

**BEFORE THE DEPARTMENT OF  
NATURAL RESOURCES AND CONSERVATION  
OF THE STATE OF MONTANA  
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**IN THE MATTER OF APPLICATION FOR                    )**  
**BENEFICIAL WATER USE PERMIT 41H-                )**           **PROPOSAL FOR DECISION**  
**11548700 BY PC DEVELOPMENT                    )**

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Pursuant to the Montana Water Use Act and to the contested case provisions of the Montana Administrative Procedure Act, and after notice required by Mont. Code Ann. §85-2-307, a hearing was held on March 18, 2003, in Bozeman, Montana, to determine whether a beneficial water use permit should be issued to PC Development, hereinafter referred to as "Applicant" for the above application under the criteria set forth in Mont. Code Ann. § 85-2-311.

**APPEARANCES**

Applicant appeared at the hearing by and through counsel, John E. Bloomquist. Neal Patrick Eller, Staff Engineer; Martin E. Gagnon, Senior Engineer II; and Michael B. Kaczmarek, Chief Geologist; all with Morrison-Maierle, Inc., and Michael E. Potter, President, PC Development, testified for the Applicant.

Objector Charles and Amelia Kelly appeared at the hearing and testified in their own behalf.

Objector Bryan Warwood appeared at the hearing in his own behalf to cross-examine witnesses who prefiled written testimony.

Objectors Archibald and Eleanor Alexander and the Sypes Canyon Water Rights Objector Group (41 Objectors, hereafter SCWROG) appeared at the hearing by and through counsel Holly Jo Franz. Alfred Avignone; Cindy Bowker; Roy Fencl; Kathleen Gallagher, Consulting Hydrogeologist; John Johaneck; Laura Johnson; Edward Leritz; Donald Smith; Larry Thayer; Jean Trombley; and Meredith Watts testified for the Sypes Canyon Water Right Objector Group.

Scott Compton, Manager, Bozeman Water Resources Regional Office of the Department of Natural Resources and Conservation (Department),

was called to testify by Objector Kelly; Russell Levens, Hydrogeologist, Department, was called to testify by the Sypes Canyon Water Right Objector Group.

#### EXHIBITS

Both Applicant and Objectors offered exhibits for the record in addition to those prefiled. Those exhibits submitted with prefiled testimony received no objections at hearing and are considered a part of the record. The exhibits listed below are those offered at hearing in addition to prefiled exhibits and are admitted into the record to the extent noted below.

Applicant offered one additional exhibit for the record. The Hearing Examiner accepted and admitted into evidence Applicant's Exhibit 3.

**Applicant's Exhibit AR3** is a large one-page map showing the area surrounding Applicant's project.

Objector Sypes Canyon Water Right Objector Group offered one additional exhibit for the record. The Hearing Examiner accepted and admitted into evidence Objector's Exhibit OG9<sup>1</sup>.

**Objector's Exhibit OG9** is five-page copy of a memorandum from Dr. John Bredehoeft to Kathy Gallagher.

#### PRELIMINARY MATTERS

The procedural format for the hearing was governed by the December 20, 2002, Prehearing Order. Therein the Department file, all prefiled testimony and attached exhibits were deemed a part of the record unless an objection was received and sustained. No objections were received to the Department file or prefiled testimony and exhibits, and they are considered a part of the record.

At hearing Objector Gallagher (Sypes Canyon Water Right Objector Group) offered an exhibit consisting of a copy of a memorandum from

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<sup>1</sup> Ruling on the admission of Exhibit OG9 is found in Conclusion of Law No. 4.

Dr. John Bredehoeft to Kathy Gallagher to which Applicant objected. The objection was taken under advisement and testimony allowed to continue. The exhibit was admitted for the reasons found in Conclusion of Law No. 4 below.

The Hearing Examiner informed the Parties that Judicial Notice would be taken of the Final Order in the matter of the *Petition for Establishment of the Sypes Canyon Controlled Groundwater Area No. 41H-115474* (hereafter Sypes Canyon Final Order - attached).

The Hearing Examiner, having reviewed the record in this matter and being fully advised in the premises, does hereby make the following:

### FINDINGS OF FACT

#### General

1. Application for Beneficial Water Use Permit 41H-11548700 in the name of PC Development and signed by Robyn Erlenbush of Autumn Ridge, LLC was filed with the Department on March 23, 2001. (Department file)
2. The Environmental Assessment (EA) prepared by the Department for these applications was reviewed and is included in the record of this proceeding.
3. Applicant seeks to appropriate 123 gallons per minute (gpm) up to 99.0 acre-feet (af) of water per year from groundwater. The proposed means of diversion and points of diversion are three wells. Well SC1 will not exceed 33 gpm and is located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ ; well SC3 will not exceed 40 gpm and is located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ ; and well SC2 will not exceed 50 gpm and is located in SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ ; all in Section 18, Township 01 South, Range 06 East, Gallatin County, Montana. The proposed purpose is multiple domestic up to 50.68 af per year and lawn and garden irrigation of 33.24 acres up to 48.32 af per year. The proposed multiple domestic place of use is 181 lots and proposed lawn and garden place of use is 33.24 acres all in the Autumn Ridge Subdivision in the S $\frac{1}{2}$  of Section 18, Township 01 South, Range 06 East,

Gallatin County, Montana. The proposed place of storage is a 0.93 acre-foot underground storage reservoir located in the S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ ; of Section 18, Township 01 South, Range 06 East, Gallatin County, Montana (Department file)

#### **Physical Availability**

4. The source of water for the proposed subdivision is an aquifer system in a complex sequence of alluvial fan deposits. The aquifer system under the Autumn Ridge Subdivision property and surrounding area is contained in a mixture of Quaternary and Tertiary-aged deposits. The deposits consist of alluvial sand and gravel lenses discontinuously and complexly interbedded with lenses of alluvial silt and clay as well as fine-grained silt and clay deposits of both wind blown and waterborne origin that separate the sand and gravel lenses. Applicant drilled wells to identify water bearing zones of the aquifer. Aquifer tests of those wells were conducted to measure the hydraulic properties of the zones controlling the flow of groundwater and to estimate the flow of groundwater under the property. Well SC1 was tested at a constant 50 gpm for 72 hours 49 minutes while 33 gpm is requested from this well. Well SC2 was tested at a constant 75 gpm for 24 hours and 30 minutes while 50 gpm is requested. Well SC3 was tested at a constant 60 gpm for 73 hours while 40 gpm is requested for SC3. The well tests show the 123 gpm flow rate is physically available. (Department file, testimony of Michael Kaczmarek)

5. Applicant performed aquifer tests to determine hydraulic properties of the zones controlling the flow of groundwater. Applicant wanted to base predictions on aquifer tests, in addition to existing studies where no actual testing had been done. Applicant estimates the groundwater flow through the deepest zone of the aquifer associated with the wells located on the Autumn Ridge property is 298-316 af per year based on the Applicant's interpretation of aquifer geometry, hydraulic gradient, and estimates of aquifer properties derived from their aquifer tests. Existing studies used measurements of Sypes Creek streamflow for one year to estimate aquifer recharge to be 452 af per

year. Objector's expert contends that until a determination of the aquifer's sustainable yield is completed, physical availability is not known. Objectors performed no actual testing to support their contentions. The volume requested by this application is physically available on an annual basis. (Department file, testimony of Michael Kaczmarek, Kathleen Gallagher)

### **Legal Availability**

6. Applicant proposes to use a portion of the 298-316 af per year of water that is flowing through the deep zone of the aquifer. Applicant argued it is only requesting 99 af per year from the deep zone of the aquifer, and that all the existing platted lots in the area will only *consume*<sup>2</sup> 173 acre-feet per year<sup>3</sup>. Applicant argues that the sum of 99 af and 173 af is less than the 298-316 af per year of water that is flowing through the deep zone of the aquifer. The existing diversionary demand on the area of potential impact has not been provided. Applicant's analysis using the *consumptive* demand of all platted lots in the area does not consider impacts of Applicant's proposed diversion on the demands of existing rights within the area of potential impact. Applicant projected the area of potential impact in the adverse affect discussion to be the cone of depression created by pumping the proposed wells, but the legal diversionary demands within the area of potential impact are not compared to the water physically available. There is no analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water, nor any information as to why the wells within the area of potential impact cannot make a legal demand on the water applicant proposes to divert. The water physically available in the deep zone has been estimated, but the existing legal demands within the area of

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<sup>2</sup> i.e., the lawn and garden irrigation portion

<sup>3</sup> 271 Sypes Canyon area lots between 1974-1993; 195 Sypes Canyon area lots since 1995; 181 lots=Autumn Ridge ~ 650 lots (Sypes Canyon area). 650 lots \* .266 af/lot lawn & garden use ~ 173 af.

potential impact have not been provided. Without the comparison and analysis of existing legal demands within the cone of depression caused by Applicant's pumping (i.e., the potential area of impact) to the water physically available, a determination of legal availability can not be made. (Department file, Sypes Canyon Final Order Finding of Fact No. 4, testimony of Michael Kaczmarek)

### **Adverse Effect**

7. Applicant's plan to control water use so the water right of a prior appropriator will be satisfied consists of multiple parts: 1) to meter production from each of the three wells; 2) to limit irrigation use on each lot; 3) to meter service to each lot; 4) to charge water users for water based on volume used; 5) to use storage, rotate well use, and limit simultaneous well use to reduce drawdown from the production wells. In addition, Applicant as a part of their plan, is proposing a water and sewer district be formed that covers the Autumn Ridge subdivision so the lot owners within the district can access public financial resources to get another source of water in the event water under this application becomes unavailable. (Department file, testimony of Martin Gagnon)

8. There are at least forty-six wells in the area experiencing problems, but the problems are not attributable to Applicant's well use since the Applicant's wells are not in use yet. One well is alleged to have been affected by Applicant's well testing, but that well owner was unwilling to come forth with his or her identity or any information. Other than well testing, Applicant's wells have not been used. Therefore, Applicant's wells could not have caused problems experienced by some well owners in the area except for possibly during the brief period of testing. Some area well owners had full use of their wells, but their ability to use their wells gradually decreased in the past three-four years. Other area well owners have had to curtail use or deepen wells in the 1980's and some in the 1990's. Owners of existing wells fear they will not be able to use their wells if this use is approved. Some of the wells with past problems are

approximately half a mile east of Autumn Ridge near the base of the mountains where the aquifer is not as deep. Applicant believes the wells in the shallower part of the aquifer, based on historical groundwater level fluctuations in the area, would be expected to experience problems during lower than usual precipitation and irrespective of whether Applicant's wells are permitted or not. A well owner located three-fourths of a mile east of Autumn Ridge attempted to deepen their well and make it useable without success. Area well owners believe, based on their own experiences, the area groundwater problems are related to the increasing number of wells in the aquifer, but offered no independent study to confirm their belief. (Testimony of Michael Kaczmarek, Kathleen Gallagher, Donald Smith, John Johaneck, Alfred Avignone, Meredith Watts, Ray Fencl, Ed Leritz, Sypes Canyon Final Order Finding of Fact No. 8)

9. The Sypes Canyon area is experiencing a drought indicated by four years of groundwater level decline associated with four years of below normal precipitation, beginning in 1997. (Department file, testimony of Michael Kaczmarek)

10. A concern of area well users is that use of groundwater stored in the lower portion of the aquifer will result in declining water levels in the upper zones where their wells are located. The upper and lower zones are vertically connected and water flows from the upper zones to the lower zones. The degree of connection is not well known. However, Applicant's aquifer tests show the vertical connection is less direct than the horizontal connection within the aquifer. Applicant monitored the shallow, intermediate, and deep aquifer zones during test pumping of the three proposed wells. After pumping SC1 over 72 hours, the pumping well had 226.8 feet of drawdown, and 37.7 feet of drawdown in the production zone 299 feet from the pumping well; 2 feet of drawdown was measured in an observation well in the intermediate zone 27 feet from the pumping well, and no impact was measured in the shallow zone 58 feet from the pumping well. Thus, there is a connection between the deep and intermediate aquifer zones, but no observed connection

between the deep and shallow zones. (Department file, testimony of Michael Kaczmarek, Kathleen Gallagher)

11. Some of the wells with past problems are approximately half a mile north of Autumn Ridge; another is approximately one mile southwest of Autumn Ridge. Applicant believes potential causes of the well problems in the area is not well density, but include the past four years of drought, completion of wells in low yield zones, excessive pumping of low yield wells, inadequate development and plugging of wells constructed with less efficient domestic well practices, and simple failure of older wells. Based on Applicant's interpretation of the potential causes of past well problems, existing groundwater appropriators would be expected to experience the same problems irrespective of whether Applicant's wells are permitted or not. One well owner located a half mile north of Autumn Ridge attempted to deepen their well to make it useable. Even with deepening, the well owner had to limit use to continue to access groundwater through their well. Well owners believe, based on their own experience, the problems are related to the increasing number of wells in the aquifer, but offered no independent study to confirm their belief. Some well owners have had to install sand filters because of sand appearing in their water; however, limited use was still available. Applicant contends these problems will persist even if Autumn Ridge uses are not allowed. (Department file, Sypes Canyon Final Order, testimony of Michael Kaczmarek, Cindy Bowker, Jean Trombley)

12. The area affected by a groundwater well is the area within the cone of depression caused by pumping the well or wells. Applicant projected drawdowns measured during their aquifer tests and concluded the radial extent of the cones of depression after 72-73 hours of pumping is expected to be 931.6 feet for well SC1 and 2,265.7 feet for well SC2. The results from the aquifer test of SC3 are not amenable to this type solution because the relatively short time for response at the observation well offers an unacceptable potential for error;

however, Applicant's expert believes proposed well SC3 will have a similar response to that of wells SC1 and SC2. Objectors contend the method used to project the radial extent of cones of depression is not consistent with the Applicant's interpretation of aquifer geometry. Objectors presented an alternative analysis in Exhibit OG9 to show the potential extent of cones of depression could be as much as four miles. Applicant proposes to take groundwater from the deep zone of the aquifer underlying the area. (Department file, testimony of Michael Kaczmarek

13. Objectors contend the upper and lower aquifer zones are connected and that removal of water from the lower aquifer zone will affect water levels in shallower zones. Applicant's aquifer testing shows the vertical connection to shallower zones is less direct than the horizontal connection in the lower aquifer zone. Existing wells in the area surrounding Autumn Ridge subdivision take water from intermediate and shallow zones of the same aquifer. Applicant did not determine how many wells are within the cones of depression of the proposed wells. Applicant did not determine total depth and pumping water level of wells within the cone of depression. Therefore, Applicant did not show those wells can be reasonably exercised according to their rights under Applicant's projections of cones of depression or objectors' alternative projections of cones of depression. (Department file, testimony of Michael Kaczmarek, Kathleen Gallagher)

#### **Adequacy of Appropriation Works**

14. The wells used to test the aquifer are completed so they can serve as the production wells. The water system will be a public water system that will service the domestic, irrigation and fire protection needs of the development. Water will be pumped from the three wells to a buried concrete water storage reservoir. The capacity of the storage reservoir is 300,000 gallons, including 180,000 gallons for fire protection. A booster station will pump water from the storage reservoir to the distribution system and provide system pressure not otherwise available due to the non-elevated reservoir location. Water

will be distributed throughout the Autumn Ridge subdivision by a network of 6-inch, 8-inch, and 10-inch water lines. The water system will be designed by a civil engineering design firm to meet all applicable requirements of the Montana Department of Environmental Quality's (DEQ) Circular No. 1 and industry standards. Each well will be metered and each lot in the subdivision will have metered service. The proposed means of diversion, construction, and operation are adequate. (Department file, testimony of Martin Gagnon)

### **Beneficial Use**

15. The proposed use is water for a public water system that will service the domestic, irrigation, and fire protection needs of the proposed subdivision. There are several existing subdivisions in the proposed area; such use is common throughout the state. The proposed purposes are beneficial uses of water. (Department file, testimony of Marin Gagnon)

16. The proposed flow rate for the domestic and irrigation purposes are based on field testing performed on the aquifer and the required volume for the purposes. The volume of water requested was calculated utilizing industry standards regarding water usage for a development of this nature. Domestic water use was estimated at 100 gallons per day per capita which is a quantity typically accepted by DEQ. The population of the proposed subdivision was estimated based on the 2000 Census which indicates the average household in Gallatin County has 2.46 people. Thus, average daily water need per domestic household is 250 gallons per day per household, or 50.68 acre-feet per year<sup>4</sup>. The irrigation demands were determined by multiplying the 33.24 acres to be irrigated<sup>5</sup> by the irrigation demand established in the Natural Resources and Conservation Service *Montana Irrigation Guide* and adjusted upward 3% for each 1000 feet above sea level for the place of use elevation. The annual irrigation volume for 33.24 acres is 48.32

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<sup>4</sup> (250 g/day\*181 lots\*365 days)/325851 g/af≈50.68 af

<sup>5</sup> (181 lots \* 8000 ft<sup>2</sup> per lot)/43560 ft<sup>2</sup>/acre≈33.24 acres

acre-feet<sup>6</sup>. The Department guideline for a domestic use including  $\frac{1}{4}$  acre lawn and garden is 1.63 acre-feet per domestic use<sup>7</sup>. The Department guideline is not adjusted for elevation and climatic areas. The requested combined annual volume of 50.68 for domestic use and 48.32 for irrigation use, 99 acre-feet per year or .55 acre-feet per lot, is reasonable. (Department file, testimony of Martin Gagnon, Scott Compton)

### **Possessory Interest**

17. Applicant, PC Development, as the developer for Autumn Ridge, LLC, has the written consent of the person with possessory interest, landowner Autumn Ridge, LLC, at the proposed place of use. The Applicant has possessory interest in the place of use. (Department file, testimony of Michael Potter)

### **Water Quality Issues**

18. Valid Objections relative to water quality were filed against this application; no objections relative to water classification or to the ability of a discharge permit holder to satisfy effluent limitations of his permit were filed. The objections state that elevated nitrate concentrations exist throughout the area, but the source of the elevated levels is not known. The high levels were documented in 1995; thus, they could not have been caused by Applicant's proposed use of water. Concern about lawn fertilizer leaching into the groundwater were voiced, but no factual information showing addition of Autumn Ridge lawns would exacerbate the nitrate levels in the area. Applicant's engineering consultant reviewed the use of deep production wells and aquifer pumping tests on Applicant's wells and found there is no information indicating the water quality of other area wells will be effected by pumping of Autumn Ridge wells. Applicant investigated on-sight sewage disposal systems and instead decided to use a public sewer system with off-sight disposal in an

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<sup>6</sup> 33.24 acres \* 1.453 af/ac $\approx$ 48.32 af

<sup>7</sup> 1 af/dm + (.25 acre) (2.5 af/ac) $\approx$ 1.63 af/dm use

area adjacent to the south boundary of the Autumn Ridge subdivision. Sewage will be treated so groundwater quality meets DEQ standards. Sewage disposal is subject to DEQ and Gallatin County approval and regulation. The water quality of prior appropriators will not be affected by the proposed use. (Department file, testimony of Michael Kaczmarek, Martin Gagnon)

### **Basin Closure Issues**

19. This project is within the Sypes Canyon Temporary Controlled Groundwater area. The purpose of the two-year temporary controlled area is to collect data to determine if the controlled designation should be modified or made permanent, or extended two more years to collect more data. The temporary closure does not prohibit applications for water use permits, but does place conditions on any permits issued during the controlled period. The conditions generally require well access for data collection, water measurement, and modification of water use in the event the Department receives an adverse effect complaint. (Department file, testimony of Scott Compton)

20. This project is within the Upper Missouri Basin Closure area for surface water. Objector SCWROG's expert corresponded with John Bredehoeft, Ph.D. Geology, regarding this application prior to the hearing. Dr. Bredehoeft indicated that the alluvial fan aquifer the subject of this application probably discharged as baseflow into the East Gallatin River under virgin conditions, and that water appropriated from the aquifer would either come from storage or from this baseflow. Dr. Bredehoeft further stated that the capture of this baseflow to the river will occur over a long period of time, but may not be noticed. Department expert stated in his August 23, 2002, memorandum that the cones of depression of the applicant's wells will continue to expand until they impinge on the discharge boundary of the aquifer (the East Gallatin River). Applicant's adverse effect analysis projects the expansion of the radius of the cone of depression for well SC#1 will expand to 1150 feet after 20 years of use at the

average flow rate. This expanded cone of depression does not reach the East Gallatin River in 20 years. Dr. Bredehoeft was not available for cross-examination at hearing and input regarding correspondence between SCWROG expert and Dr. Bredehoeft was through Objector's expert. (Department file, testimony of Michael Kaczmarek, Kathleen Gallagher, Exhibit AR3)

Based on the foregoing Findings of Fact and the record in this matter, the Hearing Examiner makes the following:

#### CONCLUSIONS OF LAW

1. The Department has jurisdiction to issue a provisional permit for the beneficial use of water if the applicant proves the criteria in Mont. Code Ann. § 85-2-311 by a preponderance of the evidence. Mont. Code Ann. § 85-2-311(1).

2. A permit shall be issued if there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, and in the amount requested, based on an **analysis** of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water; the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state reservation will not be adversely affected based on a consideration of an applicant's **plan** for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied; the proposed means of diversion, construction, and operation of the appropriation works are adequate; the proposed use of water is a beneficial use; the applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use; and, if

raised in a valid objection, the water quality of a prior appropriator will not be adversely affected, the proposed use will be substantially in accordance with the classification of water, and the ability of a discharge permit holder to satisfy effluent limitations of a permit will not be adversely affected. Mont. Code Ann. § 85-2-311 (1) (a) through (h).

3. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate, and in the amount requested. See Mont. Code Ann. § 85-2-311(1)(a)(i). See Finding of Fact Nos. 4, 5.

4. Objector Gallagher offered Exhibit OG9 at hearing. Exhibit OG9 includes a discussion of the potential area of impact. Applicant objected to the admittance of this five-page memorandum because it was not disclosed prior to the hearing and the author of the exhibit was not present for cross-examination. The reason the exhibit could not be produced earlier is that the exhibit is a review of the prefiled testimony of Applicant's hydrogeologist and Objector saw no opportunity in the hearing procedure specified at the prehearing conference for introduction of evidence of this type. In addition, the first opportunity for the Exhibit author to make the review was two nights before the hearing. In response to the objection Counsel pointed out that hearsay is allowed in this contested case hearing and this Exhibit is hearsay. Applicant did rebut the conclusions in Exhibit OG9. Applicant is not prejudiced by the late disclosure of Exhibit OG9, and Exhibit OG9 is **ADMITTED** into the record. The Hearing Examiner will accord Exhibit OG9 appropriate weight taking into account the unavailability of the Exhibit author for cross-examination and the short time available to review to the Exhibit. Legal availability is the comparison between the water physically available at the point of diversion and the existing demands in the source of supply throughout the area of potential impact. Mont. Code Ann. §§ 85-2-311(1)(a)(ii)(A), (B), (C). Applicant has not determined the existing demand for the potential area of impact. Objectors and well owners in

the area have been affected in recent years, but whether decreased water levels and flows are the result of the current drought or development is uncertain. Legal availability is determined by analysis of non-drought periods. See *In The Matter of Application 41B-074154 by Johnson*, Proposal for Decision, (1990). Applicant has shown in non-drought years water is physically available, but has not determined the existing legal demand within the projected cone of depression. Therefore, Applicant has not proven water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, and in the amount requested, based on an **analysis** of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water. Thus, the Applicant has not shown the criteria met by a preponderance of the evidence. See *In The Matter of Application 76LJ-062935 by Crop Hail Management*, Proposal for Decision, (1990). Mont. Code Ann. § 85-2-311(1)(a)(ii). See Finding of Fact No. 6.

5. Applicant's plan for water use to assure that prior rights are satisfied is not adequate. Taking the amount of water requested from the deep zone of the aquifer will not take water away from senior well owners with wells outside Applicant's cone of depression. However, the extent of the cones of depression of the applicant's wells is a matter of contention among the experts. Also, with the number of wells that have experienced problems in this area in the past, an investigation of the impacts on each well within the cones of depression of the wells is needed to show whether or not rights of senior water right holders with properly constructed wells can be reasonably exercised if Applicant's permit is granted. The wells to the east of Applicant's proposed subdivision located where recharge from the Bridger Mountains flows through the portion of the aquifer will not be affected by use of the Applicant unless the cone of depression extends to the well. Applicant has projected the cones of depression and subsequent area of

effect of the proposed wells. However, analysis of the extent of the effects on existing wells within the cone of depression is missing and the projected extents of the cones of depression are uncertain. The record does not contain an evaluation of the impact on wells within the cones of depression. Without such an evaluation in an area experiencing problems it is impossible to determine that the proposed water use will not adversely effect existing wells such that they can continue to pump water. There is no analysis showing that existing wells within the cones of depression of the applicant's wells will not be adversely affected because they were not constructed to adequate depths into the aquifer or any other explanation of why such adverse effect is not the result of interception with Applicant's cone of depression. Applicant has not shown that at least in some years, no legitimate calls for water will be made on it by a senior appropriator. *See In The Matter of Application 76G-060662 by Hadley, Proposal for Decision, (1988)*. Even assuming Applicant stops diverting as the result of a call, there is no information showing when or if the senior's use would be restored. Here, the record does not locate each Objector's well, or each well in the potential area of impact. At least forty-six wells in the area have experienced problems. It is the Applicant's burden by a preponderance of evidence to show that the proposed use will not adversely effect a senior user. Objectors informed Applicant of the existence of their wells and problems with their wells. Applicant projected the size of the cone of depression and depth of drawdown within the cone. Applicant did not determine the extent of the proposed drawdown on the wells within the cone of depression. Without this information, Applicant's plan for exercise of any permit does not show existing rights can continue to be reasonably exercised. The Applicant has not proven that the water rights of prior appropriators under existing water rights, certificates, permits, or state reservations will not be adversely affected when conditioned according to this plan. Mont. Code Ann. § 85-2-311(1)(b). See Finding of Fact Nos. 7, 8, 9, 10, 11, 12, 13. 20.

6. The Applicant has proven that the proposed means of diversion, construction, and operation of the appropriation works are adequate. Mont. Code Ann. § 85-2-311(1)(c). See Finding of Fact No. 14.

7. The Applicant has proven the proposed use of water is a beneficial use of water for which Applicant can establish a water right under a permit. Mont. Code Ann. § 85-2-311(1)(d). See Finding of Fact Nos. 15, 16.

8. The Applicant has proven a possessory interest in the property where water is to be put to beneficial use. Mont. Code Ann. § 85-2-311(1)(e). See, Finding of Fact No. 17.

9. Objectors submit that there are a number of areas of elevated nitrate either due to septic or natural causes. Objectors did not provide data to confirm that these elevated levels are affecting their use or that additional subdivision use would affect their ability to use the groundwater because the water quality would be adversely affected. Applicant's consultants reviewed aquifer parameters and the intended subdivision use of the water and found no reason to believe the water quality of a prior appropriator would be adversely affected by Applicant's proposed use. Although Applicant did not present facts and information to determine the actual impact on the groundwater quality, the review by a licensed engineer was adequate to meet the minimal proof set in the Objections. No objection was raised as to the proposed use not being in accordance with a classification of water, or as to the ability of a discharge permit holder to satisfy effluent limitation of a permit. Mont. Code Ann. § 85-2-311(1)(f), (g), (h). See, Finding of Fact No. 18.

10. The proposed Autumn Ridge subdivision is within the Sypes Canyon Temporary Controlled Groundwater Area and the Upper Missouri Basin Closure. *Petition for Establishment of the Sypes Canyon Controlled Groundwater Area No. 41H-115474*, Final Order, (2002), Mont. Code Ann. §§ 85-2-342, 343 (attached). New wells are allowed within the Sypes Canyon controlled area if they meet the requirement of the Sypes Canyon Final Order. The Department may not process or grant an

application for a permit to appropriate water within the upper Missouri River basin until the final decrees have been issued by the Montana Water Court. See Mont. Code Ann. § 85-2-343(2)(b). The Upper Missouri Basin closure prohibits the Department from processing or granting a permit to appropriate water within the Upper Missouri Basin until the final decrees have been issued in accordance with Mont. Code Ann. § 85-2 Part 2. However, appropriations from groundwater that are not immediately or directly connected to surface water, or appropriations for domestic or municipal water use are allowed. Mont. Code Ann. §§ 85-2-342, 343. Direct or immediate connection to surface water is interpreted by DNRC to be a well that induces infiltration from surface water. See Bud Clinch Letter to Donna Burns, Administrator, Meagher County Conservation Board, paras. 2, 3, (April 18, 2002). There may be a connection between the aquifer and the East Gallatin River, but the water is not immediately or directly connected to the East Gallatin River. Exhibit OG9 suggests that impacts to the East Gallatin River will be difficult to measure and may only occur in the future. Applicant projected the cone of depression for well SC#1 will expand 123% after 20 years of use. Applying the same percentage to well SC#2 expands the cone of depression after 20 years to about 2800 feet. The East Gallatin River is about 8,000 feet from Applicant's nearest well. Thus, it does not appear likely that the cone of depression will intercept the East Gallatin River at any time soon. Therefore, this application is for water that is not immediately or directly connected to the East Gallatin River. In addition, this application is for multiple *domestic* uses. The closure statute does not define "domestic" or "municipal", but the "multiple domestic" purpose does not fall under these exemptions to the closure according to unwritten Department procedure. The Missouri River Closure does not apply to this Application because it has not been shown the cone of depression induces water from the flow of the East Gallatin River. The Bozeman Water Resources Regional Office has standard conditions applied to groundwater permits issued within the Sypes Canyon

Temporary Controlled Area. Any permit issued would require at a minimum the standard conditions be applied. Mont. Code Ann. §§ 85-2-342(3), 343(2)(c). See, Finding of Fact Nos. 19, 20.

11. The Department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria for issuance of a beneficial water use permit. Applicant has not met the criteria for issuance of a permit. Mont. Code Ann. § 85-2-312. See Conclusions of Law Nos. 4, 5 above.

**WHEREFORE**, based upon the foregoing Findings of Fact and Conclusions of Law, the Hearing Examiner makes the following:

#### **PROPOSED ORDER**

Application for Beneficial Water Use Permit 41H-11548700 By PC Development is hereby **DENIED**.

#### **NOTICE**

This Proposal for Decision may be adopted as the Department's final decision unless timely exceptions are filed as described below. Any party adversely affected by this Proposal for Decision may file exceptions and a supporting brief with the Hearing Examiner and request oral argument. Exceptions and briefs, and requests for oral argument must be filed with the Department by June 30, 2003, or postmarked by the same date, and copies mailed by that same date to all parties.

Parties may file responses and response briefs to any exception filed by another party. The responses and response briefs must be filed with the Department by July 21, 2003, or postmarked by the same date, and copies must be mailed by that same date to all parties. No new evidence will be considered.

No final decision shall be made until after the expiration of the above time periods, and due consideration of *timely* oral argument requests, exceptions, responses, and briefs.

Dated this 10<sup>th</sup> day of June, 2003.

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Charles F Brasen  
Hearings Officer  
Water Resources Division  
Department of Natural Resources  
and Conservation  
PO Box 201601  
Helena, Montana 59620-1601

Att: Sypes Canyon Final Order

**CERTIFICATE OF SERVICE**

THIS CERTIFIES THAT A TRUE AND CORRECT COPY OF THE PROPOSAL FOR DECISION WAS SERVED UPON ALL PARTIES LISTED BELOW ON THIS 10TH DAY OF JUNE, 2003 BY FIRST CLASS U.S. MAIL.

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