

MINUTES

MONTANA HOUSE OF REPRESENTATIVES 53rd LEGISLATURE - REGULAR SESSION

JOINT SUBCOMMITTEE ON LONG-RANGE PLANNING

Call to Order: By Rep. Ernest Bergsagel, Chairman, on February 8, 1993, at 7:05 AM.

ROLL CALL

Members Present:

Rep. Ernest Bergsagel, Chair (R)
Sen. Bob Hockett, Vice Chair (D)
Rep. Francis Bardanouve (D)
Sen. Ethel Harding (R)
Sen. Eleanor Vaughn (D)
Rep. Tom Zook (R)

Members Excused: None

Members Absent: None

Staff Present: Jim Haubein, Legislative Fiscal Analyst
John Huth, Office of Budget & Program Planning
Sandra Boggs, Committee Secretary

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

Committee Business Summary:

Hearing: HB 7, RECLAMATION AND DEVELOPMENT GRANTS
Executive Action: DEPARTMENT OF FAMILY SERVICES;
DEPARTMENT OF STATE LANDS; AND
DEPARTMENT OF LABOR

ANNOUNCEMENTS/DISCUSSION

CHAIRMAN ERNEST BERGSAGEL submitted for the record a note from REP. JODY BIRD, HD 52, Mineral County, stating her support of the geology programs for Montana schools. **EXHIBIT 1.**

CHAIRMAN BERGSAGEL requested Mr. Haubein to explain how pending legislation could affect funds with which the committee deals.

Jim Haubein, Legislative Fiscal Analyst, stated that there are two bills the committee should be aware of. SB 177 increases the cigarette tax and taxes on other tobacco products by ten cents. The additional revenue would be used for Medicaid programs for pregnant women, infants and children. SB 177 Section 3, subparagraph two transfers \$1,133,624 from the Capital Projects Fund

to the General Fund in FY93. The fiscal note for SB 177 assumes that with every 1% increase in tobacco taxes the consumption decreases four-tenths of one percent, therefore the fiscal note shows a loss of \$104,000 in revenue in FY94, and \$69,000 in FY95 due to lost sales. If SB 177 passes as is, the committee would have to reduce by \$1.3 million the long range building projects that are funded by capital projects.

Mr. Haubein stated that SB 305 does not have a fiscal note yet, but doubles the cigarette tax to \$.36. SB 305 also transfers \$1,133,624 out of the Capital Projects Fund to the General Fund in FY93. Both bills pull out that \$1.1 million.

REP. FRANCIS BARDANOUVE asked how they chose the \$1.1 million figure. Mr. Haubein stated it is the same amount contained in HB 46. He assumes it is the calculation that was made for FY93.

REP. BARDANOUVE asked what the \$1.1 million is to be used for. Mr. Haubein stated that it seems to be targeted as start-up funds for the additional Medicaid program for pregnant women, infants and children.

Mr. Haubein said both HB 46 and HB 16 will take two cents from the cigarette tax out of Capital Projects Fund and reduce the committee's budget for long range building projects.

REP. BARDANOUVE stated that he does not object to the aid program for women and children, but asked why they were not showing any consideration to the critical infrastructure needs of the state.

CHAIRMAN BERGSAGEL stated that there are three bills which could theoretically help the LRP committee. SEN. SWYSGOOD's proposal would take funds from the permanent trust of the Treasure State Endowment Program. That would require a simple majority vote, and the money would be made available to the Long Range Building Fund. The other two bills would attempt to go into the Coal Tax Severance Trust and would require a two-thirds vote to set up a capital projects fund.

REP. BARDANOUVE stated it would require a three-fourths vote to raid the Coal Trust.

CHAIRMAN BERGSAGEL commented that the committee does have potential revenue sources but he does not know what the funding level would be. He informed the committee that tomorrow morning executive action will be taken on all construction projects. Each project will be done individually.

EXECUTIVE ACTION ON DEPARTMENT OF FAMILY SERVICES

Tape No. 1:A:191

Mr. Haubein provided a summary of executive action to be taken today. EXHIBIT 2.

BUDGET ITEM #2 INSTALL FIRE SAFETY SYSTEM, DFS:

Tape No. 1:A:198

Discussion: Tom O'Connell, Architecture and Engineering Division, Department of Administration, informed the committee that the fire alarm panels have been removed from a building scheduled for demolition. The Department of Family Services apologizes for the lack of communication that resulted in the A&E Division requesting funds for a project that has already been completed. The campus took it upon themselves to move the panels after the DFS had submitted the application for capital projects, which included a request for funds to move the panels. The DFS did not receive word that the panels had been moved until September, and the DFS failed to communicate that to A&E. The cost of removing the panels was \$5,500, and that should have been removed from the project proposal submitted to the committee. The video which showed the panel in the old location was prepared in January 1992; unfortunately no one realized that the situation had changed when the video was shown to the committee.

Mr. O'Connell informed the committee that the recommended \$627,000 authorization will not be enough to accomplish installing the required fire alarm systems in all the buildings. The buildings will need to be prioritized. The federal Department of Justice has mandated that the inadequate systems be improved.

REP. BARDANOUVE asked how much A&E had estimated the fire panel removal and re-location to cost. Mr. O'Connell stated an estimate had not been completed for that specific part of the larger improvement project, but the actual cost was \$5,500.

REP. TOM ZOOK commented that he was told by the director of Pine Hills that the overall project cost \$9,000. Mr. O'Connell stated that the overall project cost was \$9,500 but included smoke and heat detector upgrades.

SEN. BOB HOCKETT asked if Mr. O'Connell was suggesting that the committee not remove the \$5,500 from the original \$627,000 request for improvements. Mr. O'Connell stated he is just suggesting that the work done to remove the fire alarm panel and the enunciator panel is just a small piece of the overall work that needs to be done on the fire safety systems.

REP. ZOOK stated that they have had federal investigators at the school and need whatever money they can get. SEN. HOCKETT stated that he would like to leave the \$5,500 in the fund and let them continue the work that needs to be done.

Motion/Vote: REP. ZOOK moved approval of \$627,000 to Install Fire Safety Systems at Mountain View School and Pine Hills School. MOTION CARRIED UNANIMOUSLY.

EXECUTIVE ACTION ON DEPARTMENT OF STATE LANDS

Tape No. 1:A:498

BUDGET ITEM #20 VARIOUS MAINTENANCE PROJECTS, DSL:

Tape No. 1:A:500

Discussion: CHAIRMAN BERGSAGEL reminded the committee that this project has been authorized for \$50,000; the A&E recommendation was \$100,000. He asked if the committee was interested in reconsidering this action.

Discussion: REP. BARDANOUVE asked what the Capital Projects account balance is currently. Mr. Haubein stated there is approximately \$83,000 left. REP. BARDANOUVE stated that a small cushion of funds is needed.

SEN. HOCKETT asked if DSL could address how significantly this cut in funds would affect their projects.

Randy Mosely, DSL, provided the committee with a list of projects that could be done if the committee appropriated the \$100,000 recommended by A&E. EXHIBIT 3. The exhibit also includes their request for an additional \$50,000. The list is not prioritized by projects because the department would like the freedom to base their repairs on what is needed at the time should the committee not increase the \$50,000 authorization.

REP. BARDANOUVE asked if the DSL had the possibility of getting funds elsewhere. Mr. Mosely stated he did not have the possibility of getting funds from elsewhere, but had requested that the committee put language in the bill that would authorize an additional \$50,000 if the funds become available.

Mr. O'Connell informed the committee that similar language was included in a bill several sessions ago. The language would authorize the department to spend the money after funds become available. He will provide the committee with the language required to authorize this type of appropriation. The previous language used would require that the entire \$50,000 be available before it can be spent.

REP. BARDANOUVE commented he would not like to put that language in the bill.

SEN. HOCKETT asked Mr. O'Connell if the current appropriation of \$50,000 would leave a critical project unfunded. Jim Whaley, Architecture and Engineering Division, stated that DSL has always been a low priority for capital improvements, and is in worse shape than some of the other state facilities. DSL requested \$400,000 and A&E made a recommendation for only \$100,000. A&E also did not recommend DSL's request for \$136,000 for construction of an equipment storage facility.

CHAIRMAN BERGSAGEL asked the committee if the requested

contingency language should be included in the bill. There was no support for that from the committee.

SEN. HOCKETT asked what the \$83,000 capital projects balance would be used for. Mr. O'Connell replied that if the legislature does not authorize that money, it will stay in the account and not be used.

REP. BARDANOUVE stated that the \$83,000 is not much of a cushion if revenues fall off.

EXECUTIVE ACTION ON DEPARTMENT OF LABOR

Tape No. 1:A:060

BUDGET ITEM #45 EXPAND AND RENOVATE JOB SERVICES:

Tape No. 1:A:063

Discussion: CHAIRMAN BERGSAGEL asked if there was interest in reconsidering previous committee action on this project.

SEN. ELEANOR VAUGHN stated that federal funds will be used for this construction project; and if the committee does not authorize the expenditure of this federal money the funds will be lost. Mr. Haubein stated that the request is for general obligation bonds to be paid back with federal funds. In the event the federal funds weren't there, the state would be obligated to pay the bonds. The debt service would be \$153,000, and DOL feels very sure of their ability to retire the debt.

SEN. HARDING explained that she voted against this authorization because she is concerned that the state will have another building to maintain if federal funds dry up.

Motion/Vote: REP. ETHEL HARDING moved to reconsider committee action on the DOL's project to expand and renovate Job Services statewide. MOTION CARRIED UNANIMOUSLY.

Motion: REP. BARDANOUVE moved to approve \$1.5 million in General Obligation bond issues for the DOL's project.

Discussion: SEN. HARDING asked for a description of the origin of the funds. Mr. Haubein stated that the project would require bonds to be sold. At the current rate of interest debt service would be \$153,000 per year. The DOL plans to repay that with operating funds available from federal funds for operations.

REP. BARDANOUVE stated that all maintenance and operation of the building will be paid for by federal funds. The state does not have obligations for the buildings after they are built.

SEN. HOCKETT stated that he has checked on this project, and it will not require special action by the federal government to allow them to make these payments. Therefore, unless the federal government shuts down the Job Services, the DOL feels comfortable

about the repayment. He reminded the committee that this will require a two-thirds vote in the legislature to pass.

Mr. Haubein stated that if the committee authorizes this project, it will be in a separate part of the bill that will require a two-thirds vote for that particular language. If a two-thirds vote is not received, that portion will be stricken from the bill, and everything else will be left intact.

REP. ZOOK commented that he is in an awkward position. He asked how he could support a bond issue to build this building, when he will probably have to vote against a veterans home in eastern Montana. He worked hard to achieve the veterans home and the money is there to do it, but the state wants to steal the money for other proposals. He stated that he cannot support this building and believes all things should be treated consistently.

REP. BARDANOUVE replied that the veteran's home will have an impact on the General Fund, but this building will not. Therefore he can justify this expenditure.

Tape 1:B:003

REP. ZOOK stated that the money to build the veteran's home has been set aside for several years and now the federal government is ready to provide their share of the funds. Once the facility is built, there will be some General Funds used for operations but it will be for only a percentage of the total operations budget.

CHAIRMAN BERGSAGEL suggested that the veteran's home not be debated at this time, but that the committee concentrate on the Job Services. He asked if there was any more information regarding whether the new Butte facility would be a new building or an old building renovated to suit the Job Service's needs.

Mr. Mullen stated that no additional information beyond what was presented previously before the committee. The Department is still evaluating which option will be best.

SEN. VAUGHN asked if in the past, the DOL has ever had to come back to the General Fund to make payments, or have the federal funds always been there. **Mr. Haubein** commented that he is not aware of the General Fund ever having to pick up any debt service but would have to check on it. **Mr. O'Connell** stated that to his knowledge the General Fund has never been impacted in that way.

CHAIRMAN BERGSAGEL asked if the federal government puts any funds into maintenance projects. **Mr. Mullen** said they do not. The money for debt service is taken out of operations which is being done presently. Last year a bond of \$50,000 was retired; next year a \$90,000 bond will be retired.

CHAIRMAN BERGSAGEL stated his concern that the DOL does not know

what will happen to the Butte facility and does not feel comfortable authorizing funds when he does not know how they will be used.

Gary Curtis, Administrator of Job Services, DOL, explained that the Job Service works with the community on these building projects, and an organization in Butte wants them to buy an existing building in uptown Butte and remodel it. The DOL has looked at buildings and considered remodeling but has determined that the costs will be very high. Some of the remodeling costs would include making the buildings comply with the Americans with Disabilities Act. The DOL will almost certainly have to build a new facility, but in response to community needs they are trying to locate an existing facility in Butte. This is why there is some indecision at this point. The existing facility is not ideal and is not very accessible to handicapped persons.

Vote: MOTION CARRIED FOUR TO ONE WITH REP. ZOOK VOTING NO.

CHAIRMAN BERGSAGEL stated that he is concerned that the committee authorized funds when it is still not known what will happen in Butte. He asked the DOL to please not come back to this committee with a request for funds when they do not know how the funds will be used.

HEARING ON HB 7, RECLAMATION AND DEVELOPMENT GRANTS

Tape No. 1:B:300

BUDGET ITEM PROJECT #20 BUTTE-SILVER BOW:

Tape No. 1:B:305

Informational Testimony: Debbie Nokes, Friends of Urban Forest, Butte, spoke on behalf of a \$150,000 grant for Mitigation of Mining and Smelting Damage through Urban Forestry. EXHIBIT 4. She stated that 350 trees have been planted since 1989. She presented a slide show of the project, and provided a map of Butte which outlined areas to be included in the project. EXHIBIT 5.

Questions, Responses, and Discussion: REP. BARDANOUVE asked what types of trees are planted. Ms. Nokes stated that hard woods are planted, including Green Ash, Mountain Ash, Birch and Maple. The trees are ten to fifteen feet tall when planted because they are less likely to be vandalized at that size.

SEN. VAUGHN asked who maintains the trees. Ms. Nokes stated that city crews maintain them. Some businesses purchase the trees to be planted in front of their businesses and then take responsibility to maintain them.

SEN. HOCKETT asked if the city is committed to watering the trees and protecting them from insect infestation. Tom Cash, Community Development Department, Butte-Silver Bow, stated that the city is responsible for trees that are in the public right of way. The

city also has a tree ordinance that makes individual property owners responsible for trees. Insect control and spraying is the responsibility of the County Public Works Department.

REP. BARDANOUVE asked if Butte had a parks department that should do this kind of work. Mr. Cash replied that the city parks department maintains trees on the public right of way. The Friends of Urban Forest sell the trees and the majority of trees are maintained by property owners.

REP. BARDANOUVE stated he is more interested that trees be planted in the hills as opposed to downtown. He asked what became of a tree planting program in Anaconda. The trees were to be planted on private land that had been damaged by the Anaconda Company. The land was supposed to be turned over to the city or county government. John Vanisko, Deer Lodge Valley Conservation District, informed REP. BARDANOUVE that the trees went to Anaconda City and were planted on the C-Hill. A 95% stand remains from the 350,000 trees that were planted. The land will return back to the county.

BUDGET ITEM BUTTE-SILVER BOW:

Tape No. 1:B:755

Informational Testimony: Tom Cash, Community Development Department, Butte-Silver Bow, spoke on behalf of a \$123,750 grant for Development of a Mine Subsidence Insurance Program. EXHIBIT 6. This program was not recommended for funding by DNRC. Mr. Cash presented the committee with a map and picture of the affected area, EXHIBIT 7.

Questions, Responses, and Discussion: REP. BARDANOUVE said he does not understand how this program would work. Mr. Cash replied that this program will develop a mining insurance subsidence program which would allow insurance to be sold to the property owners and allow them to get financing. The application suggests that the state Department of Lands run the program, and that it be financed with Resource Indemnity Trust funds. When possible, the program can be turned over to the insurance industry.

SEN. HOCKETT commented that the state has enough problems running workmen's compensation insurance, and does not need to get into running another insurance program. He asked why, if the property is insurable at all, the city does not talk to private insurers.

Tape 2:A:004

Mr. Cash replied that private insurance companies will not write mine subsidence insurance policies.

SEN. HOCKETT asked for specific communities or areas where similar programs are in place. Mr. Cash stated that similar insurance programs are in place for coal mining subsidence, but

not for hard rock mining. He stated he believed similar programs were in Virginia.

CHAIRMAN BERGSAGEL asked that he find out for sure where similar programs are and get the information faxed to his office before executive action is taken.

REP. BARDANOUVE asked if the grant money would be used as insurance.

CHAIRMAN BERGSAGEL stated that he understood this grant money would be used to research and develop a Mine Subsidence Insurance Program.

REP. BARDANOUVE asked if insurance companies don't already conduct studies to determine the feasibility of insuring certain areas. **Mr. Cash** stated that this study would gather information, and put it together to be presented to insurance companies.

REP. BARDANOUVE asked if **Mr. Cash** had not commented that in 50 years there would be no buildings left. **Mr. Cash** replied that at the present rate of subsidence that is very likely. But the area is at the center of Butte and already has roads, water and sewer lines and should not be allowed to deteriorate.

SEN. HOCKETT asked if there were maps that show mine tunnels and the actual mining activity underneath this area at the present time. **Mr. Cash** said those are not in the City's possession. If they exist, they would be wherever the old mining company's records went when it closed down. He does not know where that would be. There might be maps at the Montana Bureau of Mines.

SEN. VAUGHN asked again if he wanted the state to both pay for this study and then run the insurance program that is developed. **Mr. Cash** replied that it could be run through the state with RIT funds to partially finance it.

CHAIRMAN BERGSAGEL asked **Mr. Cash** to fax him the requested information as soon as possible. If the committee does not have it, executive action will be taken without it.

SEN. HOCKETT asked if this area is included in the Superfund site area. **Mr. Cash** stated that it is within the Superfund area, but is not considered a superfund problem because it is not a health problem.

BUDGET ITEM JEFFERSON VALLEY CONSERVATION DISTRICT:

Tape No. 2:A:134

Informational Testimony: **Chris Eglet, Jefferson Valley Conservation District**, spoke on behalf of a \$300,000 grant for Crystal Mine Remediation Technology Demonstration. **EXHIBIT 8.** She stated that 54 mines in Jefferson County have water flowing through them, and over half have acid-mine drainage problems. If

acid-mine drainage is to be eliminated as a major nonpoint source of pollution, technology must be both adaptable to other sites and cost-effective. This project's goal is to develop such technology. The technology transfer capabilities of the Mine Waste Pilot Program, the Montana Technical College, and tours by the Jefferson Valley Conservation District will ensure that the technology is publicized.

Bill Robinson, Mine Waste Pilot Project, presented a short video of the Crystal Mine and the work that needs to be done. He provided a handout that outlines the information contained in the video. **EXHIBIT 9.**

Questions, Responses, and Discussion: **REP. BARDANOUVE** asked if there weren't already hundreds of programs in this state and others that are doing the same kinds of studies. **Mr. Robinson** replied that there are lots of programs doing research, but there are none he knows of that are doing demonstration projects. This will be a full-scale demonstration to show that this technology will work. It is a new program being focused through the EPA.

SEN. HOCKETT asked what would be done in the demonstration for \$1 million. **Mr. Robinson** stated that it is yet to be defined. The first project will be Crystal Mine. **EXHIBIT 9.**

CHAIRMAN BERGSAGEL asked who gave them the charter to find a project like the Crystal Mine, and what is the purpose of K-12 education programs. **Mr. Robinson** replied that the EPA gave the charter. The education programs will focus on what mine waste is and why it needs to be cleaned up.

REP. BARDANOUVE asked if the owners of the mine should be responsible for the waste. **Mr. Robinson** replied that is true. This is a technology demonstration project which will prove that technology will work in remote mountain areas. Who should pay for the clean up is not a factor in this project. Owners are recognizing that they will be responsible at some point, and this project will ensure that the necessary technology is available to them when that happens. There are 19,000 such remote mine sites in Montana.

SEN. HOCKETT asked if owners were required to deposit funds into an account cleaning up the waste. **Mr. Robinson** stated that would have been part of the original permitting process. It is unlikely that has happened.

REP. BARDANOUVE asked if there were plans to continue mining at the Crystal Mine. **Mr. Robinson** stated the owners hope to at some time in the future.

Mr. Robinson asked the committee to keep in mind that the Mine Waste Pilot Program is already funded and is being implemented. The committee does not need to take any action on this program; the committee is being asked to fund part of the demonstration

project.

REP. BARDANOUVE asked if this technology to prevent acid-mine drainage from contaminating streams and drinking water would have to be done eternally. Mr. Robinson replied that yes it would.

REP. BARDANOUVE asked if it was possible to just shut off the water. Mr. Robinson that is a different project, and would be more to his liking. That is called source control and their second project's goal is to re-direct that water underground so that it does not get into the mineralized zone.

SEN. HOCKETT asked Ms. Eglet if this project would need a permit if they got into the streambed. Ms. Eglet stated that no permits have been applied for yet. Mr. Robinson said they have been working with the state to learn the process they must go through.

BUDGET ITEM DEER LODGE VALLEY CONSERVATION DISTRICT:

Tape No. 2:A:105

Informational Testimony: John Vanisko, Deer Lodge Valley Conservation District, spoke on behalf of a \$137,700 grant for Developing Acid/Heavy Metal-Tolerant Cultivars for Mine Reclamation. EXHIBIT 10.

Questions, Responses, and Discussion: SEN. HOCKETT asked if more FTES would be added at the Plant Materials Center. Mr. Vanisko stated that it is hoped one FTE will be added for this project. No projects will be cut as a result of this project.

Tape 2:B:004

Informational Testimony: Mark Majerus, Plant Material Center, U.S. Department of Agriculture, stated that this project will address Montana's lack of commercially available plant material for reclamation of acid or metal affected sites. The material released from the PMC have all been native plants adapted to saline soils. This project would deal with soils that have higher acidity. The PMC is very busy, and does have just enough staff to cover the current project with 3 FTE professional positions. The Conservation District is seeking funds for an FTE position for travel and research on this project. The PMC will offer its facility, equipment, and other support for this project. The PMC is the only facility that releases commercial native plant material for reclamation purposes in Montana. It presently takes 8-10 years for plant materials to be released commercially on the Montana market, but there are efforts to reduce that time by half. Source identified, selected and tested material would be the classification for material released for commercial use in four to five years.

Questions, Responses, and Discussion: SEN. HARDING asked why only certain plants will be chosen to be made commercially available. Mr. Majerus explained that certain plants develop

tolerance for specific soil conditions over a number of years. These plants self-pollinate in order to avoid dilution of their ability to survive in heavily contaminated soils. The same species growing in non-contaminated soil will not have the same tolerance. Because the genetic ability to tolerate is passed through seeds, the tolerant plants will be identified and cultivated for commercial availability. The two-year program will be absorbed eventually into the USDA program with funds from the Office of Surface Mining or the EPA.

SEN. HOCKETT asked if the budget was for two years. Mr. Majerus replied that the budget is for salary and benefits for one person for two years. Funds are also included for soil analysis and travel.

BUDGET ITEM PROJECT #6 BROADWATER CONSERVATION DISTRICT:

Tape No. 2:B:375

Informational Testimony: Denise Jore, Fisheries Biologist, U.S. Forest Service, spoke on behalf of a \$296,300 grant for the Whites Gulch Placer Mine Reclamation Project. **EXHIBIT 11.** She provided the committee with a fact sheet, **EXHIBIT 12,** and pictures of the project area, **EXHIBIT 13.** Eight people came to support the funding of this project.

Questions, Responses, and Discussion: CHAIRMAN BERGSAGEL asked if the USFS was sure the population of pure West Slope Cutthroat Trout would not be affected by the work on the stream, stream bank, and tailing piles. Ms. Jore stated that the work to be done should enhance the fish population.

SEN. HOCKETT asked what level of funding support Fish, Wildlife, and Parks, Trout Unlimited, the USFS and other supporters would provide. Ms. Jore stated that the USFS is providing all of the work for the Environmental Analysis report, donating administrative costs and \$5,000. The FWP department is helping with the actual work on the site. She has not spoken to Trout Unlimited yet, but they have spoken of helping with the signs for the area.

Proponent's Testimony: Cliff Cox, Rancher, Supervisor of Broadwater Conservation District, and Jack Saultre, Stream and Lake Committee, Townsend-Broadwater County, spoke in support of this project.

Earl Dorsey, President, Trout Unlimited Mission River Chapter, spoke in support of this project. He stated that some Trout Unlimited funds will be available, as well as funds from the Stream and Lakes Committee of Broadwater County.

Stan Bradshaw, Montana Trout Unlimited, stated that this project is supported by Montana Trout Unlimited and is a classic RIT project which he hopes the committee will support.

Leo Kleffner, Townsend, Soil Conservation District, stated that the SCS is always concerned about water quality. The stream is being threatened and if it is cleaned up now it will be better for the future.

Ron Spoon, Fisheries Biologist, FWP, emphasized that the West Slope Cut Throat fish in this area is extremely rare, and that if this project is not done the population will very likely be lost.

Beth Ihle, Helena Forest, USFS, stated that this project is supported with time, energy and funds from the USFS. The USFS will do the Environmental Analysis report which will include a cultural resources survey, an engineering survey of the drainage, as well as other required surveys for completion of a complete project.

Questions, Responses, and Discussion: SEN. HOCKETT asked FWP and Trout Unlimited what they will contribute besides moral support. Mr. Dorsey stated that they have not been asked for money, but is sure that along with the Townsend Lake and Stream Committee there will be help provided. Mr. Spoon stated FWP has primarily contributed their time and the SITES act funds. That is all he foresees them doing at this time.

CHAIRMAN BERGSAGEL asked that they get back to the committee with the amount of funds they can contribute. Mr. Saultre stated the Lake and Stream Committee is new and will not have funds to contribute, but will contribute labor. Mr. Dorsey estimated the local Trout Unlimited would donate \$300-\$500 and labor.

BUDGET ITEM PROJECT #8 MONTANA DEPT. OF FISH, WILDLIFE & PARKS:

Tape No. 2:B:074

Informational Testimony: Vito Ciliberti, Bureau of Land Management, U.S. Dept. of Interior, spoke on behalf of a \$72,850 grant for the Elk Creek Placer-Mined Channel Reconstruction project. EXHIBIT 14. Mr. Ciliberti stated that the Environmental Assessment has been completed for this project and it is ready to go. The BLM will contribute approximately \$20,000 in in-kind services. This project will occur on BLM land. He presented a slide show on the Elk Creek area that will be reconstructed.

Tape 3:A:010

Questions, Responses, and Discussion: REP. BARDANOUVE and CHAIRMAN BERGSAGEL questioned why the mining operator was able to abandon this claim within the past five years without doing any reclamation work. Now the state is having to pay for this. Mr. Ciliberti stated that there are regulations for mining operations on state land that require reclamation work to be done; however, the law is not implemented like it should be. The state does require small mining operations to post bonds just as large mining operations are required to do, the state just has not enforced the law. Mr. Tubbs stated that small mining operations

that do not impact an area larger than five acres are not covered under current statute.

Mr. Ciliberti stated the cost will be approximately \$15/foot to repair the area. **REP. BARDANOUVE** asked why these operations were permitted in the first place. He asked how much money the mining operators made from these claims. **Mr. Ciliberti** said that miners do not have to disclose the profits they make on these sites. They make enough to cover their direct operating costs, and often they will leave the mess created because it saves them money. The Placer Mine Education Committee wants to produce a Placer Mine booklet to convey information on reclamation that does not cost an excessive amount of money if it is done concurrent with the mining program. This demonstration project will show these small miners how to do this reclamation and what the results will be.

REP. BARDANOUVE asked if a permit is necessary to do this work. **Mr. Ciliberti** stated that a permit is not necessary; a notice level operator is only required to notify the BLM that mining will be done on a specific site. The BLM can work with the miner and make suggestions but has no power to require them to do anything. If the miner does extensive damage the BLM can go through a very lengthy and laborious administrative process to try to have the activity stop. Right now a Storm Water Discharge Permitting system is being implemented that will require even notice-level operators to file a plan of operation. The plan of operation will describe what the operator will do to prevent water quality impacts, how it will be done, and what monitoring devices will be used to demonstrate that water quality standards are not being violated.

SEN. HOCKETT asked if the people were operating under the 1872 Mining Law. **Mr. Ciliberti** said that is correct. **SEN. HOCKETT** stated that is where the big hole is. A farmer or rancher is covered under laws much more rigid than the laws miners operate under. **Mr. Ciliberti** stated that miners are covered under the same laws, but by nature of their operation they dig stream bed bottoms. The state can only hope to get them to do reclamation.

Proponent's Testimony: Stan Bradshaw, Trout Unlimited, stated that Trout Unlimited supports this project. The project will restore an important tributary to the Blackfoot River. There are not very many spawning tributaries in this area for the Blackfoot River. In addition, this project is one of the reasons the RIT was set up. **Mr. Bradshaw** stated he agreed with **REP. BARDANOUVE's** concerns, but in the meantime this project will accomplish a lot of good.

CHAIRMAN BERGSAGEL stated he will discuss the committee's concerns with the authority that handles permitting for small mining operators and then report back to the committee.

BUDGET ITEM PROJECT #19 RAVALLI COUNTY:

Tape No. 3:A:600

Informational Testimony: Jim Freeman, Chairman, Bitterroot Resource Conservation and Development, Inc., spoke on behalf of a \$300,000 grant for the project A Lake For Better Water Quality (Como Lake Dam Rehabilitation). **EXHIBIT 15.** He provided the committee with maps, diagrams, and summary testimony, **EXHIBIT 16.**

Questions, Responses, and Discussion: SEN. HOCKETT asked if the irrigation district was helping with the project. Mr. Freeman stated that they are helping and have offered to donate 200 cubic yards of fill material.

Proponent's Testimony: Pam Jackson, Ravalli Chamber of Commerce, spoke in support of this project. She stated that the community supports this project due to the opportunity to increase tourism and boost the local economy. There are no opponents to the project from anyone in the valley.

Questions, Responses, and Discussion: SEN. HOCKETT commented that the DNRC's analysis states that no water rights have yet been obtained, and that must happen before construction begins. He asked Mr. Tubbs how additional water would be stored that does not have to be released for somebody downstream to use. Mr. Tubbs stated that currently western Montana has a tremendous amount of snow-melt runoff that is not captured. One power turbine exists in the whole system that can use the amount of water that flows through the state at spring runoff time. Mr. Tubbs stated that it will not be possible to store water during the middle of the irrigation season, but there is the chance of catching the high-stream flow for additional storage in reservoirs. DNRC's comment was made to remind the RCD that if they do not obtain water rights for the additional water, somebody downstream will use it. Stored water can be protected.

REP. BARDANOUVE asked if during low water years, irrigators use all of the extra water. Mr. Freeman replied that the irrigators are only entitled to 3600 acre feet of water. The Bitterroot Irrigation District has applied for storage rights for the additional stored water. As the operator of the facility they will hold the water storage rights for all water coming into the reservoir.

Kit Sutherland, Bitterroot RCD, stated that the additional 9,000 acre feet of water would be released at the request of the DFWP. They will request it as needed to maintain water quality for fisheries in the river; therefore the full amount of the storage would now be available for in-stream flows. This is non-consumptive use and is why it can be set aside is the spring.

Stan Bradshaw, Trout Unlimited, stated he is a proponent of this project. The Bitterroot Chapter of Trout Unlimited is

contributing funds for this project. He explained to REP. BARDANOUE that the water that goes downstream may be able to be monitored by the existing monitoring system. There are Water Commissioners and enforcement means in place to deal with what happens to the excess water once it goes downstream.

BUDGET ITEM PROJECT #21 TOWN OF HOT SPRINGS:

Tape No. 3:A:185

Informational Testimony: Sharon Flesch, Project Coordinator, CAM Redevelopment Corporation, spoke on behalf of the \$300,000 grant for the Camas Therapy Center in Hot Springs, MT. EXHIBIT 17. She presented documentation of the project, which included written testimony, EXHIBIT 18. In addition, she provided a packet of letters of support, EXHIBIT 19. Refer to EXHIBIT 18 - PAGE 3 for her testimony.

Raymond Flesch, President, CAM Redevelopment Corp., spoke concerning the building which will house the Camas Therapy Center. EXHIBIT 18 - PAGE 5.

Tape 3:B:004

Merle Farrier, Hot Springs CAM Redevelopment Corp., spoke concerning the business plan for the Therapy Center. EXHIBIT 18 - PAGE 6.

Proponent's Testimony: Thelma Niemeyer, Confederated Salish-Kootenai Tribes, Secretary, CAM Redevelopment Corp., spoke in support of the Therapy Center grant request. EXHIBIT 18 - PAGE 7.

William Massey, Commissioner, Sanders County, spoke in support of the \$300,000 grant for the Therapy Center. EXHIBIT 18 - PAGE 8.

REP. JIM ELLIOTT, HD 51, Sanders, spoke in support of a \$300,000 grant for the Camas Therapy Center in Hot Springs, MT. He encouraged the committee to grant the full amount of the request. The project has tremendous support from the town as the committee saw last week when 20-25% of the residents came to testify for the grant from HB 6. The committee should seriously consider the dedication the community has given to this plan over the past four years. They have done their homework and have done everything right. He personally can testify to the integrity of their attorney and their architect. He certainly would stake his integrity on the citizens of the town and hopes the committee gives their full support to the project.

CHAIRMAN BERGSAGEL stated that SEN. BARRY "SPOOK" STANG, SD 26, St. Regis would like to be on record as a strong supporter of this project.

Questions, Responses, and Discussion: CHAIRMAN BERGSAGEL asked if the HB 6 and HB 7 grants were two separate grants, and if the Farmers Home Administration loans were two separate loans. Mr.

Tubbs stated that the HB 7 and HB 6 grant requests are two separate and distinct applications for two different parts of the project. **Ms. Flesch** stated that just one FHA loan is being applied for.

CHAIRMAN BERGSAGEL stated that the two grant applications list two different loan amounts being applied for under FHA. He asked where the error was, and how much money would be received as a loan from the Small Business Administration. **Greg Mills, Program Officer, Reclamation and Development Grants Program**, stated that the original application has \$250,000 loan from the SBA, and a \$250,000 FHA loan. It was just a mis-print; these are the correct figures.

CHAIRMAN BERGSAGEL asked them to confirm the figures and report back to the committee tomorrow. **Mr. Tubbs** informed the committee that the DNRC only recommended a grant of \$150,000, not the requested \$300,000. **Mr. Mills** stated that the RDG statute prohibits funding of projects that have a responsible or liable party. The underground tank is a regulatory program and there are liable parties to be responsible for its removal. The asbestos removal is regulated by the EPA. **Mr. Flesch** stated that CAM Development is working through the county to have the fuel tanks removed. This money will not be used to remove them. The \$300,000 is needed to secure the building. If the money is not used for asbestos removal, it is still needed for roof and ceiling work. **Mr. Mills** stated that this is new information that has not been provided to DNRC.

CHAIRMAN BERGSAGEL requested that they sit down with CAM Redevelopment and be brought up to date. If a committee member then chooses to increase the recommended funding level, it will be known if DNRC's concerns have been met.

Ms. Flesch stated that some funding has been received since the application was submitted to DNRC. She will bring them up to date on that as well. **Mr. Tubbs** stated a single budget for both projects will be provided to the committee tomorrow.

REP. BARDANOUVE asked if the boiler would be replaced. **Mr. Flesch** stated it would be taken out and a geothermal heating system put in.

REP. BARDANOUVE asked what 874 money has to do with this project. **Mr. Farrier** stated that a concern of this whole project is increasing taxable valuation. Since this is a tribally owned complex, it will not increase taxable valuation. However 874 funds of the federal government provide contributions to communities in lieu of property that is not taxable. For every employee that works at the Therapy Center and has children enrolled in school, the school will be eligible for 874 funds. The land and building are owned by the CSKT. The employees do not have to be tribal members to qualify the school for 874 funds.

REP. BARDANOUVE asked who the project is owned by and how revenues were projected. Ms. Flesch stated that the property is owned by the CSKT, and the project is owned by CAM Redevelopment and the town of Hot Springs. CAM Redevelopment holds the lease and will manage, operate and pay the lease. The profit will be put back into the town to start other things for the town. A feasibility study and a business plan designed by University of Montana students were used to project revenues from the center.

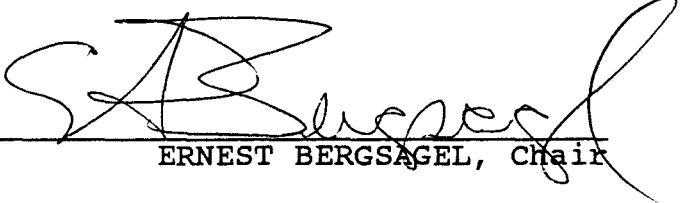
Mr. Massey stated that some of the figures came from past records of the old hot springs center. The new center will benefit the state by shortening the time people have to be off work and reducing costs for Worker's Compensation. People have faith in the tremendous healing powers of the mineral water from the spring, and now there is growing interest in natural healing processes.


REP. ELLIOTT stated that a therapist with a Ph.D. in Molecular Biology is holding seminars in Hot Springs on herbal healing and has generated considerable interest in the area. The town of Hot Springs seems to be developing into a center for this type of therapy.

Tape 3:B:572

ADJOURNMENT

Adjournment: 11:15 PM


ERNEST BERGSAGEL, Chair


SANDRA BOGGS, Secretary

EB/sb

HOUSE OF REPRESENTATIVES

LONG - RANGE PLANNING SUB-COMMITTEE

ROLL CALL

DATE

2/8/93

| NAME | PRESENT | ABSENT | EXCUSED |
|------------------------------|---------|--------|---------|
| SEN. BOB HOCKETT, VICE-CHAIR | ✓ | | |
| REP. FRANCIS BARDONOUVE | ✓ | | |
| SEN. ETHEL HARDING | ✓ | | |
| SEN. ELEANOR VAUGHN | ✓ | | |
| REP. TOM ZOOK | ✓ | | |
| REP. ERNEST BERGSAGEL, CHAIR | ✓ | | |
| | | | |
| | | | |



EXHIBIT 1

The Big Sky ~~DATE~~ Entry 2-8-93

~~HB~~
MONTANA HOUSE OF REPRESENTATIVES

2-6-93

Rep Bergsage -

Please show me as
a proponent for the
recent.
hearing on the geology
programs for schools
in support of Frenchtown
schools.

Thank you.

Rep. Bird

DATE 2-8-93

HB

EXECUTIVE ACTION 2-8-93

- 1) Department of Family Services - Install Fire Safety Systems at Mountain View School and Pine Hills School - Capital Projects Priority #1 (Page ²²~~29~~). This project was on hold until the department provided A&E further information concerning the fire alarm panel at Pine Hills School.
- 2) Department of State Lands - Various Maintenance Projects - Capital Projects Priority #20 (Page 20). This project was approved by the committee at \$50,000 or 50 percent of the Executive Recommendation. Does the committee wish to reconsider?
- 3) Department of Labor - Expand and Renovate Job Services, Statewide - Capital Projects Priority #45 (Page 134). The department stated there was no federal funding for this project and the project as recommended by the Executive Proposal was not approved. As a substitute project the department submitted a proposal to expand the project to \$1.5 million which would allow them to either build or purchase a larger facility in Butte. The funding for this was to be a General Obligation bond issue to be repaid by federal funds from the department's operating funds. The committee did not approve this substitute project. Does the committee wish to reconsider its action?

DEPARTMENT OF STATE LANDS
LONG RANGE BUILDING PROGRAM
MAINTENANCE AND IMPROVEMENTS PROJECTS LIST FY 94-95

The Department of State Lands personnel are located in 23 different communities for the purposes of managing state owned land to produce income to the school trusts and to protect private, state and federal land from wildfires. The Department leases office facilities in ten locations and operates out of state owned facilities in thirteen locations. The state owned facilities are located mostly in rural areas in western Montana (Libby, Olney, Kalispell, Marion, Plains, Swan Lake, Missoula, Greenough, Lincoln, Garrison, Anaconda, Lima, Helena) close to state owned forests and areas of wildfire protection responsibility. Many of the facilities are of older wood frame construction or trailers acquired as federal excess property. A typical field office site could include an office building, an equipment storage building, a three-sided vehicle shed, and possibly a firefighter bunkhouse or residence.

The Department of State Land's Major Maintenance Plan for FY 94-95 included \$421,700 worth of maintenance projects of varying priority levels. In addition, the Department proposed to construct \$32,000 worth of storage buildings to protect fire vehicles and equipment when they are not being used and during the winter season. Fire equipment needs to be ready to go in a moments notice and it is desired to have them protected from the elements in a three-sided vehicle shed to reduce wear, maintenance and increase operability of the equipment. This plan was reviewed by Architecture and Engineering Division and recommended for funding at \$100,000 to address only the most urgent projects.

At the \$100,000 dollar level the following projects selected from the Department's Major Maintenance Plan would likely be conducted:

| LOCATION | PROJECT | COST |
|-----------|---|-----------|
| Helena | Install ramp for Handicap access | \$4,000 |
| | Replace 2 overhead shop doors | \$5,000 |
| Missoula | Repair Equipment Development Ctr. roof | \$15,000 |
| | Renovate warehouse into fire dispatch | \$10,000 |
| | Purchase building materials for maintenance | \$2,000 |
| | Install energy conservation measures | \$11,000 |
| Kalispell | Replace roofing on existing buildings | \$2,500 |
| | Replace office furnace/water heater | \$4,500 |
| | Purchase building materials for maintenance | \$1,300 |
| Olney | Repair rotting floor joists | \$17,500 |
| | Replace roofing on existing buildings | \$6,000 |
| Swan Lake | Replace shop doors, plumbing and roofing | \$3,200 |
| Anaconda | Construct equipment storage building | \$7,500 |
| Lewistown | Enlarge fire equipment storage compound | \$3,000 |
| | Construct equipment storage building | \$7,500 |
| | TOTAL | \$100,000 |

The Department would like to see the Maintenance and Improvements Projects funded at \$100,000. If this is not possible then the Department asks that language be added which would authorize it to spend an additional \$50,000 contingent on additional capital construction program revenues that might become available during the biennium.

and August flows in the Bitterroot River would improve water quality in the Clark Fork. The applicant does not state that the additional water provided by this project would increase July and August flows by the needed 10 percent.

According to the Water Quality Bureau, to achieve improved water quality benefits would require that assurances be made that additional water storage capacity be used for streamflow augmentation. An on-site water commissioner would be needed to ensure that late season water releases remain instream and are not diverted by downstream users. Additionally, the timing and volume of releases to enhance instream flows would be critical. Close monitoring would be required to ensure there is adequate storage in Como Lake and that the stored water is reserved for the most critical periods.

RECOMMENDATION

A grant of up to \$300,000 is recommended, subject to the following contingencies.

1. DNRC must approve the project scope of work and budget.
2. Water rights must be secured for the additional water to be stored by this project.

-20-

APPLICANT NAME : Butte-Silver Bow

PROJECT/ACTIVITY NAME : Mitigation of Mining and Smelting Damage through Urban Forestry

AMOUNT REQUESTED : \$ 150,000

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|-------------------------------|-----------|
| Project Sponsor | \$ 24,000 |
| Landscape Architect (In-Kind) | \$ 3,000 |
| Volunteers (In-Kind Services) | \$ 3,000 |
| Donations | \$ 1,000 |

TOTAL PROJECT COST : \$ 181,000

PROJECT ABSTRACT (Prepared and submitted by applicant)

The overwhelming air pollution associated with early mining and smelting destroyed native vegetation in Butte and prevented ornamental planting. In addition, by 1882,

mining companies were hauling timber off the foothills at an estimated rate of over 200,000 trees per month for mining-related purposes. Most of the vegetation in the community was decimated.

Therefore, Butte, unlike most cities, did not develop an urban forestry program. To offset the bleakness of the town and give Butte residents an oasis complete with trees, shrubs, flowers, and other plantings that were lacking in the city, William Clark built the Columbia Gardens at the turn of the century. Until 1973, this beautiful area gave Butte's citizens a place to relax and play. In 1973, the Columbia Gardens gave way to mining, and, where trees and playgrounds once stood, there remains only the bare soil disturbed by mining operations.

Butte-Silver Bow's number one priority is to diversify and expand its economy. However, urban blight due to past mining has been documented as one of the major barriers to economic development. When one also adds the environmental and social costs associated with the lack of street trees, the need for a major program to rectify the damages done to this resource by past mining and smelting activities becomes apparent. Therefore, remedial action is necessary.

Numerous federal, state, and local reports have concluded that an aggressive urban forestry program is an important part of any urban enhancement program for Butte. To meet this need, Butte-Silver Bow developed an Urban Forestry Program with the assistance of a 1987 DNRC Resource Indemnity Trust Fund Grant. Although the Urban Forestry Program, which is entering its fourth season, addresses the technical, social, and long-term funding requirements beyond the initial grant request, the scope of the existing reclamation work in Butte-Silver Bow burdens the program's resources. Additional reclamation work not outlined in the initial grant still remains a priority in the community--namely, visual enhancement of the gateways, parkways, and parks.

The proposed three-year project, if implemented, would have an immediate impact on the city and citizens of Butte. It would become an important part of the total Urban Enhancement Program and would continue reducing the impact of past mining and smelting activities on Butte and its citizens.

TECHNICAL ASSESSMENT (Prepared by DNRC)

Over a three-year period, the Butte-Silver Bow Friends of the Urban Forest plan to plant over 360 trees along approximately five miles of roadway. Selected areas to be planted with trees and shrubs are two "gateways" adjacent to Interstate 90--the Montana Street exit and the City Center/Iron Street exit. Ornamental street tree plantings would be placed along three main thoroughfares (north/south connector streets)--Montana Street, Main Street, and Utah Street from Front Street north to Granite Street. Coniferous trees and various shrubs would be planted along Continental Drive from Texas Avenue to Park Street to screen active and unreclaimed mine areas.

The Butte-Silver Bow Friends of the Urban Forest program has been ongoing since 1989. The Friends of the Urban Forest is made up of five local concerned citizens. They have received input on the design of their program from the County Extension Agent, U.S. Forest Service, Montana Department of State Lands Forestry Division, and a local landscape architect. The program has planted over 350 trees since its inception. Butte-Silver Bow has evidenced the ability to carry out a successful urban forestry program. The Friends of the Urban Forest has demonstrated that it has the organization, support, and technical expertise to carry out this project successfully.

Water is the most limiting factor in a successful urban planting program. Unfortunately, a number of state and federal grants for urban forestry limit funding to the purchase and planting of nursery stock. Without a well-developed watering maintenance program, trees in downtown urban settings do not fair well. As an example, the City of Great Falls has two watering trucks out all summer, 40 hours a week, watering the six-hundred-plus trees the city plants every year. Great Falls also has an approximate \$400,000 per year forestry budget. Cities that do not have this type of internal funding source for tree watering must try to incorporate automatic watering systems into their plantings. The Butte-Silver Bow program should incorporate a tree watering/maintenance plan involving irrigation system installation and/or manual watering using trucks or other methods.

The 1991 Federal Highway Bill has given the Montana Department of Transportation \$5 million every year for the next five years for highway enhancement programs. Of this amount, Butte-Silver Bow will receive \$150,000 for a broad range of projects. The Friends of the Urban Forest should request funds from this source for the Interstate 90 interchange plantings. The request for funding should include planting stock, the cost of planting, and the installation of an irrigation system.

FINANCIAL ASSESSMENT

The RDGP budget is shown below.

| | |
|------------------------|-----------------|
| Salaries and wages | \$ 19,208 |
| Employee benefits | \$ 7,792 |
| Supplies and materials | \$ 105,500 |
| Communications | \$ 1,000 |
| Travel | \$ 500 |
| Equipment | \$ 15,000 |
| Miscellaneous | <u>\$ 1,000</u> |
| TOTAL | \$ 150,000 |

The main expense is \$97,500 for trees, shrubs, and ground cover under the supplies and materials category. Also under this category are \$7,500 for supplies and \$500 for training materials. Under the equipment category \$15,000 is budgeted for rental of equipment to break concrete, dig holes, haul trees, and irrigate.

Butte-Silver Bow charges property owners \$120 per tree, which includes planting and replacement. Based on the total RDGP request of \$150,000 to plant 360 trees, the average cost per tree would be \$416.67. This figure does not include any local match from individuals or businesses to have trees planted in the boulevard in front of homes or businesses. The average cost of contracting out the purchase and planting of a tree two and one-half inches in diameter should rarely exceed \$250 per tree. Adding the overhead cost of designing and administering the project (approximately 20 percent), a total project cost of \$108,000 would be more realistic. Contracting out the planting of trees would reduce the cost of the project. The funds saved could be redirected to incorporate a tree watering/maintenance plan as recommended in the Technical Assessment.

ENVIRONMENTAL EVALUATION

This project should not cause any major adverse environmental problems. Plans must be developed for handling and disposing of toxic wastes, if any are encountered. Also, testing should be done to ensure that topsoil used in tree planting is not contaminated.

The major positive environmental effects would be improved urban forests and aesthetics for the community. The trees would reduce street dust and air pollution. The presence of small metal particulates in street dust is a health hazard to Butte residents. Reduced noise pollution and erosion would also result. The increase in trees along Butte streets would provide habitat for birds and urban wildlife.

PUBLIC BENEFITS ASSESSMENT

This project would reclaim or screen from view areas that historically had trees but were denuded due to mining and smelter operations and resultant pollution. The benefits of this project would be long-term, provided that the trees survive. Residents of the Butte area would be the main beneficiaries of this project. This project would involve a few jobs for persons planting and caring for the trees and administering the project.

Potentially there could be an increase in jobs due to increased tourism and new businesses locating in Butte; however, this is somewhat speculative and depends on other factors as well.

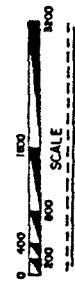
In 1987 the Butte-Silver Bow urban forestry project ranked low, 25 out of the 27 projects approved for RDGP funding. The RDGP program continues to encourage communities to appropriate local funds or seek other outside funding sources for urban forestry projects.

RECOMMENDATION

A grant of up to \$150,000 is recommended for this project with the following contingencies.

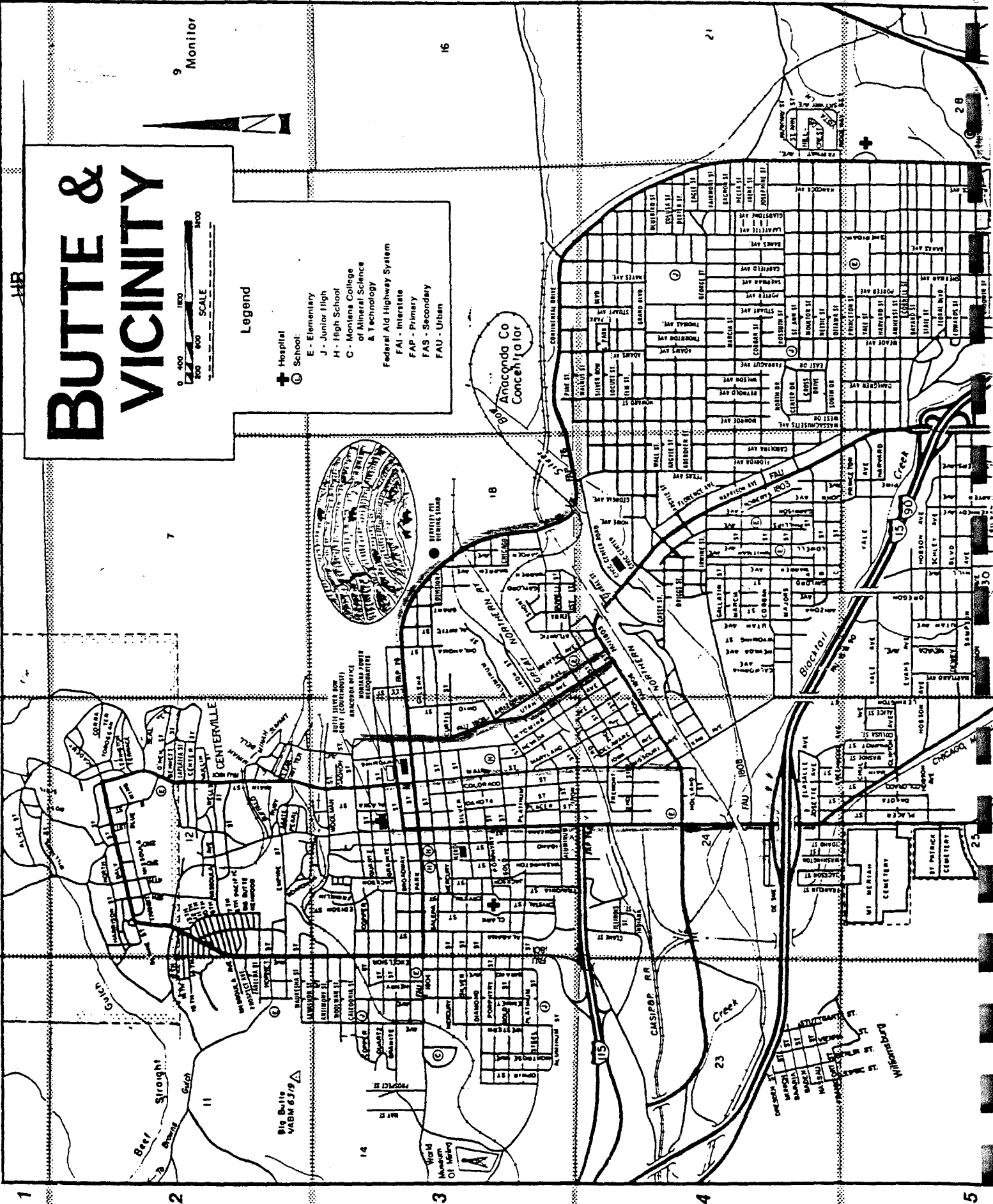
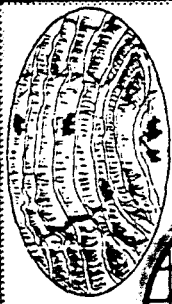
1. DNRC must approve the project scope of work and budget.
2. Butte-Silver Bow must contract out the planting of the trees to reduce costs. DSL has offered assistance to develop tighter bid documents to minimize the cost of materials and installations.
3. Butte-Silver Bow must develop and incorporate a plan for maintenance of the trees to include regular watering or the installation of automatic watering systems.
4. Butte-Silver Bow must revise the scope of work to concentrate plantings in areas that have been affected by past mining and should obtain funding for the Interstate 90 interchange areas from the Montana Department of Transportation or other sources. Alternative planting areas would need to be identified for the trees now planned for the highway interchange areas, or the grant would be reduced accordingly.

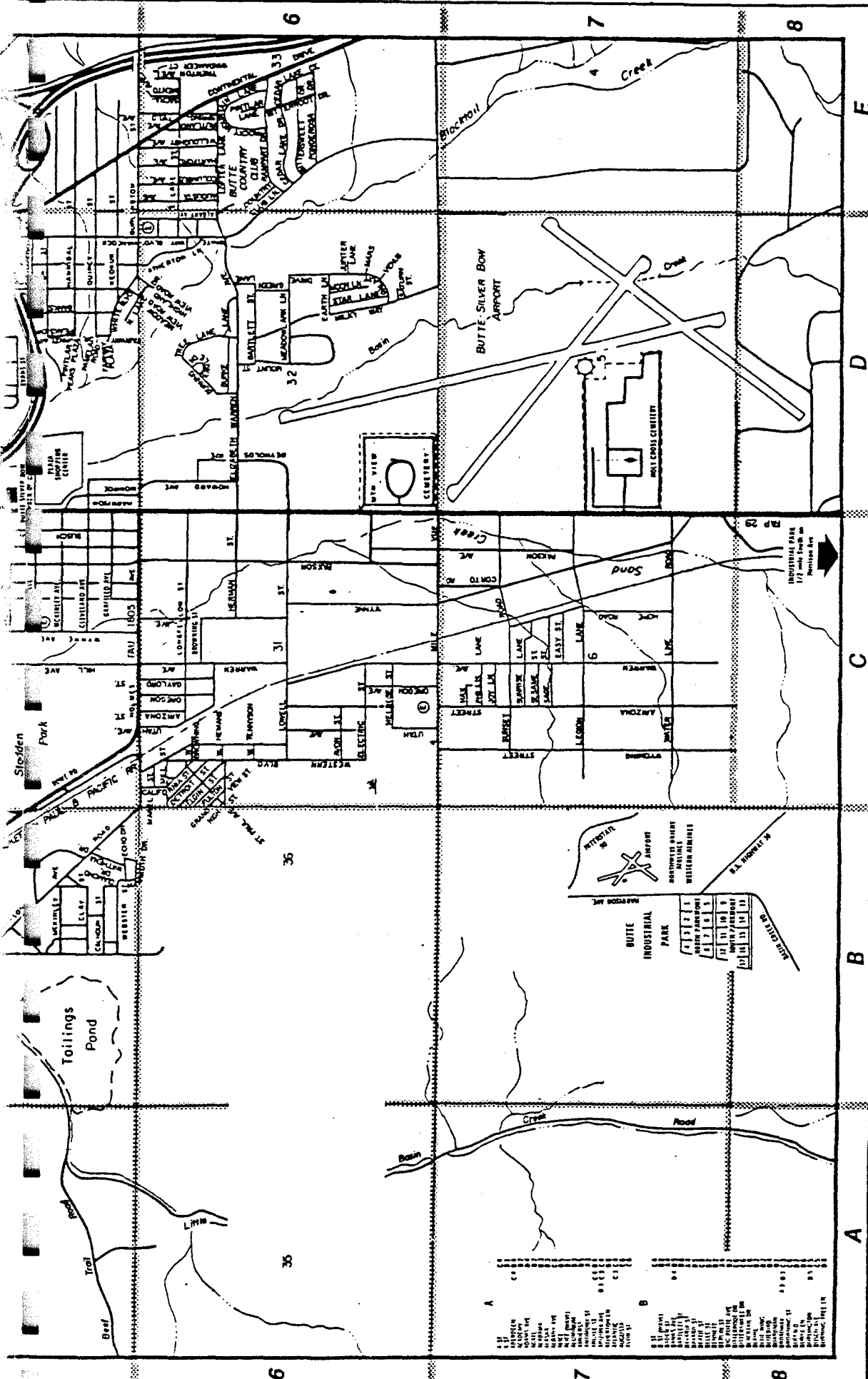
BUTTE & VICINITY



Legend

- Hospital
- School:
 - E - Elementary
 - J - Junior High
 - H - High School
 - C - Montana College of Mineral Science & Technology
- Federal Aid Highway System
 - FAI - Interstate
 - FAP - Primary
 - FAS - Secondary
 - FAU - Urban





| INDEXED STS | | | | | | | | | |
|-------------|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

The following projects are not recommended for funding. The list is alphabetized by the name of the project sponsor.

APPLICANT NAME : Butte-Silver Bow
PROJECT/ACTIVITY NAME : Development of a Mine Subsidence Insurance Program

AMOUNT REQUESTED : \$ 123,750

OTHER FUNDING SOURCES AND AMOUNTS :

Project Sponsor \$ 8,880

TOTAL PROJECT COST : \$ 132,630

PROJECT ABSTRACT (Prepared and submitted by applicant)

The overall objective of this project is to develop a sound basis for initiating a self-sustaining hard-rock mining subsidence insurance program in Montana. The general approach of the proposed project involves specific research and development and regulatory evaluation phases conducted by the Butte-Silver Bow government in an effort closely coordinated with the Montana Department of State Lands. A state-administered subsidence insurance program will be developed for the Central Butte Subsidence Area south of and adjacent to the central business district. The proposed project will develop the framework, regulatory and technical criteria, and administrative and financial requirements and procedures necessary for successfully implementing a program to insure property against damages caused by land subsidence resulting from mining.

The long-term goal of these efforts is that insurance against damage caused by hard-rock mining be handled by the private insurance industry following guidelines established by the Montana Legislature. This project will develop the information needed to establish the legislative guidelines and implement this much needed program.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The project sponsor argues that a mine subsidence insurance program would alleviate deterioration of the Central Butte Mine Subsidence Area, because adequate insurance against damage from land subsidence would eliminate restrictions and concerns by lenders about funding proposed redevelopment projects. The program could be expanded to address similarly impacted areas throughout Montana.

Four alternatives are discussed in the application, including the proposed plan. Because details analyzing the cost, scheduling requirements, and options of local residents or businesses are not provided for each alternative, it is difficult to adequately analyze the selection of the proposed project as the preferred alternative. Each of the alternatives discussed in the application demonstrates merit in solving at least a portion of the problems identified with the deterioration of properties in the central Butte area. It would appear that a land use study of the central Butte area in the context of continual adverse effects from land subsidence would benefit the process, allowing for the complete identification of available alternatives and the selection of the best course of action.

The structure of the proposed program has not been defined, and information about the success of similar programs in other states is not provided. It is therefore impossible to determine whether the proposed program will solve the problems identified with mining subsidence in the central Butte area. The funding requested would apparently be used to finance a study that would lead to the design of an insurance program; however, the mechanism by which the insurance program would provide protection for respective lenders from property damage to their investments resulting from land subsidence is not described.

Because the central Butte area is included in the Butte Superfund Site, lending restrictions may continue until EPA opinions are more clearly identified concerning the specific liability of property owners encompassed in a Superfund site.

Technical information defining the best use of land in the central Butte area in the context of continual adverse impacts due to land subsidence is not provided or discussed. Before redevelopment of the area is proposed and stimulated through implementation of a state funded insurance program, it would be prudent to determine the most desirable land use of the area.

Finally, the grant application does not discuss questions regarding the selection of a mining subsidence insurance program as the best remedial action for addressing deterioration of structures in the central Butte area. The magnitude of continual mining subsidence in the area is not discussed in detail; thus, the adverse impact of subsidence on redevelopment and purchase of properties in the area cannot be determined. In the event that mining subsidence will continue to generate widespread destruction of

structures in the central Butte area, then perhaps a different land use such as an open space area would be more sensible alternative.

FINANCIAL ASSESSMENT

Butte-Silver Bow intends to use the RDGP funds (\$123,750) to hire a consultant and contract with the Department of State Lands (DSL) to perform the proposed tasks. The selected consultant would conduct a literature search and use this information to develop a plan for program implementation. A complete analysis of the project budget is impossible because details involving implementation of the project are not provided. The method of implementation of the proposed mining subsidence insurance program and its ability to provide adequate funding for redevelopment of the central Butte area are not discussed in the application. The grant application mentions the success of similar programs in other states, but provides no explanation of that success or how those programs are implemented and structured. The level of concern of lenders about providing funding for properties included in a federal Superfund site is not recognized or discussed; thus, it is difficult to analyze the potential of this program to create a healthy lending attitude for future redevelopment and purchasing of properties in the central Butte area. Inquiries to DSL regarding its involvement indicate DSL does not support the project as proposed.

ENVIRONMENTAL EVALUATION

The project will have no direct effect on the environment. If the project is successfully implemented, the program could have an impact on the human environment, e.g., community and personal income, tax base, housing quantity and distribution, demand on government services, etc. However, until the program is better defined and implemented, these impacts are impossible to assess.

Long-term adverse impacts may continue in the central Butte area as a result of continual land subsidence throughout significant portions of the area. The magnitude of the adverse impacts on structures involved in future development projects in the area will depend on the extent of the projects and their success in avoiding areas impacted by continued land subsidence.

Short-term environmental impacts are not considered a problem.

PUBLIC BENEFITS ASSESSMENT

The applicant lists the elimination of urban blight and deterioration within the central Butte subsidence area and associated neighborhoods as the most important public benefit. The likelihood of attaining this benefit as a result of this project, as proposed, seems small.

RECOMMENDATION

No funding is recommended for this project.

APPLICANT NAME : Crow Tribe

PROJECT/ACTIVITY NAME : Lodge Grass School--Coal Mine and Gravel Pit
Reclamation

AMOUNT REQUESTED : \$ 299,090

OTHER FUNDING SOURCES AND AMOUNTS :

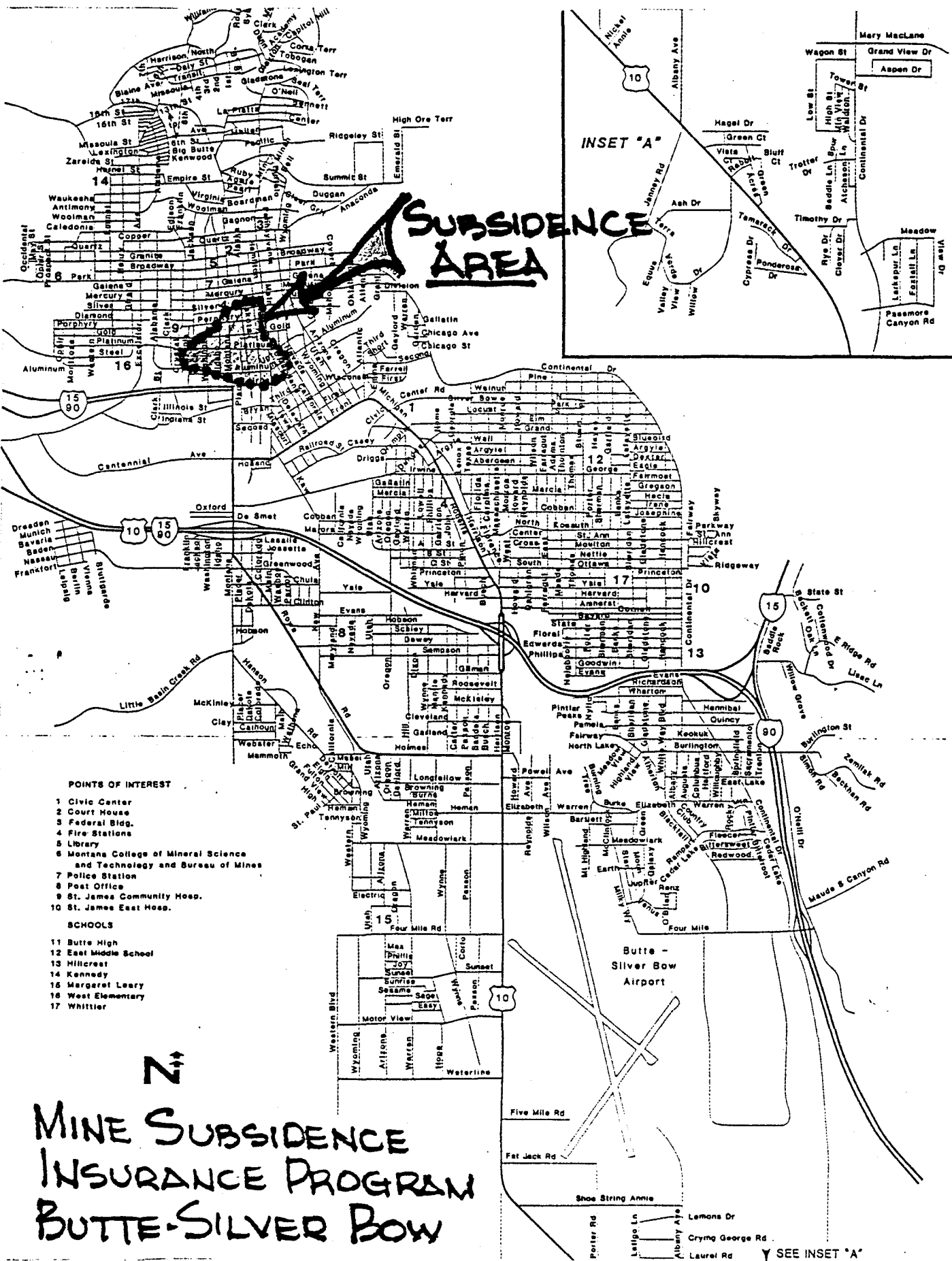
None

TOTAL PROJECT COST : \$ 299,090

PROJECT ABSTRACT (Prepared and submitted by applicant)

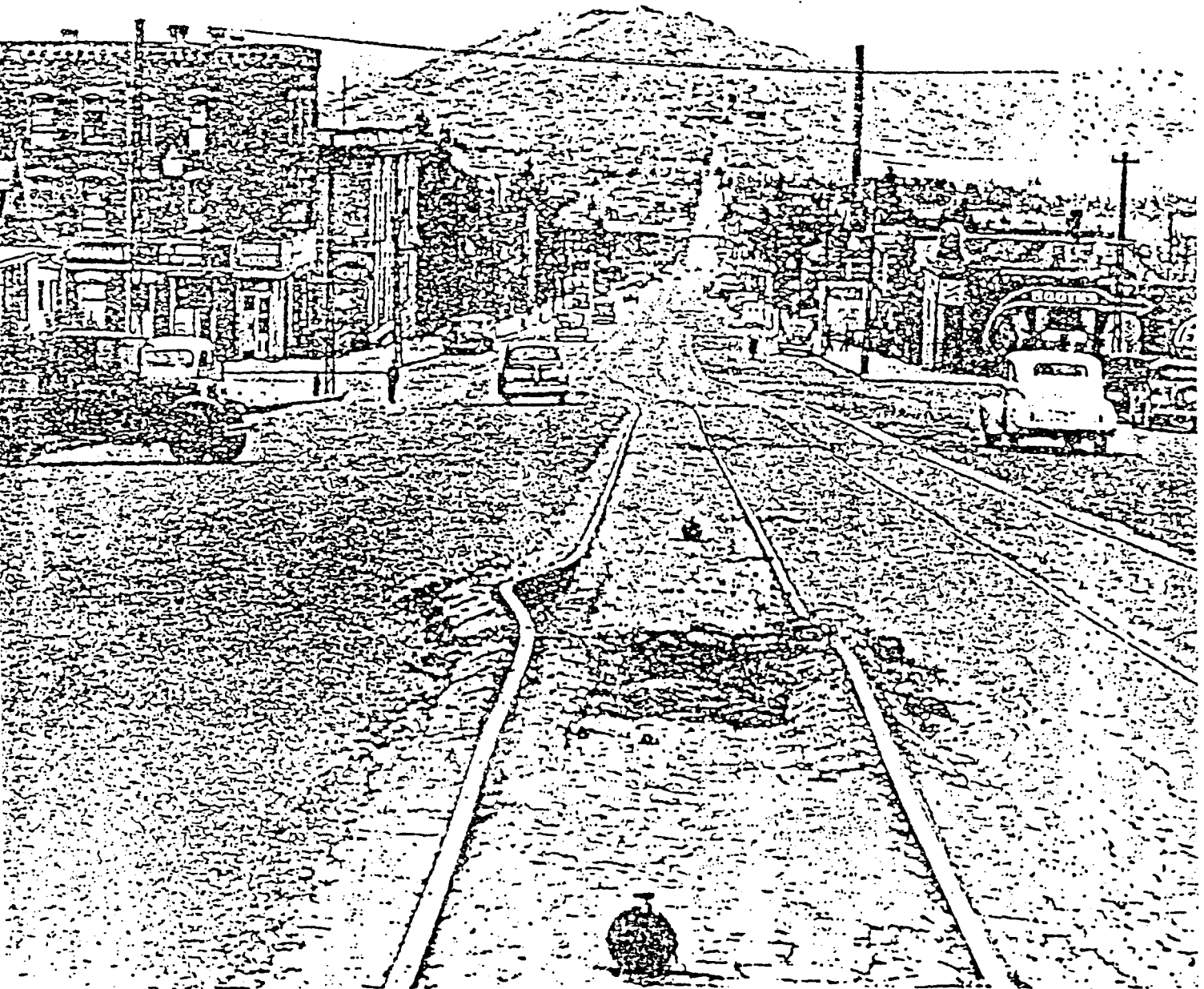
This project involves the reclamation of lands owned by Lodge Grass School District and located near the Lodge Grass Public School within the Town limits of Lodge Grass. A portion of the property (as well as adjacent private property) contains an abandoned gravel pit and abandoned underground coal mine identified as the Lodge Grass Mine. The coal mine was closed in 1921 and the mine openings sealed after the death of a miner and a local teenager. The extent of mine adits and drifts are unknown, but they are assumed to extend to, and possibly underneath, the Lodge Grass Public School building.

Located atop the underground mine is a gravel pit which has had excavations occurring since about 1930. Most of the gravel has been removed with no efforts to reclaim the pit.



MONTANA DEPARTMENT OF
NATURAL RESOURCES & CONSERVATION
RECLAMATION & DEVELOPMENT
GRANT PROGRAM

EXHIBIT 7
DATE 2-8-93



GRANT REQUEST
for
DEVELOPMENT OF A MINE SUBSIDENCE
INSURANCE PROGRAM
from
BUTTE-SILVER BOW, MONTANA, APRIL, 1992

APPLICANT NAME : Jefferson Valley Conservation District

PROJECT/ACTIVITY NAME : Crystal Mine Remediation Technology
Demonstration

AMOUNT REQUESTED : \$ 300,000

OTHER FUNDING SOURCES AND AMOUNTS :

Environmental Protection Agency (EPA) \$ 677,000
Headwaters RC&D Area, Inc. \$ 4,996

TOTAL PROJECT COST : \$ 981,996

PROJECT ABSTRACT (Prepared and submitted by applicant)

The Jefferson Valley Conservation District is seeking a Reclamation and Development Grant to assist in finding effective, cost-efficient technology to treat acid mine drainage at the Crystal Mine site in Jefferson County near Basin.

The applicant proposes to work with the Mine Waste Pilot Program (funded by EPA) located in Butte. The Mine Waste Pilot Program seeks to identify technologies that are effective in treating mine wastes, to identify gaps in the technologies, to further refine or develop those technologies, and to perform field tests to demonstrate their effectiveness.

This project, the Crystal Mine Remediation Technology Demonstration Project, would follow that exact process in order to develop a technology to treat acid mine drainage flowing from the mine adit and surrounding area.

Acid mine drainage is a serious problem adversely affecting Montana's water quality and riparian areas. Much of the technology development to date (for example, sealing the mine) has proven ineffective in treating acid mine drainage in remote areas. Some reasons for the ineffectiveness are that the technology applied is inadequate or the cost of transporting and installing the equipment and associated improvements are prohibitive.

This project would take into account all the advantages and constraints of existing technologies in order to develop a cost-effective method of treating acid mine drainage at a remote site. Passive systems requiring little maintenance or supervision may prove best for remote areas.

The Department of State Lands reports that there are 54 mines in Jefferson County alone with water flowing from them. Well over half of these have acid mine drainage problems.

If acid mine drainage is to be eliminated as a major nonpoint source of pollution, the technology must be both adaptable to other sites and cost-effective. The goal of this project is to develop such a technology and use the technology transfer capabilities of the Mine Waste Pilot Program and Montana Tech, along with tours sponsored by the conservation district and Headwaters RC&D Area, Inc., to ensure that the project and the technology are publicized.

The first phase of the project involves the research and testing of existing technologies and laboratory work that will be conducted at MSE, Inc., and Montana Tech. This phase is expected to require approximately 10 months. The second phase is transferring the technology to the field and conducting the actual demonstration. This is expected to require 12 months.

The third phase--the final report, technology transfer, and tours--will be conducted in the last months of the demonstration and in the 2 to 4 months immediately following the completion of the demonstration and analysis of the findings. In total, the project is expected to require 24 to 26 months.

TECHNICAL ASSESSMENT (Prepared by DNRC)

This proposal is a worthwhile effort to help mitigate adverse impacts from acid mine drainage (AMD). AMD is a serious problem in many areas, and additional work is needed to develop workable solutions. The proposal needs more specifics on what AMD technologies will be evaluated. It does suggest that control by mechanical sealing of the adit is not a feasible technique. It also briefly mentions the possibility of constructing a wetland. This treatment method was proposed during the last RDGP last grant cycle and was not recommended for funding due to technical problems.

A precise description of the desired goal is lacking. It is unclear whether the technology to be developed is aimed at removing metals from the water, lowering pH, improving riparian habitat, improving fisheries, or some combination of these. The scope of work is vague, with no details on what technology might be implemented. Without a definite scope of work, it is difficult to predict the final result.

The project schedule allows a short time to evaluate the effectiveness of the new technology at the mine. Some treatments work well initially but drop in effectiveness over time. It is not certain whether the project allows enough time to adequately assess the effectiveness of the technique.

The technology selection and screening process, now being formulated and eventually implemented by the Mine Waste Pilot Program and Montana Tech, will address and likely alleviate these concerns with project/technology generalities.

FINANCIAL ASSESSMENT

The budget is overly general. There is no detailed scope of work to show how the money would be expended. The proposal does not explain how costs for project implementation were derived, and there is no breakdown of cost by phase.

The proposed project budget is broken down as follows:

| | |
|--|------------------|
| Grant administration | \$ 6,000 |
| Project implementation (contracted services) | |
| Engineering and design | \$ 55,000 |
| Procurement | \$ 84,000 |
| Mobilization | \$ 25,000 |
| Installation | \$ 25,000 |
| Demonstration | \$ 59,600 |
| Final report | \$ 11,000 |
| Project management | \$ 16,000 |
| Contingency | <u>\$ 18,400</u> |
| TOTAL | \$ 300,000 |

ENVIRONMENTAL EVALUATION

Possible secondary effects, such as erosion and sedimentation into Uncle Sam Creek from project construction, are not addressed. There is no anticipation of need for an MPDES permit from the Department of Health and Environmental Sciences' Water Quality Bureau, or for a 310 Permit from the conservation district. Both would likely be necessary for any work in or adjacent to the creek. A commitment should be made to enact Best Management Practices in order to limit sedimentation problems.

Long- and short-term adverse effects beyond these are unknown because the scope of work is unknown. There is a potential for beneficial effects with development of a successful treatment technology.

PUBLIC BENEFITS ASSESSMENT

Reducing acid mine runoff into the Boulder River basin would benefit the public positively by improving riparian habitat along the tributaries, improving spawning grounds for the Boulder River fishery, and improving the water quality in the watershed as a whole. Developing an effective treatment for acid mine runoff in hard rock metal mines would be a tremendous benefit to the public if it could then be implemented in similar settings. The location is excellent for testing an acid mine drainage technology, although other project benefits are not known due to the uncertainty of the proposal. The substantial financial and staff involvement by EPA's Mine Waste Pilot Program will contribute greatly in maximizing return on RDGP funds expended.

RECOMMENDATIONS

A grant of up to \$150,000 (one-half the requested amount) is recommended for this project, subject to the following contingencies.

1. DNRC must approve of the project scope of work and budget.
2. The applicant must secure match funds in the amount of \$677,000 from EPA's Mine Waste Pilot Program and \$4,996 from Headwaters RC&D. A reduction in funding from these two sources shall result in a commensurate decrease of RDGP match funding.
3. Subject to the availability of funds, this RDGP match commitment is valid until June 30, 1995.
4. If responsible party investigations at this site lead to cost recovery of RDGP grant funds expended, then Jefferson Valley Conservation District must reimburse DNRC for the full amount of any such costs, including damages or penalties, that it may receive.

**PRESENTATION TO THE
LONG RANGE PLANNING
COMMITTEE**

FEBRUARY 8, 1993

108

DATE

EXHIBIT

MINE WASTE PILOT PROGRAM

ACTIVITIES COMPRISING THE SCOPE OF WORK

- I. IDENTIFY CANDIDATE TREATMENT TECHNOLOGIES**
- II. DEVELOP GENERIC QUALITY PLAN**
- III. CONDUCT DEMONSTRATIONS**
- IV. PERFORM BENCH SCALE INNOVATIVE RESEARCH**
- V. PROVIDE PROGRESS REPORTS AND TECHNOLOGY TRANSFER**
- VI. ESTABLISH TRAINING/EDUCATIONAL PROGRAM**

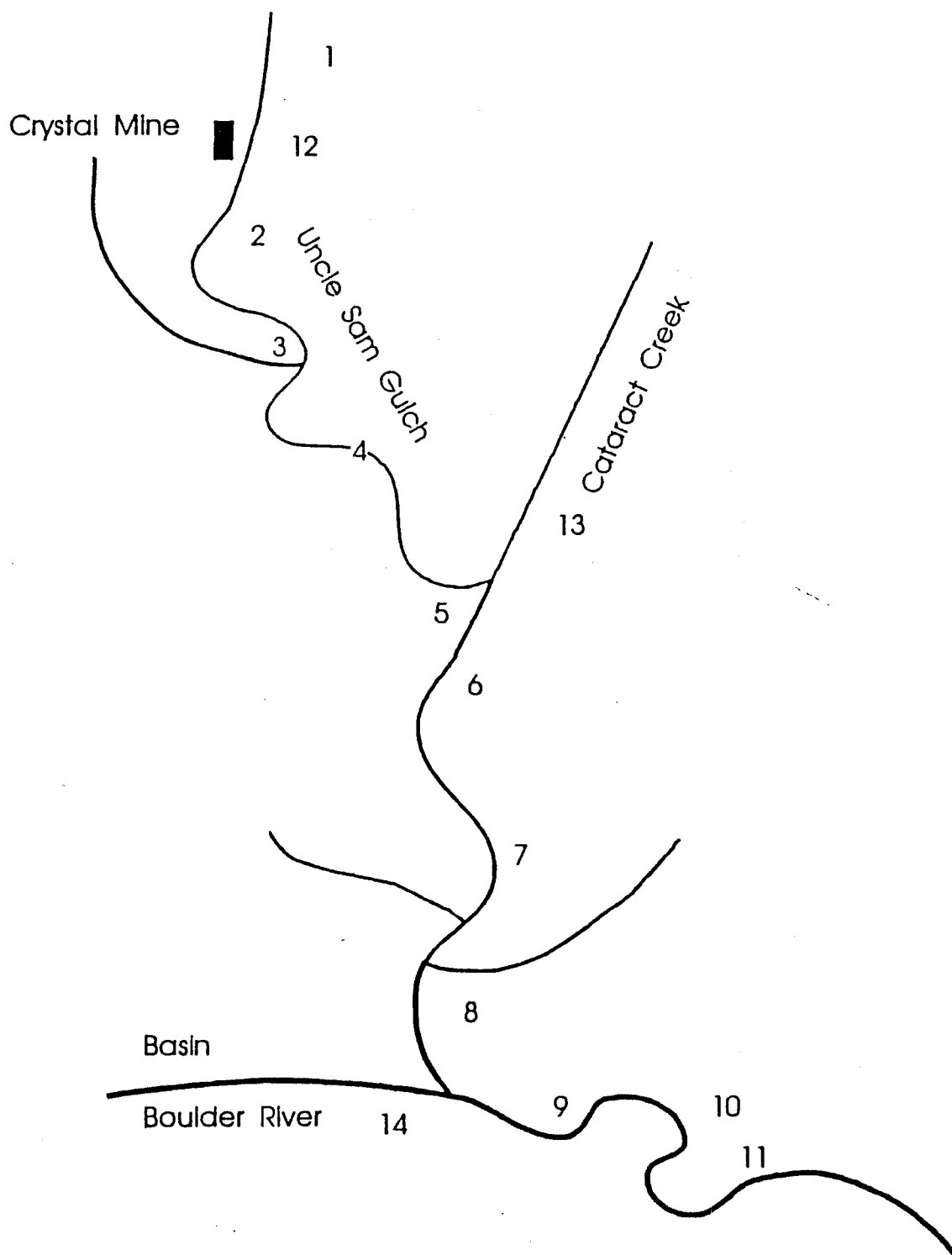
DATE 2-8-93

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MINE WASTE PILOT PROGRAM

ACTIVITIES COMPRISING THE SCOPE OF WORK

- I. IDENTIFY CANDIDATE TREATMENT TECHNOLOGIES**
- II. DEVELOP GENERIC QUALITY PLAN**
- III. CONDUCT DEMONSTRATIONS**
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- VI. ESTABLISH TRAINING/EDUCATIONAL PROGRAM**



CRYSTAL MINE BASIN, MONTANA

ADIT WATER CONTAMINANTS:

| <u>CATIONS</u> - $\mu\text{g/l}$ | | DRINKING WATER STANDARDS - $\mu\text{g/l}$ |
|----------------------------------|---------|--|
| ALUMINUM | 21,620 | -- |
| CADMIUM | 940 | 5 |
| COPPER | 2520 | 1000 |
| LEAD | 40 | 50 |
| STRONTIUM | 240 | -- |
| ZINC | 7650 | 5000 |
| ARSENIC | -- | 50 |
| IRON | 108,000 | 300 |

| <u>ANIONS</u> - mg/l | | DRINKING WATER STANDARDS - mg/l |
|-------------------------------|------|--|
| BICARBONATE | 8.6 | -- |
| SULFATE | 688 | 250 |
| NITRATE | 0.16 | 10 |

VARIOUS ADVERSE EFFECTS OF METALLIC CONTAMINANTS

**ARSENIC - FATIGUE; ANEMIA; NERVOUS DISORDERS;
LINKED TO SKIN CANCER**

**COPPER - LIVER DISORDERS IN MAN AND
LIVESTOCK; FISH VERY SENSITIVE;
TOXIC TO PLANTS**

**CADMIUM - CHRONIC KIDNEY PROBLEMS IN HUMANS
AND LIVESTOCK**

**ZINC - BIRTH DEFECTS NOTED IN HUMANS AND
LIVESTOCK; TOXIC TO FISH**

SCOPE OF CRYSTAL MINE DEMONSTRATION

- 1. ON-SITE DEMONSTRATION OF MOBILE CLEAN-UP
PROCESS FOR REMEDIATING ACID MINE DRAINAGE**
- 2. POTENTIAL OF LEAVING EQUIPMENT IN PLACE
AFTER DEMONSTRATION IS COMPLETE, AT THE
DISCRETION OF THE DISTRICT AND IN
ACCORDANCE WITH FEDERAL REGULATIONS**

CRYSTAL MINE REMEDICATION TECHNOLOGY DEMONSTRATION

• PROCESS STEPS

- 1. NEUTRALIZATION - AN ALKALINE REAGENT WILL BE ADDED TO THE ACID MINE DRAINAGE (AMD) BY A WATER DRIVEN TECHNOLOGY**
- 2. OXIDATION - OXYGEN IN AIR WILL BE ADDED TO THE NEUTRALIZED AMD TO OXIDIZE THE DISSOLVED IRON.**
- 3. SETTLING - THE SOLIDS FORMED IN THE NEUTRALIZED / OXIDIZED AMD WILL BE ALLOWED TO SETTLE OUT OF THE WATER**
- 4. PH ADJUSTMENT - CARBON DIOXIDE IN AIR WILL BE ADDED TO THE "CLEANED" WATER TO ADJUST THE PH FOR DISCHARGE**

DATE 2-8-93
HP

CRYSTAL MINE REMEDIATION TECHNOLOGY DEMONSTRATION

• CONSTRAINTS

- 1. "TREAT" AMD COMING FROM A POINT SOURCE AT A REMOTE MINE SITE**
- 2. THE TECHNOLOGY USED SHOULD BE AS "PASSIVE" AS POSSIBLE - NO POWER OTHER THAN WATER DRIVE IS AVAILABLE**
- 3. THE SYSTEM SHOULD NEUTRALIZE THE PH AND REMOVE "LARGE" QUANTITIES OF THE METALS FROM THE AMD**
- 4. THE SYSTEM SHOULD BE CAPABLE OF FUNCTIONING WITH OUT ATTENDANCE FOR "LONG" PERIODS OF TIME**
- 5. THE SYSTEM WILL BE DEMONSTRATED FOR A MINIMUM OF ONE YEAR REGARDLESS OF WEATHER PROBLEMS**

CRYSTAL MINE REMEDATION TECHNOLOGY DEMONSTRATION

• BENEFITS

- 1. THE AMD COMING FROM THE CRYSTAL MINE WILL BE TREATED PRIOR TO ENTERING UNCLE SAM GULCH CREEK**
- 2. THE ACID AND METAL LOAD ENTERING UNCLE SAM GULCH CREEK WILL BE GREATLY DIMINISHED**
- 3. THE AQUATIC HABITAT AND FISHERY OF UNCLE SAM GULCH CREEK WILL BE GREATLY IMPROVED**
- 4. THE RIPARIAN SYSTEM OF UNCLE SAM GULCH CREEK WILL BE GREATLY IMPROVED**
- 5. THE LONG-TERM VIABILITY OF A TECHNOLOGY SYSTEM FOR USE IN THE TREATMENT OF AMD AT SUCH SITES WILL BE DEMONSTRATED**

CRYSTAL MINE DEMONSTRATION

VALUE TO CONSERVATION DISTRICT & STATE OF MONTANA

- 1. DEMONSTRATION OF GENERIC ACID MINE DRAINAGE CLEAN-UP
PROCESS ON-SITE IN THE JEFFERSON CONSERVATION
DISTRICT**
- 2. DEVELOPMENT OF REMOTE SITE TECHNOLOGY THAT CAN BE
TRANSFERRED TO THOUSANDS OF OTHER MINE SITES IN
MONTANA**
- 3. POTENTIAL LONG-TERM IMPROVEMENT IN BOULDER RIVER
TRIBUTARY WATER QUALITY**
- 4. PART-TIME EMPLOYMENT, BUSINESS IN BASIN/BOULDER AREAS**

**CRYSTAL MINE
DEMONSTRATION
BUDGET**

| | |
|--|-------------|
| • MINE WASTE PILOT PROGRAM | \$677K |
| • HEADWATERS RC&D | 5K |
| • MONTANA RECLAMATION & DEVELOPMENT GRANT | <u>150K</u> |
| TOTAL | \$832K |

EXHIBIT 7
DATE 2-8-93
HB

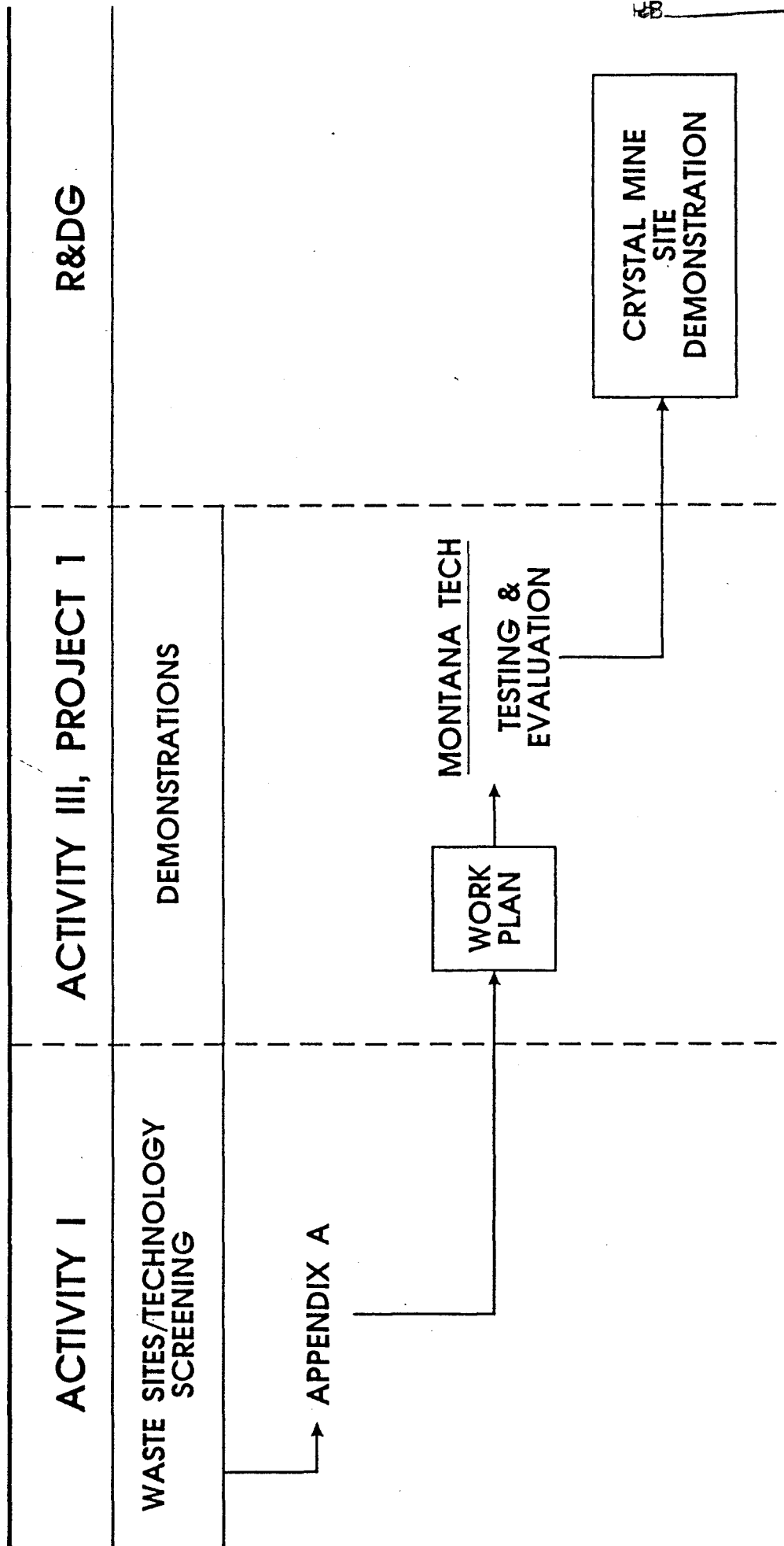
Crystal Mine Demonstration Schedule

| Activity | 1992 | | | | 1993 | | | | 1994 | | | | 1995 | | | |
|--|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| | JAN | APR | JUL | OCT | JAN | APR | JUL | OCT | JAN | APR | JUL | OCT | JAN | APR | JUL | OCT |
| • Mine Waste Pilot Program Demonstration | | | | | | | | | | | | | | | | |
| • Engineering & Procurement | | | | | | | | | | | | | | | | |
| • Mobilize Equipment | | | | | | | | | | | | | | | | |
| • Install Equipment | | | | | | | | | | | | | | | | |
| • Operate Process Train | | | | | | | | | | | | | | | | |
| • Report | | | | | | | | | | | | | | | | |

DATE

2-8-92

MWPP/R&DG



- 15 -

APPLICANT NAME : Deer Lodge Valley Conservation District

PROJECT/ACTIVITY NAME : Developing Acid/Heavy Metal-Tolerant Cultivars for
Mine Reclamation

AMOUNT REQUESTED : \$ 137,700

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|---|-----------|
| Project Sponsor | \$ 2,300 |
| USDA/SCS Plant Materials Center | \$ 60,580 |
| Soil and Water Conservation Districts of Montana, Inc. | \$ 10,860 |

TOTAL PROJECT COST : \$ 211,440

PROJECT ABSTRACT (Prepared and submitted by applicant)

The Deer Lodge Valley Conservation District (hereafter referred to as district) is applying for grant monies to help initiate a project to collect and evaluate plant materials indigenous to acid- and heavy metal-contaminated soils. Very few commercial plant cultivars are available for reclamation efforts on abandoned mine lands or on new mineral extraction sites, and those available were not developed specifically for their acid/metal tolerances.

A district employee, working out of the facilities at the USDA/SCS Plant Materials Center (PMC), Bridger, will collect and assemble seeds and/or plants from metalliferous soils throughout Montana. At each collection site a representative soil sample will be taken to determine pH and major heavy metal contaminants. Collections will be made throughout the 1993 and 1994 growing seasons. All seed will be cleaned in the seed-cleaning facilities at the Bridger PMC, and all clonal material will be propagated in the PMC greenhouse. All collected material will be established in evaluation plots, either by direct seeding or transplanting. Evaluation plots will be established at the Bridger PMC and at two affected sites (near Anaconda and East Helena). All plant materials will be evaluated for ease and speed of establishment, vigor, productivity, colonization, competitive nature, survival, and longevity.

The district employee, with contracted assistance from the PMC staff, will coordinate all aspects of the project. The Bridger PMC is currently the only research facility in Montana that is collecting, testing, and releasing cultivars of native plant materials. In

1975, an employee of the Soil and Water Conservation Districts of Montana, Inc., through a cooperative agreement with the Bridger PMC, initiated a similar project to collect and test salt-tolerant plants using grant monies from the Old West Regional Commission (U.S. Department of Commerce) and Montana Department of State Lands. This project resulted in the release of two cultivars and six additional species in advanced stages of evaluation.

The availability of native, acid/heavy metal-tolerant plant material would increase the chances of reclamation success. This would help mitigate the environmental degradation of past mining and smelting activities and provide the modern day mining industry with the resources to minimize environmental degradation.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The Deer Lodge Valley Conservation District proposes to conduct two initial stages of a long-term effort to make available acid/heavy metal-tolerant native plant species to commercial seed growers. The two-year conservation district project involves collection of native plant species with subsequent establishment of test plots and evaluation at two sites (near Anaconda and East Helena). Stages 3 to 5 (seed production, field testing, and release to commercial growers) would be conducted by USDA.

While the proposed project would not directly result in any cleanup, it would be useful. During the next 15 to 20 years, large reclamation projects in Montana, such as the Clark Fork Superfund Project and numerous mine reclamation projects, will require large numbers of seeds from acid/metal-tolerant plants. Although various research activities are ongoing on site-specific examples, no wide range collection and evaluation are ongoing for this geographic region. Due to the long time frames necessary to develop adequate seed supplies, this is a very timely project. However, the project will be successful only if the Soil Conservation Service's Plant Material Center carries the project forward after this initial two-year project.

The application generally discusses efforts made in the past to solve this problem, but does not mention the Department of Health and Environmental Science's Streambank Tailings and Revegetation Study (STARS). Little mention is made of using soil amendments as a solution to the problem of growing plants in soils with low pH or high concentrations of metals. The application does mention a study where native plants were more successful than introduced species when grown on soils that had been treated to increase pH.

The project was not coordinated through all local, state, and federal agencies. DNRC, however, requested reviews from representatives from MSU, Montana Tech, DSL, and DHES, and all supported the proposed study.

From the application, it is unclear why the soil and plant metal analyses are being carried out. They will not provide any information about metal tolerance in the plant itself. Soil analyses will indicate what type of metallic environment the plant is growing in but will not clarify plant tolerances. The conductivity and pH of the soils should be determined; the metal analysis of plant tissues appears unnecessary.

FINANCIAL ASSESSMENT

Project benefits are likely to exceed costs if SCS follows through on plant development. The project budget generally is properly developed. However, the relative responsibilities of the applicant and SCS are unclear, and costs for soils metal analysis at \$125 per sample appear to be somewhat high. Tests for copper, zinc, aluminum, and arsenic should be about \$50 per sample. Management responsibilities should be performed by Bridger Plant Materials Center personnel. Part of their time could perhaps be purchased at a cost of much less than \$27,000 per year.

The RDGP budget consists of:

| | |
|--|-----------------|
| Salaries and wages | \$ 58,000 |
| Employee benefits | \$ 8,700 |
| Contracted services (chemical analysis, USDA/SCS consulting fees, and materials) | \$ 53,000 |
| Supplies and materials | \$ 500 |
| Communications | \$ 500 |
| Travel | \$ 10,000 |
| Rent | -0- |
| Equipment | \$ 2,000 |
| Miscellaneous | <u>\$ 5,000</u> |
| TOTAL | \$ 137,700 |

The project could take 6 or more years to complete. In order to maximize project benefits, a long-term funding source must be secured.

ENVIRONMENTAL EVALUATION

The project is unlikely to have any substantial adverse impacts. There may be some minor disturbances at already impacted sites when samples are collected. The project could have substantial long-term benefits if acid/metal-tolerant plant species are developed and used in reclamation. A reliable supply of quality seed would aid reclamation attempts. A permanent plant cover could reduce wind and water erosion, sedimentation, and air pollution.

PUBLIC BENEFITS ASSESSMENT

If native indigenous cultivars could be made available for use on drastically disturbed areas, then reclamation attempts would be more successful and, in most cases, less expensive. Successful revegetation of acid/heavy metal-affected land would benefit Montanans by improving the quality of surface water and subsurface water within the affected watershed, increasing vegetative production, and improving recreational and visual quality.

RECOMMENDATION

A grant of up to \$137,700 is recommended for this project, contingent upon DNRC approval of the project scope of work and budget.

- 16 -

APPLICANT NAME : Glacier County Conservation District

PROJECT/ACTIVITY NAME : Comprehensive Evaluation of Groundwater Contamination, Red River Drainage

AMOUNT REQUESTED : \$ 214,059

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|-----------------|-----------|
| Project Sponsor | \$ 16,407 |
| MBMG | \$ 83,454 |

TOTAL PROJECT COST : \$ 313,920

PROJECT ABSTRACT (Prepared and submitted by applicant)

Glacier and Toole Counties in northwestern Montana contain thousands of oil and gas wells and as such are one of the leading producers of oil and gas in Montana. The area is also a major producer of dryland wheat and barley. These activities have caused numerous complaints of groundwater contamination as a result of saline seep, leaking brine pits, faulty seals between production piping and casing, etc.

The Glacier County Conservation District proposes to document the extent of groundwater contamination due to oil field and agricultural activities in the 55,000 acres surrounding the Red River Valley drainage. This project will evaluate current groundwater quality and compare it with historical data to determine the presence or

APPLICANT NAME : Broadwater Conservation District

PROJECT/ACTIVITY NAME : Whites Gulch Placer Mine Reclamation Project

AMOUNT REQUESTED : \$ 296,300

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|---------------------------|---------------|
| U.S. Forest Service | (unspecified) |
| DFWP | (unspecified) |
| Trout Unlimited (pending) | (unspecified) |
| EPA (pending) | (unspecified) |
| Total | \$ 52,600 |

TOTAL PROJECT COST : \$ 348,900

PROJECT ABSTRACT (Prepared and submitted by applicant)

Whites Gulch, a tributary of the Missouri River, flows southwest out of the Big Belt Mountains near Helena, Montana. The stream was mined in the late 1800s. Since the turn of the century, production of placer gold has been small and intermittent. In 1963, 114 acres in T10N, R2E, Sec. 15 and 16, were donated to the Forest Service and withdrawn from further mineral development. Recent studies have shown that the stream section donated contains the only known population of pure westslope cutthroat trout (WSCT) on public land in the Big Belts. (A population exists in North Gurnett Creek on private land.) The applicant proposes to reclaim and mitigate the resource damage caused by mining. The fisheries, watershed, soils, and recreational resources will benefit from this restoration.

Whites Creek was diverted to the north side of the valley during mining. The south side of the valley was excavated, and tailings were placed between the excavated area and the diverted creek. The current situation at the project site is that Whites Creek runs parallel to and to the south of the Whites Creek Road, a ridge of tailings runs adjacent to the creek, and the excavated ponds area is located approximately 100 feet below the tailings. WSCT and low densities of brook trout inhabit the stream, while high densities of brook trout inhabit the ponds. The tailings piles are eroding into both the stream and the ponds, and they also are constricting the stream channel (no floodplain). Near the lower end, a section of stream has almost worked through the tailings. The stream is about 1 vertical and 5 horizontal feet away from breaching into the ponds. It is likely that in the next 5 to 10 years a flood will cause the existing channel to breach into the

ponds. If the breaching takes place, cutthroat trout viability will be questionable due to further habitat degradation and competition with brook trout. Breaching into the ponds also will cause channel instability, an increase in sediment, leading to poor water quality, and a decrease in the quality of WSCT habitat. This proposal is designed to protect WSCT populations by preventing the stream from breaching into the settling ponds and by creating a hydrologically stable stream channel and floodplain.

Specifically the project objectives are to:

1. Refill the ponds with the (nontoxic) tailings material
2. Reclaim the site by revegetating the area
3. Fence the stream from cattle use
4. Remove brook trout from the upper drainage and place a barrier downstream to prevent brook trout from re-establishing
5. Display interpretive/educational signs to inform the public of the value of the cutthroat trout resource and the opportunity to reclaim sites like Whites Gulch
6. Improve the opportunity for recreation in the drainage

The duration of the project is two years, with monitoring for an additional five years.

TECHNICAL ASSESSMENT (Prepared by DNRC)

WSCT are listed as a species of special concern by DFWP and the Montana Chapter of the American Fisheries Society, and as a sensitive species by the Forest Service, because of their limited numbers and distribution. The project, which would reclaim approximately two miles of a stream channel, is in a conceptual stage and additional design work would be necessary. Of the alternatives considered, two best meet the objectives of both protecting the west slope cutthroat trout population and providing a hydrologically sound stream channel. One alternative would be to recontour tailing piles by filling the settling ponds and constructing a more natural floodplain. The stream would not be moved. However, without additional engineering design work, it is not possible to determine whether there would be enough spoils material to completely fill the ponds or whether much of the current stream channel would need to be moved to a lower elevation and reconstructed. The other alternative would be to reconstruct the valley bottom and stream channel. Under the second option, the tailings piles would be moved in several spots to create a series of step-down pools.

Another option would be to construct a flood flow channel beginning at the parking area just above the ponds, stabilize the existing channel where it is undercutting the tailings, replace the brook trout population in the ponds with pure strain WSCT, and provide a barrier below the affected stream reach to prevent upstream movement of brook trout. Sediment traps along the USFS road would reduce the amount of sediment reaching the stream from the road. This alternative would probably require less movement of tailings, but would leave the existing stream channel perched above the ponds.

Despite uncertainties in the project design, the applicant will conduct preliminary and detailed engineering studies that would remove the uncertainty before construction begins.

FINANCIAL ASSESSMENT

Cost estimates included in the application are preliminary, and additional engineering work needs to be done to better estimate costs. It is assumed that the benefits of protecting a population of genetically pure westslope cutthroat trout, stabilizing the stream channel, and reclamation of a mined area would exceed project costs, which are estimated to be \$348,900.

Most of the project costs would be for construction (\$220,000). Engineering costs are estimated to be \$30,000. Salaries and wages (\$65,800) would be for administration, preparation of an environmental assessment (EA), fence building, and follow-up fisheries monitoring for five years. Of the \$65,800 for salaries and wages, \$25,500 would be paid from the RDGP grant.

The RDGP budget consists of the following.

| | |
|------------------------|-----------------|
| Salaries and wages | \$ 25,500 |
| Employee benefits | \$ 6,500 |
| Contracted services | \$ 253,000 |
| Supplies and materials | \$ 6,800 |
| Communications | \$ 1,000 |
| Travel | \$ 1,500 |
| Office supplies | \$ 1,000 |
| Miscellaneous | <u>\$ 1,000</u> |
| TOTAL | \$ 296,300 |

Specific concerns over the budget include possible overestimates of the cost of earthmoving because of the short moves involved and the unconsolidated nature of the spoils. Revegetation costs also may be high; but the application does not provide sufficient detail to determine what would be done during the revegetation phase of the project. Finally, the specific amounts of matching funds from each contributor are unknown at this time.

ENVIRONMENTAL EVALUATION

The project would adversely affect water quality during and immediately following the construction period, change existing unstable topography to landforms that are more stable, and provide a more stable stream channel. An unknown number of brook trout now inhabiting the ponds would be killed; but westslope cutthroat trout habitat would be

improved. Depending on the final design, recreational fishing opportunities would be lost in the ponds but improved in the stream. The application lists minor adverse effects on historical and archaeological sites because the tailings are considered a cultural resource of low value. Cultural resource impacts could be mitigated. Because the reclaimed area would be fenced during revegetation, there would be a minor, short-term adverse effect on grazing. However, the holders of the grazing leases have agreed to allow the area to be temporarily excluded from their allotments. If the project were funded, permit requirements of affected state and federal agencies would have to be met.

PUBLIC BENEFITS ASSESSMENT

The public would benefit from having habitat for a sensitive fish species improved. In addition, stability of tailings piles and streambanks would be improved, as would aesthetics in Whites Gulch. The project has the support of the U.S. Forest Service; the Montana Department of Fish, Wildlife and Parks; Trout Unlimited; the U.S. Environmental Protection Agency; and the Montana Placer Advisory Committee.

RECOMMENDATION

A grant of up to \$296,300 is recommended for this project, subject to the following contingencies.

1. DNRC approval of the project scope of work and budget.
2. If responsible party investigations at this site lead to cost recovery of RDGP grant funds expended, then Broadwater Conservation District must reimburse DNRC for the full amount of any such costs, including damages or penalties, that it may receive.

EXHIBIT 12
DATE 2-8-93
HB

WHITES GULCH RECLAMATION PROJECT

FACT SHEET

SUPPORTERS: Broadwater Conservation District, Gary Gravely-rancher, Stream and Lakes Committee of the Broadwater Community Development Organization, Trout Unlimited, American Fisheries Soc., Natural Heritage Foundation, U.S.Forest Service, Mont. Dept. Fish, Wildlife, and Parks, and EPA.

LOCATION: Whites Creek flows west out of the Big Belt Mountains into Canyon Ferry Reservoir. It is located approximately 20 miles southeast of Helena and 22 miles northeast of Townsend (Map on back)

HISTORY: Extensive placer mining took place in Whites Gulch in the late 1800's. Large-scale mining was completed by the turn of the century and has left a legacy of eroding tailings piles and an unstable hydrologic condition.

PROBLEM: Whites Gulch contains the only known population of pure westslope cutthroat trout in the Big Belt Mountains (on public land). The population has decreased to very small numbers and is currently in danger of going extinct due to competition with brook trout and poor quality fish habitat (sedimentation, lack of vegetation, & channel instability) .

It is important to protect this population for the following reasons: 1) cutthroat trout currently occupy only about 2.5% of their historic range in Montana, 2) the population is unique in the Big Belt Mtns., 3) few populations exist on the east-side of the Rockies, 4) State and federal policies direct us to preserve and enhance all westslope cutthroat population.

NEED/URGENCY: Whites Creek is undermining the erodable tailings piles and is close to breaching through them into old settling ponds. This disruption of the stream flow is likely to result in eradication of the westslope cutthroat trout population. The resulting hydrologic instability of Whites Creek would lead to additional erosion of the tailings piles and possible property damage downstream.

PUBLIC BENEFIT: The project will reclaim environmental damage to fish, water, soils, recreation, and aesthetics in the Whites Gulch drainage. It will protect the westslope cutthroat trout population from possible extinction and create a stable stream channel.

Public education (signing and news releases) will increase awareness of unique fishery in the Big Belts and demonstrate to the public that these resources can be successfully reclaimed.

COST: Matching agency and other dollars = \$52,600;

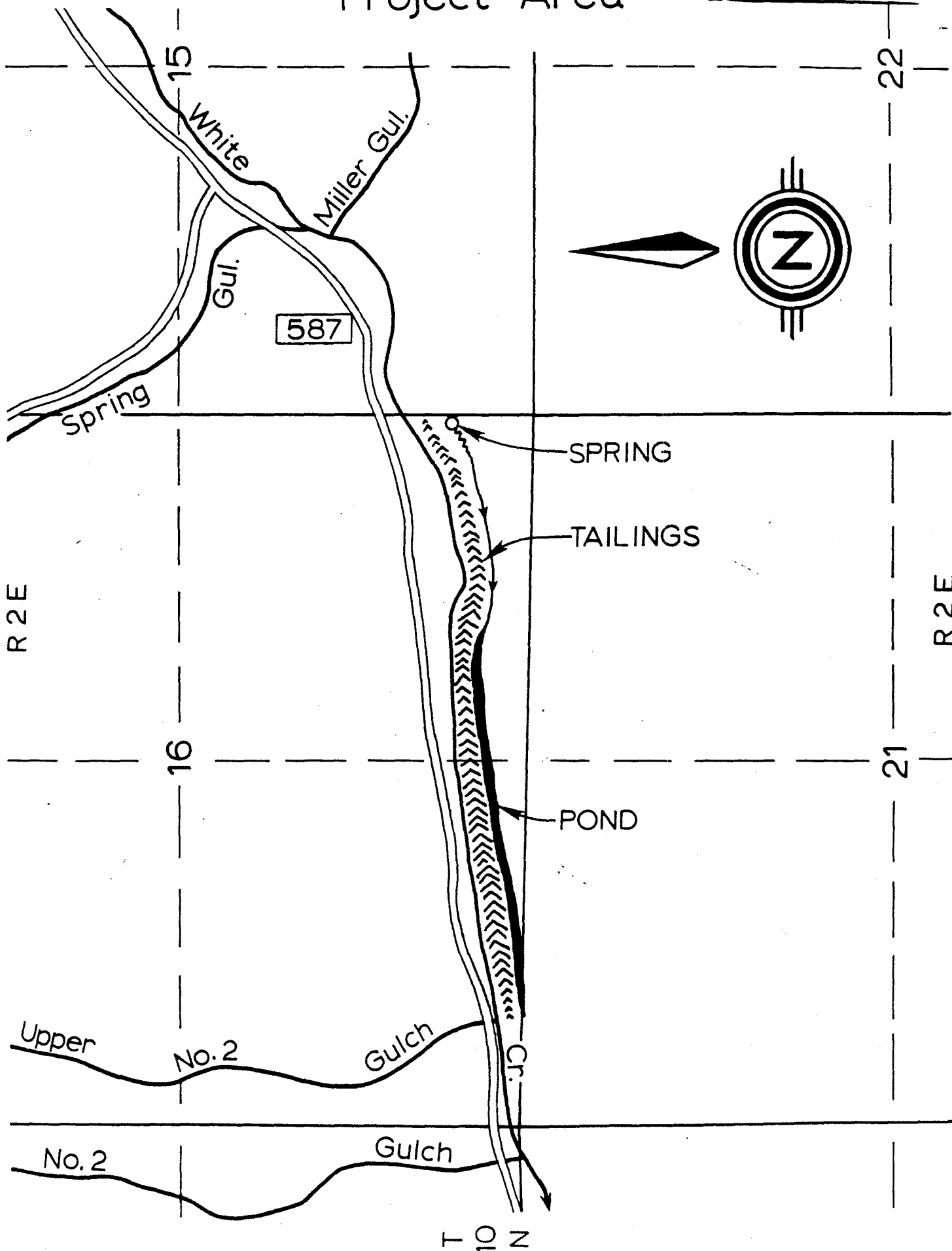
Grant= \$296,000

WHITE GULCH Project Area

EXHIBIT 12

DATE 2-8-93

HO





Pure Westslope Cutthroat



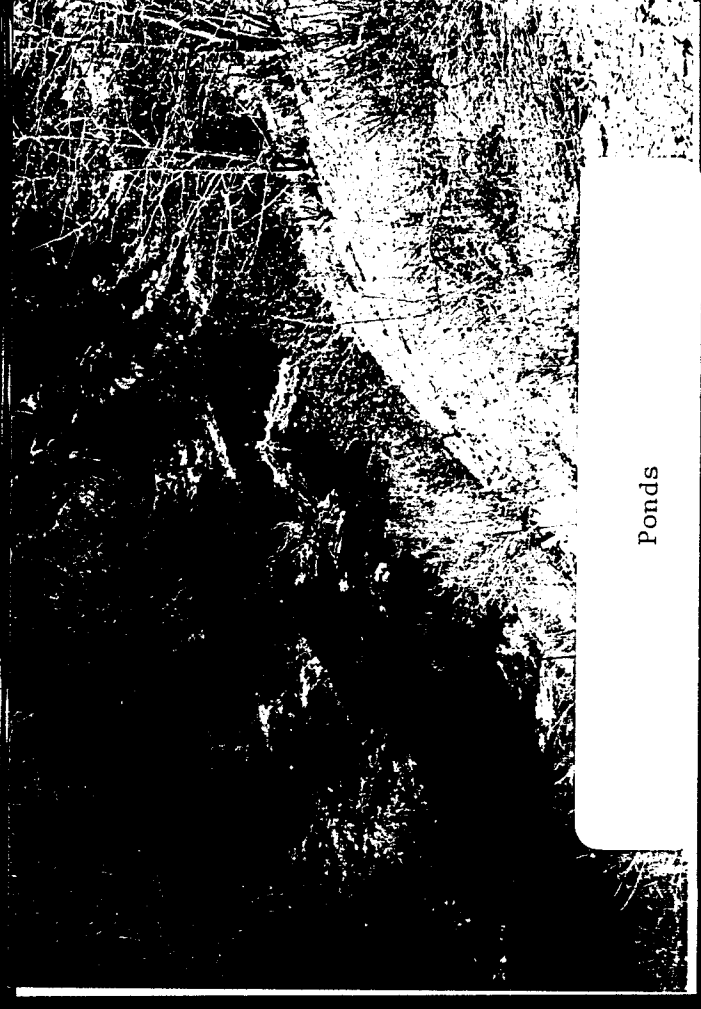
Ponds

Tailings

Stream



Whites Creek (diverted)



Ponds



Tailings eroding into Whites Cr.



Potential breach point
(Ponds in background)



Spring with tailings



Whites Cr. and downstream end
of ponds (see arrow)

b-1

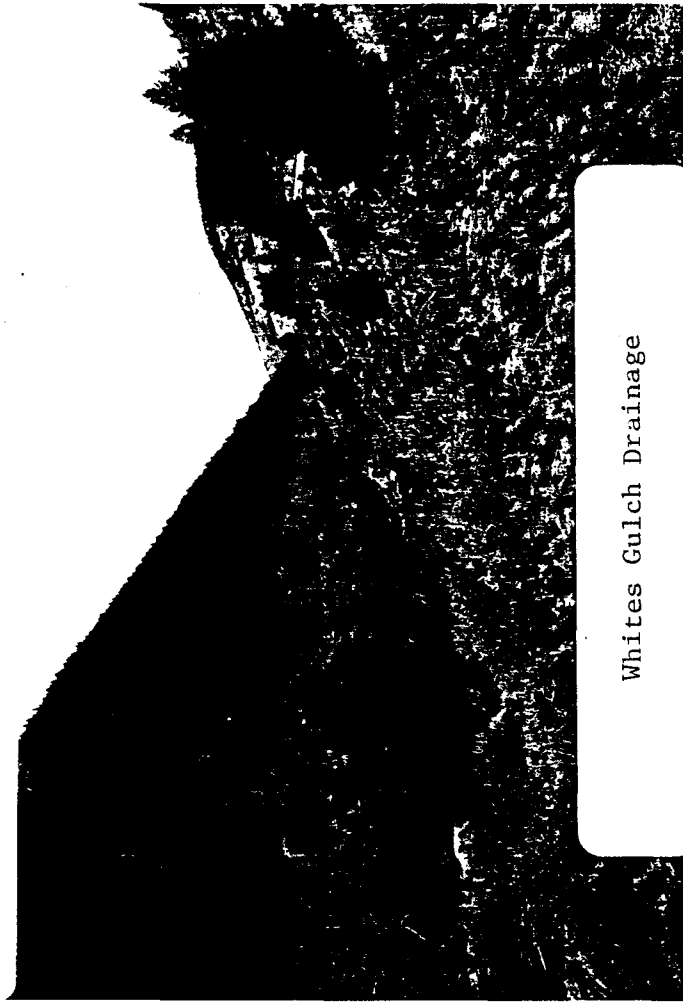
White Sands

White Sands
Environmental
Investigations

505 BOX 800388 - CORRAL VALLEY, NM 88880-3100 (406) 888-3100



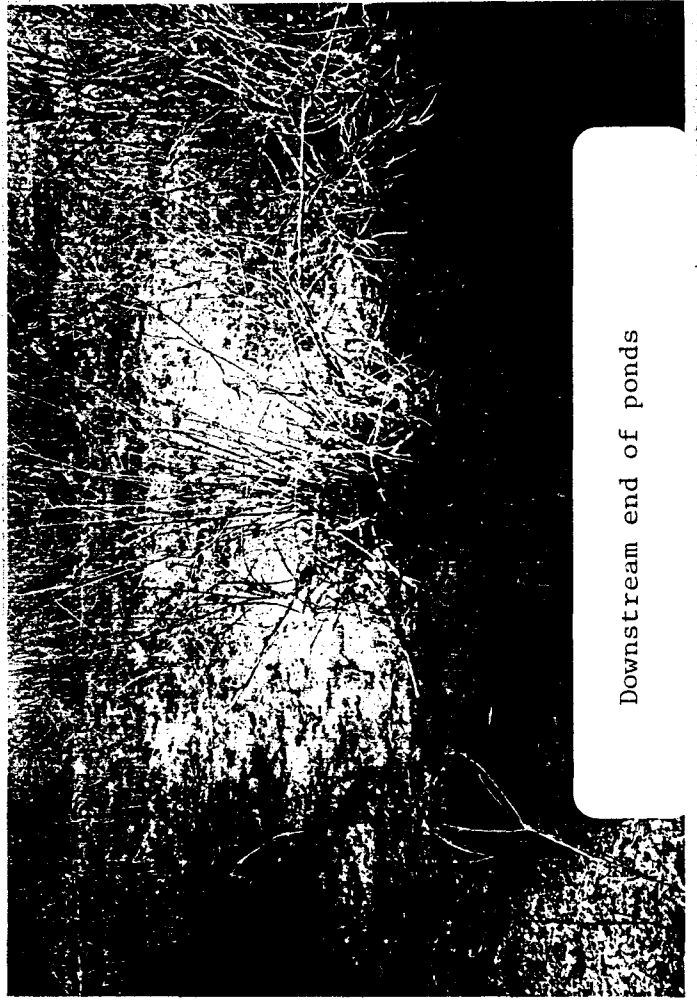
Pure Westslope Cutthroat
Trout



Whites Gulch Drainage



Tailings eroding into Whites
Creek



Downstream end of ponds



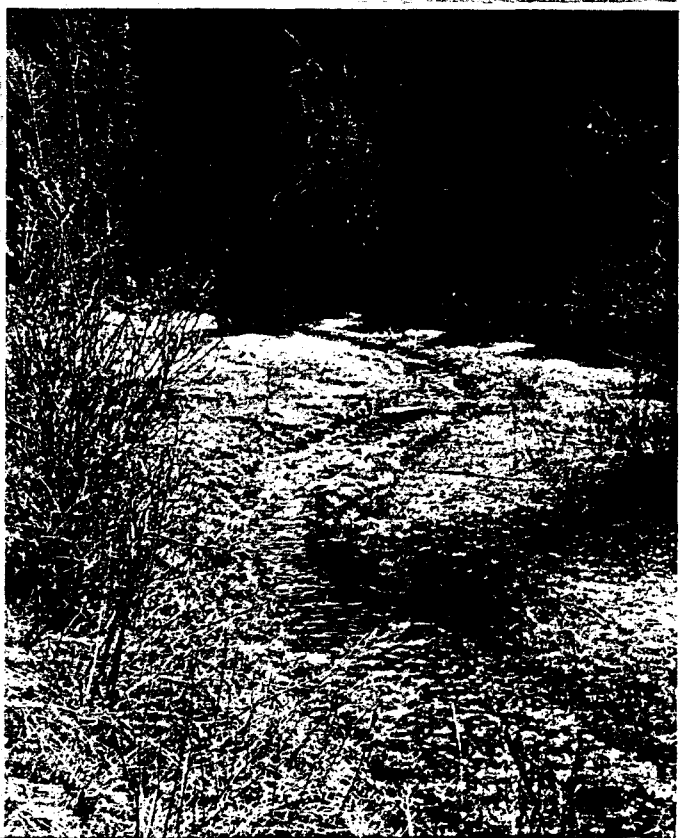
Ponds and tailings



Middle pond area



Whites Creek near Spring Gulch



Whites Creek

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APPLICANT NAME : Montana Department of Fish, Wildlife and Parks
(DFWP)

PROJECT/ACTIVITY NAME : Elk Creek Placer-Mined Channel Reconstruction

AMOUNT REQUESTED : \$ 72,850

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|-----------------------------------|-----------|
| Project Sponsor | \$ 1,000 |
| Federal Bureau of Land Management | \$ 18,400 |

TOTAL PROJECT COST : \$ 92,250

PROJECT ABSTRACT (Prepared and submitted by applicant)

Approximately 3,000 feet (in three separate reaches) of Elk Creek (T12N, R14W, Sec. 1, NE¼, PMM) does not have a channel and surface flow of water. This condition, caused by placer mining, has existed since the 1860s. These sites are the only areas on Elk Creek where there is no surface flow or channel.

Channel and riparian area rehabilitation would initiate normal function and restore the fishery on the sites, as well as improve water quality and recreational potential.

The project, as envisioned, would demonstrate how to proceed with the reclamation of placer-mined stream areas and would be a guide for rehabilitation across Montana. Reconstruction would take about 20 work days. The estimated cost is \$92,250. This work would occur on U.S. Bureau of Land Management land, and BLM would do all the work except the actual reconstruction, including design, provision of construction guides, assistance in revegetation, and various aspects of monitoring and evaluation.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The site is located about one mile east of Garnet. The proposed reclamation project is straightforward and basic in its approach; the work is not complicated.

The application lacks detailed specifications on the construction plan and channel design. The map provided is too general to be used as a technical tool. The success of this effort rests with the oversight personnel because of the conceptual nature of the application. However, the proposal does clearly outline the necessary steps to be taken

to achieve a good design, and the agencies involved are capable of successfully accomplishing the stated objectives. Channel reconstruction has been successfully implemented in other projects, so results are attainable and long term. A realistic estimate of the work schedule is presented.

The application describes the project as a demonstration for successful reclamation and development of "Best Management Practices for Placer Mining" by the Montana Placer Mining Advisory Committee. This aspect of the project indicates there are indirect benefits that would be far reaching. The connection of Elk Creek to the Blackfoot River, one of Montana's most sensitive rivers, increases the need and urgency of rehabilitating this tributary.

There is no discussion of the possibility of hazardous materials being in the dredge piles, which could degrade water quality when disturbed. The site is not listed on the Federal Facilities Docket as a hazardous waste site; however, the absence of hazardous materials should be documented.

FINANCIAL ASSESSMENT

The RDGP budget is presented in general detail only. The costs are based on reasonable estimates and are tied to specific tasks in the scope of work.

| | |
|---------------------------|-----------|
| Contracted Services | |
| Construction | \$ 49,500 |
| Consultant | \$ 10,000 |
| Lab analysis | \$ 7,350 |
| Total Contracted Services | \$ 66,850 |
| Supplies and Materials | \$ 6,000 |
| TOTAL | \$ 72,850 |

ENVIRONMENTAL EVALUATION

BLM prepared an environmental assessment (EA) on the proposed activity and found that no significant impact would result. As part of the EA, a sensitive plant survey was conducted that identified two special status plant species in the area. These plants would be avoided by the project. A cultural resource inventory also was conducted which identified two sites, one of which may be eligible for the national register. These sites are adjacent to the project and must be photographed and avoided.

If the proposed project is funded, DNRC would incorporate provisions from the federal EA into the contract and supplement them with additional provisions as necessary to comply with required state permits.

PUBLIC BENEFITS ASSESSMENT

The planned activities probably would achieve the stated objective, which is to establish "normal" stream function. This would be a useful project, providing riparian habitat and enhanced fisheries and recreation opportunities. Elk Creek is an important spawning area for the Blackfoot River. The Big Blackfoot Chapter of Trout Unlimited has ranked Elk Creek as second in funding priority for tributary streams that are in need of restoration.

By restoring streamflow to the channel, the planned activities would completely repair the damage done to the creek by past mineral development. This would be a significant improvement to the physical environment that improves the quality of public natural resources. All Montanans would benefit from the project because the benefits are certain and long-term.

Economic benefits are indirect. Successful completion of the project would demonstrate that placer mine reclamation can be accomplished at a reasonable cost. This may promote responsible future mineral development.

RECOMMENDATION

A grant of up to \$72,850 is recommended for this project, contingent upon DNRC approval of the project scope of work and budget. If responsible party investigations at this site lead to cost recovery of RDGP grant funds expended, DFWP must reimburse DNRC for the full amount of any such costs, including damages or penalties, that it may receive.

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APPLICANT NAME : Ravalli County

PROJECT/ACTIVITY NAME : A Lake For Better Water Quality (Como Lake Dam Rehabilitation)

AMOUNT REQUESTED : \$ 300,000

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|---|--------------|
| Project Sponsor | \$ 56,485 |
| Bitterroot Irrigation District | \$ 200,000 |
| Corporate, Foundation, and Private Donors (to be solicited) | \$ 1,451,500 |
| Federal (tentative) | \$ 3,000,000 |

TOTAL PROJECT COST : \$ 5,007,985

PROJECT ABSTRACT (Prepared and submitted by applicant)

There have been chronic shortages of water in the Bitterroot and Clark Fork rivers and in Como Lake from a standpoint of water quality, fisheries, and recreation. In 5 of the last 27 years, there has also been a shortage of water in Como Lake for irrigation. Enlarging the Como Lake Dam would allow more storage of excess spring runoff water for timed release when most needed to improve these deficiencies of water quality and quantity.

Como Lake is located 14 miles southwest of Hamilton. The total cost of the project to raise the dam 8.7 feet is \$5 million. The 8,200 acre-feet of additional high quality water will serve four primary objectives: (1) help improve water quality and the fisheries in the Bitterroot River, (2) dilute high nutrient concentrations in the Clark Fork and lower Bitterroot rivers, (3) provide additional irrigation water in drought to over 785 irrigators on 16,635 acres of land, and, (4) add over 220 acres of surface water to Como Lake.

One-half of the additional storage, 4,100 acre-feet, is reserved to augment late season streamflow in the Bitterroot and Clark Fork rivers. The rate of release will be based on recommendations of the Montana Department of Fish, Wildlife and Parks (DFWP). At a rate of 100 cubic feet per second, releases would last three weeks. This release has the dual potential of markedly improving the fisheries in the Bitterroot River and also diluting both nitrogen loading in the Bitterroot River from the Missoula aquifer and

nutrient discharges from the Missoula municipal wastewater treatment plant. Additional clean water may help avoid future violations of water quality standards.

The other 4,100 acre-feet would be placed in long-term storage primarily for recreation in Como Lake. In drought years when there is not enough water to fill the historical irrigation rights, up to one-third of this water would be used for irrigation, with the remainder split between storage and instream flow.

The U.S. Bureau of Reclamation (USBR) has found the current dam unsafe. Because of rapid deterioration of the dam documented by USBR during the summer of 1992, Congress approved a "fast track" construction schedule for Como Lake. Construction began in August 1992 and is scheduled for completion in November 1993. All construction will be conducive to an increase in dam height until the fall of 1993. At that time funding must be available for the increase, or the spillway will be placed at a lower elevation, making it prohibitively expensive to accommodate a future increase in height.

The Bitterroot Resource Conservation and Development, Inc. (RC&D) is coordinating fund raising and community support. The RC&D has been successfully implementing natural resource projects for 30 years. Our Congressmen have all agreed to support legislation that would provide the USBR with \$3 million for the project. Now, we must show them we can raise the other \$2 million. Appropriating \$300,000 in Montana Reclamation and Development Grant funds would help support the federal appropriation and would make Montana a viable partner in the project. All Montanans will benefit from the improvement in the quality of our public waters, as will downstream states, such as Idaho.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The problems are well defined in this application: poor water quality in the Clark Fork River, low flows during critical periods, low recreation pool in Como Lake at the end of the irrigation season, and irrigation water shortages one out of five years. The technical data provided do support some need and urgency for this project. The effects on Rock Creek after it flows out of Como Lake, which appear to be an important benefit, were not mentioned in the application. Past efforts to supply water for fisheries from Painted Rocks Reservoir, a state-owned project on the West Fork Bitterroot River, were discussed; however, the success of these efforts was not evaluated.

The methods for accomplishing the project objectives are not completely outlined, so the likelihood of success cannot be fully evaluated. Detail is needed on specific tasks that would be carried out by the RC&D and on funds disbursement responsibility and plans, coordination with interest groups, technical plan review and approval, and management plans for the retention and/or release of the additional 8,200 acre-feet of water. A management plan for use of the additional water, which is essential for project benefits

to be realized, is lacking from the application. Water rights have not yet been obtained, which must be done before construction begins.

This is a dynamic project in that the design, construction schedule, and budget have undergone various revisions since the project's inception. It is possible that other design and funding alternatives will develop that the applicant could pursue. Any current alternatives are so likely to change that they are not discussed here.

FINANCIAL ASSESSMENT

The RDGP budget request is shown below.

| | |
|---------------------|-------------------|
| Salaries and wages | \$ 1,200 |
| Employee benefits | \$ 300 |
| Contracted services | <u>\$ 298,500</u> |
| TOTAL | \$ 300,000 |

Should the legislature decide to fund this project, it is important to note that a commitment for funding is needed before the spillway is constructed. Spillway construction is currently scheduled by the USBR for the fall of 1993. If there is not enough funding to raise the dam, the bureau will install a smaller spillway.

The Bureau of Reclamation's \$5 million cost is a gross estimate, but, until conceptual designs for the enlargement are developed, no better cost estimate is available. The \$5 million estimate includes the cost of installing a larger spillway. The estimate minus the cost of enlarging the spillway is \$2.5 to \$3 million. The applicant states that, if it has to pay the cost of enlarging the spillway, pursuing this project would no longer be economically feasible for it.

ENVIRONMENTAL EVALUATION

The Bureau of Reclamation did an environmental assessment on the safety modifications. Within this assessment, the enlargement proposal was evaluated. Essentially, most impacts would be along the lake perimeter where the enlargement would flood an additional 34 acres of land. Most of the acreage that would be flooded occurs in the flatter area at the upper end of the lake. The U.S. Fish and Wildlife Service estimates that, after the raise in elevation of the lake, there would be a net loss of eight acres of wetlands. Some wildlife would therefore be permanently displaced. The additional water would be expected to increase fish availability in the lake only marginally, and fish would continue to exhibit slow growth. The lower portion of a series of cascades at the head of the lake would be inundated during high water.

During construction, there would be some short-term negative effects on water quality and fisheries due to increased sedimentation. Noise and air quality impacts are also anticipated in the short-term. Mitigation methods do exist that would reduce these impacts.

PUBLIC BENEFITS ASSESSMENT

The applicant has provided estimates of some of the benefits of the project. However, not all of the benefits have been calculated.

The project sponsor estimated the recreation benefits to be \$4 million. DFWP calculated this value to be \$1,541,740. The project's goals of increasing the recreation pool and providing additional irrigation water appear to be achievable. However, one technical reviewer maintained that significant recreational benefits would not be gained. It was that reviewer's opinion that deep-draft storage reservoirs are not ideal recreational sites because of fluctuating water levels, difficulties with boat access, poor visual quality, and unstable fisheries.

The benefits of an additional 1,367 acre-feet of irrigation water from the project were estimated to be \$100,000. This estimate appears to be reasonable.

The economic benefits of the improved fishery are not quantified. However, this could be done by estimating the additional angler days and calculating their dollar value using figures found in the *Angler Preference Study Final Economics Report*, 1988, DFWP.

DFWP has communicated to the applicant that a total flow of 400 to 450 cfs is necessary to provide a quality fishery in the Bitterroot River. The applicant does not definitively state that the additional 8,200 acre-feet of water from this project would add enough water to produce a total flow of 400 to 450 cfs in the Bitterroot River. Without effective water monitoring and management, the anticipated water quality and fisheries benefits associated with the proposal would be uncertain.

Benefits to clean water, quality of life, etc., are not quantified in the application but are real. According to DFWP, although the economic benefits quantified in the application do not exceed the costs of raising the dam, the unreported benefits would more than likely make the cost/benefit ratio positive.

However, it is not clear if the goal of improving water quality and fisheries would be attainable. According to the DHES Water Quality Bureau, a 10 percent increase in July

and August flows in the Bitterroot River would improve water quality in the Clark Fork. The applicant does not state that the additional water provided by this project would increase July and August flows by the needed 10 percent.

According to the Water Quality Bureau, to achieve improved water quality benefits would require that assurances be made that additional water storage capacity be used for streamflow augmentation. An on-site water commissioner would be needed to ensure that late season water releases remain instream and are not diverted by downstream users. Additionally, the timing and volume of releases to enhance instream flows would be critical. Close monitoring would be required to ensure there is adequate storage in Como Lake and that the stored water is reserved for the most critical periods.

RECOMMENDATION

A grant of up to \$300,000 is recommended, subject to the following contingencies.

1. DNRC must approve the project scope of work and budget.
2. Water rights must be secured for the additional water to be stored by this project.

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APPLICANT NAME : Butte-Silver Bow

PROJECT/ACTIVITY NAME : Mitigation of Mining and Smelting Damage through Urban Forestry

AMOUNT REQUESTED : \$ 150,000

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|-------------------------------|-----------|
| Project Sponsor | \$ 24,000 |
| Landscape Architect (In-Kind) | \$ 3,000 |
| Volunteers (In-Kind Services) | \$ 3,000 |
| Donations | \$ 1,000 |

TOTAL PROJECT COST : \$ 181,000

PROJECT ABSTRACT (Prepared and submitted by applicant)

The overwhelming air pollution associated with early mining and smelting destroyed native vegetation in Butte and prevented ornamental planting. In addition, by 1882,



LAKE COMO

**BOAT
TRAILER
PARKING**

**OUTLET
WORKS**

**SPILLWAY
COMO
DAM**

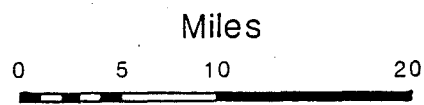
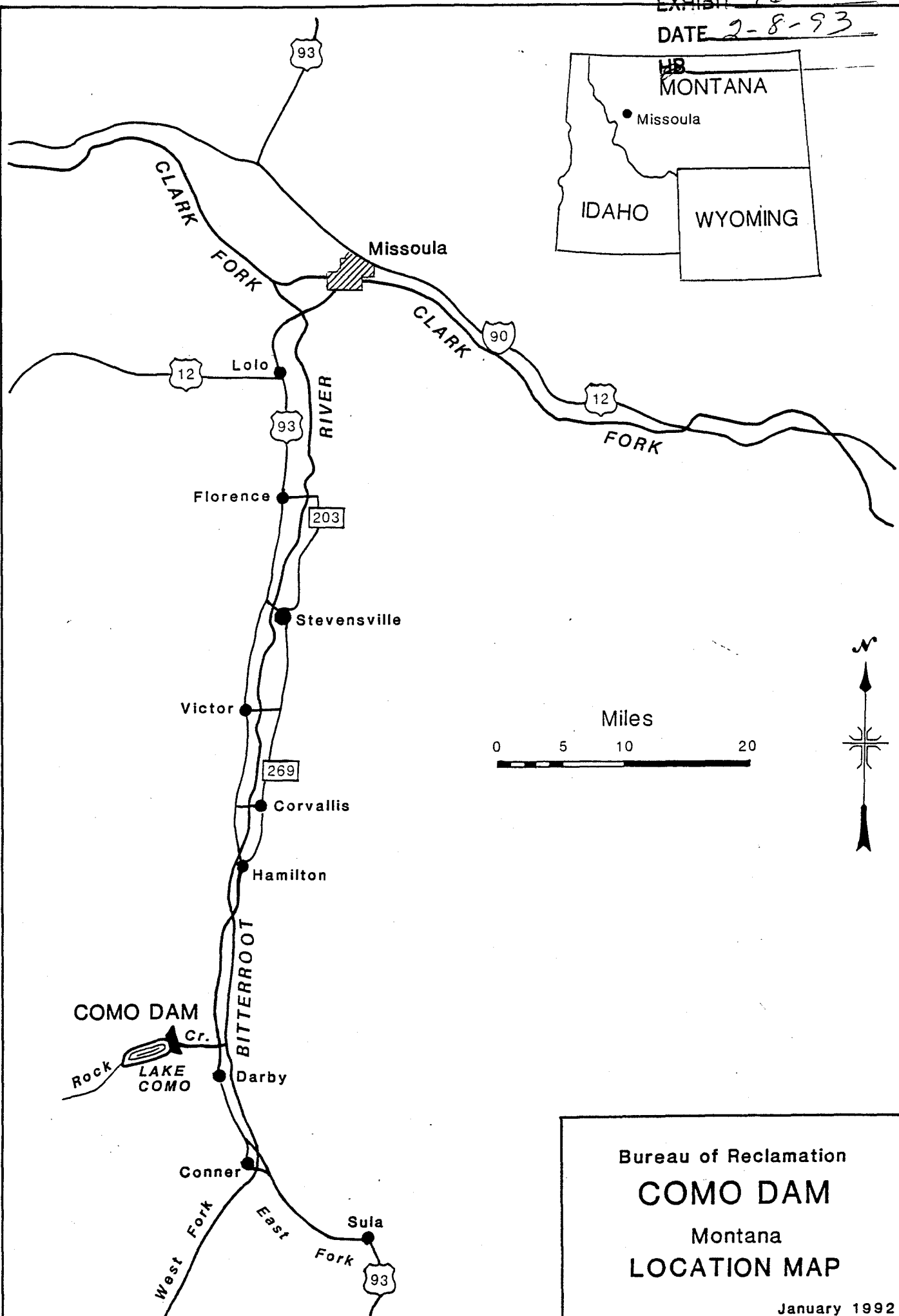
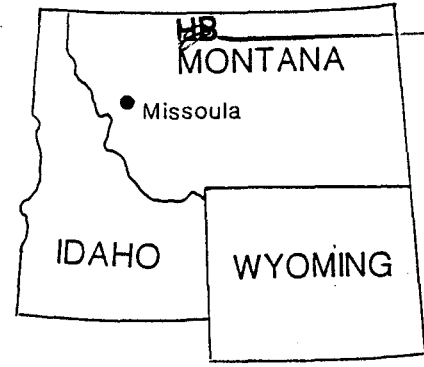
**FOREST
SERVICE
RECREATION
FACILITIES**

**BOAT LAUNCH
RAMP**

**SPILLWAY
CHANNEL**

**ROCK
CREEK**

ROAD 550



Bureau of Reclamation
COMO DAM
Montana
LOCATION MAP

February 11, 1993

COMO LAKE AND DAM

Background

Como Dam is a water impoundment facility located in Ravalli County within the Bitterroot National Forest. Como lake provides irrigation water to 16,665 acres on the East side of the Bitterroot valley. Gross crop values from the project in 1989 was over \$3 million.

Como Lake also provides a major recreation opportunity in a forested setting.

Como Dam was constructed in 1910 using hydraulic fill methods. Recent inspections conducted by the Bureau of Reclamation, as part of the Safety of Dams program revealed a number of significant problems which has led to reconstruction to meet current safety standards.

Actions:

Under Safety of Dams legislation, the Bureau of Reclamation with a 15% cost share from the Bitterroot Irrigation District is proceeding to reconstruct Como dam to the original capacity. The reconstruction schedule was accelerated when the Bureau of Reclamation determined the condition of the dam required emergency action.

Bureau of Reclamation engineers have determined that it is feasible to raise the height of Como Dam as much as 9 feet to accommodate up to an additional 9,000 acre feet of water storage capacity in Como Lake.

Following are the pertinent points relating to the re-construction and possible enlargement of Como Dam.

1. Reconstruction of the dam embankment to its original height is presently underway. The cost for this re-construction was originally estimated at \$22 million.
2. The Bitterroot Irrigation District has no foreseen need to invest in additional water storage.
3. The Bureau of Reclamation will fund the largest part of the reconstruction work, to rebuild the existing dam. They have no authority or funds, under the Safety of Dams legislation to provide funding for additional construction.
4. There is strong support for construction to add the as much as an additional 9000 acre feet to the lake storage capacity. To date, local contributors have donated almost \$31,000 to get a project to raise the dam height and add lake storage capacity underway.
5. A number of benefits accrue from creating additional storage capacity at Lake Como. They include: a lengthened recreation season, the ability to supplement Bitterroot River flows and the chance to improve fish management.

(2) Como Dam, continued

6. A number of people have spoken of the wisdom of providing for additional water storage now, when we have a reasonably efficient opportunity. Given the various projections of population growth, many felt we would be throwing away one of our better opportunities if we did not avail ourselves of this chance while the Bureau of Reclamation has a contractor in place.

Because of the efficiency of simply adding material to the top of the dam, we can presently raise the dam about 3 feet at a cost of approximately \$300,000. We are told that if we cannot move fast enough to take advantage of the present construction phase, the cost of any raise in dam height will be greater. Right now we do not know how much greater that cost will be.

The re-constructed dam will accommodate as much as an additional 9 feet in height which can be accomplished at a later time. Because of the need to tie that large a raise to the lower dam structure and to rework the spillway, the cost of a 9 foot raise has been estimated at close to \$5 million. Senator Conrad Burns is aware of this opportunity.

Summary:

Como Dam is currently being re-constructed to remedy Dam Safety problems.

Re-construction work will likely be completed this year or early in 1994.

Approximately 9000 acre/feet additional storage capacity could be added at the time of reconstruction. This would require an additional \$5 million investment. Funding for this additional storage capacity is not available from the Dam Safety program and would have to come from other sources such as a separate federal appropriation, challenge grants, private investment or State program contributions.

The Economic Development Committee of the Bitterroot Valley Chamber of Commerce has endorsed the re-construction and construction of the additional storage capacity at Como Dam. The future value of the availability of additional water in this relatively dry region is very high.

In a letter to the Bureau of Reclamation, Montana Congressman Pat Williams is on record as strongly in favor of proceeding as rapidly as possible to complete the needed reconstruction work at Como Dam. Mr. Williams has also asked The Bureau to consider the feasibility of adding to the storage capacity of this facility.

Benefits from increasing the storage capacity of Como Dam range from improving the year-to-year flexibility of irrigation management to a lengthened recreation season on 600 to 1000 acres of flat water in the summer impoundment, to increased benefits for fisheries management and the ability to augment Bitterroot river flows, especially when coordinated with releases from Painted Rocks Lake on the West Fork.

EXHIBIT 10
DATE 2-8-93
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(3)Como (Con't)

Obviously downstream users of water on the Bitterroot, Clark Fork and lower Flathead rivers stand to benefit to some extent from the availability of late season timed release of stored water. The hard fact is that we are unlikely to create additional water supplies. What we can do is to provide additional upstream storage to permit the most beneficial use of the water we have.

COMO LAKE FACT SHEET

In addition to its importance in providing storage for much needed irrigation water Como Dam provides a highly attractive recreation resource. Accessible flat water lakes are in short supply in the mountain west. In the Bitterroot Valley the only two boatable lakes reachable by road are Como Lake and Painted Rocks Lake.

In recognition of the popularity of Como Lake and the potential for additional recreational use the Forest Service has initiated a major program aimed at improving the recreation opportunity at Como. The first part of the project was to rebuild the access road from U.S. Hwy 93 to the lake. An entirely new approach to the highway was constructed and the road is now a high quality asphalt surfaced road passable by all types of recreation vehicles without danger of damage due to bad road.

The second part of the project includes improvements to the trailhead facilities at the Lake.

The third part of the project was scheduled to begin in FY 1993. This will include the construction of a new campground with improved facilities that is suitable for larger recreation vehicles.

Some Statistics:

Como Lake Present Storage Capacity: 37,000 Acre Feet

Proposed increase in Dam Height: 3 feet

Increased Storage Capacity: 3,000 acre feet

Low Water Pool Surface Area: 60 Acres + or -

Cost of Re-building Como Dam to its' present height: \$22 million est.

Cost of adding 3 feet to dam height: \$300,000 (est).

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CROSS SECTION OF COMO DAM
SHOWING PROPOSED SAFETY OF DAMS MODIFICATIONS

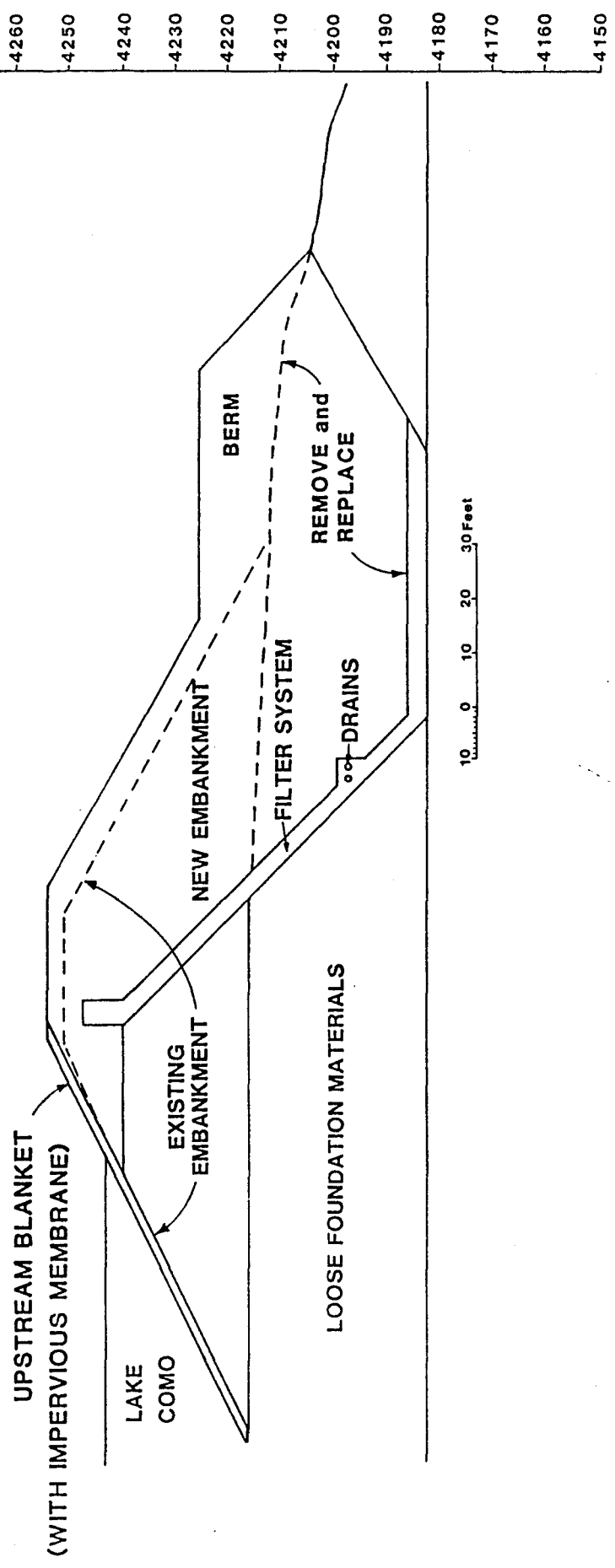


Figure 3

PLAN VIEW OF COMO DAM SHOWING
SAFETY OF DAMS MODIFICATIONS

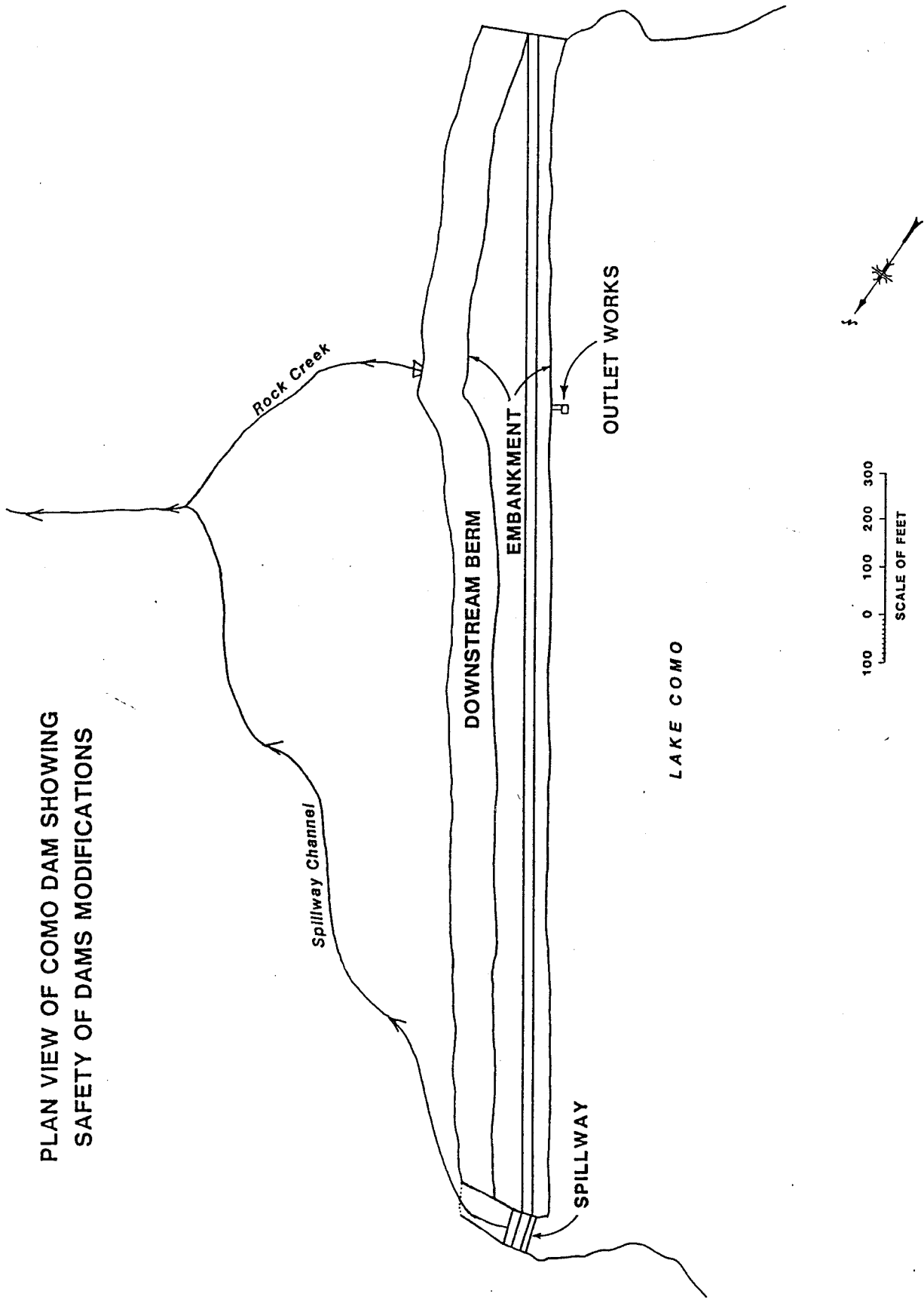


Figure 2

PROPOSED RAISE OF COMO DAM

Height of Lake Raise - 9 feet

Additional Storage in Lake Como - 8,200 ac-ft

Additional Surface Area of Lake Como - 34 acres

Reliable Storage for Instream Flows - 4,100 ac-ft

Potential Instream Flow Augmentation

50 cfs for 6 weeks

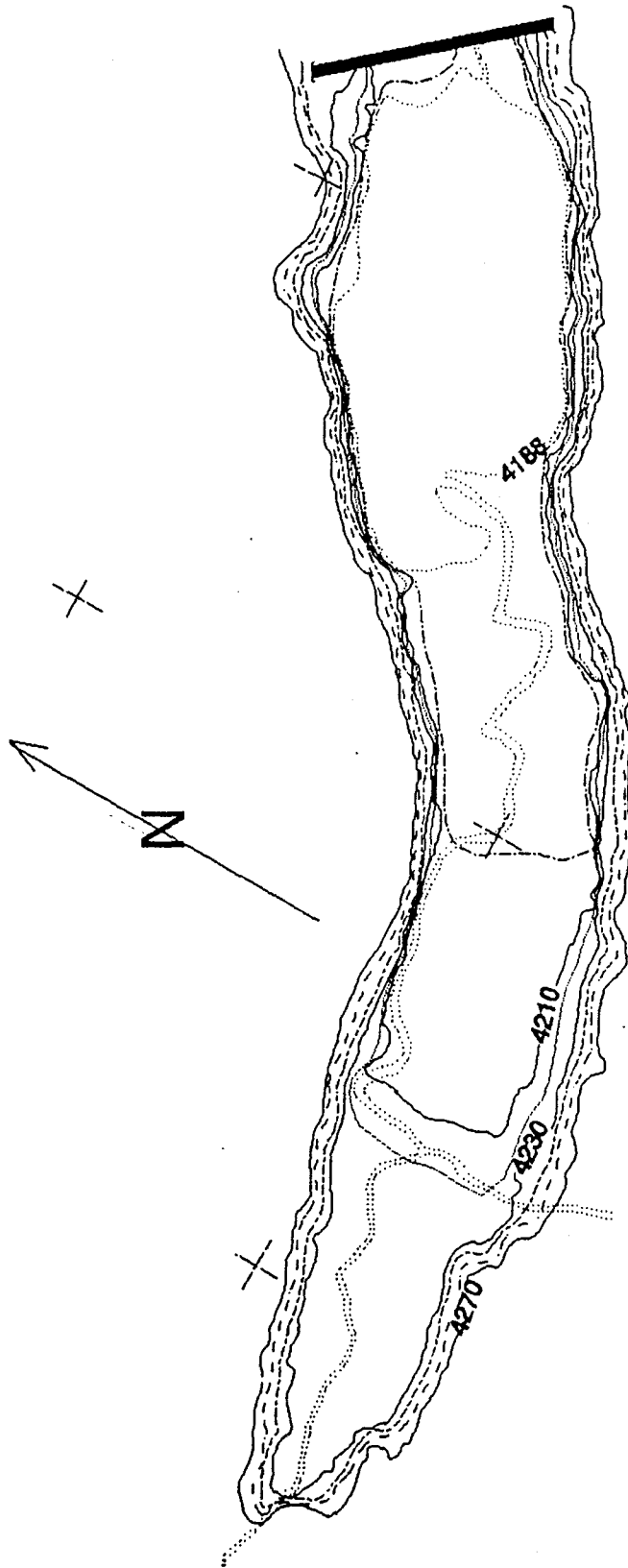
or

100 cfs for 3 weeks

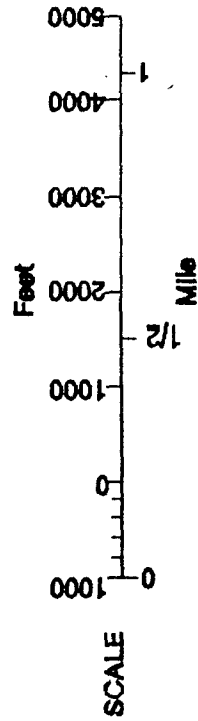
Average INCREASE in Lake Como

| Date | Depth | Area |
|-------------|-------|------|
| June 1 | 6.9 | 25 |
| July 1 | 8.1 | 33 |
| August 1 | 8.9 | 47 |
| September 1 | 9.2 | 220 |

Cost for Additional Storage - \$5 million



- ORIGINAL LAKE COMO (4188 ft)
- NORMAL WATER ELEVATION (4242.7 ft)
- - - - - LAKE COMO WITH RAISE (4251.5 ft)
- NORMAL 9-1 LAKE LEVEL WITHOUT RAISE
- NORMAL 9-1 LAKE LEVEL WITH RAISE



LAKE COMO
POOL ELEVATIONS
BUREAU OF RECLAMATION
PN REGION
BOISE, IDAHO

3/82

14

- 21 -

APPLICANT NAME : Town of Hot Springs
PROJECT/ACTIVITY NAME : Camas Therapy Center
AMOUNT REQUESTED : \$ 300,000

OTHER FUNDING SOURCES AND AMOUNTS :

| | |
|--|------------|
| Private | \$ 50,000 |
| Montana Department of Commerce (Community Development Block Grant) | \$ 300,000 |
| Economic Development Administration | \$ 900,000 |
| Farmers Home Administration (Loan) | \$ 250,000 |
| Small Business Administration (Loan) | \$ 250,000 |

TOTAL PROJECT COST : \$ 2,050,000

PROJECT ABSTRACT (Prepared and submitted by applicant)

The hot mineral waters, flowing from the springs adjacent to the Town of Hot Springs, will be used for the healing of the medical and economic ills of the community and surrounding areas.

The Town of Hot Springs, in cooperation with CAM Redevelopment Corporation, will rebuild the abandoned tribal bathhouse into a modern therapy center. In doing so, the town will provide a healing center in an area of the state where medical care, and especially physical therapy, is not currently available. This center, currently leased from the Confederated Salish and Kootenai Tribes by CAM, will in turn provide over 100 direct and indirect employment opportunities in an area hit hard by unemployment. (State of Montana Job Service figures show percentages ranging from 14.8 to 25.1.)

At the present time, in excess of 590 gallons per minute (gpm) of hot mineral water is flowing over the bank into a ditch. This water is seen as a wasted natural resource which should be conserved and protected. The applicant's plan is to capture this water and use it for hot water therapy. The heat from the wells, already in place, will also be used to provide the environmental control system for the building itself, which was once

heated with oil. The recyclable water created by the therapy center will be used in irrigating the surrounding public park and adjacent golf course.

Before the bathhouse properties were closed in the early 1980s, they served persons from the United States, Canada, and 17 other foreign countries. In their prime, they served an average of 150 persons a day. According to the feasibility study conducted by AdScripts of Missoula in 1991, there is no reason to believe that an even better success ratio could not be achieved.

This project has received unanimous support from city, county, tribal, state, and federal government officials. The applicant has worked hand in hand with the Confederated and Salish Kootenai Tribal Council and developed plans in cooperation with their cultural committees. This approach is leading to greater understanding between tribal and nontribal persons on this reservation.

This retirement community of under 500 persons has raised over \$10,000 to be used for matching funds and operation of CAM Redevelopment, a nonprofit corporation formed by leaders of the community to address economic reversals in the area. The local Swimming Pool Fund has pledged over \$50,000 to be used for matching funds. The applicant continues to work closely with the Economic Development Administration (EDA), which funded a technical assistance grant for the feasibility study. The applicant has approached EDA as a source of matching funding through its Public Works Program.

The combined funding and construction phases of this project are projected to take 12 to 24 months. The Town of Hot Springs will oversee all grants and control all funds. The mayor will be on the management board.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The Town of Hot Springs has sought avenues for local economic development since closure of the Tribal Bathhouse in 1985, transfer of Bonneville Power Administration personnel from Hot Springs to Kalispell in 1990, and closure of area lumber mills. A feasibility study was conducted with grant money from the Economic Development Administration to help determine whether revival of the resort is the best alternative for revitalizing the economy of the area. Conclusions of the study indicated that resort renovation was consistent with community goals and was advisable and viable, with certain qualifications. These centered on resolution of a water allocation issue with an adjacent leaseholder and the continued willingness of the Tribal Council and the community of Hot Springs to work together. The water allocation issue has been resolved by issuance of a revocable water permit for 39,600 gallons per day (GPD), or 27.5 gallons per minute, to be used by CAM Redevelopment Corporation for the therapy center. Annexation of the bathhouse grounds by the Town of Hot Springs is still being pursued.

Supporting studies for resort renovation include an architectural feasibility study, a preliminary engineering report, and a geothermal investigation of the Camas Hot Springs area. The architectural study provides a reasonable proposal for renovation of the bathhouse and grounds. However, the geothermal investigation does not adequately address the long-term sustainability of bathhouse wells, impacts to the reservoir's storage volume or temperature following development, or impacts to nearby existing wells and springs. From this study, it is not possible to determine if geothermal development, without adequate long-term testing, would degrade the springs' geothermal qualities and/or flow rate. Current flow rates appear adequate to support heating needs for the swimming pool, uses of the bathhouse, and partial heating of the building. More analysis and design should be completed before a heating system is selected to verify that the geothermal water would not have adverse effects on heating and plumbing systems.

Priority needs for project development are removal of one underground and one above-ground oil tank located next to the bathhouse, which pose a threat to the integrity of the aquifer, and removal of asbestos. Asbestos is known to occur on outdoor siding and on water pipes and boilers in the building, and it may occur elsewhere. Tribal support for removal of the underground tank has been documented. Some portions of the building will need to be demolished because of hazardous conditions. Funds also are requested for renovation and construction of the facility.

FINANCIAL ASSESSMENT

The budget is reasonably clear and complete. Estimates for asbestos removal are based on an educated guess by the architect, which appears to be reasonable. Matching funds of \$50,000 have been secured; however, the applicant is seeking an additional \$1,700,000 in economic development grants and FHA and Small Business Association loans.

CAM Redevelopment has initiated preapplication consultation with the Montana Department of Commerce's Community Development Block Grant staff and with the Economic Development Administration of the U.S. Department of Commerce. Documentation for consultation with the FHA and SBA was not provided.

ENVIRONMENTAL EVALUATION

Renovation of the bathhouse and grounds would not result in significant impacts. Construction-related demolition and disturbance would be limited to the site itself.

Obtaining permits would be necessary for underground tank removal, spring renovation, and building renovation and construction. EPA guidelines would have to be followed for asbestos removal and disposal. Further geotechnical investigation will be necessary to demonstrate that the proposed development would not adversely affect the aquifer and other domestic water supplies.

Long-term positive benefits would accrue to the community of Hot Springs through creation of jobs and increased community income. A potential threat to an underground aquifer would be removed.

PUBLIC BENEFITS ASSESSMENT

The proposed project would result in the development and use of Camas Hot Springs. A tangible benefit--renovation of the bathhouse and grounds that are currently abandoned and in disrepair--would result for the citizens of Montana and for the Confederated Salish and Kootenai Tribes. The completed project would support economic development activities for the Town of Hot Springs. An estimated 14 new jobs would be created at the therapy center and potentially 70 to 100 new jobs in the community of Hot Springs. The primary beneficiary would be the Town of Hot Springs.

The physical environment would benefit by the removal of an underground storage tank that may now or in the future leak and contaminate the aquifer.

RECOMMENDATIONS

A grant of up to \$150,000, which is one-half the requested amount, is recommended for this project, subject to the following contingencies.

1. DNRC must approve the scope of work and budget.
2. RDGP funds shall not be used for asbestos or tank removal; the applicant must secure these funds elsewhere.
3. Written support for the entire project must be obtained from the tribe and the adjacent leaseholder.
4. A geohydrological investigation must be conducted, and it must conclude that (1) area aquifers will not be adversely impacted by the project, and (2) sufficient flows are available to sustain the facility in the long term.
5. The lease agreement and water allocation permit must be acceptable to all funding sources, and documentation of such acceptance must be furnished to DNRC.
6. The applicant must furnish to DNRC firm funding commitments from all funding sources (other than RDGP) for the total project cost (\$2,050,000).

EXHIBIT 18
DATE 2-8-83
HB

CAMAS THERAPY CENTER

TOWN OF HOT SPRINGS

HOUSE BILL # 7

PRESENTATIONS BY

REPRESENTING

SHARON FLESCH, PROJECT COORDINATOR

CAM REDEVELOPMENT

RAYMOND FLESCH, PRESIDENT

CAM REDEVELOPMENT

MERLE FARRIER, SUPERINTENDENT

HOT SPRINGS SCHOOLS

THELMA NIEMEYER, SECRETARY

CAM REDEVELOPMENT

ENROLLED MEMBER

CONFEDERATED SALISH
KOOTENAI TRIBES

BILL MASSEY, COMMISSIONER

SANDERS COUNTY

DOCUMENTATION PROVIDED WITHIN PACKET

ANNEXATION, TOWN OF HOT SPRINGS

TRIBAL SUPPORT

ADJACENT TRIBAL LAND OWNER SUPPORT

EPA LETTER OF EXPLANATION

GEOTHEMAL SPECIFICATIONS

LEASE EXTENSION

WATER PERMIT

TECHNICAL ASSESSMENT UPDATE

FHA CONFIRMATION OF CONTACTS

LOCAL BANK - SBA CONTACTS

CDBG PRE-APPLICATION

EDA LETTER

LETTERS OF SUPPORT (FEDERAL, STATE, REGIONAL, COUNTY, LOCAL)

LOCAL PETITIONS OF SUPPORT

The original is located at the Historical Society, 25 North Roberts Street, Helena, MT 59620-1201. The phone number is 444-2694.

EXHIBIT 19
DATE 1-8-93
~~HD~~

CAMAS
THERAPY
CENTER

TOWN OF HOT SPRINGS

LETTERS
AND
PETITIONS
OF
SUPPORT

HOUSE OF REPRESENTATIVES
VISITOR REGISTER

Long Range Planning

SUBCOMMITTEE

DATE

2/8/83

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| JESSE Munro | DFS | |
| Jacki Urigg | DOLI | |
| Bob Mullen | DLI | |
| Jim Hill | DLI | |
| T. GARY CURTIS | DLI | |
| Mark Majerus | USDA Plant Material Center | |
| John Vanisko | Deer Lodge Valley C.D. | |
| Debbie Nokes | Butte, MT Friends of Urban Forest | |
| Tom Gunn | Butte - Silver Bow - | |
| Deeda Richard | DNRC - RDGP | |
| Tom Tubbs | DNRC | |
| Greg Mills | DNRC | |
| Vito Ciliberti (BLM) Mont | Dist F.W.P / Dennis Wadsworth | |
| Stan Bradshaw | MT T.U. | |
| EARL DORSEY | PAT BARNES / Trout Unlimited Missouri River Chapter | |

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HOUSE OF REPRESENTATIVES
VISITOR REGISTER

Long Range Planning SUBCOMMITTEE DATE 2/8/93
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| <u>Ron Spoon</u> | <u>MDFWP</u> | |
| <u>Jack Sautter</u> | <u>Stream & Lake Committee</u> | |
| <u>Cliff Cox</u> | <u>TOWNSEND - Broadwater Co</u> | |
| | <u>Broadwater County</u> | |
| | <u>Conservation District</u> | |
| <u>Bethany A. Inle</u> | <u>Neleua National Forest</u> | |
| | <u>Lake Como</u> | |
| <u>James Freeman</u> | <u>Bitterroot RC&D.</u> | |
| <u>Pam Jackson</u> | <u>" " "</u> | |
| | <u>& Bitterroot Valley Chamber of Commerce</u> | |
| <u>KT Sutherland</u> | <u>Bitterroot RC&D</u> | |
| <u>TOM RICHMOND</u> | <u>MT BOARD OF OIL & GAS</u> | |
| <u>J.W. HALVORSON</u> | <u>MT BOARD OF OIL & GAS</u> | |
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Long Range Planning SUBCOMMITTEE DATE 2/8/93

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