# 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 2, 1993, at 8:00 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
Jane Hamman, 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 6; WATER DEVELOPMENT AND RENEWABLE RESOURCE DEVELOPMENT PROGRAMS
Executive Action: NONE

### HEARING ON HB 6; WATER DEVELOPMENT AND RENEWABLE RESOURCE DEVELOPMENT PROGRAMS

**Tape No. 1:A:004**

BUDGET ITEM PROJECT #17 TOWN OF DUTTON:

**Tape No. 1:A:020**

Informational Testimony: **Bob Church, Civil Engineer for Damschen & Assoc.,** spoke on behalf of the Town of Dutton's requested grant of $94,680 for Water System Improvements. **EXHIBIT 1.** He completed a Witness Statement. **EXHIBIT 2.** The engineering study determined five main problems with the existing water system. The well and pump house located on the bank of the Teton River is in danger of being lost due to erosion. There is no capacity to chlorinate the drinking water at this time. The elevated storage tank is well

past its life, and is inadequate for fire protection and peak flow periods. In addition, the control system is outdated and needs to be upgraded.

**Mr. Church** stated that this grant would address the necessary pipeline replacements and provide for a liquid chlorination system at the existing well. Some improvements have already been done with previous grants and loans.

**Questions, Responses, and Discussion:** **SEN. BOB HOCKETT** asked if the Town of Dutton received a loan last time from the RRD grant and loan program. **Mr. Church** stated that they received $175,000 in loan money. Previous Community Development Block Grants and RRD money was used to replace the storage tank, install the telemetry control system and complete other improvements.

**CHAIRMAN ERNEST BERGSAGEL** asked where the necessary matching funds for receipt of the RRD grant would come from. **Jeanne Schoonover, Town Clerk, Town of Dutton,** stated that the town has a grant application in to the Treasure State Endowment Grant Program for the matching funds. The town cannot borrow any more funds because of outstanding loans already in place for the water system.

**John Tubbs, Chief of Resource Development Bureau, Dept. of Natural Resources and Conservation,** confirmed that matching funds must be secured before RRD grant money will be released to the town. If the committee wishes to authorize the money and not require the match, they can require the department to release the funds without a match. However, DNRC evaluated the total project and determined that matching funds could be required.

**Mr. Church** stated that the town has completed a majority of the work outlined in the project, and are proposing the grant to do the work in phase two. Therefore, the matching funds have already been spent. **Mr. Tubbs** stated that was correct, the town did submit where the total project was. But DNRC determined that they have some payback capabilities, either as a maximum of a $50,000 grant or 25% of the project costs. Therefore, the department did look at the total project costs and maxed them out at the $50,000 recommendation. The LRP committee also has the authority to take into account their current financial stress and give them the full amount of the grant.

**CHAIRMAN BERGSAGEL** stated that he just wanted to be sure the LRP committee was clear that a match was required.

**Ms. Schoonover** stated that the reason the total cost of the whole project is used as the funding base for applications from the town is because the legislature in 1991 reduced the original loan authority given to the town.

**REP. FRANCIS BARDANOUVE** asked why the one mile of pipeline has caused so many problems for the town, and needed so many repairs.

**Mr. Church** stated that the section was poorly bedded, and the grade of the interstate is actually below the pipeline. The vibrations off the interstate affect the pipeline, which is made of brittle material and breaks easily. The pipeline is 40 years old, and will be replaced with PVC pipe which is flexible.

**REP. BARDANOUVE** asked if it is possible that soon the whole line will need to be replaced, not just the one mile stretch. **Mr. Church** stated that would not happen shortly. Eventually the whole line will need replaced, but nothing will be lost because any replacements will be attached to the new PVC pipe in the one mile stretch. There is no indication that the rest of the line will fail in the near future.

**SEN. HOCKETT** asked what the town's water rates were per hookup, and if they would increase. **Ms. Schoonover** stated that a national average of 10,000 gallons of water per household, they are right at $35.10 or $35.30 per month. The rates have been raised 12% to pay for the DNRC loan, and will need to be raised again to pay for increased costs.

**SEN. HOCKETT** asked why the DNRC's recommendations state that any funds received from sources not previously identified will cause a dollar-for-dollar reduction in the funds awarded under this grant. **Ms. Jeanne Doney, DNRC,** stated that the department has a 25% up to $50,000 cap and want to avoid double funding projects that also have applications in to the Treasure State Endowment Program.

**CHAIRMAN BERGSAGEL** asked Ms. Schoonover if they were applying to the TSEP as well. **Ms. Schoonover** replied that since the TSEP was set up so late in the year, all applications for RRD funds were automatically given to the TSEP; therefore, they were up for TSEP grants as well. They are not seeking double-funding, but would like to be able to complete the project.

**CHAIRMAN BERGSAGEL** told DNRC that he would like them to explain this further when the hearing is complete.

**Henry McDunn, Councilman, Town of Dutton,** stated that the transmission line is about 20 years old and was replaced in the early 1970's. The problems have begun since then. **Mr. Church** corrected him that the distribution lines were replaced in the '70's, and the main transmission lines were done in the 1950's.

**REP. BARDANOUVE** asked if the federal DOT could be held accountable for the damage to the water line caused by vibrations from the highway. **Mr. Church** stated that from engineer to engineer the argument could be made. However from attorney to attorney he doubted that the argument would hold up. He does not think he could conclusively prove that the line has been damaged by the highway.

**SEN. ETHEL HARDING** asked how large the town of Dutton is and how

many people would be served by the water improvements. **Mr. Church** stated that approximately 400 people live there and would benefit. He said that the Mayor also wanted the committee reminded that the water system also serves the state rest area located on the interstate.

ANNOUNCEMENTS/DISCUSSION

**CHAIRMAN BERGSAGEL** asked Mr. Tubbs to briefly explain the relationship between the TSEP and RRD grant programs.

**Mr. Tubbs** informed the committee that TSEP was passed by vote of the public on June 2, 1992. The RRD funds a great deal of rural community infrastructure projects. The TSEP is seen as providing some complementary programs, and will take on the infrastructure programs of communities. The RRD will then go back to its initial purpose of serving agricultural projects and increasing water use efficiency. Therefore, DNRC identified all municipal applicants and gave them to the Department of Commerce for consideration for funding from the TSEP. The DOC reviewed the applicants and asked for some additional information. The DOC's ranking system differs from DNRC's, and ranks public health and safety higher. The RRD looks at the resource first as a priority, and then later looks at public safety and health. There are two different goals for each programs, and the DNRC thought the TSEP would rank some low RRD programs high enough to get funding.

BUDGET ITEM PROJECT #19 EAST GLACIER WATER AND SEWER DISTRICT:
**Tape No. 1:A:668**

Informational Testimony: **Mr. Tubbs** informed the committee that Midvale Diversion project was originally funded in 1985 with the condition that a water treatment plant had be installed at the same time in order to receive the grant. **EXHIBIT 3.** The town has been unable to secure any funding for the plant. The town has re-applied, as requested by DNRC, and need the same amount of money as they had originally been granted. DNRC recommends that the LRP committee amend HB 6 that allows the allocation of the 1985 grant without the requirement for a water treatment plant.

Questions, Responses, and Discussion: **CHAIRMAN BERGSAGEL** asked why the water treatment plant was originally required. **Mr. Tubbs** stated that the Midvale Diversion Project is one step in improving the water quality, by allowing them to route the water source around a reservoir that silts up. The condition for a water treatment plant was an attempt to give the town incentive to build the plant, but unfortunately the town can't get the funds to do that. The current project will improve the quality of water in the stream, and the funds are already there, so no more time should be wasted in allowing them to proceed with the project.

**REP. BARDANOUVE** stated he believed the Department of Health and Environmental Sciences had been involved in the past grant

application. **Mr. Tubbs** agreed that they had been, and informed the committee that DHES has reviewed this grant and also agreed that the treatment plant requirement should not prevent this work from being done.

**REP. BARDANOUVE** asked if the current water quality was a health hazard. **Mr. Tubbs** stated that surface water is being used, and current standards require that they will have to eventually install a water treatment plant.

**SEN. HOCKETT** asked if permits have been procured from the tribal entities involved. **Mr. Tubbs** stated the current Blackfeet Tribal Council is in favor of the project, and is waiting for LRP committee action on the project.

**SEN. HOCKETT** asked if the Glacier Park Chalet is hooked up to this water system. **Mr. Tubbs** said that it is, and that how much the Park Service will be responsible for the water treatment plant is being negotiated.

**SEN. HOCKETT** said the Chalet is leased out to private concessionaires. He would like to see them pay for part of this, not the Park Service. **Mr. Tubbs** stated that he would speak to the town about that, and bring it back to the committee during executive action.

**REP. BARDANOUVE** asked if all users are assessed the same amount, or are they assessed a fee according to the amount of water they use. **Mr. Tubbs** said he did not know, but he understood that the Tribal Council and city governments working together make it complicated.

**REP. BARDANOUVE** stated that the park chalet would use much more water than a homeowner, and wondered if they are assessed a fee according to volume or just hookups. **Mr. Tubbs** stated he would find out and bring it back to the committee.

**BUDGET ITEM PROJECT #40 HILL COUNTY:**

**Tape No. 1:A:934**

Informational Testimony: **Bob Sivertsen, Chairman, Hill County Salinity Committee,** spoke on behalf of the recommended $50,000 grant and $50,000 loan for their Salinity Control Project. **EXHIBIT 4.** He completed a Witness Statement. **EXHIBIT 5.** The water table has become extremely high due to the continued development of this area. He stated that a $2.7 million bid was received from one company to take care of the severe salinity problems in Hill County and Havre. The required drainage system is so costly because law requires it to be built to handle a 100-year flood storm. The 54-inch pipe required and the collection system is too expensive.

**Mr. Sivertsen** stated that since the cost is so high, the salinity committee has decided to do it in phases. The first phase or

priority will deal with conveying the fresh surface water away from the area before it becomes contaminated with saline. The second phase will place vegetative cover in the area that are salt tolerant and high water users. **Mr. Sivertsen** provided a copy of the work completed so far on the salinity problem, work to be completed and the negative and positive impacts of the problem and solutions. **EXHIBIT 6** includes the Montana Salinity Control's inventory and evaluation of the problem.

Tape 1:B:053

**Mike Wendland, Hill County Soil Conservation District,** reiterated that the project is needed to protect the water quality. The best way to do this is to get the water table down and prevent some of the runoff of saline contaminated water. The runoff then eventually goes downstream to end up in the Milk River which supplies Havre's water system. The soil quality would also be improved.

Questions, Responses, and Discussion: **REP. BARDANOUVE** stated that part of the problem is the Bearpaw shale soil in the area. The Department of Transportation (DOT) has spent thousands of dollars trying to hold the hillside in place. He expressed surprise that K-mart built a large store where they did. **Mr. Wendland** stated that K-mart didn't approach the SCS for soil surveys or information. The area is a problem and the SCS was concerned about K-mart's plans to build.

**REP. BARDANOUVE** stated that all over America shopping centers are causing problems, and it seems that the salinity problem has gotten worse since the Holiday Shopping Center was built in Havre. **Mr. Sivertsen** stated that the Montana Salinity Control Association pointed out to the town's committee that the parking area blacktop prevents water from evaporating once it seeps down through the cracks. Therefore it adds to the high discharge area.

**SEN. HARDING** asked what kind of lining was used on the ditches. **Mr. Sivertsen** stated it has not been done yet, but is proposed to be done to convey fresh water before it becomes contaminated with salt water. A synthetic fabric, cement or asphalt would be used for lining. The town hopes that the DOT will work with them on this project.

**SEN. HOCKETT** stated that he has worked with this group for 3 years and appreciates all the different government and private agencies working together to solve this problem. The hardest part was getting the DOT to admit that they were part of the problem and needed to be part of the solution. The county will do quite a bit of work too, and with funds from this committee the project should be ready to go.

**Mr. Sivertsen** said the project should be a model project because of the different entities working together to solve the problem. **SEN. HOCKETT** stated that it also illustrates the value of

planning for land use.

**REP. BARDANOUVE** asked if the water that was going to be pumped was surface water or high ground water. **Mr. Sivertsen** stated that it would be just surface water. Landscaping will be done so that the water does not have a chance to settle in, and will go to a collection point where it will be pumped out of the area before contaminated with salt.

**CHAIRMAN BERGSAGEL** asked if the county has obtained the permanent easements required to Beaver Creek. **Mr. Sivertsen** stated that they have only been explored they have not actually obtained them yet.

**CHAIRMAN BERGSAGEL** asked if the grant request before the committee today was for surface drainage only, not the subsurface part of the project. **Mr. Sivertsen** stated that was correct. The county is waiting to work with the DOT on the other things. The surface water project is less costly, and if done right, could lower the water table and alleviate some of those costs. The bid for this portion of the project was for $900,000 but the committee thinks they can do a smaller system for less. He stated that they think the DOT will help them a lot with the project.

**CHAIRMAN BERGSAGEL** asked DNRC if this grant was subject to approval of the project by the DOT. **Mr. Tubbs** stated that the grant money will not be released without documentation that the DOT has come through with money for the project. The DOT has been unwilling to commit to the project, and that is one reason why DNRC gave the project a low ranking.

**CHAIRMAN BERGSAGEL** asked the county if they would seek a waiver on the 54 year flood drainage requirement. **Mr. Sivertsen** stated he is not sure. The company that recommended solutions to the problem, said the county had to go with the 100-year flood plan and he has just learned that the 50-year plan would suffice. If the county could get RRD funding, he thinks it would provide leverage to DOT participation.

**REP. BARDANOUVE** asked if the county has considered a special assessment district for this area to help raise the funds. He heard that the Holiday Shopping Village was owned by a California firm. **Mr. Sivertsen** said that the Salinity Committee has considered every possibility for this project, and have had good community attendance at meetings. He thinks that if the community saw the project was going to get done, there would be support. If the project is not addressed, economic impact on that area will be the result. A district could be formed.

**BUDGET ITEM PROJECT #1 MALTA IRRIGATION DISTRICT:**

**Tape No. 1:B:425**

**Informational Testimony: Bud Mavencamp, Manager, Malta**

**Irrigation District,** spoke on behalf of the $50,000 grant and the $50,000 loan recommended for their Improving Water Use Efficiency through Canal Check Structures project. **EXHIBIT 7.** He provided written copy of his testimony. **EXHIBIT 8.**

Questions, Responses, and Discussion: **REP. BARDANOUVE** asked if increasing the width of checks by five feet make a big difference in preventing ice flows from plugging up the river. **Mr. Mavencamp** stated that it is only the ice that forms in the canal that the project is addressing. The river ice does not affect it .

**SEN. HOCKETT** asked what percentage of change there would be in water use efficiency. **Mr. Mavencamp** stated that they are hoping to start diverting water out of the Milk River two weeks earlier. The only water saved would be the water that would go on down the river and not be used by their irrigation district.

**REP. BARDANOUVE** stated that any water that passes this irrigation district goes directly on to the Missouri River. He asked the acre feet of Nelson Reservoir. **Mr. Mavencamp** stated it was about 60,000 storage feet, and has not been full since 1979.

**CHAIRMAN BERGSAGEL** asked how much of this water would be diverted into the wildlife refuge. **Mr. Mavencamp** stated that they have a right to 3,500 acre feet from the river; their allocation will not be increased.

**SEN. HOCKETT** stated that he is not opposed to the project but would like to see more of these projects directed toward more conservation of water, and less waste. He is amazed at how much whiter the valley has become in recent years. **Mr. Mavencamp** stated that by keeping the flow more steady they hope to actually save a little water.

**REP. BARDANOUVE** asked if the alkali or salinity was increasing in the wildlife refuge. **Mr. Mavencamp** said after it reached a certain point, it may have stabilized. He is not sure if it has increased or not.

**SEN. HOCKETT** asked if the water charges per acre feet would increase. **Mr. Mavencamp** said the charges have increased by $2 so far, and will probably increase by another $1.

**CHAIRMAN BERGSAGEL** asked DNRC if it was standard for a dollar-to-dollar reduction in RRD grant funds to occur when unidentified sources provide additional funds for these projects. **Mr. Tubbs** stated that it is standard and will be seen on all grant recommendations.

**CHAIRMAN BERGSAGEL** asked if the grants would be given out in partial payments over four years. **Mr. Tubbs** stated that the grants are actually reimbursements after the department receives a bill for work completed. There are requirements for quarterly reports so that DNRC can monitor the project's progress. The

applicants receive their matching funds on a percentage basis.

**REP. BARDANOUVE** asked if the agricultural land being served was suffering from an increasing salinity problem. **Mr. Mavencamp** said he did not think the problem is increasing; a drainage system has the problem under control.

**BUDGET ITEM PROJECT #43 DODSON IRRIGATION DISTRICT:**
**Tape No. 1:B:872**

**Informational Testimony: Joe Nicholson, Vice President, Dodson Irrigation District,** spoke on behalf of the $31,569 grant and $31,326 loan for their Improving Water Use Efficiency through Canal and Pump project. **EXHIBIT 9.** He provided a written copy of his testimony. **EXHIBIT 10.**

**Questions, Responses, and Discussion: REP. BARDANOUVE** asked how many landowners would benefit from the project. **Mr. Nicholson** stated that approximately eight landowners who pay approximately $100,000 worth of county taxes would benefit. The owners need the land and the feed it produces to support the dry land operations as well. The seepage area at the head of the delivery system causes lots of problems. He stated that at one time one ranch was completely white. They quit irrigating part of the land and went to a well sprinkler system which helped lower the water table and reduce the saline seep. However, the saline is still in the canals. And due to the improved monitoring system, the landowners are having problems getting enough water for two irrigations during a season.

**SEN. HOCKETT** asked if the 1400 feet of new pipe would go into the new ditch. **Mr. Nicholson** stated it would, but the U-Turn would be eliminated and more of the pipe would run along the valley floor. There is less gravel and more sand there.

**SEN. HOCKETT** asked if the $63 fee assessed to water users was a one-time fee or an annual payment. **Mr. Nicholson** stated that it would be charged over a period of time. **SEN. HOCKETT** asked if the people involved were in support of the project, because there is no documentation of that support. **Mr. Nicholson** stated that they are in support, but the application did not document it. **CHAIRMAN BERGSAGEL** stated he was sure the membership approved of the application before it was submitted.

**SEN. HOCKETT** stated that there are contradictory statements that say more water will be made available to the participants, but there are also statements that say more water will stay in the river. He asked if water allotments would increase for the landowners. **Mr. Nicholson** stated that landowners will only be allowed to take what is allotted to them. Now the allotted water is measured at the pumps and is lost in the first mile of the distribution system. It will still be measured at the pump, but the loss will not occur.

**REP. BARDANOUVE** asked if there would be any impact on the town of Dodson. **Mr. Nicholson** stated that the town would not be affected, but drains do run near the town limits.

Tape 2:A:004

**Ms. Doney** explained that the Dodson application received a low ranking partly because it is difficult for small entities to come up with public support. Therefore, even though DNRC listed some problems with the application, the department is in support of the benefits this project will bring.

**REP. BARDANOUVE** asked if the district has considered using any bentonite in the ditch. **Mr. Nicholson** said that has been considered, but bentonite mixed with gravel still isn't ideal.

**SEN. HARDING** asked if the crops are all irrigated. **Mr. Nicholson** said there are short-rotation crops that are irrigated, but basically the district is concerned with raising alfalfa.

ANNOUNCEMENTS/DISCUSSION

**Ms. Doney** informed the committee that a number of applicants have chosen not to attend the committee hearings and speak on behalf of their grant requests. Last session the LRP committee approved DNRC's recommendations right down the list of grants, and therefore there was some sense among applicants that if they ranked low on the list they did not have a chance. Even if the applications received a low ranking they were encouraged to attend the hearings, but have chosen not to.

**Ms. Doney** stated that the staff of DNRC is prepared to make presentations on the rest of the grant applications scheduled for today.

BUDGET ITEM PROJECT #27 EASTERN SANDERS CONSERVATION DISTRICT:

**Tape No. 2:A:095**

**George Oshinski, Salish-Kootanai Confederated Tribes,** submitted the tribes' support for the Eastern Sanders County Accelerated Soil Survey. He apologized for missing yesterday's hearing on the grant. **EXHIBIT 11.**

BUDGET ITEM PROJECT #44 & PROJECT #42 FORT SHAW IRRIGATION DISTRICT:

**Tape No. 2:A;109**

**Ms. Doney** informed the committee that the Rehabilitation and Betterment Study and the "A" System Diversion project were repeat applications from last year. Current funding projections have enabled DNRC to commit funds and, therefore, their applications have been withdrawn from this year's applications.

BUDGET ITEM PROJECT #6 STOCKETT/CASCADE WATER & SEWER DISTRICT:

**Tape No. 2:A:127**

**Ms. Doney** stated that the Sewer System project was also a repeat application from last year that DNRC is now able to commit funds to, and therefore their application is withdrawn from this year.

BUDGET ITEM PROJECT #24 LIBERTY COUNTY:

**Tape No. 2:A;134**

**Ms. Doney** said their groundwater evaluation project was also a repeat application that will now be funded. Their application is therefore withdrawn.

Questions, Responses, and Discussion: **CHAIRMAN BERGSAGEL** asked how many outstanding grant or loan balances DNRC has. Is there a time limit on how long they can be outstanding? **Ms. Doney** stated that DNRC now has the policy that if projects cannot be completed by the end of the second following biennium, the department comes into the legislature and asks that the project be cancelled. Therefore the 1989 projects are mostly done, and she is mainly administering 1991 projects.

**SEN. HOCKETT** asked if those 1991 project just receiving money, will have to be completed by FY95. **Ms. Doney** stated that she will begin writing contracts for these projects after her work with the LRP committee is complete. Typically, the projects take only one to two years to complete. However if there are extenuating circumstances, more time can be sought.

**SEN. HOCKETT** stated that last session several projects were cancelled. He asked if that is where some of this money came from. **Ms. Doney** stated that was correct.

BUDGET ITEM PROJECT #49 FERGUS COUNTY:

**Tape No. 2:A:249**

**Ms. Doney** stated they were asking for $7,000 for their well revitalization project and were ranked very low by DNRC. Consequently, they decided not to appear at today's hearing.

BUDGET ITEM PROJECT #31 HILGER COUNTY WATER AND SEWER DISTRICT:

**Tape No. 2:A:276**

**Mark Marty, Staff Engineer, Resource Development Bureau,** spoke on behalf of the $50,000 grant and $50,000 loan for Hilger's Sewage Collection and Treatment Facilities project. **EXHIBIT 12.** He stated that the city is proposing to build a central sewage collection facility and a sewage treatment lagoon, and abandon individual site septic tanks. The community's application was very well prepared with a feasibility study included in the application. The study identified several different alternatives for constructing a new sewage system, and the city has requested grant money for the least-cost alternative.

**Mr. Marty** said the town will submit grant applications to the CDBG program and the State Revolving Fund. Because the RRD grants are the first funds applied for, the DNRC did not give them a higher ranking. If other funds had been in hand, they may have ranked higher. In addition, sewer projects don't always rank high with the RRD program. The project is well thought out and the system will work.

Questions, Responses, and Discussion: **REP. BARDANOUVE** asked how many people will be served. **Mr. Marty** stated that 15 residences and 5 business would be served. There will be a high cost per hookup because of the low number served.

BUDGET ITEM PROJECT #50 CITY OF SHELBY:

**Tape No. 2:A:396**

**Mr. Marty** spoke on behalf of Shelby's $100,000 grant request for Water Supply Development. **EXHIBIT 13.** DNRC recommended zero funding for this project because of deficiencies in the application. The documentation for establishment of their need was based on a 1984 feasibility study. Since that time there has been additional development within the well field. The documentation provided for the needs assessment as well as the cost estimate were not well developed and therefore the reviewers could not determine if the project was actually needed or if it would work.

Questions, Responses, and Discussion: **REP. BARDANOUVE** asked how much residents pay for water in Shelby. **Ms. Doney** said she could not answer specifically. However, she knows from documentation submitted to the TSEP program that the community is as far in debt as it can probably go.

**SEN. HOCKETT** still wanted to know what residences were paying in fees. There is a wide variety in sewer costs across the state of Montana and those paying more should receive more state help than those with lower fees.

**CHAIRMAN BERGSAGEL** asked DNRC to provide that information to the LRP committee when possible.

**SEN. HOCKETT** stated he believed the 1984 study was too old to be used for this project, and they should be asked to provide an updated study. **Mr. Marty** stated that Shelby's application to the TSEP did include an updated study.

ANNOUNCEMENTS/DISCUSSION

University Match to Mile High Conservation District's RRD Grant

**Mr. Tubbs** informed the committee that the grant to the Mile High

Conservation District would be matched with indirect funds from the university for salaries. DNRC has made it a policy for universities to not pay for salaries, but they will accept salaries as an indirect match to grants.

**REP. BARDANOUVE** asked if the salaries appropriated in this committee were accounted for in the university's overall budget, or were positions being double-appropriated in some cases. **Mr. Tubbs** stated that he has had to take it at face value; he can't figure out the university accounting either. They bill DNRC directly for charges. **Jane Hamman, Office of Budget and Program Planning,** stated that she does not know if OBPP knows for sure that no double-appropriating is occurring. She will try to look into it.

**REP. BARDANOUVE** said that a similar problem occurs with the Bureau of Mines. They get appropriations from the LRP and the Education Subcommittee. **Mr. Tubbs** stated that DNRC sees charges per hour for their time, but he does not know if the same hours are being billed to another source. **Mr. Tubbs** referred the committee to February 1, 1993's **EXHIBIT 2 - PAGE 95** for the RRD's recommendations on the Mile Conservation District's project. The recommendation states that university indirect costs and university salaries included in legislatively approved university budgets and authorized in a 1994-95 appropriations bill shall not be reimbursed with grant funds. On its face it appears they are directly charging their time; he does not know if they are charging those same hours from another source. It is beyond DNRC's capacity to figure that out.

**CHAIRMAN BERGSAGEL** stated that he had a real problem with most of yesterday's grant applicants. It appeared many of them were taking RRD money to start doing educational programs. **Mr. Tubbs** stated that most of upcoming grant applications would not be similar to yesterday's grant applicants.

HB 6 Grants to Private Individuals

**Mr. Tubbs** stated that HB6 contains a request for $100,000 to be used for private grants. In statute there has been a private grant program for twelve years. In past sessions DNRC has come in with private grants ranked in among the local governments and disguised the names. The grants ranked poorly because they competed directly with public entities, but always one or two would get funding. Last year Rep. Bardanouve instructed DNRC that he did not want to see any more because there is a constitutional prohibition preventing the legislature from making direct appropriations to private individuals. DNRC has revised the approach so that the committee only has to decide whether they want to fund private grants or not. The department will then decide how the $100,000 will be appropriated by soliciting applications in the upcoming spring for the private grants. The applications could also be matched with private loans from the RRD program.

**CHAIRMAN BERGSAGEL** said REP. BARDANOUVE would have a motion ready by the time executive action is taken.

Montana Environmental Policy Act Compliance

**Mr. Tubbs** stated that it has now been determined that the state is not responsible for making sure that each project complies with the Montana Environmental Policy Act. Any compliance requirements would be met on the local level.

Treasure State Endowment Grant Program

**REP. BARDANOUVE** asked how the TSEP program would be coordinated with this grant program. **Mr. Tubbs** stated that the Water Development staff has been working closely with the Department of Commerce to prevent the programs from overlapping. DNRC is fully aware of which grant applications are before both grant programs.

**REP. BARDANOUVE** asked why the Department of Commerce were administering the program. **Mr. Tubbs** stated that for this biennium there were no FTE granted, but there were some contracted services dollars. The people who are currently on staff at DOC and the current staff at DNRC have been working closely together to avoid duplicating service, and to ensure that projects will be granted out of the most appropriate program.

**REP. BARDANOUVE** stated that he is worried the state will have two bureaucracies performing the same jobs. **Mr. Tubbs** stated that Commerce has the infrastructure to handle grants; they already have the CDBG program. However, they do not have the infrastructure to handle loans, so DNRC will administer any loans authorized by this administration.

**Ms. Doney** stated that she shares similar concerns. She also has witnessed the change in emphasis for the Water Development program from one that dealt with long-term water needs to a crisis water management program to deal with current water quality programs. This has occurred in the past two years with increased EPA regulations. There is a real need for water quality and infrastructure projects that have to have immediate attention. **Ms. Doney** said it is her wish to have the TSEP deal with the water quality and infrastructure needs, and that the RRD deal with long-term water conservation projects. The TSEP does not deal with irrigation projects, so it is her hope the water development program can go back to that. The Bureau of Reclamation no longer has funds available for agriculture projects, and that has increased the need for RRD money for these projects. If the two granting programs are run this way there will be no duplication.

**Ms. Hamman** commented that it seemed that DNRC and DOC have managed the TSEP very well. It seems to have been handled as efficiently and as cost-effectively as possible.

Daly Mansion

**REP. BARDANOUVE** stated that he would have a report ready for the committee on Friday, February 5th on the Daly Mansion.

HB 97

**CHAIRMAN BERGSAGEL** stated that HB 97 which deals with the Oil Overcharge funds will be heard at the end of the RIT grants hearing.

**ADJOURNMENT**

**Adjournment:** 10:05 AM

ERNEST BERGSAGEL, Chair

SANDRA BOGGS, Secretary

EB/sb

## HOUSE OF REPRESENTATIVES

LONG - RANGE PLANNING **SUB-COMMITTEE**

**ROLL CALL** **DATE** 2/2/93

| 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
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HB

## PROJECT NO. 17

| | |
|---|---|
| **APPLICANT NAME** | TOWN OF DUTTON |
| **PROJECT NAME** | Water System Improvements |
| **AMOUNT REQUESTED** | $94,680 GRANT |
| **OTHER FUNDING SOURCES** | None |
| **TOTAL PROJECT COST** | $94,680 |
| **AMOUNT RECOMMENDED** | $50,000 GRANT |

**PROJECT ABSTRACT** (Prepared and submitted by applicant)

This project consists of three parts. The first part, which has been completed, included 1,400 feet of riprap of the Teton riverbank to protect the town's sole water supply. The second part of the project, also completed, involved upgrading the town's water storage facilities, which included construction of a new 500,000-gallon water tank and a new transmission line to the distribution system. The third part of the project concerns upgrading the existing supply system and transmission main. These improvements include installation of a reliable telemetry system, replacement of a poor section of transmission line, installation of a gas chlorination system, and improvements to the pumping station's valve work and piping. The focus of this funding request, however, is the replacement of a poor section of mile-long transmission line. The other improvements under this part of the project have been completed.

**TECHNICAL ASSESSMENT** (Prepared by DNRC)

Water in Dutton is supplied by a shallow well located on the Teton River approximately 5 miles northeast of Dutton and is carried to the distribution system by pressure via approximately 28,000 feet of 8-inch asbestos cement pipe. During the 1980s, the town recognized that its sole source of drinking water was in danger of being lost. Because of a streambank erosion problem, the town had to face the possibility that the well might wash away and had to either protect the source by correcting the erosion problem or else find another water source. In addition to the erosion problem at the source, the town's storage capabilities needed upgrading. The existing tank had reached its useful life and did not provide adequate storage for Dutton's fire flow requirements.

To respond to these major concerns, the town requested funding from DNRC. In 1982, DNRC received an application for Phase I study funding from Dutton. This preliminary study examined the town's existing options. A Phase II study was initiated and, in separate 1984 applications, the town sought additional grant funding to complete the Phase II study along with a loan to connect Dutton's water system to the Tiber water supply.

Plans to connect the town's system to the Tiber supply were not put into place due to the cost of the water from this source. Instead, the town turned back to its existing supply and started considering rehabilitation options. In 1988, Dutton submitted another grant application to DNRC to riprap the streambank near the town's existing water supply. In 1989, the legislature authorized the

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HB

project, which recently was completed as part of a comprehensive improvement project.

The Town Council initiated a comprehensive rehabilitation project when the firm of Damschen & Associates Inc. was retained to conduct an engineering analysis of the community's existing water system. A detailed analysis of the need for the proposed water improvements, along with a comparison of several alternate solutions and complete cost estimates, was provided in a September 1990 final engineering report by Damschen & Associates titled "Water System Analysis for Dutton, Montana."

Using this 1990 analysis, the town of Dutton obtained funding from the Community Development Block Grant program. The town submitted another application to DNRC in 1990, and the legislature authorized the project in 1991. Also in 1991, the legislature reduced and amended the town's prior loan authority to use loan funds for the Tiber hook-up project for the rehabilitation project instead. The 1991 grant project, positioned low on the list of authorized projects, has not received any grant funds. In lieu of a grant, however, the town has accepted part of the authority as a $25,000 loan.

The rehabilitation project involves three parts. The first part, funded with the 1989 DNRC grant, has been completed and includes 1,400 feet of riprap of the Teton riverbank to protect the town's sole water supply. The second part of the project also has been completed, in part, with a $150,000 DNRC loan. This part focused on upgrading the town's water storage facilities, including construction of a new 500,000-gallon water tank and a new transmission line to the distribution system. The third part of the project has been partially completed but, without 1991 DNRC grant funds, a portion of the project was set aside. In total, part three involves upgrading the existing supply system and transmission main, including installation of a reliable telemetry system, replacement of a poor section of transmission line, installation of a gas chlorination system, and improvements to the pumping station's valve work and piping.

Although the town resubmitted its entire 1991 application and request for $94,680, replacing the poor section of transmission line is the focus of the town's current request. Other aspects have been completed, in part with the DNRC loan funds previously mentioned. According to a final report by Damschen & Associates, this proposal will serve to replace a 1-mile section of transmission line that frequently breaks and causes excessive water use.

Since this request is for funds to continue and complete an ongoing effort, many of the compliance questions already have been addressed. It appears that no unsurmountable hurdles remain for the work covered under this grant request. The final engineering and construction schedule is reasonable. Funding delays will greatly influence replacement of the mile of transmission piping.

## FINANCIAL ASSESSMENT

The town is resubmitting this application in the hope that grant funding will be available for the remaining, unfunded portion of the ongoing rehabilitation project. The total remaining costs are estimated at less than the amount requested because a loan was provided under the 1991 funding authority. DNRC funds will be used for construction and construction contingencies.

CURRENT INDEBTEDNESS

| Project | Year paid off | Indebtedness |
|---|---|---|
| 1976 Water Project | 2009 | 165,779 |
| 1988 Tractor Purchase | 1993 | 4,450 |
| 1988 Chip Seal Project | Variable | 7,800 |
| 1992 DNRC Loan | 175,000 | |

The town appears to be at its maximum loan indebtedness limit.

The $94,680 project budget appears to be is in line for the DNRC-funded share of work specified in the third part of the rehabilitation project. Since the time this application was submitted, $25,000 in loan funding has been provided. Thus, the balance of funds requested should amount to approximately $70,000.

The project is financially feasible, and the proposal documentation provided by the applicant supports feasibility in general.

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

Repair records of the 1-mile distribution line indicate the need to replace the line both to manage and conserve water. If a large fire or spill were to take place with Dutton's water system in its current condition, the threat to Dutton residents and property would be great because Dutton cannot guarantee water supply. Thus, the increased fire protection potential would be enhanced significantly. Also, replacing the distribution line and adding chlorination would reduce waste and protect the state's water.

Documentation included with the proposal illustrates the need for the complete, proposed system. Letters were received from the Office of Environmental Health - Pondera and Teton County, DNRC, Dutton Public Schools, Becker Insurance Agency, Teton County Disaster and Emergency Services, Dutton Fire Department, and the Deputy State Fire Marshall.

## ENVIRONMENTAL ASSESSMENT

A consolidated environmental assessment from a recent Community Development Block Grant application was included in the submittal. No long-term adverse impacts are anticipated from the larger project. The portion of the project for consideration under this grant is expected to produce minor impacts during construction. Replacing the 1-mile transmission line will temporarily disrupt some farm land, but any disturbed land will be reseeded following construction. Other short-term effects may include increased noise and dust.

Acquiring the necessary permits and approvals for the larger project may require some level of environmental review.

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HB

RECOMMENDATION

This project is a component of a project previously funded by DNRC, the Community Development Block Grant program, and the project sponsor. The project's overall cost is estimated at $644,180; this application therefore reflects 14 percent of this overall cost. Typically, since the project sponsor is able to assess fees or collect tax revenues to recover the project's cost, the project is considered to have "payback capability" and would qualify for only 25 percent of the project cost or $50,000, whichever is less. For this project, DNRC recommends a $50,000 grant.

Grant funds will be provided after DNRC approves a scope of work and a budget, and after matching funds have been secured. An environmental assessment may be required for the permitting process. If a review results in any changes in the project's scope of work or any measures necessary to address impacts beyond those expected, these changes shall be stipulated in the project agreement and incorporated as part of the project's scope of work. Original specifications, designs, and respective revisions shall be submitted to and approved by the Department of Health and Environmental Sciences before bids are solicited; by reference, these also shall be included in the project agreement.

After bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment. Any funds received from sources other than those already identified will cause a dollar-for-dollar reduction in the funds awarded under this grant.

PROJECT NO. 18

| | |
|---|---|
| APPLICANT NAME | PETROLEUM COUNTY |
| PROJECT NAME | Crooked Creek Recreation Area |
| AMOUNT REQUESTED | $100,000 GRANT |
| OTHER FUNDING SOURCES | $103,000 (Concessionaire)<br>$200,000 (Corps of Engineers) |
| TOTAL PROJECT COST | $403,000 |
| AMOUNT RECOMMENDED | $ 50,000 GRANT<br>$ 50,000 LOAN |

PROJECT ABSTRACT (Prepared and submitted by applicant)

Crooked Creek Recreation Area will offer Fort Peck Reservoir additional access and recreation such as camping, fishing, boating, hunting, and horseback riding. The project's objective is to make renewable resources more available to the public, including shower and rest room facilities, trailer hook-ups, and water, sewer, and electrical services for the cabins, restaurant, and store.

Crooked Creek Recreation Area now has a seasonal store, boat ramp, fenced storage for boats, and one toilet and camping facility. A map of the project site shows the proposed location for improvements such as a storage tank, wells, septic drain field, trailer hookups, new store and restaurant, camp sites, cabins, public shower and rest room facilities, fish-cleaning station, RV dump station, and water lines and stand pipes for watering trees and grass. These facilities require either water, sewer, or

EXHIBIT 2
DATE 2-2-93

HOUSE OF REPRESENTATIVES

WITNESS STATEMENT

PLEASE PRINT

NAME Bob Church BILL NO. HB9

ADDRESS 2030 11TH Ave DATE 2/2/93

WHOM DO YOU REPRESENT? DAMSCHEN & Assoc.-Town of Dutton

SUPPORT ✓ OPPOSE _____ AMEND _____

COMMENTS: I support the authorization of a $50,000 DNRC for the Town of Dutton Water System Improvements.

Also present: Bob Woodell - Mayor of Dutton
Jean Schoenover - Town Clerk
Dave - Town Council Member

HR:1991
CS15

EXHIBIT 3
DATE 2-2-93
HB

PROJECT NO. 19

| | |
|---|---|
| APPLICANT NAME | EAST GLACIER WATER AND SEWER DISTRICT |
| PROJECT NAME | Midvale Diversion Project |
| AMOUNT REQUESTED | $ 25,610 GRANT<br>$ 76,832 LOAN |
| OTHER FUNDING SOURCES | $ 1,180 (East Glacier Water and Sewer District--In-kind) |
| TOTAL PROJECT COST | $103,622 |
| AMOUNT RECOMMENDED | $ 25,905 GRANT<br>$ 76,537 LOAN |

PROJECT ABSTRACT (Prepared and submitted by applicant)

The purpose of the project proposed in this application is to construct a diversion structure that will alter the streamflow around an existing reservoir to a canal during periods of reservoir sediment cleaning. The objective is to improve water quality downstream of the reservoir during cleaning operations and to facilitate cleaning the reservoir. The project has been estimated to cost $103,622, which the East Glacier Water and Sewer District proposes to finance with a DNRC grant of 25 percent, a DNRC loan to fund the remaining 75 percent, and $1,180 in district funds. DNRC previously approved the project for both a grant and a loan, but complications delayed the project and funding was canceled. The complications have since been overcome, and the district is resubmitting its application.

Developing the diversion structure is part of an overall plan developed by the district to bring the quality of the drinking water supply to acceptable levels. With no treatment other than chlorination, this surface water source violates water quality standards because of high turbidity levels and potential giardia contamination.

Phase one of the plan involves the diversion project, and phase two focuses on developing a new water treatment facility. The district is applying for Community Development Block Grant funds to finance the treatment facility. When both phases of the plan are implemented, the community will have a complete water system that will satisfy water quality standards. Developing this system is a high and urgent community priority.

TECHNICAL ASSESSMENT (Prepared by DNRC)

This proposal's goal is to minimize streambed sedimentation and siltation in Midvale Creek when the domestic water reservoir of East Glacier Park is being cleaned. Cleaning operations create undesirable turbidity problems downstream from the cleaning site that violate the Blackfeet Water Quality Management Plan. This is the first phase of a two-part project. The second phase, development of a new water treatment plant, will be outlined in an application for Community Development Block Grant funding.

DNRC previously approved this project, but funding was canceled because of a delay in the project being implemented. Complications that caused the delay have been overcome, and the district is resubmitting the project with revised cost figures that reflect 1992 costs.

Of three technical alternatives that were evaluated, two were related to new dam construction and the third suggested construction of a diversion system. The proposed diversion structure alternative should solve the problems in a cost-effective manner. Final approval of the design must meet the requirements of the Blackfeet Water Quality Management Plan.

The stream diversion structure will allow the reservoir to be cleaned without excessive downstream sedimentation. The technical documentation submitted proved adequate to support the recommended approach. The recommended alternative will meet the proposal's needs, goals, and objectives. All the "major players" have been informed of and support the project. The water rights, permits, and easement requirements will be addressed and coordinated during the project's final engineering design phase.

The 1988 budget estimates were updated to reflect 1992 costs, which appear to be in line with other projects. The proposed schedule is reasonable, although any delays in funding will cause continued sedimentation in Midvale Creek.

## FINANCIAL ASSESSMENT

The East Glacier Water and Sewer District requests a DNRC grant of $25,610 and loan of $76,832. The loan would be repaid by increasing the monthly water rate of the 140 users by $4.26 per month, or an increase from $20 per month to $24.26 per month per user.

DNRC funding of $102,442 will pay for $4,300 in administrative costs, including salaries and associated communication, travel, and supply costs; $12,408 in technical engineering and design salaries and associated laboratory, printing, and other costs; $75,333 for construction and construction contingency; $4,601 for construction interest; and $5,800 for inflation contingency.

The district will contribute $1,180 to the project through contract administration services.

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

The project will provide water management and protection by decreasing turbidity and downstream sediment and improving Midvale Creek's overall water quality. The project is a multi-use project that will benefit the community, Glacier Park Incorporated, the many tourists that visit the area, and the environment.

The project has enjoyed strong community support throughout the past six years the project has been proposed. Several public hearings on the project also have been held. District representatives met several times about this issue with the Blackfeet Tribal Council, which is greatly interested in the project because it will improve the quality of reservation water.

The need for clear river water and quality drinking water, especially in the East Glacier resort area, is tremendous. Direct beneficiaries of the project include the 140 East Glacier users, and indirect users include Glacier Park visitors.

## ENVIRONMENTAL ASSESSMENT

The long-term effect of not completing the diversion structure is the potential for streambed and streambank erosion and continued sedimentation.

Short-term, construction-related effects such as dust, noise, and streambed sedimentation should be addressed in the design documents. Long-term benefits to stream channel stability and water quality are expected from a properly designed and operated project.

Several permits, including 310 and 404 permits and a Blackfeet tribe stream alteration permit, may be required during construction of this project. To comply with the Montana Environmental Policy Act (MEPA), permitting agencies may need to conduct an environmental review before any decisions are made on the necessary permits. The environmental assessment would provide the opportunity for public comment and may result in measures being developed to reduce impacts to minor levels.

## RECOMMENDATION

Since the project sponsor is able to assess fees or collect tax revenues to recover the project's cost, the project is considered to have "payback capability" and thus qualifies for only 25 percent of the project cost or $50,000, whichever is less. DNRC recommends a $25,905 grant.

The project sponsor may obtain additional funding through a DNRC loan up to $76,537. DNRC will provide a loan up to the amount requested, commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

Grant funds will be provided after DNRC approves a scope of work and a budget, and after matching funds have been secured. If any requirements resulting from an environmental assessment process are necessary to reduce adverse impacts to reasonable levels, these shall be stipulated in the project agreement and incorporated as part of the project's scope of work. Original specifications, designs, and respective revisions shall be submitted to and approved by the Department of Health and Environmental Sciences before bids are solicited; by reference, these also shall be included in the project agreement.

After bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment. Any reduction in the scope of work will require a proportional reduction in the grant amount.

If grant funding is not available, the project sponsor may request a DNRC loan up to $102,442. DNRC will provide loan funding in an amount commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

University indirect costs and university salaries included in legislatively approved university budgets and authorized in a 1994-95 appropriations bill shall not be reimbursed with grant funds.

Grant funds will be provided after DNRC approves a scope of work and a budget, after matching funds have been secured, and after the sale price for the publication has been established. Any reduction in the scope of work will require a proportional reduction in the grant amount. Any funds received from sales of the document or sources other than those already identified will cause a dollar-for-dollar reduction in the funds awarded under this grant.

## PROJECT NO. 40

| | |
|---|---|
| **APPLICANT NAME** | HILL COUNTY |
| **PROJECT NAME** | Salinity Control Project |
| **AMOUNT REQUESTED** | $ 100,000 GRANT |
| **OTHER FUNDING SOURCES** | $ 180,000 (Department of Transportation)<br>$ 100,000 (Hill County)<br>$ 200,000 (Salinity Control District)<br>$ 420,000 (Federal matching funds–unconfirmed) |
| **TOTAL PROJECT COST** | $1,000,000 |
| **AMOUNT RECOMMENDED** | $ 50,000 GRANT<br>$ 50,000 LOAN |

**PROJECT ABSTRACT** (Prepared and submitted by applicant)

This proposed project involves constructing a drainage system to remove surface runoff in the fairgrounds/shopping mall/industrial park area immediately west of the city of Havre. The area suffers from an acute saline seep problem that threatens to make much of the land unsuitable for any use, which would produce devastating economic and environmental impacts. The project will be funded by a variety of sources, including the Department of Transportation, Hill County, and other federal and state agencies. The feasibility of creating a salinity control district also will be investigated.

**TECHNICAL ASSESSMENT** (Prepared by DNRC)

The city of Havre has experienced salinity problems in the past. Because of development in the town's western section, the placement of fill, and lawn-watering, the groundwater flow has been altered and inhibited. This situation has caused high water tables, especially near the town's western edge. The high water tables cause surface seeps that contain high salt concentrations. Hill County has proposed building a surface water collection system to reduce infiltration during times of high precipitation. Reducing this infiltration will help prevent the high water tables that cause the saline seeps. This project was developed from recommendations proposed by the Montana Salinity Control Association, and several surface water collection systems were evaluated as options. The proposal's intent is to build part of the collection system and add the rest as funds become available.

The Montana Salinity Control Association also recommended the following options, which the proposal did not address:

(1) All asphalt must remain sealed to prevent runoff percolation. Periodic maintenance would be needed.

(2) Snow removal practices should be modified to prevent meltwater from soaking into the soil or pavement.

(3) All areas that have been altered or those void of vegetation should be seeded to perennial forages or planted to trees and shrubs. Technical assistance is available from the Soil Conservation Service or the Montana Salinity Control Association to determine the most appropriate species.

(4) Develop irrigation water management practices wherever lawns are being watered. Current practices must be monitored closely to prevent over-irrigation.

The surface water collection system involves installing drop inlets and reinforced concrete pipe along Highway 2 in the western part of Havre. Once outside the city limits, the collected water will be placed in a lined outfall ditch. This system is intended to collect surface runoff and was designed for the five-year return precipitation event. The collected runoff ultimately will be discharged into Beaver Creek, which is a Milk River tributary. As part of the collection system, a subsurface drainage system also has been proposed to collect groundwater from an area with a chronic high water table. Most of the pipeline will be placed in existing rights of way, but permanent easements for access to Beaver Creek will be required.

This project is intended to coincide with a Department of Transportation safety project for Highway 2 planned during 1993, which will save money for the proposed project. The proposed project also will benefit the Department of Transportation's project with its improvements to the drainage system along Highway 2.

Because of the subsurface water's saline nature, the subsurface drainage system will require a Montana Pollutant Discharge Elimination System (MPDES) permit from the Department of Health and Environmental Sciences' Water Quality Bureau. Water samples from the proposed subsurface drain area must be submitted to the Water Quality Bureau. After examining those samples and any other information it receives, the Water Quality Bureau will either grant or deny the MPDES permit. If the Water Quality Bureau denies the permit, the subsurface drainage system will have to be abandoned. However, removing this component from the project will not render the rest of the project useless.

## FINANCIAL ASSESSMENT

The project appears economically feasible and the benefits warrant funding. Hill County is requesting a $100,000 grant, or 10 percent of the project's proposed $1 million cost. The Department of Transportation is expected to contribute $180,000, the Salinity Control District will contribute $200,000 and Hill County has committed $100,000 in in-kind services. However, Hill County is still trying to secure $620,000 of the $1 million total project cost and will not know the status of those funds until early September 1992. Funding also is somewhat dependent on the formation of a salinity control district.

The collection system was designed for a five-year return event. Part of the collection system is located within the Department of Transportation's right of way, and the department typically requires any collection facilities within its right of way to be designed for the 50-year event. If Hill County is required

to increase the size of its pipelines and outfall ditch to accommodate the 50-year event requirement, project costs would increase substantially.

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits–economic or otherwise–currently derived from Montana's mineral resources.

This project will improve and reclaim water in Havre and the local vicinity by reducing saline seeps. Havre residents, businesses, and local farm lands now adversely affected by saline seeps will benefit from the project. Local businesses will benefit by their structures not suffering water damage from saline seeps, which are detrimental to building foundations and paved surfaces. Because land is difficult to develop in saline seep areas, the reduction of saline seeps will allow development in Havre to continue.

## ENVIRONMENTAL ASSESSMENT

The project would cause direct surface disturbances during construction that would result in short-term environmental effects. These effects would be minor since much of the proposed project would be constructed within road rights of way. Indirect effects would more likely be long-term. This project, in conjunction with other planned efforts, would reduce saline seep problems in a particular area of Havre. Those efforts may make the area more attractive for residential and commercial building construction with attendant impacts on land use. The proposed project would benefit area groundwater, soils, and vegetation. The discharge of sediment and other contaminants collected in the surface runoff, however, could cause diminished water quality in Beaver Creek.

If the proposed project is funded, an environmental assessment may be necessary. This review would determine the potential for water quality impacts from the discharge of collected water. The review also should incorporate any appropriate environmental analysis done by the Department of Transportation as part of its highway safety project. An environmental assessment may recommend necessary changes in the project's scope or in the approach taken to implement the project.

## RECOMMENDATION

Since the project sponsor is able to assess fees or collect tax revenue to recover the project's cost, the project is considered to have "payback capability" and thus qualifies for only 25 percent of the project cost or $50,000, whichever is less. DNRC recommends a $50,000 grant.

The project sponsor may obtain additional funding through a DNRC loan up to $50,000. DNRC will provide a loan up to the amount requested, commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

Grant funds will be provided after DNRC approves a scope of work and a budget, after all matching funds have been secured, and after DNRC has determined that the project complies with the Montana Environmental Policy Act (MEPA). Any MEPA requirements for reducing adverse impacts identified through the environmental review shall be stipulated in the project agreement and incorporated as part of the project's scope of work.

A more significant amount of matching funds may be needed to complete this project if the Department of Transportation requires the collection system to be designed for the 50-year event in the highway right of way. Original specifications, designs, and respective revisions shall be submitted to and approved by the Department of Transportation before any bids are solicited; by reference, these also shall be included in the project agreement.

After final designs are approved and bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment.

Any reduction in the scope of work will require a proportional reduction in the grant amount.

## PROJECT NO. 41

| | |
|---|---|
| APPLICANT NAME | ROOSEVELT COUNTY CONSERVATION DISTRICT |
| PROJECT NAME | Recreation Enhancement of Missouri River |
| AMOUNT REQUESTED | $100,000 GRANT |
| OTHER FUNDING SOURCES | Unknown |
| TOTAL PROJECT COST | Undetermined |
| AMOUNT RECOMMENDED | $ 7,000 GRANT |

### PROJECT ABSTRACT

This project is proposed to gain accessibility to the Missouri River from three sites located between Fort Peck Dam and the North Dakota border. This stretch of the Missouri River currently has no boat ramps and is considered an untapped resource that, when opened to the public, will be enjoyed by fishermen, canoeists, floaters, water skiers, and others.

In conjunction with the ramp sites, the need for overnight campsites also is a project goal. In the past, the Missouri River's downstream areas have not allowed the development of recreational facilities. If one, two, or all three ramp sites are allowed to be constructed, some objectives of opening up access to the river could be met.

The requested funding will be used primarily to purchase or lease prospective sites, road work, boat ramps, toilet facilities, picnic tables, and parking areas. The area's civic organizations overwhelmingly support the project, and part of the actual construction can take place with help from many of these groups. Interest and support has been shown by the area Chambers of Commerce, Lion's clubs, FFA organizations, Boy Scouts, women's clubs, Walleyes Unlimited, and Rod and Gun clubs.

The Roosevelt County Conservation District feels that the merits of this type of undertaking are obvious. Without it, the Missouri River will continue to flow by the communities of Wolf Point, Poplar, and Culbertson, and the area's outdoorsmen will be prohibited from gaining access to it.

EXHIBIT 5
DATE 2-2-93
~~SB~~

HOUSE OF REPRESENTATIVES

WITNESS STATEMENT

PLEASE PRINT

NAME Robert Sivertsen BILL NO. _____

ADDRESS _____ DATE _____

WHOM DO YOU REPRESENT? Hill Co Salinity Comm.

SUPPORT _____ OPPOSE _____ AMEND _____

COMMENTS: I support funding for the Hill Co Salinity funding project also present Michael Wendland from Hill County Cons. Dist.

HR:1991
CS15

EXHIBIT 6
DATE 2-2-93
HB

Hill County Salinity Committee

The Committee was organized in the fall of 1990 for the purpose of addressing the salinity problem in the area of the Hill County Fairgrounds, that includes businesses, private property and the offices of the District Department of Transportation in Havre.

Members include the Hill County Commissioners, the City of Havre, D.O.T. , Soil Conservation Service, Hill County Soil Conservation District, business representatives, and individuals. Resource agencies are the Water Quality Bureau, Montana Salinity Association, the Department of Natural Resources, the Department of Transportation, Bear Paw Development and Northern Montana College.

Work Completed:
Monitoring wells- 36 wells were drilled by Montana Salinity to monitor water levels on a regular basis. Barb Coffman , a student at the Northern Montana College is currently doing the well logs every month and at times of increased percipitation.

Project study and Solutions:
HKM Engineering of Billings, was hired by the Committee to study the problem and define solutions.
Work completed April 1, 1992

Phases of project prioritized:
Surface water or fresh water drainage
Vegetative cover
underground drainage system

Impacts
Negative Impacts:
Degredation of foundations and buildings, asphalt parking lots, Highway road beds, water quality, impedes development and aesthetics of the area.

Positive:
By addressing and resolving the saline problem there will be a real economic impact in the economic development, more activities on the fair grounds and the water quality will be enhanced.

It is a model project in that there are a number of entities and interests working together on the project and the location renders the project highly visible. It's an example of cooperaton by many interests for the benefit of the area.

Respectfully Submitted

Robert Sivertsen
Chairman Hill County Salinity Commission

EXHIBIT 6
DATE 2-2-93
HB

INVENTORY & EVALUATION

REQUESTED BY Hill County-City of Havre LOCATION Hill County
T32N, R16E, Sec. 6 & 7
T32N, R15E, Sec. 1 & 12

ASSISTED BY Montana Salinity Control Association DATE February 6, 1991

HI-43
INTRODUCTION

This plan outlines recommendations for salinity control measures for the western edge of the City of Havre along Highway 2, including the Hill County Fairgrounds. This is a cooperative effort between the Soil Conservation Service (SCS), private business owners, Hill County Conservation District, Hill County Fairgrounds, Hill County Commissioners, Hill County Electric, the Montana Department of Highways, Montana Bureau of Mines and Geology, the Department of Natural Resources and Conservation and the Montana Salinity Control Association (MSCA).

Small areas of this part of town have been historically saline as indicated in a 1937 aerial photo. However, the salinity has slowly been getting worse degrading soil and water quality as well as creating many problems for infrastructure and future development. The racetrack and portions of the parking lot on the fairgrounds are no longer usable due to the high water table. Trees planted around the fairgrounds are dying from high salinity, while roads and highways are unstable and need frequent repair. Foundations have shifted and cracked on some buildings and many asphalt parking areas are buckling and cracking. Highly saline water flows off the area eventually entering the Milk River, which is Havre's drinking water supply. Overall, the aesthetics of the area have been adversely affected by the salinity problem and this undoubtedly depresses the business climate.

GEOLOGY

The Havre region has been influenced by three significant geologic processes. First, the bedrock unit that forms the impermeable layer and perches shallow ground water in this area, the Judith River Formation, was deposited in a shallow marine environment during the Cretaceous period (65-140 million years ago). The Judith River consists of a light colored sandstone which grades into a combination of gray siltstones and sandy shales at the base. Extending hundreds of feet deep, this marine sedimentary unit contributes salts to the groundwater system which retards or eliminates crop growth in and around the saline seep.

Secondly, the volcanics, which form the core of the Bearpaw Mountains, were injected into the sediments above during the extensive volcanic period of the Tertiary (2-65 million years). Black Butte, west of Havre, is a remnant of this volcanic activity.

Finally, the prehistoric Missouri River once meandered through what is now the Milk River basin. The Missouri carved a deep, wide channel through the Havre area south to the Bearpaw Mountains. The Missouri continued to follow this northern course until the Pleistocene continental glaciers (1-2 million years) blocked the path and forced the Missouri to flow south of the Bearpaw Mountains along its present course. As the glaciers receded, a mixture of gravel, sand, silt, and clay, called till was left behind. This till is the material overlying the bedrock which most of us call soil. Today the Milk River flows in the abandoned Missouri River channel and is still shaping the landscape of the Havre region.

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INVESTIGATION

Thirty-six shallow ground water monitoring wells were installed in July 1990. Information gained from drilling include soil textures, moisture conditions and depth to bedrock (refer to drill logs).

The soils of this area formed from glacial till and outwash deposits overlying the bedrock. Soil textures from the 0-4 foot depth generally vary from sandy to silty clay loams. Subsoil materials (below 4 feet) vary widely, ranging from sandy gravels to fine clays. Characteristic of this site is the highly variable nature of glacial outwash deposits.

Depth to bedrock (shale) varied from 8-12 feet at wells 12 and 28 to over 40 feet at well 1. Wells 8, 14, and 21 were the only three wells where gravel was encountered (see drill logs). These wells are located on the east end of the project area just above the county gravel pit.

In September 1990, water table measurements and an elevation survey of the wells were completed to provide baseline data to determine ground water flow patterns in the area. Results of the survey are given on the well data summary sheet. Five wells were drilled south of the fairgrounds to determine if any ground water may be coming into the area from that direction. Well 33, south of the fairgrounds was drilled 48 feet deep and is dry to a depth lower than water in well 1 at the seep. Well 13 is the only well drilled south of the fairgrounds that contains water. The water quality of well 13 is much better than the quality of water in the seep at well 1. This rules out this area as contributing salts to the seep. The other three wells drilled on the hill near the water tank and beyond are all dry.

The difference in water table elevation from one well to another indicates the pressure gradient influencing ground water flow. Ground water moves from areas of higher elevation to areas of lower elevation. The water table in well 28 is 26.2 feet higher than it is in well 24. The change in relative water table elevation from one well to another represents the hydraulic gradient. Hydraulic gradient is a measure of the potential energy of groundwater, and represents the amount of force or pressure the groundwater exerts on the discharge area. Wells 28 and 24 are 1650 feet apart. The hydraulic gradient between well 28 and well 24 would equal: Rise/Run X 100 or 26.2'/1650' X 100 = .0159 X 100 = 1.59%. For comparison, an average irrigation canal would drop 1/10 of a foot for each 100 feet of distance giving a hydraulic gradient of 0.1%.

Water samples were collected from each well for electrical conductivity (EC) measurement. The EC provides a relative measure of the amount of soluble salts present in the water. EC values are given on the well data summary sheet, and range from 1.6 to 31.0 mmhos/cm. As a comparison, approximate limits for human consumption, irrigation, and livestock water are 0.5, 2.0, and 5.0 mmhos/cm, respectively. Nitrate levels were screened in each well indicating high levels (>500 mg/l) in several wells. High nitrates indicate the water table is locally recharged and not the result of a deeper regional ground water flow system.

Soil samples taken from 3 different saline areas (see map) indicate extremely high levels of salinity ranging from 36.4 to 63.4 mmhos/cm. As a reference, soils over 4 mmhos/cm are considered saline. While some salt tolerant grasses can grow in conditions up to 20 mmhos/cm, establishment is slow and production is severely reduced.

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RECOMMENDATIONS

The goal of this project is to control the saline soil conditions created by a high water table. In order to achieve that goal the water table must be lowered in the recharge area and subsequently the water table in the discharge (seep) area will drop. Lowering the water table can be done by preventing any more water from soaking into the soil in the recharge area.

The most important area to address is the where the relative water table is highest. This area is critical because of the pressure it exerts over the entire shallow ground water system. By destroying the pressure head, the whole system relaxes allowing the water table to recede in the saline area.

The key recharge or problem causing area(s) is outlined on the ground water contour map. This area, defined by the highest water table elevations, is the most important location to prevent deep percolation. The boundary extends from behind the Baltrusch shop, through the mall and mall parking area, along the State Highway department buildings and onto the fairgrounds.

Cracked asphalt roads and parking lots underlain by gravel are important contributors to the water table. Roofs and parking lots increase runoff which ponds unnaturally, supplying recharge to the ground water. Snow piles melt slowly causing deep percolation of water to the water table. Improper irrigation practices, worn nozzles or sprinkler heads and broken or leaking water lines can saturate the soil and artificially recharge the ground water. Also, areas with little or no vegetation are problem spots because moisture use is minimal, allowing frequent recharge of the water table during rain fall events.

The following is a list of recommendations to minimize percolation of water to the water table:

1. All asphalt must remain sealed to prevent deep percolation of runoff water. Areas may need to be resealed or rebuilt and maintained periodically.

2. Snow removal practices should be modified to prevent meltwater from soaking into the soil or asphalt. This may require physically removing the snow from the area or placing where melt water will runoff. Care must be taken to avoid other problems in the areas where snow will be piled.

3. Develop a surface runoff plan to quickly remove storm water and snow melt. This will help maintain water quality and prevent percolation into the soil. The Dept. of Highways may be able to provide assistance in this effort.

4. All areas that have been altered or are void of vegetation should be seeded to perennial forages or planted to trees and/or shrubs. Technical assistance is available from the SCS or MSCA to determine the most adaptable species.

5. Develop Irrigation Water Management (IWM) practices wherever lawns are being watered. Technical assistance is available from the SCS or the MSU Cooperative Extension Service. Irrigation practices must be closely monitored to prevent over irrigation. Test periodically to check for broken water lines.

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Several years after the water table has been lowered the salt crusts on the soil surface will begin to disappear. Most of the salt will leach down with the dropping water table. At a minimum, water levels should be maintained below 4 feet. If the water table is allowed to be recharged again to the point where it surfaces then salt crusts will again start to form. Seeding the saline areas will have to wait until the salt levels have decreased .

Art Riedinger and Barbara Coffman, students at Northern Montana College (NMC) have volunteered to monitor the static water level of the wells on a monthly basis and after any significant rainfall events. They will also periodically collect water samples and conduct the analyses for trace metals, cations and anions. The data will be made available as completed.

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DATE 2-2-93
HB

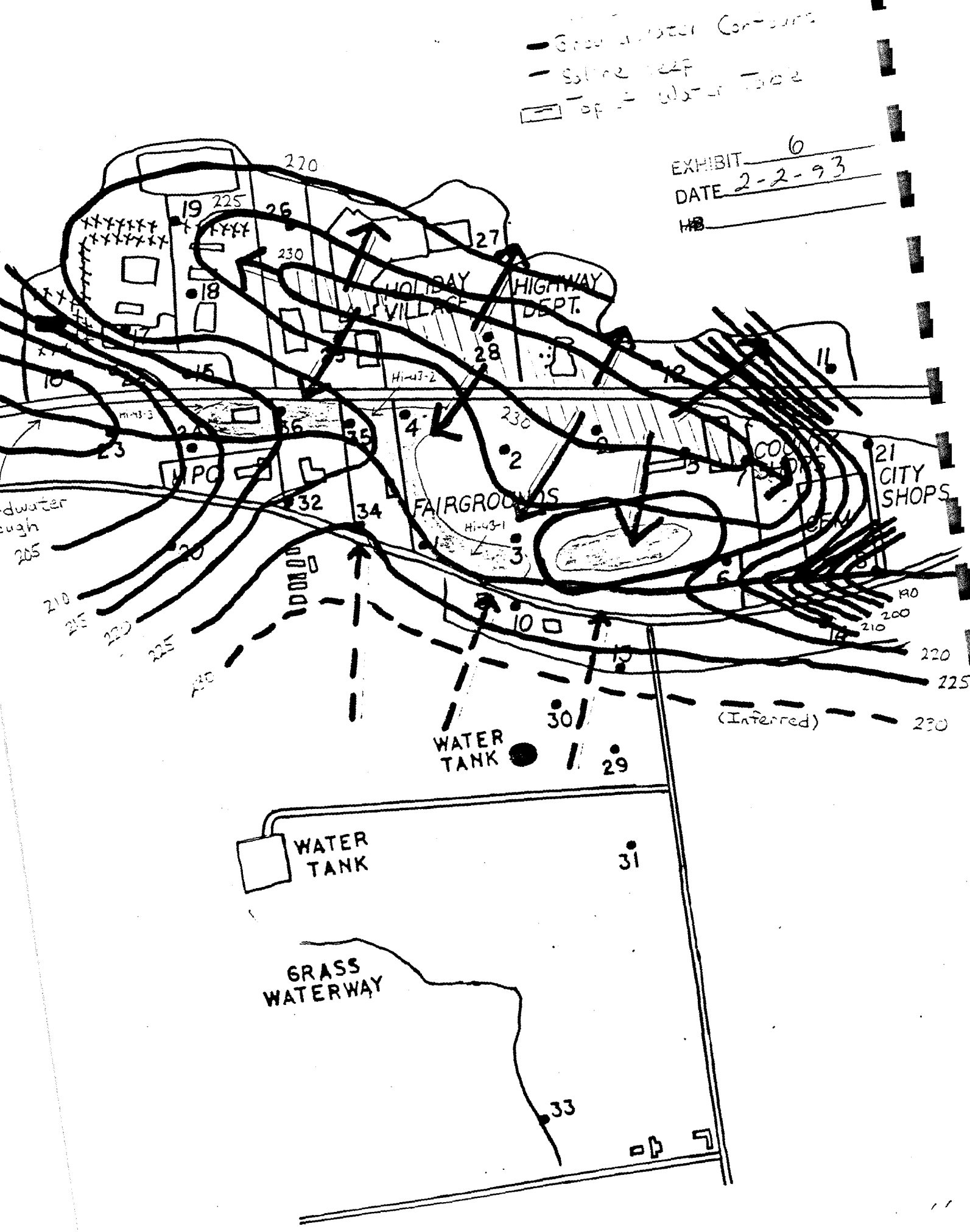

EXHIBIT 6
DATE 2-2-93
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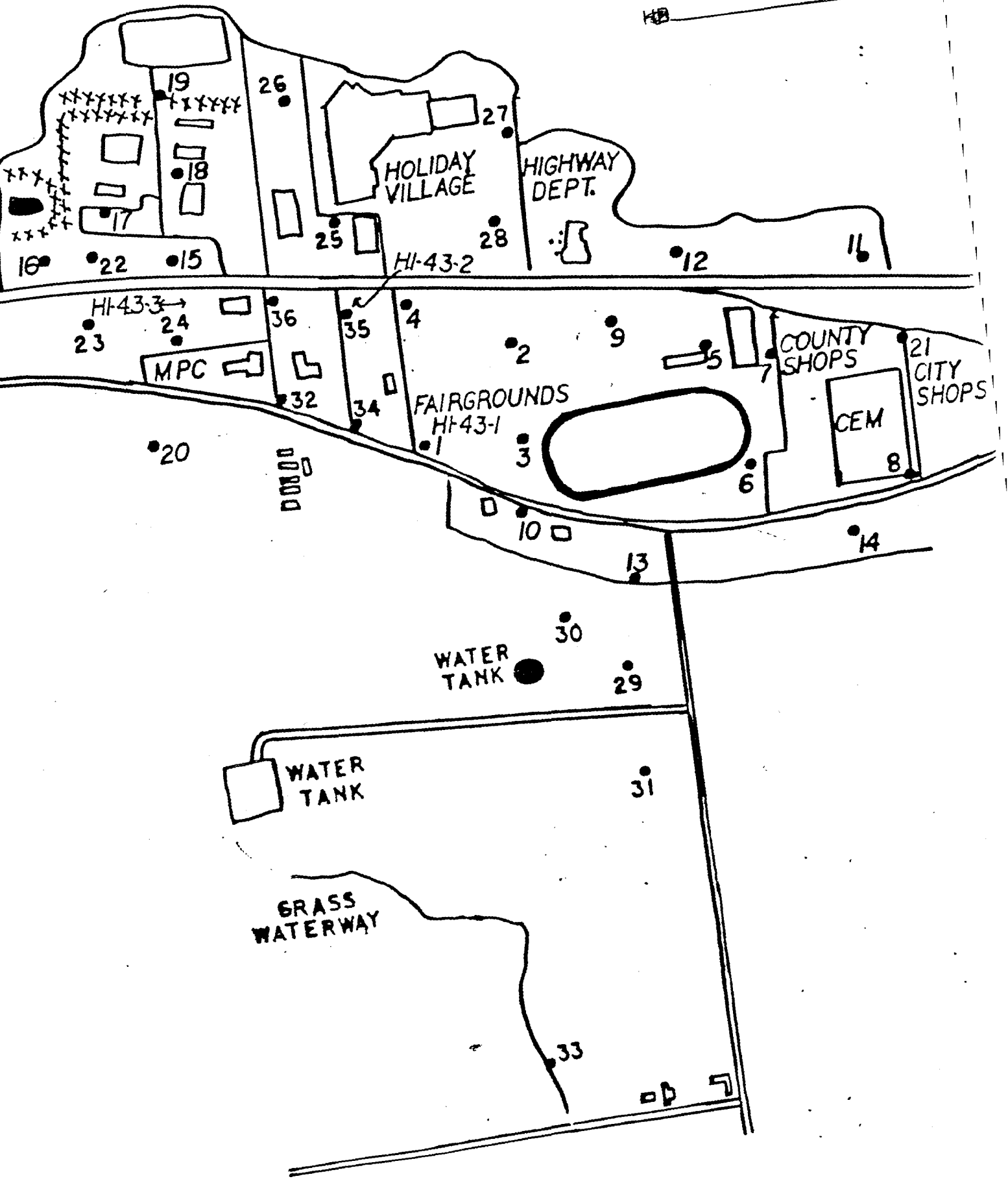

EXHIBIT 7
DATE 2-2-93
HB

PROJECT NO. 1

| | |
|---|---|
| **APPLICANT NAME** | MALTA IRRIGATION DISTRICT |
| **PROJECT NAME** | Improving Water Use Efficiency through Canal Check Structures |
| **AMOUNT REQUESTED** | $100,000 GRANT |
| **OTHER FUNDING SOURCES** | $398,500 (Project Sponsor) |
| **TOTAL PROJECT COST** | $498,500 |
| **AMOUNT RECOMMENDED** | $ 50,000 GRANT<br>$ 50,000 LOAN |

**PROJECT ABSTRACT** (Prepared and submitted by applicant)

The Malta Irrigation District is part of the Milk River project and includes 42,492 irrigable acres. The district was constructed during the years 1909 through 1923 and is an old project. Water is supplied by a diversion dam from the Milk River to the Dodson South Canal. The distribution system facilities, which the district operates and maintains, need a program of partial rebuilding.

The facilities proposed for rebuilding are the eight check structures located in the Dodson South Canal. The new check structures will have 10-foot-wide openings as opposed to the current 5-foot openings. The new structures also will have automated gates that can better handle spring ice jams, which will enable more water to be captured earlier in the spring for irrigation and improved delivery. This also will allow the diversion of early spring runoff into Nelson Reservoir for use later in the season. It is important that Nelson Reservoir, located farthest downstream from the Milk River project, be filled early in the spring because the Piping Plover bird, an endangered species, nests during May and June on the water's edge. Filling the reservoir at this later time would flood the nests and ruin any chance of a hatch for the year.

**TECHNICAL ASSESSMENT** (Prepared by DNRC)

DNRC receives applications for irrigation system improvements during each Water Development and Renewable Resource Development grant cycle because no other state funding source is available to help fund these types of projects. Throughout much of Montana, agriculture is the dominant industry. Thus, an irrigation project's physical and economic welfare is of prime importance.

Montana's largest water withdrawal areas are those with the greatest irrigation use. In fact, agriculture uses 96.5 percent of all water consumed in Montana.[1] Rehabilitating and improving irrigation systems are necessary to preserve agriculture's economic welfare. For example, just a five-percent overall water savings on agriculture's part would free enough water for all other current water uses.

[1] *National Water Summary 1987 - Water Supply and Use: Montana*

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HB

The U.S. Department of Interior develops water and related land resources in 17 western states, including Montana. Historically, the role of the Department of Interior's Bureau of Reclamation (BUREC) included the design, construction, and operation of federal storage projects--the Milk River project, for instance--for irrigation and hydropower. As the project abstract indicates, the Malta Irrigation District is part of the Milk River project and includes 42,492 irrigable acres. Storage facilities for the project include Lake Sherburne, Fresno, and Nelson reservoirs, with Nelson Reservoir farthest downstream. The Malta Irrigation District was constructed during the years 1909 through 1923, and water is supplied by a diversion from the Milk River to the Dodson South Canal.

To improve these types of aging systems, the BUREC had funds available to loan to irrigation districts that wanted to make project improvements. These loans were offered to the borrower at no interest, although the districts were required to pay the BUREC an administration fee. Figured as a small percentage of the total project cost, this fee was considered as matching funding. The match frequently was obtained in part from the state's Water Development grant and loan program. Through this program, irrigators could obtain millions of dollars in interest-free, federal loans. Because the BUREC's priorities have shifted toward water conservation and management, the agency's Rehabilitation and Betterment loan funds no longer are available.

As specifically indicated in a 1989 BUREC Rehabilitation and Betterment study, new check structures are critical for keeping the irrigation system operational (current check structures are 5 feet wide). During early spring, ice jams block the check structures and prevent water from flowing freely into Nelson Reservoir. The Malta Irrigation District estimates that ice jams cause a 13,000 acre-foot water loss that could be captured each year for irrigation. Because early spring flows not captured for storage continue to flow down the Milk River to the Missouri River and out of the state, they are lost to Montana's farmers. This loss of early spring flows means not only less water for the district and downstream users, but also that the district must continue to fill the reservoir over a longer period with later spring flows in order to capture as much water as possible.

In this instance, later reservoir-filling significantly affects the nesting Piping Plover bird, an endangered species. The Piping Plover nests on the edge of the reservoir from about May 15 through mid-July. Thus, if the district continues to fill the reservoir after nests have been made, the nests will wash out. Also, earlier filling provides more irrigation water and better Piping Plover nesting habitat. The BUREC, which currently has an agreement with the U.S. Fish and Wildlife Service to maintain water levels in Nelson Reservoir during the critical Plover nesting period, indicates that the new check structures will make compliance easier.

The Malta Irrigation District originally anticipated that loan funds for the necessary improvements identified in the BUREC study would be available through a BUREC Rehabilitation and Betterment (R&B) loan. Because R&B funding no longer is available, however, the district will rely on DNRC grant funds, water user fees, and a district reserve account. The district now charges water users $8.25 per acre irrigated, plus $2.25 per acre-foot of water used. Since approximately 1 acre-foot of water is used per acre of land, the usual fee is $10.50 per acre. Also, an additional $1.00 per acre is charged to retire existing construction debt. This charge will be increased to $3.00 to complete the project.

Additional benefits of the new check structures include less canal seepage and better water distribution to Bowdoin National Wildlife Refuge. No information was provided by the applicant to document the severity of the canal seepage problem, to show how much of a decrease would result from the new check structures, or to explain how Bowdoin will benefit.

Of two approaches presented in the application, the check structure option was chosen because Greenfields Irrigation District has had success with the same type of project. According to the applicant, the alternative to the check structure option is to do nothing. The openings on the proposed check

structures will be 10 feet wide as opposed to the 5-foot openings in the present structures. The wider openings will allow larger pieces of ice to pass through the structures and prevent the current problem of blocked flows because of the ice jams. Water conveyance in the canal will begin two weeks earlier each spring to reach the increase of 13,000 acre-feet of stored water in Nelson Reservoir. As a result, the reservoir will be full before the Piping Plover nesting period begins.

Check structures will be designed to meet the BUREC's standards, and the Malta Irrigation District manager will supervise all construction work. Under the proposed funding scheme, two new check structures will be installed each year for four years, with construction taking place during late fall of each year.

The application indicates that the check structures will be automated, but the technical information does not include any automation design or description of equipment.

## FINANCIAL ASSESSMENT

The proposed project's total cost is $498,500. The Malta Irrigation District's $100,000 grant request includes $4,850 for salaries and benefits, $24,000 for labor, $5,000 for equipment, $57,500 for materials, and $8,650 for contingencies. The district will contribute $16,600 for salaries and benefits; $1,300 for associated administrative costs (equipment, rent, utilities, communications, supplies, and miscellaneous); $96,000 for labor; $20,000 for equipment; $230,000 for materials; and $34,600 for contingencies.

A more specific breakdown of construction costs per item per structure should be provided that includes the cost of the automation equipment.

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

The proposed project will indirectly support State Water Plan objectives with the check structures allowing more efficient water conveyance and the filling of Nelson Reservoir. Water storage will be increased by 13,000 acre-feet each year, and some water also should be conserved because of the more efficient conveyance. The objectives supported would be improved water use and conveyance efficiencies. The project area encompasses family-owned farms and could preserve some of this farm land by protecting it from seepage damage.

The application represents support from the Malta Irrigation District's membership. Although no general, community-wide citizen support was solicited for the project, the BUREC's reviewer indicates that the Glasgow Irrigation District also will benefit from water stored in Nelson Reservoir. In addition to the project benefiting a multi-use reservoir, it also would be helping a threatened bird species.

## ENVIRONMENTAL ASSESSMENT

A direct environmental effect of the project would be ground disturbance at construction sites located along the Dodson Canal. The project also may indirectly or cumulatively affect the Piping Plover

nesting habitat along the reservoir's shore lines.

The U.S. Fish and Wildlife Service may need to be consulted (under Section 7B of the Endangered Species Act) concerning flows into Nelson Reservoir and the effects on the Piping Plover nesting habitat. The extent of the Piping Plover's use of the affected areas, along with the time periods for reservoir-filling and related operation criteria, should be reviewed to eliminate any adverse effects during the Piping Plover's nesting periods.

**RECOMMENDATION**

This project will provide additional water storage at a relatively low cost and, under proper conditions, may provide an improved nesting habitat for the endangered Piping Plover. Therefore, DNRC recommends this project for funding under the Water Development and Renewable Resource Development programs.

Since the project sponsor is able to assess water user fees to recover the project cost, the project is considered to have "payback capability" and thus qualifies for only 25 percent of the project cost or $50,000, whichever is less. DNRC recommends a $50,000 grant.

The project sponsor may obtain additional funding up to $50,000 through a DNRC loan. DNRC will provide a loan up to the amount requested, commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

Grant funds will be provided after DNRC approves a scope of work and a budget, after matching funds have been secured, and after DNRC has determined that the project complies with MEPA (Montana Environmental Policy Act) requirements. Any outstanding MEPA requirements shall be stipulated in the project agreement and incorporated as part of the project's scope of work. Original specifications, designs, and respective revisions shall be submitted to and approved by the BUREC before bids are solicited; by reference, these also shall be included in the project agreement. Check structure automation design and equipment and a detailed breakdown of construction costs per structure–including automation equipment–shall be included in the specifications.

After bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment. Any funds received from sources other than those already identified will require a dollar-for-dollar reduction in funds awarded under this grant. Any reduction in the scope of work will cause a proportional reduction in the grant amount.

If grant funding is not available for the project, the project sponsor may request a DNRC loan up to $100,000. DNRC will provide a loan in an amount commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

EXHIBIT 8
DATE 2-2-93
HB

Mr. Chairman, Members of the Committee - Good morning.

I am Bud Mavencamp, manager of the Malta Irrigation District and with me is Vice-President, Phil Sims of the Board of Commissioners.

For several years we have been working on a plan to improve the delivery of water from the Milk River to Nelson Reservoir. Nelson Reservoir is an off river storage site located about 110 miles below Fresno Reservoir, which is the only river storage. The only way to fill Nelson Reservoir is with water from the Dodson South Canal. Any run off in the spring, occuring below Fresno Dam, is lost down the river, except what can be diverted into Nelson Reservoir through our canal system. Snow melt on the Milk River generally starts about the middle of March. This is the time we should be diverting water into Nelson. One of the problems that occurs when diverting the water during this time is, when the weather turns cold, the canal will ice up. Ice will then float down against the check structures, creating an ice jam. To remedy this situation, we have to shut the canal off until warmer weather returns. A benefit with filling Nelson in the spring is the melted snow makes quality water, which is hard to find in Eastern Montana.

The District hired an engineer to design a check structure that will help eliminate this problem. His design is included in our grant application.

As proposed, we plan to build these structures during a four year period. This is due to the availability of financing and the fact that the water in the canal will have to be terminated for

EXHIBIT 8
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HB

construction. Normally, the canal will run from March to November 1st, diverting all the water that is available. The cost of pouring concrete during the winter months is very costly. Therefore, we propose to shut off the canal the first of October, hopefully allowing us enough time to build two checks before winter.

Besides storage of irrigation water, Nelson Reservoir provides recreational opportunities for over 100 cabin site owners, fishermen, hunters and numerous wildlife. Seepage from the north end of the reservoir returns to the Milk River creating an ice free river for several miles, making a resting place for water fowl in late fall when other ponds are frozen over.

This project will be fairly expensive as indicated in our application. With the farm economy like it is, the District needs help in financing this project. We believe, conservation of water, the protection of wildlife and the enhancement of recreational activities, qualifies this project for a grant.

EXHIBIT 8
DATE 2-2-93
HB

January 25, 1993

Malta Irrigation District
Box R
Malta, Montana 59538

RE: Improving Water Efficiency on Dodson Canal
H.B. 106 - Long Range Planning Sub-Committee

Gentlemen:

The Malta Chapter of Walleyes Unlimited would like to go on record in support of the Districts' attempt to obtain funding for the improvement of the canal check structures on the Dodson South Canal. As past years have shown, the lack of such has hindered the Districts' attempt to divert available water to the reservoir at a critical time. As a result of the nesting of the Piping Plover, capturing this water has been delayed and/or lost, reducing a number of recreational opportunities which would otherwise be available. Low water levels in early spring could also have an impact on the natural spawning success of the fish.

If there is anything we can do further to support your efforts please let us know. Thank you.

Sincerely,

Robert A. Maxie

Robert A. Maxie
President-Elect, Malta Chapter
Walleyes Unlimited of Montana

# PHILLCO ECONOMIC GROWTH COUNCIL

Box 1637 - Malta, Montana 59538

EXHIBIT 8
DATE 2-2-93
HB

Department of Natural Resources
Helena, Mt. 59601

Gentlemen,

We urge your approval of the proposal to increase the efficiency of the South Dodson Canal submitted to your office by the Malta Irrigation District.

The Milk River Irrigation System has long been a staple to the economy of Phillips County and efforts to improve that delivery system should be applauded. The earlier arrival of water into the Nelson Reservoir would allow for increased usage of the area for recreation and sport fishing.

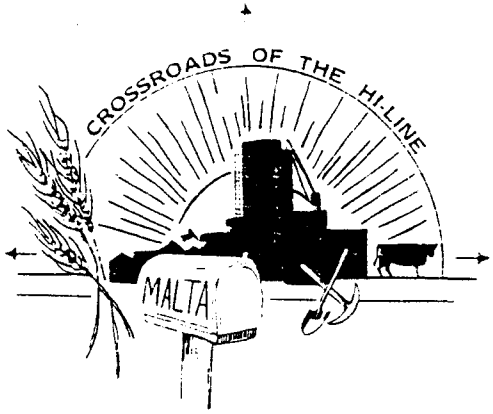
As a citizen based group organized to assist in finding economic stability for Phillips County, we fully support this proposal, not only for its conservation factors, but the economic stability it will provide our area.

Sincerely,

Anne Boothe

Anne M. Boothe
Executive Director

BETTER FOR BUSINESS
Montana Certified Communities




# Malta Area Chamber of Commerce

Drawer GG · Malta, Montana 59538

EXHIBIT 8
DATE 2-2-93
HB

Department of Natural Resources
Helena, Mt. 59601

Gentlemen,

We are writing in support of a grant proposal submitted by the Malta Irrigation District requesting financial assistance for improvements to the South Dodson Canal.

The proposed improvements would allow for increased efficiency of available water flowing through the system, enabling water to reach Nelson Reservoir earlier each spring.

Nelson Reservoir is a main attraction in eastern Montana for recreation and sport fishing. This, along with the agriculture benefits provided by Nelson Reservoir, help to stabilize our economic base of Phillips County.

We urge your approval of this grant proposal.

Sincerely,

Don Nevrivy
(DN)

Don Nevrivy,
President

EXHIBIT 9
DATE 2-2-93
HB

ENVIRONMENTAL ASSESSMENT

Direct effects on the environment from conducting the study would be limited. Indirect and cumulative effects could be caused if the study determined that installing the "A" diversion structures was feasible. These effects would have to be addressed before any structures are constructed.

The proposed feasibility study should include an environmental assessment of the impacts associated with the proposed project and any alternatives.

RECOMMENDATION

Grant funds for the study will be provided after DNRC approves a scope of work and a budget. Any requirements needed to reduce identified adverse impacts to low levels shall be stipulated in the project agreement to conduct the feasibility study as part of the project's scope of work. The scope of work will be developed from a more detailed description of the study procedures and implementation plan that will be submitted by the project sponsor. Any reduction in the scope of work will require a proportional reduction in the grant amount.

Any funds received from sources other than those already identified will cause a dollar-for-dollar reduction in the funds awarded under this grant.

PROJECT NO. 43

| | |
|---|---|
| APPLICANT NAME | DODSON IRRIGATION DISTRICT |
| PROJECT NAME | Improving Water Use Efficiency through Canal and Pump |
| AMOUNT REQUESTED | $ 62,895 GRANT |
| OTHER FUNDING SOURCES | $ 63,383 |
| TOTAL PROJECT COST | $126,278 |
| AMOUNT RECOMMENDED | $ 31,569 GRANT<br>$ 31,326 LOAN |

PROJECT ABSTRACT (Prepared and submitted by applicant)

This project is proposed to replace 3,900 feet of old canal with 1,400 feet of plastic pipe to eliminate seepage from the canal and conserve water. The proposed replacement of two energy-efficient pumps also would conserve electricity. Installing the proposed project would provide an improved water supply and benefits for the next 40 to 50 years for the Dodson Irrigation District and others.

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**TECHNICAL ASSESSMENT** (Prepared by DNRC)

The Dodson Irrigation District is comprised of 1,005 acres located in northcentral Montana. The district pumps water from a Malta Irrigation District canal supplied with water from the Milk River. Rehabilitating the irrigation district is part of an overall plan to rehabilitate the entire Milk River basin irrigation system.

Technical information about the pumps and pipeline design and specifications is provided, but the application does not indicate a reason for the problem. It says that the main problem to be solved by the proposed project is an inadequate water supply delivered to the district's water users. Although implied in the application that the canal section to be replaced by the pipeline contributes significantly toward this problem, insufficient documentation is provided. The soils information in the application indicates that seepage should not be excessive in this canal section since water percolation in these soils is rated as slow.

According to the application, efficiency of the new pumps (85 to 90 percent) would be 10 to 15 percent greater than that of the existing pumps. This should provide energy use savings of approximately 10,000 kwh (kilowatt hours) per year based on the use figures provided. If the new pumps provide any increase in flow rate, water rights must be obtained.

**FINANCIAL ASSESSMENT**

The proposed project's total cost is $126,278. The district's $62,895 grant request includes $238 for associated administrative costs (communications, supplies, travel, contingencies); $2,850 for salaries and benefits; $9,200 for labor; $13,800 for equipment; $200 for land easement acquisition; $31,170 for materials; and $5,437 for contingencies. The Dodson Irrigation District will contribute $237 for associated administrative costs (communications, supplies, travel, contingencies); $2,850 for salaries and benefits; $453 for associated professional costs; $9,200 for labor; $13,833 for equipment; $200 for land easement acquisition; $31,170 for materials; and $5,440 for contingencies.

The Bureau of Reclamation has expressed concern that the project cost may be disproportionally high to the value of the land and the crops grown. The water user contribution would be $63 per acre. A cost/benefit analysis should be conducted to determine the feasibility.

**BENEFIT ASSESSMENT**

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

The project indirectly supports State Water Plan objectives with at least some water conveyance efficiency improvement through replacing the canal section with a pipeline and more efficient water diversion with more efficient pumps. The objectives supported include improved water use and conveyance efficiencies. The project involves family-owned farms and possibly protects some farm land.

The application states that water will be conserved, but no quantity is indicated to determine whether the amount would be significant enough to help resolve Indian or federal reserved water rights in the basin.

Some conservation should be evident with the pipeline and the more efficient pumps, but no amount is stated. Contradictory statements are made indicating that the conserved water will be made available to water users and left in the river.

No citizen support of the project is documented. The project will provide measurable, ongoing benefits primarily to the local irrigation district water users.

## ENVIRONMENTAL ASSESSMENT

The proposed project would cause some wetland disturbance by the pipeline installation. The size of the wetland and its function and value are not fully known. The Bureau of Reclamation's involvement with the Milk River basin irrigation system likely would require some review of this wetland disturbance and any measures necessary to replace lost wetland resources.

## RECOMMENDATION

Since the project sponsor is able to assess fees or collect tax revenue to recover this project's cost, the project is considered to have "payback capability" and thus qualifies for only 25 percent of the project cost or $50,000, whichever is less. DNRC recommends a $31,569 grant.

The project sponsor may obtain additional funding through a DNRC loan up to $31,326. DNRC will provide a loan up to the amount requested, commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

Grant funds will be provided only after DNRC approves additional documentation that the project's cost will be outweighed by the achieved benefits, that sufficient additional funds can be obtained, that losses in the canal section to be replaced are excessively high and contribute significantly to the inadequate water delivery problem, and that the proposed project is acceptable and recommended by the Corps of Engineers.

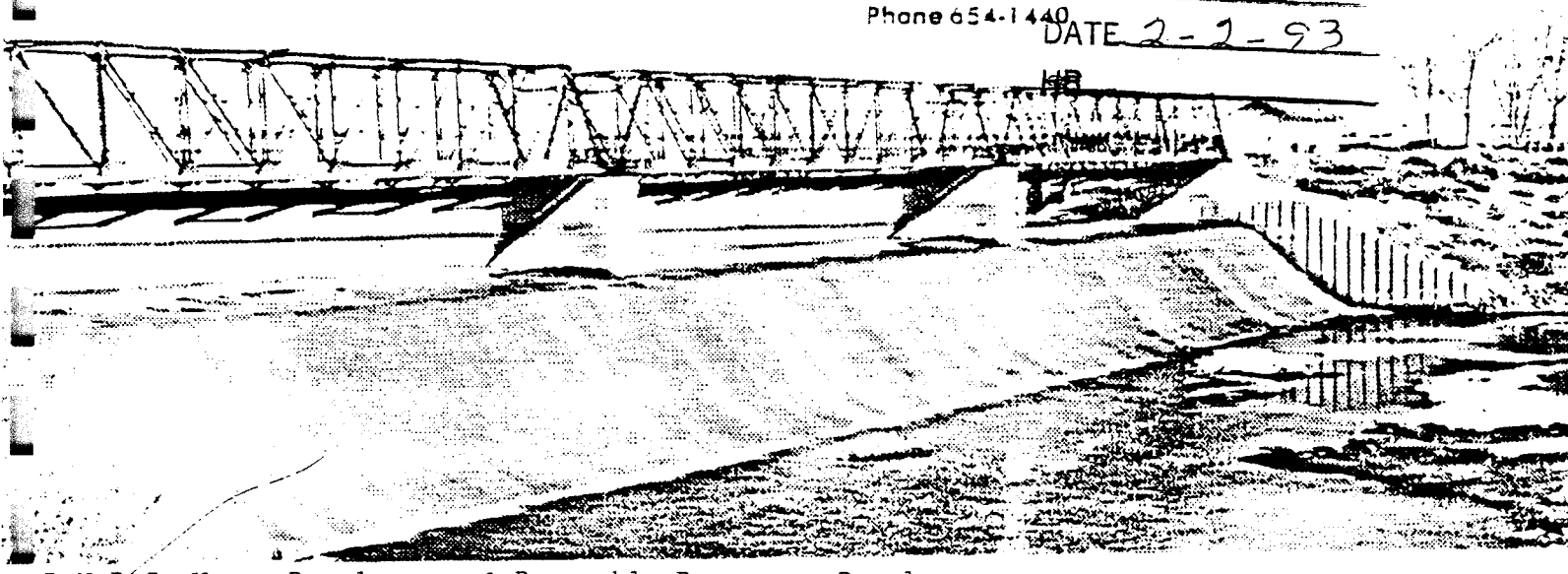
The project sponsor shall submit a scope of work and a budget, and DNRC shall prepare a grant agreement after matching funds have been secured. Any requirements for wetland protection shall be identified and incorporated as part of the project's scope of work. Original specifications, designs, and respective revisions shall be submitted to and approved by the U.S. Army Corps of Engineers before any bids are solicited; by reference, these also shall be included in the project agreement.

After bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment. Any funds received from sources other than those already identified will cause a dollar-for-dollar reduction in the funds awarded under this grant.

If grant funding is not available, the project sponsor may request a DNRC loan up to $62,895. DNRC will provide loan funding in an amount commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement. Before funding, a DNRC environmental checklist must be completed that notes the results of the Corps of Engineers' review and whether sufficient water rights have been applied for or obtained if necessary.

DODSON Irrigation District P.O. Box R Malta, Montana 59538
Phone 654-1440

EXHIBIT 10
DATE 2-2-93
HB



D.N.R.C. Water Development & Renewable Ressource Development
Long Range Planning Sub-Committee
P. O. Box 202301
Helena, Montana 59620-2301

Dear Committee Members:

I am Joe Nicholson, Vice President of the Dodson Irrigation District and thank you for the opportunity to present testimony in support of the Grant Application to improve water use efficiency in our District. I have been a water user under the District for many years and know first hand the problems with water and water delivery. We have proposed installing plastic pipe to eliminate seepage and conserve water.

The Dodson pump ditch is located west of Dodson and irrigates 1,005 acres. This is accomplished by lifting water 20 feet to supply our delivery system. Two pumps are used to raise the water elevation from the Dodson North Canal to the pump ditch. The pumps are old and obsolete and need to be replaced with a more modern design.

The canals on the Milk River Project follow the edge of the valley, are mostly gravel based and present seepage problems. This is the same prob lem experienced by other districts in the area and are not exclusive to the Dodson District. The installation of the pipe would eliminate the seepage and help alleviate the mosquito problem in the town of Dodson and outlying areas.

The system supplies water to eight different ranching operations and the water supply is utilized for raising hay and feed for livestock. This is essential in the Milk River Valley because feed is critical for the long winters.

The completion of the proposed project would result in an improved water supply and benefits will be derived for the next 40 or 50 years for the Irrigation District and others.

The proposal promotes the State Water Plan thru conservation and efficiency, reduces energy consumption and creates a more equitable distribution of the available water supply.

We would appreciate your support of our Grant Application so this can be accomplished.

Thank you.

Sincerely yours,

DODSON IRRIGATION DISTRICT

Joe Nicholson

Vice-President

EXHIBIT 11
DATE 2-2-93
HB

THE CONFEDERATED SALISH AND KOOTENAI TRIBES
OF THE FLATHEAD NATION
P.O. Box 278
Pablo, Montana 59855
(406) 675-2700
FAX (406) 675-2806



February 1, 1993

Jeanne F. Doney
Department of Natural Resources & Conservation
Lee Metcalf Building
1820 East Sixth Avenue
P.O. Box 202904
Helena, MT 59601

Re: Sanders County Soil Survey-Appropriation Pending Before the House Appropriations Sub-committee of Water Development and Renewal Resource Development

Dear Ms. Doney:

The Confederated Salish & Kootenai Tribes of the Flathead Indian Reservation strongly support the Eastern Sanders County Conservation District's application for funding to accelerate the completion of the Sanders County Soil Survey. Completion of the soil survey is necessary so information can be utilized for a variety of planning and decision-making purposes.

The Tribes have cooperated with the Soil Conservation Service (SCS) in the completion of the soil survey on fee and trust lands within the Flathead Reservation. Our assistance in this project involved developing digital computer images of the survey data which were provided to the SCS. These maps, however, will not be available for general use until the entire county is mapped, edited, computerized and published.

In the meantime, the final maps, including all soils information and management recommendations, will not be available for several years. We would like to use the data for cooperative weed control projects, irrigation scheduling, land development recommendations, and numerous other land use needs that a completed soil survey provides to land users.

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To Cathy Fleiss | From Mickey D.

EXHIBIT 11
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Completion of the Sanders County soil survey is an investment in the conservation of soil and water resources for all residents. It is vitally important for management planning, land use improvements, and for making wise resource use decisions.

Sincerely,

CONFEDERATED SALISH AND KOOTENAI TRIBES

Michael T. Pablo
Tribal Council Chairman

xc: DOL Chrono
Subject File

VD.020193.LTR

EXHIBIT 12
DATE 2-2-93

PROJECT NO. 31

| | |
|---|---|
| APPLICANT NAME | HILGER COUNTY WATER AND SEWER DISTRICT |
| PROJECT NAME | Sewage Collection and Treatment Facilities for Town of Hilger |
| AMOUNT REQUESTED | $100,000 GRANT |
| OTHER FUNDING SOURCES | $375,000 (Community Development Block Grant)<br>$177,300 (Environmental Protection Agency Loan) |
| TOTAL PROJECT COST | $652,300 |
| AMOUNT RECOMMENDED | $ 50,000 GRANT<br>$ 50,000 LOAN |

**PROJECT ABSTRACT** (Prepared and submitted by applicant)

Health risks associated with contaminated drinking water have prompted Hilger's citizens to form the Hilger County Water and Sewer District. The district's goal is to develop a potable community water supply system and create a central sewage collection, treatment, and disposal system that does not contaminate the groundwater resource. All homes in Hilger have septic tank, drainfields, on-site treatment facilities. Some homes have cesspools that are underground pits into which raw household sewage or other untreated liquid waste is discharged. The liquid from the cesspools seeps to the groundwater in a manner similar to that of improperly operating drainfields.

Seepage pits also may be installed in the area. A seepage pit usually follows a septic tank and sometimes is used in place of a drainfield for percolation of the septic tank effluent into the soil. Because seepage pits also represent a potential pollution source, a centralized wastewater treatment facility should be used in lieu of existing, improperly working, on-site treatment facilities.

**TECHNICAL ASSESSMENT** (Prepared by DNRC)

Currently, all 15 residences, 5 commercial businesses, a church, and a school are served by septic tanks and drainfields. Soil conditions are such that a high rate of drainfield failure takes place, and several wells have been contaminated. The health risks associated with contaminated drinking water prompted this proposal. Hilger County has formed a water and sewer district to reduce those public health hazards.

This project's goals involve developing: (1) a central sewage collection system, (2) a treatment plant, and (3) a disposal system that does not contaminate the groundwater. To support these goals, Billmayer Engineering of Kalispell completed a facilities plan and engineering report in 1992 for the town of Hilger's sewage collection and treatment facility. This report adequately describes and documents the existing facilities and the problems that need to be resolved.

Two collection system alternatives evaluated in the engineering study include the conventional gravity sewage collection system and the small diameter gravity system. Both collection alternatives use the natural terrain's slope to convey sewage to the treatment facility without the aid of pumps or force mains.

The treatment system alternatives considered included (1) no action (i.e., using the existing facilities with no improvements); (2) constructing an aerated lagoon system with treated effluent to be disposed of by land application/spray irrigation; (3) constructing a total containment, evaporation-reduction, facultative lagoon system; and (4) constructing a wetlands treatment system with treated effluent to be disposed of by land application/rapid infiltration.

Combinations of each collection alternative with each treatment alternative were evaluated by using a present worth analysis. This type of analysis indicates that the selected combination of collection and treatment for the Hilger County Water and Sewer District's sewer utility is a conventional gravity collection system combined with a total containment, facultative lagoon system.

The conventional gravity sewer represents the most economical sewage collection alternative, while the total containment lagoon system yields the lowest overall treatment cost and wastewater disposal when operation, maintenance, and power costs are combined in a present worth analysis that also acknowledges capital costs and salvage values of the constructed facility.

The conventional gravity sewer system would eliminate all septic tanks in the Hilger community. Wastewater will be delivered to the treatment facility in an aerobic state that provides relatively low odors and represents the most rapid form of biological treatment of Hilger's natural gradient. No lift stations are required to transfer the waste to the wastewater treatment facility located southwest of Hilger. The preliminary estimated cost of the conventional gravity sewer system is $322,900, and the estimated cost of the total containment lagoon system is $319,400.

The selected alternative--a total containment facultative lagoon system combined with a conventional gravity collection system--appears to meet Hilger's needs and is considered a cost-effective approach in comparison to other options considered. This alternative will solve the problems documented in the proposal. Grant funds from DNRC will be used to engineer and construct a collection system and treatment facility for the town of Hilger, based on the recent facilities plan and engineering report. Potential odor problems associated with the facultative systems should be addressed in the final design documents.

Early coordination of the "prime player" has taken place, and the final coordination of everyone involved will be finished during final engineering design. Preliminary compliance considerations already have been addressed, and any water rights, permits, and easements will be addressed in the final engineering document. The proposed project's costs, derived from the scope of work outlined, appear to be in line with similar construction projects now underway. Community Development Block Grant and EPA funding is now being pursued.

The project's proposed schedule, although optimistic, appears reasonable. Project benefits would not be reduced but instead would probably show an increase. Funding delays from other sources could impair the project and cause increased construction and engineering costs.

## FINANCIAL ASSESSMENT

This proposal requests a $100,000 DNRC grant for design and construction costs. The remaining project costs will be funded through a $375,000 Community Development Block Grant and a $177,300 EPA State Revolving Fund loan. Applications for this grant and loan were submitted September 15, 1992.

No documentation was provided in the application to support the community's ability to repay a loan. Because of the user group's extremely small size (15 residents, 5 businesses, a church, and a school), whether the grants or the loan present a suitable cost-versus-benefit ratio is uncertain.

EXHIBIT 12
DATE 2-2-93
SB

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

This project will not adversely affect the area's water quantity and quality, soils, vegetation, wildlife, and other natural resources. In fact, water quality should improve significantly without the contaminated groundwater wells now documented in town studies.

If this project is not completed, groundwater and surface water degradation will, at best, continue at present levels. As the drainfields age and soil capabilities deteriorate, however, this degradation likely will increase. Because the continual contamination of existing wells is unacceptable, the project represents a major protection project of local drinking water. A 1990 survey of Hilger's residents indicated that the town's water and sewer systems were a major concern.

## ENVIRONMENTAL ASSESSMENT

As the final engineering design documents are developed, they should include measures to ensure that any adverse effects caused during construction are kept at low levels. If additional state approvals require further review under the Montana Environmental Policy Act (MEPA), DNRC would participate in this review to identify mitigation measures to be included in the project's scope of work.

The proposed project's long-term effects appear minimal. Contaminated groundwater near the infiltration site will be addressed in the final engineering design, and the area's water quality is expected to be substantially improved.

Occasional air pollution problems that may be caused during construction can be minimized with proper planning before construction begins.

## RECOMMENDATION

Since the project sponsor is able to assess fees or collect tax revenue to recover the project's cost, the project is considered to have "payback capability" and thus qualifies for only 25 percent of the project cost or $50,000, whichever is less. DNRC recommends a $50,000 grant.

The project sponsor may obtain additional funding through a DNRC loan up to $50,000. DNRC will provide a loan up to the amount requested, commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

Grant funds will be provided after DNRC approves a scope of work and a budget, after matching funds have been secured, and after DNRC has determined that MEPA requirements have been met. Any measures identified through an environmental review that are necessary to keep adverse impacts at acceptable levels shall be stipulated in the project agreement and incorporated as part of the project's scope of work. Original specifications, designs, and respective revisions shall be submitted to and approved by the Department of Health and Environmental Sciences before any bids are solicited; by reference, these also shall be included in the project agreement.

After bids have been obtained, the project sponsor shall submit a breakdown of specific construction costs such as material, labor, and equipment. Any reduction in the scope of work will

require a proportional reduction in the grant amount. Any funds received from sources other than those already identified will cause a dollar-for-dollar reduction in the funds awarded under this grant.

If grant funding is not available, the project sponsor may request a DNRC loan up to $100,000. DNRC will provide loan funding in an amount commensurate with the project sponsor's ability to repay the principal and interest according to terms specified in a DNRC bond purchase agreement.

## PROJECT NO. 32

| | |
|---|---|
| APPLICANT NAME | VALLEY COUNTY |
| PROJECT NAME | Fort Peck Reservoir Breakwater |
| AMOUNT REQUESTED | $100,000 GRANT |
| OTHER FUNDING SOURCES | $400,000 (U.S. Army Corps of Engineers)<br>$300,000 (Reclamation and Development Grant) |
| TOTAL PROJECT COST | $800,000 |
| AMOUNT RECOMMENDED | $100,000 GRANT |

### PROJECT ABSTRACT

This project will allow better use of Fort Peck Lake by giving boaters a safe harbor for storing their boats. To do this, a breakwater will be constructed across an existing bay near the west side of Fort Peck Dam. The breakwater will protect the inside of the bay from large waves while providing access to the lake from the bay.

In a lake as large as Fort Peck, the wind can cause the waves to build up significantly. During storms, waves can be large enough to damage boats left in docks that provide no protection from the waves. Constructing a breakwater will provide this safe harbor and allow more future development of the marina facilities. In turn, the lake's recreational use will increase.

Expanding the use of Fort Peck Lake has been a long-time goal of the people of eastern Montana. In 1946, the original Fort Peck Lake Master Plan discussed the recreation potential the lake would bring to the eastern part of the state. The 1986 governor's forums on Montanans outdoors recognized the lake's recreational potential and the need for this potential to be developed. Although much has been said about recreational development, little has been done. This project will allow better use of the lake's water, develop much-needed recreation, and provide the surrounding area with some greatly needed economic development opportunities.

### TECHNICAL ASSESSMENT (Prepared by DNRC)

This project proposes to construct a dike across a portion of Perch Bay to dewater the bay, remove fill material from the bay to construct a breakwater, and cut a hole in the breakwater to provide access from the current boat launch and Fort Peck West Marina. Construction would begin in May and be finished in September. During at least a portion of the construction period, the privately operated marina and boat-launching facilities would be inaccessible, which could seriously affect the marina. If

EXHIBIT 15
DATE 2-2-93
HB

PROJECT NO. 50

| | |
|---|---|
| APPLICANT NAME | CITY OF SHELBY |
| PROJECT NAME | Water Supply Development |
| AMOUNT REQUESTED | $100,000 GRANT |
| OTHER FUNDING SOURCES | $319,000 (Project Sponsor) |
| TOTAL PROJECT COST | $419,000 |
| AMOUNT RECOMMENDED | NONE |

PROJECT ABSTRACT (Prepared and submitted by applicant)

The existing capacity of the city of Shelby's well field is not capable of meeting the community's water consumption needs. This situation becomes critical when the well field's recharge is hampered by a dropping water table. In these situations, the well field can only be pumped eight hours a day, which produces only 800,000 of the needed 2.73 million gallons of water. This situation shows the potential to hamper the community's growth and development.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The proposal appears to be a "thrown-together" attempt to use a 1984 study to obtain 1992 funding for a water expansion project. The proposal fails to support the project's technical feasibility.

Most of the documentation is comprised of an engineering study completed by Thomas, Dean & Hoskins, Inc. in May 1984, along with a study by the city in December 1980 (not included in the proposal).

According to the application, the 1980 records indicate that the well field was producing 1,400 to 1,500 gallons per minute (gpm), or 2,169,000 gallons per day (gpd) (24-hour pumping period). In 1983 (at the low river level), the well field was producing 1,340 gpm, or 800,000 gpd (8-hour maximum pumping period). The 1983 water shortage was attributed to the low river (3 feet below normal) and high demand. In 1984, the area had seven producing wells and one auxiliary well. The project's goal is to expand the existing well field's capacity by constructing a system of low yield wells.

Six of the options discussed in the 1984 study were not reevaluated to prepare this proposal. The estimated cost of alternative number 5 (the low yield wells) recommended in the 1984 study was updated to reflect 1992 costs. The alternative recommended in 1984 may not be appropriate for 1992. The proposal neither addresses any well field changes since 1984 or any new technology or systems. The options have not been fully analyzed, and the approach's viability is questionable at current pumping rates. These rates were not mentioned other than as a 1983 forecast.

Whether the recommended alternative will solve Shelby's problem has not been shown. The proposed alternative would not supply Shelby with water at the rate of 2.73 million gpd; the system would fall approximately 1 million gpd short–which may or may not be acceptable to the city.

Of seven alternatives, only the cost of alternative number 5 was updated to reflect 1992 dollars. Because additional budget items that may be necessary for 1992 were not addressed, a true comparison of costs versus benefits cannot be made.

The proposal did not address any coordination, compliance, or scheduling for the project. Nor were current user rates and forecasted user rates presented in the proposal.

## FINANCIAL ASSESSMENT

The total cost of the recommended low yield well alternative is $419,000. The city of Shelby is requesting a $100,000 DNRC grant. According to the proposal, the remaining $319,000 will be funded through the city's water system reserve and capital improvement funds.

The cost estimate for alternative number 5 that was presented in Thomas, Dean & Hoskins' 1984 study was the only option financially reevaluated to prepare this proposal. Because the other six alternatives were not updated, a cost-versus-benefit evaluation cannot be substantiated from the data included in the proposal.

## BENEFIT ASSESSMENT

DNRC's project review values only those benefits described by statute. Public benefits are found in projects that support the State Water Plan; promote reserved water rights; conserve, manage, or protect water resources; exhibit broad citizen support and public use; display tangible benefits; or replace benefits--economic or otherwise--currently derived from Montana's mineral resources.

Although the proposal would provide better management, use, and protection of a renewable water source, the extent of the benefits was not discussed other than to indicate that 3,500 Montanans would benefit directly from the project.

The proposal indicates that 1 million gallons of additional water reserves (1984 estimate) would be available to the city if this project were undertaken, although about 1 million gpd of water (during low river periods) still would be needed. Producing additional water from the well field would represent an investment in a renewable resource; however, this benefit was not discussed in the proposal.

In 1983, the citizens of Shelby obviously would have been eager to obtain the water that was needed. However, the proposal did not provide any documentation to show that the people still feel that way in 1992.

## ENVIRONMENTAL ASSESSMENT

The environmental assessment checklist included in the proposal indicates that the proposed project would not cause any adverse environmental impacts. The final engineering design documents would address any short-term (construction-related) environmental impacts.

EXHIBIT 13
DATE 2-2-93
HB

RECOMMENDATION

Because all the alternatives were not considered, it cannot be determined whether the proposed project will provide the most cost-effective solution. Therefore, DNRC recommends that this project receive no funding.

PROJECT NO. 51

| | |
|---|---|
| APPLICANT NAME | CITY OF POLSON |
| PROJECT NAME | Water Reservoir Reconstruction Project |
| AMOUNT REQUESTED | $ 55,000 GRANT |
| OTHER FUNDING SOURCES | $100,000 (Security State Bank, Polson)<br>$100,350 (Project Sponsor) |
| TOTAL PROJECT COST | $255,350 |
| AMOUNT RECOMMENDED | NONE |

PROJECT ABSTRACT (Prepared and submitted by applicant)

Polson has two 250,000-gallon reservoirs in its lower zone that are quickly deteriorating. They are concrete tanks covered by a metal building. The city of Polson wants to reconstruct these tanks to eliminate the leakage and potential back siphonage of contaminated water. If the tanks are not repaired and become inoperable, the city also would lose its main water supply source for domestic and fire purposes.

TECHNICAL ASSESSMENT (Prepared by DNRC)

The problem caused by deterioration of the city water storage reservoirs appears genuine. The Department of Health and Environmental Sciences' Water Quality Bureau noted during a 1988 inspection that the reservoirs should be rebuilt because of damp earth adjacent to the structures and concrete failure. A follow-up inspection report prepared by a Water Quality Bureau engineer in 1991 included a similar statement.

The application identified two alternatives for rehabilitating the reservoirs: (1) concrete patching, and (2) lining the reservoirs with a synthetic material. Concrete patching was selected as the preferred alternative from visual inspections made from the top of the reservoirs. (The application suggests that the reservoirs were not empty at the time of the inspection.) Without a detailed inspection of the reservoirs while they are empty, how this alternative was selected over a liner installation is unclear.

The town has coordinated with the Department of Health and Environmental Sciences' Water Quality Bureau on this project. Although no other coordination is documented in the application, none appears to be required. No permits should be required to complete this project.

HOUSE OF REPRESENTATIVES
VISITOR REGISTER

Long Range Planning SUBCOMMITTEE DATE 2/2/93

DEPARTMENT(S) _____ DIVISION _____

**PLEASE PRINT** **PLEASE PRINT**

| NAME | REPRESENTING | |
|---|---|---|
| Robert Sivertsen | Hill Co Salinity | |
| Judy MACK. | HILL CO. SALINITY | |
| Michael Wendland | Hill Co Salinity | |
| Henry D. McDANN | Town of DUTTON | |
| Robert C Goodell | Town of Dutton | |
| Joan Schaaraer | Town of Dutton | |
| Mark Marty | DNRC | |
| Jeanne. Doney | DNRC | |
| John E. Tubbs | " | |
| FREDRICK MAUENCAMP | MALTA IRRIGATION DIST. | |
| Phil SIMS | Malta Irrigation | |
| Steve Meyer | MT Assn. of Cons. Districts | |
| Mike Volesky | " " " " " | |
| Jon Nicholson | Glacier Dragoon | |
| George Oshinski | Salish Kootani Tribe | |
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PLEASE LEAVE PREPARED TESTIMONY WITH SECRETARY. WITNESS STATEMENT FORMS ARE AVAILABLE IF YOU CARE TO SUBMIT WRITTEN TESTIMONY.