

no trace of a "systematic, interdisciplinary approach..."

Office Copy



Department of Health and Environmental Sciences

STATE OF MONTANA HELENA, MONTANA 59601

see also Sec. 69-6504 (b)(4)

John S. Anderson M.D.
DIRECTOR

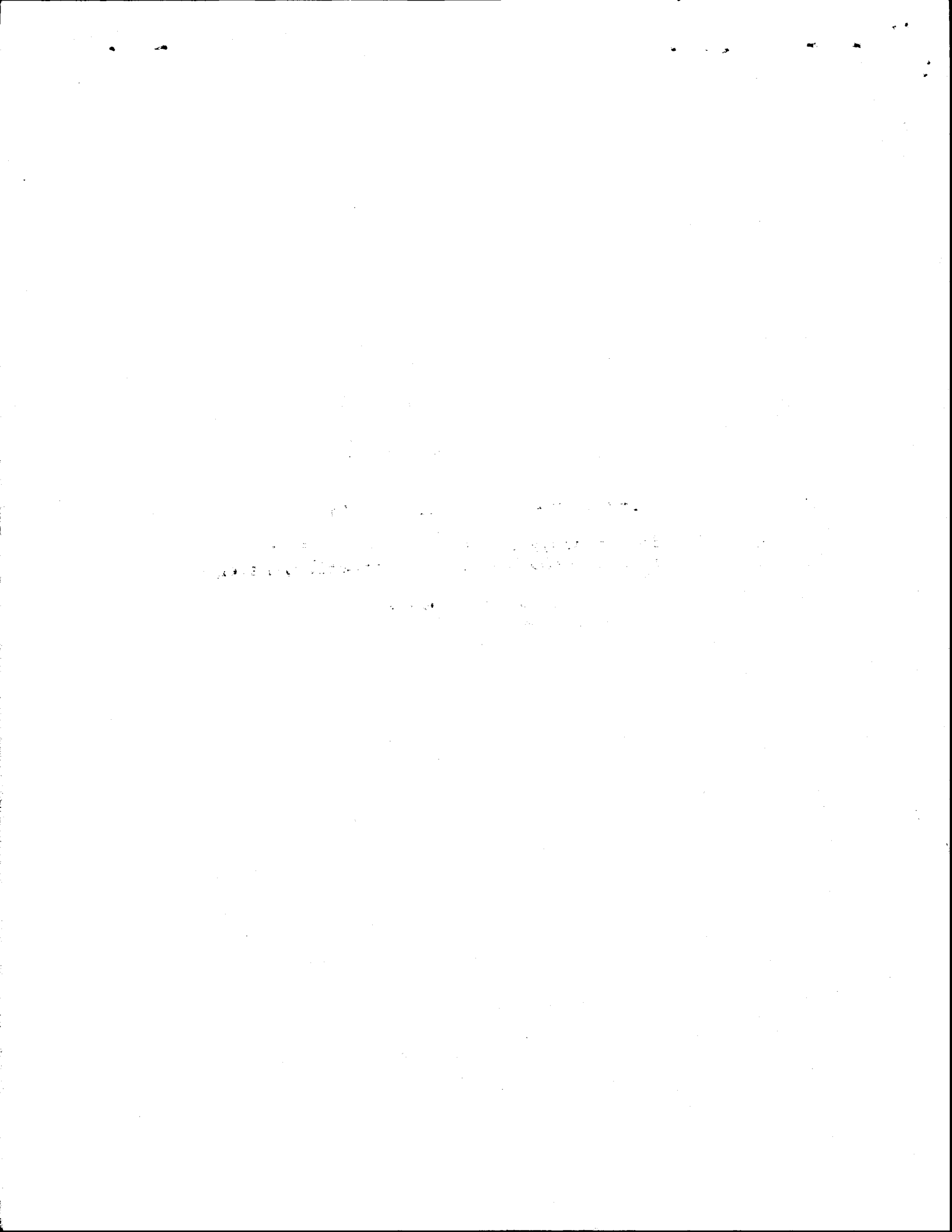
RECEIVED

June 26, 1974

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ENVIRONMENTAL QUALITY COUNCIL

- Honorable Thomas Judge, Governor, State of Montana, Helena
- Don Brelsford, Brelsford & Associates, P. O. Box 1252, Bozeman
- Board of County Commissioners, Courthouse, Bozeman
- City-County Planning Board, Courthouse, Bozeman
- City-County Health Department, Box 639, Bozeman
- Gallatin County Attorney, Courthouse, Bozeman
- Jim DeWolfe, Bozeman Chronicle, Bozeman
- Morrison-Maierle, Inc., 910 Helena Avenue, Bozeman
- Department of Intergovernmental Relations, Division of Planning, Helena
- Department of State Lands, Helena
- Department of Natural Resources and Conservation, Helena
- Department of Highways, Helena
- Ronald Schleyer, Lee State Bureau, 317 Allen, Helena
- Rick Graetz, Box 894, Helena
- Perry Nelson, Gallatin Sportsmen's Association, 526 North Bozeman Avenue, Bozeman
- Louis Moos, Sacajawea Audubon Society, 712 South 13 Avenue, Bozeman
- Mary Lee Reese, 29 South Alta, Helena
- Dr. Richard C. Ritter, Box 1170, Bozeman
- James Posewitz, Department of Fish and Game, Helena
- Gallatin National Forest, Federal Building, Bozeman
- Charles Bradley, 1105 South Tracy, Bozeman
- Northern Rockies Action Group, #9 Placer Street, Helena
- Environmental Quality Council, Helena
- Ken Porter, 502 South Grand, Bozeman
- Student Environmental Research Center, Room 212 Venture Center, University of Montana, Missoula
- Montana State Library, Helena
- Doris Milner, Montana Wilderness Association, Route 1, Box 1410, Hamilton
- Ed Mohler, The Gallatin County Tribune, 201 Mendenhall, Bozeman
- Bozeman Public Library, Bozeman
- Environmental Studies Department, Larry Uman, University of Montana, Missoula
- Gallatin Canyon Study Team, Montana State University, Bozeman
- Beaver Creek South, Inc., 24 South Willson, Bozeman
- Consumer Advocate, Governor's Office, Helena



Rick Applegate, Box 931, Bozeman
Joe Sabol, Attorney, 27 North Tracy, Bozeman
Elizabeth Smith, 2311 Highland Court, Bozeman

Gentlemen:

This final environmental impact statement for Beaver Creek South, a proposed subdivision in Gallatin County, is submitted for your consideration pursuant to the Montana Environmental Policy Act.

If you have any questions or comments, please let us know.

Sincerely yours,



D. G. Willems, P.E., Chief
Water Quality Bureau
Environmental Sciences Division

DGW:APK:sh

Enclosure

cc: Dan Vichorek
Terry Carmody



MONTANA STATE DEPARTMENT OF HEALTH
AND
ENVIRONMENTAL SCIENCES

June 26, 1974
E.S. 74/85

A Final Environmental Impact Statement
for
BEAVER CREEK SOUTH,
a proposed subdivision in Gallatin County, Montana

Pursuant to the Montana Environmental Policy Act, Section 69-6504 (b) (3); the act controlling both public and private water supply and sewage disposal for subdivisions, Section 69-5001 through 69-5005; and the act to control water pollution, Section 69-4801 through 69-4827, the final environmental impact statement was prepared by the Department of Health and Environmental Sciences, Environmental Sciences Division, Water Quality Bureau, concerning the proposed Beaver Creek South subdivision in Gallatin Canyon, for which a submittal has been received requesting subdivision plat approval.

Location

This project is located approximately seven miles south of the Big Sky of Montana Meadow Village in the canyon of the West Gallatin River. It is situated in the SE 1/4 of Section 17, Township 7 South, Range 4 East, MPM. Beaver Creek South, Inc., a Montana corporation, intends to divide approximately 95 acres into 72 lots for single-family and multi-family residences with a maximum of 7 1/2 acres along U. S. Highway 191 reserved for a neighborhood commercial area. Beaver Creek crosses a portion of the property for about a quarter of a mile along the north side. The right-of-way of U. S. Highway 191 forms the eastern boundary.

A draft environmental impact statement was prepared and circulated for the proposed Beaver Creek South subdivision on the 8th day of April, 1974. A 15-day extension to the mandatory 30-day period for accepting comments and questions was requested by the State Department of Natural Resources and Conservation. This extension was granted in compliance with the Montana Environmental Policy Act. Copies of the draft statement, along with a plat and various exhibits are available for public inspection in the Helena office of the Water Quality Bureau.

Response to the draft environmental statement was received from the State Environmental Quality Council, State Department

of Highways, Gallatin Sportsmen's Association, U. S. Forest Service, State Department of Natural Resources and Conservation, the Northern Rockies Action Group, Inc., and Dorothy Bradley Applegate.

The Environmental Quality Council offered the following comments:

The following comments on your department's EIS for Beaver Creek South subdivision in Gallatin County are offered to assist your agency in refining its EIS process, and, hopefully, to improve the quality of the proposed subdivision.

Pages 1 and 2. If the proposed commercial area is intended to cater to neighborhood residents, i.e., residents of the proposed subdivision, why will it not be centrally located rather than along the edge of the subdivision on U. S. 191? Although the highway location may attract more customers, it would be less convenient to residents of the subdivision and would sacrifice some of the aesthetic qualities of U. S. 191 as a scenic highway.

Page 7. Careful management is necessary for successful operation of any land disposal system. Who will be responsible for operating the sewage treatment units and percolation ponds? The developer? The property owners? The Department of Health and Environmental Sciences? What qualifications will be required of the operator(s)?

Page 11. Eventually, vegetation will rot and decompose. Decomposition products may enter the soil and groundwater systems and result in soil plugging and water contamination. It may be advisable to harvest the reed canary grass from time to time to avoid these problems and to maintain a healthy stand of vegetation.

Page 14. Compatibility "with the existing quality and architecture in the area", i.e., Big Sky, would probably but the price of a lot and structure in this subdivision beyond the reach of the average employee of Big Sky. A real question is whether this development will satisfy the housing shortage for Big Sky employees, or will cater to the same class of people that are attracted to Big Sky.

In conclusion, a map or a scaled-down plat showing the arrangement of lots, park dedication, commercial area, soil types and filter ponds would have been useful in orienting oneself with the proposed subdivision. We wish to complement the Department of Health on its efforts to obtain pertinent information by consulting with appropriate agencies and individuals prior to circulation of the draft EIS.

map ①

Thank you for your efforts toward compliance with the Montana Environmental Policy Act.

The proposed commercial area is intended to cater to residents of the subdivision, and the highway location is designed to attract other customers. However, there would be only one access approach to U. S. Highway 191, and the commercial area would be served from a proposed frontage road.

Any sewage disposal system that requires maintenance needs careful management. The Beaver Creek South Association, which would be comprised of the lot owners, would be responsible for operation of the sewage treatment plant. A qualified operator would have to be hired to maintain the plant. Since this sewage plant would serve ten or more families, the operator would have to pass an examination and be licensed by the Montana Board for Certification of Water and Wastewater Operators.

The vegetation would have to be harvested from any type of surface disposal system, whether it be an infiltration pond or irrigation system.

Many have suggested that the price of a lot and structure may be beyond the reach of most employees of Big Sky, that the development would not solve the housing problems at the resort complex, but cater to the same class of people that are attracted to Big Sky. This may be a valid statement, but has no bearing on the decision whether or not to approve the plat.

It is agreed that a plat would be useful to one reviewing an environmental impact statement. One was not included in the draft environmental impact statement for budgetary reasons.

The State Department of Highways offered the following comments:

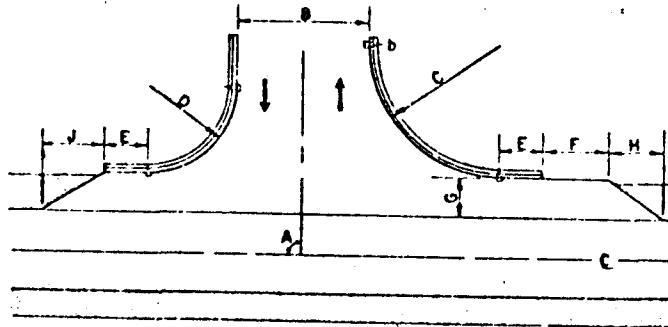
Reference is made to your draft environmental impact statement dated April 8, 1974 on the subject subdivision. As pointed out in the statement, this subdivision will generate a large amount of traffic that will utilize U. S. 191.

After reviewing the subdivision plat in your office we have the following comments.

what else has been left out for budgetary reasons?

PUBLIC ACCESS APPROACH
RIGHT TURN LANE & TAPERS

The applicant shall provide right-turn lanes or tapers as part of an approach or driveway system if the department determines that such right-turn lanes or tapers are required to minimize congestion or hazard on the highway caused by vehicles entering the applicant's approach. A right-turn lane shall be preceded by a taper. The design feature dimensions of a right-turn lane and taper shall conform to those shown below.



RIGHT-TURN LANE AND TAPERS					
Design Features		Curbed Highway		Uncurbed Highway	
		Standard	Range	Standard	Range
	E	10 ft	no range	10 ft	no range
Right-turn Lane Length	F	* *		* *	
Right-turn Lane Width	G	12 ft	10 to 15 ft	12 ft	10 to 15 ft
Entering Taper	H	150 ft *	50 to 150 ft	150 ft	50 to 150 ft
Exiting Taper	J	not applicable		50 ft	50 to 150 ft

* If a right-turn lane is used, the Entering Taper standard shall be 50 ft.
Without a right-turn lane, the Entering Taper standard shall be 150 ft.

The standard shall be used unless engineering judgment determines that another dimension within the range is more suitable for a particular site or special condition and is approved by the department.

* * TO DETERMINE F		
HIGHWAY SPEED M.P.H.	RIGHT TURN LANE F (FT.)	TAPER (FT.)
25	75	50
	0	150
30	100	50
	0	150
35	125	50
40	175	50
45	225	50
50	275	50
55	325	50
60	400	50
65	475	50
70	550	50

The Gallatin Sportsmen's Association sent in the following response to the draft environmental impact statement:

We appreciate the opportunity to comment on the draft environmental impact statement for the proposed Beaver Creek South subdivision in Gallatin County. Our main concern is for wildlife, mainly elk, in the area of the subdivision and adjacent to the subdivision.

Wildlife provide a major source of recreation in the Gallatin. Recreation hunting has been a traditional and necessary form of wildlife management for years. For 75 years, Montana Sportsmen have invested their money in management programs for the benefit of wildlife, people and recreation. The Beaver Creek South subdivision is adjacent to the Gallatin Game Range which was acquired for wildlife winter range and hunting in 1951 with sportsmen's money generated by hunting license fees and excise taxes on sporting arms and ammunition.

Since 1951 more extensive development has occurred in the area and the newcomers are already complaining about the hunting on the game range and adjoining public land. While we share their concern we must remind them that hunting has been an established use of wildlife on public lands since Montana became a state. We suggest it be mandatory that subdivision developers inform prospective buyers of the fact that hunting on public lands is an established right!

Environmental impact statements often convey the feeling that wildlife is not disturbed by development and merely move to another part of the forest and live happily ever after. Such a feeling has no basis in fact and demonstrates a lack of appreciation for wildlife ecology. Most Montana wildlife, especially the big game species, require habitat with wilderness type characteristics. Development in one form or another and the year long people activities associated with development can effectively stop wildlife production in the impacted area. The area of impact is always a much larger area than that occupied by the development alone. Eventually, development will stop the production of the wildlife dependent upon the area and their contribution to the wildlife population will be lost forever.

The development of land in wildlife winter range areas, such as Beaver Creek South subdivision, may also result in considerable economic loss to Montana. A recent publication indicates that wildlife in the area of the proposed subdivision could yield between \$50 to \$100 million in benefits over the next 25 years¹.

¹ 1974 *The Gallatin Area*, Bulletin 344, Gallatin Canyon Study Team, National Science Foundation, Cooperative Extensive Service, Montana State University, Bozeman, Montana

To realize the benefits we will need to protect the wildlife habitat, especially the winter range in the Gallatin. Also, a basic problem must be recognized--wildlife habitat cannot simultaneously be used for both wildlife under natural conditions and for development of subdivisions in or near the wildlife habitat.

If Big Sky of Montana, Inc. feels that this subdivision is necessary to their operation, we suggest it be moved into the West Fork area closer to Big Sky where wildlife is already relegated to a minor land use.

Montana citizens and sportsmen are concerned about land use control in relation to wildlife range. Unfortunately, concern has not been enough and the legislature "dropped the ball" when it came to seriously considering wildlife in laws dealing with planning and approving subdivisions. However, we hope the State of Montana will show concern, pursuant to the Montana Environmental Policy Act, for wildlife, for recreation and for our investment in wildlife that was made for the benefit of all people.

Our Association is not in favor of approving this subdivision because of the adverse impact on wildlife and on public recreation associated with wildlife.

It is true that the legislature did not pass legislation which would authorize consideration of wildlife habitat in the planning and approving of subdivisions. To not approve the subdivision based on adverse impacts on wildlife and public recreation based on wildlife would certainly precipitate litigation in the courts. This would not be in the long-range interest of wildlife protection. A probable adverse decision would have profound effects on the decision-making process of future legislatures.

Why so afraid of the courts?
One way of clarifying the issue

RDK

Personal opinion

The U. S. Forest Service has offered the following comments:

This is in response to your Draft Environmental Statement to Beaver Creek South, a proposed subdivision in Gallatin County, Montana.

Page 3, 4th Paragraph - Brelsford and Associates have made the most favorable interpretations of J. A. Olsen, et. al. "General Soils Maps and Soils Interpretation" in this and following paragraphs. This paragraph does not say but I infer that the Neighborhood Commercial and Single Family Residences will also be confined to the Bigel-Hobacker Association soils.

Page 11 and 12 - I echo the State Department of Fish and Game concern and would add that the development will further restrict game movement, particularly elk.

Page 23, 6th Paragraph - Forest Service contact with Montana Power Company does not support the quote of "no problem" in supplying the power needs of Beaver Creek South. John Cromer - Vice President for Electrical Operations of Montana Power at a 12/18/73 meeting with Forest Supervisor Hawkes told us that additional power service for the upper Gallatin Canyon, particularly Big Sky of Montana, would be needed by the fall of 1975. We have since received application for a 161 KV line from Clyde Park to Dillon to meet this and other needs. The developers of Beaver Creek South should be aware that this proposed powerline has not and may not be approved. Development of Beaver Creek should not be carried beyond the present power capacity in the Gallatin Canyon. If in fact all present power capacity is allocated, they should not proceed with their development until additional power is assured. ✓

owns in DHE'S
or developer?

Page 12, 7th Paragraph - The Gallatin Forest Fire Protection District does not include the land on this proposed subdivision and thus the U. S. Forest Service would not be responsible for wildland fire suppression on this property. Adjacent forested land is, however, within the fire protection district. The proposed subdivision would therefore have to depend on the volunteer fire district for both structural and wildland fire protection.

Page 13, 7th Paragraph - The treatment of the effect on traffic is very incomplete. No date is placed on the ADP's given. I would assume these figures are current. In 1971 the State of Montana Highway Department estimated the present highway will carry 4,500 ADP. At that time they said that in 1969 an average increase of 43 cars per day each year without Big Sky or an ADP in 1980 of 3,181 cars. Big Sky traffic by 1980 was estimated at 600 additional cars per day or 3,781 ADP. Today we have Beaver Creek South with an estimated 900 ADP for a total of 4,681 ADP. An additional figure should be added to this total for subdivisions proposed or approved since 1971 such as proposed Karst #1 and the approved Ken McBride subdivision in the West Fork. ✓

The State of Montana Highway Department should reevaluate their projections for this proposal and total use of this Highway taking into consideration peak periods of use. They appear to have used yearly average figures rather than peak figures and have not adequately considered the effect of other developments when they estimate a 4% increase per year to 1993; nor are they consistent with past projections.

Use of Highway 191 in the Gallatin Canyon may be approaching capacity during peak periods of the day now. Motor vehicle accident figures and deaths have increased many fold in the last five years. Beaver Creek South will intensify the problems. The report should accurately quantify these additional traffic problems and weigh their consequences including the consequences of a 4 lane highway.

The Beaver Creek development is not adjacent to National Forest land. Effects on National Forest land will be secondary in such forms as increased pressure for the 161 KV powerline, highway 191 improvement, use of National Forest lands for various recreation purposes, etc.

map (3)
A map of this development would have helped greatly in the evaluation process.

The neighborhood commercial area and some of the single-family residences will be located on the Bigel-Hobacker Association soils. Part of the single-family residences would be constructed on Leavitt-Loeberg and Leavitt-Hanson Associations.

The development of Beaver Creek South would add to the total power needs of the area. This subdivision alone would not create a need for additional power lines but would be a contributing factor should one be deemed necessary.

The Department of Highways reaffirms their comments on the effects the proposed subdivision would have on U. S. Highway 191. Paul R. DeVine, Chief of the Planning and Research Bureau, states that highways are designed to handle the thirtieth peak traffic flow and not the greatest peak traffic period.

no response to consequences of 4 lane highway

The Department of Natural Resources and Conservation offered the following comments:

The Department of Natural Resources and Conservation (DNR&C) wishes to comment on the Department of Health and Environmental Sciences' Draft Environmental Impact Statement (EIS) for the proposed Beaver Creek South subdivision in Gallatin County. General and specific comments follow:

GENERAL COMMENTS

Although it requires more time and effort, some consideration of the cumulative impact of the increasing subdivision activity in the Gallatin Canyon is needed. Environmental assessments

should not be restricted to the impact of a particular subdivision but rather should reflect consideration of those in existence and to the potential for new subdivisions. Limited reviews provide only incremental assessments which may not describe the total situation. Incremental impacts can add up to significant impacts and, therefore, some effort must be given to assessing their cumulative effect. For example, one subdivision might, by itself, remove only an insignificant amount of wildlife habitat; however, several subdivisions in concert may remove a substantial amount of such habitat resulting in a major negative impact on wildlife.

map (4)
A helpful addition to readers of this statement would be a general locator map together with a map showing the arrangement of development within the subdivision.

SPECIFIC COMMENTS

Page 3, Covenants. The developers assert that development planning and architectural control are to be maintained by a landowners' association and that land-use covenants will reduce the disruptive influence of the proposed subdivision upon the natural environment.

A full discussion of the effectiveness of these control methods should be presented in the Final EIS. Such discussion should center on such questions as:

- (a) How is the landowners' association created and can it be dissolved?
- (b) What enforcement power does the association have?
- (c) Can the association modify or absolve the development plan or the restrictive covenants and, if so, by what means or procedures can this happen? and
- (d) Generally, are these restrictive covenants adequate to protect the natural environment? If not, where are they weak?

Page 6, Water Supply. In reference to the water supply, there is no mention of water rights. On page 7 it is stated that, ". . . it is anticipated (emphasis added) that no single well will serve more than eight dwellings or more than 24 persons . . ." This statement does not place a limitation on the withdrawal from each well. In accordance with the Water Use Act, if the yield is 100 gallons per minute or more per well then an application for a beneficial water use permit must be made to the Department of Natural Resources and Conservation, and a permit to appropriate water issued before construction may begin. It should be further noted that the Water Use Act also requires that regardless of the yield from each well, the driller must file a well log report. Within 60 days of completion the appropriator also must file a notice of completion of water development with the Department.

Page 12, Visual Impact. We agree that the visual impact of the proposed development is, to a degree, open to speculation and a matter of personal values. However, the Final EIS should acknowledge the fact that the Gallatin Canyon is widely renowned for its scenic, natural beauty, unmarred by extensive development. The placement of subdivisions within the scenic canyon setting, therefore, has a far more serious visual impact relative to similar developments within or near urbanized areas.

Similar to other impacts, one subdivision adds only an incremental amount of degradation of natural beauty which, taken alone, may be acceptable. Nevertheless, increments often accumulate with the addition of each new development until unacceptable levels or thresholds are reached or surpassed.

The Final EIS should, therefore, consider not only the direct impacts of this one proposal, but also the cumulative impacts of existing and potential subdivisions in a relatively pristine canyon setting. ✓

Page 12, Electric Power. The proposed 200 homes, if of average size, with normal electrical use and heat, could contribute approximately 2.0 to 2.5 megawatts to peak energy demands. Additional energy demand will result from the commercial development and the sewage treatment plant.

Montana Power Company's long-range plans indicate that in the near future, the Company wishes to apply to the DNR&C to construct an additional powerline of 161 kilovolts (KV) near the area of this proposed development. If an application is received, the Department has 600 days thereafter to study the proposal and make its recommendation to the Board of Natural Resources, who, has final authority to deny or approve the application. To date, no application has been received by the Department for this project.

A statement is made in the Draft EIS that there would be "no problem" in supplying the power needs of development, however, it is not clear if there is presently no problem or if there would be "no problem" assuming the proposed 161 KV transmission line were approved and constructed.

Page 13, Police Protection. The final statement should clarify the comment that "the Association may decide to hire its own security agent for added protection, in a similar manner to Big Sky of Montana". A recent news article pointed out that the salary of a deputy sheriff to be stationed at Big Sky will be paid by the public (Gallatin and Madison Counties). From what funding will the salary of Beaver Creek South's security agent be drawn?

Page 13., Property Valuation. Possible data assembled by the Montana State University Gallatin Canyon Study could help ascertain whether property valuations are sufficient to cover the additional costs of government services. A recent reference obtained by the State Library may also help in this regard:

Oregon Extension Services
Local Tax Impact of Recreation and Subdivisions:
A Case Study
Special Report 365, 1972.

Page 13, Vehicle Impact. The Department of Highways' comments give the full development level for the subdivision as 174 dwelling units; elsewhere in the Draft the developer affirms that 200 dwelling units will be possible if the subdivision is fully developed. Therefore, the Department of Highways traffic figures may be somewhat understated if based upon 174 units.

It would be useful information if the threshold level were given for that average daily traffic (ADT) which would warrant road widening or the construction of a four-lane highway in the canyon. The Department of Highways projects future traffic in the canyon for 1993 as 3,600 vehicles per day. This figure assumes a 4 percent annual growth in the present traffic volume of 1,240 vehicles per day for an increase to 2,717 vehicles by 1993. The 900 additional trips generated from Beaver Creek South are added to 2,717 giving a total of 3,617. If the 900 figure is added at the beginning of the 4th year rather than at the end of the 20th year, a traffic volume for 1993 is 4,470 rather than 3,600. Using either a figure of 3,600 or 4,470, the carrying capacity estimated by the Department of Highways for the present canyon highway of 4,500 vehicles per day is being approached.¹

The estimates for 1980 summer ADT prior to the advent of the Beaver Creek South subdivision is 3,781.² If the additional traffic volume from Beaver Creek South of 900 is added to this assumed traffic flow it appears that within 10 years, summer traffic could exceed the present capacity of the highway!

¹The Murray-McCormick Environmental Group, Gallatin Canyon Final Report, (1972). p. 180

²Ibid. p. 132.

Although we are unskilled in estimating future traffic flows, it would seem that some discussion should be given to the adequacy of using a 4 percent annual increase in traffic when it seems possible to estimate the load more exactly from subdivision activity underway or planned such as was done for Beaver Creek South. For example, the Draft EIS for the Cascade Subdivision at Big Sky, September 1973, states that this one subdivision will accommodate 363 single family homes, multiple homesites for 420 families; and that between 950 and 1,000 condominium units would eventually be included.³ If Beaver Creek South will increase ADT by 900, it should be possible to estimate the increased ADT from this subdivision as well as provide a seemingly better estimate of future traffic loads.

Page 14, Statement of Big Sky of Montana, Inc. This statement supports the proposed development on the assumption it will help provide housing for employees of Big Sky and other individuals employed by third parties at Big Sky. Yet, the draft lacks an analysis of this statement and thereby leaves the reader to accept the conclusions as presented. If this statement remains in the final, then the Water Quality Bureau should address its validity.

We have reservations whether the majority of employees at Big Sky and other associated workers could afford the lots or housing in this subdivision. And, if so, what will encourage them to purchase in Beaver Creek South rather than in Big Sky's subdivisions or condominiums? Obviously, Beaver Creek South would have to sell or rent real estate more cheaply, if Big Sky's employees are to prefer Beaver Creek South.

Page 14, Alternatives. Within this section it is noted that:

Although there would be adverse environmental effects on wildlife and, to many, a degradation of the aesthetic quality of the area, no legislative mandate is in effect which would give legal justification for refusing to grant subdivision plat approval on these grounds.

This comment articulates a problem common to a number of agencies which are often obligated by law to approve actions that may have a significant environmental impact. MEPA mandates a broad consideration of all impacts associated with certain actions. Yet, in that it is necessary to operate within legislative guidelines, it is not always possible to avert certain impacts by disallowing an action.

³Montana Department of Health and Environmental Sciences, Draft Environmental Impact Statement, Cascade Subdivision in Madison County, Sept. 20, 1973. p.1.

✓
The regular occurrence of situations of this nature would suggest that new legislative guidance and direction is appropriate. A determination of the state's capacity to serve the long-term public interest can, in part, evolve from internal deliberations. Among these should be an assessment of the efficacy of given authorities and an examination of the need to propose certain statutory changes. Efforts of this nature on a continuing basis will hopefully enable the state to maintain its resource values and present quality of life.

We appreciate the opportunity to comment upon this Draft EIS and are hopeful these comments will be useful in preparing the Final EIS.

So what is being done to mitigate impacts in the MSU reports?
The point is well taken that some consideration is needed of the cumulative impact of increasing subdivision activity in Gallatin Canyon as incremental impacts can add up to significant impacts. This is something that is necessary in all of Montana. The Gallatin Canyon Study Team from Montana State University is addressing this problem. With funds from the National Science Foundation, they are studying the impacts of development on the Gallatin Canyon area. Reports are available to the public.

There are approximately 2,800 acres in the Gallatin Canyon that have a high potential for residential development. Beaver Creek South would occupy 95 acres of this land or a little over 3 percent.

The landowners association would be comprised of the lot owners and is financed by an annual assessment. Enforcement of covenants or restrictions is the responsibility of the association. They may bring an action at law against a lot owner for violations. The restrictive covenants can be modified by an instrument signed by 70 percent of the lot owners.

As with most covenants, enforcement is most difficult. A neighbor is reluctant to take another neighbor into court. Therefore, compliance is usually voluntary. These covenants address such problems as architectural control, hunting prohibition, building size, open space and the like. These could reduce the visual impacts to this widely renowned scenic area, but they would not eliminate the impact.

If Beaver Creek South were to hire a security agent, his salary would be paid by the property owners association through annual assessments.

Whether property valuations would be sufficient to cover additional governmental services has not been determined. The Water Quality Bureau did not make this determination for two reasons:

1. This has no bearing on a decision to be made on the proposed subdivision.
2. The assessed value of property or improvements need to be estimated in order to make some calculations. Other data that would be needed would be the area of the subdivision, number of lots, number of parcels with improvements, number of in-state and out-of-state owners, number of lots occupied year-round, number enrolled in school, number of registered voters, tax rates, school district tax levy, number of children in the district, and the number of taxed lots in the school district. Some of this information is not readily available. However, it can be stated that the same benefit-cost relationship does not continue with increased development of a subdivision. A subdivision may generate more revenue than its service cost at one stage of development but may generate less revenue than its service costs (without a tax increase) at another stage of development.

BOWAKE

The Northern Rockies Action Group has made the following statement:

I am in receipt of a copy of the draft environmental impact statement prepared on the Beaver Creek South subdivision in Gallatin County. For a variety of reasons, this environmental statement is both premature and incomplete. As I will detail below, the inadequacies of this statement are so substantial that I have no doubt that the best course to follow would be the preparation of a new draft environmental statement when the Department of Health is in fact ready to propose an action or discuss in detail the alternatives available to it.

In general, it is not appropriate to include within an environmental impact statement material from individuals who stand to profit a great deal from the approval of the development. At least, the Department of Health should either verify, critique or delete the material submitted by the environmental consultant. In fact, this material represents the bulk of the environmental statement; there is absolutely no indication that the Department of Health has done its own work on this subdivision. And, if as noted in the environmental

DHEs should do more work

statement, the waste water disposal is still under review by the Water Quality Bureau, there is absolutely no point in preparing an environmental statement for public review at this time. The purpose of an environmental impact statement is to explain in detail an agency's proposed action and to balance environmental and economic costs and benefits for public review. This is not done in the statement under discussion.

In addition, where the Department does engage in its own analysis, the language used is primarily canned. For example, it is reasonable to assume without knowing anything besides the location of this development that the impacts would "undoubtedly fall within the range associated with the residential use of a mountain valley." However, this kind of statement does not come close to satisfying the requirements of the Montana Environmental Policy Act and the guidelines prepared thereunder. A rather rigorous balancing analysis of costs and benefits of residential use of a mountain valley should be undertaken. Absent this kind of analysis, the statement is not in compliance.

The remarks presented by the Department of Fish & Game are heartening, since they are the primary independent comments contained in this environmental statement. However, as noted with the comments submitted by the environmental consultant, the Department should verify, critique or delete the statements submitted even by another state agency. Agency comments are properly included, attached to the draft environmental statement, when the final is circulated. However, where their input is to be used in the preparation of a draft, it should be clearly noted, and the Department should conduct an evaluation of the submitted material. In other words, the purpose of an environmental impact statement goes far beyond merely full disclosure. The Environmental Policy Act was passed to insure that the agency not only disclosed information and information gaps, but also evaluated the available information and presented the public with a balancing of the costs and benefits of the proposed agency action.

The comments above on the material submitted by the environmental consultant apply to the community impact report which was incorporated in this draft impact statement without independent verification. If it has not been ascertained at this time whether the property valuation of the proposed development would be sufficient to pay for the necessary school expansion, then there is no point in preparing an environmental statement at this time. Again, the function of an agency in preparing an environmental impact statement is more than revealing information gaps which could be filled by the agency; absent the completion of this analysis, the statement does not fulfill the requirements.

review not complete

canned language

evaluation lacking

Banks

In the section on alternatives to the proposed development, more evaluation should be supplied. It is not enough merely to point out that there will be adverse environmental effects on wildlife and degradation of the (esthetic) quality of the area. What is the balance of these costs compared with the benefits of the development? Do they outweigh the benefits of the development? If they do, then the Department of Health should not oppose the proposed subdivision since it is not sound public policy. These questions must be addressed in an impact statement, even if, supposing the Department of Health position is correct, there is no explicit legislative mandate to make environmental decisions on other grounds. Regardless of this departmental contention, all agencies are bound to make decisions that are in fact good public policy in all cases.

public
policy

In the section on long-term impacts of development, there is no way to verify the statement that the proposed development would reduce the pressure for mobile home parks and residential subdivisions. One might have assumed that the pressure for other residential subdivisions could have been curbed by the Big Sky development; obviously, this is not the case. Without supporting evidence, this type of statement should be deleted.

To conclude, this draft environmental statement by the Department of Health is premature and incomplete. I cannot understand why the Department felt it necessary to prepare this impact statement at this stage in the evaluation of the proposed development. The results should be in before the public is troubled with the review of a statement. Hopefully, in the future, the Department of Health will pursue more evaluation before releasing statements to the public. When this is done, the Department might want to consider, in addition to the above objections, the following.

A Montana Power Company official was quoted as stating that it would be no problem in supplying the needs of the anticipated number of residents of the Beaver Creek South subdivision. Does this "no problem" mean that the existing transmission lines are adequate to supply the needs of this development, or does it mean that the power company and thereby the Department of Health are banking on the construction of the proposed 161-kv line from Ennis? A Department of Highways official is quoted saying that the projected volume from the Beaver Creek South and the Big Sky developments would not warrant construction of a 4-lane facility from the area. What volumes of traffic would warrant construction of a 4-lane facility? How many more subdivision units could the Department of Health approve in the Gallatin Canyon without warranting the construction of such a 4-lane road? Further, what are the impacts of the

described 7 1/2 acre neighborhood commercial area at the subdivision?

How does the Department of Fish & Game statement that tertiary sewage treatment should be required fit with the Department of Health contention that secondary sewage treatment would probably be adequate.

Again, the Department of Health should prepare a new draft environmental impact statement that at least gives the public an opportunity to review in some detail both the costs and the benefits of the proposed departmental action. Unless this is done, the letter and the spirit of the Montana Environmental Policy Act will be circumvented.

Thank you for the opportunity to comment.

Dorothy Bradley has made the following comments:

I am writing to request a rewriting of the draft environmental impact statement for the Beaver Creek South development in Gallatin Canyon.

I make this request because it is inappropriate for the Department to use the environmental assessment of an independent consultant without editing or scrutinizing the work. Furthermore, the department should take special caution in accepting work from a firm which has direct financial interest in the development under study. Federal case law under the National Environmental Policy Act establishes that this is inappropriate.

I also found the EIS to be incomplete.

1. In spite of a fairly complete discussion on the geology of the area I think more adequate information is needed on the long term water needs. Although producing wells have been drilled, at what rate will the aquifer recharge itself?
2. Information was definitely insufficient on the matter of sewage disposal. P. 11 of the EIS states that "the proposed method of wastewater disposal is still under review by the Water Quality Bureau." How is the public supposed to evaluate something on which the agency has made no determination? The EIS would have it appear as a relatively simple matter, saying on P. 14, "when it is determined what pond area and dosing rates of wastewater from the sewage treatment would insure the quality of ground and surface waters, then the proposed development would appear to meet the concept criteria required . . ." This conflicts with

another agency which states on P. 12 that "unless at least tertiary sewage treatment is planned, it is my feeling that in time water quality degradation will occur in the watercourse in the area even though the seepage ponds are located quite far away from either stream."

Part of the purpose of the EIS is to present to the public information and agency evaluations regarding decisions that are to be made. Information on waste treatment should not be skimmed. Agency conflicts should be cleared up or, at least analyzed.

3. The comments on P. 12 and 13 are shallow.

For example, a Montana Power Company representative is quoted saying that supplying energy for Beaver Creek South residents will be "no problem." No problem for whom? Will that source of energy depend on the proposed 161 kv line from Ennis to Big Sky? If so, it is a problem for those of us who are supporting inclusion of Jack Creek in the Spanish Peaks wilderness proposal. No problem for MPC? I heard this past winter from a MPC lawyer in his presentation to the Environmental Quality Council, that an energy emergency would occur in the summer of '75 if plans for power plants in eastern Montana did not take place rapidly. He was requesting a waiver of the legally required time periods for public review of energy facilities.

If the problem of energy supply is to (be) mentioned at all it should be discussed seriously and in depth.

4. P. 13 includes comments on Ophir School. I suppose it is possible that Ophir School's growth will coincide with Beaver Creek's. But accommodating 300 new students is not to be treated lightly--especially considering the school had about 10 students a year ago. 300 students cannot help but cause increased growth pains. This subject demands greater attention, as it is part of a much larger question--will the public cost of the development exceed public benefit?
5. I am concerned that part of the justification for Beaver Creek South is the housing needs of its neighbor, Big Sky. Will such reasoning not lead to a proposal for a new housing development to take care of the employees of Beaver Creek?

Again, because of the inadequacies of the EIS, and more importantly, because it contains a suspect and unexamined source of information, it does not comply with MEPA. It should be rewritten and reissued as a draft EIS when the Department has more information and has done more evaluation.

An environmental impact statement can be an extremely useful guide and tool in the decision-making process. To paraphrase Richard D. Klinger, staff counsel for the Environmental Quality Council

RDK
One of the main purposes of the Environmental Policy Act was to assure a reasoned and balanced judgment about the effects of a project before the project was begun. The EIS process, if indulged as a pre-decision methodology and not as a means of project justification, can yield very helpful and useful results.

At the time the draft environmental impact statement was circulated, no decision had been reached by the Water Quality Bureau concerning the proposed Beaver Creek South subdivision. If a decision had been reached, an environmental impact statement would have just been a means of justification.

As stated in the draft environmental impact statement

Can-Tex Industries' diffused air type sewage treatment units are proposed. BOD and suspended solids should be reduced 80 to 90 percent and fecal coliforms reduced to 200 to 100 milliliters, thus affording the equivalent of secondary treatment. Plans and specifications for these sewage treatment units are available for inspection in the Helena office of the Water Quality Bureau. Wastewater disposal would be through the use of infiltration ponds.

For wastewater disposal, two 20,000 square foot percolation ponds are proposed. The percolation area will be topsoiled and planted to reed canary grass. In the draft environmental impact statement, evidence was offered that demonstrated the success of this system in several parts of the country. Therefore, the Water Quality Bureau has given serious consideration to the proposed sewage disposal system. A tertiary treatment plant was considered but was deemed impractical for this small of a residential development.

experimental
?
Since percolation ponds have not been used to a great extent in this part of the country, any such system would require monitoring wells to ascertain any effect on groundwater. Two to the east of the ponds and one north of the ponds would be necessary.

Following is a summary of the proposed wastewater collection and treatment system:

	<u>INITIAL</u>		<u>ULTIMATE</u>	
Population	150		700	
Plant Flows				
(a) Average daily flow	15,000 gpd		70,000 gpd	
(b) Peak flow	40 gpm		125 gpm	
Sewage Quality				
	<u>mg/l</u>	<u>lbs/day</u>	<u>mg/l</u>	<u>lbs/day</u>
(a) Raw sewage BOD	200	26	200	120
(b) Raw sewage SS	250	31	250	145
Design Efficiency - Treatment Plant				
(a) Effluent BOD to percolation ponds	15-25	3	15-25	14
(b) Effluent SS to percolation ponds	20-30	4	20-30	17
Extended Aeration Plant Components				
(a) Design flow	15,000 gpd		70,000 gpd	
(b) Aeration tank	15,012 gal.		70,000 gal.	
(c) Aeration tank detention time	24 hrs.		24 hrs.	
(d) Air capacity	52.2 CFM		270 CFM	
(e) Blower	3 HP		one at 3 HP one at 5 HP	
(f) Clarifier volume	2,872 gal.		11,700 gal.	
(g) Clarifier detention time	4.6 hrs.		4 hrs.	
(h) Clarifier surface loading rate	237 gal/ft ²		256 gal/ft ²	
(i) Clarifier weir overflow rate	1,579 gal/L.F.		2,080 gal/L.F.	
(j) Aerobic digester	3,393 gal.		16,000 gal.	
(k) Aerobic digester-cu.ft./capita	3.05		3.05	
(l) Chlorine tank	392 gal.		2,000 gal.	
(m) Chlorine tank detention time	37.7 min.		40 min.	
(n) Gas chlorinator capacity	100 lb/day Max.		100 lb/day Max.	
Percolation Ponds				
(a) Number of ponds	2		2	
(b) Bottom area, each pond	20,000 sq. ft		20,000 sq. ft.	
(c) Dosing rate (average)	0.375 gal./ft ² /day		1.75 gal./ft ² /day	

Alternatives Available to this Department

- Schools,
highway +
power
adequate.*
1. Approve the subdivision plat as submitted. From the data submitted, the department gave serious consideration to this alternative. Adequate evidence that a water supply is available has been given. Approved solid waste facilities are available. The sewage treatment system is acceptable. The wastewater disposal system is an experimental method for the climatic and geographic setting of Gallatin Canyon. Therefore, a blanket approval would be premature.
 2. Approve the initial phase of Beaver Creek South and base further action on operation of the wastewater disposal system. Serious consideration was given to this alternative and exercise of this alternative can be justified in light of concept criteria required by MAC 16-2.14(10)-914340, Section 69-5001 through 69-5005, R.C.M. 1947, and Section 69-4801 through 69-4827, R.C.M. 1947. The system would have to be monitored. If the evidence indicated there was forthcoming degradation of groundwater, the percolation ponds would be expanded. Five acres are available for this purpose. Dosing rates (average) could be reduced to approximately 0.075 gallon per square foot per day.
 3. Refuse to approve the subdivision plat under any conditions. From the evidence submitted, the department could not justify the exercise of this alternative.

This statement was prepared by Alfred P. Keppner, B.S.F., M.S., Soils Scientist, with information furnished by Brelsford and Associates, Morrison-Maierle, Inc., Montana Department of Highways, Montana Department of Fish and Game and others designated therein.