

Order

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. 11493-s41G BY JEFFERSON RIVER)
ACRES AND PERMIT NO. 15211-s41G BY)
GORDON E. LANE)

FINAL ORDER

* * * * *

Exceptions to the Proposal for Decision have been entered in this matter by the Bureau of Reclamation and the Montana Power Company. Said Proposal is hereby incorporated herein.

PROCEDURAL OBJECTIONS

Notice of Pick-Sloan Plan

Montana Power Company objects that "official notice" was improperly taken of portions of the Pick-Sloan Plan. This argument misconceives the scope of "official notice" as it relates to the procedural protections afforded parties in adjudicatory hearings. See generally, MCA 2-4-612. (1981), Hert v. J.J. Newberry, 178 Mont. 355, 584 P.2d 656, rehearing denied 587 P.2d 11 (1980). The right to rebut officially

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noticed facts presupposes that such factors are adjudicative ones. The Pick-Sloan Plan, like Congressional committee records, is an instrument that reflects legislative intent and, as such, it is the subject of argument and not fact-finding. For present purposes, it is immaterial whether the contents of such report are "true" or not. In re Anderson Ranch, Department Order, 4/84. They are relevant to Congressional intent and are material for that reason. See MRE 202(b) (4), MRE 102(c), MRCP 44(a). Viewed in this manner, the opportunity to respond to the Proposal For Decision adequately protects the Montana Power Company.

Bureau's Assertions of Fact

We also note that a significant portion of the materials contained in the Bureau's brief are assertions of fact. As such, they are not properly before us in this proceeding. We nonetheless accept them as true and accurate for the purposes of the present disposition. No prejudice accrues to the Applicant because said facts do not affect the disposition made herein.

Notice of Technical Matters

We have also taken notice of certain technical matters in our discussion of the evidence (e.g. the relationship between

hydropower production, head and turbine designs). None of these matters are material to the result reached herein; we note these matters merely to provide context to our discussion on the reasonableness of the Bureau's diversion scheme. These matters are within our "experience, technical competence and specialized knowledge" to be used in the evaluation of the evidence. MCA 2-4-612(7), see generally Federal Land Bank v. Morris, infra, (trial judge familiar with local irrigation practices). In this respect, they are more akin to "legislative facts" than adjudicative ones, see generally, 2 Davis on Administrative Law, §15.03; K. Davis, An Approach to Problems of Evidence in the Administrative Process, 55 Harv. L. Rev. 364 (1942); T. Weinstein's Evidence, §200(03). No prejudice accrues to the Objectors in this regard. Compare, Grosfield v. First National Bank, 73 Mont. 219, 236 P. 250 (1925) (judicial notice of adjudicative fact).

Conclusions of Law and Findings of Fact

The Bureau also objects that certain conclusions of law in the Proposal for Decision are presented as findings of fact. All of the determinations required by MCA 85-2-311 are actually

mixed questions of law and fact, and require the application of general standards of law to varying factual situations. The findings of fact in the Proposal for Decision and the explanation of our reasoning are sufficient to describe the basis of our decision.

Prior Administrative Decisions

The Bureau also charges that our result herein is inconsistent with In re Boone, Department Order. In fact, the Boone disposition was premised on a failure of proof by the applicant on the effects of his well pumping on the surface flows of an adjacent stream. Even if we assume that such result is inconsistent with the disposition herein it is of no consequence.

We further accept that prior administrative decisions play a starie decides role, if only because treating similarly situated individuals in a varying fashion amounts to arbitrary and capricious action. See MCA 2-4-702, see generally, Contractors Transport Corp. v. United States, 537 F.2d 1160 (4th Cir. 1976). Brennan v. Gilles and Colting, Inc., 504 F.2d 1255 (4th Cir. 1974). However, none of the matters appearing herein with regard to the reasonableness of the Bureau's diversion scheme or the Pick-Sloan Plan were brought to the attention of the Department in that matter. Because of such circumstances, we will not blindly adhere to former dispositions that subsequently

appear improvident or erroneous in the face of additional argument.

Department Authority

The Montana Power Company also objects generally that the Proposal for Decision characterizes portions of the Bureau's use as waste, and that this characterization is beyond the authority of the Department. Use of the term "waste" in this connection is described elsewhere herein. However, our definition and use of the term does not negate the thrust of the Montana Power Company's objection.

MPC's argument is that an adjudication involves an interpretation and determination of existing rights; the Department herein has interpreted and determined an existing right in some measure; therefore, the Department has adjudicated the existing right. However, this argument assumes that only adjudications involve a determination of existing rights, whatever the character and purpose of other proceedings involving water rights.

It is true that the Department has no authority or power to adjudicate the extent of water rights. Adjudication is left exclusively to the judiciary acting through the water divisions. See MCA 85-2-201 et seq. An "adjudication", however, is a final resolution of the rights to the use of a water resource among competing claimants. See MCA 85-2-234(1) (1981). If not before, the present adjudication procedures are in the nature of a quiet title action. See MCA 85-2-202 et

seq. The present permitting procedure is not an adjudication because the legislature has not endowed its end result with the force of finality. The present order is not determinative of the scope and extent of the Objector's rights, even as against the Applicant. Under the present permitting procedure, the right of a senior water right holder is superior to that of a junior, notwithstanding the terms or language of the resolution of a claim for a new water use permit. See MCA 85-2-312(1). ("A permit shall be issued subject to existing rights and any final determination of those rights made under this chapter.")

The effect of the inquiry into existing rights in this proceeding is thus controlled by the purposes of the administrative process. Where the statutes detailing the permitting process do not provide for a final resolution of competing rights to a source of supply, the end result is not such a final resolution. See generally, State ex rel. Reeder v. District Court of Fifth Judicial Dist., 100 Mont. 376, 47 P.2d 653 (1935). The sole purpose of the permitting process is to determine if, and under what conditions, a prospective appropriator can take his place on the ladder of priorities from a particular source of supply. Therefore, such determinations cannot foreclose objectors from asserting their priorities at any time. See In re Monforton, Department Order 5/82 (appeal pending). While a permit may foreclose a senior appropriator from arguing that a particular junior's diversion works should be removed because there is never unappropriated water, it does

not foreclose the senior from insisting that such diversion works be properly regulated to satisfy his demand. See generally, Donich v. Johnson, 77 Mont. 229, 242, 250 P. 963 (1926).

In this light, determinations of "waste" and the like are eminently proper and within the authority of the Department in disposing of permit applications. Such determinations are "adjudications", however, only if and to the extent that the water courts give such administrative determinations probative effect. The latter depends not on the power of the agency, but rather on whether the different character of the proceedings and the potentially different cast of parties preclude the application of the collateral estoppel doctrine. See generally, Parkland Hoisiery Co. Inc. v. Shore, 439 U.S. 322 (1979); Restatement (Second) of Judgments, §88, §68.1; International Union of Operating Eng. v. Sullivan Transfer, 650 F.2d 669 (5th Cir. 1981).

It is impossible to determine the existence of "unappropriated water" and lack of "adverse effect to prior appropriators" without an examination of the underlying rights. Moreover, an objector cannot insulate his claimed right from the scrutiny needed to resolve these questions by asserting that anything but an abdication to his claims amounts to an invalid adjudication. The fact that "existing rights" are endowed with explicit constitutional protection (Mont. Const., Art IX, §3) does not further the analysis, since the particular provision does not address the scope and extent of an existing right.

More fundamentally, it does not appear that our determination herein will impinge on water court determinations. Normally, the amount of water that is needed to divert one's decreed amount has not been included in the appropriative limit. See State ex rel. Crowley v. District Court, infra, Federal Land Bank v. Morris, infra, see also MCA 85-2-234(b). Wheat v. Cameron, 64 Mont. 484, 210 P. 761 (1922) (appropriation is measured at the headgate). Moreover, "beneficial use" is not a concept etched in stone. As conditions change and the "necessity" for the use decreases, the underlying right follows pro tanto. Conrow v. Huffine, 48 Mont. 437, 138 P. 1094 (1914); Huffine v. Miller, 74 Mont. 50, 237 P. 1103 (1925). See also, Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist., 3 Cal. 2d 489, 45 P.2d 972; Basin Elec. Power Co-op v. State Bd. of Control, (Wyo.) 578 P.2d 557 (1978). Adjudications, as noted in the Proposal for Decision, confirm existing rights. They do not and cannot solve all water distribution problems.

Montana Power Company also requests that we officially note its statements of claim pursuant to the adjudication proceedings. Viewing these claims as pleadings, such notice is proper, MRE 202(b)(6), but altogether immaterial to the present proceedings except insofar as such statements indicate that no water rights have been abandoned as a result of a failure to file. See MCA 85-2-226 (1981). We will not now reopen these proceedings to provide for further fact-finding. Moreover, it is unclear what benefits would be produced by such a procedure.

The data and testimony presented by Montana Power Company are accepted; it is the inferences and conclusions drawn from this evidence that are the focal point of our inquiry.

Burden of Proof

We affirm the distinction made in the Proposal for Decision regarding the burden of persuasion and the burden of production in these proceedings. In our view, during a hearing "on the objections", MCA 85-2-309, an objector bears the burden of production on the issue of an "existing right". That is, an objector must give proof of such a kind and character that reasonable minds might conclude that "existing rights" of a particular kind and character exist. See, MCA 85-2-308(2) (objection must state facts tending to show that an application does not satisfy statutory criteria). That burden is discharged where the evidence and all proper inferences therefrom, viewed in a light most favorable to the objector, are sufficient to allow a reasonable mind to conclude that an existing right exists.

This result follows from the requirement that a potential objector demonstrate some cognizable interest in the proceeding. See MCA 2-4-102(7), ("A party is a person named or admitted as a party or properly seeking and entitled as of right to be admitted as of a party. ..."), see also Holmstrom Land Co. v. Ward Paper Box, supra; McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972); Tucker v. Missoula Light & Water Co., 77 Mont. 91, 250 P. 11 (1926); Maclay v. Missoula Irr. Dist. 90

Mont. 344, 3 P.2d 286 (1931); Carlson v. Helena, 43 Mont. 1, 114 P. 110, (1911). Moreover, we do not suppose that the legislature intended an applicant to bear a burden of production on an issue involving facts that are in the province of an objector. See generally, Bratten Corp. v. OSHRC, 590 F.2d 273 (8th Cir. 1979); Assure Competitive Transportation, Inc. v. United States, 629 F.2d 467 (7th Cir. 1980), Cert. denied 449 U.S. 1124 (1981); Old Ben Coal Corp. v. Interior Board of Mine Op. App., 523 F.2d 25 (7th Cir. 1975); NRLB v. Mastgro Plastics Corp., 354 F.2d 170 (2nd Cir. 1965), cert denied, 384 U.S. 972 (1966); see generally, McCormick on Evidence (Cleary Ed. Section 373.).

To establish a prima facie case on the issues of unappropriated water and adverse affect to prior appropriators, all an applicant need show is that water is physically available in the source of supply in the amounts he seeks throughout the period of intended use, and that the diversion of such water is administratible for practical purposes in deference to senior demand. See generally, In re East Bench, Department Order (1983); Cache LaPoudre Water Users Ass'n v. Glacier Meadows, 191 Colo. 53, 550 P.2d 288 (1976); Kelly Ranch v. Southeastern Colo. Water Conservation Dist., 191 Colo. 65, 550 P.2d 290 (1977). These requirements are consistent with the recognition that senior rights are entitled to water only to the extent and measure of need. Notwithstanding one's status as a senior appropriator, no water need bypass a junior's diversion point except at times of senior demand. Thus, it is proper to require

a senior right holder to assert that demand against the junior appropriator. But see Spaulding v. Stone, 46 Mont. 384, 129 P. 327 (1913).

When, however, an objector or the Department acting in its own behalf, see MCA 85-2-310(2), show an existing right or a collection of existing rights, the amount of which raises an issue of the availability of water at any particular time, it is incumbent on an applicant to go further and show by evidence or argument that, for all practical purposes, there is still unappropriated water available notwithstanding the senior rights and the attendant pattern of need, or that said existing rights are not of the kind or character asserted. Therefore, the burden of production in this regard is on the applicant. At all times the burden of persuasion is on the applicant, see MCA 85-2-311.

In our mind, the Bureau and the Montana Power Company have failed to show by the assertion of their respective rights that there is not unappropriated water available for this Applicant. That is to say, the water rights propounded herein by these objectors do not indicate a lack of unappropriated water for this applicant. As a matter of law, the uses evidenced by the Objectors do not, for all practical purposes, take all of the waters in the source of supply during most years.¹

REASONABLENESS OF THE DIVERSION AT
CANYON FERRY DAM

Our use of the term "waste" in the circumstances of this case is somewhat an unartful one. The question before us is not so much whether all the water being impounded by the Bureau is being put to beneficial use. See MCA 85-2-102(13). Rather, it may be more properly framed as whether the Bureau is using all of the water it impounds. "Use is the foundation of the law of appropriation. ..." Mettler v. Ames Realty, 61 Mont., 152, 162, 201 P. 702 (1921).

Water Right Characteristics

The fact that water is of value to a person does not of itself form a use that characterizes an appropriation. A riparian proprietor does not appropriate a watercourse because the flow of water adds greatly to the market value of the adjacent freehold. See generally, In re Robinson, 61 Idaho 462, 103 P.2d 693 (1940). Incidental benefits accruing to the use of water do not in all cases amount to an appropriation. Power v. Switzer, 21 Mont. 523, 55 P. 32 (1898).

The Bureau contends that providing lift with water is a beneficial use. In its brief, the Bureau's contention is expressed as, "[i]s the Hearing Examiner contending that providing lift with water is not a beneficial use?" The answer to the inquiry is an unqualified yes. Providing lift (head) with water is not a use of water at all. Rather, it is a means to effectuate the ultimate use of water for power production.

These circumstances can be likened to the situation of any irrigator. The flow in the source of supply facilitates the diversion of that amount which is required for the needs of the crops. However, the irrigator does not "use" the flow of water that makes the diversion of his appropriative limit convenient. The extent of his protection to a flow of water in the source of supply is dependent on the "reasonableness" of his diversion scheme. State ex rel. Crowley v. District Court, 108 Mont. 89, 88 P.2d 23 (1939) MCA 85-2-401. ("What it had deprived plaintiff of was not the water, but the force of the water, which was no part of his appropriation", at 100, 101). In the same way, protection of the Bureau's practice of storage for providing head and carry-over water is dependent on the reasonableness of this diversion scheme.

Implicit in the Bureau's argument is the corollary that storage is intrinsically a beneficial use. This is decidedly not the case. See generally, In re Greybull Valley Irr. Dist., 52 Wyo. 479, 76 P.2d 339 (1938); Highland Ditch Co. v. Union Res. Co., 53 Colo. 483, 127 P. 1025 (1912); Windsor Reservoir & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 98 P. 729 (1928); see also Hallenback v. Crowley Ditch & Res. Co., 420 P.2d 419 (Colo. 1966) (storage rights can be abandoned), Cline v. Whitten, 250 Colo. 179, 372 P.2d 145 (1962). An appropriation is grounded upon the use of the water resource; it is a usufructary right. Holmstrom Land Co. v. Meagher County Newlan Creek Water Dist., ___ Mont. ___, 36 St. Rep. 1403, 605 P.2d 1060 (1979). Moreover, the measure of an appropriation is

always limited to the amount that is required for the ultimate use. Beneficial use is the base, measure and limit of the appropriative right. Bailey v. Tintinger, 45 Mont. 154, 122 P. 575 (1912); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451 (1923). The claim that a storage appropriation is satisfied only when the storage facility is full is inconsistent with the above principles. As explained in the Proposal for Decision, such a claim is also inconsistent with established authority in this state concerning storage appropriations. See Gwynn v. City of Phillipsburg, 156 Mont. 194, 478 P.2d 855 (1970); Whitcomb v. Helena Water Works Co., 151 Mont. 443, 444 P.2d 301 (1968).

Moreover, such an argument confuses the right to store with the right to store water. While the Bureau's property interests may yield a privilege to use land to store water as against other landowners, such interests are not material to the Bureau's rights as against other appropriators to use water. The property right to use land in connection with an appropriative right is separate from the appropriative right itself. For example, ditch rights and water rights are wholly distinct and separate. Connolly v. Harrel, 102 Mont. 295, 57 P.2d 781 (1936); Scott v. Jardine Gold & Mining Co., 79 Mont. 485, 257 P. 406 (1927); Prentice v. McKay, 38 Mont. 114, 98 P. 1081 (1908); Smith v. Dennif, 24 Mont. 20, 60 P. 398 (1900). Warren v. Senecol, 71 Mont. 210, 228 P. 71 (1924); Maclay v. Missoula Irr. Dist., 90 Mont. 344, 3 P.2d 286; McDonnell v. Huffine, 44 Mont. 411, 120 P. 792 (1911); Harrier v. Northern

Pacific Ry., 147 Mont. 130, 410 P.2d 713 (1966); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972); O'Connor v. Brodie, 153 Mont. 129, 454 P.2d 920 (1969); Smith v. Krutar, 153 Mont. 325, 457 P.2d 459 (1969). Thus, the Bureau's allegation that 87 percent of the annual inflow of the Missouri River into Canyon Ferry is beneficially used is immaterial. That figure translates into an assertion that 87 percent of the annual inflow is passed through the turbines or stored, but it is the storage practice that must be first established as being "reasonable."

We reject the Bureau's argument that RCM (1947) 89-901 (repealed in 1973) ("... an appropriator may impound flood, seepage, and waste waters in a reservoir and thereby appropriate the same") in any way equates the size of a reservoir with the measure of the concomitant storage right. Even if the statute were to apply by its terms, its purpose was merely to confirm that these types of water uses may be the subject of appropriation. Popham v. Holloran, 84 Mont. 442, 275 P. 1099 (1929); see generally, Midkiff v. Kincheloe, 127 Mont. 324, 263 P.2d 976 (1954); Wills v. Morris, 100 Mont. 514, 50 P.2d 862 (1935); Woodward v. Perkins, 116 Mont. 46, 147 P.2d 1016 (1944).

The reasonableness of a diversion scheme must not be determined by reference to mechanistic applications of any "one-fill rules". See In re Monforton, Department Order. Rather, it must be determined by an analytical standard that expressly acknowledges the competing concerns of promoting water use by according security to the capital investments needed to

develop the water resources in an arid region while at the same time maximizing the overall benefit of a limited water resource. See generally, Hall v. Kuiper, 510 P.2d 329 (1973); Baker v. Ore-Ida Foods, Inc., 95 Idaho 575, 513 P.2d 627 (1973).

"In determining the amount of water which a user applies to a beneficial use and to which he is entitled as against a subsequent appropriator, the system of irrigation in common use in the locality, if reasonable and proper under existing conditions, is to be taken as the standard, although a more economical method might be adopted." (Weil on Water Rights in Western States, 3d Ed, Sec. 481, p. 509.) And an appropriator cannot be compelled to divert according to the most scientific method known. (Citation omitted)

. . . .

It is the policy of this and all western states to require the highest and greatest possible duty from the waters of the state in the interest of agriculture and useful and beneficial purposes. (Allen v. Petrick, 69 Mont. 373, 222 P. 451; Farmers Cooperative Ditch Co. v. Riverside Irr. Dist., 16 Idaho 525, 102 P. 481.) But it is equally well-established that "economy should not be insisted upon to such an extent as to imperil success."

Worden v. Alexander, 108 Mont. at 215, 216.

"One hundred percent efficiency can be furnished by no system of diversion, and certainly by none financially available to the average water user. The law does not defeat its own end by requiring the impossible. The marginal character of many farming enterprises, and especially of the smaller ones, is well known, and if defendants' argument is followed, vested interests will be seriously affected and rights limited by the necessity of installing diversion systems by which the last drop may be taken from the stream.

. . . .

... the tendency and spirit of legislation in the northwest had been to prevent a monopoly of water."

State ex rel. Crowley v. District Court, 108 Mont. 89, 97, 101, 88 P.2d 23.

Critical Water Year Planning

At this juncture, attention must be paid to the relationship between storage and power production at Canyon Ferry. As noted in the Proposal For Decision, the Bureau operates Canyon Ferry to maintain storage for power production during the "critical years", or the low flow period of record. See generally, 18 CFR 11.25. This operation serves to "balance" the need to produce power continuously and reliably across the years with the desire to maximize power production during any given year. In any given year, except for 1976, the Bureau could have produced more energy with more water, but curtailed power production in deference to protecting carry-over storage.

We understand for purposes of this analysis that power which can be produced continuously at some level is firm energy and we assume this energy is much more valuable in the marketplace than "interruptible", "secondary" or "dump" power. Thus, critical water year operations serve to provide a higher value from the energy produced.

By contrast, the storage facilities of Montana Power Company are largely capable of only regulating the flow of the Missouri to account for the daily fluctuations which necessarily result from the exercise of rights on this large river. To a lesser extent, some or all of the storage can be devoted to short-term peaking operations. Upstream development would necessarily threaten a system with such a small margin of flexibility. See

In re Monforton, supra. The Bureau's storage not only regulates daily fluctuations in flow, but is of sufficient capacity to offset seasonal and annual variations.

It will be noted that the Bureau's critical water year operations do not assure that energy will be produced throughout the years. That is, the Bureau's water plan assumes, as it must, that past recorded water history is prologue. There is always the possibility that the future holds more prolonged drought years than have been experienced in the past. Conversely, of course, the "critical water" years may never occur again.

The foregoing serves to point out that critical water year planning is a management concept and is not geared unerringly to the natural laws of hydrology. Indeed, critical water year operations maintain some degree of flexibility. Heavy snowpack may prompt additional releases for power production during the winter months despite the fact that critical flows are occurring. The impending spring run-off justifies further releases from storage, even under the Bureau's current regime.

See Bureau's hydrograph and also Exhibit 1, Bureau's Brief. As a general matter, however, critical water planning results in power production levels that are geared to the levels of annual flow; storage is largely held as a buffer against the possibility of long-term drought. Thus, with respect to carry-over storage and critical water year planning, the effect of upstream diversions is largely that of eroding the current

protection from the effects of long-term drought. Compensation for a reduction in inflow during most years can be achieved by "borrowing" water that is devoted to power production in future years. If critical water year flows occur in succession, an outright loss of power will result. On the other hand, a critical water year followed by a wet year will not affect power production from carry-over storage. The ability to provide water across the years is constrained by both the flow of the Missouri and the capacity of the reservoir.

We do not ascribe to the Bureau's view that a change in its storage practices will "hurt" future upstream appropriators. The Bureau's belief is premised on the effects of long-term low flows on its storage. The Bureau believes that a reduction in its storage threatens existing upstream appropriators because the lack of such storage would require the Bureau to heavily rely on the direct flow of the Missouri, and/or allow downstream MPC claims to embrace the whole flow of the Missouri.

Firstly, the Bureau's lawful demand on the source of supply is historically a product of that quantity of water required from the source of supply to facilitate its use. Any significant addition to that demand amounts to a new and independent appropriation, with a priority that is junior to existing uses. See Proposal for Decision, Featherman v. Hennessy, 42 Mont. 535, 113 P. 751 (1911); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940). Thus, the observations in the Bureau's brief concerning the effect of running its turbines

at full capacity are simply not germane, nor is any other consequence of long-term drought material if the purported effect envisions an increased demand on the source of supply.

Secondly, to the extent that the Bureau's arguments are premised on the lack of storage to offset MPC's demand on the source of supply, it is enough to observe that the limited possibility of experiencing water short years of a character sufficient to cause this effect sacrifices far too much for future upstream appropriators, since such water-short years are seldom occurrences.

Head

Storage also relates to power production by providing "head." The amount of energy produced by a given unit of water is related to the linear height of water over the turbines. We accept as true the Bureau's implicit allegations that a full reservoir allows the existing turbines to operate at maximum efficiency. We reject any inference that differences in power production during dry and wet years are wholly attributable to efficiencies of the Bureau's existing turbines. Certainly, dry years result in less water through the turbines as the Bureau maintains its planned reservoir elevations. See Table 1, Department's Report, compare 1977 and 1976. We also note that additional upstream diversions will inevitably lower the reservoir level or cause the reservoir level to fall at an earlier date. This will have the effect of reducing maximum

efficiencies or at least reducing the historic period of time during which the Bureau's turbines operate at maximum efficiency. However, this effect is not determinative of the reasonableness of the Bureau's diversion scheme. For example, high diversion rates for agricultural use may provide "head" to push waters through long and leaky ditches to the ultimate place of use. See generally, Worden v. Alexander, supra, Boehler v. Boyer, 72 Mont. 472, 234 P. 1086 (1925). Where this practice strongly militates against the maximum utilization of the source of supply, a more efficient diversion practice that involves lower rates of flow to achieve the identical volume of water may argue that the former practice is unreasonable. See generally, Conrow v. Huffine, 110 Mont. 263, 103 P.2d 137 (1940) (A diversion rate that is "convenient" is not the test of the measure of an appropriation.), see also Dern v. Tanner, 60 F.2d 626 (D. Mont. 1932); Atchison v. Peterson, 1 Mont. 561 (1872), aff'd 87 U.S. 507 (1874).

We regard as immaterial the Bureau's further allegations that its existing turbines will become inoperable at certain reservoir water levels. As noted in the Proposal for Decision, and as more fully explained in In re Monforton, supra, we need only determine herein whether water in the amounts claimed by the Applicant for permit is available in some years. The water levels specified by the Bureau where turbines become inoperable are not the inevitable consequence of a significant increase in upstream depletions.

Upstream Water Development and Reservoir Spills

Generally, the Bureau exaggerates the effect of upstream development to its interests.² Since the inception of the permitting process (July 1, 1973), the Department has allocated about 85,000 acre feet of water per annum for new uses upstream from Canyon Ferry. We officially note the records that prompt this figure. No substantial harm accrues to any party in this regard, as even a substantial error in such an estimate does not detract from its significance as being representative of the relevant order of magnitude.³ We note that this figure does not mean that 85,000 acre feet are being diverted annually. It is the most that can be diverted in any given year, assuming all those permitted rights are actually developed. See MCA 85-2-315(1). We further note that this figure represents maximum diversions, not depletions.

Since 1953, the Bureau has spilled 716,000 acre feet of water on an average annual basis; in only five years were spills less than 85,000 acre feet. See Table 3, Department Report. We recognize that spill is an imperfect barometer in determining the effect of future depletions upstream of Canyon Ferry on carry-over storage. Diversions in later years are likely to be of a greater magnitude than those in earlier years since the gross volume of diversions has increased with water resource development. Thus, the spill records of early years are progressively less relevant in determining the impact of future

development on Bureau operations. However, this obvious effect is not so dramatic as to render such spill records inconsequential in determining the magnitude of the impact, since the volume of spills evident in this record, see Table 3, Department Report, for all practical purposes moots even the most optimistic estimates of increasing consumption due to water development. We also recognize that the Bureau has been developing its water supply over the years, but again this increase in use is not significant in light of the volume that is spilled.

In any event, we note that the effect of such increased use, both at Canyon Ferry and upstream, is less compelling when it is juxtaposed with the inherent uncertainties involved in forecasting the amount and timing of spring runoff. The quantity of water spilled in any given year is, in part, predicated on the Bureau's estimate of potential inflow and, in order to allow the Bureau to react to it, when that inflow is expected to occur. Undoubtedly, all spills would have been used in the prior year if such a determination could be made with technical precision. To maximize power production, it is obvious that the Bureau desires to just fill its Canyon Ferry Reservoir and not spill in any given year. Despite these infirmities, however, we think the historical fact that such spills occur is significant in determining the effect of future upstream depletions on carry-over storage.

Future diversions will also affect "head," an indispensable ingredient of power production. (Kinetic energy of falling water produces power). However, the quantity of power produced is not directly proportional to head (the uppermost foot of head is less important than the lowermost foot), and the effect of variations in hydraulic head is somewhat dependent on the turbines selected to produce the power. If an additional 100,000 acre feet of consumptive use occurred annually upstream from Canyon Ferry, it would drop the level of this 35,200 acre reservoir by approximately 3 feet per annum. (Bureau's Exhibit 1). This is a conservative estimate since, in times of drawdown, the effect of taking the first acre foot is less than taking the second acre foot. The actual reduction in reservoir level and its effect on power production, however, is also dependent on the inflow into Canyon Ferry in any given year and the capacity of the reservoir. In part, the overall drawdown effect by upstream irrigation diversions will depend on whether or not, and the extent to which, Canyon Ferry refills during the fall months.*

In summary, we agree that the Applicant's use herein will result in a depletion of water that would otherwise be stored or passed through the Bureau's turbines. We further agree that, for most parts of virtually all years, the Bureau could increase its power production with additional quantities of water. That is to say, the historic availability of water in the Missouri River Basin is not sufficient and has not been sufficient to run the Bureau's turbines at full capacity and maintain reservoir elevations at their planned levels.†

However, the issue herein is whether the Bureau is entitled to insist on continued flows where the proposed depletion could be offset with stored water, albeit with an increased risk of experiencing shortages in dry years and, to some degree, an inevitable reduction in the efficiencies of the Bureau's existing turbines. In short, again, the issue is whether the Bureau's means of diversion are reasonable as against the claims of prospective upstream appropriators. We do not decide (nor could we) that the Bureau must change its water uses or practices in any degree.

Upstream Development

A factor that is relevant to a determination of whether a diversion is reasonable concerns the amount of water that is "tied up" by such a diversion practice in the face of potential demand for the resource. Here, the Bureau asserts a claim that virtually precludes all junior direct flow diversions in the Upper Missouri River Basin. This in itself distinguishes the present matter from In re Department of Interior, Department Order, cited by the Bureau and Montana Power Company. There, the particular reservoir was at the "headwaters" of the source of supply and would preclude the additional diversion of water in only a small area. As noted in State ex rel Crowley v. District Court, 108 Mont. at 100: "Obviously, of course, under the circumstances of that case, it was unreasonable to prevent the irrigation of 300,000 acres by an unusual and inefficient method of diverting water for 429 acres." We understand that

the Bureau is not merely "diverting water for 429 acres." However, the issue remains whether the quantity of water stored in anticipation of possible long-term water deprivation is reasonable as against the needs of the upstream basin.⁶

We also note that the Missouri River exhibits a much more stable flow over time than that involved in In re Department of Interior; supra, see Federal Land Bank v. Morris, 112 Mont. 445, 116 P.2d 1007 (1941), for a description of the watercourse involved. Any appreciable development of water-dependent enterprises on such watercourses requires storage to stabilize water availability. Deference to carry-over storage on such watercourses furthers the fundamental purpose of the priority system; the economic development of the arid West. It is of course true that the same can be said for the most junior uses on rivers akin to the Missouri; however, development of a substantial portion of such a flow may clearly be made without long-term carry-over storage. The Bureau, by the quantity of its demand, cannot insist that its relatively senior right be treated as a comparable right on an intermittent stream.

The preemptive effects of large downstream rights on upstream development have prompted close judicial scrutiny of the downstream right. Contrary to the Bureau's claims, the senior appropriator's diversion and appropriative right in A-B Cattle Company v. United States, 489 P.2d 57 (Colo. 1979) was affected by upstream development. There, an upstream storage development trapped silt that had historically lined the senior's ditches, limited ditch loss, and allowed more water to

reach the crops. In rejecting the senior's claim, the court noted that:

"[t]he effect of granting any particular appropriator a constitutionally-protected property right in the concentration of silt present in the water at the time of the appropriation would seriously inhibit any subsequent upstream appropriator. Upstream diversions or impoundments will result in alteration of the silt concentration to downstream users if only due to the slowing impact on stream velocity. Applied in the extreme, an appropriator located on lower reaches of a stream with a very early appropriation date could put a call on the river for the receipt of its natural silt concentration, which would have the practical effect of halting all upstream use and commanding substantially the entire stream flow to satisfy its appropriation."

Likewise, the Bureau cannot appropriate a volume of water in the form of head by a method that preempts further upstream water development, and stand steadfast to the assertion that a full head is an indispensable ingredient of its right.

Similarly, in Empire Water and Power Co. v. Cascade Town Co., 205 F. 123 (8th Cir. 1913), a downstream senior was not protected against the acts of an upstream junior that curtailed the flow to a waterfall around which a resort had been constructed. The mist from the waterfall was an inefficient method of irrigating attendant plants and protecting that diversion practice would have preempted upstream development. This result followed even though the spray and mist were themselves "valuable" to the resort development.

As noted in the Proposal for Decision, we can conveniently liken the present situation to a groundwater appropriator with a shallow well. However, such an appropriator does not "use" all the water in the underlying aquifer which props up the volume

that is ultimately required for his use. Such a groundwater appropriator is entitled to some measure of the underlying aquifer merely to reasonably exercise his appropriative right. The balance must be struck between the need to afford security for the senior right and the needs of the overlying basin.' See Wayman v. Murray City Corp., 23 Utah 2d 95, 458 P.2d 861 (1909); compare Current Creek Irr. Co. v. Andrews, 9 Utah 2d 324, 344 1P.2d 528 (1959); see also City of Albuquerque v. Reynolds, 71 N.M. 428, 379 P.2d 73 (1963); Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552; Hall v. Kuiper, 181 Colo. 130, 510 P.2d 329 (1973); Kuiper v. Well Owners Conservation Ass'n. 179 Colo. 119, 490 P.2d 268 (1971), see generally, Protection of the Means of Groundwater Diversion, K. Bliss, 20 Nat. Res. J. 625 (1980). Allowing the depth of the aquifer to be dropped to a level of "safe yield", even given the complexities of ascertaining that level, is not inevitably an abridgement of any senior appropriator's vested right. Additional increments of risk of drought are inevitable results of such an approach. See generally, State ex rel. Tappen v. Smith, 92 Idaho 451, 444 P.2d 412 (1968); see also, Baker v. Ore-Ida Foods, Inc., 95 Idaho 575, 513 P.2d 627 (1973); Reasonable Groundwater Pumping Levels Under the Appropriation Doctrine: The Law and Underlying Economic Goals, D. Grant, 21 Nat. Res. J. 1 (1981). Indeed, the need for water on the overlying basin may prompt a demand that appropriative rights be assigned finite lives. See Mathers v. Texaco, Inc., 77 N.M. 239, 421 P.2d 771 (1966); Fundingland v. Colorado Groundwater Comm., 171 Colo. 487, 468 P.2d 835 (1970);

Thompson v. Colorado Groundwater Comm., (Colo.), 575 P.2d 372 (1978).

This general treatment of ground-water storage should not be analytically different from surface storage or storage rights. Natural lakes may equally form the basis of an appropriative claim, see generally Donich v. Johnson, 77 Mont. 229, 350 P. 963 (1926), and injecting groundwater into the underlying aquifer to ensure an appropriative claim cannot logically undermine an approach that maximizes the use of a groundwater resource by establishing a safe yield level. See generally, Los Angeles v. San Fernando, 14 Cal. 3d 199, 123 Cal. Rptr. 1, 537 P.2d 1250 (1975).

We are also mindful that "efficiency" must not be insisted upon where to do so will imperil success. State ex rel. Crowley, supra, Worden v. Alexander, supra, Dept. of Nat. Res. and Cons. v. Crumpled Horn, No. 7076 (Mont. 9th Jud. Dist. 1978). Nor may "efficiency" be insisted upon where the appropriator is powerless to effect changes. See generally, State ex rel. Cary v. Cochran, 138 Nebr. 163, 292 N.W. 239 (1940); Santa Cruz Res. Co. v. Ramirez, 16 Ariz. 64, 141 P. 120 (1914). However, nothing herein indicates that future upstream development will frustrate the Bureau's appropriative purpose; nor, of course, is it physically impracticable to allow upstream diversions to erode the Bureau's waste. It is true that such upstream diversions will increase the risk of having an adequate water supply during a long-term drought, but as much can be said of any storage right.* Massive storage developments cannot be

allowed full reign over the flow in a river in order to maintain large-scale carry-over and minimize risk. As noted in the Proposal for Decision, such an approach precludes the benefits of present use for the fear of future shortage, if only for the demand attendant to the replenishment of seepage and evaporative losses.

We note in this general regard that the Bureau admits in its brief that it plans to change up to 300,000 acre feet to other uses. We assume that such a change will not frustrate the Bureau's appropriative purpose for future power production. We also note that the effect of continuing diversions, even of a considerable magnitude, will be well within the range of the natural variation of flows in the Missouri River. Thus, some measure of additional diversions will merely make more certain the risk of water availability that the Bureau must have perceived at the outset of its appropriation.

Bank Storage and Groundwater Recharge

The reference to bank storage in the Proposal for Decision is not significant to the result reached herein since the volume of water in bank storage is not substantial in relation to that which is stored in Canyon Ferry itself. We note, however, that the Bureau's measurement scheme ignores the effect of evaporative losses and, further, overlooks the fact that Canyon Ferry is rarely drawn down to the point where a significant interface exists between the shoreline and the reservoir. We also note that the Bureau is correct in asserting that

"ground-water" recharge, as the term is used in the Proposal for Decision with regard to future upstream diversions, is a descriptive term and not a term of art. See MCA 85-2-102(8). Again, this factor is not of determinative consequence, since continuing upstream diversions will not be wholly detrimental to the Bureau's concern for carry-over storage. Depending on the distance from the stream, the local geology, and type of use, return flows attendant to future diversions will, to some degree, augment the flow of the Missouri River months and even years later.

Customary Diversion Schemes

In finding the Bureau's means of diversion unreasonable as against the claims of upstream appropriators, we do not conclude that such means are unreasonable per se. That is, we assume that the pattern of storage and resulting use at Canyon Ferry is "customary" for the appropriative purpose. See State ex rel. Crowley, supra; Wheat v. Cameron, 64 Mont. 494, 210 P. 761 (1922); Worden v. Alexander, 108 Mont. 215; Glenn Dale Ranches, Inc. v. Shauts, 94 Idaho 585, 494 P.2d 1029 (1972). Diversion schemes that are customary for particular purposes signal the reasonableness of such a practice. That is, wide-spread usage of similar systems also indicates that such systems are reasonably necessary for the culmination of the appropriative plans. In the instance of a hydropower production facility, water storage reflects the reality that electricity cannot be stored as electricity; only the "fuel" may be stockpiled.

Equally, the desire to maintain firm energy is reasonable in the abstract; power is needed in dry years as well as wet ones.

There are, however, circumstances when even customary diversion schemes can prove unreasonable (e.g. earthen ditches can leak too much.)⁸ Here, the effects of the Bureau's diversion practices, coupled with the relatively insignificant impact to those diversion practices by some measure of upstream development, is unreasonable as against the claims of upstream appropriators. Further, we reject any claim that the purpose of appropriating water for power at Canyon Ferry was to provide for firm energy. This is no more than to say that the purpose of Canyon Ferry is to provide carry-over storage, which is not a use of water at all.

Hydroelectric Power Generation

It is arguable that a hydroelectric enterprise should be given more deference in view of the need for electricity and, in particular, for a secure and reliable source of energy across the years. Although there are no statutory preferences to the use of water in Montana, see generally, Trelease, Preferences to the Use of Water, 27 Rocky Mt. L. Rev. 133 (1955), concerns for preferential treatment are reflected in the need to have water for a particular purpose. It is not so much that a water use is affected with a public interest, as it is that the use of water for a public interest must reflect certain incidents. See City and County of Denver v. Sheriff, 105 Colo. 193, 96 P.2d 836 (1939); but see Sherlock v. Greaves, 106 Mont. 206, 70 P.2d 87

(1938); Gwynn v. City of Phillipsburg, 156 Mont. 194, 478 P.2d 855 (1970). However, the nature of a hydroelectric use argues as much against, as for, according deference to this use. This results because of the similarity of hydroelectric use to that of fish and wildlife noted in the Proposal for Decision.

The marginal difference between the cost of a turbine with a capacity equal to the base flow of a stream and the cost of a hydroelectric facility with a lesser capacity will obviously be less than the "first year" cost of the initial development with such an inferior turbine capacity. As well, the "fuel" for electrical generation at Canyon Ferry is "free" and, in the event of electrical surpluses, the more costly fossil fuel facilities will be shut down. Since the need to purchase fuel for these alternative forms of generation is obviated, substantial savings can be realized. See generally, Montana-Dakota Utilities Co. v. Gordon E. Bollinger, et al., 38 St. Rep. 1221; see In re Kruse, Proposed Order (1983). Thus, although hydroelectric use has a conceptual saturation point in that it has value only as a usufruct, it is also unique in its ability to use the entire flow of a stream. We assume this allows the generation of cheap energy, but note that hydroelectric water use is at odds with the fundamental purposes of the priority system--fostering the economic development of the arid West.¹⁰

While we agree that electrical energy must be secured on a reliable basis, we do not agree that it must arise at the expense of all upstream users in the Upper Missouri River

Basin. Prior appropriation principles need not bend here to accommodate a use that is not totally dependent on the water resource for its fulfillment.¹¹ We note that, even in the face of substantial upstream development, the Bureau's risk of experiencing a water shortage would rise only slightly as compared to other water dependent enterprises in the basin. The Bureau is not entitled to whatever carry-over storage it can physically hold simply because of concern over a physical uncertainty that, to some degree, always exists.¹²

Water Storage

We appreciate the force of the Bureau's argument that the storage of water has been encouraged in this arid state. See generally, Donich v. Johnson, 77 Mont. 2329, 250 P. 963 (1926). However, such a policy does not embrace storage for the sake of storage. Schemes to use snow-melt run-off are to be encouraged, not strategies which capture these spring flows and then demand the remaining direct flow of the stream.

The substance of the Bureau's argument is largely based on the inequities in "penalizing" a storage claimant by denying him the use of direct flow waters, even though the stored water would not have been available if it were not for his expense and effort. See generally, Federal Land Bank v. Morris, 112 Mont. 445a, 116 P.2d 1007 (1941). In North Sterling Irr. Dist. v. Riverside Reserv. & Land Co., (Colo.), 200 P.2d 933 (1948), the issue arose whether carry-over from a previous year could be credited to Colorado's "one-fill" adjudicated quantity in the ensuing year.

"The Riverside Company contends that credit on said priority 53-A is limited for adjudication purposes to the amount of water actually diverted, stored, and applied in any one season or calendar year, and that no credit may be given for such carry-over water. We have been unable to find in statute or decision any support for this contention. Such a rule, if adopted, would not only invite waste, discourage conservation of water, and destroy the value of later reservoirs, but would reduce the incentive for investing funds for the construction of reservoirs in the future, and be contrary to public policy. ...

. . . .

We conclude that water stored under a reservoir priority in one season need not be withdrawn from said reservoir during the same season in order that proper credit may be received for adjudicative purposes; all of the requirements of the law are fulfilled when the water is applied to a beneficial use within a reasonable time after storage."

at 933

Similar principals are echoed in Federal Land Bank v.

Morris, supra.

"Error has been predicated on Conclusion I(c) of the court, which is Paragraph VII of the decree, and as to the first part: "That said rights are determined and fixed on the annual flow of Hay Coulee and shall not be affected by carry-overs and excess supply in any one year." It seems to be proper in protecting water that is carried over by the frugal for use in succeeding years. However, it seems to us that the remaining language, to-wit: "by reason of unusual precipitation or deficiency of supply in any one year by reason of drought," might very well have been left out, as we fail to see how the dry or the wet years should in any way change the rights of the parties."

112 Mont. at 457

Neither of these cases, however, appeared to deal with a storage claimant who was also making a direct flow use of the source of supply as against the claims of a junior

appropriator. We do not, of course, condemn the practice of carry-over per se, and we recognize that successive incremental fillings over the years may be necessary to achieve sufficient water to answer to one's appropriative purpose. Here, however, it is the magnitude of the carry-over, coupled with its wide-ranging effects, that earmark the practice as being unreasonable.

Discouraging the conservation of water will not be an inevitable consequence of our approach herein. The fact of potential physical shortages will encourage an appropriator whose priority makes such a physical shortage possible to save water for that potential. Moreover, conservation of the water resource is to be encouraged because it results in the availability of more water for beneficial use. Here, "conservation" of the water resource by crediting carry-over results in no additional use upstream from Canyon Ferry because of the direct flow use by the Bureau and the potential for no increased use at all if low flow years do not occur again.

More basically, we cannot give weight to a "credit" approach if it provides an appropriator with more water than can reasonably be used. It is axiomatic that an appropriator may only claim that quantity of water which is reasonably required for his purpose. His claim is answered when that purpose is fulfilled and the measure of that claim and purpose are defined by the prior appropriation principles that govern the use of this state's water resources. It might be argued that frugality can be encouraged by awarding an appropriator the maximum

quantity of water that may conceivably be used for a particular purpose, with a right to sell a portion of the water if his demand decreases. This approach, however, is at odds with the basic tenets of the appropriative system. See Cook v. Hudson, 110 Mont. 263, 103 P.2d 137 (1940); Conrow v. Huffine, 48 Mont. 437, 138 P. 1094 (1914).

An analogous situation to that posited by the Bureau arose in City and County of Denver, Board of Water Comrs. v. Fulton Irrigating Ditch Co., 179 Colo. 47, 506 P.2d 144 (1972). Among other things, the case involved Denver's use of imported or "transbasin" water, which Colorado recognizes as being "developed water" that is free of any call on the river, and the conjunctive use of such water with other water supplies that are subject to call by downstream priorities. The downstream appropriator complained that the judicial decree involved would allow Denver to use its imported water at times of maximum detriment to downstream users, while saving its other rights for use when, due to the availability of water, priorities were not critical. The court stated:

"If and when such a situation arises, the rights and equities of the defendants and others similarly situated can be much better protected by the State Engineer, acting under appropriate legislation, than by any judicial pronouncements. As we are unaware of the existence of statutes of this nature, we made a judicial declaration in the premises. Such a use by Denver would be arbitrary and unreasonable and would unconstitutionally deprive the defendants of the use of their water rights.

506 P.2d at 149

Similarly, the Bureau may not hoard its waters that are stored at times of surplus, and by the status of such waters, claim that it is entitled to use such waters at its discretion while at the same time making a substantial use of the direct flow in the source of supply.

Conclusion

We are aware that our approach herein begets an uncertainty that is at odds with the litmus paper certainty of a priority date. However, the result we reach is woven out of the basic fabric of appropriation law. The equation of "reasonable means of diversion" must necessarily involve the particular circumstances of an individual use.

The insistence on need in the appropriation system demands that lines be drawn, and the uncertainty evidenced as to the location of that line does not argue against the need for a line in the first instance. A water use, although arising to the dignity of a property interest, is also subject to the "vagaries" associated with any exercise of a property interest. See generally, Nelson v. C and C Plywood Corp., 154 Mont. 414, 464 P.2d 314 (1970), MCA 1-3-205. Here the Bureau's use falls on the wrong side of the line and it is unreasonable as against the claims of upstream users. Therefore, we conclude that the Bureau can reasonably exercise its rights under the changed conditions that will be prompted by the instant appropriator, MCA 85-2-401.

WATER SALES

In its brief, the Bureau reminds us that it does not claim an appropriation for the purposes of sale. Rather, the Bureau argues that it intends to sell water for upstream use by retiring (changing) the use of a portion of the water it claims for power production purposes. See generally, MCA 85-2-402. In effect, the Bureau argues that all upstream development must take place, if at all, by a change of the appropriative right for the Canyon Ferry operations, because that appropriation has the practical effect of controlling the entire flow of the Missouri River. Any sale of water or water right would necessarily reduce this appropriative amount of water. We note that this redefinition eliminates the conceptual difficulties noted in the Proposal for Decision.

In view of this redefinition, the contracts appended to the Bureau's brief are immaterial insofar as it is argued they reflect an intent to appropriate. The latter is not relevant to the Bureau's plans. As noted in the Proposal for Decision, the Bureau's intent to make water available by retiring a portion of its present uses presents no issue of "unappropriated water". Sherlock v. Greaves, 106 Mont. 206, 76 P.2d 87 (1983). Thus, the focus of this proceeding is the quantity of water that has already been appropriated that may form the basis of a sale. One cannot sell what one does not own. Creek v. Bozeman Water Works Co., 15 Mont. 121, 38 P. 459 (1894); Brennan v. Jones, 101

Mont. 550, 55 P.2d 697 (1936); Custer v. Missoula Public Service Co., 981 Mont. 136, 6 P.2d 131 (1931); Galahan v. Lewis, 105 Mont. 294, 72 P.2d 1018 (1937); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Maclay v. Missoula Irr. Dist., 90 Mont., 344, 3 P.2d 286 (1931); Middle Creek Ditch Co. v. Henry, 15 Mont. 558, 39 P. 1054 (1895).

NAVIGATION AND FLOOD CONTROL

The Bureau asserts no navigation power attendant to its Canyon Ferry Facility. Moreover, in accordance with the Proposal for Decision, the Bureau claims that its flood control activities are discretionary.¹³ We agree for the purposes herein. However, the discretionary character of flood control undermines the Bureau's claim for relief through a condition that limits future upstream diversions to those times when Canyon Ferry spills water. At least in part, this has the effect of making future upstream diversions dependent on the discretionary acts of the Federal Government. The intent of an appropriator to take and use water that supports the appropriative claim is inconsistent with a notion that diversions pursuant to that intent are at the sufferance of a senior appropriator. Water is claimed via an appropriation as a matter of right, not as a privilege that can be foreclosed through the uncontrollable acts of others. See Toohy v. Campbell, 24 Mont. 13, 60 P. 396 (1900); Bailey v. Tintinger, 45

Mont. 154, 122 P. 575 (1912); compare Power v. Switzer, 21 Mont. 523, 55 P. 32 (1898); see also MCA 85-2-310(3); Miles v. Butte Electric & Power Co., 32 Mont. 56, 79 P. 549 (1905).

FISH, WILDLIFE AND RECREATION

In contrast with the claims in the Bureau's brief, we do not characterize fish, wildlife, and recreational water uses as being "secondary uses". Nor can anything in the Proposal for Decision be construed as treating them as inherently subordinate to other uses. United States v. New Mexico, 438 U.S. 696 (1978), is not relevant to the pending proceedings since the Bureau's rights do not arise by reservation. Further, the Bureau's arguments which assert that additional drawdowns will frustrate the use of boatdocks and other recreational facilities are not material. We regard the maintenance of a fully filled water level at Canyon Ferry Reservoir to be an unreasonable means of diverting water to meet these interests.

We agree, for purposes of analysis, that the Bureau is entitled to protect the fish, wildlife, and recreational interests at Canyon Ferry. However, we do not understand how some measure of additional diversions will adversely affect these interests. Again, one cannot insist upon the maintenance of a diversion practice that "commands the whole flow of the stream" merely to facilitate a convenient way of exercising his

water rights. See generally, Spillway Marina, Inc. v. United States, 445 F.2d 876 (10th Cir. 1971); Morris v. TVA, 345 F. Supp. 321 (N.D. Ala. 1972); Kiwanis Club Foundation v. Yost, 179 Neb. 598, 139 N.W.2d 359 (1966); Hood v. Slefkin, 88 R.I. 178, 1443 A.2d 683 (1958); Goodrich v. McMillan, 217 Mich. 630, 187 N.W. 368 (1922); Whitcher v. State, 87 N.H. 405, 181 A. 549 (1935); but see City of Los Angeles v. Aitkin, 10 Cal. App.2d 460, 52 P.2d 585 (1935).

PICK-SLOAN PLAN

Congressional Intent

We agree with the Bureau's arguments which state that the details of Canyon Ferry construction and operation are matters of Bureau discretion and are not totally controlled by language of the Pick-Sloan Plan. Clearly, Congress could not be expected to foresee the actual demands that specific site constraints would place on the construction of Canyon Ferry. Technical changes and variations might well be required to tailor the Congressional intent to the problems inherent with the construction site. However, we disagree with the Bureau to the extent it is suggested that modifications can be made which significantly affect or change the Congressionally authorized purpose of the Canyon Ferry facilities. Such an argument treats Congressional commands as advisory comments. The preemptive effects of various features of federal water resource

development demand close allegiance to Congressional will. The opportunity for state and local participation in the development of federal water resource developments would be rendered worthless if the Bureau could turn a deaf ear to the legislative expression of these interests. See generally, Clark, Waters and Water Rights, Vol. 2, Section 112.

In Chapman v. Federal Power Commission, 345 U.S. 153 (1952), a comprehensive scheme of river development that is similar to the Pick-Sloan Plan was at issue in a question of whether Congressional approval of such a plan withdrew selected reservoir sites from private development under Federal Power Commission jurisdiction. The Court read the language in the plan and the Congressional action thereon as not precluding private development of sites that had previously been earmarked for development in the river plan. However, the Court also noted that Congressional approval of such a plan was meaningful in "... conveying the Congressional purpose and expressing a Congressional attitude. Concretely, it means that Congress had adopted a basic policy for the systematic development of a river basin." at 163. Moreover, Congressional approval also tells the executant of congressional policy "how to exercise its authority" in relation to the specific authorization of development for a particular site. at 164. ("C)ongressional approval of a comprehensive plan can be read, as we think it should in this case, simply as saying that a plan such as that here, recommended by the Corps of Engineers for the fullest realization of the potential benefits in the river basin, should

be accepted by the Commission as the comprehensive plan to be used in the application of these statutory provisions." at 168, 169).

The Pick-Sloan Plan then defines the Bureau's appropriative intent. In turn, the appropriative intent defines the character and extent of the water right. See Allen v. Petrik, supra; Bailey v. Tintinger, supra; Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909); Power v. Switzer, supra. Comments in the Bureau's brief regarding the agency's adherence to this Congressionally expressed intent are unconvincing.¹⁴ While acknowledging that the fundamental purpose of Canyon Ferry was to provide for upstream development, the Bureau also argues that all such development will require a water purchase from Canyon Ferry and therefore will only occur at the prerogative of the agency.

The Bureau styles this sale as a water exchange yet, paradoxically, argues against any inference in the Proposal for Decision that the operation at Canyon Ferry would infringe on downstream Montana Power Company rights. The Bureau notes, and we agree, that the construction and operation of Canyon Ferry has in every year resulted in a net benefit to the Montana Power Company. This is attributed to the increment of storage that is nonconsumptively used for power production in every year and the resultant discharge which inevitably increases the historic direct flow at the downstream hydropower sites. Thus, the exchange needed to "maintain present power capacities" at the Montana Power Company's facilities, Senate Document 191 at P. 62, was a result of the hydroelectric operations at Canyon

Ferry. In our view, this is the "physical solution" to the conflict in water uses envisioned by the Pick-Sloan Plan. See Senate Document 191 at P. 62.¹⁵

Project Beneficiaries

The "sale" proposed by the Bureau is nothing more than a demand for payment for the inevitable benefits contemplated by the construction of Canyon Ferry. As noted in the Proposal for Decision, the reclamation laws envision that benefits resulting from federal water deliveries, unless expressly made non-reimbursable by statute, are accountable to federal coffers. See 43 U.S.C. 485 et seq., see e.g. 43 U.S.C. 485 h(d), see also 43 U.S.C. 511, 43 U.S.C. 423e. Here, however, the Bureau is simply not "delivering" water to any particular upstream appropriator, nor does the Bureau claim protection for any such delivery per se. Further, the Bureau is not furnishing water to any particular upstream appropriator pursuant to the so-called "9(e)" contracts, or pursuant to any so-called "Warren" contracts. See 43 U.S.C. 485h(e), 43 U.S.C. 523, see also Ickes v. Fox, 300 U.S. 82 (1937). (The Bureau is a distributor and carrier of water for its users). In essence, the Bureau erroneously describes a water right by the measure and extent of the benefits associated with a water resource development project such as Canyon Ferry. The "clear federal purpose" that preempts state water law simply cannot find sanctuary in such convoluted expressions.

Commonly, a reclamation storage project that is designed to supplement irrigation supplies will result in benefits to future upstream users, if only because such stored water will satisfy the priorities that otherwise would impede future upstream water use. Nowhere do we find a characterization of such future upstream users as being users of reclamation waters. As an extreme example, grain warehousemen may also benefit from reclamation projects, but this benefit hardly translates into a water right. Likewise, under the Bureau's reasoning, flood control measures which are expressly made non-reimbursable by statute, would be transformed into "water rights" if the reregulation of flow satisfies downstream priorities. The fact that the project may afford certain benefits does not endow the Bureau with a water right for those purposes.

The cases noted in the Proposal for Decision that regard return flows from Bureau uses were all grounded in state law. That is to say, none of the matters determined that the Bureau was entitled to reclaim seepage from reclamation projects as against competing users solely because they are federally derived. We also note that a claim similar to that made by the Bureau herein was rejected in Nebraska v. Wyoming, 325 U.S. 589 (1945). While that matter involved an interstate allocation, the Court again turned to state law in determining that the federal government was not entitled to use seepage that augmented stream flow as an exchange for additional downstream diversions.¹⁸ See generally, Rock Creek Ditch Co. v. Miller, 93 Mont. 248, 17 P.2d 1074 (1933).

The Bureau's argument regarding downstream uses also falls of its own weight. Several of the Pick-Sloan irrigation projects that were to be made possible by the construction of Canyon Ferry are downstream of this facility and above those of the Montana Power Company. Certainly the Bureau does not intend to increase the "net benefit" to the Montana Power Company if the return flows from new downstream uses results in a benefit to the hydropower interest.

The federal interest in receiving reimbursement from project beneficiaries is, at most, an interest in securing repayment for the costs of the Canyon Ferry development. Here, the Bureau has shown nothing which indicates that a lack of revenue from upstream users will result in a failure of Canyon Ferry to repay its share of a basin-wide "debt." See §9(c), Proposal for Decision, P. 25, see generally, Clark on Water and Water Rights, Vol. 2, §112.3. Even if such a shortfall does occur, the Bureau may not, through accounting procedures which allocate the respective costs of development among the respective water users, devise a "clear federal purpose" that preempts state water law.

FERC Authority

In our attempt to glean the federal interest in the instant proceeding, we asked for and received from the Montana Power Company its license from the Federal Power Commission. See generally, 16 U.S.C. 791a et seq. Our review of this license, as well as the Federal Power Act, revealed nothing that is

inconsistent with the Pick-Sloan Plan or our determination herein.¹⁷ No federal interest can be deciphered that would frustrate the application of state law, insofar as the instant Objectors are concerned. Indeed, at page 8 of the license, the Pick-Sloan Plan is explicitly recognized by the Federal Power Commission (now known as the Federal Energy Regulatory Commission). In adherence to that Plan, the Commission also protected the future upstream development that was contemplated by Congress in said Plan from any actions that may be taken by its licensee, the Montana Power Company. Article 31 of said license specifies that:

"(t)he Licensee shall not make any claim under the authority of this license against the United States or any water users' organization claiming through the United States for any damage resulting from any future depletion in the flow of the waters of Missouri River and its tributaries for the irrigation of lands and other beneficial consumptive uses."

Although the Applicant herein does not claim through the United States, it is evident that this provision contemplates that the amount of depletion envisioned under the Pick-Sloan Plan does not comprise an adverse effect to Montana Power Company's rights to produce hydroelectricity. To that extent, upstream depletion does not adversely affect the Montana Power Company, unless and until that depletion exceeds the amount contemplated in the Pick-Sloan Plan. We obviously have not yet reached this level of development.

APPLICATION NO. 15211-s41G

Subject to the terms, restrictions, and limitations described below, Application for Beneficial Water Use Permit No. 15211-s41G is hereby granted to Gordon E. Lane to appropriate 500 gallons per minute up to 96 acre-feet per year for the irrigation of 40 acres more or less comprised of 10 acres in the NE $\frac{1}{4}$ and 30 acres in the SE $\frac{1}{4}$ of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The source of supply shall be the Jefferson River, the waters thereof to be diverted at alternate points in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 28, Township 2 North, Range 1 East, and in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The waters provided for herein shall not be diverted prior to April 15 of any given year nor subsequent to October 15 of any given year. The priority date for this permit shall be September 15, 1977, at 1:40 p.m..

This permit is expressly made subject to the following express conditions, limitations, and restrictions.

A. Any rights evidenced herein are subject to all prior and existing rights, and to any final determination of such rights as provided by Montana Law. Nothing herein shall be construed to authorize diversions by the Permittee to the detriment of any senior appropriator.

B. The Permittee shall in no event cause to be diverted from the source of supply more waters than are reasonably required for the purposes provided for herein. At all times when water is not so required, the Permittee shall cause and otherwise allow said waters to remain in the source of supply.

C. Nothing herein shall be construed to affect or reduce the Permittee's liability for damages that may be caused by the exercise of any of the rights evidenced by the Permit in this matter. Nor does the Department in issuing any permit acknowledge any liability for damage, even if damage is the necessary and unavoidable consequence of the exercise of this permit.

APPLICATION NO. 11493-s41G

Subject to the terms, restrictions and limitations described below, Application for Beneficial Water Use Permit No. 11493-s41G is hereby granted to Jefferson River Acres to appropriate 100 gallons per minute up to 11 acre-feet per year for irrigation of 6 acres located in the SE $\frac{1}{4}$ of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The source of supply shall be the Jefferson River, the waters thereof to be diverted at a point in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The waters provided for herein shall not be diverted prior to April 15 of any given year nor subsequent to October 15 of any given year. The priority date for this permit shall be February 28, 1977, at 10:40 a.m..

This permit is expressly made subject to the following express conditions, restrictions and limitations.

A. Any rights evidenced herein are subject to all prior and existing rights, and to any final determinations of such rights as provided by Montana Law. Nothing herein shall be construed to authorize diversions to the detriment of any senior appropriator.

B. The Permittee shall in no event cause to be diverted from the source of supply more waters than are reasonably required for the purposes provided for herein. At all times when water is not required, the Permittee shall cause and otherwise allow the waters to remain in the source of supply.

C. Nothing herein shall be construed to affect or reduce the Permittee's liability for damage that may be caused by the exercise of this permit. Nor does the Department in issuing this permit acknowledge any liability for such damage, even if the same is the necessary and unavoidable consequence of the exercise of the rights evidenced herein.

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 of the Final Order.

DATED THIS 29th day of April, 1984.

Matt Williams

Matt Williams, Hearing Examiner
Department of Natural Resources and Conservation

Gary Fritz

Gary Fritz, Administrator
Water Resources Division
Department of Natural Resources and Conservation

FOOTNOTES

- 1 We express no opinion on the merits of the Bureau's claim for protection of its water deliveries attendant to the Helena Valley Irrigation Unit. Whether or not the proof sufficiently supports this appropriation need not be decided. The very magnitude of the appropriation claimed for power purposes pales the minor amount of water claimed for these latter purposes. Under the approach herein, lack of adverse effect to the former is lack of adverse effect to the latter. For present purposes, we assume the validity of these appropriations as claimed by the Bureau and recognize standing of the Bureau to assert these interests for the reasons given in In re IX Ranch, Department Order (2/82).

- 2 The relationship between inflow and use at Canyon Ferry can only be conveniently described in terms of averages. To put the present matter in context, the "beneficial use" figures in Table 1 of the DNRC Report can be compared with the "probability of exceedence" graph of inflows at Figure 3b in the report. The long-term average use of water at Canyon Ferry has been approximately 3.05 million acre feet per water year. The flow of the Missouri River is equal to or exceeds a yield of 3 million acre feet during 90 percent of the years. (Figure 3b). If we take 4 million acre feet of use due to the incremental development of water use at Canyon Ferry (see Table 1, Figure 1), we find that the Missouri will equal or exceed this amount during 50 percent of the years. Thus, in roughly half of the years, inflow has approximately been equal to the Bureau's use. Figure 3b of the report incorporates the general comparison. These figures, of course, ignore variations in the pattern of flow across a year and the difficulty of predicting flows. Moreover, it is true that the actual use by the Bureau is geared on an ongoing basis to the level of incoming flows and the "rule curve" designated for reservoir operations. The Bureau undoubtedly would use more if more was available. These latter considerations are dealt with elsewhere herein.

- 3 It is of course true that, according to the Bureau's claims, virtually all upstream direct flow use after completion of Canyon Ferry occurs in derogation of its rights. The use of the 85,000 acre feet figure is used as a barometer of future development, not an index of the full amount of depletion to the Bureau's claimed right. Moreover, while it is difficult to detect the effect of upstream uses from water flow measurements, it is true that depletions attendant to such uses have resulted in losses of power production at Canyon Ferry. We express no opinion, of course, on the extent to which such pre-1973 uses have ripened into appropriations by

prescriptive use before the advent of the Montana Water Use Act. See generally, MCA 85-2-102(7), Eltjen, Water Rights: Prescriptive Right to the Use of Water in Montana, 3 Mont. L. Rev. 135 (1945); Stover v. Elliot, 137 Mont. 135, 350 P.2d 585 (1960); O'Conner v. Brodie, 153 Mont. 129, 454 P.2d 920 (1969); Smith v. Krutar, 153 Mont. 325, 457 P.2d 459 (1969); King v. Schultz, 141 Mont. 94, 375 P.2d 108 (1962). Nor do we express an opinion regarding the running of a prescriptive period as against the United States acting through the Bureau. See generally, Utah Power & Light Co. v. United States, 243 U.S. 389 (1917).

We note in passing that, according to the Bureau and Montana Power Company, the reduction in efficiencies caused by increased drawdowns are in the more severe instances allocated partly to the Montana Power Company. See P. 10, Exhibit 3, Brief of Bureau. To the extent that Canyon Ferry is a "net benefit" that MPC is not entitled to as a matter of right under water law, this arguably reduces only the extent of the "windfall" to that entity.

We note that the Bureau admits in its brief that 1976 was the only year in which its turbines were run at full capacity. (In context, this means that the 1976 runoff was ample enough to run the turbines at full capacity and still maintain the reservoir at its assigned operating levels). Since the water use permit is the exclusive means of appropriating water in this state after 1973, this additional use cannot assume the dignity of an appropriation. Featherman v. Hennessy, 43 Mont. 310, 115 P. 983 (1911); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940); Midkiff v. Kincheloe, 127 Mont. 32, 2634 P.2d 976 (1953). However, this incremental difference does not appear to be of significance in this matter, as it would only be available in an extremely wet year.

We recognize that the foregoing principle blends into the so-called "public trust" theory. See generally, Sax, The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention, 68 Mich. L. Rev. 471 (1970); Day v. Armstrong, 362 P.2d 137 (Wyo. 1961); Diana Shooting Club v. Husting, 156 Wis. 261, 145 N.W. 816 (1914). Language in Fitzpatrick v. Montgomery, 20 Mont. 181, 50 P. 416, contains public trust tones. ("We say with reasonable limits, for this right to water, like the right by prior occupancy to mining or agricultural land, is not unrestricted. It must be exercised with reference to the general condition of the country and the necessities of the people, and not so as to deprive a whole neighborhood or community of its use, and vest an absolute monopoly in a single individual," at 186). See also Martin v. Waddel, 41 U.S. 367 (1842); United

Plainsmen Association v. North Dakota State Water Comm'n., 247 N.W. 2d 457 (N.D. (1970)); Branch v. Oconto County, 13 Wis. 2d 595, 109 N.W. 2d 105 (1961); Neptune City v. Avon-by-the-Sea, 61 N.J. 296, 294 A.2d 117 (1972). With reference to Montana Power Company's claims, an early Attorney General Opinion contains language suggesting that water rights of this magnitude may not, as a matter of law, arise, based on public trust notions. See 22 Att. Gen. 70. We do not, however, ground our decision herein on such matters, nor do we in any way suggest that the legislature had not detailed the elements of the public trust, if one exists, by adopting the Montana Water Use Act and codifying accepted principles of appropriation law. But see generally, Illinois Central Railroad v. Illinois, 146 U.S. 3876 (1892).

7 The groundwater analogy answers fully to the issue herein. At common law, distinctions were drawn between surface and groundwater that answered to the practical problems of administering rights to the respective sources. Because surface streams are annually replenished, diversions therefrom do not create the problems attendant to groundwater diversions. See State v. S.W. Colo. Water Conservation, (Colo.), 671 P.2d 1294 (1983). Here, however, the Bureau argues that administration of its rights according to annual flow is an insufficient protection and this position frames the issue in terms of groundwater protection.

• The scope of our analysis assumes that the Bureau will elect to treat upstream depletions as an erosion of its storage. Of course, the Bureau may decide that its interests are best served by reducing its annual power production and preserving its capacity for long-term storage. That, of course, is a matter of discretion for the Bureau, bounded by the lawful downstream demands of others. We only decide that the Bureau's current choice of preserving long-term storage is not protected against upstream junior claims. We further assume, as we must, that the Bureau will not in the future so significantly change the character of flows downstream as to abridge MPC's appropriative and/or contractual claims to water.

• We note that the legislature defines waste, in part, as a "negligent operation of an appropriation or water distribution facility", MCA 85-2-102(13). The use of the term negligence reflects a legislative determination that even customary water practices may prove wasteful. See W. Prosser, Torts 168-169 (4th ed. 1964).

10 We do not go so far as to conclude that these circumstances indicate that hydroelectricity is not a beneficial use per se. Indeed, the legislature has explicitly recognized it as such. MCA 85-2-102(2). We note, however, that it is arguable whether such a legislative sanctification insulates otherwise beneficial uses from being wasteful in particular circumstances. A certain manner or type of use may not be "beneficial" in some circumstances despite the fact that such a use normally belongs to a category of uses that are regarded as beneficial. For example, the irrigation of phraetophytes as windbreaks or as soil cover may not be beneficial in the face of wide-spread upstream demand. See generally, Southeastern Colorado Water Conservancy Dist. v. Shelton Farms, Inc., 187 Colo. 181, 529 P.2d 1321 (1979).

The test of beneficial use is necessarily one of comparison; only when the concept is juxtaposed with its counterpart of "waste" does it become meaningful. Compare 85-2-102(2) with MCA 85-2-102(13). A determination of beneficial use cannot be made in vacuo and inevitably involves assessing the relative benefit from alternative water uses. See generally, In re Deschutes River, 134 Or. 623, 286 P. 563, 294 P. 1049 (1930); Fairfield Irrigation Co. v. White, 18 Utah 2d 93, 416 P.2d 6411 (1966); Blaine County Inv. Co. v. Mays, 49 Idaho 766, 291 P. 1055 (1930); Tulare Irrig. Dist. v. Lindsay-Strathmore Irrig. Dist., 3 Cal. 2d 289, 45 P.2d 972 (1935); Trelease, The Concept of Reasonable Beneficial Use in the Law of Surface Streams, 12 Wyo. L.J.1 (1957).

The test appears to be one of whether the particular use in a given set of circumstances can ever answer to the fundamental purpose of the appropriation system. This is in contrast to the individualistic weighing of competing benefits from competing uses that is characteristic of riparian law. See generally, Restatement of Torts, §850.

Hydroelectric production of the magnitude at Canyon Ferry bears certain earmarks of a use that is odds with the purpose of the appropriation doctrine. First, great "need" for water arises irrespective of the arid environment that prompted abandonment of the riparian system. See generally, Mettler v. Ames Realty Co., 61 Mont. 152, 201 P. 702 (1921); Coffin v. Left Hand Ditch Co., 6 Colo. 443 (1882). The appropriation system was spawned at a time when federal land policies encouraged the development of small family farms. See generally, California Oregon Power Co. v. Beaver Portland Cement Co., 295 U.S. 142 (1935); Thorp v. Freed, 1 Mont. 651, (1871). The priority afforded by the system provided security needed to develop irrigation and diversion works; the insistence on beneficial use assured the wide-spread development of water. Hydroelectric production tends to emasculate the latter purpose and insist upon the former.

Some measure of the concern for these types of developments can be gleaned from judicial treatment of trans-basin water diversion projects and their effect on the water supply in the area of origin. "Waters primarily belong in the watershed of their origin, if there is land therein which requires irrigation. ... Courts have many times sustained such foreign appropriation, and perhaps each case should be determined on its own individual merit." Galiger v. McNulty, 80 Mont. 339, 356, 260 P. 401 (1927); see generally, Spokane Ranch & Water Co. v. Bealty, 37 Mont. 342, 96 P. 727, 97 P. 838 (1908); Hansen v. Larsen, 44 Mont. 350, 120 P. 229 (1911); Thrasher v. Mannix and Wilson, 95 Mont. 273, 26 P.2d 370 (1933); Meine v. Ferris, 126 Mont. 210, 247 P.2d 195 (1952). This wary treatment of trans-basin diversions must be attributed to the water-intensive demands of such projects and their effect of eliminating return flow benefits in the area of origin, since nothing otherwise appears intrinsically wrong with such diversion practices, and in view of the difficulties inherent in defining a trans-basin diversion, per se. See generally, Orchard & City Irr. Dist. v. Whitten, 146 Colo. 127, 361 P.2d 130 (1961). Here, the Objectors transmit the alter ego of water across expansive electrical transmission systems. Like most trans-basin diversions, the use of water for hydropower generation characteristically commands a basin's water supply without reference to alternative water needs within that basin.

Moreover, it is appropriate to observe that the generation of electricity is not truly water-dependent. Even in an age of legislative encouragement of renewable resources for electrical production, see generally MCA 69-3-601 et seq., MCA 90-2-101 et seq., 42 U.S.C. 8201 et seq., some production may be expected from fossil fuel. This would occur in instances where dependence on hydroelectricity frustrates upstream water-dependent enterprises; this is especially the case where such fossil fuel electrical generation would only be needed during long-term, critical water conditions.

Finally, we note that allowing such large uses of water to control large drainage basins is not conducive to a reallocation of water to more efficient or more productive uses. As noted in the Proposal for Decision, transfers of water in the appropriation scheme are fundamentally matters of the marketplace. However, water uses are not conveniently reordered to more beneficial uses if a large proportion of the supply is held in monopolistic control.

We do not ground our decision on a conclusion that the Objectors' uses herein are not beneficial to some extent. It is arguable that the legislature must have noted these fundamental attributes of power production in characterizing "power" per se as a beneficial use, and that the legislature

has chosen to tolerate the inevitable effects of such use in order to realize cheap energy production. See also, In re Monforton, infra. We also note that, on occasion, the legislature has provided that power generation is subordinate to other uses. MCA 85-1-122 (1979). Nor do we venture an opinion as to whether a federal designation of power as the purpose of a project precludes a state from characterizing a part of that use as waste as against the claims of upstream juniors.

¹¹ We will not invade the province of the Public Service Commission to inquire as to whether Montana Power Company's exercise of its appropriation is a practice or act "affecting or relating to the production, transmission, delivery or furnishing of ... power that is "unreasonable, insufficient, or unjustly discriminatory." MCA, 69-3-321. Such a determination is outside the scope of those factors enunciated in MCA 85-2-311, and it is a decision entrusted in the first instance to the Commission. Thus, we need not speculate as to whether a utility's duty to "furnish reasonably adequate service and facilities," MCA, 69-3-201, may require a change in its water practices, or whether said duty runs to persons not complaining in their status as utility customers. See State ex rel. Public Service Commission v. District Court, 107 Mont. 240, 84 P.2d 335 (1938) ("Public utility ... statutes were enacted for the benefit of the consumers of the utilities' products, and not to arbitrate controversies between the utilities and private persons.") at 242.

¹² It is arguable that even if the Bureau's means of diversion are reasonable as against the claims of upstream appropriators, the impact of future diversions must nonetheless fall on the Bureau. Ordinarily, where the senior's manner of diversion is "reasonable", the cost of increasing the efficiency of a diversion means falls on the junior appropriator. See State ex rel. Crowley, supra; Colorado Springs v. Bender, supra; Pima Farms Co. v. Proctor, 30 Ariz. 96, 245 p. 309 (1928). Here, however, the cost of acquiring other energy resources that will "firm-up" aggregate energy supplies can best be left to the senior. The "free-rider" problem will undermine any strategy by a prospective junior to implement the same. Attaching the cost to the senior power entity will not undermine its competitive position, because it does not operate in a competitive environment. See generally, 43 U.S.C. 485(h), 16 U.S.C. §8255, 42 U.S.C. 1752, City of Santa Clara v. Klepp, 418 F. Supp. 1243 (N.D. Cal. 1976), MCA 69-1-101 et seq. One might suppose that such costs can perforce be widely distributed to ratepayers and may include the junior appropriator.

Moreover, the remedy of purchasing very senior rights in order to assure a flow in dry years, will be easier to effectuate by the hydroelectric user. Transferring that senior right to another consumptive use in whole or in part might easily violate a particular junior's vested right to maintenance of the stream conditions at the time he made his appropriation. See generally, MCA 85-2-402, Whitcomb v. Murphy, 94 Mont. 562, 23 P.2d 980 (1933); Spokane Ranch & Water Co. v. Beatly, 37 Mont. 342, 96 P. 727 (1921); Featherman v. Hennessy, 43 Mont. 310, 115 P. 983 (1911); Creek v. Bozeman Water Works Co., 15 Mont. 121, 38 P. 45a9 (1894); Farmers Highline Land & Reservoir Co. v. City of Golden, 129 Colo. 575, 272 P.2d 629 1954. Little difficulty in the latter regard can be expected for non-consumptive downstream users.

Since the seniors here appear to be in the best economic position to alleviate the waste by the construction of additional storage or the purchase of instream rights without a loss in value to the underlying use, it appears that the cost of diversion alterations necessary to accommodate the full gamut of the Objectors' projects should fall on such seniors. See Bagley, Water Rights Law and Public Policies Relating to Ground Water, 4 J. Law and Econ. 144 (1961), see also, Reasonable Pumping Levels under the Appropriation Doctrine, D. Grant, infra.

We decline to expressly rule on this question, however, because the "economic reach" of the Objectors, see Colorado Springs v. Bender, supra, is so closely intertwined with the quasi-public character of their electricity services. See Sherlock v. Greaves, infra, that is, the extensive regulatory authority over "public utility" type properties make problematic the application of water law concepts where such concepts define the duty of a utility acting as an appropriator to take certain measures in relation to its appropriation. It is one thing to conclude, as we do herein, that a "utility" has no property interests as regards the claims of others, and quite another to ground our decision on a consequence that is subject to the regulatory control of another tribunal.

- 13 The Bureau disagrees with the Proposal for Decision's description of "drafting from storage" in anticipation of future inflows. We accept the Bureau's description of "controlling inflows", although it does not affect the analysis.
- 14 We note that deference is due to the Bureau's construction of the statute it implements. Udall v. Tallman, 380 U.S. 1 (1965); EPA v. National Stone Association, 449 U.S. 64

(1980). However, deference does not amount to abdication. This is particularly the case in circumstances such as those presented in the instant record where the subject matter does not involve issues that are largely complex and technical, and within the agency's expertise. See E.I. du Pont de Nemours & Co. v. Train, 430 U.S. 112, 135 n.25 (1977); Natural Resources Defense Council, Inc. v. United States Envtl. Protection Agency, 656 F.2d 768, 774 (D.C. Cir. 1981). Moreover, unrestrained deference to a construction that is not firmly rooted in statutes which define a clear federal purpose would frustrate a context where provisions are read in light of Congress's historical reliance on state water law. See U.S. v. California, *infra*.

As noted in the Proposal for Decision the Bureau's position is fundamentally at odds with the Congressionally stated purpose of Canyon Ferry. We are not persuaded by the Bureau's reference to language in the Pick-Sloan Plan which describes the intent of the overall development program for the Missouri Basin, as opposed to those provisions which are directed at Canyon Ferry's role in that program. Of central importance are those specifics of the plan which relate to Canyon Ferry and contemplate smaller turbines, greater fluctuations in net head, and a marketing plan to "firm up" energy from diverse federal developments. Viewed in total these provisions contemplate a greater use of stored water than that currently used by the Bureau, in order to reregulate the river for downstream hydropower demand and allow upstream development to proceed.

The Bureau's assertion that 300,000 acre feet of water is available for upstream development also runs against the grain of the Pick-Sloan Plan. Even if we assume that the 300,000 acre feet may be used consumptively, this volume of water is not sufficient to foster the federal development assumed in the Pick-Sloan Plan. We do see where Congress inevitably frustrated contemplated development by the very language it authorized in it. The fact that some of the anticipated development was contingent on storage projects does not alter our conclusions. Such storage, by terms of the Plan was necessary to overcome local physical deficiencies in supply. Further, the needs of just the contemplated direct-flow projects would result in a depletion exceeding 300,000 acre feet. Moreover, even upstream storage, such as that contemplated by the Pick-Sloan Plan, is a depletion to the Bureau's asserted needs, since spills at Canyon Ferry in virtually all years do not indicate a surplus over capacity, but rather only reflect the inherent uncertainty in forecasting runoff. If the amount and time of runoff could be predicted with precision, the Bureau could, and we assume would, use more water in the preceding water year. To the extent that upstream storage appreciably modifies the runoff equation, it too can reduce Bureau use.

15 The agreement between the Bureau and Montana Power Company that was appended to the Bureau's brief is irrelevant to the instant problem. In part, the agreement details a "coordination plan" for maximizing power among the Objectors' facilities. While we agree that the exercise of water rights may be modified by contract, we do not see where parties may "contract" for a water use that is not reflected in the substantive law which defines the body of the agreement. As well, we do not see how persons who are not parties to the agreement, including this Applicant, are in any way bound by the terms thereof. Insofar as this proceeding is concerned, the focus remains on the asserted water rights that are the subject of the agreement. We also note that, while the agreement purports to leave the respective parties' water rights sacrosanct, the entire thrust of the agreement is to define when and how waters will be used. Thus, the "hand-in-hand" thrust of the agreement argues that the Montana Power Company cannot be adversely affected when the Bureau is not.

The second-prong of the agreement appears to be directed at settling the headwater benefits that are inevitably generated by Canyon Ferry. The Federal Power Act requires that licensees pay an equitable share of upstream federal or federally licensed projects from which they benefit. 16 U.S.C. 803 (f). This provision, however, cannot be read as a federal allocation of the source of supply that is geared to the structure of the payments. Its purpose is, as a financial matter, to allocate costs where benefits lie, and thereby encourage sound hydroelectric development of the waterway. Such settlements can occur by agreement, 18 CFR 13.1, and they may also be imposed on an annual basis. 18 CFR 11.25 et seq. Thus, settlements for headwater benefits flow from the facilities' attendant water rights, not vice versa. We will not dispose of the present controversy on a claim by the Objectors that a denial of the instant application will make it easier to settle the headwater benefits provided by their existing contract.

16 The water controlled by the Bureau are not "augmentation" waters. Augmentation waters are those waters which are delivered to senior users when junior needs would otherwise be out of priority. In effect, such appropriations can move water uphill, and allow junior users to proceed in the face of senior demand by an exchange that satisfies the senior need. In Cache La Poudre Water Users Ass'n v. Glacier Meadows, supra, water was held in storage to offset senior demand when junior users of the same source of supply infringed on the senior users. Thus, by means of an exchange system, the junior "used" the stored waters to augment the source of supply. See generally, Brennan v. Jones, 101 Mont. 550, 55 P.2d 697 (1936).

Augmentation waters, however, never form in and of themselves an appropriation of the water resource. They are protected only to the degree necessary to effectuate the underlying use. Augmenting stream flow is no more a use of water than draining gravel pits. See In re Kenyon Noble, Department Order; Western Ditch Company v. Bennet, 106 Mont. 422, 78 P.2d 78 (1938) (construction of drain ditch in 1901 does not amount to appropriation).

The Bureau's returns to the Missouri River are in no way dependent on the specific amount of depletion created by upstream users. Rather, they are a product of the Congressionally contemplated power production at Canyon Ferry. Incidental benefits to other water users from return flows do not characterize such increased flows as augmentation water. As noted in the Proposal for Decision, all appropriations that are non-consumptive to any degree provide water at a displaced place or time. Such return flows do not demand payment from any subsequent user; indeed, such subsequent user has a vested right to the maintenance of stream conditions which existed at the time of his appropriation. See Creek v. Bozeman Water Works Co., 15 Mont. 121, 38 P. 459 (1894); Wills v. Morris, 100 Mont. 514, 50 P.2d 862 (1935); Woodward v. Perkins, 116 Mont. 46, 147 P.2d 1016 (1944); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074 (1933). As noted in the Proposal for Decision, it makes no difference whether such returns are prompted by a use of water bearing the earmarks of developed water. This is not so much a result of the problem of proof noted in the Proposal for Decision, as it is a product of the maxim that an appropriation is a usufructuary interest. Water that has served the needs of an appropriator is public juris. Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074 (1933). Problems of proof will answer to the evidentiary hurdles.

We do not mean to intimate in the Proposal that Montana Power Company might "call out" upstream users if the Bureau should abandon any part of its appropriation where the returns at Canyon Ferry are still greater than the natural flows. In this regard, Canyon Ferry is nothing more than a massive tributary under artificial control. Montana Power Company may not under such circumstances "move its point of diversion" upstream from such a tributary. See Columbia Min. Co. v. Holter, 1 Mont. 296 (1971); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974); Haney v. Neace-Stark Co., 109 Or. 93, 216 P. 757 (1923). In all other events, of course, the upstream appropriator is also entitled to have the Bureau's use maintained in a manner that is substantially the same as it is now. See Vogel v. Minnesota Land & Reservoir Co., 47 Colo. 534, 107 P. 1108 (1910).

17 We note, however, that the Federal Power Act, 16 U.S.C. 791a et seq., contains numerous "anti-monopoly" provisions. Licenses for the construction, operation and maintenance of power works are limited to "a period not exceeding fifty years." 16 U.S.C. 799, see generally 16 U.S.C. 797(e). At the end of the original license period, the project may be taken over by the United States or another licensee under specified conditions. 16 U.S.C. 807, 808. In taking over the project pursuant to a new license, the new licensee is not required to provide reimbursement for water rights in excess of the reasonable cost of acquisition by the original licensee. 16 U.S.C. 807(a), see also 16 U.S.C. 797(b) (cost statement shall include "price paid for water rights").

Moreover, any licensee must maintain "amortization reserves" out of surplus monies earned over a "reasonable rate of return upon the net investment." 16 U.S.C. 803(d), see also 16 U.S.C. 796, see generally 16 U.S.C. 803(e). These amortization reserves may be used to reduce the net investment of the licensee which, in turn, reduces any payment to that licensee if the project is taken over.

The structure of these provisions argues that any water right held by Montana Power Company is necessarily a defeasible one, and that Montana Power Company cannot be "adversely affected" in its status as a prior appropriator unless and until depletions undermine its ability to recover a "reasonable rate of return on its net investment" in the project. See generally, Federal Power Commission v. Niagara Mohawk Power Corp., 347 U.S. 239, 74 S. Ct. 487, 98 L.Ed. 666 (1954); Alabama Power Company v. Federal Power Commission, 482 F.2d 1208 (C.A. Ala. 1973); First Iowa Hydro-Elec. Co-op v. Federal Power Commission, 328 U.S. 152, 90 C. Ed. 1143, 66 S. Ct. 906 (1946); Portland General Elec. Co. v. Federal Power Commission, 328 F.2d 165 (C.A. Or. 1964); Niagara Falls Power Co. v. Federal Power Commission, 137 F.2d 787, cert denied 320 U.S. 792, rehearing denied, 320 U.S. 815; Henry Ford & Son, Inc. v. Little Falls Fibre Co., 280 U.S. 369 (1930). Under this reading, no adverse affect could occur to the Montana Power Company unless and until the water supply was diminished to such an extent that revenues provided only a "reasonable rate of return." See 18 CFR §2.15, see also, MCA 77-4-201 et seq. MCA 77-4-211, Art 19, MPC License, AA24.

The difficulty with this position is that said amortization requirements matures only after 20 years of life, 16 U.S.C. 803(d), and the relevant rate of return may fluctuate. See 18 CFR §2.15. Water rights cannot sensibly vacillate in quantity and so, at most, this argument can be directed at "adverse effect" instead of the character of the underlying right. This is the Applicant's burden to discharge, and

there is no evidence in the record regarding Montana Power Company's revenues versus the reasonable rate of return.

More fundamentally, the Act does not by its terms "confiscate" or reduce the operating revenue of the licensee. It only reduces the amount paid on relicensing.

The amortization requirements do not in and of themselves preclude the receipt of more revenue than provided by the reasonable rate of return on the particular facility, except insofar as the underlying water right is not treated as having a capital value even at times of chronic shortage. Compare, Montana-Dakota Utilities Co. v. Ballinger, ___ Mont. ___, 632 P.2d 1086 (1981).

We also note that the Court in United States v. State of California, (9th Cir. 1982), seemed in dictum to characterize power production by federal entities as a sort of defeasible interest and described such a use as an incidental benefit of such projects.

We express no opinion on the merits of such a treatment in the present circumstances, particularly in light of the specific Congressional declaration regarding power production attendant to Canyon Ferry. 43 U.S.C. 485h, 43 U.S.C. 501.

AFFIDAVIT OF SERVICE
FINAL ORDER

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 April 24, 1984, she deposited in the United States mail, Certified mail, an order by the Department on the Application by JEFFERSON RIVER ACRES, Application No. 11493-s41G, and Application by GORDON E. LANE Application No. 15211-s41G for an Application for Beneficial Water Use Permit, addressed to each of the following persons or agencies:

1. Gordon E. Lane, Box 476, Three Forks, MT 59752
2. Ray Tocci, Box 886, Three Forks, MT 59752
3. Bureau of Reclamation, P.O. Box 2553, Billings, MT 59103
4. US Dept. of Interior, P.O. box 1538, Billings, MT 59103
5. James Walsh, Montana Power Co., 40 East Broadway, Butte, MT 59701
6. Ronald Waterman, Attorney, Helena, MT *(Hand deliver)*
7. T.J. Reynolds, Helena Field Office (inter-departmental mail)
8. Scott Compton, Bozeman Field Office (inter-departmental mail)
9. Gary Fritz, Administrator, Water Resources (hand deliver)

DEPARTMENT OF NATURAL RESOURCES AND
CONSERVATION

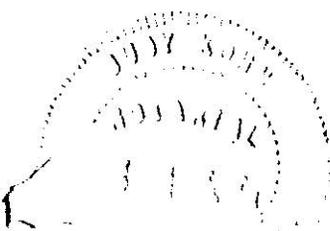
by Donna K. Elser

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

On this 24th day of April, 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.

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



CASE #

Index

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. 11493-s41G BY JEFFERSON RIVER)
ACRES AND IN THE MATTER OF THE) PROPOSAL FOR DECISION
APPLICATION FOR BENEFICIAL WATER USE)
PERMIT NO. 15211-s41G BY GORDON E.)
LANE)

* * * * *

Pursuant to the Montana Water Use Act and to the contested case provisions of the Montana Administrative Procedures Act, a hearing in the above-entitled matters was held in Three Forks, Montana. The applications were consolidated for hearing upon the agreement of the Applicants as each application in this matter has the same objectors.

STATEMENT OF THE CASES

The application made on behalf of Jefferson River Acres seeks .22 cubic feet per second or a 100 gallons per minute of water not to exceed 11 acre-feet per year. The water is to be diverted from the Jefferson River at a point in the SW1/4 SW1/4 SE1/4 of Section 28, Township 2 North, Range 1 East, and said water is to be used for new irrigation on a total of six acres more or less located in said Section 28 from April 15 through October 15, inclusive, of each year. Applicant appeared by John H. Kreitinger.

The application of Gordon E. Lane seeks the use of 1.11 cubic feet per second or 500 gallons a minute of water up to 96 acre-feet per year from the Jefferson River, said water is to be diverted at points in the NE1/4 SW1/4 SE1/4 and the SE1/4 SE1/4 NE1/4 of Section 28, Township 2 North, Range 1 East. Said waters are intended to be used for irrigation on ten acres on the NE1/4 and 30 acres in the SE1/4 of said Section 28, from April 15 through October 15, inclusive, of any given year. The Applicant appeared at the hearing in this matter by Gordon E. Lane, Senior, and by Ray Tocci.

Objections to each of these applications were filed with the Department of Natural Resources and Conservation on behalf of the Montana Power Company. These objections claim generally that the proposed appropriation is from Jefferson River in Broadwater County, and is upstream from the Canyon Ferry, Hauser, Holter, Black Eagle, Rainbow, Ryan, Cochrane and Marony dams and reservoir impoundments, and that there is insufficient unappropriated water available for the proposed use without adversely affecting the downstream water rights of the Montana Power Company and other senior appropriators. This Objector appeared at the hearing in this matter by Larry Cruel and by Counsel Jock Anderson of Gough, Shanahan, Waterman, and Johnson.

Objections to each of these applications were also filed with the Department of Natural Resources and Conservation on behalf of the Bureau of Reclamation of the United States of America. These objections claim generally that the unappropriated water supply in the Missouri River Basin above Canyon Ferry Dam is

insufficient for new irrigational development. The objection also alleges that any new irrigational development will adversely affect the prior rights of the Bureau of Reclamation's Canyon Ferry and Helena Valley units. This Objector appeared at the hearing in this matter by Wayne Treers and through Counsel Gerald Moore.

The Department of Natural Resources and Conservation appeared at the hearing in this matter by T. J. Reynolds, Area Office Field Supervisor for the Department's Helena office.

EXHIBITS

The Applicant Gordon Lane submitted the following documents as exhibits.

- A-1 The application for beneficial water use filed in this matter reflecting the intentions of this appropriator.
- A-2 A plat indicating the dimensions of Applicant's proposed place of use.
- A-3 A surveyor's description of a portion of Applicant's proposed place of use.
- A-4 A USGS map upon which has been located in brown the Applicant's proposed place of use with the red dots indicating the proposed pump sites.
- A-5 A schematic depicting this Applicant's proposed place of use and that place of use of the Applicant Jefferson River Acres, with the Applicant Lane's diversion points depicted thereon.
- A-6 A surveyor's description of a portion of Applicant's proposed place of use.

All of Applicant Lane's exhibits were received into the record.

The Applicant Jefferson River Acres tendered two documents as exhibits for the record.

- A-1a The application for beneficial water use permit reflecting this Applicant's appropriative intent.
- A-1b A schematic of this Applicant's proposed place of use with the proposed point of diversion depicted thereon.

All of the Applicant Jefferson River Acres' exhibits were received into the record.

The Montana Power Company submitted the following exhibits.

- MPC-1 A schematic of the Missouri River drainage with tributaries illustrated thereon, and the Applicants' proposed points of diversion depicted thereon.
- MPC-2-8 , inclusive. "Notices of Appropriation" which Montana Power claims evidence its right to the use of the water resource.
- MPC-9 A digest of the incidents of the water rights Montana Power Company claims to own or control.
- MPC-10 A hydrograph of Missouri River flows as measured at Marony Dam.
- MPC-11 A compilation of the periods of spill at Cochrane Dam.
- MPC-12 A graph depicting the yield of the Missouri River as measured at Fort Benton, Montana, from 1890 to the present time.
- MPC-13 A compilation of spills at Cochrane Dam and at Canyon Ferry for the water year '75-'76.

The Montana Power Company's exhibits were received into the record.

The Bureau of Reclamation tendered the following documents.

- BR-1a A copy of agreement between Montana Power Company and the Bureau of Reclamation.
- BR-2a A hydrograph of the Missouri River flows with attendant storage at the Canyon Ferry facility.
- BR-3a A compilation of the spill periods at Canyon Ferry.
- BR-4a A hydrograph depicting the average flows of the Missouri River at Canyon Ferry.

The Bureau of Reclamation's exhibits were received into the record.

The Department on its own behalf offered three exhibits.

- D-1 A document entitled "Analysis of Water Availability Above Canyon Ferry."
- D-2 A memorandum prepared by a Department employee relating his inspection of the application of Gordon E. Lane.
- D-3 A memorandum prepared by a Department employee relating his inspection of the Jefferson River Acres application.

All of the Department's exhibits were received into the record.

PRELIMINARY MATTERS

The Montana Power Company propounded certain "Notices of Appropriation" which are claimed to evidence this entity's rights to the use of the water resource. These notices have not been shown to be competent evidence for such purposes, and they are hereby denied probative effect.

Montana Power Company implicitly argues that these filings are prima facie evidence as to the matters asserted therein by virtue of RCN 89-810 et. seq. While these provisions have been repealed by the Montana Water Use Act, MCA 85-2-101 (1981) et seq., the legislature most probably intended to abrogate only the procedures detailed thereunder for evidencing the appropriate right. See generally, Mont. Const., Art. IX, Sec. 3(4). It would be incongruous to eliminate the evidentiary benefits of properly filed appropriative claims at precisely that time that such benefits would be of most material advantage in the adjudication process that supplanted the historic procedures. See generally MCA 85-2-201 (1981) et. seq.; see also Holmstrom Land Co. v. Meacher County Newlan Creek Water Dist., ___ Mont. ___, 36 St. Rep. 1403, 605 P.2d 1060 (1979).

Such filings are entitled to prima facie effect, however, only if such notices of appropriation have been filed in accordance with the provisions of the statutes providing for the same. See generally, Allen v. Petrik, 69 Mont. 373, 222 P. 451 (1924); Musselshell Valley Farming & Livestock Co. v. Cooley, 86 Mont. 276, 283 P. 213 (1929); Murray v. Tingley, 20 Mont. 260, 50 P. 723 (1897); Stearns v. Benedict, 126 Mont. 272, 247 P.2d 656 (1952); Peck v. Simon, 101 Mont. 12, 52 P.2d 164 (1935). Indeed, absent such compliance, such filings are incompetent evidence, being in the nature of self-serving hearsay. Galahan v. Lewis, 105 Mont. 294, 72 P.2d 1018 (1937); Shannel v. Vogle, 144 Mont. 354, 396 P.2d 103 (1964); Gilcrest v. Brown, 95 Mont. 44, 24 P.2d 141 (1933); Holmstrom Land Co., supra.

The instant notices are governed by RCM 89-810, the statutory provision regulating the historic doctrine of "relation back" and providing for the filing of "notices of appropriation" as an integral part thereof. See Bailey v. Tintinger, 45 Mont. 154, 122 P. 575 (1912); Murray v. Tingley, supra. RCM 89-813 is inapposite to the present filings, as that statute contemplated the recording of water rights in existence upon the effective date of the 1885 Act. The priority dates claimed herein are inconsistent with such a vintage water right.

An inspection of the present notices reveals that some or all of the same are deficient in some particular or another. For example, many of the notices have not been shown or by the terms thereof, do not show that any notice was posted at the intended point of diversion or that the instant notices were filed within twenty days of such date. See Galahan v. Lewis, supra; Holmstrom Land Co., supra. The date of appropriation referred to in RCM 89-810 must be the date of instigating the appropriation by posting the required notice, the whole purpose of the statute being to regulate the right of a prospective appropriator to relate his completed appropriation back to the priority date set by the initiation of the same. Some of the instant notices are not properly verified in accordance with the statute, rendering the whole of the same invalid. See Murray v. Tingley, supra; Shannel v. Vogle, supra. Moreover, Montana Power Company has adduced no competent proof that it has succeeded to any right or interest of the prospective appropriators named in the instant notice. See Hayes v. Euzard, 31 Mont. 74, 77 P. 423 (1904);

Osnes Livestock Co. v. Warren, 103 Mont. 284, 62 P.2d 206 (1936);
Cook v. Hudson, 110 Mont. 263, 103 P.2d 137 (1940).

Even assuming, arguendo, however, that the instant notices are in strict compliance with the statutory requirements, they nonetheless fail in the effect Montana Power Company assigns them. Said notices serve merely to replace the temporary posted notice, Musselshell Valley Farming & Livestock Co. v. Cooley, supra, and therefore can be at most a prima facie indication of what a prospective appropriator intends to appropriate in the future. The statute does not alter the well-established rule that actual application of water to beneficial use or at least completion of the diversion works therefore is a prerequisite for an appropriative right. See Bailey v. Tintinger, supra. The notice thus simply serves as notice to the public that the waters named therein may be appropriated, which appropriation would then relate back to the initiation of the appropriative plans. See generally, General Agriculture Corp. v. Moore, 166 Mont. 510, 534 P.2d 859 (1975). The measure of Montana Power Company's water right remains that quantity of water put to beneficial use over a reasonable period of time, Wheat v. Cameron, 64 Mont. 494, 210 P. 761 (1922), and therefore in any event Montana Power Company must supplement the instant notices with proof establishing the same. Holmstrom Land Co. v. Meagher County Newlan Creek Water Dist., supra; Iron v. Hyde, 107 Mont. 84, 81 P.2d 353 (1938), Missoula Light & Water Co. v. Hughes, 106 Mont. 355, 77 P.2d 1041 (1938); Miles v. Butte Electric Co., 32 Mont. 56, 77 P.2d 1041 (1938).

Similarly, although properly filed notices may be a prima facie indication of the priority of a particular right, Vidal v. Kensler, 100 Mont. 592, 51 P.2d 235 (1935), the instant notices are redundant in this regard, as other proof sufficiently establishes Montana Power Company's status as a prior appropriator for present purposes. See MCA 85-2-311(2).

Montana Power Company also refers to the so-called "Broadwater case" as probative of the scope and extent of its existing rights. See Montana Power v. Broadwater-Missouri Water User's Ass'n., 50 F. Supp. (Montana 1942). That matter purported to determine the same rights that Montana Power Company claims herein, except for those related to the Cochrane Dam facility, in relation to alleged interferences by upstream appropriators. However, the case was ultimately reversed on appeal for want of subject matter jurisdiction.

Clearly none of the statements reported in that case are determinative of Montana Power Company's rights as regards the Applicants. A judgment speaks through its decretal language, and a void determination necessarily stands mute. Caliger v. McNulty, 80 Mont. 339, 260 P. 401 (1927). Moreover, the Applicant herein was not a party to this proceeding and therefore cannot be bound by determinations made therein. Wills v. Morris, 100 Mont. 514, 50 P.2d 862 (1935).

Whether or not these master's findings are entitled to any probative value, however, demands a closer inspection of the affect of a finding of lack of subject matter jurisdiction. It is well settled that such a determination reflects a conclusion

that a particular court had in fact no power to adjudge the particular dispute before it. That is, any purported adjudication of the matter is entirely void. See generally Sloan v. Byers, 37 Mont. 503, 97 P. 855 (1902). The purported judgement cannot consequently make any sort of a prima facie case for the Objector Montana Power Company, nor is it entitled to any starie decises effect.

It does not inevitably follow from this, however, that all of the subsidiary end-products of a litigation subsequently found wanting for lack of subject matter jurisdiction are void for all puoses. See generally, Doccett v. Johnson, 79 Mont. 499, 257 P. 267 (1927). Unless the error involving the subject matter jurisdiction is egregious, the same or similar motive for the cross examination of witnesses in the similar action would exist notwithstanding the power of the court to ultimately determine the issue before it. See generally, MRE 804(b)(3). Moreover, the solemnity of the occasion reflected in the oath of the witnesses is not necessarily vitiated by a subsequent reversal on appeal. These are elements of the probativeness of statements made in the course of a proceeding that are not necessarily affected by jurisdictional concepts. See generally, MRE Rule 804(b)(1).

It is true that at least some of the language in In Re Colbert's Estates, 51 Mont. 455, 153 P. 1022 (1915), went further in similar circumstances to the effect that such evidence is tainted by the lack of the power of the court to entertain the same. However, this case is itself inconsistent with other water

disputes in which prior decrees are admitted in evidence against persons not party to such a decree so as to evidence the scope and extent of existing water rights. See Galiger v. McMulty, 80 Mont. 339, 260 P. 401 (1927); Cook v. Hudson, 110 Mont. 263, 103 P.2d 137 (1940); Sherlock v. Greaves, 106 Mont. 206, 76 P.2d 87 (1938); Wills v. Morris, 100 Mont. 514, 50 P.2d 862 (1935).

Decrees entered pursuant to water adjudications are not foundations of title, but rather merely affirm and recognize the pre-existing appropriative interest. See Cresson Consolidated Gold Mining & Mining Co. v. Whitten, 139 Colo. 273, 338 P.2d 278; Cline v. Whitten, 144 Colo. 126, 355 P.2d 306 (1960). Therefore, since these judgments are admissible, it must be for the reason that the procedures associated therewith are such that this particular form of hearsay has sufficient indicia of trustworthiness. See MRE 804(b)(5). To the extent this is true, a purported judgment void for want of subject matter jurisdiction should have the same probative force as a judgment regular in form if the indicia of trustworthiness are the same or similar.

It is not, however, necessary to finally resolve this matter. The applicant is without opportunity to cross-examine the witnesses that formed the predicate for the Broadwater case, and in the present circumstances this case and its leachings in documentary form are not necessary for decision.

It should further be noted that the Applicant Gordon E. Lane now only holds the bare legal title to the proposed place of use. The lands described as the place of use are now owned in

part by Ray Tocci, who appeared at the hearing in this matter and this person among others can be regarded as the equitable owner of any rights evidenced by any permit in this matter.

The hearings examiner, after considering the evidence herein, and now being fully advised in the premises, does hereby make the following Findings of Fact, Conclusions of Law, and Proposed Order.

FINDINGS OF FACT

1. The Department has jurisdiction over the subject matter herein, and by the appearance of the parties, has jurisdiction over the persons involved.

2. The Applicants have a bona fide intent to appropriate water to a fixed and definite plan, and they are not attempting to speculate in the water resource.

3. The Applicant Gordon E. Lane intends to use the waters claimed herein for agricultural purposes. The lands described as the place of use will not grow the crops intended by this Applicant without the use of irrigation waters.

4. The waters claimed by Gordon E. Lane would be of material benefit to him or to his assignees or grantees.

5. The use of 500 gallons a minute up to 96 acre-feet per year is a reasonable estimate of the quantity of water required for this Applicant's purpose, and said amount will not result in the waste of the water resource.

6. The intended crop of potatoes will require the use of waters throughout the irrigation season in most years.

7. The Applicant Gordon E. Lane intends to divert the water by means of a pump and pipeline, the waters therefrom to be applied to beneficial use by means of a sprinkler system.

8. Said means are customary and reasonable for their intended purposes, and the exercise of this diversion scheme will not result in the waste of the water resource.

9. The Applicant Jefferson River Acres intends to use the water resource for the irrigation of lawns and gardens.

10. Lawns and gardens cannot be maintained without the use of irrigation waters.

11. The use of the waters claimed herein by Jefferson River Acres would be of material benefit to it and/or its members.

12. The use of 100 gallons a minute up to 11 acre-feet per year is a reasonable estimate of the quantity of water required for this Applicant's purposes, and the use of this quantity will not result in the waste of the water resource.

13. Jefferson River Acres proposes to divert the waters claimed herein by means of a pump and pipeline and a system of booster pumps to drive the water to the ultimate place of use.

14. The diversion means proposed by the Applicant Jefferson River Acres are customary and reasonable for its intended purposes, and the exercise of these diversion works will not result in the waste of the water resource.

15. The uses of the Applicants herein are beneficial uses.

16. The source of supply of the waters claimed by the Applicants herein is the Jefferson River, which is at all times of the year a tributary of the Missouri River.

17. The uses of the Applicants herein will be substantially consumptive. That is, a substantial amount of the waters diverted will be lost to the source of supply.

18. The Bureau of Reclamation uses waters of the Missouri River at its Canyon Ferry facility for the production of electrical power. The maximum turbine capacity at Canyon Ferry is 6,250 cubic feet per second.

19. The Bureau of Reclamation also diverts water to the Helena Valley Irrigation District for agricultural uses and to the City of Helena for municipal uses. The Bureau diverts 750 cubic feet per second for these described uses during portions of any given year.

20. Canyon Ferry has a reservoir capacity of 2,051,000 acre-feet.

21. The top three feet of this storage are operated by the Army Corps of Engineers, and the Bureau of Reclamation claims no right or interest in the waters accumulating therein. The Bureau of Reclamation fills, refills, and otherwise successively fills this storage structure throughout the year.

22. The Bureau of Reclamation operates Canyon Ferry to maintain as much carry-over storage as possible. Primary reliance is made on direct flows of the Missouri. The Bureau's practices of saving its storage water for potential use in future years of low flow is an unreasonable one and said practice results in the waste of the water resource.

23. The Bureau diverts and otherwise controls a quantity of water in excess of its needs.

24. The Montana Power Company owns or controls a number of hydroelectric facilities on the Missouri River mainstem below Canyon Ferry.

25. The Montana Power Company's Cochrane facility has a capacity of approximately 10,000 cubic feet per second and Montana Power Company has used such a quantity for the production of electrical power for sale. The Montana Power Company at its Cochrane facility also maintains and controls a reservoir with an approximate capacity of 5,750 acre-feet. Montana Power Company fills, refills, and otherwise successively fills this reservoir throughout the year.

26. Montana Power Company also stores quantities of water at its Hauser Lake facility, at its Holter Lake facility, at its Black Eagle facility, at its Rainbow facility, at its Ryan facility, and at its Marony facility. All of these hydroelectric units also produce power for sale by use of the direct flows of the Missouri River.

27. The Missouri River flows in excess of 10,000 cubic feet per second on a reliable basis only at times the spring snow-melt run-off, if at all.

28. The Bureau of Reclamation does not release water in its Canyon Ferry operations in recognition of downstream prior water rights, except that transfers of water and/or energy may be made by agreement between Montana Power Company and the Bureau of Reclamation.

29. The Bureau of Reclamation in late winter or early spring of any year spills by drafting from storage an amount equal to a conservative estimate of anticipated snow-melt run-off.

30. The water uses of the Bureau of Reclamation provide a net increase in the Missouri River flows during substantial portions of most years. That is, the return flow from Bureau of Reclamation uses will often exceed that volume of water represented by the natural flow of the Missouri measured at the entrance point at Canyon Ferry.

31. Throughout substantial portions of any given year, Montana Power Company has historically used far less than 10,000 cubic feet per second for the production of electrical power for sale at any or all of its facilities.

32. The Applicants' proposed use will not alter the historic pattern of water availability at Montana Power Company's hydroelectric facilities.

33. The Applicants' use will not inevitably or necessarily capture water otherwise required for downstream demand.

34. There are unappropriated waters available for the Applicants' use in the amount it seeks throughout the period during which it seeks the use of the water in at least some years.

35. If the Bureau maintained this historic practice of diverting water at Canyon Ferry, there would be virtually no years in which water would be available for upstream consumptive use after August 9. Moreover, if the Bureau should maintain its current customary method of operation, in most years there will be no water available for new upstream uses after the beginning part of July. Indeed, under the present practices of the Bureau, in many years (approximately 40%) there will be no waters

available for upstream consumptive use throughout the year.

36. Missouri River flows in quantities in excess of 10,000 cubic feet per second only from approximately April 15 to July 15 in relatively good water years. In some years, the Missouri River will never exceed 10,000 cfs.

37. The Applicants' proposed use will not adversely affect the rights of prior appropriators.

38. Some Montana Power Company hydroelectric facilities have substantial sources of supply, e.g., the Sun, Dearborn and Smith Rivers, that are not available to Canyon Ferry or other MPC facilities.

39. The storage of water at Canyon Ferry provides marked and substantial recreational benefits.

40. The use of water by the Applicants will have no material effect on the water uses of the Bureau of Reclamation.

41. No water use of the Bureau of Reclamation has ever been curtailed by reason of a water shortage.

42. The return flow from the Bureau of Reclamation uses provides the only source for flows of the Missouri River immediately downstream from Canyon Ferry, except in instances where the Bureau deliberately spills water in bypassing storage waters derived from upstream MPC facilities or otherwise, and except in those few months if any, where the flows of the Missouri are in excess of the Bureau's storage capacity and direct flow needs.

CONCLUSIONS OF LAW

1. The Department has jurisdiction over the subject matter herein, and by the appearance of the parties, has jurisdiction over the persons involved herein. See generally, MCA 85-2-301 et. seq. (1981). Applicants are with a bona fide intent to appropriate water pursuant to fixed and definite plans, and they are not attempting to speculate in the water resource. See generally, Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900).

The grantees of the Applicant Lane have demonstrated an intent to use the water resource for agricultural purposes for at least so long as the lands described by the place of use are not more profitable for other purposes. This is the most that can be asked of any appropriator in terms of the requisite intent to use water. The hearings examiner does not find credible so much of the hearsay by a Department employee that concludes that the diversion means to be employed will be economically prohibitive.

2. The use of waters for agricultural purposes by the assignees of the Applicant Gordon Lane would be of material benefit to them, as the lands described by the place of use would not yield crops without the benefit of such waters. Said uses within the class of uses that are to be regarded as beneficial. See MCA 85-2-102(2) (1981).

3. Five hundred gallons a minute up to 96 acre-feet per year for the purposes claimed herein is a reasonable estimate of the quantity of water required for the Applicant Gordon E. Lane's purposes, and said amount will not result in the waste of the

water resource. See generally, Sayre v. Johnson, 33 Mont. 15, 81 P. 389 (1905), Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939).

4. The use of Jefferson River waters for the irrigation of lawns and gardens will be of material benefit to the inhabitants of Jefferson River Acres. The use of 100 gallons per minute up to 11 acre-feet per year is a reasonable estimate of the quantity of water required for this Applicant's purposes.

The fact that the inhabitants of Jefferson River Acres may have ground waters available for in-house domestic use, which waters may be made available for the irrigation of lawns and gardens, does not obviate the conclusion herein. This Applicant is entitled to use the inevitably less-expensive surface water source, and protect the expensive means of diversion normally associated with ground water development.

5. The uses of the Applicants herein are beneficial ones.

6. Both the Applicants intend to divert the waters claimed herein by means of pumps, the waters thence to be conveyed by a system of pipelines to be ultimately applied to use by a sprinkler system and related facilities. Said means are customary and reasonable for Applicant's purposes, and the exercise of these diversion schemes will not result in the waste of the water resource. See generally State ex rel. Crowley v. District Court, 108 Mont. 89, 88 P.2d. 23 (1939).

7. There are unappropriated waters in the amounts these Applicants seek throughout the period during which they seek the use of the water in at least some years. The issue of the

availability of unappropriated water can best be addressed within the context of the respective assertions of the Objectors to this matter.

BUREAU OF RECLAMATION

The Bureau of Reclamation claims rights to 7,000 cubic feet per second of the flow of the Missouri River and rights to store up to 2,051,000 of said waters for the uses attendant to its Canyon Ferry facility. Both of these figures are somewhat spurious in regard to the issues of unappropriated water and adverse affect to prior appropriators.

The 7,000 cfs figure is apparently predicated on the maximum 6,250 cfs capacity of the turbines at Canyon Ferry together with a 750 cfs delivery to the Helena Valley Irrigation District. (A significant portion of this 750 cfs is utilized merely to push the quantity actually required by the users to their place of use. See In re Brown, Proposal for Decision, 6/82.) These figures are the maximum quantities of water that can be used for the related puproses, and are not representative of the actual on-going rate of water usage. See generally, Table I & II, Department's Exhibit 1.

The fact of the actual use of such lesser flows is material to the issues of "unappropriated water" and "adverse affect to prior appropriators". The greatest quantity of water

beneficially used, while marking the boundary of the appropriative claim as against subsequent appropriations, See Savre v. Johnson, 33 Mont. 15, 81 P. 389 (1905); Featherman v. Hennessy, 43 Mont. 310, 115 P. 983 (1911), Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940), is not an accurate barometer of the amount of "unappropriated" water available for a new permittee's use. The appropriator's actual need for water at any given time determines the scope and extent of his appropriative claim at such times, notwithstanding that particular appropriator may have used a greater quantity of water for his particular purpose in the past. Cook v. Hudson, 110 Mont. 263, 103 P.2d 137 (1940); Quigley v. McIntosh, 58 Mont 103, 290 P. 266 (1930); Brennan v. Jones, 101 Mont. 550, 55 P.2d 697 (1936); MCA 85-2-412 (1981). Since the greatest quantity of water historically applied to beneficial use is not often descriptive of that quantity customarily diverted to that particular use, such maximum quantity is therefore not dispositive of the existence of unappropriated or "surplus" water. See generally, Custer v. Missoula Public Service Co., 91 Mont. 136, 6 P.2d 131 (1931). Indeed, to hold otherwise would encourage the waste of vast quantities of this state's water resources, an unlikely intention to attribute to the legislature. See generally, Allen v. Petrik, 69 Mont 373, 222 P.451 (1924); MCA 85-2-101 (1981).

Nor is the maximum quantity of water historically utilized probative as to the benchmarks of adverse affect to prior appropriators. The legislature directed that priority dates be assigned to new permittees, MCA 85-2-401 (1981), and thus the

legislature fully contemplated that demand would exceed supply from time to time. Indeed, "first in time, first in right," the talisman of the appropriative system, See MCA 85-2-401(1), MCA 85-2-406(1) (1981) is solely a rule of allocation in times of shortage. Basing a test of adverse affect upon the possibility of infringement should the permittees disregard his priority is therefore not reflective of legislative intent. Moreover, such a construction would mandate the waste of the water resource by testing a permittee's claim against the direct years of record. There are no unappropriated waters available for an applicant's use only when existing demand will, for all practical purposes, never leave a quantity of surplus water available for applicant's use. Adverse affect to prior appropriators within the guise of the permitting process occurs when the necessary and inevitable effect of Applicant's use would deprive a senior appropriator of his historic water use at his historic time and place of need. See In re Monforton, Dept. Order, 3/82.

The Bureau's claim for a storage appropriation at its Canyon Ferry facility is inaccurate in entirely the opposite direction. That is, the 2,051,000 acre-feet claimed for storage is not descriptive of the amount of water the Bureau actually stores. Rather that quantity describes the capacity of the reservoir at a single filling, and it has been the historic practice of the Bureau of Reclamation to fill, refill, and otherwise successively fill the Canyon Ferry facility to keep that reservoir filled to its storage capacity, excepting the top three feet thereof that are allocated solely for flood control purposes and are

controlled by the ARMY Corps of Engineers. Thus, in any given year, when water is available in the Missouri in excess of that flow required for its direct flow needs, additional waters of the Missouri will be stored for future use.

Moreover, the Bureau undoubtedly also has available to it substantial quantities of bank storage. That is, the storage of even two million acre-feet of surface storage will inevitably provide the hydrostatic pressure to "impound" groundwaters within the land area adjacent to Canyon Ferry by inducing water movement into the geologic ~~stratigraphy~~ and by changing the direction and rate of movement of ~~adjacent~~ influent groundwater. When this hydrostatic pressure is removed by drawdowns, this water will in time and in part ~~become~~ available as surface flow.

A general description of the Bureau's storage patterns will answer to the following pattern. Generally, the low point of stored water at Canyon Ferry is around the months of March and April. This lowest ~~level~~ of storage is partially an induced one, fostered by drafts ~~in~~ storage in anticipation of snow melt spring run-off. ~~See~~ discussion, infra. Thereafter in typical years, inflows to Canyon Ferry will exceed the Bureau's current water requirements, ~~and~~ waters will be stored for future use. These inflows are ~~often~~ marked enough that spills occur during the late spring and ~~early~~ summer months. Thereafter in typical years from about the first part of July to the first part of September of any given year, when inflows to Canyon Ferry are less than the Bureau's current water demands, waters will be drafted from storage ~~to~~ augment the direct flow of the Missouri for these uses.

In typical years, the water flow of the Missouri River in the months from September through November will again exceed the Bureau's current demands, and again this excess will be stored. On some occasions, these early fall flows in the Missouri are sufficient to cause spills at Canyon Ferry. This typical augmentation of Missouri River flows is probably not generated by increases in natural precipitation or "out of basin" supplies, but rather is most probably indicative of the cessation of upstream diversions for irrigation coupled with returns from early season irrigation via groundwater percolation. Finally, from around the end of November until the month of April, inflows from the Missouri will once again fail to meet the Bureau's direct flow capacity, and waters will be drafted from storage to augment Bureau uses.

The Bureau's claims thus coagulate into assertions that the measure of its appropriative share of Missouri River waters is determined by spills over its Canyon Ferry dam. That is, the Bureau claims that it's rights are saturated only at those times that it is physically impossible for this entity to take any larger share of the Missouri River. To the extent that this is true, the Department's "Analysis of Water Availability on the Missouri River Above Canyon Ferry Reservoir" is an accurate depiction of the consequences of this water use on new and future uses of Missouri River water upstream from Canyon Ferry.

The mere fact that the capacity of the reservoir at Canyon Ferry is sufficient to accommodate the volume of water that the Bureau has historically impounded therein does not, of course,

lead ineluctably to the conclusion that such quantity is the measure of the Bureau's appropriative claim. Beneficial use is the base, measure, and limit of the appropriative right. Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909); Jacobs v. Harlowton, 66 Mont. 312, 213 P.244 (1923); Conrow v. Huffine, 48 Mont. 437, 138 P. 1094 (1914); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940); Gwynn v. Phillipsburg, 156 Mont. 194, 478 P.2d 855 (1971). The mere diversion of water does not constitute an appropriation of it. Power v. Switzer, 21 Mont. 523, 55 P. 32 (1898).

The quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to beneficial use. (Citations omitted). If comparison between the principles regulating the appropriation and use of water is permissible it may be said that the principle of beneficial use is the one of paramount importance. Allen v. Petrik, 69 Mont. 373, 376-377, 222 P. 451 (1924).

While an appropriator cannot obviously appropriate more water than his distribution work will carry, he may also not divert or appropriate more water than is reasonably required for his purpose.

The appropriator's needs and facilities, if equal, measure the extent of his appropriation. ... If his needs exceed the capacity of his means of diversion, then the capacity of his ditch, etc., measures the extent of his right. ... If the capacity of his ditch exceeds his needs then his needs measure the limit of his appropriation. ...

Bailey v. Tintinger, 45 Mont. 154, 178, 122 p. 575 (1912)

The foregoing assumes that the federal government acting through the Bureau of Reclamation is an "appropriator" as that term is understood under state law. It is well-settled that the United States has plenary power over the water courses of this nation, either through its power to regulate commerce, see State of Oklahoma ex rel. Phillips v. Guy F. Atkinson Co., 313 U.S. 508 (1941); United States v. Appalachian Power Co., 311 U.S. 377 (1940); United States v. Grand River Dam Authority, 363 U.S. 229 (1960); or through its authority to provide "for the general welfare." See United States v. Gerlach Livestock Co. 399 U.S. 725 (1950). The issue is therefore not what Congress may do, but rather what it has done with respect to the Canyon Ferry facility.

Canyon Ferry is a part of a system of facilities planned and developed for the entire upper Missouri drainage. Its construction was authorized pursuant to the Flood Control Act of 1944. 33 U.S.C. § 701 et. seq. Section 9 of the December 22, 1944 Act set forth the parameters for the construction of the facilities in this system.

SEC. 9. (a) The general comprehensive plan set forth in House Document 475 and Senate Document 191, Seventy-eighth Congress, second session, as revised and coordinated by Senate Document 247, Seventy-eighth Congress, second session, are hereby approved and the initial stages recommended are hereby authorized and shall be prosecuted by the War Department and the Department of the Interior as speedily as may be consistent with budgetary requirements.

(b) The general comprehensive plan for flood control and other purposes in the Missouri River Basin approved by the Act of June 28, 1938, as modified by subsequent Acts, is hereby expanded to include the works referred

to in paragraph (a) to be undertaken by the War Department; and said expanded plan shall be prosecuted under the direction of the Secretary of war and supervision of the Chief of Engineers.

(c) Subject to the basin-wide findings and recommendations regarding the benefits, the allocations of costs and the repayments by water users, made in said House and Senate documents, the reclamation and power developments to be undertaken by the Secretary of the Interior under said plans shall be governed by the Federal Reclamation Laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), except that irrigation of Indian trust and tribal lands, and repayment therefor, shall be in accordance with the laws relating to Indian lands.

(d) In addition to previous authorizations there is hereby authorized to be appropriated the sum of \$200,000,000 for the partial accomplishment of the works to be undertaken under said expanded plans by the Corps of Engineers.

(e) The sum of \$200,000,000 is hereby authorized to be appropriated for the partial accomplishment of the works to be undertaken under said plans by the Secretary of the Interior.

The documents referred to in the foregoing language are popularly referred to as the Pick-Sloan plan. See generally, Environmental Defense Fund, Inc. v. Morton, 420 F. Supp. 1037 (D. Mont. 1976), aff'd in part, rev'd in part, Environmental Defense Fund, Inc. v. Andrus, 495 F.2d 848 (9th Cir.) (1979). Of central importance in the present matter is Senate Document 191 which contains the Bureau of Reclamation's plans for development of the upper Missouri. The Corps of Engineer's concerns for flood safety and navigation reflected in House Document 475 do not concern the upper Missouri directly, and are of only peripheral interest for elucidating the federal purposes of Canyon Ferry. Indeed, Senate Document 247 notes no essential disagreement between the Corp and the Bureau in developing the upper Missouri for "flood control, silt control, and storage for hydroelectric production and irrigation." See Senate Document 247 at p. 1.

Section 9 of the 1944 Act is also of significance herein as it directs the Bureau of Reclamation to proceed in accordance with reclamation law. Section 8 of the 1902 Reclamation Act provides that:

"Nothing in sections 372, 373, 381, 392, 411, 416, 419, 421, 431, 432, 434, 439, 461, 491 and 498 of this title shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested rights acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of such sections, shall proceed in conformity with such laws, and nothing in such sections shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof.

In *California v. United States*, 438 U.S. 645 (1978), the court disavowed prior dictum interpreting this section and held that state law controls the operation of reclamation enterprises where such laws are "not inconsistent" with federal purposes. In short, Sec. 8 of the Reclamation Act encapsulates the usual preemption analysis, such that a clear federal purpose will preempt state law frustrating that purpose. See *Ivanhoe Irrigation District v. McCracken*, 357 U.S. 275 (1958) (specific provision limiting use of reclamation water to 160 acres overrides absence of such restraint under state law); *City of Fresno v. California*, 372 U.S. 627 (1963) (preference for irrigation use in reclamation law preempts state order of preferences).

The following analysis examines the express or implied claims of the Bureau in relation to the particular uses asserted in the context of the "federal-state" character of the appropriation. The Congressional documents serve to detail what Congress reasonably contemplated in authorizing Canyon Ferry, and are thus important in determining the "appropriative" intent of the Bureau of Reclamation. See generally, Toohy v. Campbell, 24 Mont. 13, 60 P. 396 (1900).

NAVIGATION AND FLOOD CONTROL

In late winter or early spring of any given year, it has been the historic practice of the Bureau to obtain forecasts of spring snow-melt run-off, and to spill by drafting from storage an amount equal to a conservative estimate of that amount. This practice must find its basis in federal interests of flood control and navigation as such releases are not made in deference to downstream prior rights as is evidenced by the lack of such spills in dry years.(1) - See Department Report at Table 3. The

1. These spills may also be motivated by a desire to maximize power benefits per agreement between Montana Power Company and the Bureau of Reclamation. This practice serves to spread the "high flow water period" for Montana Power Company, and it thus assures that less spring snow-melt run-off will run to waste insofar as these appropriators are concerned. No claim is made by the Bureau of Reclamation, however, that it has appropriated water for sale in this regard, and at any event it does not appear that such sales would be warranted in view of the federal purposes evident for Canyon Ferry where the effect of the same is to curtail the availability of water for upstream use. These spills, it should be noted, often reflect greater amounts of water than can be accounted for by Montana Power Company's reserved storage right in Canyon Ferry, or by any releases made to bypass storage derived from upstream MPC reregulating facilities. Such practices are therefore analysed under the only remaining basis that may argue for their protection.

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effect of these spills is to increase the amount of time required to fill the storage associated with Canyon Ferry at the time of spring snow-melt run-off, and thus to restrict the period during which the Bureau claims there is unappropriated water available for use upstream.

The validity of this practice bears only tangentially on the merits of this Applicant's proposed use. Navigation and flood control are not "uses" of the water resource, and therefore they do not comply with the usufructuary dimensions of an appropriative interest. See Holmstrol Land Co. v. Meagher County Newlan Creek Water Dist., ___ Mont. ___, 36 St. Rep. 1403, 605 P.2d 1060 (1979). It is therefore apparent that this Applicant's proposed use and the uses of others similarly situated will not "adversely affect the rights of a prior appropriator" in this regard. See MCA 85-2-311(2).

Not all dealings in the water resource amount to appropriative interest. Appropriations are manifested to by an intent to take and use the water resource. See Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900). Drainage practices, although they may indeed impact on water uses, are characterized by a desire not to use the water resource, but rather to rid oneself of the nuisance. See generally, In re Kenyon-Noble, Dept. Order, 7/81. Flood control belongs in this latter realm. Certainly it would be surprising to learn of complaints of upstream consumptive uses by a downstream "flood control appropriation."

This general distinction is reflected in West Side Ditch Co. v. Bennett, 106 Mont. 422, 78 P.2d 78 (1938). Therein the court affirmed a necessary lower court distinction between drainage practices and appropriations. The defendant therein had drained his lands in 1901, but was accorded a priority date for his appropriation as of 1925, that being the date the water was applied to beneficial uses. See also, Galahan v. Lewis, 105 Mont. 294, 72 P.2d 1018 (1937).

"Navigation" interests find themselves on similar footing. Such interests are necessarily of a public character, and are not susceptible of unilateral private control. An appropriation for navigation purposes is necessarily an anomalous construction. See generally, United States v. Appalachian Electric Power Co., supra; First Iowa Hydro-Electric Cooperative v. FPC, supra; United States v. Rio Grande Dam & Irrigation Co., 174 U.S. 690 (1899); United States v. Rands, 389 U.S. 121 (1967). An appropriation for the purposes of determining an "adverse affect to a prior appropriator" is not of a different character merely because it is a public entity that asserts it, and therefore the asserted powers of navigation and flood control are not interests which this Applicant can "adversely affect."

It is not necessary, therefore, to decide if these interests, assuming their validity, justify the Bureau in intentionally drawing down the Canyon Ferry facility and thereafter refilling the same under a claim of senior right. The permittees would appear to have standing in such circumstances to test the validity of such practices under 33 U.S.C. 701-1(b)

The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the ninety-eighth meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the ninety-eighth meridian, of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes."

Whether or not flood control is embraced within the meaning of navigation as used therein, and whether or not this provision binds the Bureau of Reclamation as opposed to the Army Corps of Engineers, compare 43 U.S.C. 485h(b), and whether or not this provision precludes the Bureau's practices in any event are matters that must wait for a court of competent authority. See generally, Coah Conservancy Sub-District v. Alexander, 452 F Supp. 714 (D. S.D. 1978).

FISH, WILDLIFE, AND RECREATION

The Bureau also claims that this Applicant's proposed use and the use of others similarly situated will adversely affect the use of water at Canyon Ferry for fish, wildlife and recreational purposes. An inspection of the legislative history of the authorization of Canyon Ferry, however, fails to disclose a federal purpose to use water for these ends. The fact that Congress anticipated that the use of water for other ends would incidentally benefit recreational interests does not form a basis

for concluding that such interests were intended to form a separate appropriative right. See United States v. Alpine Land & Reservoir Co., 503 F. Supp. 877 (1980).

Thus, while the Congressional documents note the obvious incidental benefits to fish and wildlife and recreation that the massive storage impoundment will necessarily entail, See Senate Document 191 at P. 18, these same documents do not reflect such benefits as independent severable uses within the federal purposes to be fulfilled by the construction of Canyon Ferry. See Senate Document 247 at P. 1. When Congress intends to promote fish, wildlife and recreation by the use of water at a federal project and to make such use an integral part of the operations thereof, it ordinarily makes such intent explicit. See U.S.C. 615c, 615m, 615g, 615ff, 615pp, 616c, 616i, 616v, 620g.

Alternatively, even if such uses are within the rubric of federal purposes at Canyon Ferry, the use of water upstream cannot be said at this juncture to necessarily threaten an adverse effect to such interests.

"On the irrigation of crops there is an absolute upper limit to how much water can be applied; productivity drops or the crops may even drown if over-watered. Unlike irrigation, there is no apparent practical limit to the water that can be used for fishing and recreation; the more water there is, the more room there is for fish, boats and swimmers. The only physical limitation at the reservoir would be the capacity of the site. Since, however, water is such a scarce resource in this state and there are so many competing demands on the limited supply of water, each use can be assigned only the minimum reasonably required for that purpose" United States v. Alpine Land & Reservoir Co., supra at 889.

The clear inference from the pattern of use indicative of Canyon Ferry operations is that neither this Applicant, nor others like him in the near future, will adversely affect any fish and wildlife use by the Bureau of Reclamation. There is no need to decide, therefore, whether prior to the advent of the Montana Water Use Act, the use of water for fish and wildlife and/or recreation was a type of use that might be considered a beneficial one. See MCA 85-2-102(2), Paradise Rainbow v. Fish and Game Comm., 148 Mont. 412, 421 P.2d 717 91966) (dictum) (public appropriation for fishery purposes); Osnes Livestock Co. v. Warren, 103 Mont. 284, 62 P.2d 206 91936) (dictum) (swimming pool); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940) (dictum) (fish pond); RCM 89-301(2), repealed.

AGRICULTURAL, MUNICIPAL AND HYDROELECTRIC USE

The Bureau's use of water for the production of electrical power, and its delivery of water to the Helena Valley Irrigation District and the City of Helena for agricultural and municipal purposes can be dealt with by a single observation. Never have these uses suffered any deprivation by reason of a water shortage, and the Applicant's use herein will not precipitate any such effect. The critical issue with regard to these uses is whether further upstream development will cause injury to the Bureau's right to employ a "reasonable means of diversion" to service these uses. See discussion storage, infra.

SELLING SURPLUS WATERS

The Bureau also impliedly claims that this Applicant's uses and the uses of others similarly situated would adversely affect its right to sell waters to others for various purposes. The predicate for this assertion must be grounded upon a claim that there are surplus waters available in Canyon Ferry for such uses, and that the protection of such surplus waters is a presently vested interest. Of course, to the extent that the Bureau intends to make such waters available by retiring its other uses to some extent, no issue is raised as to "unappropriated water" and "adverse affect to prior appropriators," since these alternate uses would be the focal point of analysis.

~~This position of the Bureau of Reclamation stems from an~~
asserted federal purpose attendant to Canyon Ferry to provide for upstream development. This interest appears again and again in the Congressional history surrounding the authorization of Canyon Ferry. By way of backdrop, it appears that existing hydroelectric facilities now owned or claimed by the Montana Power Company had usurped much of the Missouri River flows during the early parts of this century. Thus, the Bureau recognized that:

"(a)bove Great Falls, further irrigation development is dependent upon construction of additional storage on the main Missouri River to permit maintenance of present extensive power facilities, which were constructed in early years, before irrigation possibilities were realized. A physical solution of this conflict in water use is one of the principal objectives to be accomplished in any comprehensive plan of development."

Senate Document 191 at p. 55

"Ultimate development is limited by tributary run-off except on the main stream, where future irrigation developments must be coordinated with the use of water in existing power developments. Any additional water-consuming projects above Great Falls, without additional storage capacity, would impair power output. A physical solution for such a conflict in water use is one of the requisites of a final plan.

Senate Document 191 at p. 62

The Bureau apparently intends to facilitate this interest by selling water upstream and by drafting from storage to augment Missouri River flows throughout the irrigation season. In short, the Bureau intends to operate an exchange system to facilitate upstream demand, and claims protection as against new uses for this program.

The right to appropriate for sale, rent, or distribution has long been recognized in Montana. See Mont. Const. Art IX, §3(2), Mont. Const., Art III, §15 (1889), see also, Brennan v. Jones, 101 Mont. 560, 55 P.2d 697 (1936); Custer v. Missoula Public Service Co., 91 Mont. 136, 6 P.2d 131 (1931); Sherlock v. Greaves, 106 Mont. 206, 76 P.2d 87 (1938); Allen v. Petrick, 69 Mont. 373 222 P.451 (1924). The seminal case in Montana is Railey v. Tintinger, 45 Mont. 154, 122 P. 575 (1912), wherein the court held that an appropriation for the purposes of the sale, rent and distribution of the waters thereof is perfected upon completion of the diversion works therefore, and not ultimate

application of these waters to beneficial use. This rule applies at least in those cases in which the appropriator is engaged in the "public-service" type enterprise of reclaiming arid lands and such appropriator shows compliance with the new repealed statutory provisions governing the posting and filing of intended appropriations.

The Bureau pursuant to its asserted rights to sell the right to use water apparently plans no diversion works behind its Canyon Ferry facility. The watercourse of the Missouri River itself is the conduit linking the ultimate place of use with the exchange point of Canyon Ferry. See generally, MCA 85-2-411; MCA 85-2-413. It is not necessary, however, to resolve the issue of where the individual purchaser's laterals should begin and where the distributor's canals should end for the purposes of applying the Bailey rule in the present circumstances. Bailey did not purport to abrogate other essential features of an appropriator.

An appropriator must in all events demonstrate an intent to appropriate and use water, See Toohy v. Campbell, 24 Mont. 13, 60 P. 396 (1900); compare, Miles v. Butte Electric & Power Co., 32 Mont. 56, 79 P. 549 (1905, see generally, Colo. River Water Conservation District v. Vidler Tunnel Water Co., (Colo.) 594 P.2d 566 (1979), and the Bureau has failed to demonstrate such an intent to appropriate for sale in the present matter.

All of the cases heretofore dealing with an appropriation for sale in Montana have dealt with circumstances in which the appropriator has at least by implication reflected an intent to sell, lease, or distribute water for certain purposes in certain

described areas. The rule could not be otherwise, for in the absence of such a showing there is no meaningful measure of the appropriation right. In the present circumstances, the Bureau's naked claim to sell water without any description of the lands to which the water is to be applied or the purposes for which the water is to be sold yields at most an intent to initiate an appropriation of water in futuro.

Enshrouding the Bureau's present claim to sell water with all the incidents of an appropriative right would result in a form of self-begetting wealth heretofore undreamed of in the arid West. The scope of the Bureau's privileges in this regard would widen as the privilege itself is exercised. Selling water for consumptive uses upstream, for example, would leave more space in the Canyon Ferry facility to store additional waters for subsequent sale. Fashioning the measure of the right on the present capacity of the reservoir is arbitrary, since the Bureau could hardly be expected to store waters where its inability to do so is predicated on the refusal of third parties to purchase an amount necessary to allow for such storage(2) . . . Bailey v. Tintinger, supra. The measure of the appropriation for sale

2. The "pioneer rule" that an appropriator is in all events limited by the capacity of the diversion ditch has no application to a storage appropriator. See generally, Gilcrest v. Brown, 95 Mont. 44, 24 P.2d 141 (1933); Holmstrom Land Co. v. Meagher County Newlan Creek, 36 St. Rep. 956, ___ Mont. ___, 605 P.2d 1060 (1979). It is obvious that a direct-flow claimant cannot intend to appropriate more than his ditch will carry, but this common-sense maximum has no place within the conference of a storage appropriation. The very purpose of storage is to capture water at one point for use at a subsequent time. See In re Monforton, supra

upstream, therefore, would be bounded only by the Bureau's capacity to provide for rights downstream. Downstream sales would not be burdened by even this inconvenient incident; the physical capacity of the water resource would set the only limit.

The well-settled maxim that the appropriator may not use water to satisfy his appropriation, and then purport to sell the "exces" thereof, would be rendered nugatory. See Galicer v. McNulty, 80 Mont. 339, 260 P. 401 (1927); MCA 85-2-412. The legislative reference to appropriations for sale and rental do not alter this result. See MCA 85-2-415 et seq.; see generally, Allen v. Petrick, supra; Sherlock v. Greaves, supra.

The right of the purchaser therein to take "surplus" waters must reflect a legislative purpose akin to the so-called "Warren contracts" of the reclamation laws. See 43 U.S.C. 523, but see also Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 p.2d 1074 (1933). That is, whenever water is available pursuant to an appropriation for sale, rent or distribution because of lack of demand for the same within the "project boundaries," persons outside said boundaries may use the water until such time as said water is needed for the original purposes of the appropriation. This concept reinforces the requirement of designating the ultimate place of use at the time of instigating an appropriation for sale. In these circumstances, it is the reasonable water requirements of the original place of use that marks the boundaries of the appropriative claim.

The principles reflected by these statutes find no application in the present matter. The record does not support a conclusion that the Bureau claims surplus waters to be available because of the non-use of waters for the original purposes of the Canyon Ferry facility. The Bureau has therefore failed to demonstrate an appropriation in this regard. Nor need the question be addressed of whether a clear Congressional earmarking of "surplus water" for undefined future use would preempt state law. See HCA 43-U.S.C. 523; see generally, U.S. v. California, supra. The legislative history of the Canyon Ferry authorization argues against any authority to sell waters in the magnitude the Bureau claims. (3)

It is true that the statutory language authorizing Canyon Ferry speaks in terms of providing water for power and irrigation. Canyon Ferry, however, was but a single facility in a regime of projects that were simultaneously authorized by the Act of Congress. Senate Document 191 clearly contemplates a number of additional projects upstream from Canyon Ferry. A proposed project in and around Three Forks, Montana, for example, contemplated by itself the irrigation of some 310,000 acres.

3. The Water Supply Act of 1958 speaks explicitly in terms of providing storage space for future municipal and industrial demand. See 43 U.S.C. 390b. However, existing projects such as Canyon Ferry cannot be retrofitted to meet these ends without Congressional approval where such an enterprise would "seriously affect the purposes for which the project was authorized, surveyed, planned, or constructed ..." 43 U.S.C. 390b(d); see discussion below.

Canyon Ferry, in the context of the entire plan, allowed for upstream development by providing for downstream power demand. The massive storage associated with this facility coupled with a non-consumptive hydroelectric use would perforce achieve a reregulation of Missouri River flows to foster further federal developments upstream.

"The proposed Canyon Ferry Reservoir, of 2,000,000 acre-feet capacity on the main Missouri, near Helena, together with its accompanying 35,000 kilowatt power plant, is a key structure, required to permit upstream development. It would re-regulate residual flows of the river after full development of upstream irrigation so as to maintain present capacities at the plants in question below the reservoir."

Senate document 191 at p. 62

With this physical solution to the problems of downstream power demand, irrigation and agricultural development were to proceed via a number of separate reclamation projects, each with sufficient storage to deal with the problems of physical shortages of water. In times of the quantity of water actually stored for future use at Canyon Ferry, it is inconceivable that this facility would have the capacity to provide for all the upstream development proposed without severe repercussions for its hydroelectric production. These projects were not, therefore, contemplated as units of the Canyon Ferry enterprise, although they were part of a system in which Canyon Ferry was an integral unit.

One can note a federal purpose throughout the reclamation laws that the users of federal project waters bear at least part of the costs associated with its development. See 43 U.S.C. 485

et. seq., see generally, Clark, Water & Water Rights, Vol. II, Chp. 8. One can equally note the federal purpose evident in the construction of Canyon Ferry to free the natural flows of the Missouri for upstream development. However, it hardly follows that since all upstream appropriators benefit from Canyon Ferry, all such users are diverting project waters. The tail cannot wag the dog in such a fashion. The purpose of Canyon Ferry was to reregulate flows of the Missouri to allow for upstream use, not to demand tribute from all such future users for this bit of federal largesse. Therefore, except for the Helena Valley Irrigation District, which area was specifically contemplated as a place of use for Canyon Ferry waters, the Bureau has failed to demonstrate an appropriative intent to sell additional waters.

Alternatively, the hearings examiner concludes that even if Canyon Ferry is with the authority and has appropriated water for sale, rent or distribution, no protection for this use as against the claims of other appropriators can be had absent an actual sale of the use of such waters. In Bailey v. Tintinger, supra, the court was moved to construe the statutes therein to authorize the perfection of an appropriation for sale, rent or distribution upon the completion of the diversion works therefore by the untoward consequences that the court foresaw in allowing third parties to control the rate of development of the actual application of such waters to beneficial use. It is not clear from the opinion why the traditional test of reasonable diligence was not considered sufficient to meet these ends. Ordinarily, one would suppose that acts beyond the control of the

appropriator would not in and of themselves frustrate a description of the appropriator's activities as being reasonably diligent in the completion of the appropriation. See generally, Department of Nat. Res. & Conser. v. Intake Water Co., 171 Mont. 416, P.2d (1977). To the extent, moreover, that it is the wide availability of non-project waters that is frustrating the complete development of project waters, it would appear that there is little state interest in encouraging these particular types of developments.

In any event, the Bailey rule does not appear to sanction the diversion of such waters until the same are required or needed for the purposes of the appropriation. The contrary construction would abrogate the fundamental tenet of appropriation law that no appropriator may divert more water than is required for his purposes. The application of this rule would not frustrate the incentive to purchase from such appropriators, for such "contract waters" would inevitably enjoy the protection of a more senior priority and such purchasers, as in the case of Canyon Ferry, would have the benefit of stability of supply provided for by storage.

Nor does the application of this rule impinge on any federal purpose evident in the reclamation laws. In Jicarilla Apache Tribe v. United States, 657 F.2d 1126 (10th Cir.) (1980), the downstream plaintiff sought to enjoin a trans-mountain diversion by the Bureau of Reclamation to the City of Albuquerque. The court held that the defendant City could not make a beneficial use of the water at that time; and noted that since beneficial

use is the measure of even such a contractual right, see 43 U.S.C. 372, the contract providing for immediate water delivery was null and void. The effect of the decision was to prevent the Bureau of delivering such water, which in turn left such waters available to the downstream plaintiff until such time as beneficial use might be made thereof pursuant to the project's purposes.

Analogically, even if the Bureau is with present rights to sell, rent, or distribute water, this Applicant may make use of the waters of the Missouri River until his use conflicts with a beneficial use established pursuant to a contracted right.(4)

4. No opinion is expressed herein as to whether the state imposed requirement of "reasonable diligence" can be applied where the result thereof would be to impinge on water availability for federal project purposes. See generally, R.C.M. 89-808 (1947), repealed.

STORAGE, STORAGE AND MORE STORAGE

The title to this particular subsection is something of a misnomer. Storage in and of itself is not an appropriation. Rather, it is but a means of diverting water for the purpose of making an appropriation.

"'Storage' may be defined as the temporary accumulation, conservation, or the storage of water for future use, as distinguished from either "direct irrigation" or "immediate use." The water stored may be from two sources: First, the residue from heavy flows or flood waters during the spring or winter months, where economical use requires the construction of reservoirs for collecting these fragments for use when most needed. Second, it may be from the waters of the normal flow of the stream. The impounding or the storage of water in reservoirs is not in and of itself a beneficial use of the water. "Storage" is not a use. The storage is merely an incident of the means of making the use occurring between the diversion and the application. Storage, therefore, like diversion and the conducting of the water to the place of use, is but a "means to an end." The appropriation is not made for the mere purpose of storage; it is made for the irrigation of lands or for some other useful or beneficial purpose. It might just as well be said that the waters diverted into a ditch were diverted for the purpose of carriage only, because they are conducted into a ditch on the way from the stream to the land. Under the prevailing authorities the direct test of an appropriation is not the method of diverting or carrying the water, but the successful application of all the water claimed to a beneficial or useful purpose."

Kinney on Irrigation, at p. 1480

Despite their analytical similarity, however, the storage appropriation has always been treated as a distinct entity from its direct flow counterpart. Whitcomb v. Helena Water Works Co., 151 Mont. 443, 444 P.2d 301 91968); Holbrook Irr. Dist. v. Fort Lyon Canal Co., 84 Colo. 174, 269 P. 574 (1928); Handy Ditch Co.

v. Greeley & Loveland Irr. Co., 86 Colo. 197, 280 P. 481 (1929); City and County of Denver v. Northern Colo. Water Conservancy District, 130 Colo. 375, 276 P.2d 992 (1954), Ackerman v. City of Walsberg, 171 Colo. 304, 467 P.2d 267 (1970); compare MCA 85-2-302 with MCA 85-2-505. Attaching substantive consequences to this difference inevitably breeds issues of when a wide spot in a stream or ditch has sufficient storage incidents to warrant treating it as a storage appropriation. See generally, Windsor Res. Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 98 P. 729 (1908).

A blind adherence to this distinction in circumstances that do not answer to the difference of such appropriations, however, merely clouds the issues. Analysis is not furthered by merely echoing concepts in situations that do not answer to the need for separate treatment. The fundamental distinction between direct flow and storage claimants is that the latter may not be ~~diverting from the ultimate source of supply at their time of~~ need. Moreover, storage claimants may be diverting a quantity of water in excess of this season's requirements in order to carry-over water for use in subsequent years.

An appropriation awarded to a ditch may be limited not only as to volume by its carrying capacity, but also by time -- that is, the use of water through it is limited by its carrying capacity, and as to direction by the necessity of use -- and it may also be restricted to some particular season or time of year. All these characteristics do not apply to an appropriation for storing water in a resource." Windsor Reservoir 7 Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 98 P. 729, 733 (1908).

The characterization of storage appropriation, then, yields a notice to other water users, both existing and prospective, that diversions will not inevitably take place at times paralleling that appropriator's time of need, and that the storage appropriator may be taking more water than would otherwise seem necessary for his particular use in that year.

This ability to divert water for storage at times that the water is not immediately required for beneficial use inevitably prompts controversy with direct flow claimants as often it will appear that a mere postponement of diversions for storage will allow such direct flow users to obtain their needed supply while also providing the storage appropriator with the full measure of his water needs. Thus, the courts in this state have consistently observed that the "primary rights" to the use of water in a watercourse belongs to the appropriators of natural flow, i.e. the direct flow user. See Whitcomb v. Helena Water Works Co., supra; Donich v. Johnson, 77 Mont. 229, 250 P. 963 (1926); Gwynn v. City of Phillipsburg, 156 Mont. 194, 478 p.2d 855 (1970).

This adage does not appear to operate as a substantive limit on storage appropriators. Rather, it merely indicates that at any given time, it is incumbent on the storage appropriator to justify his interference with direct flow uses. Insofar as this principle functions to allocate the burden of proof, it is inconsistent with MCA 85-2-311. Storage appropriations that conserve water are to be encouraged, see Federal Land Bank v. Morris, 112 Mont. 445, 116 P.2d 1007 (1941), and they are

entitled to the exercise of their priority as against all junior uses where necessary to fulfill the purposes of the appropriations. See MCA 85-2-401(1), 85-2-406(1); see generally People v. Hinderlider, 98 Colo. 505, 57 P.2d 894 (1936).

No appropriator is, however, entitled to waste the water resource whatever the character of his appropriation. The principle of beneficial use is of paramount importance in the appropriation doctrine. Allen v. Petrik, 69 Mont. 373, 222 P. 451 91924); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939). The record herein demonstrates conclusively that the Bureau is wasting water and wasting it in substantial quantities, and it is not necessary to distinguish between its direct flow and storage uses in this regard.

The fundamental principle that defines the Bureau's pattern of operations at Canyon Ferry is the desire to conserve sufficient quantities of water to protect its uses through the "critical years." These critical years are described by the four low flow years of the Missouri in the 1930's. See MPC graph of Missouri River flows at Marony, 1935-1938, inclusive. These water-starved years exhibited relatively dramatic low flows throughout the year, and throughout the entire four-year period. It will be noted that since this time, there have been a number of years exhibiting flows in this same order of magnitude. See, e.g., 1961, 1966, 1973, 1979, Bureau of Reclamation hydrograph. However, never since that time have such years occurred consecutively over a four year period.

This practice of the Bureau results in a primary reliance on the direct flow of the Missouri for its purposes. Storage is boarded for the impending water-short years. The result for upstream development is little or no water being available throughout substantial portions of any given year. The issue simply put is to what extent an appropriator may divert now for use in subsequent years where such practices result in a shortage in the year of diversion.

The concept of diverting now for use in subsequent years is cast in terms of "carry-over" storage. In terms of the continuous use of hydroelectric production, the term will be somewhat anomalous, as there is no definite end of any water year. Indeed "carry-over" storage reflects in degree from any of storage. The intent is to take now for later use. Carry-over balances out the lean and the fat years; storage stabilizes flows throughout any given year.

In Federal Land Bank v. Morris, 112 Mont. 445, 116 P.2d 1007
(1941), the court extolled the virtue of storage and carry-over storage generally, but curiously failed to decree only volume of water for that latter purpose. The decree embraced only those waters reasonably required for use in any particular year. However, it cannot be said in view of the language used therein that such carry-over was intended as merely privilege, to be foregone in the vent of subsequent demand on the stream. Rather, since the court talked in terms of a one-fill limitation, it appears that carry-over was intended to be protected up to the difference between the amount required for use in any particular year and the capacity of the reservoir.

CASE # [REDACTED]

[REDACTED]

In Gwynn v. City of Phillipsburg, 156 Mont. 194, 478 P.2d 855 (1978), the court concluded that the defendant city was wasting water, although there was little discussion of the concept of carry-over storage. The finding and conclusion was apparently predicated on the defendant's inability to demonstrate that waters in excess of the current years' requirements were nonetheless necessary for use in impending dry years.

The difficulties in dealing with carry-over storage is that it is not subject to bright-line analysis; there is no litmus paper test involved to decipher its proper scope. An incantation of the "primary right to the flow belongs to the direct flow user" masks the complexity of the problem in this context. It would be brazen for the Department to conclude that the critical years will not occur again or that the Bureau will never suffer in the future from a reduced capacity to carry-over its storage. It would be admitted by all that the future holds surprises for even the most sophisticated and wary.

Nor can the problems be dealt with within the comforting confines of estimating the reasonable requirements for an appropriator's particular purpose. The amounts of water required for crops and the like admit of a more scientific precision. Rather the problems attendant to carry-over storage are more closely akin to factors describing an appropriator's duty to utilize a "reasonable means of diversion", State ex rel. Crowley v. District Court, 108 Mont. 89, 80 P.2d 23 91939), or an appropriator's duty to apply the water countenanced by his appropriation in a reasonably efficient manner. See generally

Wheat v. Cameron, 84 Mont. 494, 210 p. 761 (1922) (leaky ditches), Allen v. Petrik, supra. These formulas call for an exercise of broader judgment, and the concerns reflected therein come into sharpest focus in groundwater disputes.

The issue in the latter scenario is often closely akin to the problems of carry-over storage. There the problem often arises as to how much groundwater should be left intact (i.e. stored in the ground) merely so that present users may enjoy a "reasonable pumping lift." See generally, Colorado Springs v. Bender, 148 Colo. 458, 366 P.2d 552 (1961); Mathers v. Texaco, 77 N.M. 239, 421 P.2d 771 (1966); Fundingsland v. Colorado Ground Water Commission, 171 Colo. 487, 486 P.2d 835 (1970); Wayman v. Murray City Corp., 23 Utah 2d 97, 458 P.2d 861 (1969), Corker, Groundwater Law, Management and Administration, National Water Commission Legal Study No. 6, (1971). No specific calculus of factors can be generated with reference to such groundwater problems, and no specific calculus is available for the present problem. The critical issue is whether the Bureau can reasonably exercise its rights under the changed circumstances of significant upstream development. MCA 85-2-401 provides that "(p)riority of appropriation does not include the right to prevent changes by later appropriators in the condition of water occurrence, such as the increase or decrease of streamflow or the lowering of a water table, artesian pressure, or water level, if the prior appropriator can reasonably exercise his right under the changed conditions."

The judgment called for by this test involves a balancing of the harm to the appropriator against the effects of his use on other appropriators generally. It is not a relative weighing of the value of the competing uses. That formula belongs to the realm of riparian law. In all events, the decisional equation must be made against the backdrop of the sanctity of a prior appropriator status, with its concomitant impetus toward the development of the water resource, with the caveat that it is the use of water itself that is protected by the first in time, first in right regime, and not the particular manner of putting it to use, except insofar as protection must be afforded the manner of diversion in order to fulfill the ultimate use.

Of course, not even great demand on the source of supply can abridge a prior appropriator's right to use water, if the exercise of such demand would result in any significant disruption to the existing use. Outright transfers of water to new and more productive uses are matters of the marketplace in the state, as such enterprising persons ought to be able to pay more for such water than it is worth to its holder. See MCA 85-2-402, 403. Conversely, an appropriator cannot sell what he does not own, and an appropriation only entitles an appropriator to that amount of water reasonably required for his purposes, which amount is in turn predicated at least in some measure of the intensity of demand on the source. This seeming paradox is implicit in the appropriation system itself. The purpose of recognizing the prior status of the first user is to maximize the use of water by providing security for the capital investments

necessary to implement the same. The senior status cannot be blindly adhered to where the effect is to defeat the purpose of its creation. Any storage appropriator must as reasonable man desire to keep his reservoir at a filled level, but the result thereof itself would cripple direct flow use in any particular year. In short, the desire to protect against deprivations in future years would sacrifice much of the available water in any current year.

It makes no difference whether the Bureau's intent to provide for use across the critical period was reasonable at the time Canyon Ferry was planned or authorized. Subsequent developments may make unreasonable what was entirely appropriate at an earlier time. See Conrow v. Huffine, 48 Mont. 437, 138 P. 1094 91914); Huffine v. Miller, 74 Mont. 50, 237 p. 1103 (1925); State ex rel. Crowley, supra; In re Willow Creek, 74 Or. 592, 144 P. 505 (1914); In re Silvies River, 115 Or. 27, 237 P. 322 (1925). An appropriator need not utilize more costly diversion works to promote the efficiency of his water use when water is in plentiful supply. The same works, however, may prove wasteful in the face of subsequent development and need.

The Bureau of Reclamation has never been forced to curtail any of its water uses due to a lack of water. See BR hydrograph, Figure I, Department's Report. Indeed, the Bureau's uses rarely require water in excess of the volume of annual flows in the Missouri. See Department Report at p. 9. Moreover, the Bureau approaches spring snow-melt run-off in any year with well over a

million acre-feet of storage.(5) The actual amount of carry-over the Bureau controls is not well described by its hydrograph in any given year, because of the practice of the Bureau in intentionally spilling water in anticipation of such run-off. For example, although water year 1967, following the dry year of 1966, shows a "mere" volume of some one million acre-feet, that volume was induced by intentional spills in October and November of 1966. See Table 3, Department's Report. Moreover, while not noted in Table 3, the Bureau was undoubtedly inducing spills in early spring months in 1967 in anticipation of substantial run-off. (The MPC hydrograph shows otherwise inexplicable increase in flow during these months). In terms of carry-over, it is enough to note for present purposes that even after the low waters of 1973 and 1977, the Bureau was able to maintain 1.5 million acre-feet of storage until the time of the ensuing year's run-off.

~~The chance of consecutive low flow years of such a character and arrangement so as to retard the Bureau's uses is too remote to justify curtailment of uses on the upper Missouri. This is so despite that fact that power production argues for a more liberal allocation of carry-over storage in light of the more drastic~~

5. Some measure of the magnitude of the Bureau's storage in relation to its use is reflected by a recognition that 2,000,000 acre-feet of storage would satisfy the Bureau's claimed maximum of 7,000 cfs for approximately 140 straight days, assuming no dead storage. See also Department Report at p. 15 (average annual use at Canyon Ferry, 3,800,000 per year).

consequences that would attend a lack of water for such purposes. A use of water for electrical production cannot be safely undertaken without some measure of security for stability of flows throughout the year. It is enough to say for present purposes, however, that significant upstream development would not seriously threaten the Bureau's uses to any material degree. Indeed, upstream agricultural development will inevitably serve to protect the Bureau against long-term shortages. Such uses tend by their very nature to recharge groundwater resources, which resources in turn act as natural storage reservoirs, recharging the surface flow of streams over long periods.

The result reached herein will not impinge upon any federal purpose evident in the authorization of Canyon Ferry. Indeed, the current operation of Canyon Ferry is antithetical to the purpose announced by Congress. Instead of reregulating flows to satisfy downstream power demand, the Bureau of Reclamation here claims protection for the very problem Canyon Ferry was designed to alleviate. Downstream power demand was to be satisfied by the use of high flow waters redistributed by the device of hydroelectric production. The Bureau's insistence for protection of its direct flow use of water trades the problems historically associated with the MPC facilities for another set of an identical character at Canyon Ferry. Such a cure is surely a painful one for upstream users.

The production of electrical power at Canyon Ferry was given fairly specific treatment by the Congressional documents. Senate Document 191 indicates an expectation of a firm output of

approximately 150,000,000 kilowatt hours per year. See page 136. This quantum was envisioned as the power surplus to the requirements of pumping water at the facility, and with Canyon Ferry operating as a unit in the system of reservoirs comprising the federal activity in the Missouri Basin. Thus, Congress contemplated that actual production at Canyon Ferry may be more or less in any given year, depending upon the actual availability of water.

More importantly to the present issue, it appears that this amount of power was predicated on a net average power head of 100 feet. Senate document 191 at p. 136. It is a well-known fact that the greater the hydraulic head in terms of vertical feet, the less the amount of water that is required to produce a given unit of electrical power. If one assumes a not improbable 85% efficiency for the 35,000 kilowatt power plant originally designed for Canyon Ferry, approximately 1.7 million acre-feet of water would be required to generate the 150,000,000 kilowatt hours intended. This is close accord with the two million

acre-feet Canyon Ferry was designed to impound. (6)

The Bureau may not maintain its storage at maximum level merely to maximize its electrical production through the use of hydraulic head. Such a plan of operation is probably a textbook description of "unreasonable means of diversion". See State ex rel Crowley v. District Court, supra. One simply cannot command the whole flow of the stream merely to extract and use an unreasonably small portion thereof. This is so even if the use of water for electrical production yields a greater economic return per unit of water than the use proposed by the Applicant herein. There are no preferences to the use of water in this state.

The concerns prompted by the Bureau's claims herein are reflected in A-B Cattle Co v. United States, (Colo.), 589 P.2d 57 (1979). Therein the downstream appropriator alleged a taking where a federal government storage project resulted in a lower silt content to the water. The theretofore silt-laden water served to seal the plaintiff's ditches and thus allowed the same

6. It will be noted that the Bureau does not operate Canyon Ferry such that power is produced on a net average 100 feet power head. Moreover, by the use of a number of turbines, the Bureau succeeds in producing approximately 426 million kilowatt hours per year. See In re Brown, Dept. Proposal for Decision, 6/82.

No opinion is expressed herein as to what extent the Bureau can alter Congressional expectations where such modifications do not substantially frustrate project purposes. The 100 foot average head is, however, more consistent with Congressional intent to free the upstream basis for development, as it implies reduction in storage throughout the year. The conclusion of waste made herein, however, is predicated on the Bureau's current practices and hydroelectric capacity.

quantity of water to be pushed further across the place of use. The court rejected any property interest in such silt-laden waters, and characterized the plaintiff's manner of diversions as unreasonable. The court noted among other things that countenancing plaintiff's claims would frustrate the state's interest in the maximum utilization of water. Any reduction in flow upstream must necessarily result in increased silt precipitation in some degree.

Similarly, although the present operations of the Bureau may be the most convenient way to exercise its right, they cannot be insisted upon where the effect is to deny the use of water throughout such a substantial drainage. The Bureau must begin to use the storage it now so jealously protects, and not "play the dog in the manger with water he does not or cannot use for a beneficial purpose when other lands are crying for water. It is to the interest of the public that every acre of land in this state susceptible to irrigation shall be irrigated." Allen v. Petrik, 69 Mont. 373, 379, 222 P.451 (1924).

MONTANA POWER COMPANY

Heretofore, on three separate occasions, the Department has recognized a water right attendant to the Cochrane Dam facility to the full scale of 10,080 cubic feet per second. See In re North Boulder Drainage District, Dept. Order 1/82 (appeal pending), In re Pettapiece, Dept. Order 3/82 (appeal pending), In re Monforton, Dept. Order 3/82 (appeal pending). All the permits

issued pursuant to these matters were restricted to limit diversions to such times as the Cochrane facility spills water. A full discussion of the nature of Montana Power Company's use may be found therein.

In none of those matters, however, was any waste made to appear upon the part of the Bureau of Reclamation. Indeed, in in re Konforton, the Department specifically addressed the concern that the permitting process not become a shield or barrier insulating wasteful and/or illegal uses of the water resource against legitimate claims to its use upon the part of prospective permittees. Therein it was suggested that where prospective appropriators make a sufficient showing of waste upon the part of any particular water user, and where the quantity of water wasted is pivotal to the issues of "unappropriated water" and "adverse affect to prior appropriators," such Applicant should be entitled to a permit protecting his priority and a chance to enjoin the wasteful use in a court of competent authority.

Such an approach would not inevitably amount to a cry in the wilderness in the present circumstances. The Hearings Examiner believes that the Bureau of Reclamation could, or perhaps must, in view of the evidence of Congressional intent detailed herein, pass through its storage structure Missouri River flows at the time of need of the Applicant herein without in any way affecting its own water uses. These flows, coupled with the returns from the Bureau's hydroelectric use and other intervening accretions between Canyon Ferry and Cochrane, might well result in spills at Cochrane in many years at such times that this Applicant would

have need of the water resource. (7)

The foregoing assumes, of course, that Montana Power Company is now entitled to the additional quantities of water that have been improperly stored or otherwise wasted at the Canyon Ferry facility. The resolution of this issue demands a closer scrutiny of the historic relationship between the pattern of uses at Canyon Ferry and the use of the water resource by the Montana Power Company.

As previously intimated herein, Montana Power Company had perfected rights to the use of the water of the Missouri River drainage for hydroelectric purposes prior to the construction and development of Canyon Ferry. Only MPC's Cochrane facility is wholly junior to the rights attendant to this federal enterprise. The construction of the massive reservoir upstream from the MPC facilities and the installation of the nonconsumptive hydroelectric use in conjunction therewith

7. Cochrane Dam is the pivotal unit in the Montana Power Company collection of mainstem hydroelectric facilities, and it is apparently used by the power company for planning the operation of all these facilities. This result stems from the relatively high turbine capacity at Cochrane in relation to the capacities of the other hydroelectric units. When Cochrane spills water, the probabilities are very high that all other Montana Power Company units will also spill water. This is so despite the fact that Cochrane has sources of supply (Smith, Sun and Dearborn Rivers) that are not available to certain upstream MPC units.

The graph of flows at Marony indicates that spills at Cochrane occur for relatively lengthy periods when the precipitating factor for such spills are waters derived from the Missouri River with its relatively massive drainage. While the inflow from the Sun, Dearborn and Smith Rivers may cause spills at Cochrane without concomitant spills upstream, said spills are likely to be insignificant in duration.

obviously resulted in some rather far-reaching benefits for the power company. Therefore, while it appears that the then existing MPC hydroelectric units had turbine capacities approaching the upper limits of Missouri River flows, much of these capacities must necessarily have gone unexercised throughout much of any given year after spring run-off flows in the Missouri had subsided. The initiation of hydroelectric use at Canyon Ferry stabilized the flows of the Missouri for downstream use, curtailing peak flows from snow-melt run-off that would otherwise have run to waste and distributing such flows later in the year when Missouri River flows have subsided. In effect, Canyon Ferry performs a storage function for Montana Power. (8)

There is, of course, nothing intrinsically wrong about such an arrangement, and indeed, to the extent that the Bureau is not wasting water, Montana Power Company has standing to protect its interest in such return flows. See City of Helena v. Rogan, 26 Mont. 452, 68 P. 798 (1902); In re Monforton, Dept. Order supra. Appropriators in the state have vested rights to maintenance of the stream conditions as of the time of their respective appropriations, including the maintenance of return flows from

8. Except for the 47,500 acre-feet reserved in Canyon Ferry by contract, Montana Power Company makes no claim to store water in Canyon Ferry in its own right. No issue is thus presented as to the merits of such a claim, nor whether such storage would be entitled to a more wide-ranging protection than that indicated herein for the Bureau of Reclamation.

existing uses. (9) See Creek v. Rozenan, 15 Mont. 121, 38 P. 459 (1894); see generally Dahlberg v. Cannon, 84 Mont. 68, 274 P. 151 (1929), Loyning v. Rankin, 118 Mont. 235, 165 P.2d 1006 (1946), McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972); Lokowich v. City of Helena, 46 Mont. 575, 129 p.2d 1063 (1913); Farmers Highline Canal Reservoir Co. v. City of Golden, 129 Colo. 575, 272 P.2d 629 (1954). This doctrine is equally applicable to return flows from waters ultimately derived from storage. It would be impossible, as a practical matter, to differentiate "stored" waters from "direct flow" waters in most instances at

9. The hearings examiner notes that reclamation projects evidence a Congressional intent to have the ultimate user repay his share of the costs of the same. See generally Clark, "Water and Water Rights", Vol. 2, Chap. 8. It is arguable that this federal purpose precludes incidental benefits of the return flow from reclamation uses pursuant to state law, and instead requires a continuous characterization of such waters as "project waters." See generally, Ide v. United States, 263 U.S. 497 (1924); Ramshorn Ditch Co. v. United States, 269 F. 80 (8th Cir.) (1920); United States v. Tilley, 124 F.2d 850 (8th Cir.) (1941), cert denied; Scott v. United States, 316 U.S. 691 (1942); Hudspeth County Conservation & Reclamation Dist. v. Robbins, 213 F.2d 425 (5th Cir.) (1954), cert. denied 348 U.S. 833 (1954); Nebraska v. Wyoming, 325 U.S. 589 (1945). No claim is made herein in this regard, and these returns are for present purposes characterized as waters in the "unappropriated water" formula. The power company has no vested interest in any particular source of supply, so long as the measure of its appropriative share is available at its "headgate". Kelly v. Granite Bi-Metallic Consolidated Min. Co., 41 Mont. 1, 108 P. 785 (1910); Featherman v. Hennessy, supra; Donich v. Johnson, supra.

any given point. (10) See discussion of storage, *infra*.
However, the application of this doctrine necessarily presupposes the scope and extent of the original appropriation. The amount of Montana Power Company's appropriative claim is a product of the quantity of water it has put to beneficial use. Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067 (1940); Featherman v. Hennessy, 43 Mont. 310, 115 P. 983 (1911); Whitcomb v. Helena Water Works Co., 151 Mont. 443, 444 P.2d 301 (1968); Conrow v. Huffine, 48 Mont. 437, 138 p. 1094 (1914); Peck v. Simons, 101 Mont 12, (1935); Gilcrest v. Fowen, 95 Mont. 44, 24 P.2d 141 (1933); Green v. Chaffee Ditch Co., 150 Ido. 191, 371 P.2d 775 91962); Holmstrom Land Co. v. Meacher County Newlan Creek Water Dist., 36 St. Rep. 1403, _____ Mont. _____, 605 P.2d 1060 (1979); Prennan v. Jones, 101 Mont., 550, 55 P.2d 697 (1936); Westminster v. Church, 167 Colo. 1, 445 P.2d 52 (1968).

The record reflects that Cochrane has utilized approximately 10,000 cubic feet per second before July 1, 1973, the effective date of the Montana Water Use Act and to advent of the permitting process. The record is equally revealing that there are

10. This vested right to return flows from waters ultimately derived from storage obtains even though the downstream appropriator has no interest in situ for those waters stored that would otherwise have gone to waste. See Donich v. Johnson, 77 Mont. 229, 250 P. 963 (1926); Federal Land Bank v. Morris, 112 Mont. 445, 116 p.2d 1007 91941); see also, Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 p.2d 1074 91933); Mannix & Wilson v. Thrasher, 95 Mont. 267, 26 p.2d 373 (1933). The storage appropriator may not extend or otherwise modify the essential features of his appropriation to the detriment of other appropriators.

sensitivity to the requirements of administering a stream system. Vagaries in natural flow and the vicissitudes in demand won that flow will never yield a consistent benchmark against which additives to historic use will stand in stark contrast. For example, it is common knowledge that additional diversions from a watercourse for irrigation will tend to augment the source of supply in late summer and fall months as seepage from the irrigated lands percolates back to the ultimate source. See generally Smith v. Duff, 39 Mont. 382, 102 P. 984 (1909). It will hardly due to characterize the use of these induced accretions as additional appropriations resulting in junior priorities for the first irrigator on the source. The limit of an appropriation cannot feasibly be discribed on an hour-to-hour or day-to-day basis.

These sorts of uncertainties are evident in the present record to some degree. That is, the return flow from the Bureau's hydroelectric facility is not a constant value. (The winter flow figures from Table 1 of the Department's report are likely to be descriptive of these returns). Nor will the flows from the Sun, the Dearborn and the Smith Rivers, which are tributary to the Missouri below Canyon Ferry and above Cochrane, be constant in velocity. Thus, fluctuations in the amounts of water available are inevitable, whatever the time of year. See Average Daily Flows at Marony Dam.

This uncertainty need not lead to hapless hand-wringing for present purposes, however, since one can nonetheless conclude with a reasonable degree of conviction that such flows have never

been of a magnitude to allow the Cochrane facility to run at full capacity throughout major portions of the year. Indeed, commencing with a period around the middle of July, it would appear that the flows of the Missouri River are only sporadically sufficient to satisfy the company's direct flow needs.

In such circumstances, Montana Power Company should not be afforded the windfall of additional waters that might be derived from Canyon Ferry. Particularly is this so where the result would be to accord an appropriator the entire flow of the stream. While there is no inherent vice in appropriating the entirety of a stream, Mettler v. Ames Realty, 61 Mont. 152, 201 P. 702 (1921); Meine v. Ferris, 120 Mont. 210, 247 P.2d 195 (1952), such monopolies should only be recognized in situations bespeaking an historical reliance thereon. See generally, Fitzpatrick v. Montgomery, 20 Mont. 181, 50 P. 416.

The determination of the scope and extent of Montana Power Company's use and appropriative claim with attention to different portions of the year cannot be said to involve such imponderable difficulties that any inquiry into the same would be a fruitless task. "As in other human problems, into which varying factors enter, it is not to be expected that results can be obtained with absolute mathematical certainty." Donich v. Johnson, 77 Mont. 229, 253, 250 P. 936 (1926), see also Allendale Irr. Co. v. State Water Conservation Board, 113 Mont. 436, 127 P.2d 227 (1942).

The fundamental focus of the appropriation doctrine is the protection of the reliance interests of the user of the water resource. The arid character of the "Great American Desert"

demanded a repudiation of the riparian system of water rights spawned in the lush countrysides of England. See generally Mettler v. Ames Realty Co., 61 Mont. 152, 201 P. 702 (1921).

The development of the water resource in Montana required more protection for the capital investments required to implement the diversion than was available with riparian notions of "reasonable use" and sharing in times of shortage. To encourage the development of the water resource, then, the talisman of the appropriation doctrine became the exclusivity of use by an appropriator, such that he who was "first in time" became "first in right." MCA 85-2-401(1) (1981); MCA 85-2-406(1) (1981). While the physical factors determining the amount of water available in the source of supply may continue to plague an appropriator, uncertainties as to supply threatened by man-made alterations were curtailed by the appropriative doctrine.

This system does not entitle Montana Power Company to the windfall of additional flows, as the operation of the MPC facilities reflect no reliance upon them. The impact of this Applicant's use and others similarly situated with future claims to the water resource will fall totally on the Bureau of Reclamation. The returns from Canyon Ferry uses will remain unabated, and probably no better index of the lack of adverse affect can be devised than that conditions remain substantially the same both before and after the claimed appropriation. Montana Power Company can "reasonably exercise its rights" under the changed conditions prompted by additional upstream development, since no change in the exercise of its asserted

rights can reasonably be envisioned. See MCA 85-2-401 (1981).

When "conditions change as time passes, and the necessity for the use diminishes, to the extent of the lessened necessity the change enures to the benefit of subsequent appropriators having need of the use ... " Conrow v. Huffine, 48 Mont. 437, 138 P. 1094 (1914); see also Huffine v. Miller, 74 Mont. 50, 237 P. 1103 (1925). Where the use prompted by the additional waters would significantly expand or enlarge such subsequent appropriations, however, the benefit of such waters is made by way of additional appropriations. But see generally, Farmer Res. & Irr. Co. v. Fulton Irr. Ditch Co., 108 Colo. 482, 120 P.2d 196 (1941), Kaess v. Wilson, 132 Colo. 443, 289 P.2d 636 (1955), Grandy Ditch & es. Co. v. Hallenbeck, 127 Colo. 236, 255 P.2d 965 (1953), North Boulder Farmer's Ditch Co. v. Leggett Ditch & Res. Co., 63 Colo. 522, 168 P. 242 (1917) (abandoned waters revert to the stream in the order of the priorities thereon).

This same result obtains with respect to those hydroelectric units of Montana Power Company that are at least in some respect senior to the uses of Canyon Ferry. The uses attendant to these facilities can be protected only to the extent of their reliance on the water resource.

However, it does appear that this reliance has been to some extent altered by the operation of Canyon Ferry itself. That is, some of the flows of the Missouri that would otherwise have been utilized by Montana Power Company before the construction of Canyon Ferry are now captured and stored by the Bureau of Reclamation. As indicated elsewhere herein, the federal

government does not operate its facility in recognition of prior rights; it takes the waters of the Missouri so long as it has a place to put them.

To the extent that Montana Power Company's rights are already being infringed, it will not do to have this Applicant and others like him predicate additional adverse affect upon an existing continuing injury. The finger-pointing this approach suggests is belied by the substantive doctrine it serves to implement. A senior appropriator's rights are cumulative and not severable. City of Helena v. Rogan, supra.

The mere fact that the pattern of flows has been altered does not warrant a conclusion of adverse effect, however. A senior appropriator may have a right to compel the maintenance of flows such that there is a sufficient quantity of water at his historic place of need; but he is of course not compelled to maintain that use that is otherwise worthy of protection. See Cook v. Hudson, supra, Wesley v. United States Borax and Chemical Corporation, 78 N.M. 112, 428 P.2d 651 (1967); but see Spaulding v. Stone, 46 Mont. 483, 129 P. 327 (1913) (not incumbent on senior to make demand for use of water).

In the circumstances herein, this Applicant and others like him will not add to any alterations in flow so long as Canyon Ferry maintains its accustomed pattern of use. (The sharp rise and fall of high flow periods where spills occur at Canyon Ferry indicate that even substantial upstream development will only have a de minimus effect on uses predicated on high-flow waters). The hearings examiner cannot ignore the evidence to the

effect that Montana Power Company and the Bureau of Reclamation operate by agreement or concert to maximize the power benefits from the flow of the Missouri. Nor need one overlook what would be an entirely rational judgment upon the part of the Montana Power Company to forego maximum power production in any given year in return for "additional storage" and a more stable production of electrical power throughout the year in its public utility enterprise. Thus, even though the pattern of flows historically available to Montana Power Company had been disrupted by operations at Canyon Ferry, it does not follow that this variation amounts to an adverse effect, particularly where the Canyon Ferry operation results in a "net benefit" to Montana Power Company and there is no indication that this downstream appropriator would elect to treat such descriptions as an "adverse affect". This answers fully Montana Power Company's disagreements with so much of the Department's report that assumes satisfaction of the Bureau's rights equates with saturation of MPC's demands. (12)

An appropriator may not call the river where additional quantities of water will not reach him at his historic time and

12. The Montana Power Company's evidence in this regard was designed to show that spills at Canyon Ferry do not necessarily equate with spills at Cochrane. This variation may be relatively great in terms of the magnitude of spills, but the differential in the times of spills do not appear to be of a serious magnitude. Compare the Bureau of Reclamation hydrograph with MPC's average daily flows at Cochrane. Indeed, it would be difficult to envision a scheme of river management that could recognize such slight variations in most instances.

place of need. Raymond v. Wimslette, 12, Mont. 551, 31 P. 537 (1892). Nor can Montana Power Company claim protection now for the derivative benefits that accrue by a reregulation of Missouri River flows by Canyon Ferry as against all future upstream users. An appropriator's vested right to maintenance of the stream conditions at the time of his appropriation does not embrace any vested interest in the continuation of wasteful conditions on a stream, the principle of beneficial use being of paramount importance in the appropriation doctrine. Allen v. Petrik, 69 Mont. 373, 222 P. 451 (1924).

Alternatively, the hearings examiner concludes that so much of Montana Power Company's claim against upstream development that is predicated on the use of return flows from Canyon Ferry has been preempted by the federal purpose evident in the construction of Canyon Ferry. The manner of expression of federal interest is not important; whether it be the "bursting bubble" or the "shifting sands," where the intent is clear state law must yield. California v. United States, *supra*. The history of Canyon Ferry recited herein makes it clear that the function of Canyon Ferry was to regulate flows of the Missouri to satisfy the power company's rights so that upstream development might take place. Indeed, the Bureau of Reclamation was so confident of the prospective success of Canyon Ferry in this regard that Hebgen Reservoir, a regulating facility of the Montana Power Company, see Jeffers v. Montana Power Co., 68 Mont. 114, 217 P. 652 (1923), was predicated as the storage unit for a proposed massive irrigation project around Three Forks, Montana. The

implied premise was necessarily that such storage was available due to lack of need therefore on the part of the power company. See Senate Document 191 at pp. 63 and 64.

It would hardly due to further this federal interest to have the downstream power company convert the increased returns from the Bureau's use into additional demands on upstream sources. Montana Power Company in these circumstances has no vested interest in a Congressional choice of power revenues to recoup the capital expenditures reflected by Canyon Ferry, or in the use of a hydroelectric enterprise by the Bureau to fulfill the project's purposes.

The duty in all events of upstream user's then, is only to allow the volume of water reflected by the natural flow of the Missouri to reach MPC's hydroelectric facilities at such times that such flows are less than the turbine capacities of the same. To the extent that the Bureau is drafting from storage, upstream diversions can make use of natural flows as the necessary affect of the use of such stored waters is to augment the flows of the Missouri. During much of the year when the Missouri River exhibits relatively low flows then, this federally instituted exchange system fully satisfies the power company's

rights. (13) See generally, Figure 5, Department's Report.

(This figure is skewed to reflect only the better years of Missouri River flow. However, years of low flow will augment the use of storage at Canyon Ferry, and aid upstream users in this regard).

13. One can go even further in this general regard. To the extent that the Bureau's diversion patterns are necessary for its uses, any descriptions in the historic pattern of water availability resulting in water deprivation at the MPC facilities might simply result in a technical "taking", compensation therefore being unnecessary in view of the net benefit to MPC from the Canyon Ferry Project. See generally, United States v. Fuller, 409 U.S. 488 (1973). Ordinarily, when Congress exercises a federal power, the right of eminent domain is implicit if "necessary and proper" to the execution of that purpose. See United States v. Gettysburg Elec. Ry Co., 160 U.S. 668 (1896). The application of this principle in the present matter is problematic in view of the dictum in United States v. California, supra, to the effect that § 8 of the Reclamation Act authorizes the use of eminent domain by the federal government only to the same extent as a private person enjoys such power in the project state. But see United States v. Gerlach Livestock Co., supra; Ivanhoe Irrigation Project v. McCracken, supra; Ducan v. Rank, 372 U.S. 609 (1903).

Alternatively, it might be argued that the stabilization of stream flow by Canyon Ferry left Montana Power Company in a better position than before, and thus perforce this entity could reasonably exercise its rights under the changed conditions. See MCA 85-2-401 (1981). To the extent there is no claim against Canyon Ferry, there is no claim against upstream users diverting water not required at Canyon Ferry. However, Montana Power Company "rights" are not simply to sell electricity, but to use water to produce the same. To the extent, therefore, that material deprivation occurs to the appropriative interest in having this historic quantity of water being available at the historic time and place of need, it is perhaps immaterial that the interfering appropriator makes other water available and other times for the exercise of a new and "different" appropriation.

Neither of these problems need be resolved herein, however, since it otherwise appears that there is water available for this Applicant's use at least in some years.

The foregoing demonstrates that there will be, at least at times in some years, unappropriated water in the amounts this Applicant seeks and throughout the period during which the use of water is sought. No more need be decided and a limitation of diversions to such times as Cochrane spills is unwarranted in view of the waste at Canyon Ferry.

7. The uses of these Applicant's will not adversely affect the rights of prior appropriators. If times occur in the future where the aggregate demand on the water resource exceeds the supply, these Applicant's must perforce curtail their diversions in deference to senior demand. See MCA 85-2-401, 85-2-406, 85-2-312(1) (1981).

WHEREFORE, based on these findings of fact and conclusions of law, the following proposed orders are hereby issued.

APPLICATION NO. 15211-s41G

Subject to the terms, restrictions, and limitations described below, Application for Beneficial Water use Permit No. 15211-s41G is hereby granted to Gordon E. Lane to appropriate 500 gallons per minute up to 96 acre-feet per year for the irrigation of 40 acres more or less comprised of 10 acres in the NE1/4 and 30 acres in the SE1/4 of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The source of supply shall be the

Jefferson River, the waters thereof to be diverted at alternate points in the NE1/4 SW1/4 SE1/4 of Section 28, Township 2 North, Range 1 East, and in the SE1/4 SE1/4 NE1/4 of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The waters provided for herein shall not be diverted prior to April 15 of any given year nor subsequent to October 15 of any given year. The priority date for this permit shall be September 15, 1977, at 1:40 p.m.

This permit is expressly made subject to the following express conditions, limitations, and restrictions.

A. Any rights evidenced herein are subject to all prior and existing rights, and to any final determination of such rights as provided by Montana law. Nothing herein shall be construed to authorize diversions by the Permittee to the detriment of any senior appropriator.

B. The Permittee shall in no event cause to be diverted from the source of supply more waters than are reasonably required for the purposes provided for herein. At all times when water is not so required, the Permittee shall cause and otherwise allow said waters to remain in the source of supply.

C. Nothing herein shall be construed to affect or reduce the Permittees liability for damages that may be caused by the exercise of any of the rights evidenced by the Permit in this

matter. Nor does the Department in issuing any permit acknowledge any liability for damage, even if damage is the necessary and unavoidable consequence of the exercise of this permit.

APPLICATION NO. 11493-s41G

Subject to the terms, restrictions and limitations described below, Application for Beneficial Water Use Permit No. 11493-s41G is hereby granted to Jefferson River Acres to appropriate 100 gallons per minute up to 11 acre-feet per year for irrigation of 6 acres located in the SE1/4 of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The source of supply shall be the Jefferson River, the waters thereof to be diverted at a point in the SW1/4 SW1/4 SE1/4 of Section 28, Township 2 North, Range 1 East, all in Broadwater County. The waters provided for herein shall not be diverted prior to April 15 of any given year nor subsequent to October 15 of any given year. The priority date for this permit shall be February 28, 1977, at 10:40 a.m.

This permit is expressly made subject to the following express conditions, restrictions and limitations.

A. Any rights evidenced herein are subject to all prior and existing rights, and to any final determination of such rights as provided by Montana law. Nothing herein shall be construed to authorize diversions to the detriment of any senior appropriator.

B. The Permittee shall in no event cause to be diverted from the source of supply more waters than are reasonably required for the purposes provided for herein. At all times when water is not required, the Permittee shall cause and otherwise allow the waters to remain in the source of supply.

C. Nothing herein shall be construed to affect or reduce the Permittee's liability for damage that may be caused by the exercise of this Permit. Nor does the Department in issuing this permit acknowledge any liability for such damage, even if the same is the necessary and unavoidable consequence of the exercise of the rights evidenced herein.

NOTICE

This Proposal for Decision is offered for the review and comment of all parties of record. Objections and exceptions must be filed with and received by the Department of Natural Resources and Conservation on or before July 9, 1982.

DONE this 11th day of June, 1982.


Matthew Williams, Hearing Examiner
Department of Natural Resources
and Conservation
32 S. Ewing, Helena, MT 59620
(406) 449 - 3962

CASE # 

AFFIDAVIT OF SERVICE

PROPOSAL FOR DECISION

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

Cheryl Wallace, an employee of the Montana Department of Natural Resources and Conservation, being duly sworn on oath, deposes and says: That pursuant to the requirements of Section 85-2-309, MCA, on June 22, 1982, he deposited in the United States mail, "certified mail", an Order by the Department on the application by Gordon E. Lane, Application No. 15211-s41G, for a Permit to Appropriate Water, addressed to each of the following persons or agencies:

1. Gordon E. Lane, Box 476, Three Forks, MT 59752
2. Ray Tocci, Box 886, Three Forks, MT 59752
3. Ronald Waterman, Attorney, P. O. Box 1715, Helena, MT 59624
4. James Walsh, Montana Power Co., 40 E. Broadway, Butte, MT 59701
5. Bureau of Reclamation, Box 2553, Billings, MT 59103
6. T. J. Reynolds, Helena Area Office (inter-dept. mail)
7. Matt Williams, Hearings Examiner (hand deliver)
8. Scott Compton, Bozeman Field Office (inter-dept. mail)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

by Cheryl Wallace

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

On this 22 day of June, 1982, before me, a Notary Public in and for said State, personally appeared Cheryl Wallace, known to me to be the Typist, 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.

Judy K. [Signature]
Notary Public for the State of Montana

Residing at Montana City

My Commission Expires 3/1/85