BEFORE THE DEPARTMENT
OF NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

* * * * * * * * * *

IN THE MATTER OF THE APPLICATION)
FOR BENEFICIAL WATER USE PERMIT) FINAL ORDER
NO. 51938-s42M BY LESTER J. ERNSTER)

* * * * * * * * * *

The time period for filing exceptions or objections to the Proposal for Decision, August 20, 1984, (hereafter, "Proposal") has expired. One comment, from Lee Yelin, Department of Natural Resources and Conservation (hereafter, "Department") staff expert, was received.

Having given the comments full consideration, and being fully advised in the premises, with the modifications specifically discussed below the Department hereby accepts and adopts the Proposal as its Final Order in the above-captioned matter, and expressly incorporates the Proposal herein by reference.

1. The word "tractor" in Proposed Finding of Fact No. 4, page 13, should be trailer. The final Finding of Fact as corrected reads:

> 4. The Applicant seeks to appropriate water from north fork of Burns Creek, an intermittent stream, by means of a movable Crisafulli pump mounted on a trailer, from various points on the Creek as it meanders through the Applicant's property in the West Half of Section 24, Township 20 North, Range 56 East.

CASE # 51938

2. Proposed Finding of Fact No. 11, p. 15, is in error as it described the watershed yield formula. The final Finding of Fact No. 11 reads:

> 11. The alternative formula which the Department used to estimate watershed yield was to assume that each section of land drained by North Fork yielded .5 inches to the Creek flow. Using this formula, the yield would be 1,626 acre-feet per year. (Dept. Exh. 1, testimony of Lee Yelin.)

WHEREFORE, based on the foregoing, and with the above specific modifications to the Proposal, the Department hereby adopts the Proposal as its Final Order herein, and issues the following:

FINAL ORDER

Application for Beneficial Water Use Permit No. 51938-s42M by Lester J. Ernster is hereby denied without prejudice.

DONE this 31st day of October, 1984.

Gary Fritz

Gary Fritz, Administrator
Department of Natural Resources
and Conservation
32 So. Ewing, Helena, MT 59620
(406) 444-6605

Sarah A. Bond

Sarah A. Bond, Hearing Examiner
Department of Natural Resources
and Conservation
32 So. Ewing, Helena, MT 59620
(406) 444-6605

CASE # 51938

NOTICE

The Department's Final Order may be appealed in the appropriate District Court by filing a petition for review within 30 days of service of this order, pursuant to Title 2, Chapter 4, Part 7, MCA (1983).

CASE # 51938

AFFIDAVIT OF SERVICE

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

Donna K. Elser, an employee of the Montana Department of Natural Resources and Conservation, being duly sworn on oath, deposes and says that on October 31, 1984, she deposited in the United States mail, Certified mail, an order by the Department on the Application by Lester J. Ernster & Sons, Application No. 51938-s42M, for an Application for Beneficial Water Use Permit, addressed to each of the following persons or agencies:

1. Lester J. Ernster & Sons, Rt. 2, Savage, MT 59262
2. Sharon P. Allard, 1408 N. River Ave., Glendive, MT 59330
3. James A. Baste, Rt. 2, Box 331, Savage, MT 59262
4. Ruth Allard, 1408 N. River, Glendive, MT 59330
5. Tom Hafele, Intake Route, Glendive, MT 59330
6. Monte & Marie Jarvis, 607 E. Dodge, Glendive, MT 59330
7. Robert Hubing, Inc., Robert Hubing, Pres., Savage, MT 59262
8. Leida E. Hubing, Savage, MT 59262
9. Eugene P. Allard, 2733 Miles Ave., Billings, MT 59102
10. Adam Buxbaum & Son, Inc., Adam T. Buxbaum, Pres., Intake Route, Glendive, MT 59330
11. Richard L. Allard, Rt. 2, Box 3078A, Forsyth, MT 59321
12. Lee Yelin, Water Rights Bureau Field Office, Missoula (inter-departmental mail)
13. Vivian Lighthizer, Water Rights Bureau Field Office, Glasgow (inter-departmental mail)
14. Sarah A. Bond, Hearing Examiner (hand deliver)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

by Donna Elser

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

On this 31st day of October, 1984, before me, a Notary Public in and for said state, personally appeared Donna Elser, known to me to be the Hearings Recorder of the Department that executed this instrument or the persons who executed the instrument on behalf of said Department, and acknowledged to me that such Department executed the same.

CASE # 51938

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

Judy Kohn

Notary Public for the State of Montana
Residing at Montana City, Montana
My Commission expires 3-1-85

CASE # 51938

BEFORE THE DEPARTMENT
OF NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

* * * * * * * * * *

IN THE MATTER OF THE APPLICATION)
FOR BENEFICIAL WATER USE PERMIT) PROPOSAL FOR DECISION
NO. 51938-s42M BY LESTER J. ERNSTER)

* * * * * * * * * *

Pursuant to the Montana Water Use Act, MCA Title 85, Chapter 2, and to the Montana Administrative Procedures Act, MCA Title 2, Chapter 4, Part 6, a hearing in the above-entitled matter was held on March 28, 1984, in Glendive, Montana.

I. Statement of Case

A. Parties

Lester J. Ernster, the Applicant, appeared personally and by and through his counsel of record Ronald S. Efta.

Sharon P. Allard, James A. Basta, Ruth Allard, Tom Hafele, Monte and Marie Jarvis, Robert Hubing, Inc., Leida E. Hubing, Eugene P. Allard, Adam Buxbaum & Son, Inc., and Richard L. Allard, the Objectors, appeared personally and by and through their counsel of record, Peter Maltese.

Lee Yelin, Montana Department of Natural Resources and Conservation (hereafter, "Department" or "DNRC") appeared in his capacity as Departmental staff expert.

B. Case

The Applicant seeks to appropriate 14.9 cubic feet per second (hereafter, "cfs") up to 328.85 acre-feet per annum from the North Fork of Burns Creek (sometimes hereafter, "North Fork") for

CASE # 51938

irrigation use on 96.3 acres of land located as follows: 44.9 acres in the W½NW¼ of Section 24, Township 20 North, Range 56 East, and 51.4 acres in the W½SW¼ of Section 24, Township 20 North, Range 56 East, all in Dawson County, Montana. The period of use applied for was March 1 through October 31 of each year, but at the hearing the Applicant indicated he wished to appropriate only during the period of spring runoff, which varies each year. According to the evidence submitted at the hearing, the runoff, or period of highest continuous flow, characteristically occurs between February 9 and April 26 of each year. The points of diversion will be located in the W½ of Section 24, Township 20 North, Range 56 East, Dawson County, Montana. Burns Creek meanders through the West ½ of Section 24, on Mr. Ernster's land, and he intends to use a Crisafulli pump at various points along the creek depending upon contemporaneous stream conditions.

The Objectors, apparently associated in the Burns Creek Water Users' Association, are all persons who ranch and/or farm along North and South Forks of Burns Creek.

Sharon P., Richard L., Ruth, and Eugene P. Allard all filed objections; Eugene P. Allard being their designated witness at the hearing for the Allard family. Their property ownership and stockwater rights relevant to this case are in the South ½ of Section 2 and the West ½ of Section 12, Township 19 North, Range 56 East, Dawson County, Montana and downstream from Applicant's proposed points of diversion and of use. The North Fork meanders

CASE # 51938

through their property in Section 2, and their stock (or stock of a lessee) water therefrom. Although the Allards currently lease some of this property to the Applicant, they retain the water rights in their name, seeking to protect those rights for their own benefit as well as for the benefit of any future lessees.

In her objection, Ruth Allard stated that she would agree to issuance of the permit if the volume were reduced and the period of use were limited to ensure that only high run-off water would be used. Eugene P. and Richard Allard stated a similar willingness to agree to permit issuance if the above conditions and limitations were incorporated therein.

Objector James A. Basta filed an Objection but stated at the hearing that his interest was general, rather than specific to his own water rights. He stated that he was too far down the South Fork of Burns Creek to be adversely affected by Applicant's proposed use, but that he was interested in the issuance of permits generally and opposed to the issuance of a permit for water when the supply is intermittant at best.

Tom Hafele filed an objection apparently stating that his objection stemmed from his use of land owned by Robert Hubing, Inc.[1], for running cattle. He alleged generally that the runoff is necessary to flush the creek of alkali buildup.

[1] "I run cattle on North Fork, on Robert Hubing, Inc. Need any runoff we can obtain, to flush away previous alkali buildup." Objection, Tom Hafele.

CASE # 51938

Monte and Marie Jarvis filed an objection alleging that, "1) Without a flushout on North Fork, the alkali deposits will increase on our lands, thereby making the stockwater unsuitable for use. 2) If such a vast amount of water is taken out of North Fork our subirrigated lands will suffer." The Jarvis's were represented at the hearing by a lessee of their property, Adam Buxbaum. Mr. Buxbaum also testified on his own behalf, and on behalf of Adam Buxbaum & Sons, Inc. Mr. Buxbaum testified that he farms in the vicinity of the proposed use, and that on his own behalf, and as lessee of Marie Jarvis, he runs cattle there. Further, he testified that the property he leases from the Jarvis's includes an irrigation water right, pursuant to which he irrigated approximately 12 acres of land at the confluence of North and South Forks of Burns Creek.

Robert Hubing filed an objection on behalf of Robert Hubing, Inc. Mr. Hubing alleges the Application, if approved, would reduce or eliminate the spring runoff which flushes the Creek and cause serious alkali problems on North Fork; that high runoff occurs only when the ground is already saturated or is frozen and therefore there isn't a need of irrigation water; and that the large amount of water applied for, if allowed to be pumped, would destroy his pasture downstream which is subirrigated by the Creek, as well as possibly dry up his shallow domestic well.

Leida Hubing filed an objection alleging that the project is not feasible, economically or otherwise, and that the water needs to be left in the Creek to flush out the alkali.

CASE # 51938

Adam Buxbaum & Son, Inc. (by Adam Buxbaum) filed an objection stating that the Corporation leases land from Marie T. Jarvis, and that, if the permit were issued this downstream property would suffer alkali build-up, resulting in lost pasture and possibly dead livestock.

The North Fork Burns Creek is an intermittant stream which meanders first through the Applicant's property, then through that of the Hubings, Allards and Jarvis's. The Objectors all claim stockwater rights out of North, Middle and South Forks of Burns Creek.[2] The Jarvis's have claimed an irrigation right out of the South Fork, for irrigation of 130 acres in Section 13 and 14 of Township 19 North, Range 56 East up to 260 acre-feet per year March 1 through September 1. (Claim No. 42M-W-122116-00).

Mr. Buxbaum testified at the hearing that he, as the Jarvis's lessee, "completed" the Jarvis' appropriation by irrigating 12 acres at the confluence of the North and South Forks of Burns

[2] Although the filing of instream stockwater rights for adjudication in the water courts of the State of Montana is not mandatory, all parties have filed various Statements of Claim ("SB 76 Claims"). Because such filings are exempt from the filing requirements, however, they cannot be evidence of other than a minimum amount of such rights, i.e.: the Objectors may have valid rights greater than those reflected by the SB76 Claims. "Claims for existing rights for livestock and individual as opposed to municipal domestic uses based upon instream flow or groundwater sources and claims for rights in the Powder River Basin included in a declaration filed pursuant to the order of the Department or a district court issued under Section 8 and 9 of Chapter 452, Laws of 1973, or under Section 3 and 4 of Chapter 485, Laws of 1975, are exempt from the filing requirements of 85-2-221(1), such claims may, however, be voluntarily filed." MCA § 85-2-222.

CASE # 51938

Creek. The filed right claimed, as indicated in DNRC computer and microfilm records of statewide SB76 filings, indicates a 1903 priority date.

The central issues of the matter, as first raised in all of the objections are: a) whether an appropriation of water from North Fork of Burns Creek during any high runoff period would exacerbate the historically severe water quality problems along the Creek, and, b) whether a permit may issue when available water will only exist in some wet years, and then, only for a few days. The Objectors allege that the reduction of high flows would reduce the natural flushing of alkali in the stream bed, and make an already bad situation worse. The quality of water during run-off (if one occurs) is generally conceded to be fairly good, but, as the amount of water drops until the Creek no longer runs, the alkalinity worsens. The result is that when the water is of sufficient purity and volume to be used successfully for irrigation the ground is not in great need of irrigating. By the time the soils have released their moisture to the thirsty pasture grasses, and irrigation would materially increase the hay yields, the water level has dropped, and the amount of the salts has skyrocketed (as a percentage of volume - i.e.: the salts concentrate as the water volume drops without a corresponding drop in salt or alkali). Put simply, the water cannot be used for irrigation when it is needed for that use.

The Objectors believe the reduction in stream flow would bring on the yearly deterioration of water quality much sooner than if no diversion were permitted, and that the reduction in flow would impair the Creek's ability to leach the salts from the soil, or at least, wash the salts downstream.

The Objectors also made mention of "subirrigation rights". These types of rights are sometimes claimed as a means of exercising an irrigation right. That is, there are filed SB76 claims for irrigation water, where the point of diversion and method of use is shown as subirrigation. The method of use claimed is simply allowing the water in the source to continue in its natural channel, so that the adjacent lands will benefit from natural percolation through the soil. None of the parties herein, however, have filed such rights, which are not exempt from filing § 85-2-222 MCA (1983).

Therefore, without any further information regarding the possible rights of the objectors to a specific volume of water for irrigation uses by means of subirrigation, the Hearing Examiner cannot protect such use rights. Although the conclusive presumption of abandonment from failure to file a claim may not be binding upon the Department until final decrees are issued, or at least until the water courts declare they will no longer accept late filed claims, it remains a statement of legislative intent that the Department cannot ignore: "The failure to file a claim of existing right filed as required by 85-2-221 establishes a conclusive presumption of abandonment of that right." § 85-2-226 M.C.A. (1983).

C. Exhibits

The Applicant offered the following exhibits into the record:

App. 1 - A copy of an aerial photograph of the project area, Section 24, Township 20 North, Range 56 East, Dawson County, Montana, with the acres to be irrigated shaded in orange. The exhibit appears to be the original of the photograph which was attached to the Application.

App. 2 - A copy of a portion of a United States Department of Interior Geological Survey (hereafter, "USGS") Quadrangle. The copy is that portion of the map showing Sections 13, 14, 23, 24, 25, 26, 35, and 36, Township 20 North, Range 56 East, and Sections 1 and 2, Township 19 North, Range 56 East, all in Dawson County, Montana. The North Fork of Burns Creek is shown through the middle of the above-named Sections.

Both of the Applicant's Exhibits were received into the record without objection.

The Objectors offered the following exhibit into the record:

Ob. 1 - USGS Quadrangle Topographic Maps, i.e.: the map showing the relevant portions of the Allard Ranch quadrangle, and the adjacent portion of the map of the Intake NW Quadrangle. The maps are mounted on stiff cardboard and covered with a cellophane wrapper. Throughout the hearing, the parties marked the location of their land owned and served by the water rights upon which they based their objections, on these exhibits.

The Objectors' exhibit was received into the record without objection.

The Department offered the following exhibits into the record:

Dept. 1 - A report, prepared by Lee Yelin in connection with the present Application. Attached thereto is water quantity and quality data photocopied from the USGS Water-Data Reports for Montana.

Dept. 2 - A supplementary irrigation requirements form worksheet prepared by Mr. Yelin, taking into account the amendments made at the hearing.

The Objectors objected to the inclusion in the record of a small yellow stick-up note paper attached to the report copy in the file. The paper contained notes admittedly written by Lee Yelin without the intent of including same in the official record herein.

The Applicant moved that the contents of the Departmental File be admitted.

The Hearing Examiner sustained the objection to the note-pad paper, and with that exception, the contents of the Departmental file were received into the record.

II. Preliminary Matters

1. The Scope of Application and Applicable Statutes

The original Application sought 10,000 gallons per minute (hereafter, "gpm") up to 328.86 acre-feet per annum. There are 448.8 gpm per 1 cubic foot per second (hereafter, "cfs") of water. The flow rate requested translates, therefore into 22.28 cfs.

At the hearing, the Hearing Examiner noted that the temporary criteria in the applicable statute, MCA § 85-2-311 (1983), require the Department to make numerous "public interest"

findings regarding the proposed use, as well as to petition the legislature to affirm those findings, before the permit could issue.

The higher burden of proof regarding lack of adverse affect and the temporary public interest criteria were triggered by the high flow rate requested, i.e.: the 22.28 cfs, since MCA § 85-2-311(1983) states:

> (2) (a) The department may not issue a permit for an appropriation of 10,000 or more acre-feet of water a year or 15 or more cubic feet per second of water unless it affirmatively finds:
> (i) the criteria in subsection (1) are met;
> (ii) the applicant has proven by clear and convincing evidence that the rights of a prior appropriator will not be adversely affected;
> (iii) the proposed appropriation is a reasonable use. Such a finding shall be based on a consideration of the following:
> (A) the existing demands on the state water supply, as well as projected demands such as reservations of water for future beneficial purposes, including municipal water supplies, irrigation systems, and minimum streamflows for the protection of existing water rights and aquatic life;
> (B) the benefits to the applicant and the state;
> (C) the economic feasibility of the project;
> (D) the effects on the quantity, quality, and potability of water for existing beneficial uses in the source of supply;
> (E) the effects on private property rights by any creation of or contribution to saline seep; and
> (F) the probable significant adverse environmental impacts of the proposed use of water as determined by the department pursuant to Title 75, Chapter 1, or Title 75, Chapter 20.
> (b) A permit for an appropriation for a diversion for a consumptive use of 10,000 or more acre-feet of water a year or 15 or more cubic feet per second of water under this subsection may not be issued unless the department petitions the legislature and the legislature affirms the findings of the department.
> (3) An appropriation, diversion, impoundment, restraint, or attempted appropriation, diversion, impoundment or restraint contrary to the provisions of this section is null and void. No officer, agent, agency, or employee of the state may knowingly permit, aid, or assist in any manner such unauthorized appropriation, diversion, impoundment, or other

> restraint. No person or corporation may, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, or otherwise restrain or control waters within the boundaries of this state except in accordance with this section.

This statute became effective on April 29, 1983, by virtue of House Bill 908. Section 6 of that Act provided that the Act was to become effective on passage and approval. The Bill was received and approved by the Governor on April 29, 1983.

Because the filing of an Application for Beneficial Water Use Permit creates no vested rights, other than the right to a priority date as of the date of filing should any permit ultimately issue, the Department could apply the temporary criteria to all applications acted on during the effective time period of the Act. The hearing, creation of record, and creation of vested rights by virtue of a departmental decision on the instant Application being within the time period of the temporary criteria, the Hearing Examiner held that the temporary criteria would be applied herein. It is the issuance of the permit from which flow the inchoate rights to appropriate in accordance therewith. See, Neel v. First Federal Savings of Great Falls, 41 St. Rep. 18, (1983).

In response thereto the Applicant successfully moved to amend his requested flow rate downward to under the trigger flow rate of 15 cfs, i.e.: to request only 6,709 gpm or approximately 14.9 cfs. The requested volume, 328.86 acre-feet, remained the same. For the amended Application, the applicable criteria are the criteria in MCA § 85-2-311(1) (1983);

85-2-311. (Temporary) Criteria for issuance of permit. (1) Except as provided in subsection (2) and (3), the department shall issue a permit if the applicant proves by substantial credible evidence that the following criteria are met:

(a) there are unappropriated waters in the source of supply:

(i) at times when the water can be put to the use proposed by the applicant;

(ii) in the amount the applicant seeks to appropriate; and

(iii) throughout the period during which the applicant seeks to appropriate, the amount requested is available;

(b) the water rights of a prior appropriator will not be adversely affected;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the proposed use will not interfere unreasonably with other planned uses or developments for which a permit has been issued or for which water has been reserved.

The Objectors objected to this amendment on the grounds of unfair surprise. The objection was overruled as the parties rights of reasonable notice of the matter at hand were adequately protected by the allowance of submission of additional evidence, subsequent to the hearing, which pertained to Objectors assertions of adverse affect specific to the reduced flow rate application. That is, the Hearing Examiner noted that the only prejudice to the Objectors arose from the difference between the evidence they prepared for the hearing on the assumption that the flow rate in issue was 10,000 gpm and and the evidence they would have prepared had they known beforehand that the requested flow rate was 6,709 gpm. As noted earlier, the total volume requested was not amended, and because the record remained open for the preparation and submission of evidence, related to flow rate, no prejudice accrues to the Objectors by virtue of the allowed amendment to the flow rate requested.

CASE # 51938

The prejudice to the Objectors by allowing the amendment is, therefore, minimal at best, while substantial prejudice to the Applicant, who filed his Application prior to the effective date of the temporary criteria, would occur if the amendment were not allowed.

III. Proposed Findings of Fact

1. The Department has jurisdiction over the parties and over the subject matter herein.

2. The instant Application was filed with the Department at 8:26 a.m., March 16, 1983, and amended as noted above at the hearing on March 28, 1984.

3. The pertinent facts of the Application were duly published in the Ranger Review on June 23, 1983 and June 30, 1983, as well as in the Sidney Herald on June 22, 1983 and June 29, 1983. Both are newspapers of general circulation in the area of the source.

4. The Applicant seeks to appropriate water from North Fork of Burns Creek, an intermittant stream, by means of a moveable Crisafulli pump mounted on a tractor, from various points on the Creek as it meanders through the Applicant's property in the West Half of Section 24, Township 20 North, Range 56 East.

5. The Applicant originally sought 10,000 gpm up to 328.86 acre-feet for new flood irrigation of forage crops on 44.9 acres in the W½NW¼, Section 24, Township 20 North, Range 56 East; and 51.4 acres in the W½SW¼, Section 24, Township 20 North, Range 56 East, all in Dawson County, Montana. After amendment, the Applicant seeks only a flow rate of 6,769 gpm.

CASE # 51938

Applicant requested a period of use from March 1 through October 31, but added the following remark to his original Application: "Also applicants (sic) period of appropriation is 3-1 to 10-31 however applicant only wants to irrigate during high runoff periods because of water quality and to allow senior (prior appropriators & existing rights) water rights to be supplied." Applicant reiterated at the hearing his intent to pump from the stream only when high runoff is present.

6. The quantitative parameters of "high runoff" were never clearly articulated by any party.

7. The North Fork of Burns Creek is a small intermittant stream, tributary to Burns Creek, and ultimately, the Yellowstone River. The North Fork contains somewhat less than one third the volume of water of Burns Creek itself.

8. The mainstem of Burns Creek is measured by the USGS at its gauging station 1 mile upstream from the mouth of Burns Creek and 7 miles southwest of Savage, Montana.

9. The North Fork dries up each summer, generally sometime in July. Thereafter, the North Fork consists of unconnected potholes of water and the North Fork ceases to contribute to the flow of the mainstem.

10. Data based on acres of drainage area, as well as on the flow of Burns Creek was used to estimate the water availability in North Fork. " The total drainage area of Burns Creek is 233 sq. miles, or 149,120 acres. North Fork Burns Creek drainage

area is 76.22 sq. miles, or 48,781 acres. In other words, the North Fork accounts for 32.7% of the total drainage area of Burns Creek. If the yearly average volume over a 16 year period is 4,780 acre feet (USGS Water Resources Data Montana Water Year 1981, Vol. 1) then 32.7% of that volume would be 1,583 acre-feet... Using another formula to estimate watershed yield we came up with 1,626 acre-feet per year". (Dept. Exh. 1.)

11. The alternative formula which the Department used to estimate watershed yield was to assume that each section of land drained by the North Fork yielded .5 acre feet to the Creek flow. Using this formula, the yield would be 1,626 acre-feet per year. (Dept. Exh. 1, testimony of Lee Yelin.)

12. Treating the Application as one for 6,709 gpm up to 328.86 acre-feet per year, and assuming that the flow of North Fork of Burns Creek is somewhat less than 1/3 of the flow recorded at the USGS gauging station on Burns Creek near Savage, Montana,[3] the USGS data indicate that the requested flow was never available in the years 1977, 1980, 1981; was available for 36 days in 1979; and 21 days in 1978. (Dept. Exh. 1).

[3] The reason that North Fork contributes less than 1/3 of the flow of the Burns Creek drainage is that testimony of all parties indicated that even after North Fork dries up, that various springs along South Fork visibly contribute to its flow. Because of these springs' contribution to Burns Creek, the North Fork's contribution must be less than the 1/3 predicted by calculating square miles of contributing drainage lands.

13. The requested flow rate was not available in 1984 or 1983. (Testimony of Applicant, Mr. Hubing, Lee Yelin).

14. The amount and volume requested will only be available in the wettest years, and then only for a few days. (Testimony of Mr. Ernster.)

15. The quantity of flow needed to satisfy downstream users is, from this record, impossible to quantify. The Objectors voluntarily filed Statements of Claim for Existing Water Rights for the Water Courts of the State of Montana (hereafter, SB76 Claims) for their instream stockwater uses in North Fork. Because these SB76 Claims may not represent the full extent of their instream stockwater uses, the filed claims represent only a minimum of prior appropriative rights on North Fork.

16. The water in North Fork, as well as the South Fork, or mainstem, of Burns Creek, has a high salinity or alkali concentration during all periods except when the Creek is flowing at high run-off. (Testimony of all parties.)

17. Burns Creek generally flows year round. (Testimony of all parties). In 1980, however, it dried up completely, or was measured at 0 cfs flow, for most of July and parts of August; for 1981, it measured no flow for some of July and September; for 1978, negligible flow was measured for February (2.7% being the total flow for the entire month); for 1977, no flow was measured for August, and negligible flows measured in January (4.5 cfs for

CASE # 51938

entire month). (Dept. Exhibit 1).

18. The water quality problems obvious to water users of the North Fork are reported to be significantly less severe in the South Fork, or mainstem, Burns Creek, presumably because Burns Creek has a consistent and heavier flow. (Testimony of Adam Buxbaum, and Mrs. Hubing).

19. The water quality problems associated with irrigating out of North Fork, at least during periods of less than high runoff, were corroborated by the Hearing Examiner during the on-site visit of the proposed use area and area of Objectors' uses. Areas of white powder deposited on the ground in and around the Creek were common.

20. Application of North Fork water to the land at the juncture of North and South Forks turned the land irrigated white. (Testimony of Adam Buxbaum, observation at site inspection).

21. The water quality and, presumably, quantity, data from the USFS gauging station on Burns Creek, does not even approximately reflect, even approximately, the quality and quantity of water at the proposed use area. (Dept. Exhibit 1; testimony of Lee Yelin, Adam Buxbaum; observation from on-site inspection). According to the USGS water quality data, and a report entitled Assessing Water Quality - for Agriculture and Domestic Uses by the United States Department of Agriculture Soil Conservation Service, Bozeman, Montana, January 1982, (attached

hereto as Exhibit A), the water of Burns Creek is suitable for both livestock and irrigation uses. The water from North Fork is not. (Except for high flow periods.)

22. The failure of the USGS data to reflect conditions on North Fork is, more likely than not, attributable to the distance between North Fork and the gauging station - at least 3 or 4 miles, and the volume and quality of South Fork water.

23. Most of the Objectors do not oppose the Applicant's pumping when high-runoff occurs.

24. The parties failed to come to agreement on what "high run-off" means, i.e.: what measured quantity of water would constitute enough volume to allow Applicant's use and satisfy downstream users.

25. The proposed use, - irrigation - would materially benefit the Applicant if the period of use is limited to high-runoff. Application of North Fork water to irrigation use at any other time would be detrimental to Applicant's farming operation and would not constitute a beneficial use.

26. There are not unappropriated waters in the source of supply at times when the water can be put to the use proposed by the Applicant, in the amount the Applicant seeks to appropriate; and the amount requested is not available throughout the period during which the Applicant seeks to appropriate. The evidence indicates no water will be available at all in some years (testimony of the Applicant). In "wet" years, water will be available for a few days. (Testimony of the Applicant).

27. The proposed means of diversion, construction and operation, of the appropriation works are reasonably and customary for the intended use.

28. The water rights of prior appropriators would be adversely affected by issuance of a permit for the amount Applicant seeks herein. The evidence indicates that such an appropriation would, if attempted, usually prevent any water from flowing downstream to other prior appropriators.

29. Conflicting evidence was presented regarding whether the reduction in volume of high flow (which would necessarily result from Applicant's pumping) would cause an increase in the water quality problems in and along North Fork Burns Creek. The Objectors believed the high flows serve to "flush-out" the salinity or alkali which is left in the Creek after the Creek goes dry each summer, and that without all available "flushing", the Creek water and surrounding pastures would deteriorate even more severely than they already do. (Testimony of Robert & Leida Hubing). On the other hand, Mike Carlson testified that Applicant's pumping at high flow would not increase the severity of water quality problems in the Creek.

Based upon the foregoing Findings of Fact, and the proceedings and record herein, the Hearing Examiner makes the following:

IV. Conclusions of Law

1. The Department has jurisdiction over the parties and over the subject matter herein. §§ 85-2-301 et seq. MCA 1983.

CASE # 51938

2. The Department gave proper notice of the hearing, and all relevant substantive and procedural requirements of law or rule have been fulfilled and, therefore, the matter was properly before the Hearing Examiner.

3. § 85-2-311 MCA (1983) directs the Department to issue a permit,

"if the applicant proves by substantial credible evidence that the following criteria are met:
(a) there are unappropriated waters in the source of supply:
(i) at times when the water can be put to the use proposed by the applicant;
(ii) in the amount the applicant seeks to appropriate; and
(iii) throughout the period during which the applicant seeks to appropriate, the amount requested is available;
(b) the water rights of prior appropriator will not be adversely affected;
(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;
(d) the proposed use of water is a beneficial use;
(e) the proposed use, will not interfere unreasonably with other planned uses or developments for which a permit has been issued or for which water has been reserved."

4. The Applicants' proposed use, i.e.: irrigation, is beneficial.[4]

5. The amount sought is reasonable in relation to the proposed use and would not result in a waste of the water resource. Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939), Sayre v. Johnson, 33 Mont. 15, 81 P. 389 (1905); Irion v. Hyde, 107 Mont. 84, 81 P.2d 353 (1938): In the Matter of the Application for Beneficial Water Use Permit No. 47648-s76M by Lawrence H. and Kevin L. Rausch, Final Order, May 23, 1983.

[4] "Beneficial use", unless otherwise provided, means a use of water for the benefit of the appropriator, including but not limited to agricultural (including stock water), domestic, irrigation..." § 85-2-101(2) MCA.

6. The Applicant's means of diversion are adequate, reasonable and customary for the intended purposes. State ex rel. Crowley v. District Court, 108 Mont. 89, 88 P.2d 23 (1939).

7. Water quality is a protectible element of any water right.

> The right to water by prior appropriation... is limited in every case, in quantity and quality, by the uses for which the appropriation is made. A different use of the water subsequently does not affect the right; that is subject to the same limitations, whatever the use... What diminution in quantity, or deterioration in quality, will constitute an invasion of the rights of the first appropriator will depend upon the special circumstances of each case, considered with reference to the uses to which the water is applied. A slight deterioration in quality might render the water unfit for drink or domestic purposes, whilst it would not seriously impair its value for mining or irrigation. In all controversies, therefore, between him and parties subsequently claiming the water, the question for determination is necessarily whether his use and enjoyment of the water to the extent of his original appropriation have been impaired. Atchison v. Peterson, 87 U.S. 414 (1874), at 416, 417.

This long standing rule of prior appropriative law is reflected in the current Water Use Act, § 85-2-401(1) MCA (1983). "As between appropriators, the first in time is the first in right. Priority of appropriation does not include the right to prevent changes by later appropriators in the condition of water occurrence.... if the prior appropriator can reasonably exercise his water right under the changed conditions."

8. The evidence is conflicting on whether the Applicant's pumping at times of high run-off will exacerbate already poor quality creek water. The testimony of Mike Carlson, SCS is at variance with that of the Objectors Robert and Leida Hubing, and

Leroy Buxbaum. The testimony of an expert need not be accorded greater weight than that of farmers with long standing familiarity with the area in question. In re: Monforton Proposal for Decision, supra, at p. 22.

> Appellants contend that this court should entirely disregard the testimony of all the witnesses for the respondents, (who were farmers) as well as that of the respondents themselves, and determine the case solely upon the testimony of the irrigation engineers. In the Joerger case just cited, the court said: "Defendants call our attention to the fact that many of the plaintiffs witnesses are farmers, and that their testimony is at variance with that of defendants' experts. Plaintiff, too, produced experts in support of his claims, but the trial court was not bound to accept the testimony of any of these witnesses to the exclusion of the farmers who were familiar with the character of the lands and its needs. Their testimony was also entitled to be considered. It has been said that this character of testimony is of a higher quality than the mere opinion of an expert; that it is the difference between practice and theory, between experience and observation or examination". (Citations omitted.) Worden v. Alexander, 108 Mont. 208 at 216, 90 P.2d 160 (1939).

9. None of the Objectors have valid rights to quantities of irrigation water by virtue of any subirrigation along Burns Creek. Their stockwater rights are just that - rights to have their stock drink the water they need. The beneficial use is the base, measure and limit of the right. Irion v. Hyde, 107 Mont. 84, 81 P.2d 353 (1938). If the Objectors had expressed their intent to use water for irrigation of their pastures by claiming existing rights therefore and by means of subirrigation, a colorable claim to the volume claimed would have arisen. Bailey v. Tintinger, 45 Mont. 154, 122 P. 575 (1912); Miles v. Butte Elec. & Power Co. 32 Mont. 56, 79 P. 549 (1905). The Hearing Examiner, however, takes official notice of the SB76 Claims filed

CASE # 51938

with the Department pursuant to § 85-2-211 et seq. MCA 1983, § 2-4-612(6) MCA (1983). Those claims of the Objectors include various stockwater and domestic claims. Marie T. Jarvis filed a Statement of Claim for an irrigation right out of South Fork, Claim No. 122116. No other irrigation claims were filed by Objectors, and the Department, (lacking an attempt to file late claims of this nature), cannot protect any Objector's alleged right to maintenance of stream flow for the purpose of subirrigation of their pastures. "The failure to file a Claim of Existing Right as required by 85-2-221 establishes a conclusive presumption of abandonment of that right" § 85-2-226 MCA 1983.[5]

10. The scope of protection afforded the Objectors is that their stockwater rights are entitled to be protected against subsequent appropriators, or changes in use by senior appropriators, whose use would prevent their use of water for

[5] Even if the Objectors had filed irrigation claims, the Water Courts have taken the preliminary position that while the volume claimed represents an existing right, the means of diversion are not protected. "While the water rights for subirrigation and natural overflow are decreed, the owner of the right does not have a right to demand continued right of the water by these means of diversion." Preliminary Decree for Sage Creek Basin, adopted by Bernard W. Thomas, Water Judge, Lower Missouri Division, November 15, 1983. (All other preliminary decrees contain the same language). The Hearing Examiner agrees with this interpretation of the law, as an irrigation right claimed for subirrigation is an unreasonable means of exercising a right for any particular volume of water. See, State ex rel. Crowley, supra. Further, private persons may only obtain a right to appropriate water, and may not claim reparian rights. Mettler v. Ames Realty, 61 Mont. 152, 201 p. 702 (1921). Hence, a water right must be obtained through "appropriation", currently defined as "to divert, impound or withdraw (including by stock for stock water) a quantity of water"... § 85-2-102(1) MCA (1983).

stock. If the Applicant's use inevitably would result in a change in water quantity or quality such that the Objectors could not reasonably exercise their use for stockwater, it must be denied. §85-2-311(1) MCA 1983.

11. The Department has the authority to issue permits with conditions where the conditions would allow Applicant some appropriative right, but would serve to protect other appropriators whose rights would otherwise be adversely affected, or where the available unappropriated water is shown to be less than the amount applied for or than can be beneficially used without waste for the purpose stated in the Application. "The Department may issue a permit for less than the amount of water requested...It may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to protect the rights of other appropriators..." § 85-2-312(1) MCA 1983.

12. The Applicant cannot make beneficial use for irrigation of North Fork water except at times of extreme high run-off. (Testimony of Applicant, Mike Carlson). Such diversion would amount to waste and cannot be permitted by the Department.

13. There is a question whether the Marie Jarvis' irrigation right actually exists as stated in the SB76 Claim therefor. Although an SB76 Claim preserves existing rights, it will not serve to create a right which lapsed prior to the filing of the claim. Beneficial use is the measure of the right. When a water right owner fails to develop the right and perfect it by actual use, the right never vests. Miles v. Butte Elec. & Power Co., 32 Mont. 56, 79 P. 549 (1905).

Similarly, when an appropriator ceases to use a part or all of his right with the intent to abandon that part, the right lapses pro tanto. 79 Ranch, Inc. et. al. v. Pitsch, 40 St. Rep. 981, 666 P.2d 215 (1983).

Mr. Buxbaum started on the irrigation project undertaken pursuant to the SB76 filed right of Marie Jarvis, No. 122116, in 1983. Pursuant thereto, he stated he irrigated 12 acres. The SB76 claim is for 260 acre-feet out of the South Fork of Burns Creek, to irrigate 130 acres in Section 13 and 14, Township 19 North, Range 56 East, Dawson County, Montana.

It is entirely possible that the Jarvis right, with a claimed priority date of August 1, 1903, has been abandoned but for the volume of water necessary to irrigate the 12 acres, as currently used.

> Water rights have therefore been limited to the amount of water actually put to beneficial use, despite the amount of water diverted or claimed under a notice of appropriation....(Citations omitted). In determining the abandonment of a water right, this Court has often recognized the rule that mere nonuse of the water does not constitute abandonment. To prove abandonment, one has to prove the other party intended to abandon his water right...(citations omitted) Nevertheless, several Montana cases have also recognized that nonuse, while not conclusive, is evidence of an intention to abandon. In Smith v. Hope Mining, 6. (1896), 18 Mont. 432, 45 P. 632, this Court stated that nine years of nonuse 'is certainly very potent evidence, if it stood alone, of an intention to abandon.' 18 Mont. at 438. In our most recent case considering the issue, Holstrom Land Co. v. Meagher Cty. Newland Creek Water District, 605 P.2d 1060, 37 St. Rep. 295, we stated that seventy-five years of nonuse is 'clear evidence' of abandonment. 605 P.2d at 1069. Pitsch, at 984.

In any case, the issue of abandonment of rights filed under

WATER QUALITY PARAMETERS AND THEIR SIGNIFICANCE (continued)

CONSTITUENT OR PHYSICAL PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Specific conductance (Sp. Cond.) Sometimes reported as E.C., Sp. Cond. = E.C. X 10^3 @ 25°C.	Dissolved minerals in the water.	Specific conductance is a measurement of the water's capacity to conduct an electric current and is an indirect approximation of the total dissolved solids. This varies with temperature and the degree of ionization of the constituents. When measured in micromhos per centimeter, it is generally 1.0 to 1.5 times the total dissolved solids content.
Sulfate (SO_4)	Dissolved from rocks and soils containing gypsum, iron sulfides, and other sulfur compounds. Usually present in some industrial wastes.	Sulfate in water containing calcium forms hard scale in steam boilers. In large amounts, sulfate in combination with other ions gives bitter taste to water. Concentrations above 250 mg/l may have a laxative effect, but is considered safe up to 500 mg/l. Domestic waters in Montana containing as much as 1,000 mg/l sulfate are used for drinking in the absence of a less mineralized water supply. High sulfate concentrations may limit use of water for irrigation on some soils. High concentrations are tolerated by livestock.
Trace metals	Dissolved from rocks and soils. Some metals may be released from plumbing pipes, etc. The recommended limits are presented in the following tables.	Limits are usually recommended for health reasons. Limits for drinking water normally are conservative, and higher concentrations may be permitted if the water is the best available supply (e.g., copper). Recommended limits may be set low in order to slow the accumulative effect of metals in humans.

Source: Modified from Montana Bureau of Mines and Geology.

CASE # 51938

Table 1. Recommended limits and maximum levels of constituents in drinking and domestic water.

(in mg/l unless otherwise noted)

Parameter	Maximum Contaminate Levels	USPHS Recommended Limits, 1962	Notes
Arsenic (As)	0.05	0.01	
Barium (Ba)	1.0	--	
Cadmium (Cd)	0.01	--	
Chromium (Cr)	0.05	--	
Fluoride (F)	2.4	0.8-1.7	See table 2.
Nitrate (NO_3 as N)	10	10	
Lead (Pb)	0.05	--	
Mercury (Hg)	0.002	--	
Selenium (Se)	0.01	--	
Silver (Ag)	0.05	--	
Chloride (Cl)		250	
Copper (Cu)		1.0	
Cyanide (CN)		0.2	
Iron (Fe)		0.3	
Manganese (Mn)		0.05	
Sulfate (SO_4)		250	
Zinc (Zn)		5.0	
Total Dissolved Solids (TDS)		500	
Phenolic Compounds (as phenols)		0.001	
Endrin	0.0002		
Lindane	0.004		
Methoxychlor	0.1		
Toxaphene	0.005		
2,4-D	0.1		
2,4,5-TP Silvex	0.01		
Combined radium-226 and radium-228	5		pCi/liter
Gross alpha particle activity (including radium-226 but excluding radon and uranium)	15		"
Tritium	20,000		"
Strontium-90	8		"
Gross beta radioactivity	50		

Source: Column 2--National Primary Drinking Water Regulations from Safe Drinking Water Act (Public Law 93-523); Column 3--U.S. Public Health Service (1962).

CASE # 51938

Fluoride

Optimum fluoride levels will reduce dental caries by 60 to 65 percent. Excessive fluoride in drinking water will mottle teeth. The optimum fluoride level for a given location depends on climatic conditions because the amount of water (and consequently the amount of fluoride) ingested is primarily influenced by air temperature.

Table 2. Recommended fluoride limits

Annual Average of Maximum Daily Air Temperatures, °F.	Fluoride Concentrations in mg/l.			Maximum[1] Limit mg/l
	Lower	Optimum	Upper	
50.0 - 53.7	1.1	1.2	1.3	2.4
53.8 - 58.3	1.0	1.1	1.2	2.2
58.4 - 63.8	0.9	1.0	1.1	2.0
63.9 - 70.6	0.8	0.9	1.0	1.8
70.7 - 79.2	0.7	0.8	0.9	1.6
79.3 - 90.5	0.6	0.7	0.8	1.4

[1]Where fluorides are native to the water supply, these concentrations will not mottle teeth. Source: Public Health Service, DHEW.

Table 3. Classification of water by hardness content

Hardness mg/l $CaCO_3$	Class	Description
0-75	soft	minimum soap required
75-150	moderately hard	moderate soap consumption
150-300	hard	high soap consumption; scum forms; mineral deposits
300 up	very hard	excessive soap consumption; scum and curds form; mineral deposits

CASE # 51938

Table 4. Recommendations for maximum levels of toxic substances in drinking water for livestock

Constituent	Upper Limit
Aluminum (Al)	5 mg/l
Arsenic (As)	0.2 mg/l
Beryllium (Be)	no data
Boron (B)	5.0 mg/l
Cadmium (Cd)	.05 mg/l
Chromium (Cr)	1.0 mg/l
Cobalt (Co)	1.0 mg/l
Copper (Cu)	0.5 mg/l
Fluoride (F)	2.0 mg/l
Iron (Fe)	no data
Lead (Pb)	0.1 mg/l[1]
Manganese (Mn)	no data
Mercury (Hg)	.01 mg/l
Molybdenum (Mo)	no data
Nitrate + Nitrite (NO_3-N+NO_2-N)	100 mg/l
Nitrite (NO_2-N)	10 mg/l[3]
Selenium (Se)	0.05 mg/l
Vanadium (V)	0.10 mg/l
Zinc (Zn)	24 mg/l
Total Dissolved Solids (TDS)	10,000 mg/l[2]

[1]Lead is accumulative and problems may begin at threshold value = 0.05 mg/l.
[2]See table 5.
[3]See table 6.
Source: Environmental Studies Board. Nat. Acad. of Sci., Nat. Acad. of Eng. Water Quality Criteria 1972.

CASE # 51938

Table 5. Guide to the use of saline waters for livestock and poultry

Total Dissolved Solids in mg/l (Sp. Cond. in μmhos/cm)	
Less than 1,000 mg/l (Sp. Cond. <1500)	Relatively low level of salinity. Excellent for all classes of livestock and poultry.
1,000 - 3,000 mg/l (Sp. Cond. = 1500-5000))	Very satisfactory for all classes of livestock and poultry. May cause temporary and mild diarrhea in livestock not accustomed to them or watery droppings in poultry.
3,000 - 5,000 mg/l (Sp. Cond. = 5000-8000)	Satisfactory for livestock, but may cause temporary diarrhea or be refused at first by animals not accustomed to them. Poor waters for poultry, often causing water feces, increased mortality, and decreased growth, especially in turkeys.
5,000 - 7,000 mg/l (Sp. Cond. = 8000-11,000)	Can be used with reasonable safety for dairy and beef cattle, sheep, swine, and horses. Avoid use for pregnant or lactating animals. Not acceptable for poultry.
7,000 - 10,000 mg/l (Sp. Cond. = 11,000-16,000)	Unfit for poultry and probably for swine. Considerable risk in using for pregnant or lactating cows, horses, or sheep, or for the young of these species. In general, use should be avoided although older ruminants, horses, poultry, and swine may subsist on them under certain conditions.
Over 10,000 mg/l (Sp. Cond. >16,000)	Risks with these highly saline waters are so great that they cannot be recommended for use under any condition.

Source: Environmental Studies Board, Nat. Acad. of Sci., Nat. Acad. of Eng. Water Quality Criteria 1972.

CASE # 51938

Table 6. Effects of nitrate on livestock

Nitrate concentration (mg/l NO_3 as N)	Effect
0 - 10	Not harmful
10 - 30	Slight possibility of harm
30 - 50	Risky, especially over a long period of time
50 - 100	Interference syndrome likely (trembling, weakness, discolored urine)
100 - 145	More serious; possible acute losses
145 - 195	Increased acute losses, secondary diseases
195 up	Acute losses

Source: "Professional Topics". Bulletin No. 14, University of Illinois. July-August 1964.

CASE # 51938

WATER FOR IRRIGATION

It is not feasible to set rigid quality standards for irrigation waters because of such varied and complex factors as soil porosity, soil chemistry, climatic conditions, the ratio of rainwater to irrigation water, artificial and natural drainage, relative tolerance of different plants, and interferences between and among constituents in the water.

Some general guidelines have been established that indicate the relative usability of a water for irrigation and generally indicate the waters for which more detailed study would be necessary. The most important quality parameters to consider are the Sodium Adsorption Ratio, the salinity, and several specific ions or trace elements.

Permeability Hazard

Irrigation water with high sodium levels and low calcium and magnesium levels can cause a severe soil permeability problem. The most commonly used method to evaluate the potential has been the sodium adsorption ratio (SAR). For SAR values greater than 6 to 9, the water could be expected to cause a permeability problem on shrink-swell types of soil. Thus, the permeability can be related to the clay type.

Table 7. SAR guidelines

Dominant clay type	No Problem	Increasing Problem	Severe Problem
Montmorillonite	<6	6-9	>9
Illite-Vermiculite	<8	8-16	>16
Kaolinite	<16	16-24	>24

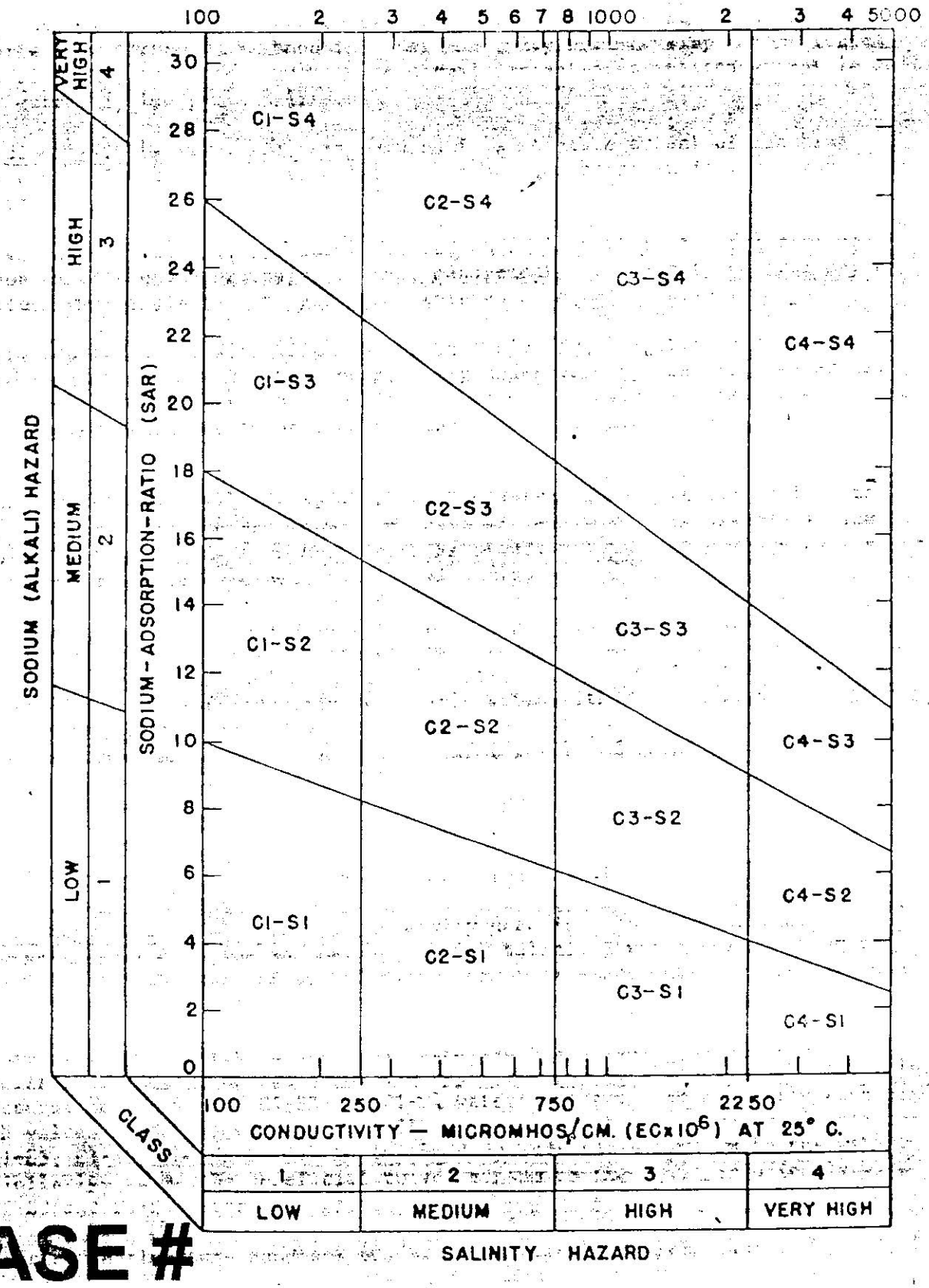
Source: Water Quality for Agriculture, UN-FAO, 1976, and A. Hayden Ferguson, Land Disposal of Wastewaters, MSU-CE Dept. 1973.

Salinity-Sodium Hazard

Irrigation waters can be classified with respect to both the salinity and the sodium hazards by using Fig. 1 and Table 8. Water in the C1-S1 area of the diagram can be used on almost all soils without detrimental effects. With increasing salinity, less exchangeable sodium can be tolerated and more leaching will be required to prevent salinity damage.

CASE # 51938

Figure 1. Diagram for the classification of irrigation waters



CASE #

Source: Agriculture Handbook 60, U.S. Department of Agriculture.

Case # 51938

Table 8. Classification of irrigation waters

Low Salinity Water (C1) can be used for irrigation of most crops on most soils with little likelihood that soil salinity will develop. Some leaching is required, but this occurs under normal irrigation practices except in soils of extremely low permeability.

Medium Salinity Water (C2) can be used if a moderate amount of leaching occurs. Plants with moderate salt tolerance can be grown in most cases without special practices for salinity control.

High Salinity Water (C3) cannot be used on soils with restricted drainage. Even with adequate drainage, special management for salinity control may be required, and plants with good salt tolerance should be selected.

Very High Salinity Water (C4) is not suitable for irrigation under ordinary conditions, but may be used occasionally under very special circumstances. The soils must be permeable, drainage must be adequate, irrigation water must be applied in excess to provide considerable leaching, and very salt-tolerant crops should be selected.

Low Sodium Water (S1) can be used for irrigation on almost all soils with little danger of the development of harmful levels of exchangeable sodium. However, sodium-sensitive crops such as stonefruit trees and avocados may accumulate injurious concentrations of sodium.

Medium Sodium Water (S2) will present an appreciable sodium hazard in fine-textured soils having high cation exchange capacity, especially under low leaching conditions, unless gypsum is present in the soil. This water may be used on coarse-textured soils or organic soils with good permeability.

High Sodium Water (S3) may produce harmful levels of exchangeable sodium in most soils and will require special soil management--good drainage, high leaching, and organic matter additions. Gypsiferous soils may not develop harmful levels of exchangeable sodium from such waters. Chemical amendments may be required for replacement of exchangeable sodium, except that amendments may not be feasible with waters of very high salinity.

Very High Sodium Water (S4) is generally unsatisfactory for irrigation purposes except at low and perhaps medium salinity, where the solution of calcium from the soil or use of gypsum or other amendments may make the use of these waters feasible.

times the irrigation water may dissolve sufficient calcium from calcareous soils to decrease the sodium hazard appreciably, and this should be taken into account in the use of C1-S3 and C1-S4 waters. For calcareous soils with high pH values or for noncalcareous soils, the sodium status of waters in classes C1-S3, C1-S4, and C2-S4 may be improved by addition of gypsum to the water. Similarly, it may be beneficial to add gypsum to the soil periodically when C2-S3 and C3-S2 waters are used.

ce: Agriculture Handbook 60, U.S. Department of Agriculture.

ASE # 51938

Trace Element Hazard

Trace element concentrations greater than those shown in tables 9 and 10 can hinder plant growth.

Table 9. Recommended maximum concentrations of trace elements in irrigation waters

Element (symbol)	For waters used continuously on all soils (mg/l)	For use up to 20 years on fine-textured soils of pH 6.0 to 8.5 (mg/l)
Aluminum (Al)	5.0	20.0
Arsenic (As)	0.1	2.0
Beryllium (Be)	0.1	0.5
Boron (B)	[1]	2.0
Cadmium (Cd)	0.01	0.05
Chromium (Cr)	0.1	1.0
Cobalt (Co)	0.05	5.0
Copper (Cu)	0.2	5.0
Fluoride (F)	1.0	15.0
Iron (Fe)	5.0	20.0
Lead (Pb)	5.0	10.0
Lithium (Li)	2.5	2.5
Manganese (Mn)	0.2	10.0
Molybdenum (Mo)	0.01	0.05[2]
Nickel (Ni)	0.2	2.0
Selenium (Se)	0.02	0.02
Vanadium (V)	0.1	1.0
Zinc (Zn)	2.0	10.0

These levels will normally not adversely affect plants or soils. No data available for Mercury (Hg), Silver (Ag), Tin (Sn), Titanium (Ti), Tungsten (W).

[1]See table 10.

[2]For only acid fine-textured soils or acid soils with relatively high iron oxide contents.

Source: Environmental Studies Board. Nat. Acad. of Sci., Nat. Acad of Eng. Water Quality Criteria 1972.

Table 10. Relative tolerance of crops and ornamentals to boron[1]

Tolerance decreases in descending order in each column (Wilcox, 1960)

Tolerant	Semitolerant	Sensitive
(4.0 mg/l of boron)	(2.0 mg/l of boron)	(1.0 mg/l of boron)
Asparagus	Sunflower, native	Walnut, black Persian or English
Sugarbeet	Potato	Jerusalem artichoke
Garden beet	Tomato	Navy bean
Alfalfa	Sweetpea	American elm
Gladiolus	Radish	Plum
Broadbean	Field pea	Pear
Onion	Ragged-robin rose	Apple
Turnip	Barley	Persimmon
Cabbage	Wheat	Cherry
Lettuce	Corn	Peach
Carrot	Milo	Apricot
	Oat	Thornless blackberry
	Zinnia	
	Pumpkin	
	Bell pepper	
	Lima bean	
2.0 mg/l of boron	1.0 mg/l of boron	0.3 mg/l of boron

[1]Relative tolerance is based on boron in irrigation water at which boron toxicity symptoms were observed when plants were grown in sand culture. Does not necessarily indicate a reduction in yield.

CASE # 51938

WATER FOR AQUACULTURE AND RECREATIONAL FISHERIES

The quality of water is very important for successful fish farming (aquaculture) and for maintaining a recreational fishpond. The following parameters must be considered in making a preliminary assessment of a water source for cold water aquaculture.

FLOW: A dependable flow of 1 cfs minimum is needed for an economic commercial operation. Very small home or hobby operations require a minimum of 100-300 gpm. A water source that requires pumping is not dependable or economical.

SOURCE: Springs and artesian wells offer the most satisfactory water sources for commercially rearing fishes. These water sources most generally provide uniform water quality and temperature necessary for successful fish production. Surface waters and stream waters should be avoided whenever possible because they are highly variable relative to water quality attributes and seasonal temperature changes. Stream waters often carry fish diseases, parasites, sediments, and other pollutants harmful to fishes.

TEMPERATURE: The temperature of most surface and ground water sources varies with the season and precipitation. Temperatures should be monitored weekly to insure fluctuations do not occur outside the recommended ranges of 50°F to 65°F for hatchery operations and for rearing trout for food market. For economical food conversion in commercial trout operations, temperatures should be greater than or equal to 50°F for at least 6 months of the year. Recreational fish pond temperatures may vary from 32°F to 65°F.

DISSOLVED OXYGEN (D.O): A minimum dissolved oxygen concentration of 7 mg/l in the source water is needed to assure that as depletion occurs, adequate oxygen is available throughout the raceways or ponds.

HARDNESS: Water hardness of 50 mg/l minimum, with 100 mg/l or greater preferable, is required to buffer the effect of toxic substances on fish--both those in the water unintentional and those added for disease control. Alkalinity of 50 mg/l or greater will generally insure adequate buffering against sudden changes in pH.

pH: 6.8 to 8.5 for trout

PHENOLIC COMPOUNDS: Such as from oils cause bad tastes in fish flesh.

ZINC: Galvanized metal contaminates water with small concentrations of zinc which are toxic to trout. For this reason galvanized pipe should be avoided in hatcheries and galvanized tanks should be treated to remove this hazard. Zinc concentrations should be limited to less than 0.04 mg/l at pH 7.6.

AMMONIA: Unionized ammonia is very toxic to fish and should never exceed 0.1 mg/l.

DEPENDABILITY OF QUALITY AND QUANTITY: While a water source may be of suitable quality and quantity when tested, the source or water in conveyance to point of use may be subject to degradation. For example, a ditch or stream

CASE # S1938

conveying spring water to a fish farm may allow entrance of runoff contaminated by herbicides from weed spraying. Herbicide concentrations below those lethal to fish may still create decaying water plants that lower the water's dissolved oxygen content. The chemical quality of a spring recharged by a shallow perched ground water can be significantly affected by man's activities on the surface. The physical qualities such as temperature and the flow rate can be altered by the season and precipitation.

Warm water fisheries require similar parameters with the exceptions of a minimum dissolved oxygen concentration of 2 mg/l and maximum water temperature of 95°F.

Before extensive planning or investments are made in commercial ventures, an onsite assessment by a fishery biologist is strongly recommended. Weekly temperature measurements for a year or as long as possible before an onsite visit would accelerate and improve the assessment.

CASE # 51938

Table 11. Sources of Water Analysis

Note: Before sampling, contact lab for collecting and shipping instructions and for current prices.

Laboratory	Water Use	Telephone	Address
AMATEC	All	248-2159	1537 Avenue D Billings, MT 59102
Energy Laboratories, Inc.	All	252-6325	1107 S. Broadway Billings, MT 59103
Montana Environmental Labs	All	755-2131	P.O. Box 65 Kalispell, MT 59901
Montana Testing Labs	All	761-8343	2302 9th Ave. No. Great Falls, MT
		248-7835	1 Cerise Road Billings, MT
Northern Testing Labs	All	248-9161	600 So. 25th Billings, MT
Soil Testing Lab	Irrigation water only	994-4601 -4602 -4603	825 Johnson Hall MSU Bozeman, MT 59717
Animal Health Diagnostic Laboratory	Livestock water only	586-5952	Marsh Laboratory MSU Bozeman, MT 59717
Analytical Laboratory	All	792-8321 496-4163	Bureau of Mines & Geology Montana Tech Butte, MT 59701
Chemical Analytical Lab	All (no interpretations on irrigation or livestock)	243-2913	School of Forestry University of Montana Missoula, MT 59812
Montana Dept. of Health & Environmental Sciences	All, except irrigation & livestock	449-2642 (microbiology) 449-3644 (chemistry)	Cogswell Building Helena, MT 59620

CASE # 51938

AFFIDAVIT OF SERVICE

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

Donna K. Elser, an employee of the Montana Department of Natural Resources and Conservation, being duly sworn on oath, deposes and says that on August 21, 1984, she deposited in the United States mail, certified mail, an order by the Department on the Application by Lester J. Ernster & Sons, Application No. 51938-s42M, for an Application for Beneficial Water Use Permit, addressed to each of the following persons or agencies:

1. Lester J. Ernster & Sons, Rt. 2, Savage, MT 59262
2. Ron Efta, Attorney, P.O. Box 326, Wibaux, MT 59353
3. Peter Maltese, Attorney, Box 751, Sidney, MT 59270
4. Sharon P. Allard, 1408 N. River Ave., Glendive, MT 59330
5. James A. Baste, Rt. 2, Box 331, Savage, MT 59262
6. Ruth Allard, 1408 N. River, Glendive, MT 59330
7. Tom Hafele, Intake Route, Glendive, MT 59330
8. Monte & Marie Jarvis, 607 E. Dodge, Glendive, MT 59330
9. Robert Hubing, Inc., Robert Hubing, Pres., Savage, MT 59262
10. Leida E. Hubing, Savage, MT 59262
11. Eugene P. Allard, 2733 Miles Ave., Billings, MT 59102
12. Adam Buxbaum & Son, Inc., Adam T. Buxbaum, Pres., Intake Route, Glendive, MT 59330
13. Richard L. Allard, Rt. 2, Box 3078A, Forsyth, MT 59321
14. Lee Yelin, Water Rights Bureau Field Office, Missoula (inter-departmental mail)
15. Vivian Lighthizer, Water Rights Bureau Field Office, Glasgow (inter-departmental mail)
16. Sarah A. Bond, Hearing Examiner (hand deliver)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

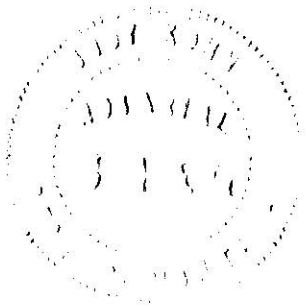
by _____

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

On this 21st day of August, 1984, before me, a Notary Public in and for said state, personally appeared Donna Elser, known to me to be the Hearings Recorder of the Department that executed this instrument or the persons who executed the instrument on behalf of said Department, and acknowledged to me that such Department executed the same.

CASE # 51938

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.



Judy Kohn

Notary Public for the State of Montana
Residing at Montana City, Montana
My Commission expires 3-1-85

CASE # 51938

SB76 is one for the Water Courts, not the Department. The evidence on the record is not sufficient for the Hearing Examiner to find that the Objectors' Jarvis/Buxbaum have a valid existing water right to 260 acre-feet of irrigation water from South Fork, such that the Applicants' proposed use must be conditioned to prevent interference therewith. These Objectors have failed to meet their burden of proof showing an existing right of that quantity, because of Mr. Buxbaum's uncontroverted testimony regarding his "completion" of the right in question. This testimony regarding historic use, or in this case, lack thereof, rebuts the presumption of validity of the right created by the SB76 filing. § 85-2-227 MCA (1983).

14. The Department, while unable to adjudicate Objectors' rights, must take note of the historic patterns of use, as this has, since before Montana's statehood always established the parameters of the water right. Mettler v. Ames Realty Co., 61 Mont. 152, 201 P. 702 (1921). Therefore, an Objector should not be allowed to prevent subsequent appropriations on the basis of a claim to more water than the Objectors have historically used. Nor will an appropriator be permitted to change the full volume claimed on an SB76 filing if the evidence clearly demonstrates that such a volume was never historically used. Such a change would amount to a new appropriation in the amount of the difference between the volume authorized to be changed (claimed on the SB76) and the volume of the underlying right, i.e.: that amount historically put to beneficial use. Featherman v.

Hennessey, 43 Mont. 310, 115 P. 983 (1911).

On the other hand, the evidence is insufficient to establish the exact contours of the Jarvis right. Mr. Buxbaum testified that he seeded approximately 180 acres in Section 11, in 1970. He did not state whether he irrigated that land. He also testified that he only now irrigated 12 acres pursuant to the right in question. Mr. Buxbaum testified that he'd only been in the Burns Creek area for 14 years. Without more direct evidence, and testimony of those whose personal experience of the area included some greater span of time than that of Mr. Buxbaum, the scope of the right cannot be determined.

Because of the disposition of the matter herein, however, the question of the quantity of the Jarvis' right is moot.

15. The Applicant failed to satisfy his burden of proof that the amount requested is available during the time of proposed use, or, perhaps more accurately, he failed to define his requested period of use such that a permit therefore can be granted. His burden is "substantial credible evidence".§ 85-2-311(1) MCA (1983); In the Matter of the Application for Beneficial Water Use Permit No. 24921-s41E by Remi and Betty Jo Monforton, Final Order, March 1, 1982; affirmed, Supreme Court of Montana, June 28, 1984.

16. Applicant's failure to sustain his burden of proof on the issue of water availability for his proposed use is dispositive of the matter herein. Therefore, no further conclusions of law are necessary.

WHEREFORE, based upon the foregoing Findings and Conclusions the Hearing Examiner hereby makes the following proposed:

ORDER

That Application for Beneficial Water Use Permit No. 51938-s42M by Lester J. Ernster be denied without prejudice.

DONE this 20th day of August, 1984.

Sarah A. Bond, Hearing Examiner
Department of Natural Resources
and Conservation
32 S. Ewing, Helena, MT 59620
(406) 444 - 6625

NOTICE

This proposal is a recommendation, not a final decision. Any party adversely affected may file exceptions to this proposal. Such exceptions must be filed with the Hearing Examiner at 32 South Ewing, Helena, Montana 59620 within 20 days after service of this Proposal by first class mail, MCA § 2-4-623. All parties are urged carefully to review the terms of the proposed order, especially checking the legal land descriptions, for correctness. No final decision shall be made until after the expiration of the period for filing exceptions, and the due consideration of those exceptions. All exceptions shall specifically set forth the precise portions of the proposed decision to which exception is taken, the reasons for the exception, and authorities upon which the exception relies. A request for oral argument before the Administrator of the Water Resources Division, Department of Natural Resources and Conservation, must be included in the filed exceptions or the right to oral argument is waived.

CASE # 51938

MEMORANDUM

It is not the Department's duty to make the Applicant's case for him. § 85-2-311 MCA (1983). Without more substantial evidence quantifying "high spring run-off", any condition and period of use the Hearing Examiner would attach to a permit such as that applied for herein, would necessarily be arbitrary.

The Permit denial is not based upon adverse affect to downstream users. The uncontroverted evidence adduced at the hearing was that the alkali, or salt, problem along North Fork had existed throughout the collective memories of the parties. There was no testimony of the condition worsening in dry years, or that the condition was worse now than it was 20 or 30 years ago. The only expert testimony, that of Mike Carlson, was that the Creek water quality would always be bad by summer, and that diversion during run-off would not exacerbate that. On the other hand, various Objectors testified only that the run-off was needed to flush out the Creek, without corroborative evidence tending to show that in dry years the alkali or salt problem had, in fact, proven to be worse. It is, rather, based upon the failure of the Applicant more accurately to describe the quantity high run-off, so that the Hearing Examiner could condition the Permit, requiring installation of a measuring gauge, and limiting diversions to those times when x feet (x being whatever the quantified amount of high run-off is) was in the Creek.

In other words, the Applicant himself testified, as well as indicated in his Application, his intent only to divert at high run-off. Yet he failed even to attempt quantifying what he meant by high run-off other than to say he'd seen the Creek flow 7-8' deep, in unspecified places. This is tantamount to requesting a Permit from an undefined source of water. Further, all parties and witnesses agreed that only at high run-off times would the water be suitable for irrigation use. Unhappily, the Applicant did not offer even any parameter for the Hearing Examiner on determining what high flow was. This is particularly disappointing, considering the fact that various Objectors specified that they had no quarrel with the diversion so long as it was limited to high run-off. If the Hearing Examiner had even an inkling of how deep the Creek is at the bridge[6], and of how deep the Creek need run to be called high run-off, a Permit condition could be fashioned requiring such a minimum flow to be recorded prior to diversion. On the record herein, however, to issue a Permit with a minimum flow condition would require sheer speculation by the Hearing Examiner.[7]

[6] The Applicant testified that he was willing to install a measuring gauge at this bridge to record Creek flow to assure enough water flowed downstream for prior appropriators.

[7] The Applicant testified he had seen the Creek run 7 or 8 feet high, "in spots". This was disputed by various other Objectors. At the time of the site visit, the Creek appeared to be approximately 2 or 3 feet deep, but this varied greatly at points along the Creek.

Hence, the Applicant has failed to establish by substantial credible evidence the element of water availability, so that an administrative permit condition may be fashioned to limit use to the water sought to be appropriated. The Department will not issue permits which cannot be administered. In re Monforton, supra, In the Matter of the Application for Beneficial Water Use Permit No. 43117-s41P by Morris O. or Elizabeth P. Mancoronal, Final Order June 14, 1984.

A permit allowing diversion "during high-run-off" is insufficiently precise to be considered administrable. Objectors at the hearing rhetorically pondered the issue of who would define high run-off. The answer is the Department will. The Department can't define it, on this record, however, because of a lack of credible evidence regarding water flows in North Fork. The Hearing Examiner will not, indeed, can not, simply pick a number from thin air to fill in the necessary blank.

A minimum volume of water is critical to the issue of water availability here, because without that minimum, the water is not available FOR THE PROPOSED USE - irrigation. That is, the North Fork water is not available for irrigation except at times of high run-off. (Testimony of all witnesses). Hence, it is only the high run-off which is sought, or for which an irrigation use permit could issue. The Applicant cannot make his proposed beneficial use of North Fork water at any other period of flow. But the Hearing Examiner must be presented with some means of fashioning the Permit terms such that only this ephemeral

CASE # 51938

"high-run-off" can be permitted to be appropriated. One means of establishing this would have been to present evidence regarding the depth of the Creek bed at the bridge, and the height there of the water during a time the Applicant calls high-run-off. Although an exact agreement among all parties as to the number of feet of water (in height) needed to pass under the bridge to be called high-run-off is not within the realm of possibility, at least testimony of this sort would serve to establish some parameters from which a workable Permit could be fashioned.

The Applicant is free to gather this evidence and resubmit his Application. The Hearing Examiner notes that any evidence presented at any future proceeding must fully be considered there - so that if Objectors then persuasively established adverse affect, or if future evidence proved "high-run-off" only available once in every 20 years, a permit would likely not issue.

On the other hand, further evidence gathering and presentation to the Department might also enable a future decision maker to fashion an irrigation permit from North Fork such as the one herein sought. It is recognized to be in the interest of the state that all lands susceptible of irrigation be irrigated. Ponich v. Johnson, 77 Mont. 229, 250 p. 963., Anaconda National Bank V. Johnson, 75 Mont. 401, 244 p. 141; Federal Land Bank v. Morris, 1112 Mont. 445, 116 P.2d 1007, (1940).

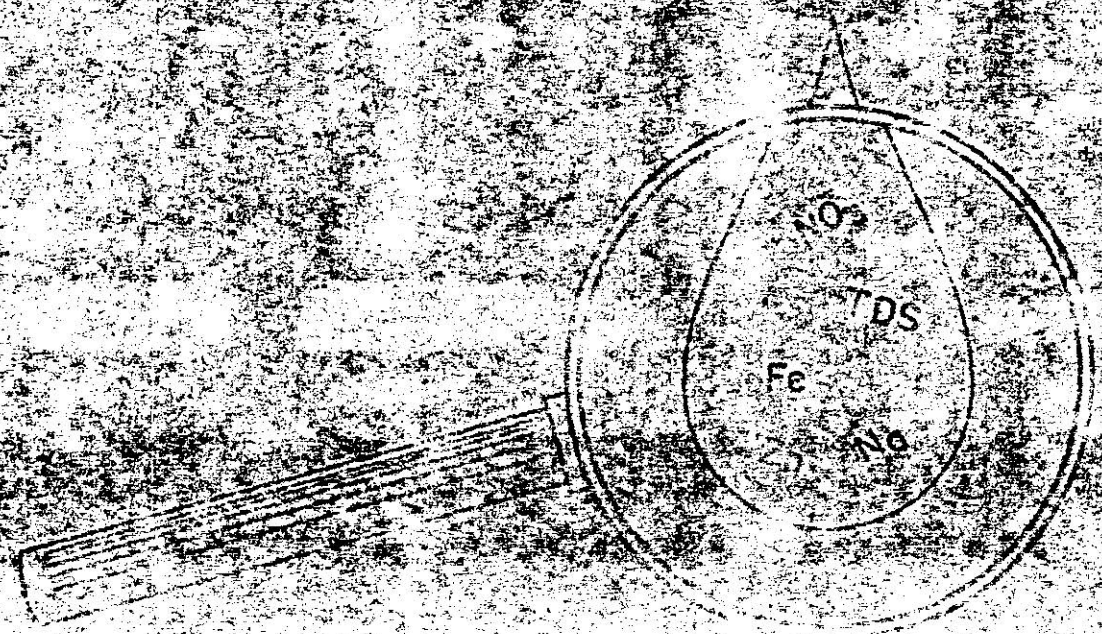
CASE # 51938

Soil Conservation Service
Bozeman

ASSESSING WATER QUALITY

for Agriculture

Montana Bulletin No. 13
January 1982



TECHNICAL NOTES
U.S. DEPARTMENT OF AGRICULTURE — SOIL CONSERVATION SERVICE

ENVIRONMENT NO. 13

Bozeman, Montana
January 1982

ASSESSING WATER QUALITY FOR AGRICULTURAL AND DOMESTIC USES

This note is a guide for determining the suitability of water supplies for their intended use. This includes ground water developed by wells or obtained from springs as well as surface flows. Uses include domestic, livestock, irrigation, and aquaculture.

The significance of water quality parameters is explained; recommended and permissible limits for the intended uses are given; and sources for water analysis are provided.

INDEX

WATER QUALITY PARAMETERS AND THEIR SIGNIFICANCE

CONSTITUENT OR PHYSICAL PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Alkalinity (as $CaCO_3$)	Formed by the presence of certain anions in solution. Certain organic materials may also produce alkalinity.	Alkalinity is an indicator of the relative amounts of carbonate, bicarbonate, phosphate, and hydroxide ions. Alkalinity is a measure of the buffering capacity of water to pH changes and to the toxicity of some heavy metals.
Bicarbonate (HCO_3) and Carbonate (CO_3) (alkalinity)	Action of carbon dioxide in water on carbonate rocks such as limestone and dolomite, oxidation of organic carbon.	Bicarbonate and carbonate produce alkalinity. Bicarbonates of calcium and magnesium in steam boilers and hot water facilities form scale and release carbon dioxide gas. Low-salt water that is high in bicarbonates may present a permeability hazard even at low sodium adsorption ratios.
Boron (B)	Dissolved from rocks and soils. Present in municipal sludges.	Boron is essential to plant growth, but is exceedingly toxic at concentrations only slightly above optimum. The optimum concentration varies with each plant type and ranges from approximately 0.3 mg/l to 4.0 mg/l. What is optimum for one plant type may be toxic to another type.
Calcium (Ca) and Magnesium (Mg)	Dissolved from almost all soils and rocks, but especially from limestone, dolomite, and gypsum. Calcium and magnesium are found in large quantities in some brines. Magnesium is present in large quantities in sea water.	Cause most of the hardness and scale-forming properties of water; soap-consuming. (See hardness.) Calcium reduces the toxicity of many chemical compounds to fish and other aquatic fauna. Usually has no effect on suitability of water for irrigation or stockwater.
Chloride (Cl)	Dissolved from rocks and soils. Present in sewage and found in large amounts in ancient brines, sea water, and industrial brines.	Chloride salts in excess of 100 mg/l give salty taste to water. When combined with calcium and magnesium may increase the corrosive activity of water. It is recommended that chloride content should not exceed 250 mg/l. Most tree crops and other woody perennial plants are sensitive to low concentrations of chloride. Most annual crops are not so sensitive; however, they may be affected by higher concentrations.

CASE # 51938

WATER QUALITY PARAMETERS AND THEIR SIGNIFICANCE (continued)

CONSTITUENT OR PHYSICAL PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Dissolved solids (filterable residue)	Chiefly mineral constituents dissolved from rocks and soils. Includes all material that is in solution in the water.	Water with dissolved solids exceeding 1000 mg/l is generally unacceptable for most uses. However, water with concentrations exceeding 1000 mg/l has been used for drinking water when no other supply was available.
Fecal coliform	All warm-blooded animal (including human) excrement.	Fecal coliform bacteria serve as an indicator organism to show that pathogenic organisms may also be present. Limits are recommended to minimize transmission of communicable diseases.
Fluoride (F)	Dissolved in small to minute quantities from most rocks and soils. Most hot and warm springs contain more than the recommended concentration of fluoride.	Fluoride in drinking water reduces the incidence of tooth decay in children when the water is consumed during the period of enamel calcification, but it may cause mottling of the teeth, depending on the concentration of fluoride, the age of the child, the amount of drinking water consumed, and the susceptibility of the individual. 0.8 to 1.7 mg/l is optimum, depending upon the air temperature. Fluoride on plant surfaces can be harmful to plants and grazing animals. Fluoride in the soil is generally not harmful.
Hardness as $CaCO_3$	In most water nearly all the hardness is due to calcium and magnesium. All the metallic cations besides the alkali metals also cause hardness.	Hard water consumes soap before a lather will form, deposits soap curd on bathtubs, and forms scale in boilers, water heaters, and pipes. Hardness equivalent to the bicarbonate and carbonate is called carbonate hardness. Any hardness in excess of this is called noncarbonate hardness.
Hydrogen sulfide (H_2S)	Natural decomposition of organic material under anaerobic conditions and from the reduction of sulfates.	Causes objectionable odor when in concentration above 1 mg/l and taste when in excess of .05 mg/l. Can be a long-term hazard to most fish and other aquatic wildlife. Common cause of partial and total winterkills in ponds and lakes.

CASE # 51938

WATER QUALITY PARAMETERS AND THEIR SIGNIFICANCE (continued)

CONSTITUENT OR PHYSICAL PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Hydrogen-ion activity (pH)	Acids, acid-generating salts, and free carbon dioxide lower pH. Carbonates, bicarbonates, hydroxides, and phosphates, silicates, and borates raise the pH.	The pH is a measure of the activity of the hydrogen ions. A pH of 7.0 indicates neutrality of a solution. Values higher than 7.0 denote increasing alkalinity; values lower than 7.0 indicate increasing acidity. Corrosiveness of water generally increases with decreasing pH, but high alkaline waters may also attack metals. Waters of low or high pH can be detrimental to fish and other aquatic life as well as for animal drinking water. A pH range between 6.0 and 8.5 is acceptable and is normal for most waters in Montana.
Iron (Fe)	Dissolved from almost all rocks and soils. May also be derived from iron pipes, pumps, and other equipment. Mine drainage.	On exposure to air, iron in ground water oxidizes to reddish-brown sediment. More than about 0.3 mg/l stains laundry and utensils reddish brown. Objectionable for food processing, beverages, dyeing, bleaching, ice manufacture, and other processes. Iron and manganese together should not exceed 0.3 mg/l. Larger quantities cause unpleasant taste and favor growth of iron bacteria, but do not endanger health. Excessive iron may also interfere with the efficient operation of exchange-silicate water softeners. Iron may be removed from water by aeration of the water, followed by settling or filtration. High concentrations cannot be economically removed from water supply. Toxic to freshwater aquatic life above 1 mg/l. Will cause problems with uptake of oxygen through fish gills at concentrations more than 0.3 mg/l.
Manganese (Mn)	Dissolved from some rocks and soils. Not as common as iron. Large quantities often associated with high iron content and with acid waters.	Same objectionable features as iron. Causes dark-brown or black stain. Iron and manganese together should not exceed 0.3 mg/l for taste and aesthetic reasons. Higher concentrations do not endanger health and can be used if objectionable features are tolerated.

CASE # 51938

WATER QUALITY PARAMETERS AND THEIR SIGNIFICANCE (continued)

CONSTITUENT OR PHYSICAL PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Nitrate (NO_3, reported as N, may also be written NO_3-N). Often includes nitrite (NO_2) then reported as NO_3+NO_2 as N.	Decaying organic matter, sewage, nitrates in soil, and chemical fertilizers.	Concentrations much greater than the local average may suggest pollution. High concentrations are generally a characteristic of individual wells and not of whole aquifers. Nitrate concentrations in unpolluted water seldom exceed 10 mg/l as N. Nitrate encourages growth of algae and other organisms, which produce undesirable tastes and odors. There is evidence that more than about 10 mg/l as N may cause a type of methemoglobinemia ("blue babies") in infants which may be fatal.
Sodium (Na) and Potassium (K)	Dissolved from almost all rocks and soils. Found also in ancient brines, some industrial brines, sea water, and sewage.	Large amounts give a salty taste when combined with chloride. Moderate quantities have little effect on the usefulness of water for most purposes. Sodium salts may cause foaming in steam boilers, and a high sodium adsorption ratio may limit the use of water for irrigation. Most tree crops and other woody perennial plants are sensitive to low concentrations of sodium. Most annual crops are not so sensitive; however, they may be affected by higher concentrations. Sodium concentrations greater than 270 mg/l may be harmful to persons on sodium-restricted diets.
Sodium Adsorption Ratio (SAR)	The SAR is defined by the equation: $SAR = Na/\sqrt{(Ca+Mg)/2}$ where the concentrations are expressed in milliequivalents per liter.	High sodium concentration combined with low alkaline-earth element concentrations (lime) usually reduces soil tilth and affects plant growth.

CASE # 51938

Fee & TMC
5/30/85

BEFORE THE DEPARTMENT
OF NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

* * * * * * * * * * * *

IN THE MATTER OF THE APPLICATION)
FOR BENEFICIAL WATER USE PERMIT) FINAL ORDER
NO. 52031-s76H BY DEAN FROST)

* * * * * * * * * * * *

Exceptions to the Proposal for Decision of October 2, 1984, were timely filed by Objector Millicent Foss Huggans on October 16, 1984. Having given the exception full consideration following a hearing for oral arguments on April 30, 1985, the Department of Natural Resources and Conservation (hereinafter, "DNRC") accepts and adopts, incorporating herein by reference, the Proposal for Decision as its Final Order, with the exception of the modifications and corrections below.

EXCEPTIONS OF MILLICENT FOSS HUGGANS

Mrs. Huggans argued her exceptions on three separate premises.

I. That the construction of the pond prior to obtaining a water use permit was in violation of state law.

II. That the proposed use is a consumptive use because increased evaporation and seepage will dissipate water from the pond.

III. That there is no water available for the proposed use.

I. The Objector's argument in support of the illegal nature of the construction of the pond centered upon the time of the filing for a water use permit. She requested both a denial of

CASE # 52031

the permit and injunctive relief to prevent the use of the pond. Both Mrs. Huggans and Mr. Frost agreed that the pond was dug berore application was made to the DNRC. However, testimony on the record indicated that no water was diverted from Ward Ditch-Hayes Creek prior to the contested case hearing.

In support of Mrs. Huggans argument her advisor, Stanton Cooper, cited §85-2-302 which prohibits appropriation or "construction of diversion, impoundment, withdrawal, or distribution works therefore except by applying for and receiving a permit from the Department." Because Mr. Frost put the cart before the horse by digging his pond before receiving a permit, the objector excepts to issuing the permit and further requests that Mr. Frost be enjoined and required to fill in his pond and stabilize the creek banks. While Mrs. Huggans raises the spector of bad faith in Mr. Frost's pond construction, there is credible evidence in the record to support Mr. Frost's argument that as soon as he determined that, to prevent stagnation, he would need fresh water flowing through his ground water pond he did, in fact, apply for a water use permit to appropriate the water.

The Water Use Act of 1973 requires any person to obtain a permit berore appropriating water or commencing construction (§85-2-302). Under the permitting process, the Department has limited authority to act in response to known violations of the Water Use Act or permit terms, see, §85-2-314 for show cause hearings where permittee not following permit conditions. Although appropriating water without a permit is a misdemeanor, the penalties authorized therefore do not include a denial of a

permit. §§85-2-122, 46-18-212, MCA, 1983. The DNRC simply has no statutory authority to deny the permit on the grounds of failure to apply prior to construction of the pond. Although the DNRC may cease action on an application, and return it to the permittee where the application is not in good faith or does not show a bona fide intent to appropriate, §85-2-310(3), no evidence of lack of good faith can be found in the record, and the applicant has demonstrated an obvious intent to appropriate.

Mrs. Huggans further argued for injunctive relief. Such action is beyond the administrative jurisdiction of the DNRC. Any such claim is properly filed in the District Court of Ravalli County.

II. The second premise upon which Mrs. Huggans excepted was that the proposed use is a consumptive use due to evaporation and seepage. The evidence of evaporation and seepage, addressed in the record of the hearing, was argued by Mrs. Huggans and responded to by Mr. Frost and Ron Porter from the Conservation District.

The objector argued that the DNRC should calculate and compare the surface area exposed to evaporation prior to the appropriation with the surface area exposed to evaporation subsequent to the appropriation, citing, Donich v. Johnson, 77 Mont. 229, 250 Pac. 963 (1926). The difference between the two surface areas should represent the evaporation area to be accounted for to prior appropriators, and would represent the consumptive amount of the use. Evidence is on the record which indictes that the ground where the pond is now located was saturated with water from the high water table during most of the

spring and some or the summer months before the pond was dug. The record indicates that evaporation naturally occurs from that saturated surface area.

Substantial credible evidence supports the hearing examiner's finding that the use would be non-consumptive because there is little or no evaporation or seepage beyond what natually occurs from the high water table. That finding can not be disturbed absent a snowing that such a finding ot non-consumptive use is not based upon competant substantial evidence or that the proceedings on which the findings were based did not comply with essential requirements of law. §2-4-621(3). Both the facts on record and the prior administrative decisions on non-consumptive uses support a finding that a mere flow-through water use with no significant increase in evaporation is non-consumptive in nature. The Objectors had a full and fair opportunity to be heard at the hearing, as well as to present oral argument to the departmental decision maker. There has been no irregularity in the procedure followed in this case.

III. The third premise on which Mrs. Huggans argued her exception was that no water is available for appropriation from Ward Ditch-Hayes Creek and, therefore, the permit application should be denied. Since substantial credible evidence supports the finding of a non-consumptive use by Mr. Frost, Mrs. Huggans' exceptions are fully answered by determining whether there are unappropriated waters available for a non-consumptive use, notwithstanding the argument that no unappropriated water is available for a consumptive use. Where the use is

non-consumptive, In re Grant Hanson, Proposal for Decision, December 3, 1984, at p. 26, Final Order, January 2, 1985, held that even though no unappropriated water exists for a consumptive use, water may still be available for non-consumptive use.

The Findings of Fact in the Proposal for Decision found the proposed use to be substantially non-consumptive. That finding is supported by substantial credible evidence in the record and can not be disturbed on final disposition. The hearings examiner's conclusion that unappropriated water is available for such non-consumptive use is further supported by the record and is consistent with prior administrative decisions. In re Loomis, Department Final Order July 19, 1982; In re Diamond City Mining Co., Department Final Order, May 25, 1983.

This decision in no way insulates the applicant from any claims for future damages or injunctive relief arising out of interference with any prior appropriator's rights where such claims are properly asserted in writing with the DNRC Missoula Field Office or a court of competent jurisdiction.

Wherefore, based upon the foregoing, including the record of proceedings and exceptions filed by the objector, and the Proposal for Decision of October 2, 1984, which is expressly incorporated herein by reference, the Department hereby makes the following:

ORDER

Subject to the terms, conditions, restrictions, and limitations listed below, Application for Beneficial Water Use Permit No. 52031-s76H is hereby granted to Dean Frost to

CASE # 52031

appropriate up to 250 gpm up to 403 acre-feet per year from Hayes Creek-Ward Ditch at a point in the SE¼SE¼SW¼ of Section 35, Township 5 North, Range 21 West, Ravalli County, Montana from January 1, to December 31 of each year. The impoundment through which the water will flow has an approximate capacity of .35 acre-feet.[1] The purpose is a flow-through fish, wildlife and recreation pond. The priority date for this Permit shall be April 4, 1983 at 10:28 a.m.

This Permit is subject to the following conditions:

a. This Permit authorizes a non-consumptive use only. No diversion or appropriation is authorized hereby except to allow Permittee to install an 8" pipe between Permittee's existing pond and Hayes Creek-Ward Ditch, and a 10" pipe between the pond and Camas Creek-Hayes Creek-Ward Ditch to allow water to flow from the source, through the pond, and back into the Camas Creek watercourse.

b. This Permit is subject to all prior existing water rights in the source of supply. Further, this Permit is subject to any final determination of existing water rights, as provided by Montana Law.

c. The diversion works shall be constructed in a good and sufficient manner under supervision of Soil Conservation Service personnel.

---

[1] The proposed order rounded the acre feet capacity to .3, but because the calculations in the record reflect a more accurate volume, the more accurate volume is included herein.

CASE # 52031

d. The water right granted by this Permit is subject to the authority of court appointed water commissioners, if and when appointed, to aameasure and distribute to the parties using water in the source of supply the water to which they are entitled. The Permittee shall pay his proportionate share of the fees and compensation and expenses, as fixed by the district court, incurred in the distribution of the waters granted in this Provisional Permit.

e. This Permit is subject to the permanent installation of a control device on the inlet structure allowing the Applicant to stop diverting water when so required.

NOTICE

The Department's Final Order may be appealed in accordance with the Montana Administrative Procedures Act by filing a petition in the appropriate court within thirty (30) days after service or the Final Order.

DONE AND DATED this 29 day of May, 1985.

Gary Fritz, Administrator
Department of Natural Resources
and Conservation
32 South Ewing
Helena, Montana 59620
(406) 444-6601

CASE # 52031

AFFIDAVIT OF SERVICE
MAILING

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

Melissa Otis, an employee of the Montana Department of Natural Resources and Conservation, being duly sworn on oath, deposes and says that on May 30, 1985, she deposited in the United States mail, First Class mail, an order by the Department on the Application by Dean H. Frost, Application No. 52031-s76H, for an Application for Beneficial Water Use Permit, addressed to each of the following persons or agencies:

1. Dean H. Frost, SW 262 Camas Creek Loop, Hamilton, MT 59840
2. Lee E. & Alice I. Foss, et al., 703 S 3rd, Hamilton, MT 59840
3. Dan and Millo Foss Huggans, 2949 Hwy 93 So., Hamilton, MT 59840
4. Mike McLane, Water Rights Bureau Field Office, Missoula, MT (inter-departmental mail)
5. Sarah A. Bond, Hearing Examiner (hand deliver)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
by Melissa Otis

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

On this 30th day of May, 1985, before me, a Notary Public in and for said state, personally appeared Melissa Otis, known to me to be the Legal Secretary of the Department that executed this instrument or the persons who executed the instrument on behalf of said Department, and acknowledged to me that such Department executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

Donald D. MacIntyre
Notary Public for the State of Montana
Residing at Helena, Montana
My Commission expires 12-15-87

CASE # 52031

BEFORE THE DEPARTMENT
OF NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

* * * * * * * * * * *

IN THE MATTER OF THE APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 52031-s76H BY DEAN FROST	)))	PROPOSAL FOR DECISION

* * * * * * * * * * *

Pursuant to the Montana Water Use Act, MCA Title 85, Chapter 2, and to the Montana Administrative Procedures Act, MCA Title 2, Chapter 4, Part 6, a hearing in the above-entitled matter was held on April 5, 1984 in Hamilton, Montana.

I. Statement of the Case

A. Parties

The Applicant, Dean Frost, appeared pro se. Lee Foss and Millicent Huggins, Objectors, appeared pro se.

Dave Pengelly, Area Office Supervisor for the Missoula Water Rights Bureau Field Office testified as a Department of Natural Resources and Conservation (hereafter, "Department" or "DNRC") staff expert witness.

B. Witnesses

The Applicant testified on his own behalf. Also testifying on behalf of the Applicant were Leonard Peterson, and Ronald Porter.

The Objectors testified for themselves.

C. Exhibits

The Applicant offered the following exhibits for introduction into the record:

CASE # 52031

App.1 - Letter from Walter M. Iten, Soil Conservation Technician, Soil Conservation Service (with attached soil description) dated February 2, 1983. re: Preliminary Report on Dean Frost pond.

App.2 - A hand-drawn map of the project, depicting, inter alia the pond, Hayes Creek/Ward Ditch and Camas/Hayes/Ward Ditch.

App. 3 - Nine pictures of the site of the pond and adjacent watercourses. The pictures were taken by the Applicant.

The Applicant's exhibits were admitted into the record without Objection.

The Objectors offered the following exhibits into the record:

Obj. 1 - Two pictures of the Frost pond, and one picture of a pump out of Hayes Creek. The pictures were taken by Lee Foss. The Objectors referred to a Departmental decision in the matter of the Application for Beneficial Water Use Permit No. 28025-g76H by Thomas Dippel. Because this is a public document on file at the Department, the Hearing Examiner may take administrative notice thereof. Further, such decisions are not factual evidence, but are rather indicative of the proper law to be followed. In the Matter of the Application for Change of Appropriation Water Right NO. W 138008 by Delbert Kunneman, Final Order April 23, 1984.

The Objector's pictures were admitted into the record without objection.

The Department offered the following exhibits into the record.

CASE # 52031 2

Dept. 1 - A computer generated document showing water rights listing by source. (Water rights being those claimed by filed Statements of Claim of Existing Water Rights for the Water Courts for the State of Montana (hereafter, "SB76 Claims").

Dept. 2 - A portion of a photocopy of a United States Geological Survey topographic maps showing the Objector's land immediately to the north of the Frost pond, the location of Frost's pond, Camas Creek and Hayes Creek-Ward Ditch. The Objector's irrigated land and the above-mentioned items were drawn on the map by Dave Pengelly.

Dept. 3 - A photocopy of page 19 of the Water Resources Survey for Ravalli County, published by the State Engineers Office, 1958, reprinted 1965, the page shows Township 5 North, Range 21 West.

Dept. 4 - A photocopy of an aerial photogragh showing the location of the Frost pond. The original aerial photograph is in the Missoula Water Rights Bureau Field Office, as a part of the records on file in the adjudication process.

Dept. 5 - A photocopy of an SB76 claim filed by Alice I. Foss, Claim No. 105051, showing a claimed water irrigation right out of Hayes Creek, diverted from Camas Creek, downstream from Applicant's pond.

The Department's Exhibits were accepted into the record without objection.

D. Case

The Applicant, Mr. Frost, has applied for a Beneficial Water Use Permit for a flow-through fish and wildlife pond already

constructed on his property in Ravalli County. He seeks to appropriate 250 gallons per minute (gpm) up to 403 acre-feet per year from Hayes Creek-Ward Ditch at a point in the SE¼SE¼SW¼ of Section 35, Township 5 North, Range 21 West, Ravalli County, Montana. The pond has an approximate capacity of .3 acre-feet, being approximately 8 feet deep, and triangular in shape; the sides are 75', 90' and 117 feet. The period of use would be year round; the purpose for fish, wildlife and recreation.[1]

Mr. Frost had experienced drainage problems on that portion of his property where he dug the pond in March, 1983. Because of the stagnant water which generally occurred there, Mr. Frost decided to build a small pond. After having dug the pond, he noticed that it then simply partially filled up with water as the water table rose, and that its water level naturally declined as the water table did. In order to provide for a fresh supply of water, to reduce the unpleasantness associated with stagnant water, and to allow the pond to support fish, Mr. Frost developed a plan to tap the water that ran by his pond in the Hayes Creek-Ward Ditch watercourse and let it flow through his pond, out another pipe, and into the Camas-Hayes-Ward Ditch on the other side of the pond where the water currently flows. The water will thus run through Mr. Frost's pond rather than around it as before.

[1] Although the recreation use is not stated in the Permit, the evidence on the record clearly indicates personal recreation as a primary use of the appropriation. The Applicant impliedly amended his Application at the hearing and the Department will conform the pleadings to the evidence by adding recreation as a use for the appropriation.

Lee Foss and Millicent Huggins objected to the pond because it was dug without benefit of a permit, and because they believe it is constructed so close to the banks of the watercourses (which surround it on two sides) that the watercourses will be structurally impaired when the pipes are installed. Mr. Foss stated at the hearing that he would have no objection to the pond if it were filled in, and re-dug 150 feet from the watercourses and no deeper than the bottom of the watercourses. Further, Mr. Foss and Mrs. Huggins objected on the basic grounds that Mr. Frost had circumvented the by-laws of Ward Irrigation District, that he needed Ward's permission to install his pipes as proposed.

Wherefore, based on the record of the proceedings herein, the Hearing Examiner hereby makes the following:

Findings of Fact

1. The Department has jurisdiction over the subject matter herein, and the parties hereto, whether or not those parties have appeared.

2. The instant Application was regularly filed with the Department, on April 4, 1983 at 10:28 a.m.

3. The pertinent facts of the Application were published on May 11, 18 and 25, 1983, in the Ravalli Republic, a newspaper of general circulation in the area of the source.

4. The Applicant seeks to appropriate 250 gpm up to 403 acre-feet per year of water for a year-round, non-consumptive use in a private fish, wildlife, and recreational pond. The source is water flowing in Hayes Creek-Ward Ditch; the points of diversion and of use are in the SE¼SE¼SW¼ of Section 35, Township 5 North, Range 21 West, Ravalli County, Montana. The diversion means is an 8" pipe, which will divert water from Hayes Creek-Ward Ditch, into an off-stream, triangular-shaped, reservoir approximately 8' x 72' x 90' x 117', with an approximate volume of .3 acre-feet. The water would be returned to the Camas Creek-Hayes Creek-Ward Ditch through a 10" pipe. The general lay-out of the project is depicted on Applicant's Exhibit 2, attached hereto as Exhibit A.

5. The Applicant dug the pond in issue on approximately March 18, 1983.

6. The Objectors have filed various SB76 claims for water rights, and in association therewith, have claimed two diversion points downstream from Applicant's proposed use. (Dept. Exhibits 1; 2.)

7. The proposed use is for the benefit of the appropriator.

8. The proposed means of use is reasonable and customary and will not result in a waste of the water resource.

9. The amount sought to be appropriated is reasonable.

10. The Applicant has a present bona fide intent to use the water as applied for.

CASE # 52031

11. The proposed installation of pipes will not affect the banks of the Hayes Creek-Ward Ditch watercourse, or the Camas Creek-Hayes Creek-Ward Ditch watercourse. (Testimony Ron Porter; testimony of Applicant.)

12. The proposed use is substantially non-consumptive.

13. The proposed use will not affect the volume of water passing by, or at least reaching the Objector's points of diversion downstream, labeled 1 and 2 on Dept. Exhibit 2.

14. The proposed use will divert whatever water is flowing in the Hayes Creek-Ward Ditch as it passes immediately to the south of Mr. Frost's pond, and just prior to its turn into the Camas Creek-Hayes Creek-Ward Ditch watercourse, immediately to the west of Mr. Frost's pond.

15. The denomination of the watercourses immediately to the south and the east of Mr. Frost's pond as either ditches or as creeks or natural watercourses is impossible to determine from the record in the instant proceeding.

16. The Objectors also alluded to Mr. Frost diverting from Hayes Creek in excess of his existing water rights. This contested case proceeding is not the appropriate forum for these concerns, and whether Mr. Frost is wrongfully pumping from Hayes Creek is not before the Hearing Examiner. Those concerns are properly addressed, through written complaint, to the Missoula Water Rights Bureau Field Office. Whether, in fact Mr. Frost is improperly diverting water as purportedly shown by one of the Objector's pictures entered into the record as Objection 1, cannot be determined from the record herein.

17. From the record herein, it appears there are no planned uses or developments for which a permit has been issued or for which water has been reserved with which this Permit would interfere.

18. The natural water which flows in Hayes Creek apparently dries up sometime in late summer, but because of Ward Ditch water turned into the Ditch, there is water year round in the watercourse immediately south of Mr. Frost's pond and into which his inlet pipe will intrude. The source of water for Ward Ditch is the Bitterroot River at a point of diversion in the center of the SW¼ of Section 2, Township 4 North, Range 21 West, Ravalli County.

19. Similarly, the water flowing in the watercourse to the immediate west of the pond is that naturally flowing in Camas Creek, Hayes Creek, and imported water brought to the watercourse by the Ward Ditch Company.

20. The proposed use is non-consumptive.

Wherefore, based upon the foregoing Findings of Fact and the record herein, the Hearing Examiner hereby makes the following Proposed:

Conclusions of Law

1. The Department has jurisdiction over the subject matter herein and the parties hereto. Title 85, Chpater 2, MCA (1983).

2. The Department gave proper notice of the hearing, and all relevant substantive and procedural requirements of law or rule have been fulfilled, therefore, the matter was properly before the Hearing Examiner.

3. The Applicant's proposed use is a beneficial use. "Beneficial Use", unless otherwise provided, means a use of water for the benefit of the appropriator...including but not limited to agricultural (including stock water), domestic, fish and wildlife...." § 85-2-102(2) MCA (1983). See, Paradise Rainbow et al. v. Fish and Game Commission, et al. 148 Mont. 412, 421 P.2d 717 (1966); Osnes Livestock Co. v. Warren, 103 Mont. 284, 62 P.2d 206, (1936).

4. The Applicant's proposed use is an appropriation, as the appropriation works seek to divert waters from an adjacent watercourse, Hayes Creek/Ward Ditch, and into an impoundment, prior to releasing the water into the watercourse to which it would have flowed prior to the diversion. "Appropriate" means to divert, impound, or withdraw (including by stock for stock water) a quality of water..." § 85-2-102(1) MCA (1983).

5. The Applicant's proposed use is non-consumptive (Testimony of Applicant; testimony Ronald Porter.)

6. The denomination of the watercourses adjacent to the proposed use as "ditches" or as "watercourses" is irrelevant in this proceeding. The only relevance offered for the argument on this point was regarding the Natural Streambed and Land Preservation Act of 1975. Title 75, Chapter 7, Part 1, MCA (1983). If the agencies who administer that law wish to pursue

enforcement thereof against Applicant, that is a separate matter from this proceeding. Mr. Peterson's testimony indicated that the Conservation District had already granted permission for the construction of the instant project, despite his belief that the Act did not apply. The point is not only irrelevant to this proceeding, but it is also moot.

7. The Department must independently evaluate each Application for Beneficial Water Use Permit. In each case, the Applicant must meet a specific burden of proof on each of the relevant statutory criteria. Whether a permit issued for a different Applicant (e.g. Dippel) contained particular conditions is irrelevant herein, unless the elements of res judicata can be shown. In the Matter of the Application for Beneficial Water Use Permit No. 34,204-s42M by Donald Chaffee, Interlocutory Order March 6, 1984; Audit Services, Inc. v. Wayne Anderson d/b/a/ Wayne's Electric, 41 St. Rep. 1388 (1984). None of those elements exist herein.

8. The Applicant proved by substantial credible evidence that there are unappropriated waters in the source of supply: at times when the water can be put to the use proposed by the Applicant, in the amount the Applicant seeks to appropriate; and throughout the period during which the Applicant seeks to appropriate, the amount requested is available.

9. The Applicant proved by substantial credible evidence that the water rights of a prior appropriator will not be adversely affected. Because the proposed use is non-consumptive, no less water will flow to appropriators whose points of

diversion are downstream from the proposed use. The proposed use need be properly engineered, of course, to prevent damage to the adjacent watercourses, and to assure that the water actually flows through the pond as anticipated.

10. The Applicant proved by substantial credible evidence that the proposed means of diversion, construction and operation of the appropriation works are adequate, and that the proposed use will not interfere unreasonably with other planned uses or developments for which a permit has been issued or for which water has been reserved.

Based upon the foregoing Findings of Fact and Conclusions of Law, and based upon the record of proceedings herein, the Hearing Examiner hereby makes the following:

PROPOSED ORDER

Subject to the terms, conditions, restrictions, and limitations listed below, Application for Beneficial Water Use Permit No. 52031-s76H is hereby granted to Dean Frost to appropriate up to 250 gpm up to 403 acre-feet per year from Hayes Creek-Ward Ditch at a point in the SE¼SE¼SW¼ of Section 35, Township 5 North, Range 21 West, Ravalli County, Montana from January 1, to December 31 of each year. The impoundment through which the water will flow has an approximate capacity of .3 acre-feet. The purpose is a flow-through fish, wildlife and recreation pond. The priority date for this Permit shall be April 4, 1983 at 10:28 a.m.

CASE # 52031

This Permit is subject to the following conditions:

a. This Permit authorizes a non-consumptive use only. No diversion or appropriation is authorized hereby except to allow Permittee to install an 8" pipe between Permittee's existing pond and Hayes Creek-Ward Ditch, and a 10" pipe between the pond and Camas Creek-Hayes Creek-Ward Ditch to allow water to flow from the source, through the pond, and back into the Camas Creek watercourse.

b. This Permit is subject to all prior existing water rights in the source of supply. Further, this Permit is subject to any final determination of existing water rights, as provided by Montana Law.

c. The diversion works shall be constructed in a good and sufficient manner under supervision of Soil Conservation Service personnel.

d. The water right granted by this Permit is subject to the authority of court appointed water commissioners, if and when appointed, to admeasure and distribute to the parties using water in the source of supply the water to which they are entitled. The Permittee shall pay his proportionate share of the fees and compensation and expenses, as fixed by the district court, incurred in the distribution of the waters granted in this Provisional Permit.

e. This Permit is subject to the permanent installation of a control device on the inlet structure allowing the Applicant to stop diverting water when so required.

CASE # 52031

MEMORANDUM

From the evidence on the record herein, it appears that the Permit proposed for issuance would have no discernable affect on the watercourses involved or on other appropriators in the area.

The Objectors herein raised various objections, none of which negated the Applicant's showing of the statutory criteria requisite to permit issuance. One of these issues was that the Department could not issue the permit applied for because the Applicant had failed to comply with Ward Irrigation District by-laws. Whether the Applicant has circumvented the letter or spirit of the internal governing rules of Ward Irrigation District is not for the Department to say. Those complaints are properly addressed to the Irrigation District. The only apparent representative of the District at the hearing was Ronald Porter, who indicated that the District had no objection to the proposed use.

Assuming the project is properly constructed, it appears that no consumptive use of water will occur, and that no damage to the integrity of the ditches, or watercourses, involved will arise. If it appears, after construction of the project, that the appropriative rights of Objectors are infringed upon, then the remedy is to file a written complaint with the DNRC Missoula Field Office, and after investigation thereof, action may be taken to prevent the Permittee's use under the Permit. The right granted by the Provisional Permit remains junior to the water rights of Objectors, and therefore susceptible to their call when

the senior's rights are not being satisfied and cessation of use would result in an increased amount of water available to the Objectors. Beaverhead Canal Co. v. Dillon Electric, Light & Power Co., 34 Mont. 135, 85 p. 880 (1906); In the Matter of the Application for Beneficial Water Use Permit No. 4317-s41P by Morris Mancoronal, Proposal for Decision, April 18, 1984, Final Order, June 14, 1984. It should be noted that the Permit requires installation of an adequate control device which would enable the Permittee to stop diverting water and allow the pond to drain when conditions so require.

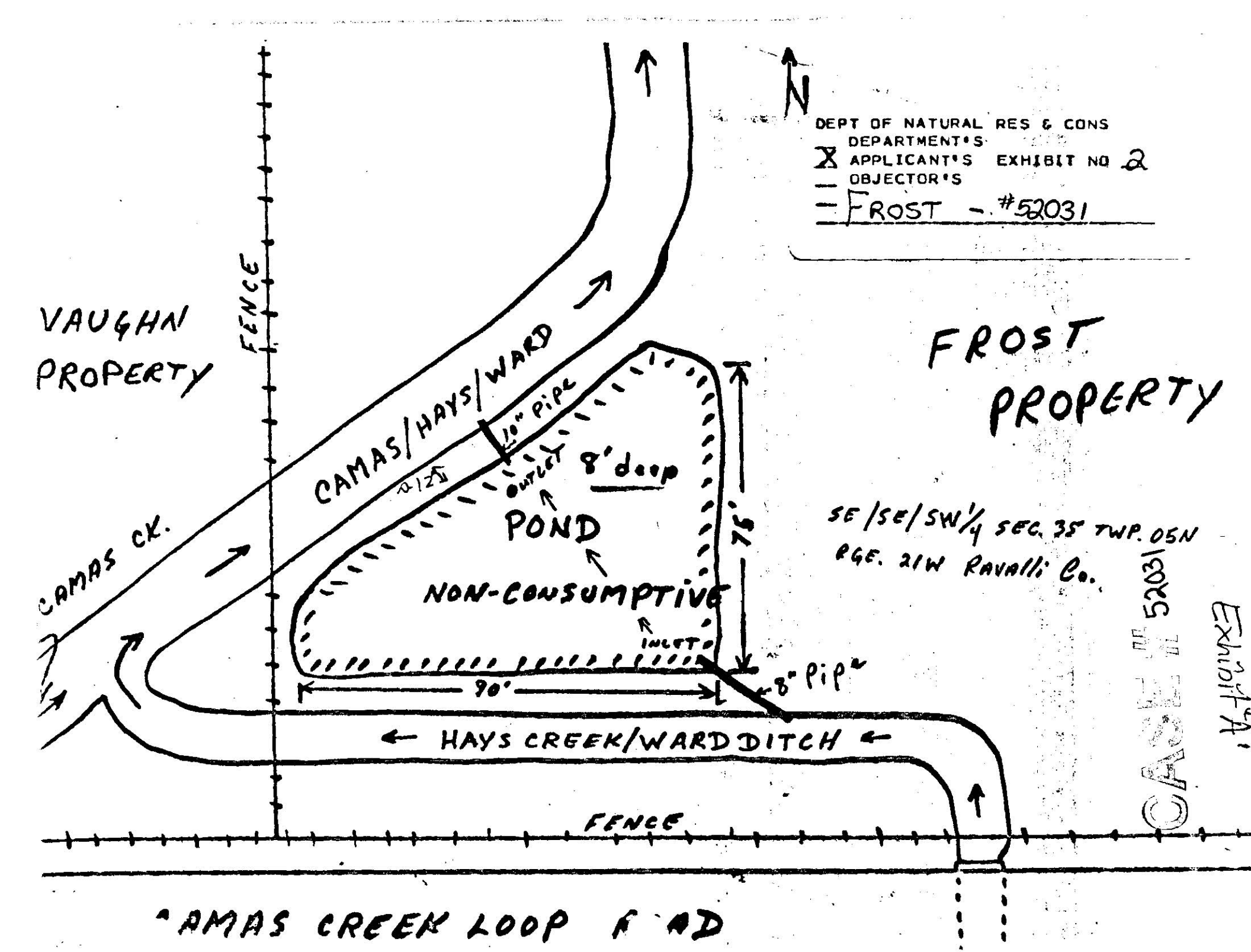
DONE this 1st day of October, 1984.

Sarah A. Bond, Hearing Examiner
Department of Natural Resources
and Conservation
32 S. Ewing, Helena, MT 59620
(406) 444 - 6625

NOTICE

This proposal is a recommendation, not a final decision. Any party adversely affected may file exceptions to this proposal. Such exceptions must be filed with the Hearing Examiner at 32 South Ewing, Helena, Montana 59620 within 20 days after service of this Proposal by first class mail, MCA § 2-4-623. All parties are urged to carefully review the terms of the proposed permit, especially checking the legal land descriptions, for correctness. No final decision shall be made until after the expiration of the period for filing exceptions, and the due consideration of those exceptions. All exceptions shall specifically set forth the precise portions of the proposed decision to which exception is taken, the reasons for the exception and authorities upon which the exception relies. any aggrieved paraty has the right to present briefs and oral argument, but oral argument must be requested within 20 days hereof.

CASE # 52031


N
DEPT OF NATURAL RES & CONS
DEPARTMENT'S
X APPLICANT'S EXHIBIT NO 2
OBJECTOR'S
FROST - #52031
VAUGHN PROPERTY
FENCE
CAMAS/HAYS/WARD
10" PIPE
OUTLET
8' deep
POND
NON-CONSUMPTIVE
INLET
75'
90'
8" PIPE
FROST PROPERTY
SE/SE/SW1/4 SEC. 35 TWP. 05N RGE. 21W Ravalli Co.
CAMAS CK.
HAYS CREEK/WARD DITCH
FENCE
CAMAS CREEK LOOP ROAD
Exhibit A
CASE # 52031

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

Donna K. Elser, an employee of the Montana Department of Natural Resources and Conservation, being duly sworn on oath, deposes and says that on October 3, 1984, she deposited in the United States mail, certified mail, an order by the Department on the Application by Dean H. Frost, Application No. 52031-s76H, for an Application for Beneficial Water Use Permit, addressed to each of the following persons or agencies:

1. Dean H. Frost, SW 262 Camas Creek Loop, Hamilton, MT 59840
2. Lee E. & Alice I. Foss, et al., 703 S 3rd, Hamilton, MT 59840
3. Dan Huggins, 2949 Hwy 93 So., Hamilton, MT 59840
4. Mike McLane, Water Rights Bureau Field Office Supervisor, Missoula (inter-departmental mail)
5. Sarah A. Bond, Hearing Examiner (hand deliver)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

by Donna K. Elser

STATE OF MONTANA)
) ss.
County of Lewis & Clark)

On this 3rd day of October, 1984, before me, a Notary Public in and for said state, personally appeared Donna Elser, known to me to be the Hearings Recorder of the Department that executed this instrument or the persons who executed the instrument on behalf of said Department, and acknowledged to me that such Department executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

Jean P. Gilbert

Notary Public for the State of Montana
Residing at Helena, Montana
My Commission expires 1-21-1987

CASE # 52031