

MINUTES

MONTANA HOUSE OF REPRESENTATIVES
51st LEGISLATURE - REGULAR SESSION

SUBCOMMITTEE ON LONG RANGE PLANNING

Call to Order: By Chairperson Connelly, on January 31, 1989, at
8:00 a.m.

ROLL CALL

Members Present: All

Members Excused: None

Members Absent: None

Staff Present: Claudia Montagne, Secretary; Carroll South,
Staff Researcher, Legislative Fiscal Analyst's Office

Announcements/Discussion: None

RENEWABLE RESOURCE DEVELOPMENT GRANT PROGRAM

Tape 27:A:000

GALLATIN CONSERVATION DISTRICT, RANKING 1, East Gallatin State
Recreation Area.

PEG HINES, Treasurer, East Gallatin State Recreation Area Task Force, testified for the project. She gave a history of the project, stating that money had been appropriated for the land acquisition of an old landfill and gravel pit north of Bozeman in 1984. She said 30 acres had been purchased by the Department of Fish, Wildlife and Parks, a 20 acre pond was donated, an additional 47 acres of an old landfill were donated by the city, and 8 acres were donated from the Park Land Trust Fund. An amount of \$120,000 had been appropriated for the initial development, which would have included testing wells, but this money had been re-appropriated. Therefore, the community and the department had no money to work with. The project sat until the previous fall, when seed money was acquired from the estate of the original owner, Glen Hash. At this time, the task force was formed to work in cooperation with DFWP and the student chapter of the American General Contractors Association on the development of the park. The city of Bozeman, as well as citizens and local groups, donated money and machinery, labor and technical help. Work accomplished to date included picnic tables, parking lot, roads, latrines and landscaping. MS HINES said the purpose of the grant application by the Gallatin Conservation District and the East Gallatin Recreation Area Task Force was to develop the middle of the park area, the old landfill.

KATHY HAGGERTY (27:A:055), Bozeman, member of the task force, presented the slides describing the project, the reclamation of the former Bozeman City Landfill. She said it would provide a valuable and usable asset for the Gallatin Valley community and the state of Montana. The slides covered the area as it existed at the present time, with a discussion of the plans for the development.

JOANNE JENNINGS (27:A:136), East Gallatin Recreation Area Task Force, spoke regarding their plans for the development of the park. She distributed EXHIBIT 1, which outlined in detail the plans for the park, and contained letters of support for the project.

REP. JOHN VINCENT (27:A:212), House District 80, spoke for the project, and commended the people for their excellent job in presenting the project. He termed the project a rebirth, taking what amounted to a wasteland and converting it to a recreational oasis. He said the project brought the people together in a cooperative mode and produced a tremendous return on the state's investment.

REP. CONNELLY (27:A:245) asked if any methane gas had been generated from the landfill. MS HINES said there had been no methane gas detected and that the landfill had not been used since 1952. She said monitoring wells had been dug and that the water was nearly drinkable.

REP. BARDANOUVE (27:A:267) commended the city of Bozeman and its citizens for forming a partnership with the government of Montana. He said this process should be a pattern for parks and park development across the state. He expressed the appreciation of the committee for the people's efforts in "taking the ball and running with it" when there wasn't much of a ball to begin with. He asked what the source of water in the lake was. MS HINES said there was an actual spring under the lake. The gravel pit had tapped the spring.

FLATHEAD BASIN COMMISSION, RANKING 2, Flathead Basin Forest Practices/Water Quality and Fisheries Cooperative Program, (27:A:305).

CRAIG HESS, Information Officer, Flathead Basin Commission, testified for the project. He said the Flathead Basin Commission had been officially created by the 1983 Legislature to address the water quality concerns in the Flathead Area. He said there were 17 members on the commission, representing federal and state entities, landholders, resource managers, Canada, the tribes and citizens.

He listed the six tasks the legislature had asked the commission to be responsible for in the Flathead:

- 1) Monitoring the basin's natural resources;
- 2) Encouraging cooperation among basin land managers;
- 3) Holding public hearings on the condition of the basin;

- 4) Supporting economic development without compromising the system;
- 5) Promoting cooperating between British Columbia and Montana on resource issues; and
- 6) Making recommendations to the legislature.

MR. HESS described the project and its history. He said last summer, a memorandum of understanding was signed by seven different parties: Flathead Basin Commission, Flathead National Forest, Plum Creek Timber Co., Department of State Lands, Department of Health and Environmental Sciences, the University of Montana and the Department of Fish, Wildlife and Parks. In this memorandum the terms of the project were laid out, as well as the goals, objectives and the financial commitments of all of the parties.

MR. HESS (27:A:366) said the cooperative program would be taking advantage of the ongoing projects, statewide and in the Flathead, coordinating them and applying them to the Flathead. He said they would be able to fill in data gaps with regards to the cause and effect relationships between different forest practices and water quality. He said the results would be shared not only in the Flathead, but statewide. He said the entire project was geared for on the ground results. He said that because of the use of the University for the primary researchers, together with an outside review, they hoped to have an unbiased analysis of the impacts of forest practices on water quality. MR. HESS stated that the project was non-partisan, was started under the Schwinden administration, and had the current support of the Stephen's administration. MR. HESS handed out EXHIBIT 2, a rundown of the titles of the individual projects and the financial breakdown.

REP. BARDANOUE (27:A:410) said that during the past four years, the Department of State Lands (DSL) had adopted a new policy of accelerated timber forest. He asked if this policy was having an adverse impact on the watershed. MR. HESS said it was hard to determine the actual effects of this change in policy. He added the potential for damage was high in areas depending upon the soil types. This was an complex issue they hoped to address.

REP. BARDANOUE commented that the legislature could not control the Forest Service or other large agencies of government, but they did have some control over DSL. He asked if DSL was being cooperative with the Flathead Basin Commission, or if they were barging ahead, the watershed be damned. MR. HESS said they were definitely cooperating, both financially and otherwise. He said the project had been spearheaded by the participants. He corrected a minor error on page 79 of the Renewable Resource Development Grant Program book. The total cost of the project was \$230,000 instead of the printed \$250,000.

STAN BRADSHAW, Montana State Council of Trout Unlimited, testified that the Montana Environmental Quality Council (EQC) had been working very hard over the past few years on the issue of forest practices. He said one of the themes of EQC's

recommendations was that we continue to look at forest practices in the state on a voluntary and cooperative basis. He said this particular proposal was very much in that spirit, and he urged the committee to support it.

MONTANA STATE LIBRARY, RANKINGS 3, 4, and 5, Montana Natural Resource Information System, Montana Water Information System, and the Montana Natural Heritage Program, (27:A:463).

RICHARD MILLER, Montana State Librarian, gave an overview of the three programs as set forth in EXHIBIT 3. He said John Sesso, the Montana Natural Information System (NRIS) director, would address each of the three proposals.

MR. MILLER said one of the reasons he was very interested in becoming the Montana State Librarian was because of the NRIS/Heritage Program. He said it was an excellent service, and was a perfect use of the kind of information resources that state libraries should provide state government and Montana as a whole. He continued as set forth in EXHIBIT 3, and reviewed each of the sections within the NRIS/Heritage Program: the Montana Natural Resource Index (MNRI), the Montana Water Information System, the Montana Geographic Information System (GIS), and the Montana Natural Heritage Program (Heritage). He said the program eliminated duplication of effort.

REP. BARDANOUE (27:A:715) asked if they would have ample room in the library as they increased the data base. MR. MILLER said they would have enough space because they were building the access to rather than the collection of the materials.

JOHN SESSO (17:A:744) went over the three grant proposals referred to on page 15 of EXHIBIT 3. The grant for the Montana Natural Information System (NRIS) would provide core funding for NRIS program as well as core base support for the Water Information System. By this he meant it would provide 60% of the director's salary, 60% of the assistant's salary, and would cover the activities of building the Index as well as 40% of the Water Information Specialist and the Water Technician. The second proposal, ranked 4th, was a supplemental grant to implement the Water Information System in a more statewide fashion. He said the proposal would provide an additional 40% for the Water Information Specialist and Water Technician. The third proposal, ranked 5th, provided core funding for the Heritage program by funding 33% of the cost of that program.

REP. DAVE BROWN (27:B:055), House District 72, Butte-Silver Bow, testified in favor of all three proposals. He said it was his bill in 1983 that established the program, and wished the record to show his strong support for the proposals.

JOHN SESSO distributed a letter of support from the Department of Agriculture, EXHIBIT 4, as well as a collection of letters of support, EXHIBIT 5, from other users of the service.

SEN. HIMSL (27:B:069) asked if this program represented a duplication of effort and data with DNRC, and other agencies. MR. SESSO said there was no duplication, and that in fact the idea was to reduce duplication. The index was the focus of the NRIS program. He said the hope in the future was to tie into the data for those agencies and institutions who had data on their computers. NRIS could call up the information through a mode access.

JAMES L. HILL, Department of Health and Environmental Sciences (DHES), Bureau of Solid and Hazardous Waste, testified in support of the program and its proposals. He said the bureau was in a cooperative agreement to develop the Geographic Information System to serve the department in the Clark Fork Superfund clean-up effort and other natural resource related activities in the state (EXHIBIT 6).

JOHN NORTH (27:B:122), Department of State Lands, testified in support of the proposals. He said the department used the NRIS and Heritage programs in the preparation of environmental impact statements. He said the programs provided a clearinghouse for the natural resource information, as well as a central access point for acquiring this data. He said the department also contracted with them for data base maintenance and computer expertise.

JANET ELLIS, Montana Audubon Legislative Fund, spoke in support of the proposals as set forth in EXHIBIT 7.

KEITH COLBO (27:B:153), Montana Cultural Advocacy Project, testified in support of the projects.

DONNA LOOP, Nature Conservancy, testified for the projects as set forth in EXHIBIT 8.

STAN BRADSHAW (27:B:161), Montana State Council of Trout Unlimited, wished to go on record in support of the three grant proposals.

PAM HACKLEY, OEA Research, said her business provided a wide variety of ecological consulting services for clients, including state agencies. She said the relationship between businesses and organizations worked both ways. She said OEA Research had provided information for the NRIS data base, and had also worked with NRIS and Heritage for data they needed. She urged support for the proposals.

A letter from Land and Susan Lindbergh in support of the NRIS/Heritage program was entered into the record (EXHIBIT 9).

FLATHEAD COMMUNITY COLLEGE, RANKING 8, Outdoor Education and Conference Center, (27:B:188).

LEX BLOOD, a teacher at Flathead Community College, represented Flathead Community College and the Glacier Institute, co-

participants in the grant proposal, and spoke in favor of the project. He gave a history of the project, and said they hoped to expand eventually into a full year facility for outdoor education. He said the Glacier Institute was an independent, non-profit educational organization founded six years ago. He said its purpose was to conduct educational programming in and around the Glacier Park ecosystem. See EXHIBIT 10. The Glacier Institute had recently signed a five-year special use permit with the Flathead National Forest for the use of the Big Creek Ranger Station for an educational facility. See EXHIBIT 10A.

The proposal, for a total grant of \$72,000, had two parts to it. The first part would allow for expansion and acceleration of the educational programming already started. This would include programming organized with the local school district as well as a community college in California, elderhostels, and foreign student programs. DR. BLOOD said the grant monies would fund 3/8 of the salary of the director for the next two years.

DR. BLOOD (27:B:302) said the balance of the grant would go for an innovative program, a conferencing and facilitating process for a national and international integrated approach to management of the entire Glacier Park ecosystem. Included in this ecosystem are the Bob Marshall and Scapegoat Wilderness Areas, Flathead National Forest, parts of the Lewis and Clark National Forest, as well as parts of Canada and Waterton International Peace Park. He said that the air, water and wildlife migrated across the political and geographic boundaries. He said that Glacier Institute and the Big Creek Center could provide the site and the mechanism for bringing about conferencing and meetings in a neutral environment together with a neutral facilitative situation for the discussion of those management issues.

DR. BLOOD (27:B:347) said the educational program would not stand apart from the management program. He said a clearly informed public at all levels was the best tool that we have for sound management of our land. He said they hoped one of the primary effects would be the reduction of conflicts that had arisen locally as well as world wide. By working ahead of the problem, by educating and by bringing a variety of interests into the discussion process, issues could be dealt with on a cooperative rather than confrontational basis.

SEN. HIMSL (27:B:380) asked if they had a tourist program that used that facility. DR. BLOOD said that was the elderhostel program, 5 to 6 day programs for people from across the United States.

REP. BARDANOUVE asked if this facility was becoming part of the campus of Flathead Community College. DR. BLOOD said it was not, and that the special use permit was held by the Glacier Institute. REP. BARDANOUVE asked how many people would be served, and commented that the conference funds would generate \$9,000. DR. BLOOD said there could be up to 1,000 participants

in the educational program. He said the second part, the conferencing component, would be largely for local land managers. He said their income presently came from student funds or fees for the courses. Some of the courses were accredited.

REP. BARDANOUE (27:B:448) asked where the funds for the maintenance of the camp came from. DR. BLOOD said these had been met to date on a cooperative basis with the Flathead National Forest. Under the special use permit, we would be charged with the day-to-day maintenance, while the Flathead National Forest would be responsible for major investments. The maintenance costs would be met through the fees charged to educational and conference participants. DR. BLOOD described the charges.

UNIVERSITY OF MONTANA, RANKING 6, Management Guidelines/Riparian Site Types, (27:B:489).

PAUL HANSON, Research Professor in the School of Forestry, University of Montana, testified for the project. He described what they considered a very exciting program. He said a cooperative had been formed in 1985 to develop ways to identify and manage riparian systems throughout the state of Montana. He said the importance of these areas far exceeded their total area. He said riparian areas were an important island of diversity within the extensive upland ecosystem. Abundant water, forage and habitat attracted a proportional greater amount of use and conflict than their small area indicated. He described the importance of riparian areas and said they were vital to both private enterprise and public concern. Because of this, MR. HANSON said, riparian areas were focal points for water, livestock, timber and wildlife management in the region. Management strategies that recognized all resource values must be designed to maintain and restore the integrity of the riparian community.

MR. HANSON (27:B:536) said the purpose of the project was to provide landowners and land managers with the knowledge and techniques they needed to know to properly identify and manage their riparian areas. He showed a few slides of riparian areas to aid the committee in identifying the diverse types of these areas. Other slides showed the project in action, on-site workshops and demonstration of management techniques for riparian zones.

MR. HANSON (27:B:694) distributed EXHIBIT 11, which listed all of the members of the cooperative, the purpose of the proposal and financial schedule. He described the purposes in detail. Regarding the financial schedule, he said the Montana Riparian Association was not currently meeting its budget. The amount requested in the grant proposal would make up the budget deficit for FY 90 and 91.

SEN. HIMSL (28:A:062) asked if the cooperative members made a contribution, and MR. HANSON said they contributed in the amount of \$69,600 per year, and that the payment would be made to the

University of Montana, School of Forestry. He said discrepancies in the amounts of money in the Governor's budget were due to having to include indirect costs for the University. He understood that these indirect costs would be removed by the Legislature.

MONTANA DEPARTMENT OF AGRICULTURE, RANKING 7, Monitoring of Agricultural Chemicals in Groundwater, (28:A:091).

RALPH PECK, Montana Department of Agriculture, introduced Gary Gingery. GARY GINGERY, Administrator, Environmental Management Division, testified for the project as set forth in EXHIBIT 12.

As an introduction, MR. GINGERY said that 33 different compounds were used in the state of Montana which were designated as primary leachers by the EPA. He said that over the years, the agency had done minimal monitoring of groundwater by pulling samples from existing domestic wells. He said they had found some pesticide contamination. The problem with the study had been that it did not really address the soil characteristics and hydrogeologic conditions. Moreover, regarding the wells sampled, there had been no guarantee that the wells were constructed in such a way that the pesticides were not coming in from the surface. This project would set up a system that combined soil scientists, hydrogeologists as well as pesticide people to study groundwater in terms of pesticide contamination.

HAYDEN FERGUSON (28:A:188), Soil Physicist, Montana Agricultural Experiment Station, testified for the project. He said it was essential for the protection of Montana, and of the Montana agriculturist as well as necessary to meet the requirements for various laws. He supported the project because it was not only a monitoring program, but a program that would also look at the how, why, when and where issues in groundwater pollution. Without this information, he said there would be no capability of predicting the possibility of groundwater pollution.

MARVIN MILLER, (28:A:215) Montana Bureau of Mines and Geology, testified that MBMG was one of the partners in this effort. He said it provided a unique opportunity for science agencies, schools and landowners to come together to study in the field potential chemical (nutrient and contaminant) movement. He said there was also a possibility of reducing the expensive costs of the chemical analyses. He urged the committee's support.

PAM LANGLEY (28:A:232), Executive Director, Montana Agricultural Business Association, said they were concerned about their products getting into the groundwater. She said they supported this project to determine if there really was a problem out there.

REP. THOFT (28:A:242) asked why wells drilled to test for saline seep, or water wells, could not be used for this project. MR. MILLER said the salinity wells drilled in the area were

constructed of sewer pipe. The data therefore would not be accurate because the pipe absorbed the chemicals.

SEN. HIMSL asked who was the lead agency in this "troika". MR. GINGERY said the Department of Agriculture would be the lead agency. SEN. HIMSL asked about Miles City's application for removal of pesticide on the surface. He asked about the absence of southeastern Montana as one of the testing areas. MR. GINGERY said the six sites would be assessed for suitability. If they found certain characteristics that needed to be assessed, they would seek another site, which could be in southeastern Montana. SEN. HIMSL asked what they could do if pesticide pollution was discovered at a site. MR. GINGERY said they would notify the Department of Health and Environmental Sciences as to the public health hazard. When an aquifer became contaminated from a point source, soils might have to be removed. In terms of the groundwater itself, it could not be cleaned. He said the health concern could be removed through mechanical dilution.

LEWIS AND CLARK COUNTY, RANKING 9, Hydrogeologic Evaluation of Helena Valley, (28:A:320).

WILL SELSER, Director of Environmental Health Division for the Lewis and Clark County Health Department, testified for the project as set forth in EXHIBIT 13. He distributed letters of support from the Lewis and Clark County Commissioners, EXHIBIT 14, and from Senator Joseph P. Mazurek, Senate District 23, EXHIBIT 15.

R.A. ELLIS (28:A:379), Helena Valley, said he had an irrigated farm and operated in the center of the valley. He encouraged the committee to support the project.

JOHN WARD, owner/operator of Little John's Septic Service in the Helena Valley, testified in favor of the project. He said there was not a moving, underground water source to move contaminants out. He said this factor together with rampant ignorance was threatening the quality of the groundwater supply. He said he provided education regarding the value of periodic maintenance of septic systems and the design of water and septic systems.

REP. ED GRADY, House District 47, (28:A:437) emphasized the problems in the valley, such as septic tanks working inadequately and the location of a landfill on the edge of the aquifer. He said the aquifer was the potential water source for the City of Helena. He urged the committee's support of the project.

DAVE LEWIS (28:A:472), West Helena Valley resident, added that the west Helena Valley was one of the largest unincorporated areas in the state with 7,000 people in that area alone. He said that his neighborhood on the west side of the west Helena Valley was currently being furnished with bottled water by the county because of the uncertainty regarding the leaching from the old landfill. He supported the study, because more information was needed, and a lot of people were at risk.

JIM HOHN (28:A:489), Supervisor of the Lewis and Clark County Weed District, testified for the project as set forth in EXHIBIT 16.

SEN. TOM RASMUSSEN, Senate District 22, (28:A:505), testified for the project. He stated that groundwater pollution was an emerging issue. He said there had been tremendous growth in the valley without sufficient attention to the aquifer. He said there was a potential for pollution and destruction of both the agricultural base with irrigation as well as the water supply. He said this proposed study and its computer data base could be applied here and elsewhere around the state.

SEN. HIMSL (28:A:543) asked if it would be better to direct the money into a corrective program, rather than into yet another study. MR. SELSER said there was a quantum jump between knowing that we have a problem and knowing where the aquifer flow patterns were taking the problem. He said he agreed that the best use for any money would be to apply it directly to solutions to specific problems, but they had to know more about what's happening underneath their feet before that money could be applied. He cited the situation of less than perfect planning in the valley. He said, with the number of septic systems, the only thing that keeps the groundwater drinkable was the dilution factor. MR. SELSER said they had no idea of how many more septic systems the aquifer could handle before the capacity to dilute was exceeded. The evaluation would provide just this type of information. Thus, reasonable and rational judgments could be made about where people should be living in a valley such as this that has a contained aquifer.

SEN. HIMSL (28:A:610) asked if the solution would be to move people out of the valley. He asked if a central sewer system would be a viable solution. MR. SELSER said people would not be moved out, but more people would not be put in areas where they did not belong. He said that a central sewer system was a solution they hoped to avoid if they can get a handle on what is happening now. The costs would be prohibitive with the population densities in the valley. He said they have enough people to cause a problem, but not enough people to pay for the solution.

JOHN WARD (28:A:630) commented that this study could lend credibility to the informal education he provided.

SEN. MANNING asked what was the level of the water table. MR. SELSER said it varied from at the surface (such as Lake Helena) to 60 to 100 feet deep. At Mr. Lewis' residence in the west valley, it was 5 to 15 feet.

REP. JIM RICE, House District 43, Helena Valley, testified in support of the project. He said the grant would make available other matching funds from other agencies.

REP. HAL HARPER, House District 44, (28:A:690) said this was a first step to get to a solution to the problem. He urged support of the project.

A letter from REP. JAN BROWN, House District 46, Helena, was submitted for the record in support of the project (EXHIBIT 17). A letter from JIM MELSTAD, Eastgate Village Water and Sewer Association, was submitted in favor of the project (EXHIBIT 18).

MONTANA DEPARTMENT OF STATE LANDS, RANKING 11, Pilot Urban Forestry Project, (28:A:712).

PAUL KLUGE, Department of State Lands, Division of Forestry, testified in support of this cooperative effort between DSL and the Headwaters Resource Conservation and Development Area. He introduced June Boles, Drummond, who testified for the project.

JUNE BOLES (28:B:000) spoke on behalf of the grant as a citizen and member of the Drummond Citizens for Development. She said they wanted to gain some of the tourism that was flowing by their town with the aid of this beautification project. They wanted to start with 5 and 6 foot trees. The main purpose of the grant amount of \$100,000 was to provide for an urban forestry specialist to help the community with the project. Without this additional \$40,000 this position would not be funded and the community would lack the professional guidance they needed. She requested a minimal increase of \$14,000 for a coordinator so that the project would have a better chance of succeeding.

NATALIE FITZPATRICK (28:B:066), Anaconda, urged support for the Urban Forestry grant. She said they were trying to reclaim the ARCO ground east of the community with a wildflower park project. She said they wanted to revitalize the community and were planning to make Anaconda an urban natural arboretum, since the north and south streets were named after trees. She said they joined in with the seven county area and were behind this project. She said they saw this as an opportunity to increase their tax base, to increase tourism, and to provide badly needed jobs.

MR. KLUGE (28:B:110) spoke from DSL'S standpoint and reiterated some of the points in favor of the position of coordinator. He said in order to be an organized project, knowledge was needed. He said DSL regarded the role of urban forestry coordinator as essential for the technical expertise required for inventories and planning. He said without the retention of those services, DSL felt the project could fail and end up wasting a lot of money, rather than providing environmental, aesthetic and economic benefits to the communities.

CITY OF BELGRADE, RANKING 11, Meter Installation and Water Main Replacement, (28:B:145).

BARBARA SNIDER, Mayor of the City of Belgrade, spoke for the request. She said they had originally asked for a loan/grant

combination of \$204,061, and had been recommended by DNRC a grant of \$50,000 and a loan of \$150,000. The \$4,061 difference the city could raise out of the water reserve budget. She described the project and the domestic water system and use in the community. She said that they had to enforce strict watering restrictions during the summer months. She said there were no incentives for citizens in Belgrade to conserve water.

MS SNIDER said the \$50,000 grant would pay for the installation of meters. This project would result in conservation of water and electricity (which had been used for pumping). It would also provide a means of billing for actual water used, an adequate supply of water for fire protection, and the capability to monitor for leaks. Moreover, she said it would encourage people to repair household leaks and irrigate more wisely.

MS SNIDER (28:B:198) said the \$150,000 loan would be used for replacement of water mains. The original water mains were used oil field pipe installed prior to 1932. Moreover, they were not buried very deep. The result, she said, was freezing mains every winter unless the user left water running. She encouraged the committee to approve the grant and loan applications. She said the city manager, the city public works superintendent and the city engineer were present for answers to technical questions.

DEPARTMENT OF FISH, WILDLIFE AND PARKS, RANKING 12, Wildlife Habitat/Conservation Reserve Program, (28:B:222).

BOB MARTINKA, DFWP, testified for the grant request which was a proposal for partial funding for the continuation of a program that was ongoing for the past three years. He said the purpose of the program was the establishment of wildlife habitat on Conservation Reserve Program (CRP) acres. He gave background on the Conservation Reserve Program, started in 1985, the purpose of which was to take highly erodible cropland out of production and to establish permanent vegetation on those acres. He said the department regarded this as an opportunity to create wildlife habitat on these acres during the time they were retired for the 10 year term of the CRP contract. In order to piggy-back with this federal program, the agency decided to offer free trees and shrubs to landowners who enrolled acreage in the CRP program. In turn for providing those free trees and shrubs, the department was encouraging these landowners to plant seed mixtures on their retired acres that the department felt were most beneficial for wildlife.

MR. MARTINKA said the department had spent approximately \$125,000 in trees and shrubs that had been planted as a result of the program. He said the program benefited society as a whole in changing the looks of the landscape and improving the water quality. He said it also benefited the landowner in diminishing wind erosion. He said the program operated on a first-come, first-served basis, with landowners allowed up to \$1,000 per CRP contract.

REP. CONNELLY (28:B:275) distributed a copy of the memo concerning the NRIS/Heritage program that Rep. Thoft asked to be drafted. Rep. Thoft wanted to know if the committee might be interested in sending this out to inquire about the willingness of users of the service to pay user fees. REP. BARDANOUE said he wanted to think about it. REP. CONNELLY said they would take action on the matter at the next meeting.

ADJOURNMENT

Adjournment At: 10:55 a.m.

M. E. Connelly
REP. CONNELLY Chairperson

MEC/cm

2625.min

EXHIBIT 1

DATE 1-31

HB Renewable Resource
Grants

East Gallatin



State Recreation Area Task Force

EAST GALLATIN STATE RECREATION AREA TASK FORCE
GALLATIN CONSERVATION DISTRICT

APPLICATION FOR RENEWABLE RESOURCE DEVELOPMENT GRANT

INFORMATION PACKET AND LETTERS OF SUPPORT

NATURAL RESOURCES COMMITTEE
MONTANA HOUSE OF REPRESENTATIVES

JANUARY 31, 1989



Peg Hines, Treasurer, 1011 E. Curtiss, Bozeman, MT 59715

DATE 1-31-89
 HE *December 1988*
Development Prog

Flathead Basin Forest Practices/Water Quality and Fisheries Cooperative Program

| STUDY MODULE | PRINCIPAL INVESTIGATOR | PROJECT COSTS |
|-----------------------------------|------------------------|-----------------|
| 1. Site Survey | Dr. Don Potts, UM | |
| 2. Watershed Risk Assessment | Dr. Don Potts, UM | |
| 3. GIS Application | Dr. Don Potts, UM | Subtotal 44,087 |
| 4. Riparian Management Guidelines | Dr. Bob Pfister, UM | 13,284 |
| 5. Historical Records | Dr. Ric Hauer, YB | 16,194 |
| 6. Fisheries Study | Mr. John Fraley, DFWP | 60,159 |
| 7. Water Quality Effects | Dr. Ric Hauer, UM | 75,305 |
| 8. Workshop & External Review | Dr. Bob Pfister, UM | 4,644 |
| | | <u>213,673</u> |
| RRD Request: 25,000 | | |
| Committed: | | |
| 130,000 Flathead National Forest | | |
| 50,000 Plum Creek Timber Co. Inc. | | |
| 5,000 Dept. of State Lands | | |
| Other State of Montana Sources | | |
| 230,000 TOTAL PROJECT COSTS | | 1/30/89 |

APPROVED TOTAL
(to date)

HB 1-31-89
Dunaway
Director
Signature

MONTANA NATURAL RESOURCE INFORMATION SYSTEM (NRIS)

MONTANA NATURAL HERITAGE PROGRAM (HERITAGE)

LEGISLATIVE BRIEFING

JANUARY 1989

LEGISLATIVE HISTORY

Environmental legislation in mid- 1970's spawned a great increase in natural resource information collection and management:

- Montana Environmental Protection Act ● Strip Mine Act
- Major Facility Siting Act ● Open Cut Act
- Water Use Act

In 1982, the Montana Governor's Council on Management, recognizing the growing amounts of natural resource data and the growing need for quick access to the data, identified the need for greater coordination and information sharing among natural resource agencies. In Recommendation No. 14 of its Final Report, the Council emphasized three principles:

- Separate data systems are acceptable, but compatibility is vital.
- An indexing system is needed to locate and access existing sources of data;
- A flexible, decentralized information management system is needed, and not a large, centralized data base.

In response to Recommendation No. 14, the 1983 Montana Legislature created the Natural Resource Information System and the Natural Heritage Program (Ch. 650, L. 1983; House Bill No. 785 and House Bill No. 860). The chief objective:

"... TO BE A COMPREHENSIVE PROGRAM FOR THE ACQUISITION, STORAGE, AND RETRIEVAL OF EXISTING DATA RELATING TO THE NATURAL RESOURCES OF MONTANA." (SECTIONS 90-15-101 THROUGH 90-15--304, MCA)

In 1985, the Legislature provided start-up funding through a variety of sources including a Resource Indemnity Trust grant, Fish, Wildlife and Parks license fees, and private funds. The 1987 Legislature reinforced the importance of NRIS/Heritage, amending state laws governing the Renewable Resource Development Program to give special emphasis to proposals that "provide for the long-term compilation and management of information on the natural resources of Montana."

WHERE ARE THE PROGRAMS LOCATED?

The law creating NRIS/Heritage also established a Natural Resource Data System Advisory Committee, with representatives from the state's major natural resource agencies. This Committee was charged with the task of directing the development of the NRIS/Heritage programs. The first decision was to find a suitable home for the two programs.

The Montana State Library was selected for two reasons:

- The State Library is an agency that remains neutral (no bias or advocacy) in its information gathering, which is especially important on issues regarding environmental conflicts and other controversies.
- The Library already has the ongoing function of providing information to those needing it.

Thus, in late 1985, the NRIS/Heritage operations started up in the basement of the State Library. At that time, the Committee also decided that the Natural Heritage Program should be implemented through a contract with The Nature Conservancy, with NRIS administering that contract.

THE NRIS PROGRAM: MAKING CONNECTIONS AMONG DATA USERS

After three years of development and operation, the NRIS and Heritage programs have achieved great success in helping business, industry and government agencies. To achieve its chief objective as a clearinghouse for natural resources data, NRIS is involved in several information management projects. Major projects include:

- the Natural Resource Information Index (MNRI)
- the Montana Water Information System
- the Montana Geographic Information System (GIS)
- the Natural Heritage Program (NHP)

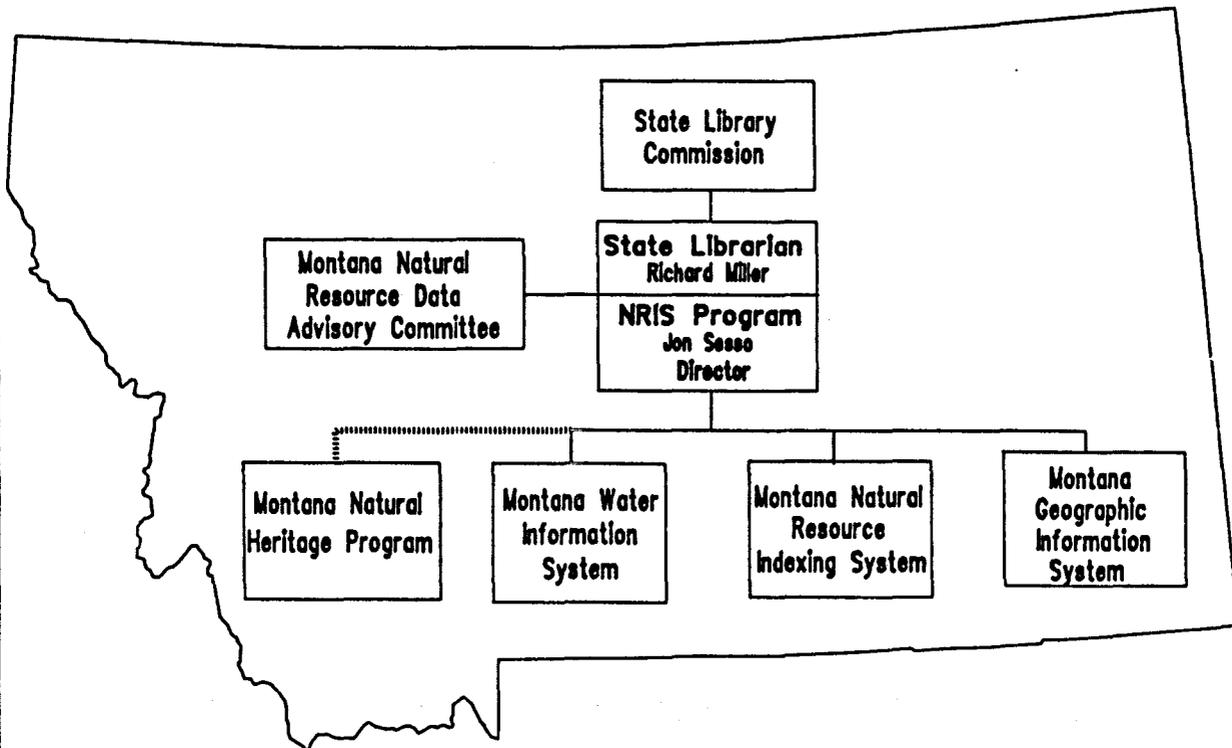
In addition, NRIS is involved in several smaller data base management activities on behalf of federal, state and local agencies, such as the Bald Eagle Nesting Survey and Montana Rivers Study, where NRIS provides technical assistance in systems design and data management services.

NRIS also helps develop standards for the collection of new data to ensure quality, compatibility, and data-sharing capability, such as coordinating the State Mapping Advisory Council (SMAC) and participating as a member of a statewide GIS Subcommittee.

Montana State Library

Natural Resource Information System

(Organizational Chart)



**NATURAL HERITAGE
PROGRAM**

Dave Center
Coordinator
444-3009

Steve Shelly
Botanist

Andy Kretz
Ecologist

Margaret Zeek
Data Technician
444-3009

**WATER INFORMATION
SYSTEM**

Jim Stimson
Water Information
Specialist
444-5358

Pam Smith
Library Technician
444-5354

**NATURAL RESOURCE
INDEXING SYSTEM**

Diane Capron
Library Technician
444-5354

Jim Senkler
Programmer/Analyst
444-5354

**GEOGRAPHIC
INFORMATION SYSTEM**

Allan Cox
GIS Specialist
444-5357

Gerry Daumiller
GIS Technician
444-5358

THE MONTANA NATURAL RESOURCE INDEX (MNRI)

The first step in meeting the program's objective has been the creation of an indexing system for sources of natural resources data, especially unpublished sources not indexed elsewhere.

The system, called the Montana Natural Resource Index (MNRI) allows users to obtain a list of data sources for a specified subject area and geographical location within the state. As of January, 1989, there are more than 9,000 documents listed in the MNRI, including (among other titles):

- the Water Resources Library at the Department of Natural Resources (DNRC)
- the Energy Resources Library at DNRC
- Environmental Impact Statements submitted to the State Library
- Yellowstone Co. Inventory
- Forest Stand Maps from Department of State Lands (DSL)
- Fisheries Bibliography from Department of Fish, Wildlife, and Parks (DFWP)
- Botanical citations from Natural Heritage's data bases
- Documents from Department of Agriculture relating to weeds

Planned additions to the Index include special collections of information on:

- pesticides (Department of Agriculture)
- hazardous wastes (Department of Health and Environmental Sciences)
- reclamation and mining (Department of State Lands)
- mining and minerals (Bureau of Mines and Geology)
- water (several agencies, including the MSU Water Center)

Output may be printout, a machine-readable data file, or a word processing document on diskette in standard format, at the user's option.

THE MONTANA WATER INFORMATION SYSTEM

In late 1987, NRIS also began to develop an efficient water resources data system, providing a central access point to the many decentralized water data bases around the state on behalf of state, federal and private water users and managers.

One task of this program is to coordinate direct access to the major national and state data bases on water resources. So far, NRIS has access to:

| <u>National</u> | <u>State</u> |
|-----------------|------------------------|
| ● NAWDEX | ● QSAR |
| ● WATSTORE | ● SNOTEL |
| ● STORET | ● Montana Rivers Study |
| ● GW-ONLINE | |

Presently, these data bases can be accessed at the State Library. Future plans call for NRIS to coordinate remote and on-line access on behalf of users throughout the state.

Two ongoing tasks have been to survey data users throughout Montana to determine their data needs, and to maintain a comprehensive inventory of the water resources data bases in Montana. The inventory, presently in draft form, is a roadmap to link up those who need data with those who can provide it. The user survey and inventory also help identify data gaps -- where data does not exist to fill the needs. The inventory includes important access information, such as:

- which agency has the data
- who to contact
- how to access the data base (software/hardware needs)

Another major goal is to develop data quality "indicators" for each water resource data base accessed through NRIS. The "indicators" will provide data users with a means to determine if data is of sufficient quality for the task at hand.

The Water Information System staff is learning all the special instructions on how to use the water data bases. Presently, the staff provides searches for users who don't have the time to learn for themselves. Future plans include training others and providing technical assistance for those who need to be frequent users of the various data bases.

THE MONTANA GEOGRAPHIC INFORMATION SYSTEM (GIS)

In late 1987, NRIS began the development of the Montana Geographic Information System (GIS). GIS technology is widely recognized as the newest and most powerful tool yet to organize, manage, analyze and use natural resource information. At NRIS, the GIS promises to be the most valuable asset for program staff and users of natural resource data.

NRIS was able to achieve its goal to develop a GIS when it signed an Interagency Agreement with the Department of Health and Environmental Sciences (DHES). The Agreement allowed NRIS to install and implement a GIS to help DHES manage the huge amounts of data being collected for the U.S. EPA Superfund Program, particularly the sites included in the Clark Fork Superfund Cleanup Project. The GIS is used by the government personnel in charge of managing and monitoring the cleanup as well as by the contractors hired to work on the project.

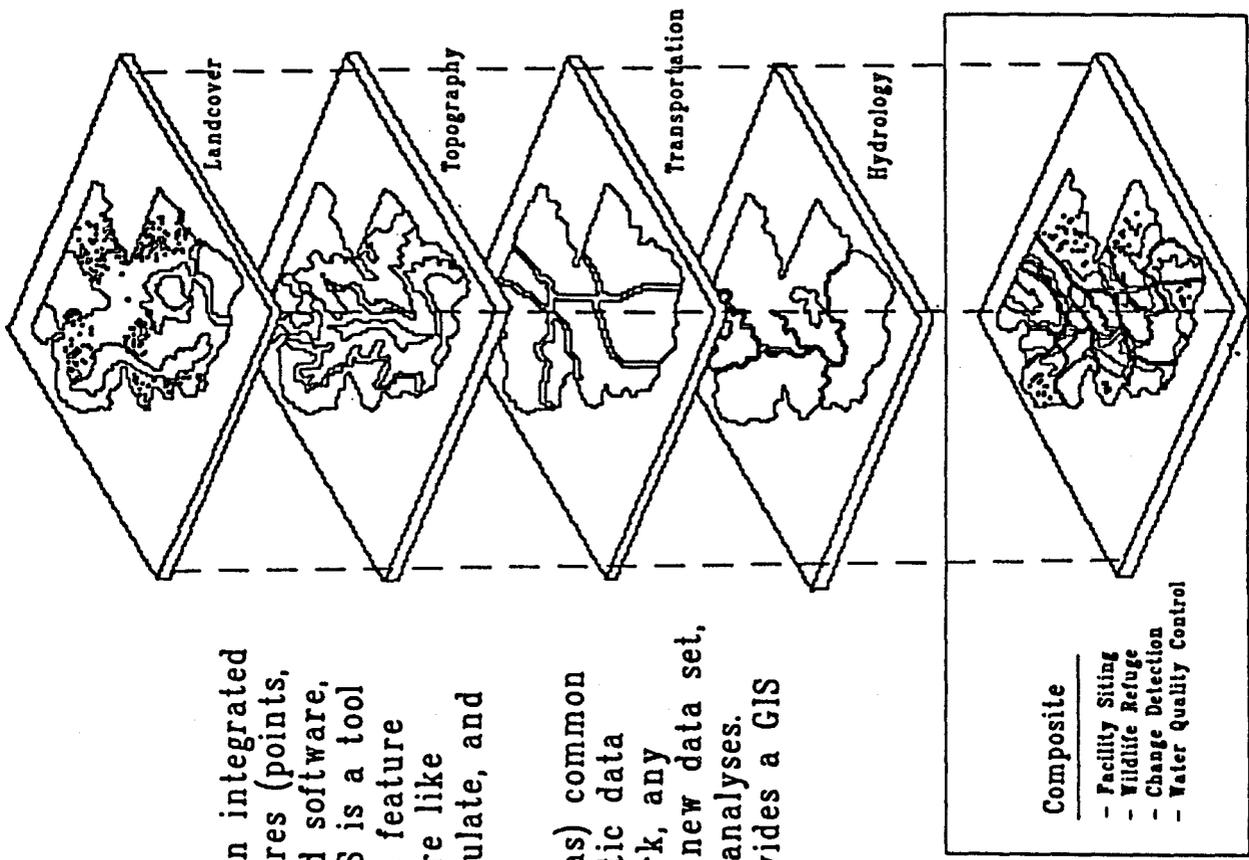
The Superfund GIS project, now in its second year, is expected to operate for up to five years. During that time, NRIS is expected to identify and engage other users of the GIS to support the costs of its continued operation and development. NRIS is developing a long-term implementation strategy as part of its commitment to DHES and EPA, hoping to serve other federal and state agencies within Montana in the future.

A related goal is to promote coordination among the agencies developing their own GIS's. The role of NRIS is to help ensure compatibility and data-sharing capability, thus helping agencies move forward with the new technology in the most efficient and cost-effective fashion. NRIS staff is working with a statewide GIS Subcommittee to achieve this goal and has made several informational presentations to interested parties.

WHAT IS A GEOGRAPHIC INFORMATION SYSTEM?

An automated Geographic Information System (GIS) is an integrated database containing information about geographic features (points, lines, and areas) as well as the computer hardware and software, and people to analyze those features. In essence, a GIS is a tool for bringing together, from varying sources, data about feature locations (geographic coordinate data) and what they are like (attribute data), to provide the ability to query, manipulate, and analyze those data.

In a GIS, the map data are separated into (and stored as) common thematic data layers. By storing information in thematic data layers registered to a common map coordinate framework, any combination of these layers may be overlaid to form a new data set, a map, or to be used to answer a question or perform analyses. This ability to manipulate the separate data layers provides a GIS with its analytical power.



MONTANA NATURAL HERITAGE PROGRAM (HERITAGE)

Generally, NRIS does not create data bases, but provides a ready means to access natural resource information wherever it is housed. Only when vital data are not collected elsewhere does NRIS store information or create data bases.

The Heritage Program is one of the key statewide data bases created and developed within the NRIS system. It is a computer-assisted inventory of rare or exemplary plants and animals in the state including threatened and endangered species.

The data base is a record of facts: the existence, numbers, location, condition, and status of species. This information, which is not otherwise accessible, is unbiased, comprehensive and accurate, and as such, serves the broadest possible range of users.

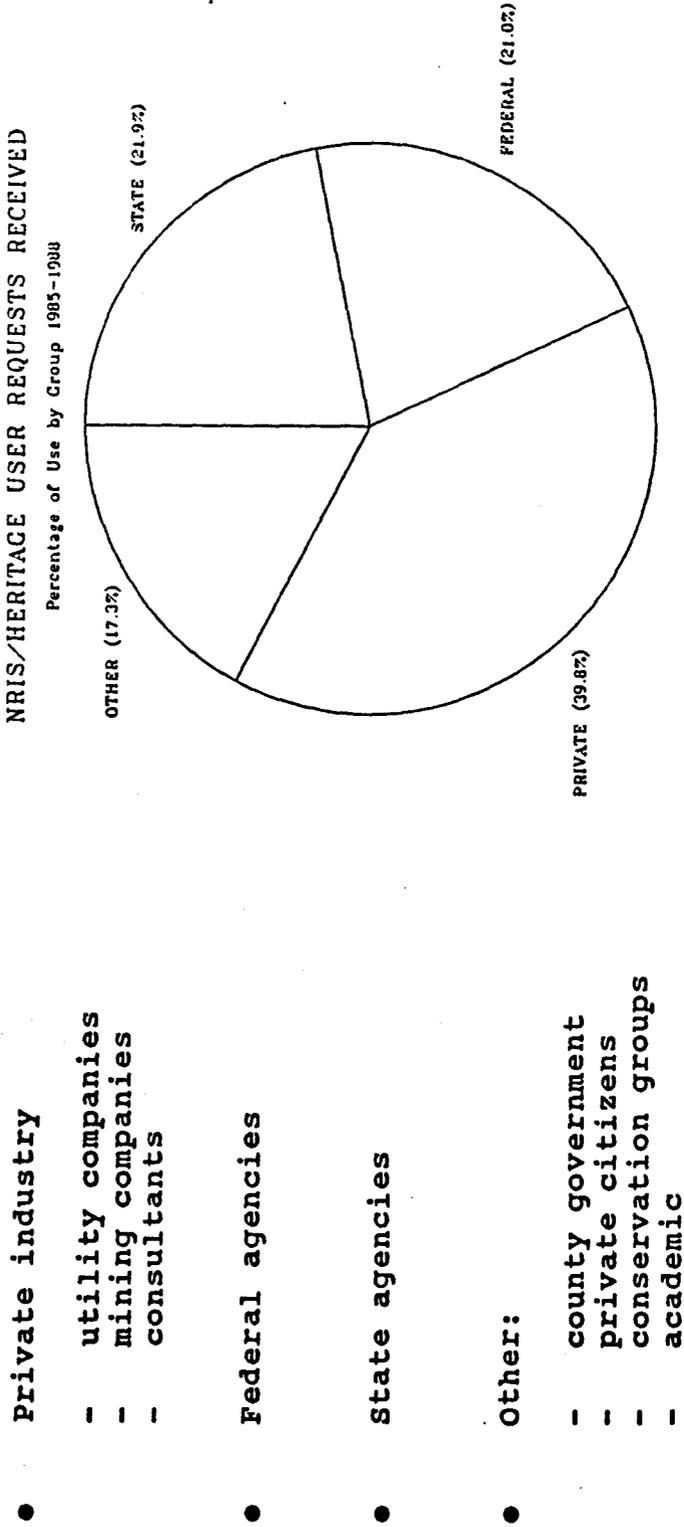
WHY ARE THE HERITAGE DATA BASES IMPORTANT?

With increases in mining activity, oil exploration, timber harvesting, and other resource extraction projects, companies, developers, and state agencies increasingly will need access to current, accurate, objective information about natural resources. Planners and decision-makers can learn the possible biological impacts of a project while in the planning stage - before significant commitments have been made, thus preventing potential delays, litigation, or expense.

With the Heritage Programs providing access to such information, economic development can occur even in environmentally sensitive areas without causing irreparable damage.

WHO DOES THE PROGRAM SERVE?

In three years of operation, the NRIS and Heritage programs have served a full spectrum of users, primarily in the resource extraction industries. NRIS and Heritage combined have responded to 854 data and information requests in approximately three years. The breakdown of users:



In particular, improved access to natural resource information has expedited permit processes and facilitated planning and resource development. NRIS also helps prevent duplication of effort and promotes information sharing among agencies and the private sector.

EXAMPLES OF NRIS/HERITAGE USERS

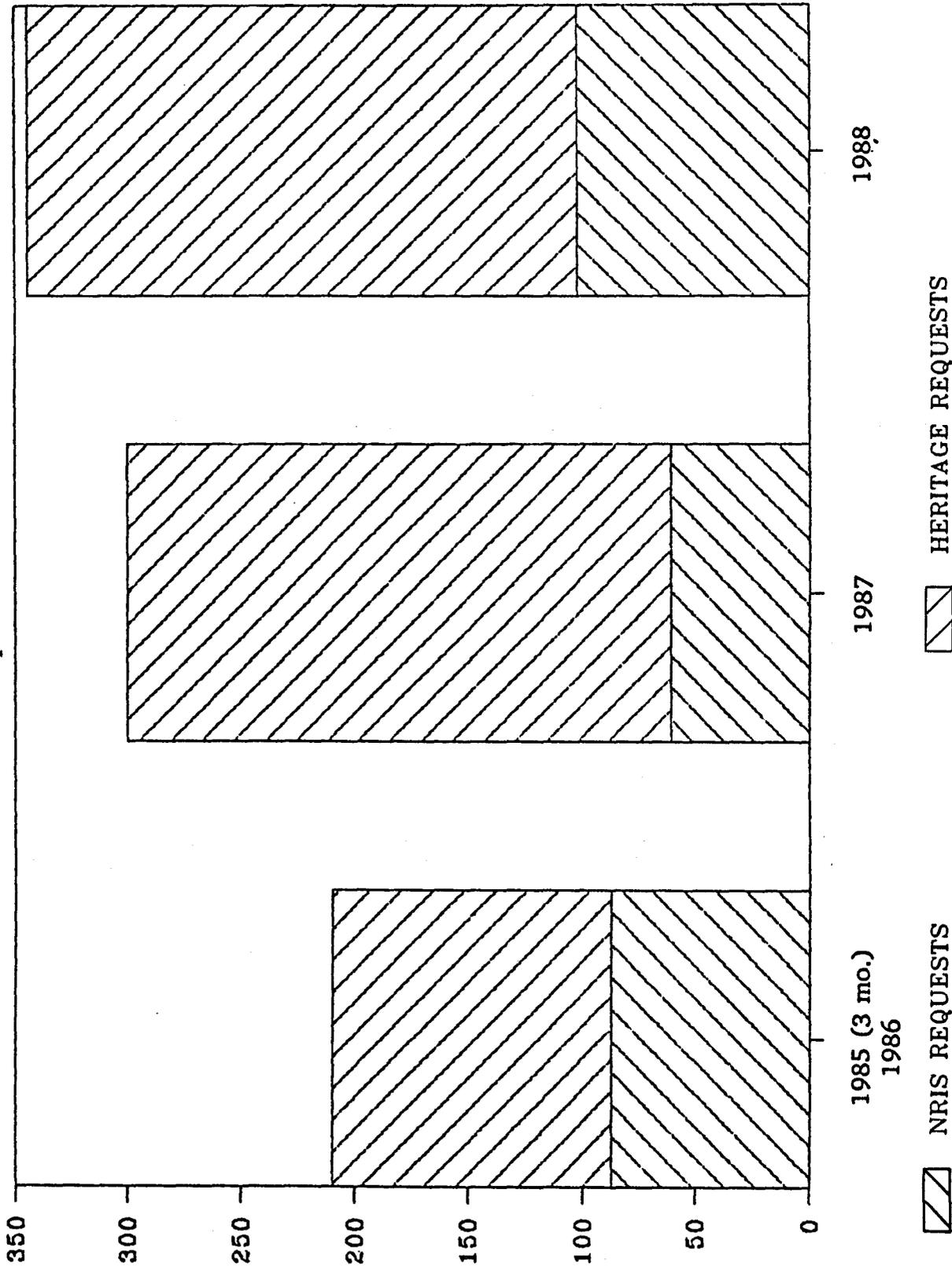
Readily available information provides an alternative to confrontation between development and conservation interests. A clearinghouse of sources of existing data also saves time. For example:

- A national telecommunications company planning a trans-Montana underground cable saved months of research time and considerable cash outlay when the Heritage Program discovered more than 100 listed or sensitive plant and animal species directly in the planned path of the cable.
- A large mining company revised its plan and avoided conflict over a government agency permit when the Heritage Program steered the company away from three occurrences of a rare plant near the proposed mine site operations.
- A utility company altered the route of a transmission line and saved thousands of dollars in pre-construction planning when the Heritage Program identified conflicts with nesting bald eagles, a federally protected species.
- A State agency needed an inventory of groundwater and surface water quality information in the areas of potential Superfund clean-up sites, and by accessing the Water Information System at NRIS, eliminated the need to start from scratch and quickly found out who had done monitoring in the past.
- A Federal agency, under a tight time schedule, turned to NRIS and information from the Montana Rivers Study to complete their analysis of planning areas with wild and scenic rivers.

NRIS/Heritage data searches are unique in the ability to search by geographic area as well as by subject. The NRIS/Heritage referral services link users with the best sources of information. Generally, requests can be handled within a week or sooner if needed.

NRIS / HERITAGE

Information Requests: 1985-1988



NRIS/HERITAGE FUNDING SUMMARY

The NRIS/Heritage Programs are statutorily authorized in 90-15-101 through 90-15-304, MCA. They are supported by a complex mix of funding sources. As shown below, the investment of state funds has generated significant matching funds from federal and private sources. In the 1990/91 Biennium, federal sources are expected to comprise almost 50% of the funding, particularly for GIS activities.

| Funding Sources | Coordinating Agency | Biennium 86-87 | Biennium 88-89 | Projected Biennium 90-91 | How Funds Were Used |
|---|---------------------|-------------------|---------------------|--------------------------|--|
| STATE | | | | | |
| 1. Resource Indemnity Trust Water Development RRD RDGP | DNRC | \$225,561 | \$177,970 97,712 | 244,766** 197,607 | NRIS/NHP Water Info Sys. NRIS/NHP/Water NHP NRIS/NHP |
| 2. DFWP License Fees | DFWP | 75,000 | 50,000 | 50,000 | NRIS/NHP |
| FEDERAL | | | | | |
| 3. EPA | DHES | | 314,145 | 405,000 | GIS Project |
| 4. BPA | DFWP | | 37,944 | 30,000 | MT Rivers Study |
| 5. OSM | DSL | 150,000 | 30,000 | 30,000 | NRIS/NHP |
| 6. USFWS | USFWS | 4,500 | 23,500 | | NHP |
| 7. USFS | USFS | 20,000 | 4,000 | | NHP |
| 8. BLM | BLM | | 1,200 | | NHP |
| PRIVATE | | | | | |
| 9. The Nature Conservancy | TNC | 75,140 | 22,637 | | NHP |
| SUBTOTAL | | | | | |
| Carry Forward | | \$565,415 | \$759,108 | \$957,373 | |
| TOTAL | | <u>\$565,415*</u> | <u>\$928,007</u> | <u>\$992,373</u> | |

* Of this total, only \$396,516 was expended in the Biennium since the programs were in a startup phase; consequently, the balance of \$168,899 was carried forward to FY 88/89; thus, funds available for the 88-89 biennium were \$928,007.

** This total is for three projects: \$99,806, \$99,450, \$45,510

1990/91 Biennium Funding Notes (based on information available as of January, 1989):

A. GRANT SOURCES

1. Renewable Resource Development Grants Program (RRD)

NRIS submitted three proposals in this year's grants cycle, all highly ranked by DNRC in its report to the Legislature:

- Proposal #1, ranked third, for \$99,806, provides core funding for NRIS operations and staff, including base support for water information system staff.
- Proposal #2, ranked fourth, for \$45,510, provides funds to implement the water information system as a statewide service, including: developing a network to provide remote and on-line access, cross-training for state personnel and frequent users of the water data bases, coordinating statewide efforts in water data collection;
- Proposal #3, ranked sixth, for \$99,450, provides core funding for the Heritage program, approximately 34% of staff and operating costs at 88/89 levels.

Currently, approximately \$1.1 million is projected to be available for the RRD program, with the top 21 ranked projects, including the NRIS/Heritage proposals, being fully funded.

Reclamation and Development Grants Program (RDGP)

NRIS/Heritage submitted one proposal to this program, which is ranked 10th by DNRC in its report to the Legislature:

- Proposal, for \$197,607, provides core funding for the Heritage Program, approximately 66% of staff and operating costs at 88/89 levels.

Currently, approximately \$2.2 million is projected for the RDGP program, with the top nine ranked projects being fully funded. The tenth project listed, NRIS/Heritage, would receive only partial funding.

B. OTHER SOURCES (Numbers refer to funding chart)

2. The Department of Fish, Wildlife and Parks (DFWP) has supported the program since its inception through the allocation of license fees. DFWP has included funds for NRIS/Heritage in their 1990/91 budget request.
3. The Department of Health and Environmental Sciences (DHES) has contracted with NRIS to develop a Geographic Information System (GIS) in support of the Department's work with the U.S. Environmental Protection Agency's Clark Fork Superfund Cleanup Project. The project, started in October 1987, is funded through September 1989 and is expected to continue through at least September 1991.
4. The DFWP has contracted with NRIS to manage the Montana Rivers Study, a data base developed on behalf of the Bonneville Power Administration (BPA). The project was started in 1985, with NRIS becoming increasingly involved. Annual funding is expected to remain at \$15,000 through federal Fiscal Years 1990 and 1991.
5. The Department of State Lands (DSL) has supported NRIS/Heritage with funds from the federal Office of Surface Mining (OSM). These funds are used primarily for base Heritage staff and operational costs. The allocation is expected to remain at \$15,000 per year for federal Fiscal Years 1990 and 1991.
- 6-8. The U.S. Fish and Wildlife Service (USFWS), the U.S. Forest Service (USFS) and the federal Bureau of Land Management (BLM) have supported the Heritage Program through various grant programs. The grants are for special projects to collect data on threatened and endangered species. The outlook for federal Fiscal Years 1990 and 1991 is unknown at this time.
9. The Nature Conservancy (TNC), an international, non-profit land conservation organization, provided private sector seed money to initiate the Heritage Program in 1985 and continues to support the NRIS/Heritage program with funds and in-kind support. The Montana Heritage Program data is linked to an international data base covering 49 states and 14 foreign countries.



STAN STEPHENS
GOVERNOR

STATE OF MONTANA
DEPARTMENT OF AGRICULTURE

OFFICE OF THE DIRECTOR
AGRICULTURE/LIVESTOCK BLDG.
CAPITOL STATION
HELENA, MONTANA 59620-0201

EXHIBIT 4
DATE 1-31-89
HB Renewable Resource
TELEPHONE: Brants
AREA CODE 406
444-3144

FAX 406-444-5409

EVERETT M. SNORTLAND
DIRECTOR

January 30, 1989

MEMORANDUM

TO: Representative Mary Ellen Connelly
Chairman, Long Range Planning Committee

FR: E. M. Snortland *EM Snortland*
Director

RE: Department of Agriculture Letter in Support of NRIS Program

The Montana Department of Agriculture supports the continued effort of the NRIS program to provide the public and private sector with pertinent information and direction with regards to natural resource issues.

The vast resources which exist in our state serve as opportunities for both employment and recreation. Finding an acceptable balance between development and preservation can be accomplished with qualified decision-making tools from which policies can be soundly based. The NRIS program has, in the past several years, undertaken the difficult task of gathering, cataloging and summarizing the enormous amount of raw data which has been generated on natural resources within Montana. A centralized source of environmental data significantly streamlines the tedious process which normally accompanies data acquisition, while expanding the library of information available for project analysis.

The Department of Agriculture is interested in NRIS's capabilities in the field of automated map compilation and analysis: Geographic Information Systems (GIS). This service seems to be an effective means by which information can be shared between government agencies increasing technical abilities in such areas as; monitoring and predicting major insect and weed infestations, monitoring the presence and type of plant diseases, monitoring certain pesticide use patterns, etc. By limiting the initial cost investment to one entity, that savings may be able to be applied to other needed programs.

Representative Mary Ellen Connelly
Page 2
January 30, 1989

The ultimate determinant of success or failure of service programs is the quality and willingness of the staff to accommodate the needs of its users. The staff at NRIS are professionals and have been instrumental in bringing state-of-the-art technology into the hands of personnel throughout state government. These capabilities will become more useful and important as we move forward into even more complex and controversial areas of resource management. We wish them continued success in their effort.

JUL 11 1988



DAMES & MOORE A PROFESSIONAL LIMITED PARTNERSHIP

15 OLD TOWN SQUARE, FORT COLLINS, CO 80521 (303) 221-1436

EXHIBIT 5
DATE 1-31-89
HE Remuel Besora
Aranta

July 5, 1988

Mr. David Genter
Coordinator
Montana Natural Heritage Program
1515 East Sixth Avenue
Helena, MT 59620

Dear David:

Now that we have finished the field surveys for rare plants and animals along US Sprint's proposed fiber optic cable route in Montana seems an appropriate time to thank you for working closely with me during the last six months.

As you know, Dames & Moore undertook the challenging task of completing a comprehensive environmental assessment of the proposed cable route between Spokane, Washington and Fargo, North Dakota within a six-month time frame. This required us to rely heavily on existing data and expertise available within State agencies, both to define the biological resources of concern, and to implement the appropriate field surveys to minimize the potential for adverse impacts on plant and animal species and ecological communities of special concern. The assistance of the Heritage Program in sharing data and completing field surveys was invaluable in helping us complete our work, allowing US Sprint to begin construction of the fiber optic system close to its ambitious target date.

Because the proposed route traversed the entire width of Montana, the availability of an up-to-date, comprehensive, statewide data base was critical. The collection of data available from the Heritage Program saved us many weeks of work in State libraries and museums and increased the amount of time we were able to spend evaluating, and developing appropriate measures to reduce impacts. Overall, we were able to address a wider scope of issues and to afford a higher level of protection to significant biological resources than would have been possible without the Heritage Program's data base.

In addition to data, you and your staff provided extremely valuable advice to Dames & Moore and our local subcontractors and completed several field surveys on our behalf. In all cases, I found your staff to be professional, competent, and helpful--even when we added the pressures of our very tight time schedules to your normal workload.



I understand that the Montana Natural Heritage Program faces uncertain funding levels in upcoming State budgets. In my view, reducing funding for the program would be a mistake. The Heritage Program provides a unique and valuable service that can (and should) be used by private parties such as Dames & Moore, federal agencies, and other state agencies in furthering their programs. Most importantly, the Heritage Program improves the protection and management of important elements of Montana's unique biological heritage.

Thank you once again for your efforts. I hope to work with you again in the future.

Sincerely,
DAMES & MOORE

Thomas G. Shoemaker
Senior Ecologist

January 27, 1989

Mr. Jon C. Sesso
Director Natural Resource
Information System
Montana State Library
Helena, Mt 59601

Re: Natural Resource Information System Funding

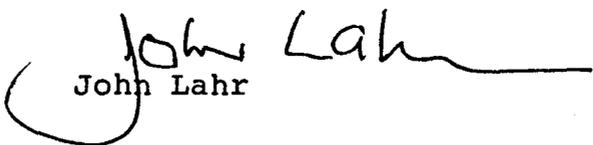
Dear Mr. Sesso,

We support funding of The Natural Resource Information System (NRIS) by The Montana Legislature's Long Range Planning Subcommittee.

Personnel from The Montana Power Company's Environmental Department have used the NRIS system, and have reported to me that the program has been of significant value in researching natural resource data. Some examples include:

1. Stream vegetation data along the Madison and Missouri Rivers;
2. Fisheries data - from Missouri River headwaters to the Fort Peck reservoir;
3. Species data pertaining to the Laurel-Bridger 100 kV transmission line corridor;
4. Species data pertaining to the Roundup transmission line corridor;
5. Species and natural features data for the vicinity of Black Eagle, Cochrane, and Morony Dams on the Missouri River near Great Falls, Montana;
6. Species data near Ennis Lake, related to lake level assessment;
7. Biological information to use in preparing environmental assessments of the Madison Dam, Georgetown Lake, and Morony Dam

In short, I would say the system works, it has proven itself capable of providing the research efficiencies expected when it was first funded, I believe, by the sub-committee in the 1985 session.


John Lahr

OCT 17 1988

ARGONNE NATIONAL LABORATORY

9700 SOUTH CASS AVENUE, ARGONNE, ILLINOIS 60439

PHONE (312) 972-7698

October 14, 1988

David Genter, Coordinator
Montana Natural Heritage Program
Montana State Library Building
1515 East Sixth Avenue
Helena, Montana 59620

Dear Mr. Genter:

On behalf of the Argonne National Laboratory Environmental Assessment Team, I would like to express my appreciation of the Heritage Program services, and to your staff for their assistance during our recent visit to Montana. We were very impressed with the dedication and professionalism displayed by your staff, and greatly appreciated the prompt and thorough response to our informational needs.

Special thanks are extended to Margaret Zook, who expediently handled our request for special habitat, and endangered and threatened species inventories for eight distinct locations throughout the state. The detailed information we received will add important perspectives to our reports.

This is one of several types of site-specific information our teams obtain when they travel to different locations. Of the states visited to date, Montana's natural resources data bases have been the most efficient and effective systems we've encountered. We were impressed with the accessibility and quality of information we received. Programs like yours are an invaluable tool for organizations like ours. I wish the Heritage Program continued success!

Thanks once again.

Sincerely,



Tamara L. Reeme

Office of Environmental Management and Surveys
Energy and Environmental Systems Division



State of Montana
Office of the Governor
Helena, Montana 59620
406-444-3111

Copy

TED SCHWINDEN
GOVERNOR

July 28, 1988

Theresa Blazicevich
Water Development Bureau
Department of Natural
Resources and Conservation
1520 East Sixth Avenue
Helena, Montana 59620-2301

Dear Ms. Blazicevich:

I appreciate the opportunity to comment on the Montana State Library grant applications for the NRIS and Heritage program. As a participant in the first NRIS Advisory Committee that recommended the programs to the 1983 Legislature, I have tried to stay informed on the programs and their progress.

During the first few years of the programs, considerable effort has necessarily been devoted to organization and development of widely scattered data systems. Much progress has been made and various user groups are now becoming aware of the system and how it can be used.

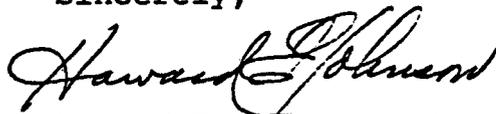
As a participant of several interagency committees I have often heard favorable comments about each of these programs. Industry representatives have indicated that the system is especially valuable because it provides a single, coordinated information source. They have expressed confidence in this program and they urge a continuation of this state effort.

I am especially interested in the development of the Montana Water Information System (MWIS). The state has a number of water programs underway that need the services offered by the MWIS. It is a certainty that water resource management and MWIS will be increasingly important in the future.

Theresa Blazicevich
July 28, 1988
Page 2

The programs are now reaching a stage of maximum usefulness to all user groups. It is essential that all potential user groups are made aware of the system and trained to use these services. I am confident that the NRIS and the Heritage program will become ever more valuable and cost-effective as the programs gain maturity.

Sincerely,



Howard E. Johnson, Coordinator
Clark Fork River Basin Project

HJ/rb



United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA 22092



In Reply Refer To:
WGS-Mail Stop 421

August 31, 1988

Mr. Jim Stimson
Montana State Library
1515 East 6th Avenue
Helena, Montana 59620

Dear Jim:

Your participation at the U.S. Geological Survey's National Water Data Exchange Conference, June 21-23, 1988, is appreciated. Specifically, your presentation describing the Montana Natural Resources Information System (NRIS) program particularly in regard to water resources was very informative. I commend you and your colleagues in this effort. The NRIS Water Information System definitely enhances the on-going cooperative efforts among federal and state agencies to share and disseminate water resources information. The NRIS certainly facilitates the handling and exchange of much needed water-data throughout the State. Your endeavors to identify the numerous State, Federal, and Academic organizations that are collecting and maintaining water-data is vital to establishing a linkage between those organizations that require and use water-data with those organizations that collect it.

As you know, the National Water Data Exchange Program and U.S. Geological Survey's District Office in Helena have worked closely with Larry Thompson during the inception of the NRIS Water Information System and we continue to support the objectives of the NRIS.

I commend you and your colleagues in developing the NWIS and trust it will continue to provide the focal point in the state of Montana for numerous user groups of water-data.

Sincerely yours,

Owen O. Williams
Deputy Program Manager
National Water Data Exchange

Timberlands
P. O. Box 8
Milltown, Montana 59851
406 258-5511



Mr. Dave Genter
Montana Natural Heritage Program
State Library Building
1515 E. 6th Avenue
Helena, MT 59620

February 4, 1987

Dear Dave:

Thank you for making me aware of the hearing for funding the Montana Natural Heritage Program. Since it is unlikely anyone from Champion will be able to attend the hearing, I hope this letter will be of some help.

The heritage program provides a service to large landowners, such as Champion, in an area not associated as a concern for these landowners. This is in the area of endangered and rare species and protection to unique natural areas. Our land managers are all professional foresters with strong backgrounds in the natural sciences. They, perhaps more than many others, do not want to see rare plants, animals and unique areas destroyed. This is also the feeling of Champion. After all, our company is made up of these people.

The database now in place helps us to identify these habitats and areas so we can manage our lands, not only more effectively, but also in a way that helps protect this resource we are often said to destroy. It is a tool helping our managers to identify environmental issues we may not have been aware of. The fact this database is maintained by the state (a neutral party) also helps improve its credibility.

Sharing this type of data and a willingness to serve as a third party in assisting large and small landowners in land trades is a service which is appreciated by Champion. It would be the loss of an important management tool if the service cannot be funded. At a time when the public is more aware of environmental concerns, managers of our resources need this type of service.

Very truly yours,

A handwritten signature in cursive script that reads 'James R. Runyan /mew'.

James R. Runyan
Planning Manager

mrw/RUNYAN

~~Park One Building~~
~~2010 6th Avenue North~~
Post Office Box 789
Billings, Montana 59103-0789
(406) 252-5208

FEB 04 1987



MONTCO

February 3, 1987

Mr. David Genter, Coordinator
Montana Natural Heritage Program
1515 East 6th Avenue
Helena, Montana 59620

Dear Mr. Genter:

The purpose of the Montana Natural Heritage Program established in 1985 was to provide a comprehensive and readily available system for the acquisition, storage, and retrieval of natural resource information for the entire state. The program has provided a vehicle for obtaining natural resource data which would have otherwise remained obscure and costly to collect.

During the period 1978-1984, Montco, in its mine permitting and EIS process, expended millions of dollars in the collection of environmental data and assessment of critical areas within the 16,000-acre project area. A program such as the Montana Natural Heritage Program would have provided a much more cost-effective and timely method of data accumulation and assessment of the natural resources within our area of concern.

The use of such a program would also have greatly facilitated the permitting process for Montco while at the same time providing the necessary environmental protection. This program is truly a cost-effective and useful program.

Montco looks forward to utilizing the valuable natural resource data the program provides as well as working with your staff in future development activities.

Sincerely,

Douglas A. Day
Lands Manager

DAD/hm1

ECON

ECOLOGICAL CONSULTING SERVICE

ECON INC.

130 Neill Ave.
Helena, Montana 59601
Telephone
406/442-4650

February 7, 1987

Mr. David Genter, Coordinator
Montana Natural Heritage Program
State Library
1515 East 6th Avenue
Helena, Montana 59620

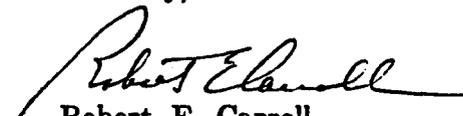
Dear Mr. Genter:

This letter expresses our support for the Montana Natural Heritage Program. This program is valuable for a number of reasons. First, the nature of the data base makes biological information available in condensed, reliable format, which saves everyone time (and money). Second, the data are not readily available from other Montana sources. Third, the readily accessible nature of the Heritage Program is cost effective, especially when the data are needed on a geographical, site-specific basis.

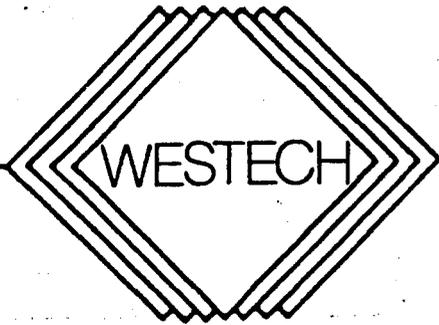
Millions upon millions of dollars have been spent by the private and public sectors in Montana over the last several decades on research studies. Certainly studies have duplicated each other, causing considerable waste, simply because no central data base existed. I anticipate that the Montana Natural Heritage Program will continue to be a very valuable resource to private business firms such as ours, and also to various agencies.

I hope that the data base will continue to be supported by state government. As long as both public and private sectors must comply with the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA), not to mention several dozen other regulatory acts, the Heritage Program will save a great deal of money for everyone involved among the many user groups.

Sincerely,


Robert E. Carroll
President

REC/lh



WESTECH

Western Technology and Engineering Inc.

P. O. BOX 6045
3005 AIRPORT ROAD
HELENA, MT 59604
(406) 442-0950

February 5, 1987

Mr. David Genter
Montana Natural Heritage Program
Montana State Library Building
1515 E. Sixth Avenue
Helena, MT 59620

Dear Mr. Genter:

Western Technology and Engineering, Inc. (WESTECH) is a small, privately owned environmental consulting firm located in Helena. Our principal clients are members of the Montana mining industry. We conduct vegetation, soils, wildlife, and other environmental inventories, prepare reclamation plans and contribute to impact analyses prepared for both the Montana and National Environmental Policy Acts.

We have used the resources of the Montana Natural Heritage Program since its inception in autumn, 1985. We have found it to be of considerable value to ourselves and our clients.

I understand that government agencies are the primary beneficiaries of your program, but I think it is important to emphasize its value to private business as well. As government spending is reduced, the responsibility to provide biological resource data and subsequent environmental evaluations will rest more heavily on the private sector. We have seen this trend already, through the evolution of "third party" environmental impact statements. In addition, the Montana mining industry is gradually rebounding from its economic doldrums. As this recovery accelerates, our staff (and those of mining companies) will increase its use of the Natural Heritage Program. Therefore, it is appropriate that Resource Indemnity Trust Funds financially sponsor your program.

Mr. David Genter
Montana Natural Heritage Program
page 2
February 5, 1987

As with any new business, a mining company's primary concern is its initial investment, i.e. that money spent to obtain a permit and develop the mine before a financial return is realized. Environmental data collection is a substantial "up-front" cost, and may discourage some companies to develop. Since it is certainly not desirable to weaken environmental standards for development, any program which helps provide the needed information in a cost-effective manner is a welcome addition to responsible development. While the Natural Heritage Program was not conceived as a "build Montana" project, it certainly has the potential to contribute to a better economic climate while helping to maintain the environmental quality cherished by Montanans.

Therefore, I would like to voice my support for your program, both as the owner of a small business and as a professional biologist. Please let me know if I can help generate support for what I consider to be an excellent and justified program.

Sincerely,

Dean Culwell

Dean Culwell

s

JUL 20 1988

DEPARTMENT OF STATE LANDS

TED SCHWINDEN, GOVERNOR

CAPITOL STATION

STATE OF MONTANA

(406) 444-2074

1625 ELEVENTH AVENUE
HELENA, MONTANA 59620

July 18, 1988

Mr. David Genter, Coordinator
Montana Natural Heritage Program
Montana State Library
Helena, Montana 59620

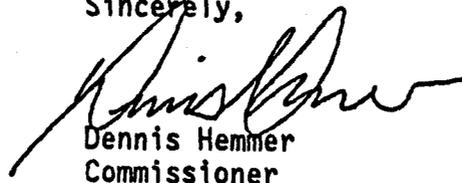
Dear Mr. Genter:

I am in full support of the Natural Heritage Program. I feel that the program is now in a position to realize the potential that we predicted in the effort to initially put the program in place.

One of my goals has been to expedite the environmental review process mandated under the Montana Environmental Policy Act. In order to rapidly yet completely comply with MEPA, the agencies need a comprehensive system affording access to existing information. That is the role of the Natural Resource Information System and the Heritage Program. With increase mining activity, it becomes more critical that my agency have access to your systems. Likewise the information contained in the systems is important to our timber program and the management of all the state owned lands.

If Montana's future lies in developing its natural resources while protecting the environment, the importance of Heritage and NRIS will continue to increase. I feel that investing our Resource Indemnity Trust monies in the systems makes good business sense. If we hope to increase RIT collections, we should facilitate the development of those industries contributing.

Sincerely,



Dennis Hemmer
Commissioner

Renewable Resource Dev

DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES



TED SCHWINDEN, GOVERNOR

COGSWELL BUILDING

STATE OF MONTANA

HELENA, MONTANA 59620

January 31, 1989

TESTIMONY OF THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

IN SUPPORT OF THE NATURAL RESOURCE INFORMATION SYSTEM

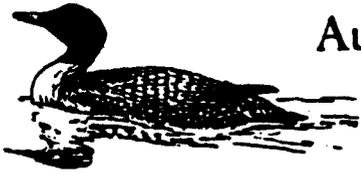
The Department of Health & Environmental Sciences would like to go on record in support of the Natural Resource Information System/Heritage Program and its pursuit of funds through the Renewable Resource Development Grant Program.

Our support is based on the fact that the State Library and the Department of Health & Environmental Sciences have entered into an interagency agreement to develop a Geographic Information System (GIS) on behalf of the State of Montana. The department, through a cooperative agreement with the U.S. Environmental Protection Agency, has been able to invest considerable funds in this Geographic Information System development effort. In the short term, the system serves the Clark Fork Superfund cleanup effort. In the long term, the system can be an extremely valuable tool in handling the compilation of all natural resource information in the state, which is a primary goal of the Renewable Resource Development Grant program. It was our belief that choosing the Natural Resource Information System program to develop and operate the Geographic Information System was in the best interests of Montana in terms of bringing this advanced capability on line to serve all natural resource agencies. The existence of and long-term operation of the Natural Resource Information System is crucial to the development of the Geographic Information System project.

In addition, the Department of Health and Environmental Sciences generates and manages a great amount of natural resource information. Department personnel have been working with Montana State Library staff to ensure that this information is properly indexed in the Natural Resource Information System. We believe the continued success of the indexing projects is directly related to increasing efficiency in natural resource information management in Montana.

For these reasons, we support the continued operation of the Natural Resource Information System/Heritage program.

Montana
Audubon Legislative Fund



Testimony RRD Grants 3,4 & 5
Long Range Planning Committee
January 31, 1989

Madam Chairman and Members of the Committee,

My name is Janet Ellis and I'm here today representing the Montana Audubon Legislative Fund. The Audubon Fund is composed of nine Chapters of the National Audubon Society and has over 2500 members located throughout the state.

The Audubon Fund would like to express its support for the State Library's Natural Resource Information System and Natural Heritage System (Renewable Resource Development Grants 3,4 & 5).

Development and protection of Montana's natural resources - including minerals, forests, water, agriculture and wildlife - requires planning. The NRIS-Heritage system helps the developer develop and the planner plan - at a savings to both. It's a planning tool that will allow Montana to continue to grow without losing the best of what we have. The quality information gathered by the system is outstanding, and the method used to store it is efficient, economical and useful - to business, industry, government agencies and citizens groups.

This is a state program with a broad base of support from many Montanans. Please support funding for this important program.

THE NATURE
CONSERVANCY **MONTANA**
CENTENNIAL PROJECT
1985-1989

EXHIBIT. 8
DATE 1-31-89
HB Renewable Resources
Mont

TESTIMONY PRESENTED IN SUPPORT
OF THE MONTANA NATURAL HERITAGE PROGRAM/
NATURAL RESOURCE INFORMATION SYSTEM

MONTANA CHAPTER, THE NATURE CONSERVANCY
Donna J. Loop

Before the Long Range Planning Subcommittee
Montana Legislature
January 31, 1989

The Montana Chapter of The Nature Conservancy fully supports the Natural Resource Information System/Natural Heritage Program (NRIS/Heritage).

The Montana Natural Heritage Program is a computer-assisted inventory of biological information. The data base is a record of facts: the existence, numbers, location, condition, and status of species. This information, which is not otherwise accessible, is unbiased, comprehensive and accurate. As such, it serves the broadest range of users.

The Nature Conservancy invented Natural Heritage Programs. There are currently 49 Heritage programs located throughout the United States. Heritage programs have recently been established in Latin American countries, where they are called Conservation Data Centers. Heritage programs have proven themselves to be invaluable to industry, public agencies and private organizations in that they are the most reliable, comprehensive source of biological information available.

The Nature Conservancy respectfully requests that the Subcommittee recommend funding for NRIS/Heritage from the Renewable Resources Development grants program at the levels proposed by the Department of Natural Resources and Conservation and the Governor's office. Thank you for your consideration.

EXHIBIT 9
DATE 1-31-89
HB Renewable Resources
Grants

January 29, 1989

Representative Mary Ellen Connelly
Chairwoman, Joint Subcommittee on Long Range Planning
Montana House of Representatives
State Capitol
Helena, MT 59620

Dear Representative Connelly:

My husband and I would like to express our support of the Montana Natural Resource Information System/Natural Heritage Program (NRIS/Heritage), and we hope that the Subcommittee will provide full funding from the Renewable Resources Development/Reclamation and Development grants programs.

We have been ranchers in the Blackfoot Valley since 1965 and care deeply about the land, its use, and the future of our state. We have watched with alarm and sadness the polarity of opinion that usually surrounds land use and conservation issues, and the bitterness which often divides neighbors across the state when new issues arise. Intensity of feeling prohibits clear-sighted, long-term consideration of these issues, and there is very little dialogue between opposing forces.

With relief, we welcome an unbiased, comprehensive inventory of natural resources across the state, a computer-assisted NRIS/Heritage program that is being used by a broad range of users, both public and private. Industry, business and citizens groups have joined together in support of this valuable, accurate collection of data, which helps to prevent potential litigation, delays or expense.

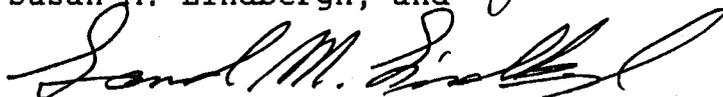
We join the Department of Natural Resources and Conservation in recommending full funding of the NRIS/Heritage program.

Thank you for considering our views. Enclosed are copies of this letter to share with other members of your subcommittee.

Sincerely,



Susan M. Lindbergh, and



Land M. Lindbergh

Star Route Box 337
Greenough, Montana 59836

EXHIBIT 10
DATE 1-31-89
RE: Renewable
Resource
Grants

THE GLACIER INSTITUTE

*The
Field Study
Experience
At
Glacier National Park*

WHAT PROGRAMS ARE OFFERED AT THE BIG CREEK CENTER?

- ...multi-day residential experience for 5th and 6th grade students; other age groups can be accommodated also.
- ...one- to two-week summer programs for students, K - 12, special needs groups, and adult and senior citizen groups.
- ...single day use for any group wishing a beautiful outdoor setting.
- ...teacher training classes in science, curriculum development, and environmental education. College credit can be arranged upon request.
- ...facilities for meetings and conferences concerned with education, resource management, and other related topics.

WHAT MAKES THE BIG CREEK CENTER UNIQUE?

- ...a beautiful outdoor setting convenient to Glacier Park, Flathead National Forest, a Wild and Scenic River segment, candidate Wilderness Areas, and Canada.
- ...a resident Director and certified teacher with an environmental education and curriculum development background to facilitate your program.
- ...activity packets including pre-, on-site, and post-course activities designed to meet your individual needs.
- ...on-site training for teachers or other facilitators.

WHAT OUTDOOR TOPICS CAN BE STUDIED AT THE BIG CREEK CENTER?

| | |
|---------------------|------------------|
| Geology | Weather |
| Plant Communities | Pond Environment |
| Stream Environment | Wildlife |
| Astronomy | Map and Compass |
| Resource Management | Ecology |

WHAT IS THE COST?

For schools and non-profit organizations:

- | | |
|--|--------------|
| A. 2-1/2 days, full use of facilities and staff - includes six meals | \$30/student |
| B. 2-1/2 days, full use of facilities and staff - provide your own food | 20/student |
| C. 1 day group visit with full use of cookhouse, meeting rooms, classroom, and staff - provide your own food | 75/day |
| D. 1 day visit with limited use of facilities, no staff - provide your own food | 50/day |

FOR FURTHER INFORMATION CALL:

Oct. 1, 1988-Nov. 30, 1988--Tues. & Thurs. 9:00 a.m.-5:00 p.m. 406-752-5222 Ext. 29
Mon., Wed., & Fri. 406-755-6078 Big Creek Center Ext. 3
Dec. 1, 1988-Mar. 31, 1989--406-755-3494
After April 1, 1989 --406-755-6078 Big Creek Center Ext. 333

SUMMER PROGRAM: JUNE-JULY-AUGUST

P.O. Box 527
West Glacier, Montana 59936
(406) 888-5215



EXHIBIT 10 A

DATE 1-31-89

HB Renewable Resource Acts

ADMINISTRATIVE OFFICE

P.O. Box 1457
Kalispell, Montana 59903
(406) 752-5222

BIG CREEK OUTDOOR EDUCATION CENTER



WHAT IS THE GLACIER INSTITUTE?

The Glacier Institute, an independent, non-profit, educational organization, was established in 1983 to provide high-quality outdoor educational opportunities within the Northern Continental Divide Ecosystem. Glacier National Park and surrounding lands in both the United States and Canada are the settings for a wide variety of workshops, conferences and field courses for all ages.

WHAT IS THE BIG CREEK OUTDOOR EDUCATION CENTER?

In 1988 the Glacier Institute signed a Special Use Permit with the Flathead National Forest for the use of facilities at the former Big Creek Ranger Station. The Big Creek Center is located on the western boundary of Glacier National Park, 20 miles north of Columbia Falls, on the North Fork of the Flathead River.

With the addition of the Big Creek Center, the Glacier Institute has expanded its season; developed programs for school-age children, teachers, senior citizen, handicapped and special education groups; and can also provide facilities and programs for other interested groups.

WHAT DO THE BIG CREEK CENTER FACILITIES INCLUDE?

- ...two bunkhouses with a sleeping capacity of 38, equipped with hot and cold running water, showers and flush toilets.
- ...a meeting hall combining kitchen, dining area and main classroom.
- ...a large multipurpose meeting room/classroom.

MRA Steering Committee Contacts (11-27-88)

EXHIBIT 11
DATE 1-31-89
HB Resource
Pratts

Agencies/Organizations

USDI Bureau of Land Management

Montana State Office
Butte District
Lewistown District
Miles City District

USDA Forest Service, Northern Region

Range, Air, Watershed and Ecology
Wildlife and Fisheries

USDA Forest Service

Beaverhead National Forest
Bitterroot National Forest
Custer National Forest
Deerlodge National Forest
Flathead National Forest
Gallatin National Forest
Helena National Forest
Kootenai National Forest
Lewis and Clark National Forest
Lolo National Forest

USDI Bureau of Indian Affairs

State Office
Blackfeet Indian Agency
Crow Indian Agency
Fort Belknap Indian Agency
Fort Peck Indian Agency
Northern Cheyenne Indian Agency
Rocky Boys Indian Agency

USDI Fish and Wildlife Service

USDI National Park Service

USDA Soil Conservation Service

US Environmental Protection Agency

MT Dept. of Fish, Wildlife and Parks

The Nature Conservancy

Champion Timberlands

University of Montana

USDA Forest Service Intermountain Research Station

Montana State University

MT Association of State Grazing Districts*

Western Energy Company*

MT Dept. of State Lands, Forestry Division*

US Bureau of Reclamation*

Contact Persons (Alternative Contacts)

Dan Hinckley
Rick Schwabel (Larry Rau)
Larry Eichhorn (Duane Ferdinand)
Leon Pack

Wendel Hann (Angela Evenden & Ron Haag)
Don Bartschi

Dan Pence (Daniel Svoboda)
Robert Bigler
Jim Fishburn (John Logan)
Thomas Griffith (John Joy)
Dave Bunnell (Robert Hensler)
Rich Inman (Richard Kracht)
John Padden
Charles Brooks (Lou Kuennen)
Wayne Phillips (Jerry Reese)
Jack Losensky (Charles Spoon)

Bob Swick (Greg Smithman)
(Bill Draght)
(Alan Hanley)
(Dave Smith)
(Courtney Smith)

(Mark Swinney)
Wayne Brewster (Dennis Christopherson)
Dan Huff (Don Despain - YNP, Cliff Martinka - GNP)

Ron Batchelor
John Peters
Bob Martinka (Norm Peterson)
Bob Kiesling (Andrew Kratz & McAllisters)
John Mandzak
Bob Pfister & Paul Hansen
Warren Clary (Bill Platts)
Clayton Marlow
Kim Enkerud
Bruce Waage (Peter Martin)
Bill Schultz

*Indicates those Agencies or Organizations that are Associate Members.

The overall purpose of this proposal is to provide land resource managers and land owners with the knowledge and techniques they need to properly identify and manage riparian areas. Specific objectives to be accomplished during the grant period are:

- 1) To complete a statewide riparian site type publication to assist in the identification, description, and management of riparian areas by landowners and managers.
- 2) To develop a summary of recommended management practices for the riparian site types identified in Montana.
- 3) To provide training and continuing education in the identification and proper management of riparian areas. Results of this project in 1991 will include:
 - a) Publication of riparian identification and management guidelines for all areas of the state.
 - b) Distribution of education materials pertaining to riparian management.
 - c) Annual workshops and training sessions presented for landowners and managers.
 - d) Riparian information and management guidelines compiled by the Montana Riparian Association may serve as a technical basis for possible legislation regarding water quantity and quality, and related resource management problems.

MRA Financial Schedule

| | 1985 July | 1986 July | 1987 July | 1988 July | 1989 July | 1990 July | 1991 July |
|------------------|-----------------|------------------------------|-----------------|-----------------|-------------------------|-----------------|--------------|
| | \$42,500 | \$42,500 | | | | | |
| | DNRC | | | | | | |
| | \$9,000 | \$9,000 | \$9,000 | | | | |
| | NPS-YNP | | | | | | |
| | | \$42,000 | \$48,000 | \$69,600 | \$69,600 | \$69,600 | |
| | | Montana Riparian Association | | | | | |
| | | | \$6,000 | | | | |
| | | | MTDFWP | | | | |
| | | | | \$20,400 | | | |
| | | | | BLM | | | |
| | | | | \$3,000 | | | |
| | | | | Mc-Stennis | | | |
| | | | | | \$23,400 | \$23,400 | |
| | | | | | DNRC (This Proposal) | | |
| FY Totals | \$51,500 | \$93,500 | \$63,000 | \$93,000 | \$93,000 | \$93,000 | |

TESTIMONY

ON

Establishment of a Monitoring Network to Help Assess the Extent of Agricultural Chemicals in Montana's Groundwater Resources - A grant application submitted to the Renewable Resource Development Grant Program

LONG RANGE PLANNING JOINT COMMITTEE

Chairperson, Representative Mary Ellen Connelly and Members of the Committee:

The funding requested in this project will be used to establish at least six groundwater monitoring sites statewide to serve as a long-term monitoring network to assess potential pesticide contamination in Montana. The key to the success of this proposed project will be the attention given to the selection of each of the sites prior to the installation of the monitoring network. The sites will be selected based on a number of key factors including: 1) agricultural chemical use patterns; 2) assessing whether physical and chemical characteristics of various pesticides will affect their mobility and persistence in soils and groundwater; 3) proximity to groundwater; 4) local groundwater gradients in the area; and 5) soils present in the area.

A number of monitoring sites have tentatively been selected. These areas represent regions with a strong potential for groundwater contamination by agricultural chemicals based on hydrogeologic conditions. The areas include (but are not limited to):

The Dagmar Outwash Channel Area, the Fairfield Bench Area, the Highwood Bench Area, the Larslan Area, the Turner-Hogeland Area, the Townsend Valley Area, the Edgar Area and the Power-Dutton Area.

The proposed project represents a cooperative effort between the Montana Department of Agriculture (Environmental Management Division) (MDA), the Montana Bureau of Mines and Geology (Hydrology Division) (MBMG), and Montana State University (Plant and Soils Department) (MSU). The proposed budget will support the project for a two-year duration. Additional sampling and/or monitoring after this two-year time frame will have to come from other sources.

A portion of salaries and fringe benefits for three people from the MDA, one person each from MBMG and MSU will be used as matching contributions. The salary funds request for a MBMG hydrologist 0.5 F.T.E. and an MSU soil scientist 0.5 P.T.E. are to help with the hydrogeologic and soils characterization.

The salary of the temporary analytical chemist, to be located at the MDA Laboratory in Bozeman, would cover the 12 months of analytical work needed for this project. The funding of this temporary position would allow for a much greater number of analyses to be performed than would be possible at the current fee of approximately \$750 per sample for a scan of the common pesticides used in Montana. A chemist should be able to run from 120 to 160 groundwater samples during the year including scans for phenoxy and triazine herbicides and organochlorine, organophosphate and carbamate insecticides. This would allow each site to be sampled at least five times per year if four types of analyses were performed for each site.

The requested operational funds will cover the cost of drilling and installing three to five hybrid PVC/stainless steel monitoring wells at each site. The \$17,510 travel and per diem request will cover the associated travel costs for both site characterization and sampling during the project. A total of \$8,725 is requested for expendable supplies which include lab chemicals, neutron access tubes, tensiometers, and sample containers. An additional \$1,960 is requested for rental of MBMG well recorders, sampling equipment, well logging equipment, and aquifer testing equipment. The MBMG will match this amount with a sum of \$1,200 for rental fees.

This project would be used to help assess the extent and magnitude of the problem on water quality. The proposed monitoring network represents the first step in the quantification of a potential problem that should be addressed before it reaches crisis proportions due either to actual pesticide contamination of groundwater or to a public perception of a contamination.

/GWtrgrant



EXHIBIT 13
DATE 1-31-89
HB. Resource
Plans

City-County Building
P.O. Box 1723
Helena, Montana 59624
Telephone 406/443-1010

LEWIS AND CLARK COUNTY

Health Department

January 31, 1989

Madam Chairman, members of the committee, my name is Will Selser and I am the Director of the Environmental Division of the Lewis and Clark City-County Health Department.

The Lewis and Clark City-County Board of Health has always been interested in groundwater protection because all 13,000 Helena Valley residents are dependent upon wells for their drinking water. Also, the city of Helena may need to tap the aquifer if city surface water sources prove inadequate.

The Helena Valley aquifer is threatened by many human activities, ranging from septic systems to underground storage tanks and mining activities. Because of these threats the Board recently made groundwater protection a high priority.

The department staff has reacted to the Board's prioritization by developing a long-range plan for protecting local groundwater. An objective hydrogeologic evaluation is a vital first step of the plan.

The professionals performing the evaluation will examine the quantity and quality of water in 40 existing and five newly-drilled wells. Their findings will allow the City-County Health Department to address current and future site-specific pollution problems more wisely. The data collected will also provide the Health Department with enough information to apply for Sole-Source Aquifer designation from the Environmental Protection Agency. The EPA thinks there is just too little data available on our aquifer for us to be eligible for such a designation at this point.

Most importantly, this evaluation will put in place a system for data analysis that the county can use to make good decisions about future protection of the aquifer.

This hydrogeologic evaluation will be a unique cooperative effort between experts from the Montana Bureau of Mines and Geology, the

University of Montana and US Geological Survey. I know of no other aquifer that all three agencies are actively working together to protect. Also, the three agencies will collectively match our RRD grant dollar for dollar.

It is wise to spend Renewable Resources and Development funds on groundwater protection. Groundwater is one of our most fragile and important renewable resources. If Helena Valley groundwater were to become irreversibly polluted, the current private well drinking water system would cost \$25 million to replace with a surface water system. In the words of Representative Grady, "a polluted aquifer will bankrupt the valley."

Finally, I'd like to respectfully suggest that you keep the RRD priority list intact. A great deal of thought and effort went into prioritizing these projects.

**LEWIS AND CLARK CITY-COUNTY HEALTH DEPARTMENT'S PROPOSED
HYDROGEOLOGIC EVALUATION OF THE HELENA VALLEY AQUIFER**

Lewis and Clark County intends to proactively protect the valley's water supply from current and future threats. In order to do so, we need a better understanding of how the aquifer, which serves 13,000 people, flows. Officials will not be able to make sound management decisions without the information this hydrogeologic evaluation will provide.

The Helena Valley hydrogeologic evaluation is unique:

- * It will be performed by three of Montana's top groundwater quality professionals: Bill Woessner of the University of Montana; Joe Moreland of the US Geological Survey; and Marvin Miller of the Montana Bureau of Mines and Geology.

The Helena Valley hydrogeologic evaluation is needed:

- * It is designed, in part, to supply the County with enough data to qualify the Helena Aquifer for Sole-Source Aquifer designation from the EPA.
- * The hydrogeologic study will hopefully allow us to begin addressing the question of how many septic systems a valley aquifer system like this can handle before the water supply is seriously impacted.
- * Monitoring programs such as this are vital before site-specific solutions can be implemented. This project is the first step in a long-term effort to ensure that specific threats to the groundwater are avoided or abated.
- * Without this study and the ensuing wise management decisions, the Helena Valley Aquifer may become so polluted that valley residents may be forced to hook up to the city's water system, a move that could cost as much as \$25 million.
- * Unlike surface water, groundwater is almost impossible to clean after it is polluted, especially if the necessary information is not available.

Funding the evaluation:

- * The evaluation will cost \$225,000. The University of Montana, US Geologic Survey and Montana Bureau of Mines and Geology are collectively supplying \$100,000 if the county can secure \$100,000 in Renewable Resources and Development (RRD) grant funds. Lewis and Clark County is responsible for the remaining \$25,000.



EXHIBIT 14
DATE 1-31-89
HB Resour
Grant

City County Building
P.O. Box 1724
316 North Park
Helena, Montana 59624
Telephone 406/443-1010

LEWIS AND CLARK COUNTY

Board of County Commissioners

January 18, 1989

Francis Bardanouve
Long-Range Planning Subcommittee
Capitol Station
Helena, Montana 59620

Dear Representative Bardanouve:

We are writing to you and the other members of your committee to support our City/County Board of Health's proposed hydrogeologic evaluation of the Helena valley aquifer.

The percentage of valley wells tested for nitrates and bacteria found to be contaminated has risen from five percent in 1980, to 18 percent in 1989. The City/County Health Department does not know exactly what these numbers mean, but the drastic rise in the percentage of contaminated wells clearly points to the need for a deeper understanding of the aquifer.

This project is very cost effective because the \$100,000.00 the Board of Health is requesting from the Renewable Resources and Development Grant Program will be matched dollar for dollar with hard and in-kind money from the US Geological Survey, University of Montana, and Montana Bureau of Mines and Geology, collectively.

This project is vital to the sound and healthy development of our county. We urge your support.

Sincerely,
LEWIS AND CLARK COUNTY
BOARD OF COUNTY COMMISSIONERS

David E. Fuller
David E. Fuller, Chairman

Linda Stoll-Anderson
Linda Stoll-Anderson

Jim Campbell
Jim Campbell

cc: City/County Health Dept.
File:rp:Gy:Water.ltr.



EXHIBIT 14
DATE 1-31-89
HB Groundwater Resource
Brate

City-County Building
P.O. Box 1723
Helena, Montana 59624
Telephone 406/443-1010

LEWIS AND CLARK COUNTY

Health Department

January 23, 1989

Mary Ellen Connelly, Chair
Long-Range Planning Committee
Capitol Station
Helena, MT 59620

Dear Representative Connelly,

The Lewis and Clark City-County Board of Health believes that the Health Department's proposed hydrogeologic evaluation of the Helena Valley is vital to protect the drinking water supply of over 13,000 residents.

Recently, the board has become aware of a number of actual and potential threats to the Helena Valley aquifer. The threats range from leaking underground storage tanks to the proliferation of septic systems.

Because of these threats, the board agrees with scientists from US Geological Survey, the University of Montana and the Montana Bureau of Mines and Geology that more information about the aquifer is needed for wise groundwater management in an area whose population has increased by six times in the last 15 years.

The aquifer is the only source of drinking water for all rural valley residents. If it becomes polluted, the cost to replace it with an above-ground system could be as much as \$25 million. It is much more desirable to spend \$225,000 now, and learn how to proactively prevent severe pollution, than to spend \$25 million later.

Thank you for your attention.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim Campbell", is written over a horizontal line.

Jim Campbell, Chairman
Lewis and Clark City-County
Board of Health

cc. Long-Range Planning Subcommittee

EXHIBIT 15
DATE 1-31-89
HB Renewable Resources
Grant



The Big Sky Country

MONTANA STATE SENATE

SENATOR JOSEPH P. MAZUREK
SENATE DISTRICT 23

HOME ADDRESS:
516 HAYES
HELENA, MONTANA 59601
HOME PHONE: (406) 443-6404
OFFICE PHONE: (406) 442-8560
SENATE PHONE: (406) 444-4866

STANDING COMMITTEES:
JUDICIARY, CHAIRMAN
TAXATION, VICE CHAIRMAN
EDUCATION
LEGISLATIVE ADMINISTRATION
COMMITTEE ON COMMITTEES

PERMANENT COMMITTEES:
REVENUE OVERSIGHT
RESERVED WATER RIGHTS COMPACT

September 29, 1988

Les Peterson
Program Manager
Water Development Bureau
Department of Natural Resources
and Conservation
State Capitol Complex
Helena, Mt 59620

Re: Lewis and Clark County Water Development Grant
Application

Dear Mr. Peterson:

I am writing in support of the application by Lewis and Clark County for a water development grant. Lewis and Clark County has submitted an application for a grant to allow the development of baseline data for the Broadwater aquifer in the Helena Valley. The grant application is unique in that it represents a combined effort of Lewis and Clark County, the University of Montana, the U.S. Geological Survey and the Montana Bureau of Mines & Geology, all of whom recognize the critical need for the baseline data information. Lewis and Clark County has itself committed \$27,000.00 during a time when money is hard to come by and the County budget is very tight.

As you probably know, there are presently approximately 13,000 people who live in the Helena Valley and rely upon the groundwater aquifer as their sole source of water. There are a multitude of threats to the aquifer from sewage lagoons, septic systems and underground pipelines. There is a very high groundwater level in very porous soil. The baseline data is critical to the residential business and agricultural community in the Helena area.

Les Peterson
September 29, 1988
Page 2

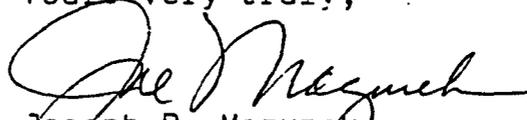
It is the recognition of the critical need for this hydrogeologic evaluation in the Helena Valley which has resulted in the cooperative funding effort which has been proposed in the application. The fact that these diverse organizations have collectively recognized the need and committed funds to obtain the critically needed baseline data.

I would urge the Department and the Advisory Committee to seriously consider the application and recommend it for funding. It is also important that the funding level requested be obtained since the combined funding formula has been carefully negotiated among the participants.

We appreciate your consideration of the application. I would also appreciate it if you could provide copies of this letter to the Advisory Committee when it considers the application.

Thank you for your consideration.

Yours very truly,



Joseph P. Mazurek
Senate District 23

JPM/sam

6542M

LEWIS & CLARK COUNTY WEED DISTRICT

HELENA, MONTANA 59601

EXHIBIT 16DATE 1-31-89HB ReversibleResource

Madam Chairman, members of the committee, my name is Jim Hohn. I represent the Lewis and Clark County Weed District. We are testifying in support of the Health Department's hydrogeologic evaluation of the Helena Valley aquifer.

We think the type of study is invaluable in determining what potential problems may be developing and what impact these problems will have on our program. We are concerned about the quality of the ground water and wish to have accurate data with which to make informed decisions in regards to the types of weed control programs we implement in this area.

It is also important to get accurate data out to the public regarding the potential threat to the ground water so they can make informed decisions in regards to agricultural chemicals and there use.

Again, we fully support this request and encourage you to approve it.

EXHIBIT 17
DATE 1-31-89
HB Druske, Garsura
Garda



The Big Sky Country

MONTANA HOUSE OF REPRESENTATIVES

REPRESENTATIVE JAN BROWN

HOUSE DISTRICT 46

October 17, 1988

Kate McIvor
Lewis & Clark City-County Health Dept.
City-County Building
Helena, MT 59601

Dear Ms. McIvor:

I am writing to express my support of Lewis and Clark County's proposed hydrogeologic study.

From the information I have received to date, I believe that the study is essential for a better understanding of how the aquifer flows, prior to attempting to make any management decisions. The study will allow the County to begin addressing the question of how many septic systems a valley aquifer system like this can handle before the water supply is seriously impacted.

The Environmental Protection Agency has indicated that current data on the aquifer is inadequate. This study will provide the necessary data to qualify the Helena aquifer for a "sole-source aquifer" designation from EPA. This means that in the future EPA will review all federally-funded projects that may impact the aquifer, and it should be easier for groups like the City-County Health Department to obtain funds to address specific threats to the Helena aquifer.

This study is the first step in a larger groundwater protection plan recently initiated by the Lewis & Clark City-County Health Dept. The plan includes the sole-source aquifer designation application, public education efforts, a new city-county landfill, and the establishment of a valley sewer maintenance district. I am concerned that without this study and the ensuing informed management decisions, the Helena Valley aquifer may become so polluted that valley residents will be forced to hook up to the City's sewer system, which would be extremely costly.

I will look forward to hearing the good news that adequate funding has been secured for the study and will hope to be kept informed of subsequent progress.

Sincerely,
Jan Brown

HELENA ADDRESS: JAN BROWN
CAPITOL STATION
HELENA, MONTANA 59620-0144
PHONE: (406) 444-4800

HOME ADDRESS:
906 MADISON
HELENA, MONTANA 59601
PHONE: (406) 443-3824

COMMITTEES:
BUSINESS & LABOR
LOCAL GOVERNMENT
HUMAN SERVICES & AGING
LEGISLATIVE ADMINISTRATION

EXHIBIT 18
DATE 1-31-89
HB Renewable Res.
Development Man

January 30, 1989

Representative Mary Ellen Connelly
Chairman, Long Range Planning Committee
Capitol Station
Helena 59620

re: Lewis and Clark County Application to the Renewable Resources
and Development Grant Program.

Dear Representative Connelly:

Our association would like to take this opportunity to express our support for the hydrogeological study that is proposed by Lewis and Clark County. The Lewis and Clark County Board of Health has applied to DNRC's Renewable Resources and Development Grant Program for funding for the study.

Our association is responsible for operating and maintaining the water and wastewater systems that serve the Eastgate Village Subdivision located east of East Helena. Our water system is a groundwater well system that supplies domestic water to our approximately 800 residents. Our subdivision is essentially a small town and has the capacity to more than double in size before we are at full occupancy.

Our water supply is currently at risk. As a real example, an area located immediately east of our subdivision has a high nitrate level in the groundwater. The levels are almost too high for human consumption and appear to be a result of on-site sewage systems. Without a better understanding of our groundwater system that will provide guidance for proper land use, this type of problem can only get worse. We expect that we are certainly not the only water system in the valley that is threatened with contamination from a variety of sources.

As mentioned, our association supports the funding for the hydrogeologic study for the Helena Valley. Except for air, our water supply is our most precious resource. We are hopeful that your committee recommends full funding. Thank you for your consideration.

Sincerely,



Jim Melstad, President
Eastgate Village Water and Sewer Association

cc: Lewis and Clark County

1062

VISITOR'S REGISTER

Long Range Planning

SUBCOMMITTEE

AGENCY (S)

DATE

1-31-89

DEPARTMENT

RRD Projects

| NAME | REPRESENTING | SUP-PORT | OP-POSE |
|----------------------------|---|----------|---------|
| <u>Reg. Henry</u> | <u>East Glacier Park</u> | ✓ | |
| <u>Sheldon Ferguson</u> | <u>Groundwater Monitor</u> | ✓ | |
| <u>Sally Laine</u> | <u>City of Helena</u> | ✓ | |
| <u>Natalie Fitzpatrick</u> | <u>Anacosta, Wildflower Project</u> | ✓ | |
| <u>CRAIG HESS</u> | <u>Flathood Basin Commission</u> | | |
| <u>Paul Miller</u> | <u>MT State Library</u> | ✓ | |
| <u>DAVID GENTER</u> | <u>MT NATURAL HERITAGE PROGRAM</u> | ✓ | |
| <u>DEBORAH SCHLESINGER</u> | <u>MT LIBRARIAN ASSOC</u> | ✓ | |
| <u>BOB KIESLING</u> | <u>THE NATURE CONSERVANCY</u> | ✓ | |
| <u>Marrin P. Miller</u> | <u>MT. Bur. of Mines & Geology</u> | ✓ | |
| <u>TOM SESSO</u> | <u>MT STATE LIBRARY</u> | ✓ | |
| <u>James L. Hill</u> | <u>MT Dept of Health and Envtl</u> | ✓ | |
| <u>DON HYPPA</u> | <u>FLWD</u> | ✓ | |
| <u>Paul L. Hann</u> | <u>Management guidelines for riparian site types of montane</u> | ✓ | |
| <u>John North</u> | <u>Dept. of State Lands</u> | | |
| <u>Diane Brown</u> | <u>State Reg #72 for NREIS of Natural Heritage</u> | ✓ | |
| <u>R.A. Ellis</u> | <u>Helena Valley</u> | ✓ | |
| <u>J LAMR</u> | <u>MPC</u> | ✓ | |
| <u>Donna Loop</u> | <u>The Nature Conservancy</u> | ✓ | |
| <u>Gloria Sherman</u> | <u>MT Cultural Adv.</u> | ✓ | |
| <u>Keith L. Colbo</u> | <u>MT Cultural Adv</u> | ✓ | |

5/ case

IF YOU CARE TO WRITE COMMENTS, ASK SECRETARY FOR WITNESS STATEMENT. IF YOU HAVE WRITTEN COMMENTS, PLEASE GIVE A COPY TO THE SECRETARY.

Garet Ellis

Audubon

✓

