MINUTES OF THE MEETING OF THE APPROPRIATIONS SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATION January 27, 1983

The meeting was called to order by CHAIRMAN MANUEL at 8:15 a.m. in Room 132 of the Capitol Building in Helena, Montana on January 27, 1983. Roll Call was taken and all members were present. Also present were DICK GILBERT, LFA; CAROLYN DOERING, OBPP; PATTI SCOTT, SECRETARY; and SENATOR JOHN MOHAR.

DEPARTMENT OF STATE LANDS BUDGET (Tape #29 Side A-001)

WITNESSES for the Department were DENNIS HEMMER, Director of the Department and GARY AMESTOY.

CLASSIFICATION UPGRADES IN LAND ADMINISTRATION AND RECLAMATION

DENNIS TAYLOR, Administrator for the Personnel Division in the Department of Administration, and JOHN McEWEN, Chief of the Classification Bureau in Personnel were present to explain classification procedures. SENATOR SMITH feels there is a big problem with the system when departments get upgrades, and then come back to the Legislature for supplementals to support the upgrades.

DENNIS TAYLOR explained that the Classification Bureau is responsible for classifying and assigning grade levels. Classification has the employee complete the Position Description form to describe their job. Classification then compares those descriptions to other similar positions in state government to decide where their skill levels fit in. In some cases, the positions are re-classified. In some cases, they are not. The employee has the right to appeal the decision of Classification to the Personnel Appeals Board.

An example DENNIS sited is the recent reclassification of the Highway Patrolmen. Classification did not approve their upgrades. The Highway Patrolmen appealed to the Personnel Appeals Board. The Board said they were doing the work of a sergeant, and gave them an upgrade. Since some of the positions in Fish and Game were classified by comparing them to the Highway Patrol, Fish and Game wanted reclassifications. Thus, there was a "ripple effect" and a problem with internal equity.

CHAIRMAN MANUEL stated the Committee was concerned because \$50,000 in upgrades out of only 37 employees, and how the whole process got started.

JOHN MCEWEN, Chief of Classification, stated the Department of State Lands had requested a review of all of the positions in the Reclamation Division, because they felt over the course of several years, the work had changed and become more complex. Classification did a thorough investigation including on-site job audits. The SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATION Page 2 January 27, 1983

Department also made a recommendation on how they felt the positions should be classified. The result was that Classification felt the quality of work had changed and had become more complex. Classification changed the "Mine Specialist" position to a new job class called "Reclamation Specialist". As a result, these positions were upgraded. Part of the change in duties was due to the addition of the Forestry Division, and trying to melt Forestry and Lands activities together.

JOHN stated that 90% of all reclassifications approved are through Departmental requests. Ten percent are through the appeals process. The Department controls what work is assigned to what positions, not Classification.

SENATOR SMITH stated the Department should have had some idea last session what position these employees were going to be in, and why didn't the Department bring it to the attention of the Committee at that time. DENNIS HEMMER stated he did not know the Department's reasoning at that time, but that he had worked in the Reclamation Bureau. The employees in Reclamation are specialists. When anyone came to work for the Bureau, they normally were classified a "Mine Specialist-1. They were to be entry level people. But since the people in Reclamation were specialists, they ended up doing the same work as those in the higher levels. Because they were not getting paid the same, there was high turnover, as these people would leave to go to private industry. The mining industry was getting upset, because every time they came to the office, there was someone new to deal with. Reclamation realized they were paying their employees less than comparable positions, and wanted "equal pay for equal work."

SENATOR BOYLAN felt if the Department is going to upgrade and assign new responsibilities, the Department should operate within the level the Legislature assigned to them, and perhaps lay some employees off. SENATOR BOYLAN also felt that in these times there will be less turnover because of the high unemployment.

DENNIS HEMMER agreed there is less turnover, and that last biennium, they did operate within the level assigned to them and that supplementals should not be used for reclassifications. But going into the next biennium, DENNIS would like to have the money to pay these people their fair wage. Because of the specialties these people have, it is very hard to replace them.

SENATOR SMITH asked why they didn't reduce the number of FTE's if they want to pay these people more money. DENNIS HEMMER felt if they reduced the number of FTE's in Reclamation, they can't do the job. SENATOR SMITH stated since they were upgraded, they should be more efficient and able to handle the duties. MR. HEMMER stated the industry doesn't feel they are doing their work fast enough now. SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATION Page 3 January 27, 1983

SENATOR SMITH felt Departments are putting the Legislature in a terrible position by approving upgrades after the budgets are set. He asked if Personnel has ever pursued this into District Court. DENNIS TAYLOR said they have pursued some cases to District Court, but that it takes considerable money and resources to pursue it, and if Personnel feels they can't win, they do not pursue. In other words, MR. TAYLOR said "they won't ride a dead horse to finale."

SENATOR SMITH asked what would happen if this Committee does not approve the supplemental. DENNIS stated Personnel would do nothing. Recently, the Department of Institutions had this problem, and simply had to "eat" that in their current level, and make changes in their programs.

CHAIRMAN MANUEL asked MR. HEMMER to clarify the problem in losing these people to private industry. MR. HEMMER stated the salaries paid to these employees are not near the scale of private industry. DENNIS TAYLOR stated that the results of a recent "Salary Survey" showed that salaries for technical professions in State Government are significantly below private industry. REPRESENTATIVE STOBIE asked what private industry was taking these employees. DENNIS HEMMER stated mining, consulting, and the Federal Government. Unfortunately, technical positions in State Government are often used as a "training ground" for people who then move into private industry.

SENATOR LANE asked how much the Department has grown these past couple of years. DENNIS HEMMER stated the only significant increase was the addition of the Forestry Division, which increased the total employees for the Department from 72 to 265.

CAROLYN stated if the upgrades were not funded, the employees could go to the Personnel Appeals Board and force the Department to pay. SENATOR SMITH felt if the Legislature is supposed to oversee, and they continue to allow these supplementals for upgrades, maybe it should be tested in court.

DENNIS HEMMER summarized his position as the Director that these people deserve "equal pay for equal work." In between sessions, he is not happy when people come in for upgrades, because they must eat this out of their budget. But he feels these employees deserve it.

RECLAMATION DIVISION MODIFICATIONS FOR AN ATTORNEY (Tape #30 Side A-001)

SENATOR BOYLAN asked why the need for a new attorney and what kind of lawsuits they are having problems with. (EXHIBIT B from 1/24/83 Page 15) DENNIS stated the Department presently has two attorneys working in Land Administration, Forestry, and non-coal reclamation. SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATION Page 4 January 27, 1983

They are general funded. With the addition of the Forestry Division to the Department and the development of Montana's permanent program for compliance with the Federal Surface Mining Control and Reclamation Act, the workload has increased significantly. No attorneys have yet been added as a result of any of these changes. The two attorneys are critically overloaded and DENNIS feels they need this additional help. The requested attorney would be federally funded, and if these funds dry-up, the position will be terminated.

NEW FTE'S (EXHIBIT B from 1/24/83 Page 16)

The Department is also requesting one FTE for an EIS staff Wildlife Biologist. The current biologist cannot continue to work under contract because of the Fair Labor Standards Act. Monies for this position are from fees assessed to industry for impact assessment.

Two FTE's are requested for the Abandoned Mine Reclamation Bureau. Two FTE's are requested for the Coal and Uranium Bureau. DENNIS felt there is some urgency, as new projects are increasing.

RIT (RESOURCE INDEMNITY TRUST) FUNDS (Tape #29 Side B-085)

CHAIRMAN MANUEL inquired if these funds are being used correctly, as there is a rumor they are not. DENNIS HEMMER felt the best defense for use of these funds is using them in the Reclamation Division. The RIT money comes-in from the mineral industry, and is going back-out to assure reclamation of our lands. DENNIS stated they use the base program for Coal and Uranium Bureau, Hard Rock and Open Cut that is funded by RIT as the 20% match for the Federal fund match.

LAND ADMINISTRATION (Tape #29 Side B-137)

TRAVEL

CHAIRMAN MANUEL asked for clarification of the reorganization cost of \$29,000 in FY 84 and \$31,000 in FY 85. DENNIS stated part is for information to go out to the field offices, part is for travel to investigate problem areas in rights of way, oil and gas investigations, and temporary access permits.

DENNIS read part of the preliminary report by the Legislative Auditor: (Referring to field staffing)

"Present state statutes mandate school trust land be managed to secure the largest measure of legitimate and reasonable advantage to the state. We believe the department cannot act in the best interest of the state and cannot place state owned lands to their SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATIONS Page 5 January 27, 1983

highest and best use using their present levels of department field staff." The Audit Report in reference to gravel pits: "The pits are not systematically monitored by the department personnel to verify the amount of gravel that is removed." The Audit Report in reference to oil and gas: "It is questionable whether the department can pursue its objective to maximize its trust by using the present level of mineral leasing staff. As the department's leading revenue producer, mineral leasing should have sufficient FTE's to truly maximize the revenues received by the School Trust." DENNIS stated he is not coming in for more FTE's as recommended by the Legislative Auditor, but attempting to get maximum use from the FTE's he already has. In order to do this, his people must travel.

REPRESENTATIVE HEMSTAD asked just how much is for travel. CAROLYN stated OBPP had reduced the original request, and the total increase in travel is \$4,700 for 5 FTE's. CAROLYN also stated that projections were based on actual expenses. The total amount of the increase in FY 84 is \$18,986 and FY 85 is \$20,185.

SENATOR SMITH asked what happened to their appropriation last biennium, in which costs were based on an increase in gas prices, but, in fact, the cost of gas had gone down. The Department did not have an answer.

REPRESENTATIVE HEMSTAD asked what costs are associated with information for the outlying offices, and what costs associated with outfitting offices. DENNIS said \$5,000 for each year for materials for the offices. Historically, Lands people had always worked out of their homes, and never had offices. In addition to maps and materials, DENNIS is equipping some offices with microcomputers, so field staff may communicate with Helena.

VEHICLES

DENNIS stated they are requesting two vehicles; a two-wheel drive and a four-wheel drive.

EXHIBITS

DENNIS provided the Committee with information on the Abandoned Mine Reclamation Program (EXHIBIT A) and information on the Forestry Division (EXHIBIT B). DICK GILBERT gave the Committee an explanation of the major differences between OBPP and LFA in the Forestry Division (EXHIBIT C). SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATIONS Page 6 January 27, 1983

RESOURCE DEVELOPMENT WATER RIGHTS (Tape #29 Side B-397)

CHAIRMAN MANUEL asked how the water-rights contracts work with DNRC. DENNIS stated DNRC is recording all water rights on computer. State Lands is then getting the information from DNRC to find out what was filed on their tracts. When they get into adjudication, they can then defend their claims.

SENATOR SMITH expressed concern over a state department filing a water claim on private land, and then the land owner would not have adequate protection. DENNIS clarified they are only filing claims on state-owned lands.

CONTRACTED SERVICES (RESOURCE DEVELOPMENT)

DENNIS stated the Department contracted with private businesses to file the water right claims on state owned lands, rather than hire new people to do this. REPRESENTATIVE STOBLE asked if that work is already done, why the increase in contracted services. DENNIS stated they are preparing for the adjudication hearings, and will need expert testimony. \$44,955 FY 84 and \$47,652 FY 85 is for water right adjudication. SENATOR BOYLAN felt that was an enormous amount for this. DENNIS stated they have over 8,000 claims. The State Land Board must also approve this, but DENNIS feels he needs the money to be fully prepared. Some of these monies would be used on projects related to the water rights.

CAPITAL PROJECTS (RESOURCE DEVELOPMENT) (Tape #29 Side B-650)

DENNIS stated the State Land Board is showing more interest in non-agricultural projects, because the return on their investment is better. He stated again the importance of getting his people in the field to be sure the leased land is being used in accordance with the requirements of the lease. DENNIS stated they are investigating several projects for which they will use the money, but cannot say which ones the Board will approve.

FORESTRY (Tape #30 Side A-164)

CHAIRMAN MANUEL asked about the two clerks. DENNIS stated one clerk is the "slash clerk." This clerk takes in the slash deposits and when the slash has been reduced, she reimburses the contractor. She is very busy about 80% of the time. The other clerk is in the Leasing Bureau, handling timber sales and building cabin sites. The Governor's Council on Management had recommended that the Department do away with these positions. However, because of the heavy work load, that would not be feasible. SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATIONS Page 7 January 27, 1983

TIMBER SALES

GARY stated for the last few years, they have not had any problem selling timber. Even though they may be getting a lesser price for the timber, the Department is still forced to sell because the majority of timber has been damaged by insects.

CAROLYN asked about the additional \$119,000 in their budget for GARY stated this was because the timber was HAZARD REDUCTION. not cut, even though it was sold. The lumber industry or whoever bought the timber is waiting for a more opportune time to cut. The Department did not spend the funds that were previously authorized because the timber was not cut. These funds were for the Department to go in and take care of the slash. GARY stated they are asking for a re-authorization of these funds. He feels the lumber industry will be picking up this biennium. The Department is required to comply with the State Slash Law. The Department also contracts with local people with big equipment to help with this slash disposal.

APPRAISING LAND VALUES (Tape #30 Side A-391)

CHAIRMAN MANUEL asked GARY to explain the approximately \$18,000 to appraise land values. GARY stated that in 1982, the Department was in the process of appraising all state lands. Because of some problems (a moratorium) with the Legislature on cabin sites they quit appraising. They did not spend the monies. They are asking that the Committee re-appropriate this money to them, in the hopes they can continue appraising. The Department did raise the cabinlease rates, based on inflation only.

CONTRACTED SERVICES (Tape #30 Side A-447)

The Division has five buildings they need janitorial services for in Missoula. In the past, they have used work-study students to do the janitorial services. Work-study is no longer available, and now they must contract these services out.

STATE FIRE DISTRICTS

State and private land owners are assessed \$.16 an acre. As those funds come to the Department, the Department must then pay the protection agencies for their services. The assessed funds amount to about \$357,000 a year. The Department is asking for a \$70,000 increase in this area. Last session the Legislature allowed the Department to assess a \$6 minimum in addition to the \$.16. The Department now needs to pass that increase on to the protection agencies. These are "pass through" costs and GARY is just asking for the authorization to spend. SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATIONS Page 8 January 27, 1983

EQUIPMENT (Tape #30 Side A-565)

GARY stated they are buying tankers and tanks and replacement vehicles for the County Co-Op Fire Program. This equipment is for the 35 counties already in the program.

CAPITAL PROJECTS (Tape #30 Side B-004)

CAROLYN stated their original request was reduced to \$83,000 from \$183,000 because some of the projects went to Long-Range Building. The projects that remained were: FY 84 - EXPAND CARPENTER SHOP, \$6,000; WATER LINE, \$16,000; COMPLETION CLEARWATER LOG OFFICE/ BUNKHOUSE, \$11,000; and DISPATCH OFFICE REMODELING, \$10,000. FY 85 - REPLACE HEATING SYSTEM AND ADD AIR CONDITIONING, \$10,000; CONSTRUCTION OF LOG RESIDENCE, \$20,000; and REMODEL OFFICE BUILDING, \$10,000.

CHAIRMAN MANUEL thanked DENNIS and GARY. The Committee went into work session.

FORESTRY (Tape #30 Side B-067)

OPERATING BUDGET

REPRESENTATIVE STOBLE MOVED TO ACCEPT THE OBPP BUDGET FOR FY 84 AND FY 85. MOTION PASSED UNANIMOUSLY.

MODIFICATION

REPRESENTATIVE STOBLE MOVED NOT TO RECOMMEND RESTORING THE TWO FTE'S IN THE FORESTRY DIVISION. REPRESENTATIVES STOBLE AND HEMSTAD VOTED YES. SENATORS: LANE AND BOYLAN VOTED YES. CHAIRMAN MANUEL VOTED NO. MOTION PASSED. (SENATOR SMITH WAS EXCUSED)

EQUIPMENT (Tape #30 Side B-236)

SENATOR BOYLAN MOVED TO APPROVE FOR EQUIPMENT \$511,269 FY 84, and \$574,343 FY 85. MOTION PASSED UNANIMOUSLY.

DICK stated that if the Committee had gone with the OBPP numbers, they would have increased the Equipment budget by over \$200,000 from the last biennium. In FY 82, the Department spent \$510,000. Their request for this biennium was very extensive, but the Committee felt since this is general fund, it was too much of an increase at this time. So they cut \$50,000 from the OBPP numbers in FY 84, and \$50,000 in FY 85, or a total of \$100,000 for the biennium. This gave the Department one-half of their requested \$200,000 increase. SUBCOMMITTEE ON NATURAL RESOURCES AND BUSINESS REGULATIONS Page 9 January 27, 1983

FORESTRY DIVISION CAPITAL PROJECTS REQUEST (Tape #30 Side B-295)

REPRESENTATIVE STOBLE MOVED TO APPROVE THE FOLLOWING OBPP FIGURES FOR FY 84 FOR \$6,000 TO EXPAND THE CARPENTER SHOP; WATER LINE -\$16,000; COMPLETION OF THE CLEARWATER LOG OFFICE/BUNKHOUSE - \$11,000. FY 85 TO REPLACE HEATING SYSTEM AND ADD AIR CONDITIONING - \$10,000; AND THE CONSTRUCTION OF LOG RESIDENCE - \$20,000. THE COMMITTEE WILL NOT APPROVE IN FY 84 - DISPATCH OFFICE REMODELING - \$10,000, NOR THE REMODELING OF OFFICE BUILDING - \$10,000 IN FY 85. SENATORS LANE AND BOYLAN VOTED YES. REPRESENTATIVES HEMSTAD AND STOBLE VOTED YES. CHAIRMAN MANUEL VOTED NO. (SENATOR SMITH WAS EXCUSED)

FORESTRY DIVISION VACANCY SAVINGS

REPRESENTATIVE HEMSTAD MOVED TO ALLOW 4% VACANCY SAVINGS FOR THIS DIVISION, WHICH IS THE SAME AS LAST BIENNIUM. MOTION PASSED UNANIMOUSLY.

RESOURCE DEVELOPMENT DIVISION (Tape #30 Side B543)

SENATOR LANE MOVED TO APPROVE THE OBPP FIGURES FOR TRAVEL. SENATORS LANE AND BOYLAND VOTED YES. CHAIRMAN MANUEL VOTED YES. REPRESENTATIVES STOBLE AND HEMSTAD VOTED NO. MOTION PASSED. (SENATOR SMITH WAS EXCUSED)

OPERATING BUDGET

SENATOR BOYLAN MOVED TO APPROVE THE OBPP OPERATING BUDGET. MOTION PASSED UNANIMOUSLY.

EQUIPMENT

REPRESENTATIVE HEMSTAD MOVED TO NOT ALLOW ANY FUNDING FOR EQUIPMENT IN FY 84. MOTION PASSED UNANIMOUSLY.

The Committee felt lens equipment for a camera was excessive spending at this time.

RESOURCE DEVELOPMENT - FUNDS FOR ADJUDICATION PURPOSES

The Committee instructed CAROLYN and DICK to write a motion for the Committee to consider on the request for the Capital Project money in the Resource Development Program. If needed, the Department would like to use some Capital Project funds for Water Adjudication. The Committee agreed that this money may be better spent on Water Adjudication rather than Capital Projects.

The meeting was adjourned at 11:55 a.m.

VISITORS' REGISTER

SHOUSE SubCom on NatiRes & Businescommittee

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Date -27-83

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SPONSOR

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NAME	RESIDENCE	REPRESENTING	SUP- PORT	OP- POSE
Gary G. Brown	Missoula	state Forester, DSL	V	an a g
Dennis Hemmer	Holena	J 51	1	
Dennis M. Tank	Kelana	Reconnel Du/Del A-	化化化学 - 大心 酸素化	
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IF YOU CARE TO WRITE COMMENTS, ASK SECRETARY FOR LONGER FORM.

PLEASE LEAVE PREPARED STATEMENT WITH SECRETARY.

Form CS-33 1-81

DEPARTMENT OF STATE LANDS

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TED SCHWINDEN, GOVERNOR

CAPITOL STATION

1625 ELEVENTH AVENUE

1539 ELEVENTH AVENUE HELENA, MONTANA 59620

HELENA, MONTANA 59620

Exhibit A

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(406) 449-2074 (406) 449-4560 RECLAMATION DIVISION

(406) 449-2711 EIS TEAM

January 26, 1983

MEMORANDUM

TO: Dennis Hemmer

FROM: Dick Juntunen

RE: Montana Abandoned Mine Reclamation Program

The attached summary sheet describes our reclamation program and is the standard summary sheet we hand out at public hearings. We anticipate letting bids for all remaining construction projects in our budget this spring.

For future expenditures the AMR program anticipates spending approximately \$5 million per year for construction activities and approximately \$1 million per year for administrative services (Annual Work Plan) which includes all tasks up to actual earth moving. The break down for all our grants to date is as follows:

<u>Administrative</u>	Amount	<u>Closing Date</u>
Abandoned Mine Inventory	\$ 220,047.75	5/31/81
National Inventory Sand Coulee/Belt	\$ 67,780.00	9/17/81
Master Plan	\$ 150,259.00	9/30/82
Annual Work Plan FY81	\$ 273,926.00	6/30/82
Annual Work Plan FY82	\$1,117,820.00	6/30/83
TOTAL	\$1,829,833.75	

In the FY82 Annual Work Plan administrative grant, line items are as follows:

Personnel Benefits	= \$ = \$	118,000 23,600	• • •
Travel	= \$.	38,400	
Equipment	= \$	41,451	
Supplies	= \$	4,150	
Contracted Services	= \$	875,000	(engineering, mapping drilling, and environ- mental studies)
Other	= \$	6,000	· · ·
Indirect Costs	= <u>\$</u> <u>\$</u> 1	11,219	

ME 0 to Dennis Pue Two January 26, 1983

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Closing Date Construction Amount \$ ilgrim Creek, Cascade County 16.891.00 9/30/81 Ś mmington, Cascade County 25,120.00 9/30/81 Heal Mine #1, Cascade County 64,206.00 9/30/82 [lein Mine #1 & 2, Cascade County \$ 190,240.30 7/30/85 and Coulee Dump, Cascade County Black Diamond, Wibaux County \$ 320,928,20 7/30/85 \$ \$ 477,301.00 7/30/85 Brown, Cascade County 287,412.00 7/30/85 \$ Centerville D, Cascade County 193,242.00 7/30/85 \$ East Belt, Cascade County 321,516.00 7/30/85 Ś Lekvold/Shaw, Daniels County 433,266.00 7/30/85 Lewis Coulee, Cascade County \$ 668,737.00 7/30/85. Me North Belt, Cascade County \$ 271,858.00 7/30/85 Ś North Culbertson, Roosevelt County 585,251.00 7/30/85 \$ Royan, Roosevelt County 412,310.00 7/30/85 North Star, Powder River County Ś 458,266.00 7/30/85 N.W. Centerville, Cascade County \$ 330,727.00 7/30/85 **#5** Coulee Mouth, Cascade County \$ 167,057.00 7/30/85 Storm King, Custer County 692,287.00 7/30/85

TOTAL

During a recent oversight inspection by the Office of Surface Mining it was stated by OSM personnel that the Montana Abandoned Mine Reclamation Program accomplishes much more work with fewer people than any other state and we have one of the best programs nationwide. Many states with similar reclamation funds are asking for many more people; for instance, Indiana, with the same size reclamation fund, anticipates having <u>27</u> personnel in their AMR program this year.

\$5,916,615.50

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rsanal Services:	2[14 FTE'S	9.72 FTE'S	9,72'FTE's	Foresters, Firefighters	
es S	30,170	136,626	166,796		-
SC 25					
ongevity					
ชื่อคณะที่มีธร	6,034,	22,775	28,309		
AL PERS. SERVICES	35,204;	159,401	195,605		· · ·
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Contracted Services	0	50,300	50,300	Helicopter, Equipment maintenance contract	ts .
reglies & Faterials	22,750	11,000	33,750	Tools, equipment, supplies for fire crews	, Lookou
	250	700	950	Phone	;
rarel.	650	1,150	1,500	Training of firefighters	
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60 60 60 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	150	2,200	2,350	Fire Station	
Gepair 3. Vaintenance	2,100	4,300	6,400	Tankers, saws, radios, station	
)thor Expense	100	200	300	Advertising notices	
TAL OPERATIONS	26,050	69,950	96,000		
ital Equipmont	135,650	52,850	238,500	Fire trucks, slipon units, radios, pumps	Saws
fial Improvements	44,500	10,000	54,500	Lookout base, move station buildings, see	urity fea
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Background:

The state is charged with providing fire protection to the forested lands of the state. The Division of Forestry protects about 5 million acres of forest land in Central and Western Montana. A portion of this protection (2.2 million acres) is contracted to the U.S. Forest Service. In turn, the state protects a portion of USFS lands (280,000 acres) inside state districts. This creates an imbalance of 1.9 million acres between the two agencies.

Problem:

The Forest Service has requested full reimbursement of their fire protection costs for the 2.2 million acres at 657 per acre. This amounts to nearly a 50¢ per acre increase, totalling 1.1 million dollars more than is currently being paid to them.

This request is not new, in fact it was first presented as an issue to the state in the early 1960's. The Forest Service withdrew protection from l_2^2 million acres of state and private land at that time, but was willing to forestall any further action on recovering their full protection costs as long as the state made an "honest effort" to reduce the acreage imbalance. This issue was included in the Governor's budget as a possible problem area.

With tighter federal budgets, the Forest Service is now demanding full reimbursement unless a definite timetable is established by the state to zero out the protection acreage balance.

Proposal:

Enter into a program to reduce, over a ten year period, the current 1.9 million acre imbalance with the Forest Service. Approximately 400,000 acres per biennium would be removed from the Forest Service contract, and protection begun by the state. If the Forest Service agrees to withhold any increase in fees, the state could save a total of $4\frac{1}{2}$ million dollars over the ten year period versus payment of $4\frac{1}{2}$. Ger acre to the federal agency. In addition, some 150,000 dollars would be saved every year thereafter due to state protection versus federal. The same level of protection would be maintained. An increase in the assessment limit (76-13-201 MCA) would be needed at the next legislative session if assessment funds are to be used to carry a share of the increased cost.

P. O. Box 7669 Missoula, MT 59807

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Forest Service

Reply to: 5170

Date: SEP 8 1982

Gary G. Brown, Administrator Division of Forestry Department of State Lands 2705 Spurgin Road Missoula, Montana 59801

Inited States

Department of

Agriculture

Al Troutt's letters to you dated January 22 and June 18, 1982, discuss the need to revise our cooperative fire protection agreement and established July 1, 1983, as the effective date.

We will charge the full cost of protection beginning July 1, 1983, or I could enter into an agreement for offset protection. It would not be practical to go to full offset protection in a short period of time due to impact on our organizations, lead time required for budgeting, planning, etc. We could mutually agree on an implementation plan, working toward full offset protection over a specific planning period.

The Forest Service protects over 2,200,000 acres of State and private Land in Montana. The cost of protecting these Lands is \$.657 per acre (based on an average of the most recent 5-year costs) or a total of \$1,445,000.

It is important that we continue a cooperative operand to fire protection in order to provide the most cost effective protection program. If you have any questions, please let me know. I would be glad to discuss this with you in more detail at your convenience.

Sincerely,

Dear Gary:

. TOM COSTON Regional Forester

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<u>FY</u>	Acres of Reduction	State Funds		Private Landowner Funds	(Currently \$357,000)
84 85 86 87 88 90 91 92 93 94	355,000 360,000 400,000 400,000 400,000	292,000 292,000 170,000 150,000 164,000 141,000 162,000 137,000 162,000	(462,000 total) (442,000 total) (606,000 total) (583,000 total) (745,000 total) (720,000 total) (882,000 total) 858,000 total 770,000	0 38,000 38,000 38,000 38,000 38,000 38,000 38,000 38,000	<pre>(76,000 total) (114,000 total) (152,000 total) (190,000 total)</pre>
95 96 97			745,000 707,000 707,000 total	38,000 38,000	(228,000 total) 228,000 +357,000 currently in budget

Total: \$1,292,000

200 BLZ 5 000 000/04/2/ 46 t 000258 000 502 90 en qs/ 3 1061 000 000 84 Proposed Reduction in USFS protection contract. 00000 8 000872 1 33 Assessments 25 258 Ķ ϕdo 400,000 Current assessment /chcl 30, 25 000 986 Increased 10 00812 Fund 000001 State General 00 DOOEFL 4 000 1,916,000 Acres ل 68 000785 22 000 000-88 000 407 Z **A** 学習者 60 0000 BE 361,000 98 and the second second second 0% 8 भे and the second se g 540000 35.5,000 60.03 48, 000 062 RCRES 藻 90 600,000 14000 1,20000 900,000 30000 DOLLOUS

TIMBER RESOURCES -- PROVISION OF FIRE PROTECTION SERVICES

76-13-201. Duty of owner to protect against fire. (1) An owner of forest land classified as such by the department shall protect against the starting or existence and suppress the spread of fire on that land. This protection and suppression shall be in conformity with reasonable rules and standards for adequate fire protection adopted by the board.

(2) If the owner does not provide for the protection and suppression, the department may provide it at a cost to the landowner of not. more than 16 cents per acree per year and not less than \$6 per owner per year in each protection district. The owner of the land shall pay to the county treasurer of the county in which the land is situated the charge for the same approved by the department in accordance with this part and part 1.

(3) No other charges may be assessed those landowners participating except in cases of proven negligence on the part of the landowner or his agent.

76-13-202. Means by which department may provide protection. The department may provide for forest fire protection of any forest lands through the department or by contract or any other feasible means, in cooperation with any federal, state, or other recognized agency.

76-13-203. Extension of the forest fire season. In the event of excessive or great fire danger, the period defined in 76-13-102(6) may be expanded when in the judgment of the department dangerous fire conditions exist. When expanded, the department shall give public notice.

76-13-204. Creation of forest fire protection districts. (1) The board may create forest fire protection districts. Before a district is created, the board shall hold a hearing in any county in which the proposed district or a part thereof is included and the department shall give notice of the hearing at least 20 days in advance thereof to all owners to be affected by the proposed district. Service of the notice may be made by registered or certified mail or by publication in a newspaper published in the county in which the hearing is to be held or, if no newspaper is published in the county, than in a newspaper having a general circulation therein.

(2) A forest fire protection district may not be created unless approved in writing by vote of not less than 51% of the owners representing at least 51% of the acreage to be involved in the proposed forest fire protection district.

76-13-205. Determination of boundaries of district. In establishing boundaries of organized forest fire protection districts covering forest lands, the board may for the purpose of administrative convenience designate recognizable landmarks as boundaries.

76-13-206. What constitutes compliance with duty to protect against fire for landowners within district. An owner of forest lands within an organized forest fire protection district while a member of or while participating in a recognized agency for forest protection or within areas protected by a county shall be considered to have fully complied with the requirements of 76-13-201.

FIGURE 1

MAP SHOWING GENERAL LOCATION OF FISHER RIVER-WOLF CREEK AREA







7

COUNTY COOP FIRE ROGRAM HISTORY

Background:

The state is charged with providing fire protection for the natural resources on state-owned lands, and to cooperate with local fire forces in providing wildfire protection to the privately-owned range and crop lands of the state. Any county that does not have a cooperative fire agreement with the state must reimburse the state's expenses for assistance during a fire emergency in that county. The state and 35 counties are now participating in the cooperative fire program. The state provides assistance in organizing, training, preventive maintenance, support on fires beyond the counties' capabilities, and also obtains excess military equipment which is converted to firefighting tankers. The counties fight the fires on both state and privately-owned lands.

IV

Problem:

Nine counties entered the program in FY '82 and '83 (Beaverhead, Blaine, Carter, McCone, Powder River, Richland, Sheridan, Stillwater, Wibaux). Funding needs to be continued to work with these counties. Funds have been requested as exceptions to the '82 Base for this purpose.

Five counties are requesting entry into the program (Carbon, Fergus, Madison, Musselshell, Valley). Funding is needed to begin work with these five counties. The Equipment Development Shop is at maximum production partially due to the long travel distances and preventive maintenance work in Eastern Montana. Mechanic assistance is needed prior to adding the five counties. Organizing of rural volunteer crews in 22 eastern counties requires training of volunteers in these counties to safely use state equipment.

Proposal:

Continue funding to allow work with the nine counties. Add two FTEs and funding for the state to enter into a cooperative program with the five new counties.

Funding Needed (General Fund):

Nine counties:	\$ 97,554 \$ 97,554	'84 '85	(Included as exceptions to '82 base)
Five counties:	\$141,290	'84	(New Funding)
(Two FTEs)	\$141,290	'85	



Ц



	-84	- 85	Total	Items		
Personal Services:	2.00 FTE's	2.00 FTE IS	2 00 FTE's	Firewarden, mechanic		
Salaries	39,297	39, 297	78,594			
Mages						
Overtime 4						
Longevity						
Unallocated Salaries						· · · · ·
Cenefits	8,253	8,253	16,506			
TOTAL PERS. SERVICES	47,550	47, 550	95,100			
Operations:						
Contracted Services	1,200	2,400	3,600	Insurance		
Supplies & Materials	27,750	28,970	56,720	Fire tools, hose, reels		
Commun. & Transp.	1,700	1,700	3,400	Phone		
Travel	7,310	7,890	15,200	Procure-deliver équip.	training, preventi	ve maint
Rent	18,000	18,000	36,000	Rent shop		
Utilities	0	0	0			;
Repair & Maintenance	12,780	14,780	27,550	Refurbish military vehi	cles	
Cther_Expanse		0	.0			
TOTAL OPERATIONS	68,740	73.740	142,480			
Çapital Equipment	25,000	20,000	45,000	Pumps & tanks		
Capital Improvements						
TOTAL OPERATING BUDGET	141,290	141,290	282,580			
NDING						
neral Fund	141,290	141,290	282,580			
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Coun

Organize 5 Rural Fire Councils

Draft Annual Fire Plan

Procure 15 fire vehicles - excess

Purchase pumps, tanks, tools

Build fire tankers

Train - 2 sessions/County/year -advanced, Approximately 100 firefighters/County - basics Preventive Maintenance on 120 - 130 tankers January 26, 1983

1-21-00 ExhibitC

TO: Natural Resources Subcommittee

.....

FROM: Dick Gilbert, Assistant Analyst

SUBJECT: Summary of Major Differences in Forestry Division OBPP/LFA

1. The department is requesting an increase of \$17,984 plus inflation for specialized services to appraise land values for purposes of:

a. Setting commercial lease rates on state forest land-

b. Gaining access to state lands through right of way acquisition-

c. Land exchange with other agencies-

This is a general fund request.

2. The 1981 Legislature failed to include 1/2 of pass through monies to pay the USFS and the BIA their share of landowner assessments for fire protection, resulting in budget amendments in both fiscal 1982 and fiscal 1983. These payments are necessary each year. The department is requesting \$70,000 for this purpose. This is from federal earmarked funds.

3. The department is requesting \$104,000 be added to their 1982 base. According to the department this was earmarked revenue not expended in fiscal 1982 because of poor timber sale market conditions. The department expects the timber market to return to normal in fiscal 1984 and fiscal 1985 requiring authorization to spend hazard reduction (Brush) and timber stand improvement monies. The money is from earmarked funds.

LEG:NR:cm:c

1-27-83 Exhibit C

PRESCRIBED FIRE PILOT PROJECT

Montana Division of Forestry

Department of State Lands

FINAL REPORT

Prepared by

Ed Mathews

Prescribed Fire Specialist Fire Management Bureau

INTRODUCTION

Between November of 1979 and November of 1982 the Montana Division of Forestry planned and conducted nine prescribed fires on state and private lands in western and central Montana. The prescribed fire pilot project was initiated at the direction of the State Forester, Gary Brown, with the approval of the State Land Commissioner, Gareth Moon. The purpose of this report is to summarize the results and findings of the prescribed fire pilot project.

Agency Responsibilities

Under current Montana law the Department of State Lands (DSL) is authorized to "cooperate with all public and other agencies in the development, protection, and conservation of the forest, range and water resources in this state." (NCA 76-13-104(2)

The goal of the Division of Forestry relating to prescribed fire is "to provide for the wise, controlled use of fire as a basic tool in resource management on state and privately owned lands by perfecting planning and application techniques and procedures relating to the prescribed use of fire." (Montana Division of Forestry - Goals, Objectives & Policies Manual.)

Requests for Assistance

Department of State Lands field offices and the Forestry Division's Fire Bureau received numerous requests from private landowners in Montana in 1979 wand 1980 for assistance with and advice on the use of prescribed fire. Most of the landowners that requested assistance knew that fire could be used for beneficial purposes on their lands, but most lacked the technical expertise to plan and conduct the actual burns. In response to these requests, the Fire Bureau drafted and implemented the Prescribed Fire Filot Project. This project was designed to explore the feasibility of advising and/or assisting with range improvement projects on privately owned lands in Montana. It was expected that a significant number of requests for assistance would continue to be received in the forseeable future. The potential for a major workload appeared to exist with this type of a program, which would adversely impact existing forestry programs. If the Department of State Lands and its Forestry Division were to receive continuing pressure to provide this service, it was felt that information was needed on: the overall feasibility of an operational assistance program, manpower needs, training and experience requirements, and costs. The issue of state and landowner liability also needed clarification.

PRESCRIBED FIRE PILOT PROJECT

Study Plan

In the spring of 1980 the Prescribed Fire Action Plan was drafted, reviewed, and approved for implementation. Valuable input and review comments on initial drafts were received from Forestry Division bureau chiefs and section supervisors, DSL staff and field office supervisors, Soil Conservation Service personnel, and from the Montana Fish, Wildlife & Parks Department. These comments were incorporated into the final approved action plan.

The prescribed fire action plan defined how the project was to be conducted and defined the responsibilities for the participating landowners and for the Department personnel of State Lands.

Objectives

The objectives of the project as defined in the Prescribed Fire Action Plan were:

1. Evaluate the feasibility of using fire to meet resource management objectives on state and private lands.

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- 2. Develop and test a training program to provide the necessary information to Department personnel so they would meet acceptable prescribed fire qualifications and standards.
- 3. Develop a standardized format and procedure for handling private landowner requests for assistance with prescribed fire projects on forest and range lands.
- 4. Define the Department's operational fire use policy and examine feasible levels of involvement on state and private lands.
- 5. Determine the needs for, and interest in, range improvement activities on state and private lands.

IMPLEMENTATION PROGRAM

Demonstration Fires

The action plan was implemented in part by planning, conducting and evaluating demonstration fires at various locations in western and central Montana. This program allowed Department of State Lands employees to receive valuable experience in planning and conducting rangeland fires. Training assistance and guidance from Fire Bureau staff personnel ensured that a standardized process was used and followed during the planning phase, and during the actual conduct of the prescribed fires. Both formal classroom and on-the-ground training was conducted. The three formal training courses held included subjects such as fire planning, pilot project development and background, fire effects and implementation procedures. Training received by state personnel should prove beneficial in any future fire operations on state owned lands.

By utilizing demonstration fires, many individual groups, agencies, associations, and county/state officials were able to observe the actual firing operations. Observers on the pilot burns included:

- 1. County officials
- 2. Rural fire departments
- 3. Federal agencies (United States Forest Service, Bureau of Land Management, Soil Conservation Service)
- 4. Montana Fish, Wildlife & Parks employees
- 5. Conservation district members
- 6. Farmer/Rancher Association members
- 7. Resource Conservation & Development personnel
- 8. Media personnel
- 9. University of Montana Forestry School personnel

- 10. Forest Service Fire Research personnel
- 11. Many of the ranchers on whose lands the fires were conducted brought family, neighbors and relatives to observe the burns.

Time Schedule

A time-phased planning schedule was published to guide field offices through the planning and implementation process. This schedule allowed lead time for landowner contacts, site selections, planned grazing deferment (if necessary), fire use plan development and review, training, on-site vegetative inventories, and post-burn evaluations. Close adherence to the schedule allowed field offices to successfully complete nine of ten planned prescribed fires.

Requirements of Participating Landowners

Private landowners participating in the pilot project were required to have a management plan for their ranch, or have received technical advice or recommendations from the Soil Conservation Service, a private resource consultant or range specialist. This plan had to specify prescribed fire as the preferred method or tool for accomplishing their management plan If deemed necessary, grazing deferment or slash management work objectives. had to be accomplished prior to burning. Further, landowners had to agree to follow the FIRE USE PLAN and prescription that was designed specifically for the prescribed burn on his/her ranch. Landowners were asked to provide personnel for the actual ignition and control portions of the burn. Durina the actual burning, state personnel did the necessary on-site weather monitoring and acted as the burn advisor to the landowner. Fuel for the ignition torches, dozers, and pumpers was normally supplied by the landowner.

A key element to the success of these rangeland burns was the management practices following the burn. All participating landowners were asked to defer grazing following the burn at least through one growing season. This practice allowed time for seed from the desirable native plants to set and germinate on new growing sites, and for site recovery.

Requirements of State Lands Department Personnel

Each participating state land office was asked to plan and conduct, as a minimum, two demonstration burns in their respective areas. Both spring and fall fires were planned. Field office personnel selected the actual burn site based on previous landowner requests, and on general site selection guidelines outlined in the action plan. Sites could be selected on either state or private lands.

Designated personnel were selected to plan and conduct the demonstration fires. These personnel were charged to: meet with landowners, select the actual burn sites, do all the required planning and coordination, develop the Fire Use Plan (to include the fire prescription, burn plan, and evaluation procedures), and conduct the burn.

Training

Many Department of State Lands field personnel have had years of experience in prescribed fire practices associated with timber harvesting operations. However, few employees have had experience with rangeland prescribed fires prior to the start of the pilot project. While many basic fire behavior principles remain constant whether burning in conjunction with timber harvesting or rangeland burning, the planning processes and procedures differ significantly between the two.

To address this problem the training portion of the action plan was designed to allow time for formal training in rangeland fire operations. Department of State Lands personnel, and personnel from cooperating agencies attended these sessions held in Kalispell, Helena, and Missoula. The plan also allowed for as much on-the-ground experience as practical under existing budget and time constraints, for selected personnel.

Project Files

In an attempt to accelerate training, to obtain information which could be shared, and to improve our knowledge about prescriptions and procedures, all field offices were asked to maintain project records for each burn. This enabled us to improve or refine our techniques and procedures on each successive burn.

Each project file contained:

- 1. Pre-burn vegetative inventory data.
- 2. Fire Use Plan for the project.
- 3. Weather data taken and recorded during the burn.
- 4. Fire behavior observations recorded during the burn.
- 5. Photo documentation.
- 6. Complete itemized cost breakdown for the project.
- 7. Maps.

RESULTS

Burns Conducted

Figure 1 shows the general locations of the ten planned burns. (No. 10 was not burned due to unacceptable weather conditions in the fall of 1982). Burns 1-8 were all located on private property. Several of these projects contained small amounts of state, Bureau of Land Management, or Forest Service acreage. In all cases, coordination with the appropriate agency was done, and permission was received to include their acreage in the plan. Burn 9 was on state land near Little Bitterroot Lake, west of Kalispell, Montana.

Objectives for burns 1-8 were very similar. All of the private landowners who participated in the project wanted to reduce sagebrush densities and competition on their ranches in order to increase range forage production for domestic livestock. Reduction of weed/tree encroachment on several sites was a secondary objective. Desired reduction levels of sagebrush varied from 60-90% on the eight sagebrush burns. Each plan called for significant increases in desirable forage, usually at least double the pre-burn amount. Table 1 shows the percentage cover of sagebrush before and after each fire. Sagebrush that survived the fire was not reburned. Small patches and clumps of residual scattered sage were desirable from a wildlife standpoint. Montana Fish, Wildlife & Parks biologists were consulted during the planning phase of each project. They normally preferred that a mosaic pattern of sage be left.

Unit Name	Sagebrush	% Cover
	Pre-burn	Post-burn
Cal Creek	43%	48
Grady Ranch	37%	Trace
Grubb Gulch	50 %	10 ዓ
Hells Canyon	33%	98
Gravelly Ranch	50%	5%
Slocum Creek	45%	48
Christiensen Ranch	40%	5%
Sweetwater	45%	5%

TABLE 1.

One hundred percent kill of sagebrush over large acreages was rare in our range burns due to lack of continuities in grass cover, rocky areas devoid of fuels, and areas containing low densities of sagebrush with sparse understory fuels. Grazing deferment was necessary on most burns in order to



SITES PROJECT FIRE PRESCRIBED

F-100

have a sufficient amount of grass understory to carry the fire through the sagebrush stands.

Scheduling Prescribed Fires

Table 2 lists the dates and acres burned for each fire conducted. Two very important elements affecting the results of our rangeland burns were the fire prescriptions developed for each site, and the time of year in which we ignited each unit. A thorough analysis of current fire effects literature allowed us to tailor the prescriptions to the specific grass species that were present on each site. We scheduled all of the rangeland burns as early in the spring as possible, or late in the fall, after the fall rains occurred. According to available literature, most of the grass species present on the eight sites we burned could be damaged by hot slow moving fires such as a summer wildfire. We designed our ignition patterns and prescriptions with this fact being a key consideration. The three species of sagebrush present on our sites were Big sagebrush, Mountain sage, and Wyoming sage. All three species can be easily killed by fire. None of these species resprout. We chose early spring and late fall fires to take advantage of high soil moistures which are normally present. Our spring burns were conducted just after snow melt. The soil, roots and root crowns of the grasses contained high levels of moisture which helped to protect them from being damaged or consumed by fire. These fires were specifically designed to be fast-moving fires with medium to low heat intensities. Residence time on a specific plant was of very short duration, oftentimes only a few seconds. Our observations indicated that the predicted fire behavior compared reasonably well with the observed fire behavior. Prescriptions were designed to ensure that we could easily control any fire which moved outside of the control lines. Flame lengths, rates of spread, and fireline intensities were calculated using state-of-the-art fire behavior prediction systems.

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TABLE 2.

PRESCRIBED FIRE PILOT PROJECT Montana Division of Forestry

Project Name	Vicinity	Acreage	Date Eurned
Grubb Gulch	Townsend	150	Nov 1, 1979
Christiensen Ranch	Dillon	240	May 5, 1980
Gravelly Ranch	Townsend	250	Nov 7, 1981
California Creek	Virginia City	620	Apr 30, 1982
Slocum Creek	Stevensville	200	Apr 21, 1982
Grady Ranch	Helena	169	May 1, 1982
Hells Canyon	Twin Bridges	500	May 14, 1982
Sweetwater	Dillon	500	Nov 4, 1982
Little Bitterroot Lake	W. of Kalispell	100	Aug 31, 1982

Data Collection

Data collection for each prescribed fire consisted of:

- ... on-site weather data
- ... fire behavior observations
- ... fuel/soil moisture sampling
- ... pre-burn vegetative inventories
- ... post-burn vegetative inventories

Weather data was collected throughout the ignition portion of each fire. One person was designated to take the observations every half hour with a belt weather kit. This information was recorded and reported to the burn boss after each observation.

Fire behavior estimates were taken at the same time as the weather observations.

Fuel moisture was monitored by utilizing fuel moisture sticks. Fuel and soil samples were collected on some burns in aluminum cans and the contents were then oven-dried. Moisture contents were determined gravimetrically using a top-loading balance and a convective drying oven.

Pre-burn vegetative inventories were done on each unit by Soil Conservation Service personnel, and by DSL employees.

In order to determine changes in key plant community components due to the the fire, we ask each planner to collect, as a minimum, the following data:

- 1. Percent cover of sagebrush.
- 2. Percent cover by species of all grasses.
- 3. Quantitative measurements or estimates of grasses (pounds/acre).

Complete species lists including forbs were obtained for several of the sites.

Post-burn data collection was conducted <u>after</u> one complete growing season following the burn on each site. Transects established prior to burning were revisited and the same data was collected as in the pre-burn inventories.

We plan to re-inventory each site for three successive growing seasons following the burn, in order to determine the responses of the vegetation to the fire treatment over this time period.

Forage Production Increases

All 8 of the prescribed fire sites showed substantial increases in forage production the first growing season after the fire. Data in Table 3 shows the forage production increases which we obtained by applying fire on those sites.

Data for all sites is maintained at the Forestry Division Headquarters in Missoula, Montana. Species lists, range condition classes, percent composition by weight of shrubs, grasses and forbs, and other data not contained in this report is available and will be compared with inventories taken in 1983 and 1984.

Table 3.

Unit Name	Forage Production			
	<u>Pre-burn</u>	Post-burn (after 1st growing season) bs/acre		
Slocum Creek	800 (estimate	d) 2000 (estimated)		
Grady Ranch	480 (measured) 930 (measured)		
California Creek	500 (measured) 1900 (measured)		
Grubb Gulch	765 (measured) 1530 (measured)		
Gravelly Ranch Hells Canyon	630 (measured 850 (measured) 1260 (measured)) 1000 (measured)		

Perhaps more significant than the increase in available forage is the associated increase in AUM's (Animal Unit Months) on these sites. With proper management following the fire, the livestock carrying capacity on these sites will be increased substantially.

On the California Creek site, the allowable AUM's prior to the fire was .32AUM's/acre. Due to the fire treatment, the AUM's for this site are expected to stabilize at .50AUM's/acre.

On the Grady Ranch site, the AUM's/acre increased from .32 AUM's/acre to .40 AUM's/acre. Grubb Gulch data shows an increase of 56 percent in the net stocking rate. The Gravelly Ranch burn showed an increase of .24 AUM's/acre, an 89 percent increase over pre-burn rates.

Pilot Project Burning Costs

An important objective of this study was to determine costs for this type of burning. Complete records were maintained for each project. These records included expenses for planning time, pre-burn inventories, travel to and from the site, fuel for ignition, control line preparation, wages for all personnel involved on each burn, and expenses for post-burn inventories. Table 4 shows actual cost data for each site burned.

Table 4.

Prescribed Burning Costs for 8 Rangeland Fires in Montana

Unit Name	Cost/Acre
California Creek	\$ 5.18
Hell's Canyon	\$ 8.37
Christiensen Ranch	\$ 5.90
Sweetwater	\$ 4.57
Slocum Creek	\$ 3.96
Grady Ranch	\$ 7.28
Gravelly Ranch (helitorch burn)	\$12.65
Grubby Gulch	\$ 5.86

Average Cost

The average cost of \$6.72/acre includes the Gravelly Ranch burn on which we utilized a helitorch for ignition. For the 7 units which were ignited by conventional ground ignition methods, the average cost per acre was \$5.87. These cost figures are significantly cheaper than other methods such as

\$ 6.72/acre

chemical spraying and mechanical treatments. It is expected that as additional experience is gained in rangeland burning, planning time and costs associated with the burning operations will decrease. Average costs in the range of \$4.50 to \$5.50 per acre should be attainable on future prescribed fire projects.

PILOT PROJECT EVALUATION

Objectives

Analysis of all data and correspondence pertaining to the Prescribed Fire Pilot Project indicates that we successfully met the objectives outlined for this project.

Feasibility

This two year pilot project has shown that the practice of using prescribed fire to accomplish resource management objectives on state and private lands in Montana, is entirely feasible, and is a highly effective treatment when planned and conducted by trained professional fire managers in response to a management plan. Substantial increases in desirable forage production and improvements in site quality were obtained on our prescribed fire sites, at an average cost of \$5.87 per acre for conventional ground ignition methods.

- 3

Liability Considerations

Prescribed fire managers and participating landowners agreed that the liability question was an important item to be addressed during the pilot project.

It is unlikely that any professional fire manager would give a 100% guarantee that a prescribed fire will never escape. While we recognize that the potential for an escape fire exists in prescribed fire operations, we approached the issue by taking positive steps to reduce the potential for an escape fire to the lowest possible level. Investigations conducted in the United States in recent years following escape fires revealed some interesting facts. Some of those are:

- 1. Many fires escaped because fire managers were unaware of changes in weather conditions.
- 2. Personnel conducting the prescribed fires were not qualified to do so, and, many didn't have sufficient fire experience or fire training.

- 3. Fires were ignited when weather conditions were outside the prescription called for in the plan.
- 4. Some prescribed fires which escaped didn't have written plans specifying the proper conditions and procedures.
- 5. Oftentimes escape fires occurred several days after the actual ignition. Poor mop-up and patrol procedures were indicated.

The Montana Department of State Lands took steps to insure that many of these situations would <u>not</u> occur on our prescribed burns. We require that for every burn, a Fire Use Plan be written and approved by the fire staff. This plan includes the objectives, the fire prescription, a burn plan, and evaluation procedures. Long term and spot weather forecasts are obtained and reviewed. A person is designated to monitor weather during every burn. Weather conditions are reported to the fire boss every half hour, or whenever sudden changes occur.

Formal classroom training is required for employees involved in prescribed burning. Prescribed Burning Guidelines will be published soon which will specify training and experience requirements for state employees. Our training program will ensure that only fully gualified personnel are available for prescribed fire assignments.

This pilot project allowed ignition to begin only when all conditions specified in the written plan were met. No burning was allowed outside the planned prescription.

Each plan contained a contingency plan for an escape fire. Prior planning would allow us to quickly shift into a suppression mode, if necessary. Suppression equipment must be available to the site before a planned burn is begun.

Each plan required aggressive mop-up and patrol (if necessary) until the fire was out.

The above items will allow us to reduce the potential for an escape fire to the lowest level possible under the current state-of-the-art in fire management.

Response to the Pilot Project

Throughout the life of the pilot project high interest in the project was apparent at the federal, state, and private landowner levels. Department of State Lands field offices have received scores of requests for assistance once word of the project spread. More requests have been received for 1983. The Soil Conservation Service has enthusiastically supported the program based on the potential benefits they see from an operational program in Montana. The <u>Montana Association of Conservation Districts</u> and its members have also recognized the potential of such a fire program in Montana. Several members were active participants on some of the pilot projects.

Project Conclusion

1 1

With the exception of future presentations and planned data collection on each prescribed fire site, the Montana Department of State Lands Prescribed Fire Pilot Program is complete. No further prescribed fires are planned for the future due to funding and manpower limitations. Department of State Lands employees took time from already busy schedules to assist with the pilot project. The following personnel played key roles in this project:

Central Land Office

DSL Employee

Tim Murphy Bob Vlahovich

Grady Ranch Grubb Gulch Gravelly Ranch

Prescribed Fire

Southwestern Land Office

Jim Greene Fred Staedler Christiensen Ranch Sweetwater California Creek Hell's Canyon

Mark Lewing

Slocum Creek

Northwestern Land Office

Bill Wright Bill O'Brien Little Pitterroot Lake

				EXMIDIT E
	DEPARTME	INT OF STATE	LANDS	1-27-83
	TED SCHWINDEN, GOVERNOR		<u>ΝΙΛ</u>	CAPITOL STATION
	(406)449-2074 (406)449-4560 RECLAMATION	<u>UF IVIUNIAI</u> adivision		1625 ELEVENTH AVENU HELENA, MONTANA 5962
February 4, 1983	3			
MEMORANDUM				
TO: Natur	ral Resources Joint	Appropriations Subco	ommittee	Λ
FROM: Denn		iter of States samues	June Kh	ne
RE: Quest	tions raised at appr	opriations hearing		:
During the m the subcommittee	eeting of January 2 I would get back w	7, 1983, several que ith responses to. 1	estions were the following	raised that I told are those responses
1. Question:	'How much does it co brings in?"	st to put up a timbe	er sale versu	s how much it
Answer: The Cut	e following informat and Value Received	ion on costs of Fore by the Trust Funds.	est Product S	ales (1), Volume
Fiscal <u>Year</u>	Sales Cost	Volume Cut Mbf	Value R \$	eceived
1978	191,864.23	24,459 M	2,068,	079.00
1979	200,340.86	32,797 M	2,899,	347.00
1980	223,772.00	31,465 M	2,740,4	496.87
1981	299,993.43	32,879 M	2,491,	277.06
1982	<u>495,189.96</u>	29,290 M	<u>2,197,</u>	<u>736.62</u> 936.55
5 vear	average cost = $$9.3$	5/Mbf	φι ζ 30303.	

5 year value received to sales cost = 8.78 to 1

5 year average value received = <u>\$82.16/Mbf</u>

*(1) Forest Product Sales (Code 11) Cost defined as: "All activities and expenditures directly necessary in the sale of products from State lands." This would include posts, poles, Christmas trees, and other miscellaneous products. Value of these other products is included in Value Received, but are not reflected in Volume Cut as they are not necessarily expressed in board feet. Natural Resources Joint Appropriations Subcommittee February 4, 1983 Page Two

. Question: "Will the Department of Fish, Wildlife and Parks allow the present lessees to continue to lease lands acquired by exchange with the Department of State Lands through in-lieu selection?

Answer: The Department of Fish, Wildlife and Parks has indicated that they would allow the lessees to continue to use the land under the State Land leasing rules.

网络根据工具相比

LANDARD CORRECTIONS CONTRACT OF STREAM PARTY AND FRAME