



## EXHIBITS

Hearing Examiner Eggart accepted and admitted into evidence the following exhibits submitted by the Applicant with the July 10, 2009, pre-filed testimony of Mr. Carstensen and Mr. Nicklin, and at the July 17, 2009, hearing:

- **Consent to Entry of Administrative Order:** Dated July 15, 2009. Signed by Attorney for Town of Manhattan, Attorney for Montana Trout Unlimited, Attorney for Montana Department of Fish Wildlife and Parks, and Attorney for Francis Kelly, Deloris Kelly, Walt Sales and Association of Gallatin Agricultural Irrigators.
- **Exhibit A:** Map illustrating Aquifer Recharge and Retired Acreage;
- **Exhibit 4:** April 2009 Application to Change a Water Right Town of Manhattan Pioneer Crossing, Centennial Village on Behalf of the Baker Ditch Company;
- **Carstensen Exhibit 5:** Pioneer Crossing and Centennial Village Consumptive Use calculations;
- **Carstensen Exhibit 5:** Memorandum RE: Manhattan Wastewater Treatment Facility;
- **Nicklin Exhibit B, Figure B-1:** Model illustrating cone of depression defined in original application as developed by Gaston Engineering; Ground water simulation model illustrating cone of depression for pumping only developed by Nicklin Earth & Water; and Ground water model illustrating cone of depression for pumping and augmentation recharge developed by Nicklin Earth & Water;
- **Nicklin Exhibit B, Figure B-2:** Model illustrating Comparison of Points of Diversion Potential Affected Area;
- **Nicklin Exhibit B, Table B-1:** Water Rights and Points of Diversion within Potential Zone of Influence;
- **Nicklin Exhibit 5:** Copy of Table 1 *Revised* – Comparison of Available Water Column Versus Projected Drawdown;
- **Nicklin Exhibit 6:** Copy of Depletion Simulation Assessment Summary

Hearing Examiner Bramblett accepted and admitted into evidence the following Affidavits provided by Applicant in its October 28, 2009, Response to Order Requesting Clarification Regarding Wastewater Returns:

- **Affidavit of John Carstensen**
- **Affidavit of Dr. Michael Nicklin**

- **Affidavit of Robert Seamons RE: Wastewater Discharge**

Exhibits submitted by the Applicant at the September 4, 2008, contested case hearing previously incorporated into the record are listed in the Department's Proposal for Decision dated December 9, 2008. (Attachments A and B)

Hearing Examiner Bramblett also admitted into evidence the exhibits and attachments to the Applicant's exceptions and from the February 25, 2009, oral argument, which are contained in the Department's file.

### **PRELIMINARY MATTERS**

The following is a summary of the preliminary matters relevant to the July 17, 2009, hearing. Preliminary matters relevant to the September 4, 2008, contested case hearing and February 25, 2009, oral argument are discussed in the Department's Proposal for Decision dated December 9, 2008, and Final Order dated April 6, 2009. **A complete understanding of this case requires review of that Proposal for Decision and Final Order.** (Attachments A and B).

Application for Beneficial Water Use Permit 41H-30021840 (Application) in the name of the Town of Manhattan (by Vidar Companies, Inc.), and signed by Anthony M. Haag, Mayor, was filed with the Department on April 28, 2006. This is not a HB 831 (2005) application. It is an appropriation for ground water under an exception within the Upper Missouri River Basin Closure set forth in §§ 85-2-342 and 343, MCA

A contested case hearing was held before Hearing Examiner Jolyn Eggart regarding the Application on September 4, 2008. Following the hearing, Hearing Examiner Eggart issued a Proposal for Decision on December 9, 2008. The Proposal for Decision proposed to deny the Application. (Attachment A)

On December 30, 2008, the Applicant filed exceptions to the Proposal for Decision. Department Hearing Examiner David Vogler was appointed to consider Applicant's exceptions. On February 25, 2009, an oral argument hearing was held before Hearing Examiner Vogler regarding Applicant's exceptions to the Proposal For Decision. A Final Order rejecting Applicant's exceptions and denying Permit Application 41H-30021840 was entered by Hearing Examiner Vogler on April 6, 2009. (Attachment B)

The Applicant filed a *Petition for Judicial Review* of the *Final Order* in Montana's Eighteenth Judicial District Court on May 6, 2009. On June 10, 2009, the parties executed a

*Stipulation for Remand Order and Order of Dismissal* (Stipulation). Pursuant to the terms of the Stipulation the Applicant's *Petition for Judicial Review* was dismissed without prejudice, the matter was remanded to the Department, and the administrative record was reopened to receive additional evidence from the Applicant in support of Permit Application 41H-30021840. Furthermore, pursuant to the Stipulation, the Department's Final Order of April 6, 2009, was vacated.

On June 24, 2009, Hearing Examiner Eggart was appointed by the Department to conduct a hearing and receive additional evidence regarding the Application. On July 1, 2009, Hearing Examiner Eggart conducted a telephonic prehearing conference with the parties. On that same date Hearing Examiner Eggart issued a *Prehearing Conference Report and Scheduling Order*, in which a hearing was scheduled in this matter for July 17, 2009.

On July 10, 2009, the Applicant submitted written testimony from Mr. Carstensen and Mr. Nicklin. On July 15, 2009, Department staff expert Mr. Levens issued a memorandum in which he addressed issues regarding the written testimony and made recommendations for further clarification by the Applicant at the hearing.

On July 17, 2009, an evidentiary hearing was conducted in Bozeman, at which time the Applicant submitted additional evidence and witness testimony in support of its Application. As stated on the record and as noticed to the parties, this hearing was the time and place for the Applicant to present any and all written and oral evidence in addition to that previously submitted to the Department that it wanted the Department to consider in this matter in determining whether the Applicant proved the statutory criteria found in § 85-2-311, MCA, by a preponderance of evidence.

At the conclusion of the hearing, Hearing Examiner Eggart requested the Applicant submit proposed findings of fact and conclusions of law. The Applicant submitted proposed findings on July 29, 2009. However, the Applicant's proposed findings failed to cite to the record for support.

On September 8, 2009, Hearing Examiner Bramblett substituted for Hearing Examiner Eggart. Upon review of the record, and review of *Applicant's Proposed Amended Findings*, Hearing Examiner Bramblett ordered the Applicant to re-submit its proposed findings and conclusions with references to the record by order dated September 25, 2009. On October 13, 2009, Applicant submitted its *Applicant's Supplemental Findings of Fact and Conclusions of Law*.

Finally, on October 22, 2009, Hearing Examiner Bramblett issued an *Order for Clarification of Wastewater Returns to the Gallatin River*. The Applicant filed its *Response to Order Requesting Clarification Regarding Wastewater Returns* on October 28, 2009.

Official notice is taken of all documents in the Department's file for this Application, including those exhibits contained within the Department files from the September 4, 2008, contested case hearing, the February 25, 2009, oral argument and the July 17, 2009, evidentiary hearing and the Applicant's responses to the post-hearing orders regarding clarification.

Being well and fully advised, the Hearing Examiner makes the following Findings of Fact (FOF) and Conclusions of Law (COL).

## **FINDINGS OF FACT**

### **General**

Findings of Fact 1 through 4, and 6 through 32 of the Proposal for Decision are adopted in their entirety. (Attachment A) Finding of Fact 5 from the Proposal for Decision is hereby amended to provide:

5. In the Application and as noticed, the Applicant requests a ground water appropriation at the rate of 575 gallons per minute (gpm) and up to 560 acre-feet (ac-ft) of water per year. However, the Applicant subsequently clarified that it will only divert 256.11 ac-ft/yr (132 ac-ft/yr(lawn and garden irrigation) + 124.11 ac-ft/yr(domestic and commercial potable) = 256.11 ac-ft/yr), of which 138.21 ac-ft/yr will be consumed (132 ac-ft/yr (132 ac-ft/yr x 100%) + 6.21 ac-ft/yr (124.11 ac-ft/yr x 5%) = 138.21 ac-ft/yr), and 117.90 ac-ft/yr will be discharged to surface water as wastewater returns. Because the Applicant's appropriation was reduced, a new or amended Application was not requested by the Department or required. The proposed period of diversion is January 1 through December 31, inclusive each year. The requested appropriation will be used for municipal uses (domestic, commercial, lawn and garden irrigation, and fire protection) in the proposed Pioneer Crossing subdivision, located in the NE1/4NW1/4SW1/4, Section 3, Township 1 North, Range 3 East, and Centennial Village subdivision located in the SE1/4SE1/4NE1/4, Section 3, Township 1 North, Range 3 East, near the town of Manhattan, Gallatin County, Montana. The subdivisions are located about 1.75 miles southwest of the Gallatin River. Pioneer Crossing and Centennial Village subdivisions are part of a common Planned Unit Development. (Department file; Miller Testimony)

### **Physical Availability**

Findings of Fact 33 through 42 of the Proposal for Decision are adopted in their entirety.  
(Attachment A)

### **Legal Availability**

I have determined it would be disjunctive and confusing to amend certain Findings of Fact, strike other Findings of Fact, and adopt new Findings of Fact regarding Legal Availability in arriving at my Final Order. In an effort to make comprehensive and clear Findings of Fact regarding Legal Availability, I have determined that it is appropriate to strike all of the Findings of Fact in the Proposal for Decision regarding Legal Availability. Accordingly, Findings of Fact 43 through 50 under Legal Availability in the Proposal for Decision are hereby stricken. I now make the following new, comprehensive findings of fact regarding Legal Availability. (It should be noted, however, that Findings of Fact 43, 44, 45, and 46 in this Final Order are identical to Findings of Fact 43, 44, 46, and 47 in the Proposal for Decision)(Attachment A)

43. According to published and recognized information, the Gallatin Valley encompasses an area of about 540 square miles in the eastern half of the Three Forks structural basin, and intermontane basin in southwestern Montana. The Gallatin Valley was filled with as much as 6,000 ft of Tertiary-and Quaternary-age sediments consisting of boulders, cobbles, sand, silt, clay, and volcanic ash. (Noble, *et al.*, 1982, p. 71). The lowermost unit of valley-fill material is composed of Tertiary sediments, consisting mostly of sandstone, siltstone, claystone, and volcanic ash. The upper Tertiary sediments consist mostly of conglomerate, sandstone, siltstone, and claystone of fluvial origin. Bedrock underlying the valley-fill deposits in the Gallatin Valley and exposed in the surrounding areas consist of metamorphic, sedimentary, and volcanic rocks ranging in age from Precambrian through Cretaceous. (Department file; Technical Report to Application, p. 3 of 23)

44. According to published and recognized information, the source aquifer discharges to the Gallatin River along a reach beginning east of Manhattan to Logan, MT. Near Logan, steeply dipping bedrock outcrops at the land's surface thus forming a barrier to ground water flow and causing discharge from the source aquifer to the Gallatin River. (Hackett, *et al.*, 1960). A ground water resource study was conducted by Hackett and others, which included the Manhattan area. The report referenced a test well (A2-2-33da) drilled in 1952, located about 1 mile northeast of this proposed project. The United States Geological Survey (USGS) well penetrated 55 feet of Quaternary alluvium overlying variable Tertiary strata to a total depth of

450 feet. Two principle water-bearing zones were encountered: 32-73 feet bgs and 215-300 feet bgs. The static water level for the upper zone was 32 feet bgs, while the static water level for the lower zone was 12 feet bgs, indicating the lower zone is confined and hydraulically separated from the upper zone. (Department file; Technical Report to Application, p. 3 of 23)

45. Applicant estimated the zone of influence using AQTESOLV, a generally recognized aquifer test analysis software. Applicant used a specific yield value of 0.04, a typical conservative value for an unconfined aquifer. Applicant stated that the zone of influence, defined as that area resulting in 0.01 feet of drawdown, was calculated to extend 13,350 feet from the pumped well. (Department file; Technical Report to Application, pp. 16-19 of 23)

46. Tertiary deposits in this area were found by the Applicant to be likely heterogeneous with boundaries along the northern portion of the zone of influence (i.e. Horseshoe Hills). A water right database search conducted by Applicant in 2006 found 137 ground water water rights located in the projected zone of influence, excluding the Horseshoe Hills portion due to its no-flow/low-flow boundary consisting of Paleozoic belt series Precambrian rock. Applicant states some of the records were not complete. Wells that did not indicate a depth and were not described as pit or surface water were assumed to be deeper than 140 feet. For domestic use, Applicant assumed a volume of 1.5 ac-ft, 0.5 ac-ft for stock use, and 2.5 ac-ft/acre for irrigation use. (Department file; App. F to Application; Technical Report to Application, pp. 16-19 of 23)

47. Applicant maintains that the 137 wells the Applicant originally projected as being within the zone of influence of its proposed use overstates the number of wells that can be affected by draw-downs of 0.01 feet. The Applicant's original analysis omitted 60 of the 137 wells from further review, as they were determined to be developed in hydraulically isolated aquifers, or beyond the hydraulic boundary of the Gallatin River. The Applicant maintains that its entire original analysis substantially understates the specific yield and transmissivity of the subject aquifer. When more representative numbers of specific yield and transmissivity are incorporated into the analysis as argued by the Applicant, I find that only 47 wells are within the zone of influence of the proposed use, meaning that only 47 wells would experience a drawdown of at least 0.01 feet. (Nicklin Testimony, Levens Report, Uthman email)

48. The Applicant further analyzed the effects of its proposed use on other groundwater appropriators using a Darcy flux methodology refined by the Applicant's computer model of this aquifer. The Darcy flux methodology is a well-accepted hydrogeologic technique for evaluating groundwater supplies. (Nicklin Testimony) According to the Applicant's analysis there are

2,172 ac-ft of water moving annually through the computed zone of influence of this well. The total amount of ground water claimed by existing groundwater users is 1,186 ac-ft/yr as calculated by the Applicant. (Nicklin Testimony, Attachment B-1, Levens Report) Mr. Levens questioned how the Applicant assigned volumes to those water right certificates for wells that did not have an assigned volume on the certificate of water right. Mr. Levens opined that the Applicant should either use an estimated volume of 3.5 ac-ft/yr for wells without an assigned volume or explain why another volume was appropriate. (Levens Report) In response, Mr. Nicklin testified that a volume of 1.5 ac-ft/yr was used for those wells without an assigned volume. Mr. Nicklin further testified that when a volume of 3.5 ac-ft was used for those wells without an assigned volume, the total existing legal demand would increase to 1,194 ac-ft/yr. (Nicklin Testimony) For purposes of this decision, I have relied on the Applicant's corrected calculations assigning 3.5 ac-ft/yr to wells without an assigned volume. Accordingly, of the 2,172 acre feet of ground water physically available the existing legal demand is 1,194 ac-ft/yr, leaving 978 ac-ft/yr legally available.

49. The amount of ground water that is legally available is substantially greater than the 256.11 ac-ft/yr that the Applicant proposes to appropriate under this Application. I find that the Applicant has proven by a preponderance of the evidence that ground water is legally available.

50. During his review of the Application, Mr. Uthman determined the aquifer is not hydraulically connected to surface water within the zone of influence and that induced surface water infiltration (reverse hydraulic gradient) cannot occur as a result of the proposed production wells. Mr. Uthman opined, and the Applicant acknowledges, the complexities of knowing with a precise degree the hydraulic connection within this geographic area. However, pumping of these wells will result in long-term depletions to surface water flows in the Gallatin River if not mitigated. The proposed appropriation will capture water otherwise discharging to the Gallatin River. (Department file; Uthman Memo, dated May 10, 2006)

51. The Applicant acknowledges and the evidence establishes that the Applicant's proposed ground water pumping will result in depletions to surface water on the Gallatin River, Lower Camp Creek, Randall Creek, and the Backlin Ditch. (Levens Report, Nicklin Testimony, Nicklin 6)

52. The Applicant provided uncontroverted testimony that there are no senior surface water appropriators below the estimated area of depletion on Lower Camp Creek or Randall Creek. (Nicklin Testimony) Review of Department records confirms that while there are water rights on

both Randall Creek and Camp Creek, there are no water rights with points of diversion on the affected reaches of either. See *infra* Granite Ditch Co. v. Anderson and COL 13.

53. The Applicant did not analyze or provide information regarding senior surface water rights on the affected reach of the Gallatin River. However, the Applicant generally recognized that there are irrigation season surface water rights and non-irrigation season surface water rights such as FWP Murphy rights on the Gallatin River and hydropower rights on the Missouri below the estimated area of depletion.

54. Under the specific facts of this case, the Applicant's failure to analyze existing surface water rights does not preclude a finding that surface water is legally available, so long as the Applicant offsets or mitigates all surface water depletions caused by its proposed use.

55. The Applicant used a computer model to estimate net depletions caused by its ground water withdrawals to surface water, which analyzed the effects of its proposed use on the Gallatin River, the Backlin Ditch, Lower Camp Creek and Randall Creek. (Nicklin Testimony, Exhibit Nicklin 6, Exhibit 4 Table 4) The Applicant's Exhibit Nicklin 6 (hereinafter "Depletion Simulation Assessment Summary") estimates net depletions caused by its proposed ground water pumping without mitigation, with mitigation through its proposed infiltration gallery, and with mitigation through its proposed infiltration gallery as well as wastewater returns. (Nicklin 6) The Applicant's proposed mitigation infiltration gallery and plan for wastewater returns are discussed in detail under Adverse Effect.

56. The Applicant's Depletion Assessment Summary establishes that the projected surface water depletions will be eliminated through its mitigation infiltration gallery and plan for wastewater returns. As discussed in further detail under Adverse Effect, the Applicant's mitigation infiltration gallery and wastewater returns will offset depletions to the Gallatin River in the amount of surface water depleted during the year round time period of the depletions, and in the location where those depletions will occur. Thus, water may be considered legally available both during the irrigation season and the non-irrigation season (taking into account both instream flow rights such as Murphy Rights, and downstream hydropower rights).

57. The Applicant has established that surface water is legally available upon implementation of its proposed mitigation infiltration gallery and plan for wastewater returns so long as both are operated in the manner provided for as conditions in this Final Order.

## **Adverse Effect**

I have determined it would be disjunctive and confusing to amend certain Findings of Fact, strike other Findings of Fact, and adopt new Findings of Fact regarding Adverse Effect in arriving at my Final Order. In an effort to make comprehensive and clear Findings of Fact regarding Adverse Effect, I have determined that it is appropriate to strike all of the Findings of Fact in the Proposal for Decision regarding Adverse Effect. Accordingly, Findings of Fact 43 through 50 under Adverse Effect in the Proposal for Decision are hereby stricken. I make the following new, comprehensive findings of fact regarding Adverse Effect. (It should be noted, however, that Findings of Fact 58, 59 and 63 in this Final Order are identical to Findings of Fact 51, 52, and 54 respectively in the Proposal for Decision)(Attachment A).

58. Applicant estimated the potential effects to area ground water wells using AQTESOLV, which showed that the drawdown and distance measured from the pumped well would be 2 feet at 5,000 feet; 3 feet at 4,100 feet; and 4 feet at 3,500 feet, for a pump rate of 347 gpm at 365 days of continuous pumping in the deep aquifer. Applicant evaluated only 347 gpm even though the requested flow rate is 575 gpm. Applicant states that observation wells #3 and #4 did not show more than 0.2 feet of drawdown at approximately 2,200 feet from the pumped well. Observation well #5 did not show more than 0.6 feet of drawdown at approximately 1,100 feet from the pumped well. (Department file; Fig. 3.2 and 3.5 of Application; Technical Report to Application, pp. 19-22 of 23)

59. According to Applicant's estimates, deep wells<sup>1</sup> (140 feet-422 feet bgs (below ground surface)) will experience approximately 2-4 feet of drawdown; shallow wells (30 feet-80 feet bgs) will not be affected; and intermediate wells (100 feet-140 feet bgs), located near the pumped well, could experience up to 4 feet of drawdown. Applicant asserts that the area has a major amount of water bearing strata with reliable amounts of water and drawdown is not significant, so existing appropriators will not be adversely affected. (Department file; Technical Report to Application, pp. 19-22 of 23, Nicklin Testimony)

60. The Applicant computed with its groundwater model the greatest drawdown that can occur in the wells of other water users based on annual drawdown. Mr. Levens requested that the Applicant explain whether the maximum drawdown modeled by the Applicant accounted for seasonal differences in use. In response, Mr. Nicklin evaluated the greatest seasonal drawdown compared to the annual drawdown for seasonal impacts of pumping its proposed

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<sup>1</sup> Department records show these two wells are owned by the Town of Manhattan.

appropriation on such other wells. Seasonal impacts in the cone of depression will be generated by this use because a substantial amount of demand for this new use is for lawn and garden irrigation. The evidence establishes that when seasonal impacts are accounted for, there will be at worst only several feet of drawdown at the nearest wells. (Nicklin Testimony, Nicklin 5)

61. Mr. Levens testified that the methodology used by the Applicant was adequate to support a determination that ground water users will continue to have water available for pumping in spite of the Applicant's proposed use. (Levens Testimony)

62. I find that each of the affected wells has penetrated the aquifer sufficiently that there will be substantial amounts of saturated thickness of the aquifer that remain available to all other groundwater users based on both the annual and seasonal drawdown modeling for the Applicant's proposed use. There will be no adverse effect to other groundwater users as a result of the Applicant's use because the Applicant's use will allow all existing ground water users to reasonably exercise their water rights to this source aquifer.

63. In the Application and as noticed, Applicant stated that it intends to install an in-line flow meter, which measures instantaneous and cumulative flows, at each pump-house for each corresponding well. Applicant has agreed with the Objectors that it will install a totalizing flow meter that will measure both flow rate and total annual volume. Applicant agreed that it will also submit to DNRC complete water measurement reports setting forth both daily and annual usage. (Department file; Applicant's *Synopsis of Application*; Technical Report to Application, pp. 19-22 of 23)

64. Applicant's proposed use will result in long-term depletions to surface water. The Applicant acknowledges and the evidence establishes that its use will result in depletions to the Gallatin River, Randall Creek, Lower Camp Creek, and the Backlin Ditch. (Nicklin Testimony, Exhibit Nicklin 6, Uthman Memo, dated May 10, 2006)

65. The Applicant's water supply calculations as set forth in Exhibit 3 show an annual volume of 124.11 ac-ft/yr for domestic and commercial use in the two subdivisions and an annual volume of 132 ac-ft/yr for irrigation, for a maximum water demand of 256.11 ac-ft/yr. (Exhibit 1 Table 3, Exhibit 3)

66. To determine depletions that may arise from that quantity of water consumed by potable uses, the Applicant estimated that 5% of its potable demand will be consumed. The use of 5% of the potable demand to estimate consumption for these uses is conservatively high, as the

DNRC has in the past recognized that these uses consume as little as 2% or 3% of the amount diverted for households served by municipal wastewater treatment facilities, assuming wastewater is not otherwise consumed. (Levens Report, Carstensen Testimony, Nicklin Testimony)

67. Applicant's Exhibit 3 estimates the domestic and commercial water demand is 110,800 gpd (gallons per day) at full occupancy for Pioneer Crossing and Centennial Village subdivisions. Domestic and commercial use of 110,800 gpd equates to 124.11 ac-ft/yr (i.e.,  $110,800 \text{ gpd} \times 365 \text{ days/year} \times 1 \text{ ft}^3/7.48 \text{ gal} \times 1 \text{ ac-ft}/43,560 \text{ ft}^3 = 124.11 \text{ ac-ft/yr}$ ). (Exhibit 3) The Applicant estimates 115.71 ac-ft/yr will be required to meet potable demands for those portions of the use earmarked for households, and 8.40 ac-ft/yr will be required to meet potable demands for those portions of use earmarked for commercial, for a total potable demand of 124.11 ac-ft/yr. Five percent consumptive use of 124.11 ac-ft/yr is 6.21 ac-ft/yr, which if averaged over the entire year during which use will occur, amounts to 0.52 ac-ft/month, assuming all months are equal in duration. (Exhibit 3) This leaves a non-consumed volume of 117.90 ac-ft/yr of water diverted for wastewater returns, which are discussed below. Had the Applicant used 2% to estimate consumption for its potable demands, the consumed portion of its potable demands would be reduced by 3.73 ac-ft/yr to 2.48 ac-ft/yr.

68. The Applicant's Technical Report submitted with its Application estimated domestic and commercial water demand is 110,550 gpd at full occupancy for Pioneer Crossing and Centennial Village subdivisions. (Technical Report, p. 6 of 23). The difference between the Technical Report and Exhibit 3 is 250 gpd for Pioneer Crossing at full occupancy, which is equal to the demand for a single residential unit. (Technical Report, p. 6 of 23). Domestic and commercial use of 110,550 gpd equates to 123.84 ac-ft/yr (i.e.  $110,550 \text{ gpd} \times 365 \text{ days/year} \times 1 \text{ ft}^3/7.48 \text{ gal} \times 1 \text{ ac-ft}/43,560 \text{ ft}^3 = 123.84 \text{ ac-ft/yr}$ ). (Technical Report, p. 6 of 23). Five percent consumptive use of 123.84 ac-ft/yr is 6.19 ac-ft/yr, which if averaged over the entire year during which use will occur, amounts to 0.52 ac-ft/month, assuming all months are equal in duration. It appears from the record that the difference in the two calculations is a carry-over from a January 18, 2007, Memo issued by Gaston Engineering & Surveying in which Gaston Engineering used 160 lots with single family occupancy for the Pioneer Crossing subdivision rather than 159 lots identified in the Technical Report. (Applicant's Exceptions Exhibit A-2) While this error is not material, it exemplifies the inconsistencies within the Applicant's evidence that have made the Applicant's proposed use so difficult for the Department to evaluate.

69. The Applicant proposes a wastewater treatment facility that became operational June of 2008 to treat its wastewater from potable uses. The wastewater treatment plant also treats wastewater for the Town of Manhattan. (Carstensen Affidavit) The wastewater treatment facility is constructed of covered concrete tanks that prevent ground water loss and evaporation loss of treated water. (Carstensen 5, Carstensen Testimony) At full build out treated wastewater in the amount of 73.09 gpm will be discharged from the wastewater treatment facility into the Backlin Ditch, for a total volume of 117.90 ac-ft/yr of wastewater returns. The amounts of treated wastewater discharged from the new proposed use will be relatively constant through the year, as they are derived from water returned from potable demands. The treated wastewater will then travel through the Backlin Ditch where it will be discharged into the Gallatin River. (Carstensen Testimony, Exhibit Nicklin 6) Once wastewater is discharged into the Backlin Ditch, the Applicant will not divert or use the water for any purpose.

70. The wastewater treatment facility currently discharges approximately 100,000 gpd of treated wastewater from the Town of Manhattan into the Backlin Ditch. (Seamons Affidavit) The Applicant maintains that the amount of treated wastewater discharged into Backlin Ditch from the new proposed use will not increase the wetted perimeter or surface area of water already running through the Backlin Ditch. (Carstensen Affidavit) The Applicant maintains that because the addition of wastewater from its proposed use will not increase the wetted perimeter or surface area of water running through the Backlin Ditch, there will not be any additional loss of wastewater from seepage or evaporation. (Carstensen Affidavit) The Applicant maintains that in the event any wastewater returns are lost to evaporation or seepage, the amount would be so small that it is offset by its use of 5% rather than 2% or 3% for potable consumption by its proposed use. During the winter months, the Applicant established through affidavits that the water in the Backlin Ditch is covered with a layer of ice, but water continues to flow through the ditch under the ice. (Carstensen Affidavit, Seamons Affidavit)

71. For purposes of this Final Order, the calculations set forth in Exhibit 3 rather than the Applicant's Technical Report will be relied upon. I find that the Applicant has proven by a preponderance of the evidence that the potable demands (domestic and commercial) for its use will total 124.11 ac-ft/yr. I further find that of the 124.11 ac-ft/yr potable demand, a maximum of 6.21 ac-ft/yr will be consumed by the Applicant's proposed potable uses at the point it is discharged from the treatment facility to the Backlin Ditch. Finally, I find that the full amount of wastewater discharged into the Backlin Ditch from the Applicant's proposed use will

subsequently discharge into the Gallatin River at a steady rate throughout the year. Any loss of wastewater to evaporation or seepage, while unlikely to occur, is offset by the Applicant's use of 5% for potable consumption, rather than a figure of 2% or 3%.

72. To determine depletions that may arise from that quantity of water consumed by lawn and garden uses the Applicant calculated consumption for lawn and garden irrigation using computer software identifying Irrigation Water Requirements from the Natural Resource and Conservation Service for pasture grasses for Manhattan, Montana. (Carstensen Testimony, Exceptions Exhibit A-2) The Applicant did not use turf grass coefficients for determining water requirements because no such coefficients were available for the subject climatic area. Mr. Carstensen testified that Dr. Gerald Westesen, an irrigation specialist, concurred in the Applicant's methodology and use of pasture grass for lawn and garden water consumption for Pioneer Crossing and Centennial Village. (Carstensen Testimony) Bill Uthman also recognized that where turf grass irrigation requirements are unavailable it is acceptable to use turf grass from a similar location, or to use a similar crop type from the IWR for the location. (Uthman Memo 7/11/08 pg 2) Mr. Levens acknowledged that a study of water use in the Gallatin Valley reported that lawn irrigation for the area is below that provided for in the irrigation guide. He further testified that the Applicant's methodology likely over-estimates the amount of crop consumption for lawn and garden in the area in light of this study. (Levens Testimony)

73. Therefore, I find that the use of pasture grasses for the Applicant's lawn and garden crop consumption was acceptable in the absence of turf grass coefficients for the area.

74. The Applicant's calculations assume that 100% of the water diverted for lawn and garden irrigation will be consumed. The Applicant assumed that the full water requirements for pasture grass in dry years would be consumed by the new lawn and garden use and commercial irrigation. The IWR for Manhattan, Montana, provides that pasture grass water consumption for dry years is 18.38 inches, or 1.53 ac-ft per acre for the 169 day growing period of April 27 through October 12. (Carstensen Testimony, Exceptions Exhibit A-2) However, the Applicant did not account for water consumption attendant to sprinkler irrigation inefficiency.

75. In its undated Position Memorandum, the Applicant accounted for a 10% consumption attendant to sprinkler irrigation inefficiency in addition to crop consumption. (Department File) At the September 8, 2008, contested case hearing, Mr. Carstensen testified that the lawn and garden consumption estimates accounted for water consumption attendant to sprinkler irrigation above the estimated crop consumption. Importantly, the Applicant's analysis of the acreage that

needs to be retired from Water Right No. 41H-119990-00 for mitigation accounts for consumption from sprinkler irrigation inefficiency. (Exhibit 4, FOF 86) There is nothing in the record explaining why 10% consumption for sprinkler irrigation was not accounted for in the current estimate for lawn and garden consumption. Absent such an explanation, and because 10% consumption was added to the calculations for consumption by lawn and garden in the Applicant's original analysis and in arriving at the retired acreage in the proposed change, I find that the estimate for lawn and garden water consumption must include 10% additional consumption per acre to account for water consumed due to sprinkler irrigation inefficiency.

76. When 10% consumption is added for inefficiency attendant to sprinkler irrigation, lawn and garden consumption by the Applicant's proposed use using dry year coefficients for pasture grass is 1.68 ac-ft/yr per acre. I find that the Applicant's proposed lawn and garden use will consume 1.68 ac-ft/yr per acre.

77. The Applicant maintains that the net acreage irrigated for lawn and garden will be 86 acres.<sup>2</sup> While the Applicant did not provide the specific calculations used to arrive at 86 acres, it maintains the lawn and garden acreage was calculated using the lot acreage and estimated structure footprint. (Miller Testimony) Generally, the Applicant maintains that the lawn and garden acreage is 60% to 70% of the developed lot acreage.<sup>3</sup> (Exceptions Exhibit A-2) The Applicant multiplied the 86 acres of proposed lawn and garden by a 1.53 ac-ft/yr per acre consumed volume factor to arrive at a total requirement and consumptive use of 132 ac-ft/yr for domestic lawn and garden (127 ac-ft/yr) and commercial irrigation (5.0 ac-ft/yr). When 10% is added for consumption attendant to sprinkler irrigation inefficiency, 86 acres of lawn and garden irrigation will consume 144.48 ac-ft/yr. This increases the Applicant's lawn and garden consumption 12.48 ac-ft/yr and increases the Applicant's total consumption from 138.21 ac-ft/yr to 150.69 ac-ft/yr. Total consumption by the Applicant's proposed use is therefore 12.48 ac-ft greater than the amount of water made available for mitigation by the Applicant's proposed change of Water Right No. 41H-119990-00.

78. I find that the Applicant's failure to account for sprinkler inefficiency in its lawn and garden consumption calculations is not fatal to its Application. Instead, I find that the Applicant's

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<sup>2</sup> As noted in the PFD, the Applicant previously provided varying calculations regarding acreage irrigated for lawn and garden. At the 2/25/09 hearing, the Applicant's counsel insisted that Brent Miller testified regarding how 86 acres was reached for lawn and garden irrigation. However, nothing in the record or Miller's testimony provides the actual calculations used by the Applicant to arrive at 86 acres.

<sup>3</sup> The Applicant maintains that open space within the subdivisions will not be irrigated with water from the proposed wells.

proposed use will consume 132 ac-ft/yr if the Applicant's lawn and garden irrigation is limited to 78.6 acres (78.6 acres x 1.68 ac-ft = 132 ac-ft). Reducing the irrigable lawn and garden acreage ensures that the Applicant's water demand will not exceed its requested volume of 256.11 ac-ft/yr.

79. I find that the diverted volume of water required for the Applicant's proposed use is 256.11 ac-ft/yr. Of the diverted volume, 124.11 ac-ft/yr will be diverted for domestic and commercial use in the two subdivisions, of which 6.21 ac-ft/yr will be consumed ( $124.11 \times 5\% = 6.21$  ac-ft/yr). Of the diverted volume, 132 ac-ft/yr will be diverted for irrigation of 78.6 acres of lawn and garden, of which 132 ac-ft/yr will be consumed ( $132 \text{ ac-ft/yr} \times 100\% = 132$  ac-ft/yr). Total consumption by the Applicant's proposed use will be 138.21 ac-ft/yr (6.21 ac-ft/yr (domestic and commercial consumption) + 132 ac-ft/yr (lawn and garden consumption) = 138.21 ac-ft/yr), subject to the condition that the Applicant only irrigate 78.6 acres of lawn and garden.

80. The Applicant entered into a Consent to Entry of Administrative Order with AGAI, TU and FWP on July 15, 2009 which provides:

Come now the Association of Gallatin Agricultural Irrigators (AGAI), Montana Trout Unlimited (TU), and the Montana Department of Fish Wildlife and Parks (FWP), and through their attorneys, and agree to withdraw their objections to the Town of Manhattan's application for new ground water appropriation (App. No. 30021840), provided that the Montana Department of Natural Resources and Conservation's (DNRC's) approval of Application No. 30021840 contains the following material conditions, in addition to all other conditions that are usually and customarily appended by the DNRC to any authorization to change an existing water right:

A) Permittee shall divert of cause to be diverted 0.70 cfs out of Water Right No. 41H-119990-00, for a period of 100 days during the period from May 15<sup>th</sup> through September 30<sup>th</sup>, for a total annual diversion of 138.21 acre feet, and shall discharge such amounts of water into underground perforated pipe located within the place of use of this Permit so as to cause said water to be discharged below the ground surface at a depth of at least 3 feet. Said amounts of water shall be measured at the point of discharge into the perforated pipe, and Permittee shall not allow trees or shrubs to be planted or grown on the land that overlies the pipe within ten feet of the centerline of the pipe. In addition, an application for change of water right shall be filed with the DNRC pursuant to MCA 85-2-402 to change the purpose of use of Water Right No, 41H-119990-00 with the permission and approval of the Baker Ditch Co. within sixty (60) days of the issuance of this Permit, insofar as it is required to provide for the ongoing administration of this right in accordance with the terms of this paragraph, and Permittee shall secure from the DNRC the authority requested under such application. Nothing in the terms of this Paragraph A, however, shall be construed to prohibit diversions under this water right pending final agency action by DNRC under such a change

of water right application. In addition to all the other terms of this paragraph, Permittee shall not divert water under the authority of this water use permit where less than 123.40 acres depicted on Exhibit A hereto are not being irrigated in whole or in part with the water diverted through or secured from Water Right No. 41H-119990-00, Water Rights No. 41H-119986-00, Water Rights No. 41H-119987-00, Water Rights No. 41H-119988-00 and/or Water Rights No. 41H-119989-00.

B) Notwithstanding any other term or condition hereof, Permittee is authorized to use water in accordance with the terms of this Permit, where Permittee under the authorization of a change of water right causes water to be made available in the Gallatin River in and about the area of Manhattan, Montana, in those amounts and at those times set forth on Exhibit B hereto.

C) The water not consumed by this use that is treated at the wastewater treatment plant and ultimately discharged to the Gallatin River shall be deemed return flow from and after the use provided for herein, and the Permittee shall not further divert or use such flows for any consumptive purpose.

D) The Parties agree that the diversion provided for in Paragraph A hereof will mitigate any effect that would otherwise adversely affect any prior appropriators of surface water flows in the Gallatin River Drainage. The parties further agree that if any of the material conditions described in Paragraph A cannot be made part of the DNRC's approval of the Town of Manhattan's groundwater pumping permit Application NO. 30021840, then the objections of AGAI, FWP, and TU to Application No. 30021840 shall be reinstated and the parties shall proceed to contested case hearing on Application No. 30021840, unless an alternative settlement accord can be reached on the reinstated objection.

E) This Consent to Entry of Administrative Order replaces all previous consents to entry of administrative order entered by the undersigned parties.

81. The Applicant also entered into a Consent to Entry of Administrative Order with F Double D, L.L.C, on June 7, 2008 which provides:

Come now F Double D, L. L. C., by and through its attorneys, and agrees to the withdrawal of its objections to the Town of Manhattan's application for new ground water appropriation (App. No. 30021840), provided that the Montana Department of Natural Resources and Conservation's (DNRC's) approval of Application No. 30021840 contains the following material conditions, in addition to all other conditions that are usually and customarily appended by the DNRC to any authorization to change an existing water right:

A) For purposes of administration, the applicant's permit is subject to call by existing senior rights, permits and certificates. There is no exception to priority administration based on municipal use.

B) Permittee shall install a totalizing flow meter that will measure both flow rate and total annual volume.

C) Permittee shall submit to DNRC complete water measurement reports setting forth both daily and annual usage.

D) Permittee shall not use water withdrawn from the well or wells that constitute the point(s) of diversion outside the place of use of this Permit without

first obtaining the necessary change authorizations or additional permits to include an enlarged service area serving the Town of Manhattan and/or to include any additional volume of water.

82. As discussed under General Conclusions of Law, the Department is not bound by the settlement terms of the parties. While the above referenced settlements are illustrative of how the Applicant intends to operate their appropriation, and specifically mitigation and wastewater returns, they are **NOT** binding on the Department. For example, in Paragraph A of July 15, 2009, Consent to Entry of Administrative Order, the parties agreed that the Applicant could start using water immediately upon issuance of a permit. As discussed below, the Applicant may not divert water under this permit until it has changed Water Right No. 41H-119990-00 for use as mitigation water in its infiltration gallery in the amounts and manner set forth in this Final Order. Moreover, in Paragraph D of the July 15, 2009, Consent to Entry of Administrative Order, the parties agreed that if the material conditions of the settlement were not made part of the Final Order, the Objector's objections were reinstated and the parties would have a contested case hearing. However, the time for a contested case hearing has come and gone. Once a Final Order is issued in this matter, the parties' only remedy is a petition for judicial review as set forth in the Notice of this Final Order.

83. The Applicant plans to mitigate the consumptive portion of its proposed use, its net depletion, by retiring 123.40 acres of irrigated land, and changing a portion of Water Right No. 41H-119990-00 historically used for irrigating that ground to use for its mitigation infiltration gallery. (Nicklin Testimony, Carstensen Testimony, Exhibit 4) The Applicant submitted a draft Change Application for Water Right No. 41H-119990-00 dated April 2009 in the name of the Baker Ditch Company.<sup>4</sup> (Exhibit 4) The Baker Ditch Company is the owner of Water Right No. 41H-119990-00, to which the Applicant claims an interest in its use as a shareholder.

84. Through the retirement of the 123.40 acres, the Applicant maintains that 138.21 ac-ft of water historically used for irrigation will be made available to offset the 138.21 ac-ft/yr consumed by its proposed use. This water will in turn be discharged into an infiltration gallery, or perforated pipe under the rooting profile of plants, in an area adjacent to the wells. (Carstensen Testimony, Exhibit 4, Consent to Entry of Administrative Order) The Applicant will measure the

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<sup>4</sup> The Department notes that counsel for the Baker Ditch Company filed a letter dated May 9, 2008, and a letter dated July 16, 2009, with the Department. Both letters call into question whether the Baker Ditch Company is willing to Change Water Right No. 41H-19990-00 for use as mitigation through the Applicant's proposed infiltration gallery. While this may pose a problem for the Applicant, it does not prevent the Department from considering whether such a change, if granted as proposed here, would provide effective mitigation water.

water discharged into its infiltration gallery at the point of discharge into the perforated pipe using a totalizing flow meter. (Consent to Entry of Administrative Order, Exhibit 4) The Applicant proposes a 0.70 cfs rate of recharge assuming a 100-day recharge period between May 15 and September 30 of each year, which totals 138.21 ac-ft. From this discharge, water will percolate to the same aquifer that the Applicant proposes to withdraw its supply. As a result, this mitigation or augmentation water will recharge the aquifer in the amount of water consumed by the Applicant's use. (Nicklin Testimony, Exhibit 4, Consent to Entry of Administrative Order)

85. The Applicant computed the amount of water made available for mitigation through the retirement of 123.40 acres of irrigated ground by using computer software identifying Irrigation Water Requirements from the Natural Resource and Conservation Service for pasture grasses. The Applicant's calculation of consumption by the 123.40 acres of irrigated ground used data for normal irrigation years. The IWR for Manhattan, Montana provides that pasture grass water consumption for normal years is 17.20 inches, or 1.43 ac-ft/yr per acre for the 169 day growing period of April 27 through October 12. (Exhibit 4)

86. Water Right No. 41H-119990-00 has a priority date of October 15, 1912. (Exhibit 4) The historic place of use for the subject portion of Water Right No. 41H-119990-00 is primarily located within the area of the proposed subdivisions. (Exhibit 4) The period of use for Water Right No. 41H-119990-00 reflected in the Change Application is April 15<sup>th</sup> through November 1<sup>st</sup>. (Exhibit 4) The Change Application indicates that Water Right No. 41H-119990-00 was historically out of priority for approximately three weeks from mid-July through early August each year. (Carstensen Testimony, Exhibit 4) The Affidavit of Historical Property Use and aerial photographs of the place of use attached to the Change Application identify the historical irrigation relied upon. (Exhibit 4) The Applicant reduced the amount of water available for mitigation through Water Right No. 41H-119990-00 by 5.12 inches to reflect a 30 day period<sup>5</sup> in mid-July through early August when Water Right No. 41H-119990-00 did not receive water, to arrive at 12.08 inches for annual per acre crop consumption for land serviced by Water Right No. 41H-119990-00. (Exhibit 4) The Applicant then added to this crop consumption figure 0.90 inches of consumption per acre to reflect a 10% evaporative loss for sprinkler irrigation, arriving at a total consumed volume of 1.12 ac-ft/yr per acre of land serviced by Water Right No. 41H-119990-00. According to Applicant's calculations, 1.12 ac-ft/yr x 123.40 acres will result in

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<sup>5</sup> The Applicant used a 30 day period even though the evidence suggests that Water Right No. 41H-119990-00 was only out of priority for three weeks a year (Carstensen Testimony).

138.21 ac-ft of water for mitigation purposes through the proposed change. (Exhibit 4, Carstensen Testimony)

87. The Applicant's wells and the mitigation infiltration gallery are approximately 1.5 miles from the Gallatin River. The Applicant provided modeling that establishes that the rate of depletion to surface water will occur at a constant rate throughout the year, regardless of when the ground water pumping actually takes place. (Exhibit 4 Attachment E Table 4, Nicklin Testimony) Likewise, the Applicant's modeling demonstrates that recharge from the Applicant's infiltration will impact the Gallatin River and other surface water at a constant rate regardless of when the water is discharged into the infiltration gallery. (Nicklin Testimony) Consequently, the Applicant maintains that the fact that water is discharged into the infiltration gallery only in the irrigation season does not mean that such mitigation or augmentation will not offset the year round surface water depletion caused by its consumption of 138.21 ac-ft/yr. (Nicklin Testimony)

88. The evidence establishes that the Applicant's proposed ground water pumping will result in depletions to surface water on the Gallatin River, Lower Camp Creek, Randall Creek and the Backlin Ditch. Review of Department records confirms that while there are water rights on both Randall Creek and Camp Creek, there are no water rights with diversions on the affected reaches of either. There are also senior surface water rights such as FWP's Murphy Rights and hydropower rights downstream of Randall Creek and Lower Camp Creek.

89. The Applicant recognized that below the area of depletion there are irrigation season surface water rights and non-irrigation season surface water rights (such as FWP Murphy Rights) on the Gallatin River and downstream hydropower rights. The Applicant did not analyze or provide information regarding these water rights. The Department records confirm there are water rights on the affected reach of the Gallatin River and downstream hydropower rights.

90. FWP's Murphy Rights are an example of water rights that may be affected by the Applicant's proposed use. FWP's Murphy Rights are of special importance to this case because they encompass both the irrigation and non-irrigation season.<sup>6</sup> (Department File) The following table sets forth FWP's Murphy Rights on the Gallatin River that may be affected by this use:

| <b>River Reach</b>           | <b>Claim Number</b> | <b>Period of Diversion</b> | <b>Flow Rate (CFS)</b> | <b>Priority Date</b> |
|------------------------------|---------------------|----------------------------|------------------------|----------------------|
| Mouth to East Gallatin River | 41H 138947 00       | 5/1 – 5/15                 | 947                    | 12/21/1970           |
| Mouth to East Gallatin River | 41H 138950 00       | 5/16 – 5/31                | 1278                   | 12/21/1970           |

<sup>6</sup> See COL 15 in this Final Order for an explanation of Murphy Rights.

|                              |               |             |      |            |
|------------------------------|---------------|-------------|------|------------|
| Mouth to East Gallatin River | 41H 138949 00 | 6/1 – 6/15  | 1500 | 12/21/1970 |
| Mouth to East Gallatin River | 41H 138951 00 | 6/16 – 6/30 | 1176 | 12/21/1970 |
| Mouth to East Gallatin River | 41H 138948 00 | 7/1 – 8/31  | 850  | 12/21/1970 |
| Mouth to East Gallatin River | 41H 138952 00 | 9/1 – 4/30  | 800  | 12/21/1970 |

It should be noted that there are hydropower rights and FWP holds Murphy Rights on the Missouri River that may be affected by the Applicant's proposed use. However, because I find FWP's Murphy Rights and other water rights on the Gallatin River will not be adversely affect, it is unnecessary to discuss those downstream water rights.

91. Under the specific facts of this Application, the Applicant's failure to analyze surface water rights such as FWP's Murphy Rights or downstream hydropower rights does not preclude a finding that senior appropriators will not be adversely affected, so long as the Applicant offsets or mitigates all surface water depletions caused by its proposed use that would adversely affect senior surface water rights.

92. The Applicant modeled the net depletion to surface water caused by its proposed use. The total proposed ground water withdrawal is 256.11 ac-ft/yr, which is 0.35376 cfs (158.77 gpm) averaged over the year. Total consumption calculated by the applicant is 138.21 ac-ft/yr, which is 0.19091 cfs (85.68 gpm) averaged over the year. The volume for wastewater returns is 117.90 ac-ft/yr, which is 0.16285 cfs (73.09 gpm) averaged over the year.

93. Applicant's Table 4 to Exhibit 4 models net depletions of 256.11 ac-ft/yr (0.35 cfs) to surface water caused by ground water pumping without factoring in the mitigation infiltration gallery or the wastewater returns. (Exhibit 4) It further models net depletions of 138.21 ac-ft/yr (0.19 cfs) to surface water caused by ground water pumping, when the Applicant discharges 117.90 ac-ft/yr (0.16 cfs) of wastewater to the Backlin Ditch/Gallatin River as provided for in FOF 69 – 71 (256.11 ac-ft/yr – 117.90 ac-ft/yr = 138.21 ac-ft/yr). Finally, Table 4 models net depletions caused by its ground water pumping are eliminated when both wastewater returns and the Applicant's proposed mitigation infiltration gallery are accounted for (256.11 ac-ft/yr – 117.90 ac-ft/yr – 138.21 ac-ft/yr = 0.0). The Applicant's analysis reflected in Table 4 demonstrates that there will be no net depletions to surface water as a result of its ground water pumping and water consumption when wastewater returns and its mitigation infiltration gallery are accounted for.

94. At the July 2009 hearing, the Applicant provided evidence regarding modeled depletions to surface water through the testimony of Mr. Nicklin and Nicklin Exhibit 6 (Depletion Simulation

Assessment Summary). Mr. Nicklin testified that the Depletion Simulation Assessment Summary reflects the results of a computer model used to estimate net depletions to surface water indefinitely into the future for the specific affected stream reaches. The Depletion Assessment Summary indicates that Randall Creek and Lower Camp Creek will experience depletions that will be reduced by the Applicant's mitigation infiltration gallery. The Applicant's Depletion Assessment Summary establishes that the projected surface water depletions on the Gallatin River and Backlin Ditch will be eliminated through its mitigation infiltration gallery and plan for wastewater returns.

95. While the affected reaches of Randall Creek and Lower Camp Creek will experience depletions even when the Applicant uses its mitigation infiltration gallery to offset the consumptive portion of its proposed use, I find those depletions will not adversely affect any prior appropriator of surface water on those streams, as there are no water rights with diversions on the affected reach of either. Furthermore, adverse effects to downstream water rights such as FWP's Murphy Rights and hydropower rights are mitigated by offsetting depletions. See *Infra Granite Ditch Co. v. Anderson* and COL 27.

96. The Applicant established that its plan for mitigation through the infiltration gallery and wastewater treatment returns will offset year round surface water depletions to the Gallatin River at a steady rate both during the irrigation season and during the non-irrigation season. I find that depletions to surface water caused by the 117.90 ac-ft/yr diverted but not consumed by potable demands, are eliminated by the Applicant's wastewater returns. I find that both the annual and monthly depletions to the Gallatin River caused by the 138.21 ac-ft/yr consumed by the Applicant's proposed use will be offset year round by diverting 138.21 ac-ft into the infiltration gallery at a rate of 0.70 cfs over 100 days between May 15<sup>th</sup> and September 30<sup>th</sup> of a given year so long as wastewater from the Applicant's proposed use is discharged into the Gallatin River as described in FOF 69 - 71.

97. The Applicant's analysis establishes that the timing of these diversions into the infiltration gallery is not significant. Instead, the depletions caused by the Applicant's consumptive use will be offset if the Applicant can divert into the infiltration gallery 138.21 ac-ft in the manner described above. Moreover, the Applicants plan for wastewater returns offsets the remaining depletions caused by the Applicant's withdrawal of the non-consumptive portion of its proposed use. Importantly, the Applicant's plan addresses year round depletions with year

round mitigation. Year round mitigation and wastewater returns prevent adverse affect to non-irrigation season water rights such as FWP Murphy Rights and hydropower water rights.

98. I find that FWP and other surface water users will be able to reasonably exercise their water rights so long as the Applicant mitigates depletions through its mitigation infiltration gallery and plan for wastewater returns in the manner described in this Final Order.

99. I find that net depletions to surface water caused by the Applicant's proposed use of 575 gpm up to 256.11 ac-ft/yr will not adversely affect any prior appropriator of surface water so long as the following conditions are followed: 1) the Applicant mitigate the consumed volume of 138.21 ac-ft/year from its proposed use through introducing 138.21 ac-ft of water obtained through a change authorization of Water Right No. 41H-119990-00 into its infiltration gallery as described in FOF 83-86, and: 2) the Applicant discharge 73.09 gpm of treated wastewater for a total volume of 117.90 ac-ft/yr into the Backlin Ditch as wastewater returns from its potable use, and not further divert or use such wastewater returns for any purpose as described in FOF 69-71.

#### **Adequacy of Means of Diversion and Construction**

Findings of Fact 73 through 74 of the Proposal for Decision are adopted in their entirety and renumbered Findings of Fact 100 and 101 respectively.

#### **Beneficial Use**

Findings of Fact 75, 76 and 77 of the Proposal for Decision are adopted in their entirety and renumbered Finding of Fact 102, 103 and 104 respectively. I make the following additional finding regarding Beneficial Use:

105. Applicant's total volume for 256.11 ac-ft/yr is based on the potable demands and lawn and garden irrigation demands set forth in FOF 67 and 79. The Applicant has established a total demand for potable uses of 124.11 ac-ft/yr as set forth in FOF 67. However the lawn and garden acreage for the Applicant's proposed use must be reduced from the 86 acres requested, to 78.6 acres as set forth in FOF 78-79, as a condition to this Final Order. Conditioned upon a reduction of lawn and garden irrigation to 78.6 acres, I agree with the finding that the Applicant has proven the beneficial use in this matter will require an annual volume of 256.11 ac-ft/yr.

#### **Possessory Interest**

Finding of Fact 78 of the Proposal for Decision is adopted in its entirety and renumbered Finding of Fact 106.

### **Water Quality Issues**

Findings of Fact 79 through 81 of the Proposal for Decision are adopted in their entirety and renumbered Findings of Fact 107 through 108 respectively.

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

### **CONCLUSIONS OF LAW**

Conclusions of Law 1 through 5 of the Proposal for Decision are adopted in their entirety.

### **Physical Availability**

Conclusion of Law 6 of the Proposal for Decision is adopted in its entirety.

### **Legal Availability**

I have determined it would be disjunctive and confusing to amend certain Conclusions of Law, strike other Conclusions of Law and adopt new Conclusions of Law regarding Legal Availability in arriving at my Final Order. In an effort to make comprehensive and clear Conclusions of Law regarding Legal Availability, I have determined that it is appropriate to strike all of the Conclusions of Law in the Proposal for Decision regarding Legal Availability. Accordingly, Conclusions of Law 7 through 9 under Legal Availability in the Proposal for Decision are hereby stricken. I make the following new, comprehensive Conclusions of Law regarding Legal Availability.

7. Pursuant to §85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

- (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) 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.

8. As noted above, this is a pre-HB 831 application for a new ground water use within the Upper Missouri River Basin Closure pursuant to the municipal use exception. § 85-2-343 (2005), MCA. Pursuant to Montana Trout Unlimited v. DNRC, 2006 MT 72, 331 Mont. 483, 133

P.3d 224, the Department recognizes the connectivity between surface water and ground water and the effect of pre-stream capture on surface water. E.g., *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 and 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006)(mitigation of depletion required)(*affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008)); see also Robert and Marlene Takle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994) (affirming DNRC denial of Applications for Beneficial Water Use Permit Nos. 76691-76H, 72842-76H, 76692-76H and 76070-76H; underground tributary flow cannot be taken to the detriment of other appropriators including surface appropriators and ground water appropriators must prove unappropriated surface water); *In the Matter of Beneficial Water Use Permit No. 80175-s76H by Tintzman* (DNRC Final Order 1993)(prior appropriators on a stream gain right to natural flows of all tributaries in so far as may be necessary to afford the amount of water to which they are entitled): *In the Matter of Beneficial Water Use Permit No. 63997-42M by Joseph F. Crisafulli* (DNRC Final Order 1990)(since there is a relationship between surface flows and the ground water source proposed for appropriation, and since diversion by applicant's well appears to influence surface flows, the ranking of the proposed appropriation in priority must be as against all rights to surface water as well as against all groundwater rights in the drainage).

9. Where a proposed ground water appropriation depletes surface water in a closed basin or any other basin, the applicant must prove legal availability of the amount of depletion of surface water throughout the period of diversion through a mitigation/aquifer recharge plan to offset depletions or, through analysis of the legal demands on and availability of surface water impacted by depletions. *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006)(permits granted), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007)(permit granted)(*affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008)); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC* (DNRC Final Order 2008). Where the depletions

will occur year round, the applicant must demonstrate that surface water is legally available year round, both during the irrigation season and the non-irrigation season.

10. In the present case, the Applicant's proposed use will result in year round surface water depletions. Because the Applicant bears the burden of proof as to legal availability, and it has been found that the ground water appropriation in this case will deplete surface waters, the Applicant must prove the legal availability of surface water in light of the proposed ground water appropriation. *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 By Utility Solutions LLC* (DNRC Final Order 2007) (permit denied). Accordingly, whether the Applicant has proven water is legally available in the present case must consider both the legal availability of ground water and the legal availability of surface water.

11. The Applicant established that 2,172 ac/ft of ground water moves annually through the computed zone of influence of the Applicant's wells. Of that quantity of water 1,194 ac-ft/yr is claimed by existing ground water users, leaving 978 ac-ft/yr available for appropriation. The Applicant's proposed use will require the withdrawal of 256.11 ac-ft/yr. The Applicant has proven that ground water is legally available in the amount necessary to satisfy its proposed use.

12. As noted in FOF 51, the evidence establishes that pre-stream capture caused by the Applicant's proposed ground water pumping will result in year round depletions to surface water on the Gallatin River, Lower Camp Creek, Randall Creek and the Backlin Ditch.

13. There are no senior surface water rights on the affected reaches of Randall Creek and Lower Camp Creek. However, there are senior surface water rights such as FWP Murphy Rights and hydropower rights downstream of Randall Creek and Lower Camp Creek, to which both creeks are tributaries. See Granite Ditch Co. v. Anderson (1983), 204 Mont. 10, 662 P.2d 1312 (where creek was tributary of another creek and its waters thus belonged to the other creek to extent of prior appropriations and where decreed water rights of petitioners were prior in time to the tributary appropriations, petitioners' water rights were senior to tributary appropriations). Because I conclude below that the Applicant's mitigation infiltration gallery and wastewater returns will offset all depletions below Randall Creek and Lower Camp Creek, I conclude that water may reasonably be considered legally available on affected reaches of these streams.

14. While the Applicant acknowledged there are senior surface water rights on the affected reach of the Gallatin River and downstream, the Applicant did not analyze those surface water rights for purposes of legal availability.

15. Because the Applicant's proposed use will result in year round depletions to the Gallatin River and downstream, legal availability of surface water must consider both irrigation season and non-irrigation season water rights (such as Murphy Rights and hydropower rights). FWP holds Murphy Rights for instream flows in the affected reach of the Gallatin River. Murphy Rights are legislatively created water rights for instream flows on Montana's streams. See In the Matter of Application For Beneficial Water Use Permit No. 41H 30025398 By Bostwick Properties, Inc. Final Order (November 18, 2009)(citing Albert W. Stone, *Montana Water Law for the 80's* (1981) at p. 79). Murphy Rights reserve instream flow on legislatively created "blue ribbon" streams throughout Montana. The purpose of Murphy Rights was to permit the Fish and Game Commission to preserve and protect instream flows to maintain minimum flows, water levels, or water quality in those streams. *Id.* FWP's Murphy Rights are of special significance in this case because they represent both irrigation season and non-irrigation season water rights.

16. The Applicant acknowledges and Department records indicate that there are also irrigation, and stock water rights along the affected reach of the Gallatin River and downstream hydropower rights.

17. Under the specific facts of this case, the Applicant's failure to analyze these water rights under legal availability is not fatal to its Application. While the Applicant did not analyze these water rights, the Applicant established that the projected surface water depletions will be eliminated through its mitigation infiltration gallery and plan for wastewater returns. Importantly, the Applicant's mitigation infiltration gallery and wastewater returns offset year round depletions with year round mitigation. This ensures there will be no net depletions during the either the irrigation and non-irrigation seasons.

18. The Applicant established that surface water is legally available upon implementation of its proposed mitigation infiltration gallery and plan for wastewater returns so long as both are operated in the manner provided for as conditions in this Final Order. The Applicant's plan for year round mitigation ensures that water is legally available both during the irrigation and the non-irrigation seasons.

19. I conclude that the Applicant has established surface water is legally available for the Applicant's appropriation of 575 gpm, up to 256.11 ac-ft/yr so long as the following conditions

are followed: 1) the Applicant mitigate the consumed volume and net depletion of 138.21 ac-ft/yr from its proposed use through introducing 138.21 ac-ft of water obtained through a change authorization of Water Right No. 41H-119990-00 into its infiltration gallery as described in FOF 83-86, and: 2) the Applicant discharge 73.09 gpm of treated wastewater for a total volume of 117.90 ac-ft/yr into the Backlin Ditch as wastewater returns from its potable use, and not further divert or use such wastewater returns for any purpose as described in FOF 69-71.

### **Adverse Effect**

I have determined it would be disjunctive and confusing to amend certain Conclusions of Law, strike other Conclusions of Law and adopt new Conclusions of Law regarding Adverse Effect in arriving at my Final Order. In an effort to make comprehensive and clear Conclusions of Law regarding Adverse Effect, I have determined that it is appropriate to strike all of the Conclusions of Law in the Proposal for Decision regarding Adverse Effect. Accordingly, Conclusions of Law 10 through 11 under Adverse Effect in the Proposal for Decision are hereby stricken. I make the following new, comprehensive Conclusions of Law regarding Adverse Effect.

20. Pursuant to §85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined 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. See Montana Power Co., 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users) *and* Trout Unlimited (2006), 331 Mont. 483, 133 P.3d 224 (recognizing effect of prestream capture on surface water).

21. As the Montana Supreme Court recognized in In the Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnier (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use

will not unreasonably interfere with a planned use for which water has been reserved.

The Court has likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co. v. Carey (1984), 211 Mont. 91, 97-98, 685 P.2d 336, 340; see also Mont. Const. art. IX § 3(1). Montana does not recognize an exception to the 311 criteria for “de minimus” depletions. See Piute Reservoir & Irr. Co. v. West Panguitch Irr. & Reservoir Co. (1962), 13 Utah 2d 6, 10. 367 P.2d 855, 857 (The Utah court rejected “de minimus” argument made by applicant. The Court held that where a change or new water use will adversely affect senior water users, even if the adverse effects will be small, the application or change may not be authorized. It noted: “If a ‘de minimus’ reduction of the waters available to the lower water users were allowed under such conditions over and over again, the damage to the lower users would be unbearable”).

22. The proposed appropriation is within the upper Missouri River basin closure. § 85-2-343 (2005), MCA. Any depletion of water in a closed basin or any other basin from a new appropriation must be addressed so as to not cause adverse effect to a senior water right holder. See e.g., In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC (Proposal for Decision (2006), adopted by Final Order); and In the Matter of Beneficial Water Use Permit Application No. 41H-30019215 by Utility Solutions LLC (Final Order, 2007) (depletions must be offset in timing, amount and location).

23. The Department can and routinely does, condition a new permit’s use on implementation of special management, technology, or measurement such as augmentation now generally known as mitigation and aquifer recharge. See Mont. Code Ann. § 85-2-312; see, e.g., *In the Matter of Beneficial Water Use Permit No. 107-411 by Diehl Development* (DNRC Final Order 1974). The use of an augmentation or mitigation plan to offset depletions has been affirmed on judicial review as a permissible means for an applicant and the Department to address potential adverse effects caused by ground water pumping in a closed basin:

Under Section 85-2-311, MCA, the burden is placed on the applicant to establish by a preponderance of the evidence several criteria, including that “the water rights of a prior appropriator under an existing right . . . will not be adversely affected.” Section 85-2-311(1)(b), MCA. Further, DNRC “may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to

satisfy the criteria listed in 85-2-311 . . . .” Section 85-2-312(1), MCA (2005). Here, the hearing examiner expressly conditioned the permit on augmentation in order to ensure that senior water rights are not adversely affected. Although, Utility Solutions’ permit application is for the appropriation of ground water in a closed basin, DNRC by administrative rule permits augmentation in a closed basin. Rule 36.12.120(6), ARM (2005), states: “Augmentation plans are allowed in basin closure areas. An augmentation plan must mitigate the effect to the surface water source that would be depleted because of a proposed application.” (Emphasis added). . . . Indeed, the permit application is entirely dependent on Utility Solutions obtaining the change of a water right under the change permit. Therefore, the Court concludes that the hearing examiner correctly determined that augmentation is permissible.

Montana River Action Network, et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District Court, Lewis & Clark County, Memorandum and Order, pgs. 10-11 (November 7, 2008)(*affirming In the Matter of Application for Beneficial Water Use Permit No. 41H 30019215 By Utility Solutions LLC* (Final Order, 2007)).

24. The Department evaluates whether an applicant’s proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet §85-2-311(1)(b), MCA, in the permit proceeding. The applicant’s authority to use water for mitigation as proposed is assumed for the purposes of the analysis. The authority of the applicant to use water as proposed for the mitigation plan is not determined in the permit proceeding but is determined in any required application for change in appropriation. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan. E.g., *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (DNRC Final Order 2006) (permits granted based on plan for mitigation of depletion)(*affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008)); *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (DNRC Final Order 2007) (permit granted on basis of plan for mitigation of depletion)(*affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008)).

25. The Applicant has requested an appropriation right of 575 gpm up to 256.11 ac-ft/yr. Of the 256.11 ac-ft/yr, the Applicant established that the consumptive portion of its water right will not exceed 138.21 ac-ft/yr. The Applicant proposes to augment or mitigate the consumptive portion of its water right through the discharge of 138.21 ac-ft of water from Water Right No. 41H-119990-00 into an infiltration gallery proximate to the proposed ground water well after

change of that water right for mitigation. Water not consumed by the Applicant's use will be discharged to surface water as wastewater returns in the amount of 117.90 ac-ft/yr.

26. Applicant modeled the depletion of the proposed appropriation to the Gallatin River, Randall, Creek, Lower Camp Creek and the Backlin Ditch. Lower Camp Creek and Randall Creek will experience depletions even when the Applicant's mitigation infiltration gallery and wastewater return flows are accounted for.

27. Review of Department records confirms that while there are water rights on both Randall Creek and Camp Creek, there are no diverted water rights on the affected reaches of either. However, there are senior surface water rights such as FWP Murphy Rights and hydropower rights downstream of Randall Creek and Lower Camp Creek, to which both creeks are tributaries. See *supra* Granite Ditch Co. Accordingly, analysis of adverse affect is not limited to Randall Creek or Lower Camp Creek, it must consider adverse affect to those water rights on sources to which Randall Creek and Lower Camp Creek are tributaries. Because I find that the Applicant's mitigation infiltration gallery and wastewater returns will offset depletions to Gallatin River and downstream, I conclude the depletions to Randall Creek and Lower Camp Creek will not adversely affect senior surface water users.

28. The Applicant acknowledged that there are irrigation season surface water rights and non-irrigation season surface water rights (such as FWP Murphy Rights) on the affected reach of the Gallatin River and downstream hydropower rights. The Applicant did not analyze or provide any information regarding these water rights. See Montana Power Co. v. Carey (1984), 211 Mont. 91, 98, 685 P.2d 336, 340 (recognizing power company's water rights in the Missouri River and declaring the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights).

29. However, the Applicant established that its plan for mitigation through the infiltration gallery and wastewater returns will offset surface water depletions at a steady rate both during the irrigation season and during the non-irrigation season. Importantly, the Applicant's plan addresses year round depletions with year round mitigation. Year round mitigation and wastewater returns are essential to preventing adverse affect to non-irrigation water rights such as FWP Murphy Rights and hydropower rights.

30. Assuming the historic right and historic consumptive use for Water Right No. 41H-119990-00 that the Applicant has described in its mitigation plan, and assuming Change Application for Water Right No. 41H-119990-00 as relied upon for mitigation of this permit can

be granted, the use of 138.21 ac-ft of water through the retirement of 123.40 acres of land previously irrigated by Water Right No. 41H-119990-00 will provide effective mitigation when discharged into the Applicant's infiltration gallery. While Water Right No. 41H-119990-00 is out of priority for a three week period in July and August, the Applicant has accounted for that restriction in its calculations for water made available through Water Right No. 41H-119990-00. I make the assumption for purposes of this Application that the 123.40 acres Applicant proposes to retire received irrigation for the time period identified in the Change Application, with an assumed volume of 138.21 ac-ft/yr that may be changed for mitigation. The Applicant will still bear the burden of proving the necessary elements to change Water Right No. 41H-119990-00 by a preponderance of evidence in the change proceeding. For purposes of this permit application, I conclude the retirement of 124.40 acres of land irrigated by the identified portion of Water Right No. 41H-119990-00 will provide effective mitigation in the amount of 138.21 ac-ft to offset the consumed portion of the Applicant's proposed use when used by the Applicant in its proposed infiltration gallery. So long as wastewater returns in the amount of 73.90 gpm for a total volume of 117.90 ac-ft/yr are discharged into Backlin Ditch as conditioned in this Final Order, I conclude that the Applicant's proposed change and mitigation infiltration gallery will effectively mitigate or offset depletions to surface water that would otherwise adversely affect senior surface water users.

31. I conclude that FWP and other senior surface water right holders will be able to reasonably exercise their water rights so long as the Applicant operate its mitigation infiltration gallery and wastewater returns as required in this Final Order. See § 85-2-401, MCA.

32. I conclude that the Applicant has established that the water rights of prior appropriators under any existing water right, certificate, permit, or state water reservation will not be adversely affected by the Applicant's appropriation of 575 gpm, up to 256.11 ac-ft/yr so long as the following conditions are followed: 1) the Applicant mitigate the consumed volume and net depletion of 138.21 ac-ft/yr from its proposed use through introducing 138.21 ac-ft of water obtained through a change authorization of Water Right No. 41H-119990-00 into its infiltration gallery as described in FOF 83-86, and: 2) the Applicant discharge 73.09 gpm of treated wastewater for a total volume of 117.90 ac-ft/yr into the Backlin Ditch as wastewater returns from its potable use, and not further divert or use such wastewater returns for any purpose as described in FOF 69-71.

### **Adequacy of Means of Diversion and Construction**

Conclusion of Law 12 of the Proposal for Decision is adopted in its entirety, and renumbered Conclusion of Law 33.

### **Beneficial Use**

Conclusions of Law 13 through 16 of the Proposal for Decision are adopted in their entirety, and renumbered Conclusions of Law 34 through 37 respectively.

### **Possessory Interest**

Conclusion of Law 17 of the Proposal for Decision are adopted in its entirety, and renumbered Conclusion of Law 38.

### **Water Quality Issues**

Conclusion of Law 18 of the Proposal for Decision are adopted in its entirety, and renumbered Conclusion of Law 39.

### **General**

Conclusion of Law 19 is hereby stricken. I make the following General Conclusions of Law regarding issuance of a permit:

40. The Department may issue a provisional permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria for issuance of a beneficial water use permit. (§ 85-2-312, MCA; see also, Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339). The terms and conditions of a permit must be consistent with the Department's authority provided for by the Montana Water Use Act.

41. The Department is not bound by the terms of settlement reached by an applicant and objectors, where those terms are not supported by the evidence or are otherwise inconsistent with the MWUA. See Bostwick v. DNRC, 2009 MT 181, ¶ 21, 351 Mont. 26, 208 P.3d 868. The agreement between the parties that the Applicant may begin appropriating water immediately upon issuance of this permit, and that the Objector's are entitled to a contested case hearing if the material terms of the settlement are not made conditions of this Final Order, are expressly rejected. While the Department recognizes that the terms and conditions of the settlements entered between the Applicant and the objectors may be enforceable against the parties to those agreements, unless expressly set forth as conditions to this permit, they are not conditions imposed upon the Applicant by the Department.

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

## ORDER

Subject to the conditions, restrictions, and limitations specified below, Application for Beneficial Water Use Permit No. 41H-30021840 by Town of Manhattan is **GRANTED** to the Town of Manhattan to appropriate 575 gpm and up to 256.11 ac-ft/yr of water for municipal use in the proposed Pioneer Crossing subdivision, located in the NE1/4NW1/4SW1/4, Section 3, Township 1 North, Range 3 East, and Centennial Village subdivision located in the SE1/4SE1/4NE1/4, Section 3, Township 1 North, Range 3 East, near the town of Manhattan, Gallatin County, Montana. The period of diversion is January 1 through December 31, inclusive each year. The following are conditions to this Permit:

1. Permittee shall install an in-line flow meter, which measures instantaneous and cumulative flows, at the pump-house for each of the two corresponding wells. Applicant shall install a totalizing flow meter that will measure both flow rate and total annual volume. Applicant shall maintain the measuring devices in proper operating condition at all times. Water may not be diverted until the required measuring devices are in place and operating. On a form provided by the Department, the Applicant shall keep a written record of daily, monthly and annual flow rates and volumes measured at each measuring device. Applicant shall submit to the Department's Bozeman Regional Office complete water measurement records by November 1 of each year and upon request at other times of the year.
2. Permittee shall not allow more than 78.6 acres of lawn and garden to be irrigated through water appropriated under this Permit.
3. All water not consumed by the proposed use shall be treated at the wastewater treatment plant and discharged into the Backlin Ditch. Permittee shall not cause or allow any wastewater discharged from its wastewater treatment plant into the Backlin Ditch from its use under this Permit to be diverted or used for any purpose other than returns to the Gallatin River required by this Final Order. At all times, the Applicant shall discharge or cause to be discharged at a minimum 95% of water appropriated for domestic and commercial potable uses under this Permit into the Backlin Ditch as wastewater described in FOF 69 – 71. At full build out, the Applicant shall discharge or cause to be discharged 73.09 gpm for a total volume of 117.90 ac-ft/yr of wastewater into the Backlin Ditch as described in FOF 69 - 71. Permittee shall obtain Department approval for any change in the method of disposal of non-consumed/wastewater, including any reduction in water treated at the wastewater treatment plant and discharged into Backlin Ditch from other sources.

4. Permittee shall divert or cause to be diverted 0.70 cfs out of Water Right No. 41H-119990-00, for a period of 100 days during the period from May 15<sup>th</sup> through September 30<sup>th</sup>, for a total annual diversion of 138.21 acre feet, and shall discharge such amounts of water into its infiltration gallery in the manner described in FOF 83 - 86. Permittee shall install a measuring device at the point of discharge into the infiltration gallery to record the flow rates and volume of all water diverted into its infiltration gallery. Applicant shall maintain the measuring device in proper operating condition at all times. On a form provided by the Department, the Applicant shall keep a written record of daily, monthly and annual flow rates and volumes measured at the measuring device. Applicant shall submit to the Department's Bozeman Regional Office complete water measurement records by November 1 of each year and upon request at other times of the year.

5. Permittee shall cause Baker Ditch Company to file the Application to Change the purpose of use of Water Right No. 41H-119990-00 for use as mitigation in its infiltration gallery. The volume and flow rate of water authorized by the Department for change from Water Right No. 41H-119990-00 must be equal to or greater than 0.70 cfs for a period of 100 days during the period from May 15<sup>th</sup> through September 30<sup>th</sup>, for a total annual volume of 138.21 ac-ft. The Permittee shall retire a minimum of 123.40 acres of land historically irrigated by Water Right No. 41H-119990-00.

6. Permittee shall not divert or use water under this Permit until: the change in Water Right No. 41H-119990-00 has been granted in the amounts required under the Permittee's mitigation plan as required by Conditions 4 and 5; water from the change in Water Right No. 41H-119990-00 is diverted into its infiltration gallery as required by Conditions 4 and 5, and; wastewater returns are provided as required by Condition 3.

### **NOTICE**

This Final Order may be appealed by a party in accordance with the Montana Administrative Procedure Act (Title 2, Chapter 4, Mont. Code Ann.) by filing a petition in the appropriate court within 30 days from the date of service of this Final Order.

If a petition for judicial review is filed and a party to the proceeding elects to have a written transcript prepared as part of the record of the administrative hearing for certification to the reviewing district court, the requesting party must make arrangements for preparation and

payment of the written transcript. If no request is made, the Department will transmit only a copy of the audio recording of the oral proceedings to the district court.

DATED this 8<sup>th</sup> day of December, 2009.

/Original signed by Brian Bramblett/  
Brian Bramblett  
Department of Natural Resources  
and Conservation  
Water Resources Division  
P.O. Box 201601  
Helena, Montana 59620-1601  
(406) 444-9758

**CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the FINAL ORDER was served upon all parties listed below on this 8<sup>th</sup> day of December 2009 by first class United States mail:

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(VIA HAND-DELIVERY)

DNRC BOZEMAN REGIONAL OFFICE  
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BOZEMAN MT 59715

/Original signed by Jamie Price/  
Jamie Price, Hearings Assistant  
Hearings Unit, (406) 444-6615

# **ATTACHMENT A**

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

\*\*\*\*\*

**IN THE MATTER OF APPLICATION FOR            )**  
**BENEFICIAL WATER USE PERMIT NO.        )**           **PROPOSAL FOR DECISION**  
**41H-30021840 BY TOWN OF MANHATTAN    )**

\*\*\*\*\*

Pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, Montana Code Annotated (MCA)), the provisions of the Montana Administrative Procedure Act (MAPA) (Title 2, chapter 4, part 6), and the administrative procedural rules (Admin. R. M. 36.12.201, *et seq.*), and after notice required by § 85-2-307, MCA, a hearing was held on September 4, 2008, in Bozeman, Montana, before the undersigned Hearing Examiner for the Montana Department of Natural Resources and Conservation (Department or DNRC) in the above-referenced matter. The purpose of the hearing was to determine whether a beneficial water use permit should be issued to Applicant Town of Manhattan (Applicant or Town) for the above Application under the criteria set forth in § 85-2-311, MCA. The Department has fully considered the record, including all testimony, evidence and argument submitted in this matter.

### **APPEARANCES**

The Applicant appeared at the hearing by and through its counsel, Jane Mersen, and Matt W. Williams, counsel for Vidar Companies, Inc. The following witnesses were called to testify by the Applicant: Brent Miller, Project Manager for Gaston Engineering (Miller); Dr. Michael Nicklin, Nicklin Earth & Water, Inc. (Nicklin); and John Carstensen, consultant with Nicklin Earth & Water, Inc. (Carstensen).

Because of the conditional settlement between the parties, the Hearing Examiner notified the parties that the Objectors were not required to be present at the hearing. However, if they did choose to appear, they would be allowed the opportunity to introduce any issues they wished or provide statements to add further clarification to the settlement conditions. The following Objectors appeared at the hearing: Bill Schenk, on behalf of Montana Department of Fish, Wildlife and Parks (FWP); David Weaver, on behalf of Association of Gallatin Agricultural Irrigators (AGAI); Michael Cusick, on behalf of F Double D, LLC (FDD); and Virginia Heavner

## **ATTACHMENT A**

(Heavner). Counsel for Objector Montana Trout Unlimited (TU) was unable to be present at the hearing; however, TU and FWP agreed previously that counsel for FWP would represent TU's interests at the hearing. Objectors Janice M. Dyk (Dyk), William Heavner (Heavner), and Samuel M. and Diane R. Buckman (Buckman) were not present at the hearing.

DNRC Staff Expert, Bill Uthman, Hydrogeologist (Uthman), appeared at the hearing and was available for questions regarding his Staff Expert Memorandum, dated July 11, 2008, and his technical opinion in the matter.

### **EXHIBITS**

Applicant offered and the Hearing Examiner accepted and admitted into evidence the following exhibits:

- **Exhibit 1:** Copy of a Report entitled *Ground-water Model Town of Manhattan Beneficial Use Application (Adapted for Vidar Beneficial Use Application)*, prepared by Nicklin Earth & Water, Inc., August 2008; and
- **Exhibit 2:** Copy of an *Application to Change a Water Right Town of Manhattan Pioneer Crossing, Centennial Village on Behalf of the Baker Ditch Company, Gallatin County, Montana*, prepared by Nicklin Earth & Water, Inc., September 2008.

Objector FDD offered and the Hearing Examiner accepted and admitted into evidence the following exhibit:

- **Exhibit 1:** Copy of a Consent to Administrative Order, dated June 2, 2008, entered into between FDD and the Applicant.

### **PRELIMINARY MATTERS**

Prior to the hearing, the Applicant notified DNRC that all objections in this matter were conditionally withdrawn by the Objectors, as a settlement had been reached between the parties. Applicant then indicated at the hearing that it was in the process of finalizing a revised settlement which it was not ready to present at the hearing, which hearing was held for the Applicant to explain the previous settlement. Applicant raised an objection on the record at the hearing that it should not have to proceed to a hearing before the DNRC on the Application, due to the settlement and conditional withdrawal of all of the objections to the Application. Applicant's objection was based on the recent decision issued in the Montana Eighteenth Judicial District Court in Gallatin County on May 12, 2008, entitled Bostwick Properties, Inc. vs. Montana DNRC, Cause No. DV-07-917AX, *on appeal*, Case No. DA-08-248 (Bostwick).

## **ATTACHMENT A**

Objectors FWP, TU, and AGAI indicated at hearing that while they were optimistic that a revised settlement would be reached, their objections were not withdrawn. The proposed settlement conditions are not part of the Application determined “correct and complete” and ready for further processing by DNRC.

As stated previously in this proceeding, it is the DNRC’s opinion that the Bostwick decision does not provide an allowance for DNRC to issue a decision or statement of opinion on whether the proposed Application meets the statutory criteria under § 85-2-311, MCA, without proceeding to a hearing first before the DNRC on the objections, any conditions agreed to by the parties, and any potential application issues of the DNRC. See §§ 85-2-309, and -312, MCA. Valid objections were filed under § 85-2-308, MCA, and the Department is required to hold a contested case hearing on valid objections under §85-2-309, MCA. While this Application was filed in 2006, Applicant requested and received five extensions of the procedural schedule in this case. As stated on the record and as noticed to the parties, this hearing was the time and place for the Applicant to present any and all written and oral evidence it wanted the DNRC to consider in this matter in determining whether the Applicant proved the statutory criteria found in § 85-2-311, MCA, by a preponderance of evidence. The Objectors were also afforded the opportunity to introduce any issues or provide statements at the hearing to add further clarification to the settlement conditions. Therefore, this objection is overruled.

As discussed further below, the Hearing Examiner requested the Applicant submit a post-hearing summary of the Application explaining the proposed project and the revised conditions agreed to between the Applicant and the Objectors, including an explanation as to why the conditions are adequate under the statutory criteria. At the request of the Applicant, the record was left open after hearing, until September 15, 2008<sup>1</sup>, to receive the post-hearing submission. On September 30, 2008, the Applicant submitted a *Consent to Entry of Administrative Order*, dated September 26, 2008, to the DNRC. On October 1, 2008, the Applicant submitted a *Synopsis of Application*, dated October 1, 2008, to the DNRC. The record in this matter is considered to have closed as of October 1, 2008.

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<sup>1</sup> Applicant stated that it would have the post-hearing submission to the Hearing Examiner within one-week. To ensure the Applicant had sufficient time, the Hearing Examiner ordered the Applicant to submit the Application summary within 10-days of the date of the hearing, or September 15, 2008.

## **ATTACHMENT A**

Official notice is taken of all documents in the record, including those exhibits already contained within the DNRC's files.

Being well and fully advised, the Hearing Examiner makes the following Findings of Fact (FOF) and Conclusions of Law (COL).

### **FINDINGS OF FACT**

#### **General**

1. Application for Beneficial Water Use Permit 41H-30021840 in the name of the Town of Manhattan (by Vidar Companies, Inc.), and signed by Anthony M. Haag, Mayor, was filed with the Department on April 28, 2006. Applicant is proposing a new appropriation for municipal use with two ground water wells. (Department file)
2. The Environmental Assessment (EA) prepared by the Department for this Application and dated May 23, 2006, was reviewed and is included in the record of this proceeding. (Department file)
3. A public notice describing facts pertinent to this Application was published in the *Bozeman Daily Chronicle*, a newspaper of general circulation, on July 6, 2006, and was mailed to interested persons listed in the Department file. (Department file)
4. The deadline for filing objections to the Application expired on August 6, 2006. The DNRC received seven timely valid objections to the Application, from FWP, AGAI, FDD, TU, Mrs. Dyk, Mr. and Mrs. Buckman, and Mr. and Mrs. Heavner. (Department file)
5. In the Application and as noticed, the Applicant requests a ground water appropriation at the rate of 575 gallons per minute (gpm) and up to 560 acre-feet (ac-ft) of water per year. The proposed period of diversion is January 1 through December 31, inclusive each year. The requested appropriation will be used for domestic, commercial, irrigation, and fire protection (municipal) in the proposed Pioneer Crossing subdivision, located in the NE1/4NW1/4SW1/4, Section 3, Township 1 North, Range 3 East, and Centennial Village subdivision located in the SE1/4SE1/4NE1/4, Section 3, Township 1 North, Range 3 East, near the town of Manhattan, Gallatin County, Montana. The subdivisions are located about 1.75 miles southwest of the Gallatin River. Pioneer Crossing and Centennial Village subdivisions are part of a common Planned Unit Development. (Department file; Miller Testimony)

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6. At full build-out, the subdivisions will be comprised of a total of 363 lots (241 single-family dwellings; 107 single-family with accessory dwellings; and 15 commercial lots). The residential lots are approximately 1/3-1/2-acre size lots, and the commercial lots are approximately 1-acre size lots. (Department file; Miller Testimony)
7. The proposed subdivisions will be annexed into the Town corporate limits, serving a municipality (the town of Manhattan). The two new ground water supply wells will be connected to the Town's water distribution system; therefore, the place of use can occur throughout the Town. The Town and proposed appropriation are located within the upper Missouri River basin closure area, which consists of the drainage area of the Missouri River and its tributaries above Morony Dam. This Application seeks to appropriate ground water for municipal use, which is an exception under the basin closure act. The Application did not contain a mitigation (augmentation) plan at the time it was filed. (§ 85-2-343(2)(c), MCA (2005)).
8. On April 11, 2006, the Montana Supreme Court ruled in Montana Trout Unlimited v. Department of Natural Resources and Conservation (2006), 331 Mont. 483, 133 P.3d 224 (Trout Unlimited). This decision applied to DNRC's processing of all future and pending water use permit applications, including this Application, seeking the use of ground water in the upper Missouri River closed basin (basin closed to new appropriations of surface water), and to the use of ground water "immediately or directly connected to surface water," basin closure exception as it existed in 2005. The decision recognizes the effect on surface water of prestream capture from ground water appropriations. (See § 85-2-343, MCA (2005)).
9. Applicant began aquifer testing in October 2005, in order to obtain hydrogeological information for the Application. Department Hydrogeologist Bill Uthman summarized his completed review of the hydrogeological information provided for this Application in a memorandum to DNRC Water Resources Specialist, Porter Dassenko, dated May 10, 2006. (Department file)
10. On January 24, 2007, notification was sent to the Town and all parties of record that a contested case hearing was set for June 14, 2007, in this matter. A pre-hearing conference call was held on February 8, 2007, to establish contested case deadlines and address any issues pertaining to the hearing the parties wished to discuss. The Town failed to appear at this pre-hearing conference and was found to be in default, pursuant to Admin. R. M. 36.12.212.

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Consequently, a procedural schedule was established with the parties who appeared and without the Town. The procedural schedule allowed parties time to pursue discovery and prepare for a full and fair hearing on the criteria. (Department file)

11. On April 10, 2007, DNRC sent a letter to the Applicant regarding the impacts on the pending Application as a result of the decision issued on March 26, 2007, from the Montana First Judicial District Court for Lewis & Clark County in Lohmeier, et al. v. DNRC, Cause No. ADV-2006-454 (Lohmeier). All pending applications for municipal use had to be re-evaluated by DNRC in light of the holding in Lohmeier on the meaning of municipal use. DNRC notified the Applicant in a letter dated April 27, 2007, that it had determined that DNRC could continue processing the pending Application under the municipal use basin closure exception. (Department file)

12. On May 15, 2007, the Town sent a *Joint Request to Vacate Hearing Date and Scheduling Order* to the Hearing Examiner, on the basis that the parties needed additional time to work out settlement details. On May 16, 2007, an order was issued vacating the hearing as to those parties who had entered into a settlement and agreed that the hearing date could be vacated. However, the Hearing Examiner ordered the remaining parties who had not entered into a settlement and had not agreed to vacate the hearing date to respond to the joint request to vacate within 10 days. Objectors Heavner and Dyk stated they wished to continue their objections; therefore, a mandatory conference call with all parties was set for June 5, 2007. During the June 5, 2007, conference call, the parties all agreed that they were engaging in settlement with the Town, and they requested the hearing be vacated. (Department file)

13. On June 6, 2007, the Hearing Examiner issued an Order vacating the hearing and the contested case deadlines. In this Order, the Hearing Examiner required the parties to submit a written status report within 60 days, to inform the Hearing Examiner on the progress of the settlement and whether a contested case hearing was still necessary. On August 6, 2007, the Town submitted a status report requesting an additional four weeks to work out settlement details. (Department file)

14. On August 8, 2007, the Hearing Examiner issued an Order granting the four-week extension. In this Order, the Hearing Examiner required the parties to submit a written status report by September 10, 2007, informing the Hearing Examiner if they needed additional time to

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finalize settlement or if a prehearing conference should be set to establish contested case deadlines. The Town did not submit a status report by that date; however, it did submit one on October 1, 2007, requesting an additional four-week extension. (Department file)

15. On October 10, 2007, the Hearing Examiner issued an Order granting the four-week extension. In this Order, the Hearing Examiner required the parties to submit a written status report by November 7, 2007, informing the Hearing Examiner if they needed additional time to finalize settlement or if a prehearing conference should be set to establish contested case deadlines. The Town submitted a status report on November 5, 2007, stating they had agreed in principle with some of the Objectors to augment or replace certain depletions to the Gallatin River. To achieve the replacement, the Town further stated they had an agreement in principle with a third party appropriator, which would reduce diversions under its appropriations (i.e. leave water in the Gallatin River), in amounts required to offset the asserted depletions. The Town requested a status conference with the parties and the Hearing Examiner, to determine whether DNRC would require any change of water right approval as a result of this augmentation, as opposed to a condition requiring such a reduction in diversions on this new water use permit. (Department file)

16. The Hearing Examiner issued an Order on November 15, 2007, informing the parties that it was inappropriate for the Hearing Examiner to be involved in any discussions pertaining to settlement or terms of the permit with the parties, prior to the contested case hearing. However, the Town was granted additional time, until January 30, 2008, to submit a final settlement to DNRC or a status report informing the Hearing Examiner if they needed additional time to finalize settlement or if a pre-hearing conference should be set to establish contested case deadlines. (Department file)

17. On January 28, 2008, the Town submitted an additional request for a conference call with the Hearing Examiner, asking that DNRC implement procedures to determine whether the proposed settlement can be given effect without additional administrative proceedings. The Town also submitted a *Position Memorandum* summarizing the proposed settlement and augmentation plan (leaving water instream in the Gallatin River). (Department file)

18. On February 6, 2008, the Hearing Examiner issued an Order, reiterating that there is no current process that authorizes the Hearing Examiner to comment upon any settlement terms or

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participate in settlement discussions when the matter is contested. The Hearing Examiner informed the parties that upon review of the *Position Memorandum*, it appeared there was still some question whether the terms were acceptable for purposes of issuing a permit under § 85-2-311, MCA, and therefore agreed to schedule a status conference. A status conference for February 21, 2008, was scheduled to discuss the *Position Memorandum*, set a date for a contested case hearing, and schedule contested case deadlines. (Department file)

19. During the February 21, 2008, conference call, the parties agreed to a revised scheduling order and set a date for hearing, July 15, 2008. (Department file)

20. On May 12, 2008, the Montana Eighteenth Judicial District for Gallatin County issued its decision in Bostwick. As stated above, the Bostwick decision provided in relevant part that the DNRC has no authority to issue a Statement of Opinion under § 85-2-310(3), MCA, where valid objections are filed, even if later settled. The DNRC must issue a “decision.” The Statement of Opinion was previously the method used by the DNRC to evaluate criteria and consider any conditions on settlement if objections were withdrawn, conditionally or unconditionally. (See § 85-2-309, MCA).

21. On May 20, 2008, the Town submitted a *Notice of Settlement* between the Town and Objectors FWP, TU, AGAI, Mr. and Mrs. Heavner, and Mrs. Dyk. On May 30, 2008, DNRC received an *Agreement* dated May 30, 2008, entered into between the Town and Objectors Mr. and Mrs. Buckman. On June 2, 2008, DNRC received a *Consent to Entry of Administrative Order* entered into between the Town and Objector FDD. Some objections were unconditionally withdrawn and others were withdrawn based on certain conditions. DNRC is not bound by private settlements, but may consider conditions as they relate to meeting the criteria under § 85-2-311, MCA. (See Admin. R. M. 36.12.207; § 85-2-312, MCA; Department file)

22. On June 23, 2008, based on the Bostwick decision which removed the DNRC’s ability to evaluate criteria and consider conditions through a Statement of Opinion when there are objections, DNRC ordered that the hearing would proceed as scheduled before the Hearing Examiner on July 15, 2008. In that same order, the Hearing Examiner sought clarification from the Applicant as to what exactly it was proposing given the changes agreed to through settlement and its evolving mitigation plan. The mitigation plan was not part of the original Application publically noticed after the correct and complete determination. The Hearing

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Examiner further notified the parties that she saw potential issues with legal availability and adverse effect in the filed Application. A pre-hearing conference call was scheduled for June 30, 2008, to discuss the hearing procedures and any other issues the parties wished to address. (Department file)

23. As discussed and agreed by the parties in the conference call, on July 2, 2008, the Hearing Examiner ordered that any motions, reports, or summaries of the Application be submitted no later than July 7, 2008, and staff expert Bill Uthman would submit a report evaluating the evidence contained in any pre-hearing memoranda and the Application as modified by the conditions and mitigation plan no later than July 11, 2008. (Department file)

24. On July 7, 2008, the Town submitted a *Notice of Permit Conditions*, summarizing the revised Application and proposed mitigation plan to offset stream depletion, and the settlement terms agreed to by the parties. The Town also submitted a *Statement of Principles*, stating it disagreed with DNRC that it was required to seek a change of water right application for the mitigation plan, where the terms of the permit require mitigation. The Applicant further stated it believed the DNRC should be precluded from exercising any further substantive authority over the Application, based on the holding of the Bostwick decision. (Department file)

25. On July 11, 2008, DNRC Staff Expert Bill Uthman submitted a memorandum analyzing the information submitted from the Town. Mr. Uthman raised several questions in this memorandum, stating that the Applicant would need to answer the questions posed in the memorandum in order to address the Hearing Examiner's request for clarification of the proposed mitigation plan to offset stream depletion. On this same date, the Town faxed DNRC a request to continue the hearing for the reason that it received Mr. Uthman's July 11, 2008, memorandum at 1:30 p.m. on July 11, 2008 (the date agreed by the parties), and would not have adequate time to prepare an expert response to the memorandum, or answer Mr. Uthman's questions raised in the memorandum at the July 15, 2008, hearing. The Town requested a hearing be rescheduled to September 4, 2008. On July 14, 2008, an Order continuing the hearing to September 4, 2008, was issued. (Department file)

26. On August 27, 2008, a pre-hearing conference was held with all parties. At this conference, the Hearing Examiner requested the Town submit a detailed written summary of the

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Application, including an explanation of conditions agreed to under any settlement agreements, and the proposed mitigation, prior to or on the day of the hearing. (Department file).

27. A hearing was held on September 4, 2008, in Bozeman, Montana. The Town did not present a written summary of the Application to the Hearing Examiner as requested. The Town informed the Hearing Examiner at this hearing that it was still working through a new settlement with the Objectors, which terms differed from those submitted in July 2008, and it was not prepared to present those conditions to the Hearing Examiner. No new evidence was presented to answer the questions raised in Mr. Uthman's July 11, 2008 Memorandum, or to address the Hearing Examiner's issues regarding legal availability or adverse effect under § 85-2-311, MCA. The Hearing Examiner requested the Applicant submit a detailed written summary of the Application, with the new settlement conditions and proposed mitigation, by September 15, 2008. (Department file; Hearing record)

28. On September 30, 2008, the Applicant submitted a *Consent to Entry of Administrative Order*, dated September 26, 2008, agreed to by all parties to this matter, which set forth a proposed aquifer recharge plan; it did not include the previous instream mitigation plan. (Department file)

29. Pursuant to the September 26, 2008, *Consent to Administrative Order*, the Applicant agreed to the following conditions, in relevant part: (a) Applicant shall install a totalizing flow meter; (b) shall submit to DNRC complete water measurement reports setting forth both daily and annual usage; (c) shall not use water withdrawn from the wells that constitute the points of diversion outside the place of use without first obtaining the necessary change authorizations or permits to include an enlarged service area; (d) shall divert or cause to be diverted 0.70 cfs from the Gallatin River out of Water Right Claim No. 41H-119990-00 (priority date of October 15, 1912) for a period of 100 days during the period from May 15 through September 30, for a total annual diversion of 138.21 ac-ft/year; (e) shall discharge such amounts of water into underground perforated pipe located with the place of use to cause said water to be discharged below the ground surface at a depth of at least 3 feet; (f) shall file change of water right to change the purpose of use of said Water Right No. 41H-119990-00; and (g) shall not divert

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water where less than 114.22 acres<sup>2</sup> are not being irrigated in whole or in part with water diverted through or secured from Water Right Nos. 41H-119990-00, 119984-00, 119985-00, 119986-00, 119987-00, 119988-00, and/or 119989-00. (Department file; *Consent to Admin. Order*, p. 3-4)

30. On October 1, 2008, the Applicant submitted a *Synopsis of Application*, dated October 1, 2008, which essentially reiterated the conditions agreed to by the parties as set forth in the September 26, 2008 *Consent to Entry of Administrative Order*, and the proposed mitigation (diverting water out of an existing right in designated amounts for discharge into an infiltration gallery). The Applicant stated the flow rate, volume, point of diversion and place of use remained as set forth in the public notice. The record was considered closed upon receipt of this information. (Department file)

31. It is the Hearing Examiner's understanding that the Applicant is proposing to use shares in the Baker Ditch Company, owned by the developer, Vidar Companies, Inc., to mitigate potential adverse effects to senior surface water users from the consumption of ground water under this Application. However, the Applicant did not present a formal mitigation plan to the Hearing Examiner at the September 4, 2008, hearing. Applicant submitted a copy of a proposed draft change application, dated September 2008, as an exhibit (Exhibit 2) at the hearing. This change application had not been provided to Baker Ditch Company or presented to the DNRC as a formal change application at the time of hearing. (Department file)

32. This proposed Order presents the Department's decision in this matter based on the information in the record as that information addresses the statutory criteria for issuance of a beneficial water use permit under § 85-2-311, MCA (2005). This Application is being judged on the law that was in effect when it was submitted. HB 831 (now §§ 85-2-360 *et seq.*, MCA (2007)) is not applicable because it expressly does not apply to pending applications. (2007 Mont. Laws § 31, Ch. 391)

### **Physical Availability**

33. Applicant has a conditional approval for locating and constructing up to four (4) wells from the Montana Department of Environmental Quality (DEQ), Public Water Supply (PWS)

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<sup>2</sup> Applicant stated that the 114.22 acres are depicted on Exhibit A attached to the Consent to Administrative Order; however, the version submitted to DNRC did not contain said Exhibit.

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Section, EQ#05-2051. This Application is for two (2) wells. Because it is a public water supply, the Applicant asserted that it used DEQ standards and requirements to design the system, and calculated the flow rate and volume needed for the municipal purpose based upon DEQ design criteria and requirements (peak hour and per capita). The record does not contain a copy of the conditional Plan Approval from DEQ. (Department file; Miller Testimony)

34. A test well, PC/CV Public Well #1 (Well #1), which is intended to satisfy Phase I of this project, was drilled by a licensed water well contractor in accordance with the rules of the Montana Board of Water Well Contractors. This proposed well will be connected to the Town's water distribution system, which has five sources of water supply. Applicant estimates the subdivisions at full build-out require an "Average Day Demand" of 347 gpm according to DEQ standards, but in order to satisfy peak demands and supplement fire flows, the Town proposes that the well pump be capable of up to 575 gpm<sup>3</sup>. The wells will operate in a cyclic manner at variable flows (utilizing variable frequency drives). Actual flows will be dependent on system pressures and demands, but Applicant estimates typical flows will be 200-300 gpm. (Department file; Technical Report to Application, p. 2 of 23)

35. Applicant submitted test-pumping information for Well #1. This well consists of a 26" diameter borehole, with a 16" diameter steel casing that extends to a depth of 442 feet below ground surface (bgs). A 16" stainless steel well screen extends beyond the solid steel casing from approximately 392-442 feet bgs. The well intake is isolated from the shallow aquifers found in wells nearby by providing cement grout in the annular space of the well to a depth of 0-80 feet bgs. The grout seal is expected to inhibit surface water contamination and minimize water withdrawal from the upper aquifer zones in which domestic wells are completed in the surrounding areas. The annular space underlying the cement grout is packed with 3/8" diameter gravel for the remainder of the total depth of the well. (Department file; Technical Report to Application, p. 2 of 23)

36. Pumping was accomplished with a 150 hp line-shaft turbine pump set at approximately 390 feet bgs (above the top of the well screen). Static water level was 28.7 feet bgs, with the pumping water level at approximately 374.7 feet bgs (about 17.3 feet above the well screen). The well was pumped continuously for 72 hours at 643 gpm, with drawdown of about 346 feet.

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<sup>3</sup> Applicant originally requested a flow rate of 347 gpm, but subsequently amended the flow rate in the Application to 575 gpm on May 7, 2006.

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The flow meter odometer revealed a *weighted average* of 613 gpm over the entire 72-hours, with a projected drawdown of 360 feet (measured from static water level). Applicant states that actual drawdown will be significantly less than the projected drawdown due to the cyclic operation of the wells at 200-300 gpm during normal pumping. (Department file; Technical Report to Application, pp. 8-9; 11-16 of 23)

37. Well drilling shows that Well #1 was constructed through Quaternary alluvium and Tertiary strata, with lenses of unconsolidated sand and gravel within confining layers which may yield coefficients of transmissivity up to 26,000 gpd/foot. Tests were representative of a leaky confined aquifer bounded horizontally and vertically by less permeable layers. (Department file; Technical Report to Application, pp. 9, 11-16 of 23)

38. Applicant estimated Well #1 will pump up to 575 gpm for peak demands and fire flows, and the well pump will be set above the screen at 390 feet bgs. Since the projected drawdown (i.e. 388.7 feet bgs) at the pumping rate of 643 gpm is less than the pump setting of 390 feet bgs or top of screens, Applicant estimates the pumping water level to be higher than observed during the aquifer test. (Department file; Technical Report to Application, pp. 9, 11-16 of 23)

39. As the project proceeds with Phases II, III, and IV, Applicant asserts that only one additional PWS well would be necessary to satisfy DEQ requirements (i.e. fire suppression). Well #1 is capable of providing flow rate of 575 gpm, so Applicant believes the second well may be designated for fire protection or the water rights could be distributed between the wells. The Hearing Examiner is uncertain to which water rights the Applicant is referring. (Department file; Technical Report to Application, pp. 9, 11-16 of 23)

40. Applicant states the Town's existing water supply is capable of providing much of the necessary fire flow and maximum day demand that the proposed development requires under DEQ standards. However, as part of the water line extension/connection at Nixon Gulch Road & Railroad Ave North, the Applicant intends to replace the existing 6" diameter water line with a new 10" diameter water line. (Department file; Technical Report to Application, pp. 9, 11-16 of 23)

41. Applicant states the water demands were based on the uses within the subdivisions' boundaries as estimated by the Applicant's consultant using DEQ Circulars and assumptions generally used by the engineering community. (Department file; Miller Testimony)

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42. Bill Uthman, DNRC Hydrogeologist, reviewed the Application and in a memorandum to Porter Dassenko, DNRC Water Resources Specialist, dated May 10, 2006, Mr. Uthman states that the Applicant sustained an average discharge of 613 gpm from the well for a period of 72 hours. Mr. Uthman also notes the Applicant has projected drawdown observed in the proposed production well, assuming continuous pumping at 613 gpm, demonstrating that available drawdown will remain above the pump inlet for the period of diversion. (Department file; Technical Report to Application; Uthman Memo, dated May 10, 2006). The Applicant has provided sufficient data to prove that water is physically available in the amount requested. (§ 85-2-311(1)(a)(i), MCA)

### **Legal Availability**

43. According to published and recognized information, the Gallatin Valley encompasses an area of about 540 square miles in the eastern half of the Three Forks structural basin, and intermontane basin in southwestern Montana. The Gallatin Valley was filled with as much as 6,000 ft of Tertiary and Quaternary-age sediments consisting of boulders, cobbles, sand, silt, clay, and volcanic ash. (Noble, *et al.*, 1982, p. 71). The lowermost unit of valley-fill material is composed of Tertiary sediments, consisting mostly of sandstone, siltstone, claystone, and volcanic ash. The upper Tertiary sediments consist mostly of conglomerate, sandstone, siltstone, and claystone of fluvial origin. Bedrock underlying the valley-fill deposits in the Gallatin Valley and exposed in the surrounding areas consist of metamorphic, sedimentary, and volcanic rocks ranging in age from Precambrian through Cretaceous. (Department file; Technical Report to Application, p. 3 of 23)

44. According to published and recognized information, the source aquifer discharges to the Gallatin River along a reach beginning east of Manhattan to Logan, MT. Near Logan, steeply dipping bedrock outcrops at the land's surface thus forming a barrier to ground water flow and causing discharge from the source aquifer to the Gallatin River. (Hackett, *et al.*, 1960). A ground water resource study was conducted by Hackett and others, which included the Manhattan area. The report referenced a test well (A2-2-33da) drilled in 1952, located about 1 mile northeast of this proposed project. The United States Geological Survey (USGS) well penetrated 55 feet of Quaternary alluvium overlying variable Tertiary strata to a total depth of 450 feet. Two principle water-bearing zones were encountered: 32-73 feet bgs and 215-300

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feet bgs. The static water level for the upper zone was 32 feet bgs, while the static water level for the lower zone was 12 feet bgs, indicating the lower zone is confined and hydraulically separated from the upper zone. (Department file; Technical Report to Application, p. 3 of 23)

45. During his review of the Application, Mr. Uthman opined the aquifer is not hydraulically connected to surface water within the zone of influence and that induced surface water infiltration is unlikely to occur in the zone of influence as a result of the proposed production wells. However, pumping of these wells will result in long-term stream depletion impacts to the Gallatin River. Mr. Uthman and the Applicant both recognize the timing and location of these impacts are difficult to credibly evaluate because of numerous geologic and hydrologic uncertainties within this geographic area. (Department file; Uthman Memo, dated May 10, 2006; Technical Report to Application)

46. Applicant estimated the zone of influence using AQTESOLV, a generally recognized aquifer test analysis software. Applicant used a specific yield value of 0.04, a typical conservative value for an unconfined aquifer. Applicant stated that the zone of influence, defined as that area resulting in 0.01 feet of drawdown, was calculated to extend 13,350 feet from the pumped well. (Department file; Technical Report to Application, pp. 16-19 of 23)

47. Tertiary deposits in this area were found by the Applicant to be likely heterogeneous with boundaries along the northern portion of the zone of influence (i.e. Horseshoe Hills). A water right database search conducted by Applicant in 2006 found 137 ground water water rights located in the projected zone of influence, excluding the Horseshoe Hills portion due to its no-flow/low-flow boundary consisting of Paleozoic belt series Precambrian rock. Applicant states some of the records were not complete. Wells that did not indicate a depth and were not described as pit or surface water were assumed to be deeper than 140 feet. For domestic use, Applicant assumed a volume of 1.5 ac-ft, 0.5 ac-ft for stock use, and 2.5 ac-ft/acre for irrigation use. (Department file; App. F to Application; Technical Report to Application, pp. 16-19 of 23)

48. Applicant calculated the total legal water demand on the deeper aquifer (i.e. 140 feet-442 feet bgs) to be 1,405.92 ac-ft/year. Using Darcy's Law, the annual volume of water passing through the potential zone of influence was estimated to be 1,968.8 ac-ft/year. Applicant determined the existing appropriations plus the proposed demands are less than the aquifer flux (1,405.92 ac-ft/year + 560 ac-ft/year = 1,965.92 ac-ft/year < 1,968.8 ac-ft/year). Applicant

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states that it used a very conservative value for transmissivity (1,100 feet<sup>2</sup>/day) and expects it to be slightly higher. (Department file; App. F to Application; Technical Report to Application, pp. 16-19 of 23)

49. Of the 137 ground water wells located within the zone of influence, Applicant found that 77 wells were completed in the shallower aquifer (less than 140 feet bgs). Applicant states the remaining 60 ground water water rights were not included in the flux calculation above. The Hearing Examiner presumes the 60 ground water water rights are located in the water producing zone (i.e. deep source aquifer), but it is not clear from the record. The Hearing Examiner is also uncertain why said water rights were not included in the flux calculation. I find the Applicant has not shown that water physically available exceeds the existing legal demands within the area of potential impact. (Department file; App. C and F to Application; Technical Report to Application, pp. 16-19 of 23)

50. The Applicant has not provided analysis of any evidence on the existing demands throughout the area of potential impact, including the Gallatin River. The Town proposes to offset any depletions to surface water, but the Applicant never identifies how the alleged net depletion was determined to demonstrate that the depletions will be offset by the proposed amount of mitigation water, as further explained in the discussion on adverse effect. Applicant must address the legal availability of surface water due to the depletions from the proposed appropriation. The Applicant has not proven that water can reasonably be considered legally available in the amount and during the period of requested appropriation. (§ 85-2-311(1)(a)(ii), MCA)

### **Adverse Effect**

51. Applicant estimated the potential effects to area ground water wells using AQTESOLV, which showed that the drawdown and distance measured from the pumped well would be 2 feet at 5,000 feet; 3 feet at 4,100 feet; and 4 feet at 3,500 feet, for a pump rate of 347 gpm at 365 days of continuous pumping in the deep aquifer. Applicant evaluated only 347 gpm even though the requested flow rate is 575 gpm. Applicant states that observation wells #3 and #4 did not show more than 0.2 feet of drawdown at approximately 2,200 feet from the pumped well. Observation well #5 did not show more than 0.6 feet of drawdown at approximately 1,100 feet

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from the pumped well. (Department file; Fig. 3.2 and 3.5 of Application; Technical Report to Application, pp. 19-22 of 23)

52. According to Applicant's estimates, deep wells<sup>4</sup> (140 feet-422 feet bgs) will experience approximately 2-4 feet of drawdown; shallow wells (30 feet-80 feet bgs) will not be affected; and intermediate wells (100 feet-140 feet bgs), located near the pumped well, could experience up to 4 feet of drawdown. Applicant asserts that the area has a major amount of water bearing strata with reliable amounts of water and drawdown is not significant, so existing appropriators will not be adversely affected. (Department file; Technical Report to Application, pp. 19-22 of 23)

53. Applicant evaluated potential adverse impacts to surface water it found to be in the zone of influence, including the Gallatin River, East Gallatin River, and Camp Creek. Based on well logs of wells located along the Gallatin River and East Gallatin River, Applicant determined that the source aquifer is hydraulically disconnected from shallow unconfined alluvium by confining layers in the vicinity of Well #1. Along Camp Creek, Applicant found similar data showing the confined source aquifer is hydraulically disconnected from surface water in the vicinity of Well #1. However, this analysis did not address the full area of potential impact. (Department file; Technical Report to Application, pp. 19-22 of 23)

54. In the Application and as noticed, Applicant stated that it intends to install an in-line flow meter, which measures instantaneous and cumulative flows, at each pumphouse for each corresponding well. Applicant has agreed with the Objectors that it will install a totalizing flow meter that will measure both flow rate and total annual volume. Applicant agreed that it will also submit to DNRC complete water measurement reports setting forth both daily and annual usage. (Department file; Applicant's *Synopsis of Application*; Technical Report to Application, pp. 19-22 of 23)

55. During his review of the Application, Mr. Uthman determined the aquifer is not hydraulically connected to surface water within the zone of influence and that induced surface water infiltration (reverse hydraulic gradient) cannot occur as a result of the proposed production wells. However, pumping of these wells will result in long-term depletions to surface water flows in the Gallatin River if not mitigated. The proposed appropriation will capture water otherwise

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<sup>4</sup> Records show these two wells are owned by the Town of Manhattan.

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discharging to the Gallatin River. Mr. Uthman opined, and the Applicant acknowledges, the complexities of knowing with a precise degree the hydraulic connection within this geographic area. (Department file; Uthman Memo, dated May 10, 2006)

56. The Applicant states that the proposed aquifer recharge program, presumably that in the draft change application for Baker Ditch Company, set forth in the ground-water model conducted by Dr. Nicklin, combined with the flows of the treated wastewater will offset combined net depletions for all portions of the year for the potentially affected streams in the vicinity of the Town. Dr. Nicklin states the simulation results demonstrate the recharge basin likely has significant capacity to accept substantially greater quantities of recharge water for future mitigation needs of the Town. (Exhibit 1, p. 7; Nicklin Testimony)

57. Dr. Nicklin further puts forth in Exhibit 1 that according to transient simulations, the theoretical annual depletion is the same as the net annual pumping volume over time, which equates to 256.11 ac-ft/year from all streams represented in the model. Dr. Nicklin states the Gallatin River and other “potentially affected” streams (Gallatin River, Camp Creek, Randall Creek, Backlin Ditch) are about 1-1.5 miles from the pumping well; therefore, the time required to achieve the theoretical pumping depletion is beyond 100 years. At 100 years, Dr. Nicklin determined the simulated depletions total 218 ac-ft, which is about 85% of the theoretical pumping depletion assuming the model were run to steady-state conditions, and about 202 ac-ft of depletions are due to the “potentially affected” streams. (Department file; Nicklin Testimony; Exhibit 1, p. 6)

58. Dr. Nicklin testified that he had identified the aquifer characteristics via pumping tests, and there was water available for the Town’s use, with only modest drawdowns at the nearest wells. Dr. Nicklin also testified there is no adverse effect based on the mitigation plan in the proposed draft change. Dr. Nicklin further testified that through the model, he was able to identify the amounts and timing of depletions to the Gallatin River. The Town has agreed to offset any depletions by diverting water out of an existing right in designated amounts for discharge into an infiltration gallery. By putting these amounts in perforated pipe underground, the Applicant states that any impacts will be eliminated as the water will percolate to the same aquifer from which the depletions are generated. (Department file; Nicklin Testimony; *Consent to Administrative Order*, p. 2-3; Exhibit 1)

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59. Mr. Uthman pointed out in his July 11, 2008 Memorandum that the Applicant identifies lawn irrigation as the only source of stream depletion, and lists domestic and commercial as beneficial use. Domestic and commercial consumptive use can range from 3-10% of the volume appropriated, depending on how domestic waste water is returned to the system. Five percent is a reasonable average value for domestic and commercial consumptive use, provided that waste water is recharged to the system. However, if waste water is "land applied", consumptive use is 100%. (Uthman Memorandum, dated July 11, 2008)

60. The Applicant used the Natural Resource and Conservation Service (NRCS) Irrigation Water Requirements (IWR) online software to calculate the stream depletion volume. Applicant states in the Narrative and Addendum to the proposed change application that it had determined "dry year" net irrigation requirements for pasture grass listed for the Belgrade airport weather station. Applicant reported that "of the appropriation maximum volume of 256.11 ac-ft, 138.21 ac-ft are consumed." (Exhibit 2, p. 1) The Department typically expects an applicant to use turf grass water use requirements found in the NRCS IWR software in preparing a consumptive use analysis. Turf grass includes grasses typically planted for lawns and generally has a higher water requirement than the pasture grass category. (Nicklin and Carstensen Testimony; Department file; Exhibit 2; Uthman Memo, dated July 11, 2008)

61. Applicant states that "the calculation of consumptive use is shown on Table 1." The Hearing Examiner cannot evaluate the Applicant's consumptive use calculations because Table 1 is not included in Exhibit 2 or in the record. The Applicant acknowledges in Exhibit 2, page 1, that domestic and commercial consumptive use is 5% and 100% of the municipal demand for lawn and garden is consumed. The Applicant indicates that their waste water system is a water treatment facility. The remainder returns to the local hydrologic system as treated wastewater discharge to the Gallatin River. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibit 2)

62. Mr. Uthman reviewed the water supply calculations in order to estimate the Applicant's domestic and commercial consumptive use. (Technical Report, p. 4 of 23) Applicant estimates the domestic and commercial water demand is 110,550 gpd at full occupancy for Pioneer Crossing and Centennial Village subdivisions. (Technical Report, p. 6 of 23). Domestic and commercial use of 110,550 gpd equates to 123.84 ac-ft/year (i.e. 110,550 gpd × 365 days/year

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$\times 1 \text{ ft}^3/7.48 \text{ gal} \times 1 \text{ ac-ft}/43,560 \text{ ft}^3 = 123.84 \text{ ac-ft/year}$ ). (Technical Report, p. 6 of 23). Five percent consumptive use of 123.84 ac-ft/year is 6.19 ac-ft/year, which if averaged over the entire year during which use will occur, amounts to 0.52 ac-ft/month, assuming all months are equal in duration. This value must be added to irrigation consumptive use. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibits 1 and 2)

63. The Applicant's water supply calculations, listed on Table 3 of Exhibit 1, indicate an annual volume of 124.11 ac-ft/year for domestic and commercial use in the two subdivisions and an annual volume of 132 ac-ft/year for irrigation, for a total maximum water demand of 256.11 ac-ft/year. The Applicant requests 560 ac-ft/year, which it states is based on DEQ standards. The remaining volume of approximately 304 ac-ft/year (560 ac-ft/year – 256.11 ac-ft/year) is unaccounted for. The Applicant has not provided a clear explanation or justification for the remaining requested volume of water. (Department file; Uthman Memo, dated July 11, 2008; Exhibit 1)

64. The Applicant states in Exhibit 2 that it proposes to mitigate the full volume and rate of consumptive use for the two proposed subdivisions. Applicant proposes to change the purpose of use of a total of 0.70 cubic feet per second (cfs) (i.e. 314 gpm) up to 138.21 ac-ft/year for mitigation purposes. (Table 3, Exhibit 1). If 123.84 ac-ft/year (i.e., in the Application) are required for domestic and commercial use in the two subdivisions, then about 436 ac-ft/year (560 ac-ft/year – 123.84 ac-ft/year) remain to serve irrigation requirements. If 138.21 ac-ft/year are required for irrigation demand, then there is a remaining volume of about 298 ac-ft/year (436 ac-ft/year – 138.21 ac-ft/year). The Applicant has not fully explained or justified this requested volume of water in Applicant's water supply calculations. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibit 1)

65. A review of the Exhibits 1 and 2 presented at hearing indicate the irrigation consumptive use component will be mitigated by ditch water recharged to infiltration structures in the subdivisions from which ground water will flow under a natural hydraulic gradient toward the Gallatin River. Applicant states that the ground-water modeling conducted by the Applicant indicates that because the distance to the Gallatin River is about 1.5 miles, baseflow accretions to the river will be more or less constant over the period of diversion. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibits 1 and 2)

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66. Applicant estimates the recharge for mitigation of its consumptive use (138.21 ac-ft/year) as 293 gpm from May 15 through July 16, and August 16 through September 30 (109 days). (Table 3 of Exhibit 1). Dr. Nicklin states that modifying the recharge rate and distribution of the total consumptive use over different recharge time-frames will have little effect on the net stream depletion/accretion over time (i.e. Dr. Nicklin opines that a recharge rate of 314 gpm over a 100 day period produces the same results as the simulated model stated above). (Table 3 of Exhibit 1; Exhibit 1, p. 6). The Hearing Examiner cannot determine whether the Applicant proposes a recharge rate of 293 gpm or 314 gpm even if the effect is likely to be the same. Applicant must define exactly what it is proposing. (Department file; Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Exhibit 1 and 2)

67. The Applicant also has not adequately identified the irrigation period. An increase in the duration of the period of use will increase the irrigation consumptive use. The Applicant tabulates an irrigation demand of 388,282 gallons per day (gpd) assuming a 123-day period of irrigation (i.e. May 1 through August 31)<sup>5</sup>. Table 3 of Exhibit 1 (submitted at hearing) indicates that the period of irrigation will include 4 days in April through 12 days of October, which is 169 days<sup>6</sup>. The Applicant provided no explanation how it will have control over the timing of lawn and garden irrigation use. In the Applicant's *Position Memorandum*, submitted on January 28, 2008, the Applicant calculates that the use of water cannot create stream depletions that exceed 135.28 ac-ft over a 100-day irrigation season (i.e. May 15 and September 30). (Department file; Uthman Memo, dated July 11, 2008; *Position Memorandum*)

68. Applicant estimates the recharge for mitigation of its consumptive use schedule is from May 15 through July 16, and August 16 through September 30, which is 109 days. (Table 3 of Exhibit 1). The Applicant in Exhibit 2 states the aquifer recharge schedule is 100 days between May 15 and September 30 of each year, and testified at hearing to the same period. Both Exhibits were submitted at hearing. The Hearing Examiner presumes the Applicant is proposing a duration of recharge of 100 days. (Exhibits 1 and 2)

69. The water supply calculations section on page 6 of 23 of the Applicant's Technical Report suggests that irrigated acreage is 100.1 acres. The *Position Memorandum* lists 86

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<sup>5</sup> Applicant's Technical Report, p. 6 of 23.

<sup>6</sup> Table 3 of Exhibit 1 states the number of irrigation days is 168, but the Applicant was in error in the number of irrigation days for July (i.e. July has 31 days in the month but Applicant states 30 days for irrigation).

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irrigated acres. The Applicant stated during the September 4<sup>th</sup> hearing that irrigated acreage can be approximated as 70% of the total acreage of the subdivisions. Exhibit 2, Attachment C Historic Use, states that Pioneer Crossing subdivision will occupy 173.844 acres and Centennial Village subdivision will occupy 44.747 acres, for a total of 218.59 acres. Seventy percent of 218.59 acres is 153.01 acres of lawn and garden irrigation, which differs from the previous estimates of irrigated acreage as 100.1 acres and 86 acres. The Applicant must make a firm decision on the number of irrigated acres in order to determine irrigation consumptive use. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibit 2)

70. Regarding the proposed rate of mitigation, the Hearing Examiner notes that the Applicant's *Position Memorandum* suggests 0.75 cubic feet per second (cfs) or 148.76 ac-ft/year over a 100-day irrigation season. The Applicant's *Notice of Permit Conditions*, dated July 7, 2008, indicates 0.54 cfs or 107.11 ac-ft/year, assuming a 100-day irrigation period. The Applicant now states in its *Synopsis of Application* and testified at hearing that the new aquifer recharge rate is 0.70 cfs, assuming a 100-day irrigation period, which totals 138.21 acre-feet. Applicant's estimate of new aquifer recharge must be quantified with a consumptive use analysis. The record contains many conflicting positions, none of which are logically supported by the assertions in the Application. Therefore, analysis of the consumptive use and required mitigation are impossible to quantify. (Nicklin and Carstensen Testimony; Uthman Memo, dated July 11, 2008; Department file; Exhibit 2; Position Memorandum)

71. To summarize, the Applicant has presented the following examples of multiple variations for analysis: a) irrigation periods of 100 days, 123 days and 169 days; b) mitigation periods of 100 days and 109 days; c) a diverted amount of 256.11 ac-ft/year, but not the 560 ac-ft/year requested; d) proposed mitigation in the amounts of .75 cfs, .54 cfs and .70 cfs; e) irrigated acreage of 100.1 acres, 86 acres, 153.01 acres; f) irrigation consumptive use of 123.84 ac-ft/year, 124.11 ac-ft/year, and some other amount based on the changing estimates of irrigated acreage and length of irrigation season; and g) recharge for mitigation of its consumptive use (138.21 ac-ft/year) at rates of 293 gpm and 314 gpm. The Applicant has not presented a single credible value of irrigated acres and monthly water-use requirements for a consumptive use analysis. The Hearing Examiner cannot evaluate the Applicant's estimate of consumptive use because Table 1 is not included in Exhibit 2. Table 4, summarizing aquifer recharge and

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surface water mitigation over a 100-year period, is also missing from both Exhibits 1 and 2. The Department cannot determine from all of these multiple variations exactly what the Applicant's plan is for the proposed appropriation and the justification for it. (Uthman Memo, dated July 11, 2008; *Position Memorandum*; Department file; Exhibits 1 and 2)

72. I find the Applicant provided very limited factual evidence to quantify the amount of water consumptively used. The Applicant has failed to provide an adequate plan to demonstrate that the Applicant's use of water will be controlled such that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Applicant's plan further cannot be considered complete until all prior water rights on the source of supply, particularly surface water, throughout the area of potential impact are identified. (§ 85-2-311(1)(b), MCA)

### **Adequacy of Means of Diversion and Construction**

73. Well #1 was drilled by a licensed water well contractor in accordance with the rules of the Montana Board of Water Well Contractors. The wells were grouted with bentonite to a depth of 80 feet bgs during the installation to avoid contamination by sealing off the surface gravel layers and upper aquifer zones. A stainless steel screen has been installed in the lower water bearing zone, and the well will have a sanitary well cap and a submersible pump installed, which will discharge below ground through a pitless adapter to a water main. The water main will connect to a pump house which will house a flow meter, pressure sustaining valve, variable frequency drive, a bypass line, and other fittings required for water distribution. One well is anticipated for Phase I construction, with a second well to accommodate Phases II-IV, primarily for fire protection. The pumps will be controlled by pressure switches. (Department file)

74. The design, construction, and operation of this system is regulated by the DEQ, and the design of the system is necessarily predicated on DEQ design standards produced to regulate the design of public water and sewer facilities. DEQ has reviewed and conditionally approved this public water system (EQ#05-2051), and the design is based on engineering standards commonly employed by engineers in designing and constructing such system. Applicant will be required to monitor and sample the system as required by DEQ. (Department file; Miller Testimony) I find that the proposed means of diversion, construction, and operation of the diversion works are adequate. (§ 85-2-311(1)(c), MCA)

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## **Beneficial Use**

75. Applicant has provided persuasive evidence that the proposed use is a beneficial use of water. Applicant intends to supply water within the identified place of use for municipal use including: (1) domestic water requirements for two subdivisions; (2) fire suppression; (3) commercial purposes within the subdivisions; and (4) lawn and garden irrigation within the subdivisions. The proposed use will benefit the homeowners who purchase homes within the subdivisions, other commercial patrons, and the public, as the system includes a fire-suppression component. I find the proposed use is a municipal use and beneficial use of water. (Department file; Miller Testimony)

76. Applicant asserts that the size of the water system and the estimate of the amount of water needed for the proposed use within the subdivisions are based on standards from DEQ Circulars (design standards used by DEQ to regulate the design of public water and sewer facilities). At full build-out, Applicant asserts the Pioneer Crossing and Centennial subdivisions will be comprised of a total of 363 lots, with uses being single-family dwellings, single family with accessory dwellings, and commercial structures. The Applicant is seeking approval of an annual flow rate of 575 gpm and volume of 560 ac-ft/year, which the Applicant states is based on these DEQ standards and requirements. However, Applicant submitted no information from DEQ regarding the size, flow and volume of its system. The record does not contain a copy of the Plan Approval from DEQ. Applicants' analysis in this Application is predicated solely on a proposed use of an annual volume of 124.11 ac-ft/year for domestic and commercial use and 132 ac-ft/year for irrigation in the two subdivisions, for a total of 256.11 ac-ft/year, subject to the inconsistencies explained above. The remaining volume of about 304 ac-ft/year is unaccounted for. (Department file; Miller Testimony; Uthman Memo, dated July 11, 2008; Exhibits 1 and 2).

77. I find the Applicant has not shown that 560 ac-ft/year of water is the amount needed to sustain the beneficial use. I find that that the Applicant has proven by a preponderance of the evidence that 256.11 ac-ft/year is the amount of water necessary to sustain the proposed beneficial use within the two proposed subdivisions. I find the Applicant has proven by a preponderance of the evidence that an annual flow rate of 575 gpm is the amount of water necessary to sustain the proposed beneficial use. (§ 85-2-311(1)(d), MCA)

## **Possessory Interest**

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78. Applicant is the owner of the property which has been designated in the Application as the place of use. Applicant has the possessory interest or the written consent of one with possessory interest in the property where the water will be put to beneficial use. Applicant will have consent prior to supplying water to a landowner, because water cannot be supplied to any landowner without the landowner subscribing to the service, which is by its nature, consent. Applicant has possessory interest in the proposed place of use. (Department file; § 85-2-311(1)(e), MCA)

### **Water Quality Issues**

79. No valid objections related to adverse effect on the water quality of a prior appropriator were received by the Department. (Department file; § 85-2-311(1)(f), MCA)

80. No valid objections filed by the DEQ or a local water quality district relative to the proposed use not being in substantial accordance with the classification of the source of supply pursuant to § 75-5-301(1), MCA, were received by the Department. (Department file; § 85-2-311(1)(g), MCA)

81. No valid objections related to the ability of a discharge permit holder to satisfy effluent limitations of a permit under Title 75, chapter 5, part 4, were received by the Department. (Department file; § 85-2-311(1)(h), MCA)

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 within the upper Missouri River basin closure area if an application qualifies for an exception as provided in § 85-2-343, MCA, (2005) and if the applicant proves the criteria in §85-2-311, MCA, by a preponderance of the evidence. (§ 85-2-311, MCA)

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;

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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. (§ 85-2-311(1) (a)-(h), MCA)

3. This Application is subject to the statutes and rules in effect at the time the application was submitted, and not those that have been enacted since then. See In the Matter of the Application for Beneficial Water Use Permit No. 24550-41QJ by Anderson Ranch, (Proposal for Decision, 1984). The Trout Unlimited decision established that the 2005 exception to the upper Missouri River basin closure for ground water that is not immediately or directly connected to surface water does not extend to new uses that involve the prestream capture of groundwater. Trout Unlimited, (2006), 331 Mont. 483, 133 P.3d 224. Pursuant to Trout Unlimited, the Department recognizes the connectivity between surface water and ground water and the effect of prestream capture on surface water. The Montana Supreme Court decision in Trout Unlimited applies retroactively. Id. See In the Matter of Application No. 41D-30002459 by Big Hole Grazing Association & Montana Department of Transportation and Application No. 41D-30002460 by Big Hole Grazing Association (Final Order, 2006); In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC (2006) (mitigation of depletion required); see also Dempsey v. Allstate Insurance Company (2004), 325 Mont. 207, 104 P.3d 483.

4. DNRC cannot process or grant an application for a permit to appropriate water within the upper Missouri River basin until final decrees have been issued in accordance with Title 85, chapter 2, part 2, MCA, for all of the sub-basins of the upper Missouri River basin. § 85-2-343(1), MCA. The upper Missouri River basin consists of the drainage area of the Missouri River and its tributaries above Morony Dam. (§ 85-2-342(4), MCA). The proposed wells are

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located within the upper Missouri River basin closure area. However, there are exceptions to this closure for applications for permits to appropriate water for domestic, municipal, or stock use. (§ 85-2-343(2)(c), MCA, and § 85-2-342, MCA). This Application is for municipal use. The Application falls under the exceptions to the upper Missouri River basin. (FOF 1-7; § 85-2-343(2)(c) and (e), MCA)

5. A public notice containing the facts pertinent to the permit application was published once in a newspaper of general circulation in the area of the source and mailed to certain individuals and entities. The Department received seven timely valid objections to the Application. (FOF 3-4; §§ 85-2-307, -308, -309, MCA)

### **Physical Availability**

6. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. (FOF 33-42; § 85-2-311(1)(a)(i), MCA)

### **Legal Availability**

7. To comply with § 85-2-311(1)(a)(ii), MCA, an applicant must prove that, at least in some years, sufficient unappropriated water will be physically available at the point of diversion to supply the amount requested throughout the period of appropriation, and that at least in some years, no legitimate calls for water will be made on him by a senior appropriator. In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company (December 2006); In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson (1992).

8. The Applicant has not shown water is legally available. Applicant estimates that 1,968.8 ac-ft/year is available in the source aquifer, and estimates the legal demands (existing appropriations of 1,405.92 ac-ft/year plus proposed demands of 560 ac-ft/year) within the cone of depression caused by pumping the ground water wells to be 1,965.92 ac-ft/year. The Applicant did not analyze all ground water water rights located with the potential impact area, including only 77 of the 137 ground water water rights. (FOF 43-49)

9. Additionally, the area of potential impact is not limited to ground water within the cone of depression; it must be extended to include the area impacted by depletions to the Gallatin River. The Town proposes to mitigate net depletions to surface water. But the Applicant has not

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identified how the alleged net depletion was determined in order to demonstrate that the depletions will be offset by the proposed amount of mitigation water. The Applicant has not identified the current existing legal demands throughout the entire area of potential impact for this Application, and it is not known from the record that the amount of water physically available exceeds the existing legal demands within the area of potential impact, which includes the surface water rights beginning on the Gallatin River and downstream where the depletion occurs. Applicant has failed to analyze all ground water and surface water rights throughout the area of potential impact which might be adversely affected in the non-irrigation season when no mitigation (augmentation) was proposed. Applicant's plan cannot be considered complete until all prior water rights on the source of supply throughout the area of potential impact are identified. (FOF 43-50; See In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC, Final Order, December 2007, Admin. R. M. 36.12.101; Admin. R. M. 36.12.120; § 85-2-311(1)(b), MCA)

### **Adverse Effect**

10. The Applicant has not provided adequate evidence to support or explain the volume of water requested. The Applicant only reports a total appropriation of 124.11 ac-ft/year for domestic and commercial and 132 ac-ft/year for irrigation, which is a combined total of 256.11 ac-ft/year. Of a total volumetric request of 560 ac-ft/year, only 256.11 ac-ft/year are accounted for by the Applicant. The Applicant presented multiple variations of analysis of the use of the identified 256.11 ac-ft/year, none of which were reconcilable with the information in the record. Applicant proposes to change the purpose of use of a total of 0.70 cubic feet per second (cfs) (i.e. 314 gpm) up to 138.21 ac-ft/year for mitigation purposes, estimating the recharge for mitigation of its consumptive use (138.21 ac-ft/year) as 293 gpm or 314 gpm over a 100-day mitigation period. Applicant has not presented evidence to support its consumptive use calculations. (FOF 51-72 )

11. The applicant bears the affirmative burden of demonstrating the applicable criteria, Mont. Code Ann. §85-2-311(1) are met, including the criterion that prior appropriators under an existing water right, a certificate, a permit, or a state water reservation will not be adversely

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affected. See e.g., In the Matter of the Application for Beneficial Water Use Permit No. 25170-G41B by East Bench Grain & Machinery, Inc. (Final Order, March 1983) (The evidence must support a finding of no adverse effect, and it is the applicant's burden to provide it. If the applicant does not, the permit cannot be issued). As the Montana Supreme Court recognized in In the Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

The Court has likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co. v. Carey (1984), 211 Mont. 91, 97-98, 685 P.2d 336, 340; see also Mont. Const. art. IX § 3(1).

Pursuant to § 85-2-311(1)(b), MCA, adverse effect must be determined 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. Applicant has modeled the depletion of the proposed appropriation to the Gallatin River. See Trout Unlimited (2006), 331 Mont. 483, 133 P.3d 224 (recognizing effect of prestream capture on surface water). However, Applicant has failed to provide a single, credible analysis supported by the record of the amount of the depletion and the mitigation water necessary to offset the depletion.

It is the applicant's burden to produce the required evidence, and not doing so constitutes a failure of proof. In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC. (Proposal for Decision, adopted by Final Order, 2005); East Bench, *supra*. The proposed appropriation is within the upper Missouri River basin closure. §

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85-2-343 (2005), MCA. DNRC cannot assume an impact to a source is so inconsequential and negligible that it can be disregarded in a closed basin. Any depletion of water in a closed basin or any other basin from a new appropriation must be addressed so as to not cause adverse affect to a senior water right holder. Applicant failed to demonstrate a plan which provides for the mitigation of the depletion in the timing and amount of the depletion. See e.g., In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC (Proposal for Decision (2006), adopted by Final Order); In the Matter of Beneficial Water Use Permit Application No. 41H-30019215 by Utility Solutions LLC (Final Order, 2007) (depletions must be offset in timing, amount and location); In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC (Final Order, 2008), *pending judicial review*, Shennum et al. v. DNRC et al., Cause No. CDV-2008-740, Montana First Judicial District Court, Lewis & Clark County. The Applicant has not proven that the water rights of a prior appropriator under an existing water right, a certificate, permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b), MCA. (FOF 51-72; § 85-2-311(1)(b), MCA)

### **Adequacy of Means of Diversion and Construction**

12. The Applicant has proven that the proposed means of diversion, construction, and operation of the appropriation works are adequate. (FOF 73-74; § 85-2-311(1)(c), MCA)

### **Beneficial Use**

13. Municipal use is a beneficial use. (§ 85-2-102(4), MCA). The Applicant has proven the proposed use of water is a beneficial use of water. (FOF 75; § 85-2-311(1)(d), MCA)

14. An appropriator may appropriate water only for a beneficial use. (§ 85-2-301, MCA, and § 85-2-311(1)(d), MCA). It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. See e.g., McDonald v. State (1986), 220 Mont. 519, 722 P.2d 598; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. See e.g., Bitterroot River Protective Assoc. v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court, Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451. Moreover, the

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Department is specifically prohibited, “[t]he department . . . may not issue a permit for more water than . . . can be beneficially used without waste for the purpose stated in the application.” §85-2-312(1)(a), MCA. Waste is defined to include the “application of water to anything but a beneficial use.” §85-2-102(23), MCA. An absence of evidence of waste does not prove the amount requested is for a beneficial use. In the Matter of Application for Beneficial Water Use Permit No. 76H-84577 by Thomas and Janine Stellick (Final Order, 1995). It is the Applicant’s burden to prove the required criteria. A failure to meet that affirmative burden does not mean the criterion is met for lack of contrary evidence. It is the applicant’s burden to produce the required evidence, and not doing so constitutes a failure of proof. In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., (Proposal for Decision, adopted by Final Order, 2005). See also In the Matter of Application No. 76GI 30012925 to Change Water Right Claim No(s) 76GI 40733-00, 76GI 94401-00, 76GI 94402-00 By Granite County (Proposal for Decision adopted in Final Order, 2008), *citing* In the Matter of Application No. 43B-30002710 by USA (Department of Agriculture – Forest Service) (Final Order, 2005); In the Matter of Application No. 41K-11226000 by Poulson (Final Order, 2002) (Applicant must prove the amount of water necessary to sustain the proposed purposes).

15. Applicant requests an annual volume of 560 ac-ft/year of water, and provides an analysis of 256.11 ac-ft/year of water. Applicant failed to prove by a preponderance of the evidence that the 560 ac-ft/year of water requested is the amount needed to sustain the beneficial use, when its entire analysis in this Application is predicated on the use of 256.11 ac-ft/year. I find that that the Applicant has proven by a preponderance of the evidence that 256.11 ac-ft/year is the amount of water necessary to sustain the proposed beneficial use. (FOF 76; § 85-2-311(1)(d), MCA)

16. Applicant further requests an annual flow rate of 575 gpm of water. I find that that the Applicant has proven by a preponderance of the evidence that an annual flow rate of 575 gpm is the flow rate necessary to sustain the proposed beneficial use. (FOF 77; § 85-2-311(1)(d), MCA)

### **Possessory Interest**

## **ATTACHMENT A**

17. Applicant has proven by a preponderance of evidence that the Applicant has a possessory interest, or the written consent of the person with possessory interest, in the property where the water will be put to a beneficial use. (FOF 78; §85-2-311(1)(e) MCA; Admin R. M. 36.12.1802)

### **Water Quality Issues**

18. The criteria in §§ 85-2-311(1)(f), (g), and (h), MCA, do not apply because no valid water quality objections were received. (FOF 79-81; § 85-2-311(2), MCA)

### **General**

19. 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. (§ 85-2-312, MCA; see also, Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339). Applicant has not proven the criteria for issuance of a provisional permit. (§ 85-2-311, MCA)

**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 No. 41H-30021840 by Town of Manhattan is **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. If those parties choose to have oral argument on the exceptions, those parties must request oral argument in their exceptions. Exceptions and briefs, and requests for oral argument, must be filed with the Department by **December 30, 2008**, or postmarked by the same date, and copies mailed by that same date to all parties. No new evidence will be considered. The parties will be notified of the time and place for oral argument on exceptions filed, *if requested*.

## **ATTACHMENT A**

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

DATED this 9<sup>th</sup> day of December, 2008.

/Original signed by e-signature by Jolyn E Eggart/

Jolyn E. Eggart, Hearing Examiner  
Department of Natural Resources  
and Conservation  
Water Resources Division  
P.O. Box 201601  
Helena, Montana 59620-1601  
(406) 444-1307

# ATTACHMENT A

## 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 9<sup>th</sup> day of December, 2008, by first class United States mail:

JANE MERSEN  
KASTING KAUFFMAN & MERSEN PC  
716 S 20<sup>TH</sup> STE 101  
BOZEMAN MT 59718

MATTHEW W WILLIAMS  
WILLIAMS & JENT LLP  
506 E BABCOCK ST  
BOZEMAN MT 59715

BILL SCHENK  
MT DEPT OF FISH WILDLIFE & PARKS  
PO BOX 200701  
HELENA MT 59620-0701

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Cc:  
BILL UTHMAN, HYDROGEOLOGIST  
DNRC WATER RESOURCES  
1424 9<sup>TH</sup> AVE  
PO BOX 201601  
HELENA MT 59620-1601  
(VIA HAND-DELIVERY)

DNRC BOZEMAN REGIONAL OFFICE  
2273 BOOT HILL CT STE 110  
BOZEMAN MT 59715

/Original signed by Jamie Price/  
Jamie Price, Hearings Assistant  
Hearings Unit, (406) 444-6615

# ATTACHMENT B

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

\* \* \* \* \*

IN THE MATTER OF APPLICATION FOR )  
BENEFICIAL WATER USE PERMIT NO. )  
41H-30021840 BY TOWN OF MANHATTAN )

FINAL ORDER

\* \* \* \* \*

### BACKGROUND

The Proposal for Decision (PFD) in this matter was entered on December 9, 2008. Applicant Town of Manhattan filed timely exceptions to the PFD on December 30, 2008. No other exceptions were filed. A request for oral argument was made by Town of Manhattan in their filing of exceptions. Oral argument was scheduled and heard in Helena on February 25, 2009, at which Town of Manhattan appeared by and through counsel Matthew W. Williams. Objector Montana Department of Fish, Wildlife and Parks (DFWP) appeared at oral argument by and through counsel William A. Schenk.

The PFD recommends denial of Beneficial Water Use Permit No. 41H-30021840 because the Hearing Examiner found that the Applicant did not prove by a preponderance of the evidence that "water can reasonably be considered legally available" 85-2-311(1)(a)(ii) MCA and that "the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected" 85-2-311(1)(b). The Hearing Examiner found that the Applicant did prove the beneficial use of water up to 256.11 ac-ft/year (a reduction of 303.89 ac-ft/year from the Applicant's original request of 560 ac-ft/year) along with the Applicant's requested flow rate of 575 gallons per minute. 85-2-311(1)(d) MCA. All remaining criteria under 85-2-311(a)(i), -311(1)(c), and -311(1)(e) MCA were deemed to have been proven.

As public noticed, the Applicant seeks to appropriate up to 560 acre-feet (ac-ft) of water per year at a maximum rate of 575 gallons per minute (gpm). The proposed period of diversion is January 1 through December 31, inclusive each year. The requested appropriation will be used for municipal use including domestic, commercial, irrigation, and fire protection in the proposed Pioneer Crossing subdivision located in the NE1/4NW1/4SW1/4, Section 3 Township 1 North, Range 3 East, and Centennial Village

## **ATTACHMENT B**

subdivision located in the SE1/4SE/1/4NE1/4, Section 3, Township 1 North, Range 3 East, near the town of Manhattan in Gallatin County, Montana. The subdivisions are located about 1.75 miles southwest of the Gallatin River. Pioneer Crossing and Centennial Village subdivisions are part of a common Planned Unit Development. At full build out, the subdivisions will be comprised of a total of 363 lots (241 single-family dwellings; 107 single-family with accessory dwellings; and 15 commercial lots). The residential lots are approximately 1/3 – 1/2 acre size lots, and the commercial lots are approximately 1-acre size lots. The proposed subdivisions will be annexed into the Town corporate limits, serving a municipality (the Town of Manhattan). Two new ground water supply wells will be connected to the Town's water distribution system, therefore, the place of use from these new wells can occur throughout the Town. The Town and proposed appropriation are located within the Missouri River basin closure area, which consists of the drainage area of the Missouri River and its tributaries above Morony Dam. This Application seeks to appropriate ground water for municipal use, which is an exception under the basin closure act. 85-2-343(2)(c) MCA (2005 and 2007). This Application was filed prior to the effective date of House Bill 831 (2007) and the statutory requirements for mitigation plans and combined applications under 85-2-360 through - 363 MCA. See *infra* discussion of mitigation/augmentation. The Application did not contain a mitigation (augmentation) plan at the time it was filed.

### **STANDARD OF REVIEW**

Pursuant to Mont. Code Ann. § 2-4-621, the Department may, in its final order:

reject or modify the conclusions of law and interpretation of administrative rules in the proposal for decision but may not reject or modify the findings of fact unless the agency first determines from a review of the complete record and states with particularity in the order that the findings of fact were not based upon competent substantial evidence or that the proceedings on which the findings were based did not comply with essential requirements of law.

"Substantial evidence" is evidence that a reasonable mind might accept as adequate to support a conclusion; it consists of more than a mere scintilla of evidence, but may be less than a preponderance. *Strom v. Logan*, 304 Mont. 176, 18 P.3d 1024 (2001). Furthermore, only factual information or evidence that is a part of the contested case hearing record shall be considered in the final decision making process. ARM 36.12.229(2). The record was considered to be closed as of October 1, 2008. PFD pp.

## **ATTACHMENT B**

3. No evidence presented after the record was closed has been considered in this decision.

Applicant's exceptions included attachments as follows:

1. "Tab 1" a ten-page letter dated December 23, 2008 from Michael Nicklin to Matthew Williams "RE: Review and Comments on the Proposal for Decision Application for Beneficial Use 41H-30021840." "Tab 1" includes four "Exhibits." "Tab 1" appears to be an internal working document of the Applicant in response to the PFD. "Tab 1" is mostly a summary of what the Applicant believes they have proposed in their Application. While helpful, as such, it could and should have been presented to Hearing Examiner Eggart (HE) at the hearing in this matter, not 3 months after the close of the hearing record.

The four "Exhibits" in "Tab 1" include "Exhibit A" parsed into three sub-exhibits as follows:

"Exhibit A-1 Communications Identifying those Participating in Negotiations on Water Use and Consumptive Use"

This exhibit details a series of e-mails (dated around January, 2007) regarding determination of the historical and consumptive use for a proposed augmentation plan. Participating in these discussions were the DNRC, the Association of Gallatin Agricultural Irrigators (AGAI), Trout Unlimited, Montana Department of Fish, Wildlife and Parks and the Local Water Quality Control District, and others.

This series of e-mails does not appear in the record and it is unclear as to whether it is an attempt to introduce into the record additional evidence. It is also unclear to this Final Decision Maker what the relevance of this series of e-mails has to the criteria under consideration by the HE other than to show that the DNRC was involved early on in working with the Applicant and Objectors.

"Exhibit A-2 Calculation on Water Supply and Consumptive use by Applicant's Engineer"

This exhibit consists of an e-mail from Brent Miller to Alan English (Applicant's consultants) dated January 18, 2007 transmitting a memo prepared by Gaston Engineering & Surveying, P.C. which includes updated calculations of water use and consumptive use apparently prepared in response to the issues raised in "Exhibit A-1".

This exhibit (in particular the memo) is not found in the record (although portions of this memo seem to be relied upon in the original Application and Applicant's

## **ATTACHMENT B**

Exhibit 2 from the hearing) and appears to be an attempt to introduce into the record additional evidence. This memo was clearly available to the Applicant at the time of hearing and if the Applicant was relying on this memo in support of its Application, such information should have been brought forth at the hearing.

“Exhibit A-3 E-mail showing Applicant Engineer provided Mr. Uthman Copy of Water Use Calculations per Request on April 10, 2007”

This exhibit consists of an e-mail from Brent Miller to Bill Uthman (DNRC) dated April 10, 2007 which states “[a]s per your request, I have attached a copy of the information sent to Alan English regarding the above referenced project.” A pdf file titled “Water use.pdf” was attached.

It is unclear to this Final Decision Maker what significance the Applicant attaches to this e-mail and it cannot be found in the record in this matter.

“Exhibit B DNRC Memorandum from Mr. Uthman to Mr. Dassenko (DNRC) May 10, 2006 Determining that Applicant had Met DNRC Requirements on Physical and Legal Availability of Ground Water”

This exhibit is a memo from Bill Uthman, DNRC Hydrogeologist, to Porter Dassenko, DNRC Water Resources Specialist, and is Mr. Uthman’s initial evaluation of the Application in the correct and complete review of the Application (prior to objections to the Application and subsequent negotiations). It concludes that “[t]he applicant has adequately addressed the criteria for issuance of a permit according to department evaluation standards.”

This exhibit is found in the record for this matter.

“Exhibit C Miscellaneous Communications between Mr. Uthman and Applicant’s Engineer Miller – Mr. Uthman had assisted in Revising the Technical Memorandum Until it met DNRC Requirements for defining Physical and Legal Availability of Ground Water during the correct and complete review.”

This exhibit consists of a series of e-mails between Bill Uthman and Brent Miller from around April and early May 2006, regarding the “Technical Report for Pioneer Crossing & Centennial Village Subdivision.”

This series of e-mails do not appear in the record in this matter and it is unclear to this Final Decision Maker what significance the Applicant attaches to them.

“Exhibit D Figure 8 from Ground-Water Model Town of Manhattan Adapted for Vidar Beneficial Use Application”

This exhibit consists of a one page reproduction of the “Features Represented in the Vicinity Town of Manhattan.”

## **ATTACHMENT B**

This exhibit is included in the record as Figure 8 in Applicant's "Exhibit 1" presented at the hearing.

Applicant also provided "Table 1" at the oral argument, which was referenced in the contested case proceeding but not previously provided for the record. To the extent that the above provided materials are found in the record of hearing, I have considered them for this Final Order. Material not found in the record has not been considered. ARM 36.12.229(2) (only factual information or evidence which is part of the contested case hearing record shall be considered in the final decision making process).

Pursuant to ARM 36.12.229, exceptions must specifically set forth the precise portions of the proposed decision to which the exception is taken, the reason for the exception, authorities upon which the party relies, and specific citations to the transcript if one was prepared. Vague assertions as to what the record shows or does not show without citation to the precise portion of the record (e.g., to exhibits or to specific testimony) will be accorded little attention. See *In the Matter of the Application for Beneficial Water Use Permit No. 14295-g41F by Yolanda Blakely*, DNRC Final Order (1985) (no portion of the "exceptions" filed by applicant specifically sets forth what part of the decision is being excepted to. They are therefore accorded little attention).

I have considered the exceptions and reviewed the record under these standards.

### **APPLICANT EXCEPTIONS**

At the outset I note that with few exceptions do the Applicant's written exceptions direct this Final Decision Maker to the "precise portions of the proposed decision to which [an] exception is taken" nor is there any citation to any authority<sup>1</sup>. Applicant made no exception to a conclusion of law in the PFD. As noted above, Applicant attaches multiple exhibits to its Exceptions – some of which is "clarification" of what the Applicant believes the record to show and some of which appears to be new explanatory evidence not in the record. This makes it extremely difficult to discern what part of the PFD, specifically, the Applicant's general exceptions are intended to address. The same holds true for the oral argument hearing. Instead, Applicant maintains that the Department "has no authority to conduct a contested case hearing" in this matter and then goes on to make a generalized assertions that "DNRC Incorrectly Analyzed the Application." Nonetheless, I shall attempt to address the Applicant's concerns.

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<sup>1</sup> Applicant cites a list of Findings of Fact (FOF) in the PFD at the beginning of its Exceptions (p. 2) but does not later tie these FOFs to a specific factual exception.

## ATTACHMENT B

### **I. The DNRC Has No Authority to Conduct Contested Case Hearings**

Applicant contends in its exceptions as it did in the proceeding below, that the Department must issue its permit with the settlement conditions and that the Department had no authority to hold a contested case hearing under *Bostwick Properties v. DNRC*, Cause No. DV-07-917A, Montana Eighteenth Judicial District (May 2008), *appeal pending*, Montana Supreme Court Case No. DA-08-248. Objector DFWP objected to the application of *Bostwick* at the oral argument hearing. DFWP, Trout Unlimited, and AGAI contended at the contested case hearing that *Bostwick* did not apply to this proceeding.

Applicant misapprehends the role of the Hearing Examiner in issuing a Proposal for Decision in this matter – that is to decide if, by a preponderance of the evidence, the information submitted by the Applicant meets the criteria enumerated in 85-2-311 MCA. The fact that a hearing was held in this matter in no way makes that hearing the subject of the Proposal for Decision. The Hearing Examiner explained in great detail the procedural history of this matter (during which the decision to hold a hearing was made) but did not then rely on that procedural history to make the **holding** of the Proposal for Decision. The interpretation of *Bostwick* is not the subject matter of this proceeding. The subject matter of the Proposal for Decision is the criteria of 85-2-311 MCA, and the Hearing Examiner determined that the Applicant failed to prove that “water can reasonably be considered legally available” 85-2-311(1)(a)(ii) MCA and that “the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected” 85-2-311(1)(b).

Regardless, there are substantial factual differences between this matter and that presented by *Bostwick*. As the Applicant admitted and is evident in the record, the “settlement” of the objections was an evolving process consisting of at least four different variations of mitigation after the “correct and complete” stage: 1) no mitigation; 2) shares in a mutual ditch company (Baker Ditch) are left instream in the Gallatin River without a change authorization; 3) shares in a mutual ditch company are left instream in the Gallatin River with a later-filed change application; and 4) shares of a mutual ditch company are diverted to an infiltration gallery with a later-filed change application. See e.g., Consent; Applicant Exceptions p.3, footnote (Department Hydrogeologist Bill Uthman analyzed a mitigation plan in preparation for the hearing that was no longer under consideration). The “settlement” of “objections” did not occur until after the contested case hearing was held and the Consent to Entry of Administrative Order dated

## **ATTACHMENT B**

September 27, 2008 (Consent) was filed with the Department. Record; Consent p. 3. The last mitigation option (infiltration gallery) made its first appearance as a settlement condition in the Consent. Objectors DFWP, Trout Unlimited and AGAI all noted at the contested case hearing on September 4, 2008, that while they were optimistic, there was no settlement yet in place.

In addition, the *Bostwick* case does not appear to stand for, among other things, the proposition cited by Applicant that conditions must be accepted sans hearing and the permit issued. *Bostwick* mandated issuance of a permit as determined “correct and complete” without consideration or incorporation of any settlement conditions. The *Bostwick* decision held that the Department lacked the authority to issue a statement of opinion when any objection is filed. The decision clearly referenced that the Department hold a “contested case hearing . . . on the objection” under 85-2-309(1) MCA, and issue a “decision” as was done in this case. *Bostwick* FOF 16, COL 44-45, 67. The Montana Water Use Act provides only two alternatives for processing and application: 1) a statement of opinion where no objections under 85-2-310(1) MCA are filed and the Department is of the opinion that the criteria have not been proven; or 2) or a hearing on the objection and a decision under 85-2-309(1) MCA. The Montana Water Use Act does not have the option advanced by the Applicant of no hearing where objections are filed and settled, and the required issuance of the permit incorporating settlement conditions without review by the Department. See also 85-2-312 MCA.

Applicant’s first “exception” is not well taken and will not result in reversal or modification of the Proposal for Decision.

### **II. The DNRC Incorrectly Analyzed the Application**

Applicant avers that the Proposal for Decision “makes [settlement agreements] impossible, as it insists that an application be denied where an accord with an objector creates conflicting numbers. See Finding of Fact No. 71.” Applicant Exceptions p. 3. Applicant goes on to state that “[b]ecause the DNRC should not adopt an approach that declares to applicants for permits or changes that they face denial if they agree to numbers that can no longer be endorsed by the applicant’s experts, the DNRC must adopt a different approach for negotiated settlements...” Applicant Exceptions pp. 3-4. What the Applicant misses here is that the role of the DNRC is (as is relevant here) to determine if water is legally available or that no adverse effect to other water users will occur under the proposed appropriation. Such a determination necessarily requires an

## **ATTACHMENT B**

analysis of the numbers agreed to by the applicant and the objectors whether or not those numbers can be “endorsed” by the Applicant’s experts. It is disingenuous for the Applicant to argue because they have negotiated some numbers with some specific objector, that they then are not required to provide the Department with an analysis that enables the Department to evaluate the relevant criteria. The Applicant asks the Department to accept numbers simply because they are settlement numbers.

However, the Examiner entirely overlooks the Town’s repeated observations that many of the numbers used to arrange settlement are simply not the Town’s numbers. Accordingly, it is often impossible for the Town to “justify” a number that the Town adopted solely to reach an accord with objectors.

Applicant Exceptions, p.2. The Applicant further explained:

Moreover, precisely because the negotiated number is now different than the applicant’s original analysis, none of the applicant’s experts will necessarily endorse the negotiated result.

Id. at 3.

Applicant did not present the analyses of other Parties or a cohesive one of its own such that they could be independently evaluated and a conclusion could be drawn that the settle numbers are supportable. The record is devoid of the analysis of the Parties or their proposed numbers such that one can conclude the settlement is reasonable given that no expert will stand behind the negotiated numbers.<sup>2</sup> The Department is faced with dueling experts and analyses on a regular basis and is asked to reach a conclusion. The evaluation is based on the Department’s own consideration and analysis of the evidence presented by the experts. Without a basis in the record of what the analyses were that led to the settlement number, the Department cannot evaluate the propriety of the analysis and number proffered by the Applicant.

Applicant asks the Department to accept numbers simply because it should. Anyone can agree to anything in a settlement, based on fact or not. What is to prevent an applicant from having a straw-man objector simply to have a settlement and force the Department to agree to “settlement numbers.” The Department is bound by 85-2-311 and -312 MCA, to make an independent analysis of the facts, law and the proposed settlement. The Department is not anti-settlement; it simply seeks a basis from the parties upon which to review the propriety of the analysis directed in the 85-2-311 MCA criteria.

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<sup>2</sup> Applicant admits that it does not know the numbers used by other Parties to derive their settlement offers.

## **ATTACHMENT B**

One of the Department's roles is to see that no prior appropriator is adversely affected by a proposed appropriation, not just that objections have been satisfied. 85-2-311(1)(b) MCA. What the HE found in this case was no concrete set of numbers for irrigation period, mitigation period, proposed mitigation amount, irrigated acreage, irrigation consumptive use, etc. were settled on and more importantly no analysis to support those varying numbers. As the HE aptly pointed out "[t]he Department cannot determine from all of these multiple variations exactly what the Applicant's plan is for the proposed appropriation and the justification for it." For example, the Applicant at one point appears to acknowledge that a volume of 256.11 ac-ft/year is the appropriate amount for this proposed use (see Applicant's Exceptions to Proposal for Decision, pp. 4), yet in its "Synopsis of Application" filed on October 1, 2008 it is stated that "[t]he application . . . seeks the authority to initiate an appropriation of water for municipal use. The flow rate, **volume**, point of diversion, and place of use are all as set forth in the **public notice** of this application." (emphasis provided) i.e. a volume of 560 ac-ft/year. That is but one example of the inconsistencies with which the HE based her decision. Applicant asserts that the hearing examiner should have asked any question that she might have had at the September 2008 hearing while the record was still open. However, despite a request to provide a "synopsis" of the Application and the evolving mitigation plans for her use at hearing, the Applicant did not provide a synopsis until October 1, 2008, or the Consent until September 26, 2008. Furthermore the synopsis was not entirely correct as illustrated above. Despite her request and a postponement of the hearing at Applicant's request, the Hearing Examiner did not have the relevant information needed at the time and place appointed for hearing to be able to ask any question she might have.

Applicant's exceptions generally point to some of the testimony and evidence that was presented by Applicant's experts, but unfortunately do not point to which of the numbers that testimony apply to. It does not appear to this Final Decision maker that "the Department incorrectly analyzed the application" so much as the Applicant did not present a cohesive, understandable project, with supporting analysis that the Department could use to adequately evaluate the applicable criteria.

As the Montana Supreme Court recognized in In the Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnner (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, superseded by legislation on another issue:

## **ATTACHMENT B**

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

The Court has likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co. v. Carey (1984), 211 Mont. 91, 97-98, 685 P.2d 336, 340; see also Mont. Const. art. IX § 3(1).

It is the applicant's burden to produce the required evidence, and not doing so constitutes a failure of proof. *In the Matter of Application to Change Water Right No. 41H-1223599 by MGRR #1, LLC.*, Proposal for Decision, adopted by DNRC Final Order (2005). The Department will evaluate whether an applicant's proposed plan, i.e. mitigation or aquifer recharge, will offset depletions so as to meet 85-2-311(1)(b), MCA, in the permit proceeding. The applicant's authority to use the water as proposed is assumed for the purposes of the analysis. The authority of the applicant to use the offset water as proposed for the plan is not determined in the permit proceeding but is determined in the change. Whether the applicant proves by a preponderance of the evidence that the mitigation/aquifer recharge plan will be effective is determined in the permit proceeding. Thus, the applicant must accurately convey to the Department exactly what it proposes for a mitigation/aquifer recharge plan in the permit proceeding and cannot wait until a later filed change application, if any. *E.g.*, DNRC Final Order (2006), *In the Matter of Beneficial Water Use Permit Nos. 41H 30012025 And 41H 30013629 By Utility Solutions LLC* (permits granted based on plan for mitigation of depletion), *affirmed*, Faust v. DNRC et al., Cause No. CDV-2006-886, Montana First Judicial District (2008); DNRC Final Order (2007), *In the Matter of Application for Beneficial Water Use Permit 41H 30019215 by Utility Solutions LLC* (permit granted on basis of plan for mitigation of depletion), *affirmed*, Montana River Action Network et al. v. DNRC et al., Cause No. CDV-2007-602, Montana First Judicial District (2008); DNRC Final Order (2008), *In the Matter of Application for Beneficial Water Use Permit No. 41H 30026244 By Utility Solutions LLC, pending judicial review*, Shennum et al. v. DNRC et

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al., Cause No. CDV-2008-740, Montana First Judicial District. Applicant failed to demonstrate a plan which provides for the mitigation of the depletion in the timing and amount of the depletion. See *e.g.*, *In the Matter of Beneficial Water Use Permit Application No. 41H-30019215 by Utility Solutions LLC*, Final Order (2007) (depletions must be offset in timing, amount and location); DNRC Final Order (2007), *In the Matter of Application for Beneficial Water Use Permit No. 41H-30023457 by Utility Solutions LLC* (permit denied).

Contrary to Applicant's assertions (Exceptions Tab 1 pg. 6), mitigation to prevent adverse effect to senior appropriators (also known as adverse effect) is not dependent upon the requirements of House Bill 831, 85-2-360 MCA, *et. seq.* *E.g.*, *Faust v. DNRC et al.* Cause No. CDV-2006-886, Montana First Judicial District. *Order on Petition for Judicial Review* (November 2008) (augmentation is a permissible means to replace ground water in the Gallatin River to prevent adverse effect to senior water right holders). Montana case law and Department decisions provide a history of augmentation, including augmentation by new or untried methods. See *Thompson v Harvey* (1974), 154 Mont. 133, 519 P.2d 963; *Perkins v. Kramer* (1966), 148 Mont. 355, 423 P.2d 587; see also 85-2-413 MCA (recognizes exchange of water – divert natural flow and release water from storage to senior appropriators downstream). The Department in earlier administrative decisions provided for the use of replacement water to mitigate what would otherwise constitute adverse effect. *E.g.*, *In the Matter of Application for Beneficial Water Use Permit No. 41H-104667 and Application to Change Appropriation Water Right No. 41H-125497 by Ronald J. Woods*, DNRC Final Order (June 1, 2000) (to ensure the pond is nonconsumptive, intake and outflow conveyances must be lined or conveyed by pipe. Evaporation must be replaced by some reduction in other uses. Here the water would be replaced by water made available through the change of another water right.); *In the Matter of Application to Change Appropriation Water Right 76GJ-110821 by Peterson and MT Department of Transportation*, DNRC Final Order (2001); *In the Matter of Application to Change Appropriation Water Right No. 76G-3235699 by Arco Environmental Remediation LLC.*, Change Abstract (2203) (application had no objections; allows water under claim 76G-32356 to be exchanged for water appropriated out-of-priority by the permits at the wet closures and wildlife ponds to offset consumption arising at the wet closures and wildlife ponds with the priority date of claim 76G-32356); *In the Matter of Designation of the Larsen Creek Controlled*

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*Groundwater Area as Permanent*, Board of Natural Resources Final Order (1988) (requires augmentation).

Because the Applicant in the instant matter provided conflicting numbers and it is difficult, if not impossible, to determine to which of those numbers the Applicant's analysis did apply to, it cannot be said that the HE in this matter erred in determining that the Applicant has met their burden under the criteria of 85-2-311 MCA.

The Department further responds to the exceptions raised by the Applicant as best it can decipher the issues:

### **Amount Requested Under the Application**

The Applicant appears to confirm that it seeks only 256.11 acre-feet. That figure, however, conflicts with Applicant's final submission at the contested case hearing that they are requesting "[t]he flow rate, **volume**, point of diversion, and place of use are all as set forth in the public notice of this application." Synopsis of Application, p. 1. (emphasis provided). In other words, a volume of 560 acre-feet. The HE's confusion with the record is understandable given the conflicting responses above.

### **Other Groundwater Users**

Applicant asserts that the HE's review of the record was incomplete when she ruled that the Applicant erred by disregarding some senior [ground] water rights. The HE found that there were 137 ground water wells located within the zone of influence. Of those the Applicant stated that 77 wells were completed in the shallower aquifer (less than 140 feet bgs). The Applicant then states that the remaining 60 ground water rights **were not** included in the flux calculations that the Applicant used to determine legal availability. (FOF 49, Technical Report to Application, pp. 16-19 of 23). The HE, presented with this information presumed that the 60 excluded wells extended into the deeper aquifer – the same aquifer into which the Applicant's wells extended – and was understandably confused by the Applicant's decision to exclude the very wells that the Applicant's wells may affect. There does not appear to be anything in the record to refute this finding. Assuming, *arguendo*, that the Applicant made a typographical error (Applicant's Exceptions, Tab 1 p. 3), it is not the HE's role, nor that of this Final Decision Maker, to ferret out the true meaning of the Applicant's submissions. Based on the record in this matter the HE's Findings of Fact and Conclusions of Law regarding the legal availability of ground water and potential adverse effect do not constitute error.

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Applicant relies heavily on a Memorandum dated May 10, 2006 by Department Geohydrologist Bill Uthman (Department File and Exhibit B to Applicant's Exceptions), and communication in preparation for that Memorandum prepared as part of the "correct and complete" assessment of the Application. In April 2006, the Montana Supreme Court issued its decision in Montana Trout Unlimited v. Montana Dept. of Natural Resources and Conservation, 2006 MT 72, 331 Mont. 483, 133 P.3d 224 ("TU"). TU recognized the interconnection of ground and surface water and that ground water appropriations can capture ground water destined for surface water (pre-stream capture) in addition to drawing water directly from surface water (induced infiltration). Mr. Uthman's Memorandum did not include the analysis resulting from TU, because the result of the holding in TU had not yet been incorporated into the Department's analysis. The Memorandum reviewed the analysis criteria only for induced infiltration of surface water, not for the prestream capture resulting from TU. Applicant was subsequently made aware (but did not necessarily agree with) the analysis required by TU apparently through its negotiations with various objectors and its willingness to settle those objections through a mitigation plan. See, e.g. Applicant's "Request for Conference" dated January 28, 2008.

### **Surface Water and Augmentation**

The HE found that the Applicant had not adequately addressed, in their depletion analysis or in their mitigation proposal the legal availability of water and adverse effect to surface water appropriations. The Applicant states "[w]e recognize that generalizations made using the limited resources available are not definitive proof that the proposed appropriation will not eventually affect surface water within this basin and that some degree of long-term stream depletion may eventually occur along unknown reaches of the Gallatin River." (Technical Report for Pioneer Crossing Subdivision & Centennial Village Subdivision pp. 22) Notwithstanding the Applicant's disagreement with the HE regarding "turf grass" versus "pasture grass" in their consumptive use calculations (notably in Applicant's "Table 1" which is not of record), the Hearing Examiner notes, and the record reveals, that the Applicant did not analyze all ground water rights located within the potential impact area (COL 8); did not include surface water rights on the Gallatin River and downstream in their analysis (COL 9); and the Applicant's fluctuating numbers used throughout the Application (FOF 69, 71) makes this Application next to impossible to evaluate. This Final Decision Maker finds that the HE's conclusion that

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she “cannot determine from all of these multiple variations exactly what the Applicant’s plan is for the proposed appropriation and the justification for it” does not constitute error.

**WHEREFORE** this Final Decision Maker enters the following:

### **ORDER**

The Proposal for Decision entered in this matter on December 9, 2008 is hereby adopted in its entirety.

Therefore Application for Beneficial Water Use Permit No. 41H-30021840 by Town of Manhattan is **DENIED**.

### **NOTICE**

This final order may be appealed by a party in accordance with the Montana Administrative Procedure Act (Title 2, Chapter 4, Mont. Code Ann.) by filing a petition in the appropriate court within 30 days from the date of service of this order.

If a petition for judicial review is filed and a party to the proceeding elects to have a written transcript prepared as part of the record of the administrative hearing for certification to the reviewing district court, the requesting party must make arrangements for preparation of the written transcript. If no request is made, the Department will transmit only a copy of the audio recording of the oral proceedings to the district court.

DATED this 6<sup>th</sup> day of April, 2009.

/Original signed by David A Vogler/  
David A. Vogler, Hearing Examiner  
Water Resources Division  
Department of Natural Resources  
and Conservation  
PO Box 201601  
Helena, Montana 59620-1601

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## **CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the FINAL ORDER was served upon all parties listed below on this 6<sup>th</sup> day of April, 2009, by first class United States mail:

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