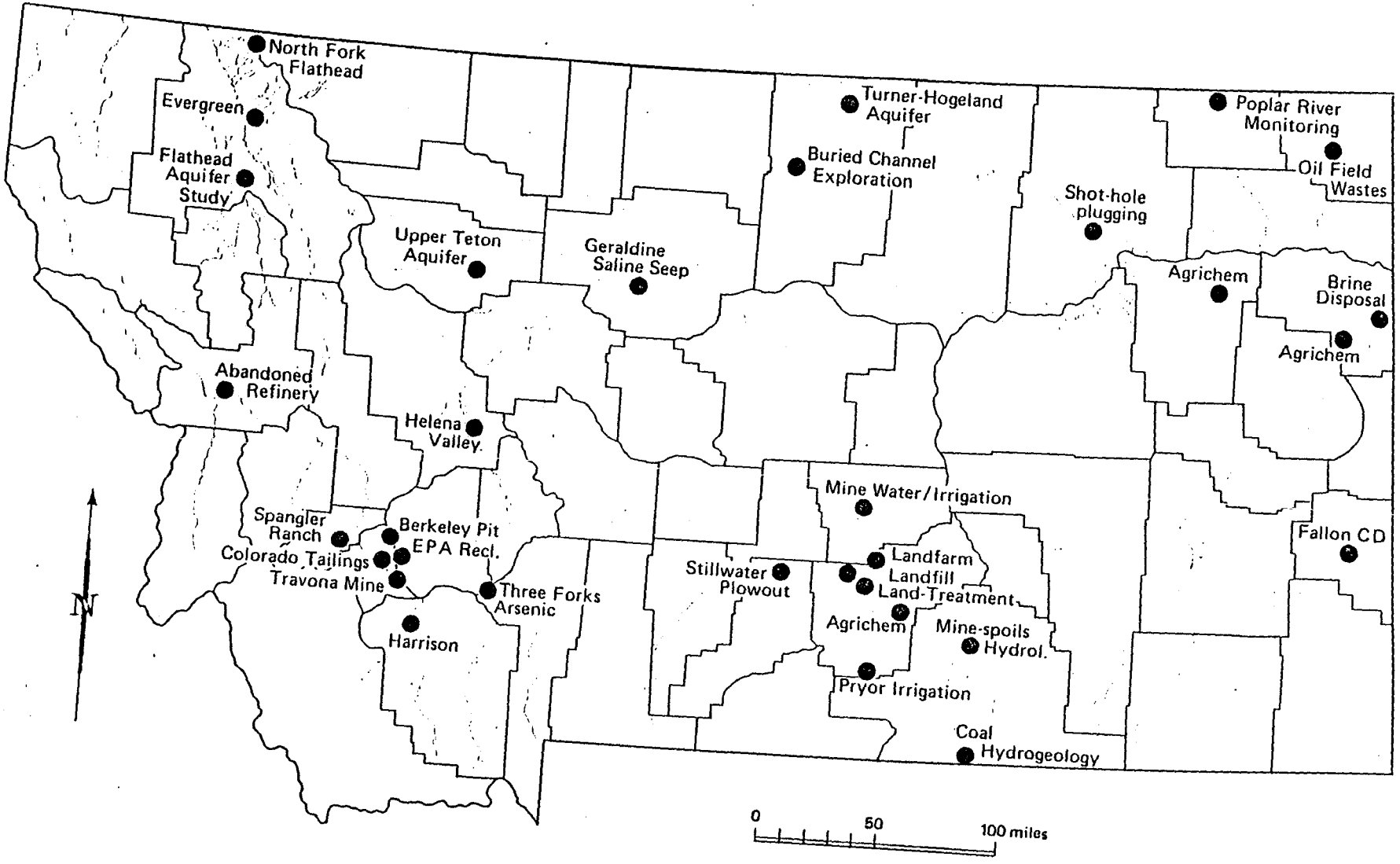
Maps showing areas
of Bureau investigations



MBMG Hydrology Division field projects 1988-1990.

MAP NO. 1

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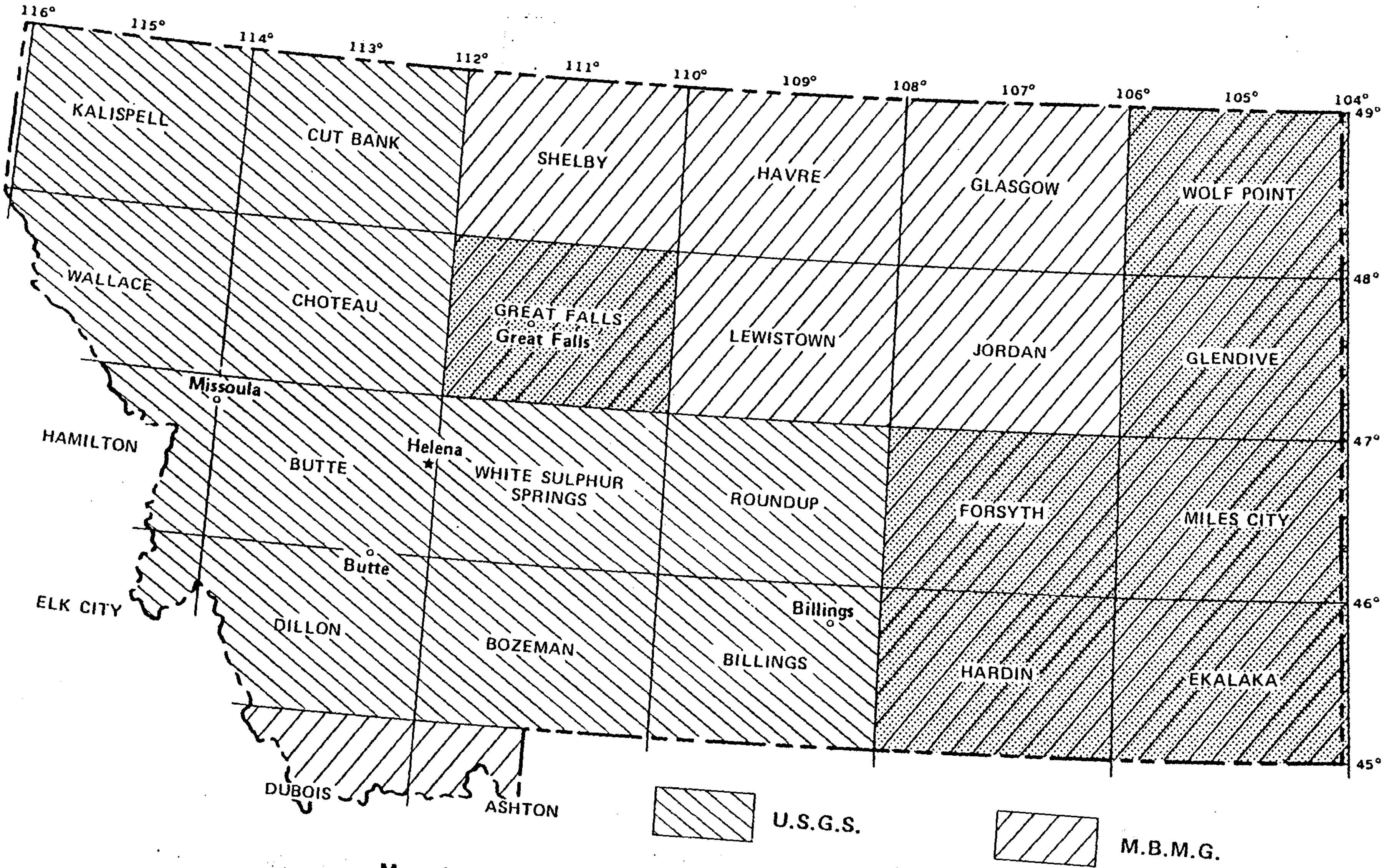
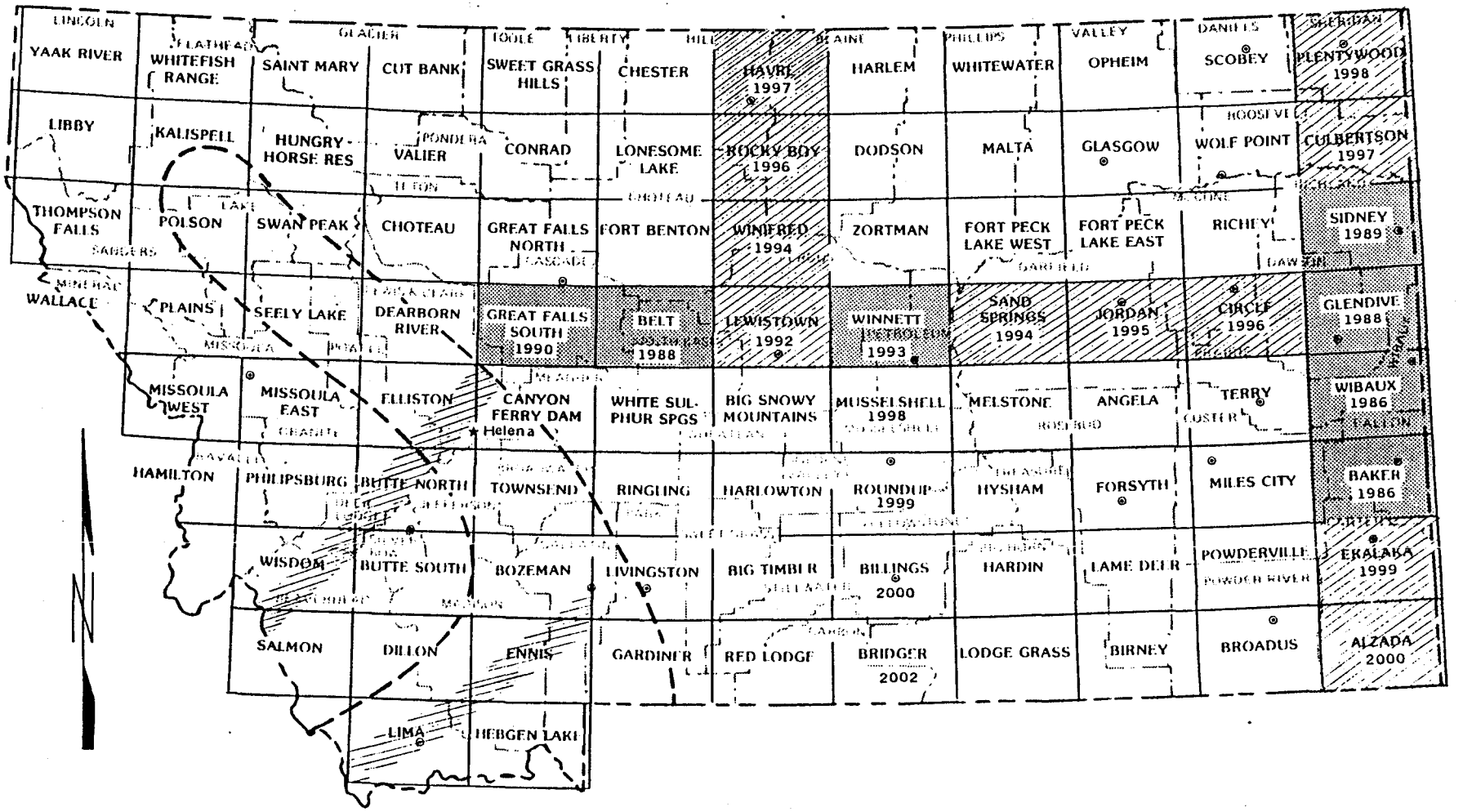
MAP NO. 2



Map of Montana showing areas of responsibility for USGS and MBMG; shaded 1 x 2-degree quadrangles are those that are completed (Hardin, Ekalaka, Miles City, Forsyth) or are currently being compiled by MBMG staff (Great Falls, Glendive, Wolf Point).



Map of Montana showing Great Plains transects of 30 x 60-minute quadrangles; shaded quadrangles are published (Baker, Wibaux) or currently being mapped (Glendive, Sidney, Winnett, Belt, Great Falls S.) by MBMG staff.

Map also shows two Rocky Mountain transects relative to area of high earthquake hazard.

MAP NO. 3

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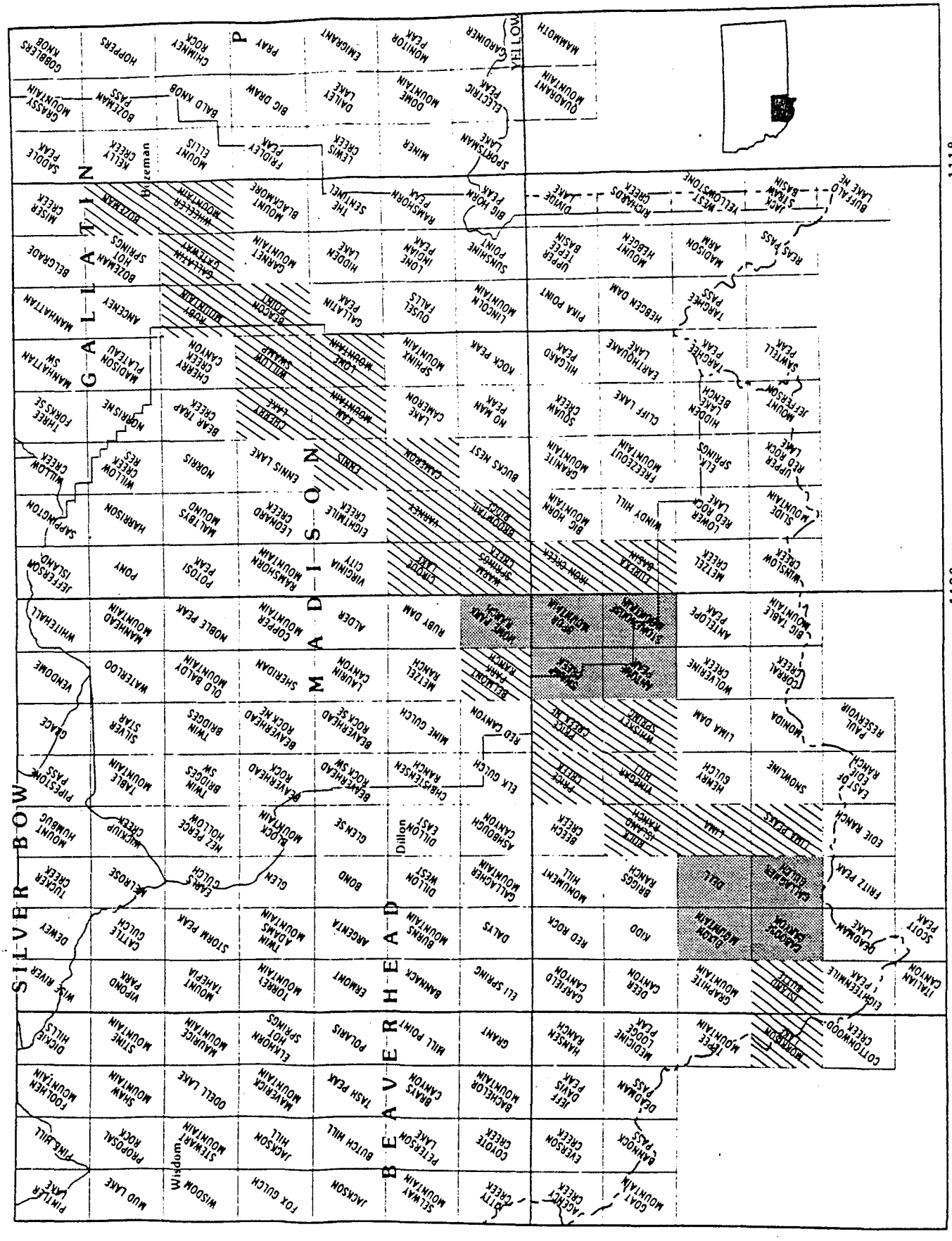
MAP NO. 4



Lima-Bozeman transect showing 7½-minute quadrangles currently being mapped.

NORTHERN MONTANA COLLEGE

EXHIBIT 3
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Degree offerings

FALL 1990

General authorization:

Associate of Arts, July 10, 1972
Associate of Science, July 10, 1972
Bachelor and Masters, Elementary and Secondary Education, April 12, 1954

Specific authorization:

Master of Education
- Counseling and Development
- Elementary Education
- Vocational Education
- Counseling and Development Minor

Bachelor of Technology:
- Automotive
- Business
- Construction
- Diesel
- Drafting
- Electronics
- Farm Mechanics
- Mechanical: Manufacturing

Bachelor of Science:
- Elementary Education
- Interdisciplinary Studies
- Nursing
- Secondary Education

Bachelor of Arts and Associate of Arts
- Interdisciplinary Studies

Associate of Science:
- Agricultural Technology
- Automotive Technology
- Automotive Body Technology
- Business Administration
- Computer Information Systems
- Diesel Technology
- Engineering Technology
  - Construction Engineering
  - Drafting
  - Electronics Engineering
  - Mechanical Engineering
- Environmental Health: Water Quality Technology
- Farm Mechanics
- Metals Technology
- Nursing
- Secretarial Technology

IDST Concentrations:

Arts:
- Art
- Communications
- Community Service
- Computer Information Systems
- Drama
- Economics
- English
- French
- History
- Humanities
- Native American Studies
- Social Science

Science:
- Biology
- Chemistry
- Ecology
- Mathematics
- Water Quality

NMC PROGRAMS CURRENTLY OFFERED IN GREAT FALLS

NORTHERN MONTANA COLLEGE — January 17, 1991

	Approved for Campus	Approved for Great Falls
ASSOCIATE OF SCIENCE:		
Automotive Technology	7/72	7/80
Business Administration	7/72	1/90
Computer Information Systems	3/80	1/90
Construction Technology	4/64	6/76
Drafting Technology	7/72	7/80
Electronics Technology	7/72	6/76
BACHELOR OF TECHNOLOGY:		
Business Technology Major	3/80	1/90
MASTER OF EDUCATION:		
Career Guidance and Counseling Option	6/26/81 title change	
Recently changed again to:		
Counseling and Development Option	12/14/90 title change	7/80
CERTIFICATE:		
Automotive Technology	7/72	7/80
OTHER:		
Professional Teacher Education Core	1929	8/89

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HANDOUT NO. 3

NORTHERN MONTANA COLLEGE

NMC Disciplines Currently Offered in Great Falls

January 17, 1990

STUDENT CREDITS GENERATED			
	1988-89	1989-90	1990-91 (Fall only)
Undergraduate:			
Automotive Technology	300	246	60
Business	NA	894	534
Computer Information Systems	97	717	270
Construction Technology	18	135	54
Drafting Technology	121	199	48
Electronics	252	273	78
Industrial Technology	21	NA	NA
Social Sciences	NA	255	309
Mathematics	132	288	150
Educational Psychology	102	221	0
Physical Science	180	42	108
Education	90	147	81
Guidance	NA	212	219
English	NA	NA	18
Psychology	NA	Was offered but counted in Havre	126
Total	1313	3629	2055
Graduate:			
Education (general)	429	327	117
Guidance	630	784	363
Educational Psychology	117	150	0
Total	1176	1261	480

REGENT'S RECOMMENDATIONS
Northern Montana College's Revised Request
Malmstrom/Great Falls Program Phase-In

Calculation of two-year average enrollment:

	ON-CAMPUS	MALMSTROM/ GREAT FALLS	TOTAL
FY 89			
SUMMER 88	698	48	746
FALL 88	1,254	59	1,313
WINTER 89	1,294	66	1,360
SPRING 89	1,159	67	1,226
TOTAL	4,405	240	4,645
AY FTE	1,468	80	1,548
FY 90			
SUMMER 89	659	54	713
FALL 89	1,305	90	1,395
WINTER 90	1,267	134	1,401
SPRING 90	1,108	125	1,233
TOTAL	4,339	403	4,742
AY FTE	1,446	134	1,581
Two-year average:			
TOTAL	2,915	214	3,129
AVERAGE	1,457	107	1,565

(Governor's & Regents' Base Budget)

MALMSTROM/GREAT FALLS ADJUSTMENT

WINTER 90	134	
SPRING 90	125	
SUMMER 90	113	
FALL 90	169	
TOTAL		541
AY FTE		180

Combined On-Campus Average with the Malmstrom/Great Falls Adjustment

On-Campus Average	1,457
Great Falls/Malmstrom Adj	180
Adjusted FTE Enrollment	1,637
(NMC requested level of funding)	

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HANDOUT NO. 5

NORTHERN MONTANA COLLEGE

January 1991

Northern Montana College is one of six institutions comprising the Montana University System. Located in Havre, Montana, a community of approximately 10,500, it is a regional institution which serves the diverse needs of a vast cattle and wheat producing area of nearly 32,000 square miles which includes four American Indian reservations. Northern Montana College was established in 1913 by an act of the Montana legislature and began offering instruction in September, 1929.

The College currently offers programs at both the undergraduate and graduate levels. Undergraduate programs include applied technology offerings in automotive, construction, diesel, drafting, electronics, farm mechanics, mechanical/manufacturing and water quality. Additional professional programs having an applied technology emphasis are business and nursing.

Northern Montana College also offers elementary, physical education and secondary education programs at the baccalaureate level and elementary education at the master level. Graduate programs are also provided in counseling and development, and vocational education. Unique interdisciplinary degrees in the arts, humanities, social sciences, and natural sciences provide students the opportunity to develop degree programs particularly suited to their educational and career goals.

Providing access to citizens in rural and urban areas currently underserved by higher education is a particular focus of the College's outreach programs. Currently, Northern Montana College provides instruction at Malmstrom Air Force Base and at a facility in the community of Great Falls, Montana, where a limited number of undergraduate and graduate programs are offered. A wide variety of evening and summer courses along with a full spectrum of short-term workshops to meet continuing educational needs of the region also make up a significant portion of the College's commitment to increase access to higher education.

The student population totals approximately 1800 of which 57% are over the age of 25 with an average age of slightly over 29 years. Eighty-four percent are undergraduates, 54% are female, 38% come from the three contiguous counties of Blaine, Hill and Chouteau and almost 12% of the student body is American Indian.

Northern Montana College strives to provide a strong nurturing environment where both the students and the faculty are actively engaged in the teaching and learning process. The College believes that high levels of involvement result in the highest levels of understanding and intellectual development. This atmosphere allows opportunities for students to develop interpersonal communications with faculty and other students and helps to create the caring community for which Northern is well known. Students don't become lost in a large classroom environment.

Most of Northern Montana College's programs are designed to allow students to enter and exit at various points. Business, nursing and applied technology programs provide students the option to exit at the end of the second full year of study upon completing the associate degree requirements. At this point students have the option to seek employment, or to continue

their studies to complete the baccalaureate degree. Students who choose to exit with an associate degree may complete their baccalaureate degree at a later date in the same area without loss of credits. All programs of study require the completion of a core of general education courses designed to integrate with specialized professional and technical courses which combine to prepare students to be flexible and to better adapt to the changing social, economic and work environments.

Northern Montana College students make use of up-to-date laboratories and technical equipment similar to what they will find when they exit their programs. In addition to learning in modern laboratories and on the latest equipment, students are encouraged to participate in the Cooperative Education program where they can earn credit toward the completion of their degrees while they receive financial compensation to offset the cost of their education.

The College promotes the intellectual, interpersonal, cultural, physical, recreational, and career development of its students through a rich array of student clubs and organizations, music and theatrical performances, visiting lecture programs and intramural and intercollegiate athletic programs. For those who choose to live on campus, a wide variety of residence life activities add to the overall development of students.

AREAS OF CONTINUING DEVELOPMENT

Northern Montana College continues to develop in a variety of areas to meet the ever changing needs of Montana and the citizens of the region.

Improving Access to College Programs. As the characteristics of the student body continue to change, the College will increase access to its programs by making more coursework available through alternative instructional means. This will include providing more evening and weekend courses to serve those who are working during traditional times.

A growing number of students are older than the typical recent high school graduate and need to work to support themselves and in many cases their families. An increasing number of students find themselves place bound and many miles from the institution. In these cases the institution is developing techniques to deliver instruction through the use of telecommunications so that students no longer are required to commute long distances to complete their entire program of study.

Cooperative and Articulation Agreements. Students are becoming increasingly mobile, a characteristic also applicable to the general population. As work assignments move people geographically, there is an increasing demand to accept previously earned college credit as well as the need to recognize previously learned competencies as a part of one's college degree. Older students frequently have gained the equivalent of college credit through work and life experiences. The College is currently developing transfer articulation agreements with the state and tribally controlled community colleges as well as the state vocational-technical centers to ensure that students do not have to repeat courses already successfully completed. In addition to formal articulation agreements, the College recognizes the CLEP program, credit for military service, and is developing the mechanisms to allow students to challenge college-level courses

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required for completion of a degree on the basis of past experiences. The program will require extensive documentation and a comprehensive evaluation process involving the faculty to determine the appropriate number of college credits earned through experience.

Partnerships in Economic Development. The College continues to rely heavily on partnerships and alliances with business and industry. These partnerships provide the institution with a growing list of equipment and technical training opportunities which in turn are used directly in the instructional programs to ensure students learn the latest information and techniques in their programs. The College currently is an authorized training center for computer-aided drafting (AutoCAD), operates certified General Motors training programs and provides continuing educational training to support a certification program for the Montana Water Quality Bureau of the Montana Department of Health and Environmental Sciences. Numerous agreements have been established with health care organizations that serve as clinical sites for both associate- and baccalaureate-level nursing students, with school districts that assist in the education of future teachers, and with cooperative education work sites located throughout Montana for students from virtually every program the College offers.

The College will continue to explore creative partnerships to further assist existing, new, and proposed businesses in every possible way to enhance the economic development of the region. An innovative Tractor Testing Resource Center to assist farmers and ranchers with a variety of technical equipment problems is being developed. In addition, the College will continue to increase its involvement with local, state and regional economic development organizations.

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Active and Qualified Faculty. Over 70% of the faculty of Northern Montana College have earned terminal degrees in their disciplines. All take pride in providing excellent and current instruction in their programs and continue to find additional and creative ways to involve students actively in the learning process. The science and mathematics areas are developing expertise in teacher education and additional avenues to involve students in undergraduate research projects.

In summary, Northern Montana College is an institution with vitality and vision. It continues to develop so that the citizens of Montana and the region have access to high quality programs designed to serve a wide range of students well into the next century. Faculty members are increasingly active in the community as well as in their areas of expertise and add considerably to the quality of life in the community. The College will continue to have a growing impact on the economic and cultural development of north central Montana.

HANDOUT NO. 6
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NORTHERN MONTANA COLLEGE

Long Range Goals
August 1990

1. Meet the intellectual, cultural, social, technological and economic needs of the region by offering quality programs and instruction.

2. Initiate a comprehensive institutional assessment program to ensure that appropriate student achievement levels and institutional climate exist.

3. Foster a physical atmosphere that is environmentally safe, educationally functional, and aesthetically pleasing.

4. Enhance a sense of community by fostering collaboration and collegiality among faculty, staff, and students.

5. Support and expand the institution's role and mission through a comprehensive faculty development program focused on instructional excellence and research.

6. Enhance the faculty governance process of the institution.

7. Provide a program of faculty/staff recruitment, retention, review, reward, and promotion congruent with the institution's role, mission, and purposes.

8. Enhance effectiveness, efficiency and upward mobility of the staff through a comprehensive development program.

9. Reach an optimum operational efficiency by implementing a program of planned systematic institutional growth.

10. Utilize appropriate levels of technology to maximize effectiveness and efficiency of students, faculty, and staff.

11. Provide the region strong leadership to develop an awareness of societal needs, to act as a catalyst for community development, and to enhance the effectiveness of public schools.

12. Provide work experience and placement opportunities for students congruent with their areas of learning.

13. Provide a full range of effective and efficient support services to meet the needs of the institution and its clientele.

14. Promote the enhancement of the institution's image.

15. Expand the level of institutional and financial resources available to the institution.

Exhibit 3 also contains an 18-page pictorial study. The original exhibit is available at the Montana Historical Society, 225 North Roberts, Helena, MT 59601. (Phone 406-444-4775)

EXHIBIT 4
DATE 2-4-91
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CAMPUS PROFILE

Northern Montana College

December 31, 1990

The baccalaureate nursing program at Northern Montana College articulates nursing competencies so that diploma, certificate, or associate degree graduate can attain high quality baccalaureate education without course repetition. Both the associate and baccalaureate nursing programs continue to develop curriculum and clinical experiences to reflect current health care technology with consideration to the special needs of rural regions in Montana. Both programs pursue accreditation by the National League of Nursing.

The multi-entry/multi-exit mode of access to higher education recognizes that many Montana citizens, for various reasons, interrupt their educational careers. In many cases these students should receive the appropriate credential to reflect their achievement and to expedite their re-entry into post-secondary education. Northern Montana College designs its academic programs so that no citizen will be required to repeat courses to certify knowledge, understanding, or skill already mastered within another educational context.

AREAS OF CONTINUING DEVELOPMENT

Northern Montana College emphasizes an interdisciplinary approach to liberal studies providing students with the traditional breadth of disciplines within the arts and sciences as well as selected concentrations within those disciplines. The Northern Montana College Program in business emphasizes small business development employing a quantitative focus and is characterized by the multi-entry/multi-exit pattern of enrollment. Cooperative educational experiences continue to be strong components of business and other academic programs. Teacher education programs at Northern Montana College focus on K-12 educational needs within the north central region of the state, especially in the area along the northern border known as the Hi-Line.

Northern Montana College shares many characteristics with other Montana University System institutions providing basic collegiate instruction required for career preparation and the development of human potential--a requisite role of any institution of higher education. Northern Montana College, a teaching and learning institution, is committed to meeting the continuing education and manpower needs of Montana's changing economy. Scholarly activity, applied research, and public service are undertaken at Northern Montana College to lend vitality to teaching, the growth of a community of scholars, and the economic and social development of the state; Northern Montana College considers its primary role to be a human potential development center for Montana citizens.

To accomplish these various goals, Northern Montana College has established state-of-the art computer and automation laboratories, automotive and diesel technology work facilities, a designated governmental documents depository is located in the Vande Bogart Library which is accessible to the citizens of the region, and national public radio programming is broadcast from the campus radio station under the call letters KNMC. Partnerships and agreements have been developed with a variety of health care agencies to provide clinical experience for associate and baccalaureate nursing students. Education majors, in addition to

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NORTHERN MONTANA COLLEGE
Havre, Montana

EXECUTIVE OFFICERS:

President: William Daehling
Vice President for Academic Affairs: Martha Anne Dow
Director of Fiscal Affairs: William Byars
Dean of Student Affairs: Gregory M. Hauser
Director of Development: Thomas Reynolds

CAMPUS PROFILE

ENROLLMENT: Fall 1989

1,489	Undergraduate
269	Graduate
1,758	Total (Headcount)
1,581	FTE (Fall)

DECLARED MAJORS BY FIELD (1989 Fall Headcount):

554	Education
389	Technology
308	Business
216	Nursing
291	General

STUDENT PROFILE:

49%	Male
51%	Female
97%	Montana Residents
29	Average Age

DEGREES AWARDED (1990):

157	Associate
150	Baccalaureate
75	Masters

FTE EMPLOYEES (Unrestricted):

84.2	Contract Faculty
25.7	Contract Professional
60.5	Classified
18.5	Part-time and Other
188.9	Total

PEER INSTITUTIONS:

Adams State College, CO
Lewis-Clark State, ID
Oregon Institute of Tech
Western New Mexico Univ.

ACCREDITATION: 1989-1990

Northwest Association of Schools and Colleges - Northern Montana College
Montana Board of Nursing - Nursing
Montana Board of Public Education - Education

SPECIAL FEATURES

Extension campus in Great Falls/Malmstrom Air Force Base provides access to associate degree programs in technology and masters degrees in Education and Counseling and Development. Two new programs added through Board of Regents action in 1989 have resulted in a 70% (FTE) increase in enrollment.

Applied Technology programs at the associate and baccalaureate levels provide a "Career ladder" curriculum structure for students. Associate degree graduates (about 40% of the annual graduating class) have the option to pursue a baccalaureate degree and receive full credit for all courses completed at the two-year level.

Authorized AutoCAD Training Center for computer applications in drafting and design.

Only fully-equipped Automation Laboratory in Montana providing CAD, CAM, and CIM capabilities.

Certified General Motors training programs.

Host for the State VICA Conference and Skills Olympics.

Test site for the Association of Professional Computer Certification.

Electronic farm management and ag-bulletin board programs serve north central Montana farmers and ranchers.

Network system for 39 state Environmental Training Centers (Coalition of Environmental Training Centers) through an electronic bulletin board to provide teleconferences, curriculum exchange, and resource directories.

Home to the Montana Environmental Training Center in cooperation with the Montana Department of Health and Environmental Sciences Water Quality Bureau focusing on water and wastewater treatment technology.

Only academic program for water and wastewater treatment plant operators in Montana.

57% of the students are over 25 years of age and the overall average age of the student body is 29 years old.

65% of the students receive some form of financial aid.

Highest percent of American Indian students in the university system.

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ACT TEST SCORES OF 1989 ENTERING FRESHMEN

	NMC	USA
English	16.8	19.0
Math	15.1	17.8
Social Science	15.7	18.1
Composite	17.2	19.3

EMPLOYMENT STATUS OF 1989 GRADUATES

	Average Annual Salary	-----Percent Employed----- Desired Field	Other Field	Graduate School	Seeking Work	Not Seeking Work
Associate	$19,714	62%	3%	30%	4%	1%
Baccalaureate	$18,874	73%	4%	10%	9%	4%
Masters	$26,070	96%	2%	2%	-	-

92% of all 1989 NMC graduates are employed or engaged in activities of their choice.

82% of NMC graduates are working in Montana.

1989-90 FACULTY WITH TERMINAL DEGREES

Percent of Faculty with Terminal degrees: 73%

various wastewater treatment plants in order to provide recommendations for correction of problems for improved compliance. This program has been continually funded since 1982.

$6,000 - Environmental Protection Agency - Small Community Outreach assistance for public utilities. This project focuses on updating a resource guide for smallcommunities for financial management assistance for wastewater facilities. It will provide workshops on budgeting, funding, maintenance, etc.

$55,000 - Environmental Protection Agency - A project which will provide networking through an electronic bulletin board for the Coalition of Environmental Training Centers, a consortium of 39 state centers. The purpose is to exchange curriculum,resource directories, environmental information, and provide teleconference capability.

$25,000 - Bear Paw Development and Burlington Northern - Project to establish a tractor testing center to provide technical assistance to the agricultural community. This project will work with the local economic development agencies and the Alberta Farm Machinery Research Center to establish a testing site. This project enhances the Diesel Technology program.

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NORTHERN MONTANA COLLEGE

FINANCIAL PROFILE FISCAL YEAR 1989

EXPENDITURES BY PROGRAM

	Expenditures		Percent of Total	
	NMC 1989	Peers 1989	NMC 1989	Peers 1989
Instruction	$3,953,653	$5,372,398	50.0%	52.8%
Academic Support	726,842	1,014,761	9.2%	10.0%
Student Services	943,546	958,497	11.9%	9.4%
Scholarships & Fellowships	247,943	0	3.1%	0.0%
Subtotal	$5,871,984	$7,345,656	74.2%	72.2%
Research	0	0	0.0%	0.0%
Public Service	2,439	23,940	0.0%	0.2%
Institutional Support	889,869	1,366,370	11.3%	13.4%
Physical Plant	1,140,293	1,434,066	14.5%	14.2%
TOTAL	$7,904,585	$10,170,032	100.0%	100.0%

NORTHERN MONTANA COLLEGE

REGENTS' BUDGET RECOMMENDATIONS

FORMULA ELEMENTS FISCAL YEAR 1992

	Peers 1989	Inflated Peers 1992	Regents' Request 1992	Index of NMC to Peers
Instruction				
Student/Faculty Ratio	17.35	17.35	15.87	109.33
Average Faculty Salary	$30,600.00	$35,423.00	$31,763.00	89.67
Instructional Support/FTE	$456.00	$527.88	$387.20	73.35
Support/FTE	$1,845.00	$2,135.82	$1,621.36	75.91

FORMULA ELEMENTS FISCAL YEAR 1993

	Peers 1989	Inflated Peers 1993	Regents' Request 1993	Index of NMC to Peers
Instruction				
Student/Faculty Ratio	17.35	17.35	16.17	107.30
Average Faculty Salary	$30,600.00	$37,194.00	$33,351.00	89.67
Instructional Support/FTE	$456.00	$554.27	$420.61	75.89
Support/FTE	$1,845.00	$2,242.61	$1,745.61	77.84

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NORTHERN MONTANA COLLEGE

Formula Components	1991-92	1992-93
FTE	1,565	1,565
Student/Faculty Ratio	15.87	16.17
Formula Faculty	98.61	96.78
Faculty Salary	$31,763.00	$33,351.00
Benefit Rate	21.847%	21.847%
Instructional Support	$387.20	$420.61
Support Rate	$1,621.36	$1,745.61

Component Change From FY91 – FY92

Enrollment Adjustment	($267,821)
Student Faculty Ratio	(81,545)
Faculty Salary	357,568
Instructional Support	55,041
Support Rate	239,275
Library	62,600
Equipment	62,600
Incrementals	48,252
Scholarships\Fellowships	0
Total	$475,970

NORTHERN MONTANA COLLEGE

Request:	FY 92	FY 93	TOTAL
Malmstrom/Great Falls Program Phase-In	$321,043	$336,918	$657,961

BRIEF SUMMARY OF REQUEST:

Malmstrom/Great Falls Program Phase-In

This modified request gives recognition to enrollments generated by the enhanced programs at Great Falls and at Malmstrom Air Force Base. Winter Quarter 1990 marked the beginning of offerings at the Great Falls site and the new degree offerings at Malmstrom Air Force base. Enrollments in these programs are not fully recognized in the two year average used for funding determinations. The addition of 72 FTE to the funding base of NMC will recognize these new enrollments.

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NORTHERN MONTANA COLLEGE

Degree offerings

FALL 1990

General authorization:

Associate of Arts, July 10, 1972
Associate of Science, July 10, 1972
Bachelor and Masters, Elementary and Secondary Education, April 12, 1954

Specific authorization:

Master of Education
- Counseling and Development
- Elementary Education
- Vocational Education
- Counseling and Development Minor

Bachelor of Technology:
- Automotive
- Business
- Construction
- Diesel
- Drafting
- Electronics
- Farm Mechanics
- Mechanical: Manufacturing

Bachelor of Science:
- Elementary Education
- Interdisciplinary Studies
- Nursing
- Secondary Education

Bachelor of Arts and Associate of Arts
- Interdisciplinary Studies

Associate of Science:
- Agricultural Technology
- Automotive Technology
- Automotive Body Technology
- Business Administration
- Computer Information Systems
- Diesel Technology
- Engineering Technology
  - Construction Engineering
  - Drafting
  - Electronics Engineering
  - Mechanical Engineering
- Environmental Health: Water Quality Technology
- Farm Mechanics
- Metals Technology
- Nursing
- Secretarial Technology

IDST Concentrations:

Arts:
- Art
- Communications
- Community Service
- Computer Information Systems
- Drama
- Economics
- English
- French
- History
- Humanities
- Native American Studies
- Social Science

Science:
- Biology
- Chemistry
- Ecology
- Mathematics
- Water Quality

NMC PROGRAMS CURRENTLY OFFERED IN GREAT FALLS

NORTHERN MONTANA COLLEGE — January 17, 1991

	Approved for Campus	Approved for Great Falls
ASSOCIATE OF SCIENCE:		
Automotive Technology	7/72	7/80
Business Administration	7/72	1/90
Computer Information Systems	3/80	1/90
Construction Technology	4/64	6/76
Drafting Technology	7/72	7/80
Electronics Technology	7/72	6/76
BACHELOR OF TECHNOLOGY:		
Business Technology Major	3/80	1/90
MASTER OF EDUCATION:		
Career Guidance and Counseling Option	6/26/81 title change	
Recently changed again to:		
Counseling and Development Option	12/14/90 title change	7/80
CERTIFICATE:		
Automotive Technology	7/72	7/80
OTHER:		
Professional Teacher Education Core	1929	8/89

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NORTHERN MONTANA COLLEGE

NMC Disciplines Currently Offered in Great Falls

January 17, 1990

STUDENT CREDITS GENERATED

	1988-89	1989-90	1990-91 (Fall only)
Undergraduate:			
Automotive Technology	300	246	60
Business	NA	894	534
Computer Information Systems	97	717	270
Construction Technology	18	135	54
Drafting Technology	121	199	48
Electronics	252	273	78
Industrial Technology	21	NA	NA
Social Sciences	NA	255	309
Mathematics	132	288	150
Educational Psychology	102	221	0
Physical Science	180	42	108
Education	90	147	81
Guidance	NA	212	219
English	NA	NA	18
Psychology	NA	Was offered but counted in Havre	126
Total	1313	3629	2055
Graduate:			
Education (general)	429	327	117
Guidance	630	784	363
Educational Psychology	117	150	0
Total	1176	1261	480

REGENT'S RECOMMENDATIONS
Northern Montana College's Revised Request
Malmstrom/Great Falls Program Phase-In

Calculation of two-year average enrollment:

	ON-CAMPUS	MALMSTROM/ GREAT FALLS	TOTAL
FY 89			
SUMMER 88	698	48	746
FALL 88	1,254	59	1,313
WINTER 89	1,294	66	1,360
SPRING 89	1,159	67	1,226
TOTAL	4,405	240	4,645
AY FTE	1,468	80	1,548
FY 90			
SUMMER 89	659	54	713
FALL 89	1,305	90	1,395
WINTER 90	1,267	134	1,401
SPRING 90	1,108	125	1,233
TOTAL	4,339	403	4,742
AY FTE	1,446	134	1,581
Two-year average:			
TOTAL	2,915	214	3,129
AVERAGE	1,457 (Governor's & Regents' Base Budget)	107	1,565

MALMSTROM/GREAT FALLS ADJUSTMENT

WINTER 90	134	
SPRING 90	125	
SUMMER 90	113	
FALL 90	169	
TOTAL		541
AY FTE		180

Combined On-Campus Average with the Malmstrom/Great Falls Adjustment

On-Campus Average	1,457
Great Falls/Malmstrom Adj	180
Adjusted FTE Enrollment	1,637
(NMC requested level of funding)	

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NORTHERN MONTANA COLLEGE

January 1991

Northern Montana College is one of six institutions comprising the Montana University System. Located in Havre, Montana, a community of approximately 10,500, it is a regional institution which serves the diverse needs of a vast cattle and wheat producing area of nearly 32,000 square miles which includes four American Indian reservations. Northern Montana College was established in 1913 by an act of the Montana legislature and began offering instruction in September, 1929.

The College currently offers programs at both the undergraduate and graduate levels. Undergraduate programs include applied technology offerings in automotive, construction, diesel, drafting, electronics, farm mechanics, mechanical/manufacturing and water quality. Additional professional programs having an applied technology emphasis are business and nursing.

Northern Montana College also offers elementary, physical education and secondary education programs at the baccalaureate level and elementary education at the master level. Graduate programs are also provided in counseling and development, and vocational education. Unique interdisciplinary degrees in the arts, humanities, social sciences, and natural sciences provide students the opportunity to develop degree programs particularly suited to their educational and career goals.

Providing access to citizens in rural and urban areas currently underserved by higher education is a particular focus of the College's outreach programs. Currently, Northern Montana College provides instruction at Malmstrom Air Force Base and at a facility in the community of Great Falls, Montana, where a limited number of undergraduate and graduate programs are offered. A wide variety of evening and summer courses along with a full spectrum of short-term workshops to meet continuing educational needs of the region also make up a significant portion of the College's commitment to increase access to higher education.

The student population totals approximately 1800 of which 57% are over the age of 25 with an average age of slightly over 29 years. Eighty-four percent are undergraduates, 54% are female, 38% come from the three contiguous counties of Blaine, Hill and Chouteau and almost 12% of the student body is American Indian.

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Most of Northern Montana College's programs are designed to allow students to enter and exit at various points. Business, nursing and applied technology programs provide students the option to exit at the end of the second full year of study upon completing the associate degree requirements. At this point students have the option to seek employment, or to continue

their studies to complete the baccalaureate degree. Students who choose to exit with an associate degree may complete their baccalaureate degree at a later date in the same area without loss of credits. All programs of study require the completion of a core of general education courses designed to integrate with specialized professional and technical courses which combine to prepare students to be flexible and to better adapt to the changing social, economic and work environments.

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NORTHERN MONTANA COLLEGE

Long Range Goals
August 1990

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3. Foster a physical atmosphere that is environmentally safe, educationally functional, and aesthetically pleasing.

4. Enhance a sense of community by fostering collaboration and collegiality among faculty, staff, and students.

5. Support and expand the institution's role and mission through a comprehensive faculty development program focused on instructional excellence and research.

6. Enhance the faculty governance process of the institution.

7. Provide a program of faculty/staff recruitment, retention, review, reward, and promotion congruent with the institution's role, mission, and purposes.

8. Enhance effectiveness, efficiency and upward mobility of the staff through a comprehensive development program.

9. Reach an optimum operational efficiency by implementing a program of planned systematic institutional growth.

10. Utilize appropriate levels of technology to maximize effectiveness and efficiency of students, faculty, and staff.

11. Provide the region strong leadership to develop an awareness of societal needs, to act as a catalyst for community development, and to enhance the effectiveness of public schools.

12. Provide work experience and placement opportunities for students congruent with their areas of learning.

13. Provide a full range of effective and efficient support services to meet the needs of the institution and its clientele.

14. Promote the enhancement of the institution's image.

15. Expand the level of institutional and financial resources available to the institution.