MINUTES OF THE MEETING LONG RANGE PLANNING SUBCOMMITTEE 50TH LEGISLATIVE SESSION

The meeting of the Long Range Planning Subcommittee was called to order by Chairman Rep. Robert Thoft on February 11, 1987 at 8:00 a.m., in Room 202B of the State Capitol.

ROLL CALL: All members of the Long Range Planning Subcommittee were present except Rep. Donaldson who was excused.

Tape 68:A:000

RIT PROJECTS

Grant #6 Board of Oil and Gas Conservation Plug Wikstand Simero #1, Cut Bank:

Chuck Milan said they received emergency funds for this project. The executive is asking for repayment of the emergency funds through this RIT grant.

Grant #13 Board of Oil and Gas Conservation Plug - Sunburst Disotell #1, East of Sunburst:

Floyd Podahl said the well was plugged in 1950 but began leaking saline water and 1% of oil, which endangers a fresh water aguifer.

Rep. Bardanouve asked how many wells are flowing saline water. Mr. Podahl said he is aware of three. (086)

Grant #14 Board of Oil and Gas Conservation
Plug Well Leaking Gas, Gas City Field, Dawson County: (129)

Mr. Milan said the shallow well was drilled in the early 1900's and is leaking saline water.

Mr. Milan said there are no responsible parties.

Sen. Aklestad asked how the cost is calculated. Mr. Milan said there are no bids now, the estimate is from the board, but the project will be bid.

Mr. Milan said the board has never seen the original agreement of Shell with the original owner. (297)

Grant #16 Water Resources Center, UM: (313)

Long Range Planning Subcommittee February 11, 1987 Page 2

Howard Peavey submitted a fact sheet for the Subcommittee (Exhibit #2). Mr. Peavey said the will determine where the "hot spots" are in the sediments.

Mr. Peavey said the federal government would match the funds they raise.

Chairman Thoft said he is concerned with the amount of monies put into studying the Clark Fork River, because he is not sure they are benefiting from them. (478)

(68:B:000)

Grant #17 Montana Salinity Control Association:

Jane Holzer presented a slide show for the Subcommittee on salinity control in Montana.

Ellis Hagen, Sen. Cecil Weeding, Sen. McLane, Rep. Bardanouve, Barry Warem, Dan Deegan, Sen. Bob Williams, Lloyd Barry, and Pete Pervis are all in favor of this project. (400)

(69:A:000)

Grant #18 Mile High Conservation District - Berkely Pit Reindustrialization:

John Driscoll said he was in favor of the project.

Kathy Hadley said they will have to develop a liability paper relative to having people working in the pit.

John Sonnberger submitted a worksheet (Exhibit #6).

Mr. Sonnberger said there are higher values of copper in the pit than in the shaft. (123)

Mr. Peavey said he was in favor of the project.

Russ Forba, Environmental Protection Agency, said there is no conflict between this project and the Butte Silver Bow Creek project.

George Ochlenski said he is not in favor of this project. (295)

Grant #19 Butte Silver Bow Government: (430)

Rick Griffith, Butte Silver Bow Government, said he is in favor of the project.

Long Range Planning Subcommittee February 11, 1987 Page 3

Fred Quivek, Butte Anaconda Historical Park presented pictures of the mine yard and said it is the only surviving historic mine yard in Montana. Mr. Quivek submitted fact sheets to the subcommittee (Exhibit #7, #8).

(69:B:000)

Nancy Foot, Butte resident, said she was in favor of the project and presented pictures of the area to the Subcommittee.

Morris Mulcahy said he is in favor of the project.

Mr. Griffith said the Office of Surface Mining is going to cap the mine shafts.

Sen. Van Valkenburg asked if it will cost more to clean up the mine shaft than to tear it down. Mr. Griffith said it will cost more to renovate the mine yard.

Mr. Griffith said the master plan involves reclaiming 25 sites, but they don't expect funding for all 25 sites. (141)

Grant #20 Lower Musselshell Conservation District: (282)

Doug Parrot submitted written testimony of Gale Stensvad (Exhibit #1).

Mr. Parrot said the city of Melstone runs out of water in dry years.

Mr. Parrot said it is not economically acceptable to use water for irrigation from abandoned mines.

Mr. Parrot said there has been testing on the water appears to be available for use.

Sen. Van Valkenburg asked who will use the water. Mr. Parrot said the Deadman's Basin water users will pump and distribute the water from the mines.

Mr. Parrot said the water development funds are for measuring devices. (420)

Mr. Parrot said the Deadman's Basin water users have applied for a water permit on this water, but it will require legislative action.

Rep. Gay Holliday said she is in favor of the project.

Ken Meney said he is in favor of the project. (529)

Long Range Planning Subcommittee February 11, 1987 Page 4

(70:A:000)

law

Tom Hogan, Deadman's Basin Water Users Association, said he is in favor of the project.

Dick Walker, Musselshell County Commissioners Office, said he is in favor of the project, and that there is 11,000 - 13,000 an acre foot of water in the mines.

John Funk, Musselshell chamber of Commerce, said he is in favor of the project.

Monty Sealy, said he is in favor of the project. (118)

Grant #22 DNRC: (304)

Chuck Dalby said there are salinity sources in the Powder River Basin.

Mr. Dalby said they will use a water quality simulation model for testing.

Sen. Bill Yellowtail said he is in favor of the project.

Howard Best read his testimony for the Subcommittee (Exhibit #9). (392)

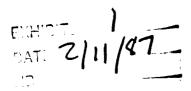
<u>ADJOURNMENT</u>: There being no further business the Long Range Planning Subcommittee adjourned at 11:20 a.m.

DAILY ROLL CALL

| | LON | RANGE PLANNING | SUBCOMMITTEE |
|------|------------|----------------|--------------|
| DATE | February] | 1 . 1987 | |

| NAME | PRESENT | ABSENT | EXCUSED |
|-------------------------------------|---------|--------|---------|
| Rep., Thoft, Chairman | | | |
| Sen., Van Valkenburg, Vice-Chairman | | | |
| Rep., Bardanouve | | | |
| Rep., Donaldson | | | |
| Sen., Aklestad | | | |
| Sen McLane | | | |
| Sen., Walker | | | |
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Form CS-30A Rev. 1985



Deadman's Basin Water Users Association 101 11th Ave. West Roundup, MT 59072

February 9, 1987

Mr. Gale Stensvad, Chairman Lower Musselshell Conservation District 109 Railroad Ave. East Roundup, MT 59072

Dear Gale;

The board of directors of the Deadman's Basin Water Users Association met on Monday, February 9, 1987 at Roundup, Montana.

The main topic of our agenda was the "Resource Indemnity Trust Grant" that your organization has applied for, titled, "Groundwater from Abandoned Mine Workings for Irrigation and Instream Flows."

The board re-affirmed their intention, subject to the satisfactory results of your proposed two year demonstration project, to develop and distribute the waters from the subject mines for irrigation and instream flow. The waters will be distributed along the Musselshell River downstream from Roundup, Montana during the normal irrigation use season, May 1 through October 15, each year.

It was also resolved that the "Operating and Maintenance" budget required for pumping and distributing the subject mine waters will be averaged with the existing operating and maintenance budget, thus all waterusers along our system will be assessed the same operating and maintenance fee for each foot of water that they have contracted.

It was also resolved that if the demonstration project is successful and after it has been proven by our subsequent operations that additional water can be made available from the subject mine sources for irrigation purposes, those additional waters will be offered for contracted acreage along our entire system.

We also have on file, with the Department of Natural Resources and Conservation, Water Rights Bureau, and application for a "Beneficial Water Use Permit." In that application we are asking for a permit to divert water, from the subject mines, up to 13,364 acre feet of water per year, during the irrigation season May 1 through October 15 each year. That application also requires legislative approval, which we have initiated through Senator Jack Galt.

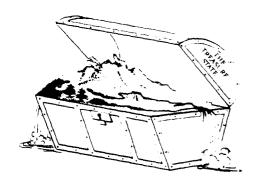
If we can assist you in any way in your efforts, to acquire the subject grant, please feel free to contact us.

Sincerely,

Gordon Eklund President /

J. Walter Newton

Secretary



MONTANA

UNIVERSITY SYSTEM

WATER RESOURCES CENTER

309 Montana Ha Montana State Universit Bozeman. Montana 5971 Telephone 406-994-669

THE MONTANA UNIVERSITY SYSTEM WATER RESOURCES CENTER

Organization

The Montana University System Water Resources Center was chartered by the Board of Regents for Higher Education in 1964 and rechartered in 1984. It is a cooperative effort of all units of the University System. The Director's office is at Montana State University with Associate Directors at the University of Montana and Montana College of Mineral Science and Technology. Faculty from all units of the University System are invited to participate in the Water Center programs. An Advisory Committee composed of officials from state and federal water related agencies, representatives from industry and private sector organizations, and private citizens serves to maintain relevance in the Water Center programs. This committee reviews proposals and makes recommendations on appropriate projects for Water Center funding. Current membership of the Advisory Committee is listed on the back of this page.

Functions

The goal of the Water Center is to carry out a program of Research, Information Transfer and Educational Activities to benefit persons and organizations involved in the use, management and/or conservation of water in Montana. Since its inception in 1964, the Water Center has funded over 150 projects relating to Montana's water resources. Many of these projects were "seed" in nature and assisted in developing other, larger projects to address significant problems. Over 200 graduate students have received training through Water Center projects. Many of these students are now employed in Montana water agencies. In addition to its research program, the Water Center provides an information transfer service through water forums and conferences and library services for off campus users. In addition, the Water Center maintains a bibliography and data file on all the surface water projects within the University System. This file is updated periodically and will interface with the Montana Natural Resources Information System.

Funding

The Water Center is one of 54 such institutes located in all 50 states, the District of Columbia, and three territories. These centers operate as a cooperative effort of federal/state/university water interest to address local, regional and national water problems and issues. Federal funds are administered through the U.S. Geological Survey. Matching funds are provided by state appropriations, and by matching and in-kind services by state agencies and university units, and private sector organizations.

(OVER)

MONTANA SALINITY CONTROL PROGRAM

EXHIBIT 3 DATE 2/11/87 HB_____

"RPOSE:

The purpose of the project is to locate the recharge or contributing areas for individual saline seeps in a 33-county area and provide information and assistance to the landowners, conservation districts, and the Soil Conservation Service, and to develop a cooperative control and management plan to minimize or eradicate saline seeps. The field method which has been refined by the saline seep team uses a drill rig to determine soil profile, depth to water table, and establishment of a monitoring system maintained and utilized by the farm operators. This information is combined with visual appraisal, aerial photographs, climatic factors, available crops, and the farm operator's management level to develop the plans.

SCOPE OF WORK:

The Montana Salinity Control Association was formed in 1985 to administer the state control program. It enumpasses the 33 eastern counties now involved in saline seep control. A six member executive board is made up of two supervisors from each of the three control organizations with one being the chairman. The executive board includes Alvin Boxwell and Tom Burns - Triangle Conservation District; Merton "Pete" Purvis and Ellis Hagen - Northeast MT. Saline Seep Association; and John Zinne and Keith Lockie - Southern Taline Seep District. Each of the three organizations have their own board of directors made up of one elected supervisor from each conservation district. The supervisors are instrumental in securing funding each biennium and providing policy and priority decisions for the field team.

The technical field team of four professional planners is headquartered in Conrad, but travels throughout the 33-county area. At least 35 reclamation plans will be developed during FY 87-88. The team will continue to monitor progress and provide implementation assistance on the previously developed 270 reclamation projects. The staff will maintain an active public education program that is coordinated with state and federal agencies and private industry.

Participation in the program is voluntary. Each Soil Conservation District receives farmer applications and establishes priorities based on seep severity, access to recharge areas and probability of implementing a successful control plan. Applications are forwarded to the team office. The program is unique in that the landowners are charged for technical assistance. To be partially self-supporting, MSCA charges landowners for drilling, which comprises approximately one-third of the costs for technical assistance.

Athey to the process of the line seep reclamation is to recognize the two executive parts of a scept the discharge area, which expresses track us a wet salinized spring, and the recharge or upslope area, where salinized ground water originates. The discharge area is easily recognized, but is only a symptom of the problem. Inefficient use of precipitation and soil moisture in the recharge area is the real culprit. Therefore, recharge area for the problem of the recharge area.

The field team investigation of each application is divided into five steps: initial review, drilling, fieldwork, plan development and delivery, and plan follow-up. An initial review of seep development, cropping history, surface water accumulation and any reclamation techniques tried to date. Important items used throughout the planning process are: the earliest and latest aerial photos available to enable stereoscopic viewing, and document seep growth; V.S. Geological Survey topography maps; ASCS farm maps and SCS soil survey information. Monitoring well locations are plotted on the appropriate farm map, and a cost estimate is developed which reflects the anticipated cost of drilling. If the laudowner accepts the cost-estimate and signs a cooperative agreement, the project proceeds. Prior to the inception of drilling, there are no costs to the individual.

mation planning process. There are many benefits derived from the dralling program. The wells allow for more accurate adentification of the potential recharge area of the scaps in question. Soil textures, soil water conditions and depth to tedrack or an imperioable layer are recorded during the drilling process. The owner/operators are encouraged to assist with the drilling and be involved throughout the entire planning process. They are more willing to implement the recommendations if they have helped develop them. Solw utions are written with the open test's particular situation in mind.

The fielders processed of the wells. An elevation survey of the weils, often assisted by the SCs, is also corpored at this time. During plan development, information from the elevation survey, well logs and water table levels are combined to provide a two dimensional picture of the shallow ground water asstem and underlying scolopy. Ground water flow patterns are determined by comparing the relative water table elevations at each monitoring well location. A reclamation plan is delivered to the applicant with specific cropping recommendations as to where and what needs to be planted. The log sero goals and minagement of the land as well as economics and federal tarm program points to any taken into account in developing rotations.

The last step in the field team procedure is an on-going follow-up of plan implementation and reclamation progress. Cooperators are provided a well measurement device for periodic monitoring (monthly from April through October) of the depth to the water table. They send the measurements to the MSCA field office where well hydrographs are kept. Over time, the impact of land use decisions in the recharge area on the shallow ground water system will affect the seep or discharge area. Technical assistance is provided usually for 5-6 years or until reclamation of the salinized area back to productive land is complete. The ultimate goal is to lower and stabilize the water table at seven feet or more in the seep area through intensive cropping systems in the recharge area.

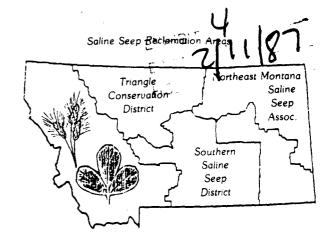
MSCA works closely with the Soil Conservation Service, Agricultural Research Service, Montana Bureau of Mines and Geology, Montana Agricultural Experiment Station, Montana Cooperative Extension Service and Agricultural Stabilization and Conservation Service to deliver up-to-date recommendations at each plan delivery and seasonally thereafter during follow-up. The local SCS and Extension Service often assist throughout the planning process and are provided copies of each plan.

Since the program was funded in 1979, nearly 270 reclamation plans have been developed on over 9,232 acres of saline seep. Presently over 40 applications are in various stages of progress. The average seep acres per plan is 34, with the size ranging from 1 to 545 acres affected. Currently, the average cost to landowners for technical assistance is \$1,400.00 per plan. The price will vary by the number and size of saline seeps being investigated.

Montana Salinity Control Association

P. O. Box 1411 Conrad, Montana 59425 Phone (406)278-3071

February 9, 1987



TO: Long Range Planning Joint Subcommittee Members

The Montana Salinity Control Association (MSCA) would like to go on record in support of the allocation of Resource Indemnity Trust Funds to be used by conservation districts throughout eastern Montana to control and reclaim salinity problems. The RIT fund money provides the basis for a stable program, with one-third of the total budget being generated through landowner payments. The program is designed to provide public education programs to prevent salinity problems as well as working on a farm-by-farm basis to develop individualized reclamation plans.

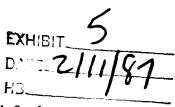
The salinity control program is utilized by various state and federal agencies and municipalities. Many reclamation plans have been developed on state trust lands in an effort to increase their productivity. The Food Security Act of 1985 requires the Soil Conservation Service to develop conservation plans by 1990 for every farm in the farm program. This requires an assessment of environmental problems and suggested solutions that must be implemented to maintain eligibility for farm program benefits. Soil and water salinity problems are among the state's top four resource problems. The SCS works very closely with the MSCA technical field team for assistance in developing and implementing reclamation measures, since the SCS does not have salinity specialists on staff.

The MSCA has provided a continuity for the salinity research programs active from 1970-1978. The program builds upon this strong base and a major goal and continuing achievement of the MSCA has been the implementation of site specific reclamation plans. Additionally, detailed follow-up and updating to ongoing projects is required as technical, environmental and economical influences change. State and federal agencies have no ongoing salinity control programs and in fact most of the personnel who previously worked on salinity have retired or transferred out of state. The conservation district reclamation team provides a storehouse for all technical materials developed and continues to improve on the reclamation techniques.

The development of saline seeps is very dynamic and requires long term management. If allowed to go unaddressed, the problem will only spread and become more of a problem. A successful reclamation program is in place and recommendations are being trusted and implemented by landowners and agencies alike. We urge you to consider continuation of the salinity control program through RIT funds.

Montana Salinity Control Association Executive Board

Triangle Conservation District Alvin Boxwell, Chairman Tom Burns Northeast MT. Saline Seep Assoc. Merton 'Pete' Purvis, Chairman Ellis Hagen Southern Saline Seep District John Zinne, Chairman Keith Lockie



Montana Bureau of Mines and Geology Open-File Report No. 169

Saline Seep Assessment of Geraldine, Montana and Surrounding Area

Contract No. WDG-84-5024

to

Montana Department of Natural Resources and Conservation Helena, Montana 59620

and

Geraldine Rural Area Saline Seep Association Geraldine, Montana 59446

by

Terence E. Duaime Herman R. Moore

Montana Bureau of Mines and Geology Butte, Montana 59701

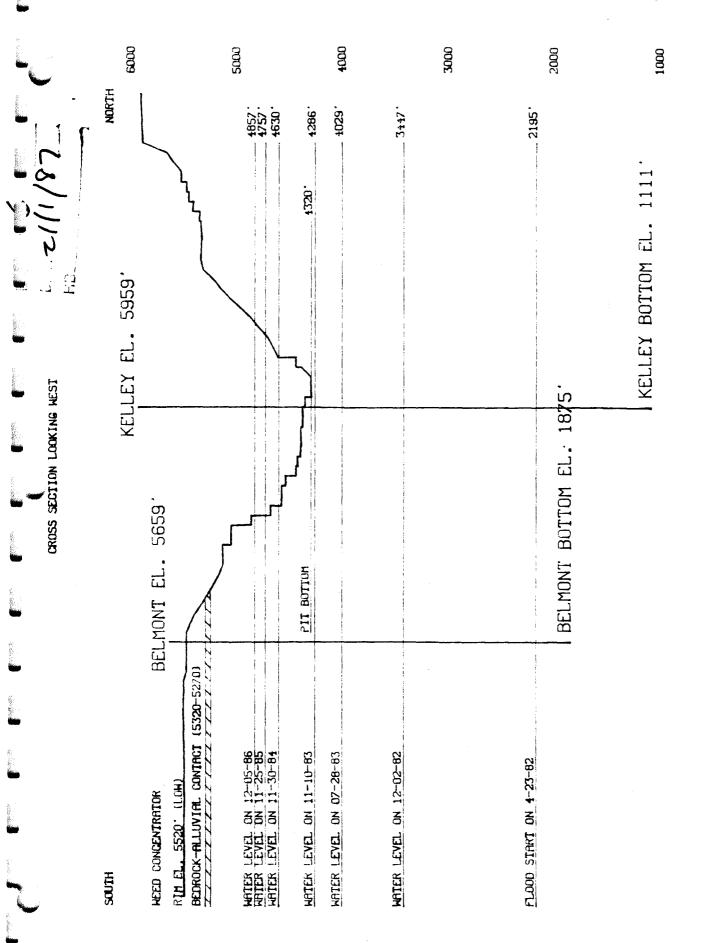
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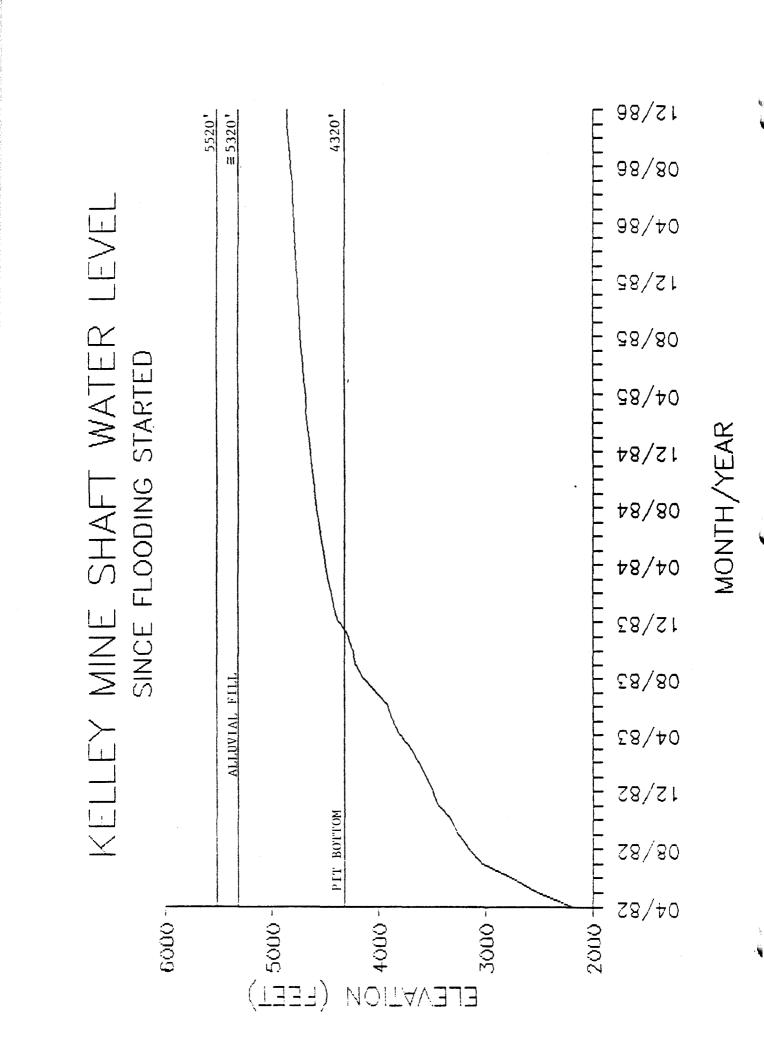
Jane M. Holzer Glenn A. Hockett

Montana Salinity Control Association Conrad, Montana 59425

August 15, 1986

The work upon which this report is based was supported by funds provided by the Montana Bureau of Mines and Geology, Montana Department of Natural Resources and Conservation - Water Development Bureau and Conservation Districts Division, Montana Department of State Lands - Resource Development Bureau and the Citizens of Geraldine.





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| 1,000. | Boron | 270. | 400. |
| 1,000. | Copper | 540. | 213,000. |
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| | Lithium | 67. | 260. |
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⁽¹⁾ Recommended and permissible limits for inorganic constituents in water.

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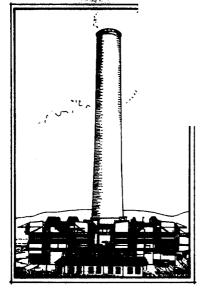
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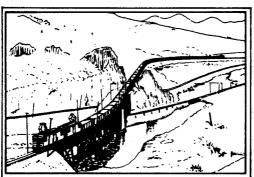


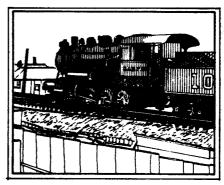


The Anaconda Historical Park System
Man Plar 1985









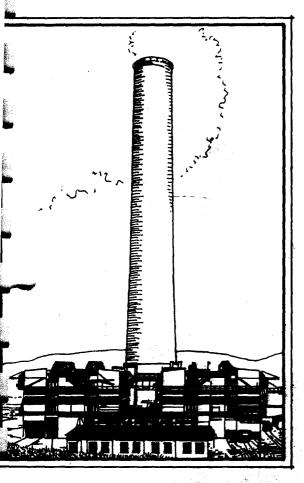
Prepared by Renewable Technologies, Inc. for the Butte Historical Society

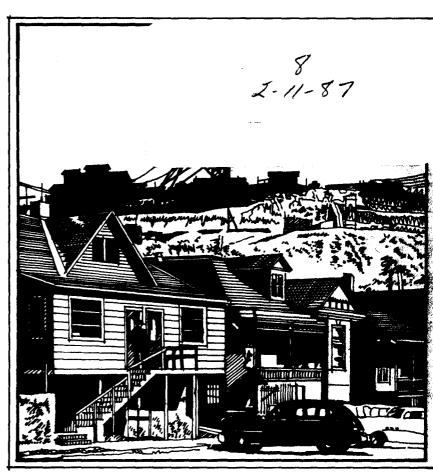
Executive Summary

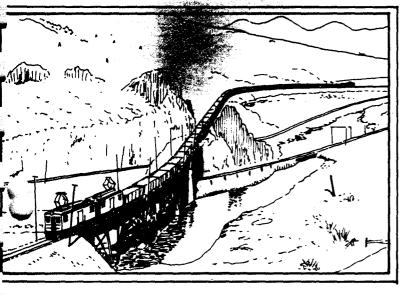


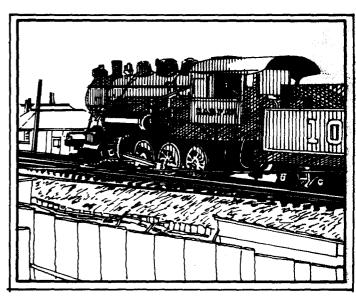


The Butte - Anaconda Historical Park System Master Plan 1985









Today I'd like to address this committee concerning the continuing decline in water quality on the Powder River.

Traditionally, the three S's govern the use of the Powder River - Silt, Salt and Supply, but now a fourth, and perhaps more economically devastating "S" should be added; Sodium.

The Powder River Conservation District and P.R.P.A. are concerned that continued oil well treater discharges and planned water storage projects which dam up the clear water tributaries, will result in further degradation of an already marginal water source.

While the salt contribution of the Salt Creek Oil well treaters (this field is better known as Tea Pot Dome) are fairly recent discoveries by Montana, there is documentation that Wyoming has been aware of these problems as early as 1970. In 1977 Mr. John Wagner of Wyoming D.E.O., Water Quality Division, wrote a letter stating in part, "The high salinity of the discharge significantly increases salinity levels in the Powder River below the mouth of Salt Creek. While this department has not identified these high salinity levels in the Powder River as a significant problem indications are the State of Montana will soon do so."

Seven years later Montana was inadvertently made aware of this situation by way of a reconnaisance study commissioned by the state of Wyoming. This study was to determine the feasibility of daming up the four clear water tributaries of the Powder River. This plan envisioned developing the good-quality water for use in Wyoming and "sending the poor-quality water downstream to Montana to satisfy the requirements of the Yellowstone River Compact". Water which Montana irrigators rely on for dilution

as well as volume. Water which Wyoming hopes to sell to the highest industrial bidder. This prompted five Montana irrigators to testify before a 1984 Wyoming Legislative Committee to tell "our side of the story". The legislators in Wyoming were asked that in their future funding, consideration be given to the impact on downstream irrigators.

Most of the people were shocked! They had been led to believe there was no irrigation anywhere on the Powder River. Following the testimony of the Montana delegation, one representative offered an amendment to the water bill being considered that would "ensure water quality to downstream users" at which point the Wyoming State engineer very vehemently pointed out that it was not in Wyoming's best interest to quarantee anything to the state of Montana, especially water quality. They went on to say that Wyoming was already bound by the Yellowstone Compact and that such matters should be left to the administrating body or the Yellowstone Compact Commission. This Compact is a treaty between Wyoming, Montana and North Dakota with North Dakota playing a very insignificant role. This treaty took 17 years and four attempts to finally be ratified by the three states. In 1951 it was accepted as a legal treaty by the U.S. Congress. Thirty-six years later our DNRC and Wyoming's equivalent is still trying to figure out how to administer this Compact. to administer the Compact, a commission was established composed of one voting member from Montana and Wyoming and a U.S.G.S. representative to act as chairman/tie breaker. But that was as far as they went, not laying down any specific rules for administration. Consequently, the Compact Commission is being hamstrung

in their attempt to administer the Compact by virtue of a lack of rules. Example: Recently, the U.S.G.S. identified a chloride problem on the Powder. The type of chlorides identified originate (1) from geothermal activity, and (2) industrial pollution. There is no geothermal activity anywhere in the Powder River Basin. Gary Fritz, DNRC, Montana's Compact Commission Representative made a motion that the Yellowstone River Compact Commission encourage the U.S.G.S. to do a point source location study. The Wyoming State Engineer (Wyo's YRCC Member) responded that the motion "would die for lack of a second" and furthermore, he refused to study a "known problem" - this from an agency whose standard response is "We'll have to study it". This general lack of understanding of Montana's concerns and an overall Wyoming attitude of "use it or loose it" prompted the idea of a Powder River Basin Management Negotiating team or S.J.R. 16 (1985). We were obviously heading for litigation which would be costly, timeconsuming and would undermine our spirit of cooperation currently enjoyed by the two states as well as setting precedent for the other four basins flowing through Montana originating in Wyoming.

Unfortunately, our attempts at negotiations have failed simply because we do not, in Wyoming's legal eyes, have a solid bargaining position. Their best interest is to do nothing; ours is to find the biggest "stick". Therefore, at the last legislature we asked for a grant to do an on-site test to determine the existing soil condition. Further research by the U.S.G.S. and an independent team reveals we only have 1/2 of the puzzle. To make a

complete picture for EPA action, Wyoming standards update and avoidance of costly litigation in which neither state will win we need this study, if for no other reason than having the data to be able to operate in spite of adverse conditions.

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