Big Sky County Water and Sewer District No. 363

Source Capacity Plan 2022 Update

September 2022



Western Groundwater Services, LLC

6595 Bear Claw Lane Bozeman, MT 59715 (406) 585-5947 www.westerngroundwaterservices.com



1.	INTRO	DUCTION
	1.1	SUMMARY OF FINDINGS
		1.1.1 Growth Rates
		1.1.2 Source Capacity 1
		1.1.3 Water Demand1
		1.1.4Source Capacity Limits3
		1.1.5 Water Rights
		1.1.6 Water Conservation
		1.1.7Groundwater Development3
		1.1.8Other Source Capacity Development Options4
		1.1.9Preferred Alternatives and Costs
		1.1.10 Meadow Village Capacity Improvements and Timelines
2.	GROW	TH RATE PROJECTION
	2.1	Undeveloped SFEs with Committed Service
2		
5.		Moodow/Villago
	2.1	Mountain Village 10
	J.Z	3 2 1 Future Solit System 14
		3.2.1 Mountain Village Booster Pumping Stations 14
	33	Flow and Level Monitoring
	5.5	
4.	WATEF	USE AND DEMAND PROJECTION16
	4.1	Meadow Village
	4.2	Mountain Village
		4.2.1 Resort Area and Cascade Systems (Future)
		4.2.2 Yellowstone Club Purchased Water Use
5.	WATEF	RIGHTS
	5.1	Meadow Village Rights25
	5.2	Mountain Village Rights25
	5.3	Other Groundwater Rights
	5.4	Surface Water Rights25
	5.5	Place of Use
6.	SOUR	E CAPACITY IMPROVEMENTS
	6.1	Water Conservation
		6.1.1 Indoor Water Use Conservation
		6.1.2 Outdoor Water Use Conservation
		6.1.3 Conservation Plan and Program
	6.2	Groundwater Development
		6.2.1 Meadow Village
		6.2.2 Mountain Village
	6.3	Surface Water
		6.3.1 West Fork Gallatin River
		6.3.2 Gallatin River Mainstem
	6.4	Direct Potable Reuse
		6.4.1 DPR Preliminary Engineering Report

7.	PREFERRED ALTERNATIVES AND BUDGETS			
	7.1	Conservation	38	
	7.2	Meadow Village Alluvial Test Wells.	38	
	7.3	Well Water Level Instruments	39	
	7.4	Direct Potable Reuse (DPR)	39	

List of Tables

6
8
10
12
14
18
20
22
22
23
26
26
26
26
29
29
39
• • • • •

List of Figures

Figure 1. Service Area Map	2
Figure 2. Growth Rate Analysis Plots	5
Figure 3. Growth Projection Plots	7
Figure 4. Meadow Village Wells and Tanks	9
Figure 5. Mountain Village Wells, Tanks and Booster Stations	11
Figure 6. Lone Moose Wells and Tank	13
Figure 7. Resort Area and Cascade Systems (Future)	15
Figure 8. Meadow Village Water Use History	17
Figure 9. Source Capacity Surplus Projection	19
Figure 10. Mountain Village Water Use History	21
Figure 11. Yellowstone Club Purchased Water Use	24
Figure 12. Water Rights Place of Use	27
Figure 13. Meadow Village Test Well Locations	32
Figure 14. Meadow Village Bedrock Wells	33
Figure 15. Mountain Village Test Well Location Map	35
Figure 16. Implementation Schedule	39
Figure 17. Meadow Village Improvements	40

List of Appendices

Appendix A – Water Supply Well Logs

Appendix B – Snowmaking Memo

Appendix C – Water Rights

1. INTRODUCTION

Big Sky County Water and Sewer District No. 363 (District) owns and operates Public Water System (PWS) MT0002385, serving most of Meadow Village and Mountain Village in the Big Sky Resort community (**Figure 1**). This Source Capacity Plan 2022 Update (Plan) is the third such plan prepared with the purpose of evaluating water demand, supply capacity, and source capacity improvements.¹ The goal of the plan is to identify necessary improvements that enable the District to maintain a reliable, high-quality, potable water supply within the service area.

This Plan is limited to source capacity for the public water system. It does not include an evaluation of horizontal infrastructure (pipes, booster pumps, tanks, etc.) and does not evaluate the adequacy or reliability of the system to achieve fire flows.

This Plan is also limited to the data on which it is based. Continued monitoring of supply adequacy and growth of the public water system is necessary into the future. Given the rapid growth of the Big Sky area, updates of this Plan should be prepared at five year intervals. A demand projection spreadsheet has been prepared as part of the work and can be used to assess how changes will impact supply capacity at intervals of 1-year.

1.1 SUMMARY OF FINDINGS

1.1.1 Growth Rates

• At the end of 2021, the District had permitted water supply services to 5,381.54 SFE (Single Family Equivalent). There were 3,303.54 SFE permits in Meadow Village and 2,078.00 SFE permits in Mountain Village. Using data for 2015 through 2021, there was a total SFE growth rate of 3.9%. Meadow Village was growing at a rate of 4.7% and Mountain Village at a rate of 2.6%.

1.1.2 Source Capacity

- The existing source capacity for Meadow Village includes five wells, designated MV-1 thru MV-5. The total capacity available from these wells is 975 gallons per minute (gpm). The existing source capacity for Mountain Village is supplied from seven wells, MTN-1 thru MTN-7. The effective capacity of these wells is 990 gpm.
- The DEQ source capacity standard requires groundwater supply systems to achieve the maximum day demand with the largest well out of service. Because Mountain Village can supply Meadow Village, the largest well is determined to be MTN-6 with installed capacity of 450 gpm. Consequently, the available capacity compliant with the DEQ standard for Meadow Village remains 975 gpm. For Mountain Village the available capacity is 540 gpm.

1.1.3 Water Demand

• Meadow Village in 2021 had an average daily use of 362,000 gallons per day (gpd). The maximum day use was 850,000 gpd and the peaking factor was 2.35. The unit water use rate for the average day was 114 gpd/SFE. The maximum day unit water use rate was 267 gpd/SFE.

¹ Western Groundwater Services, LLC (2009) Water System Source Capacity Plan, Report to District, 6/9/2009; Western Groundwater Services, LLC (2015) Water System Source Capacity Plan Update, Report to District, 8/11/2015.





Figure 1. Service Area Map

 Mountain Village (excluding water sold to Yellowstone Club) in 2021 had an average day use of 246,000 gpd, and a maximum day use of 469,000 gpd. The peaking factor was 1.91. Mountain Village usage has declined substantially due to effective leak repairs and conservation measures. The unit water use rates were 127 gpd/SFE for average day and 241 gpd/SFE for maximum day.

1.1.4 Source Capacity Limits

- Meadow Village source capacity will become insufficient by about year 2030. The existing supply is estimated to accommodate 1,858 SFEs resulting in 5,162 SFEs for Meadow Village. There are 930 additional SFEs already committed for Meadow Village. 928 additional SFEs could be added to fully utilize the existing source capacity.
- Mountain Village (including Lone Moose and Aspen Grove) source capacity will become insufficient by about year 2038. The existing supply is estimated to accommodate 1,132 SFEs resulting in 3,210 SFEs for Mountain Village. These SFEs are already committed for service.
- Additional supply for Mountain Village can be obtained by treating wells MTN-3, MTN-5, and MTN-6, resulting in available capacity of 660 gpm. This treatment will accommodate about 740 additional SFEs, of which 413 SFEs are already committed.

1.1.5 Water Rights

• Existing water rights owned by the District can be used to permit additional source capacity beyond the present supply. Meadow Village water rights for alluvial aquifer wells have additional volume of about 366 acre-feet that can be used to permit new source capacity. Mountain Village water rights for bedrock aquifer wells have additional volume of about 561 acre-feet that can be used to permit additional capacity. It may be necessary to file for new beneficial use to increase the maximum rate of withdrawal, however, these filings would not add new volume, and therefore would not create new depletion of surface water beyond the existing water rights.

1.1.6 Water Conservation

• The District can realize significant water use reductions, mostly in Meadow Village, by restricting irrigation use of potable water to no more than 500 square-feet. A non-mandatory incentive program would be used to reduce irrigation use of developed properties, and a mandatory requirement would be imposed on undeveloped properties. These conservation measures can be implemented in-house..

1.1.7 Groundwater Development

- There is limited opportunity for new groundwater development in Meadow Village. The Meadow Village aquifer in the vicinity of the District's existing wells may have additional capacity for one or two new vertical wells with combined total capacity of 200- to 400-gpm.
- There is limited opportunity for new groundwater development in Mountain Village as determined from 10 test wells that were constructed from 2019 to 2021. There appears to be additional groundwater capacity that could be developed in the vicinity of the Thunder Wolf chairlift. However, iron and manganese treatment of the water is likely to be necessary and water right permitting may be difficult due to proximity of the well sites to the Middle Fork channel.

1.1.8 Other Source Capacity Development Options

- Development of surface water from the Gallatin River mainstem is a source of supply that is accessible to the District. Surface water could be developed with offset of depletions by discharge of treated effluent. Permitting of this source for either water rights or discharge is considered difficult and may not be feasible.
- Direct potable reuse of treated effluent as a source of supply to the public water system may be a viable source of supply. This water use also provides discharge of treated effluent. There are governmental and societal difficulties anticipated for this source development.

1.1.9 Preferred Alternatives and Costs

• The preferred alternatives for improvements to the public water system include: 1) conservation by restriction of irrigation (\$0); 2) test well drilling in the Meadow Village aquifer (\$110,000); 3) well water level sensor installations (\$270,000); and 5) preliminary engineering report for direct potable reuse (\$50,000). The total budget estimate for these alternatives is approximately \$430,000.

1.1.10 Meadow Village Capacity Improvements and Timelines

• The District should implement conservation measures to reduce irrigation use in 2022. Reduced irrigation could save about 400 gpm by 2042 and enables the District to defer the need for new capacity development by about 5-years. Meadow Village test wells are not required until about 2030, with new production wells being constructed and put into service by 2035, assuming 250 gpm of new capacity (125 gpm per well). Direct potable reuse of 150 gpm is required by 2040. These timelines and estimated capacities would enable Meadow Village to meet demand through 2042.

2. GROWTH RATE PROJECTION

The District defines a Single Family Equivalent (SFE) as the unit of measure for services. Each connection is assigned an SFE quantity based on living space and associated water uses. On average over all account types, there are 2.00 SFE per account.² Considering only residential accounts, the average is 1.8 SFE per account. SFE data were used to establish unit water use rates (quantity of water per SFE) and also to estimate growth rate within the service area. The data used for these analyses were limited to the period from 2015 to 2021, as these years are expected to provide the most relevance to current conditions.

The District provides wastewater-only services to the Spanish Peaks subdivision. These SFEs were excluded from the data used for growth rate analysis. The Spanish Peaks subdivision is within the Meadow Village service area.

The District data include a tabulation of net SFE added for each permit, and are recorded by account and date. These data were summed over all accounts annually to obtain total SFE values (excluding Spanish Peaks subdivision).³ SFEs were tabulated according to subdivisions and each subdivision was assigned to either Mountain- or Meadow-Village. Growth rate estimates were made based on the annual totals (**Figure 2**).

² Calculated from the District "Sewer Users Billing Master" data file.

³ Calculated from the District "Permits" data file.



Growth rates were calculated by fitting an exponential function (steady growth model) to the SFE data. Total annual growth rate was estimated at 3.9%. A slightly higher growth rate was estimated for Meadow Village, at 4.7%, and a slightly lower growth rate was estimated for Mountain Village, at 2.6%.

At the end of 2021, there were a total of 5,381.54 SFE permitted, with 3,303.54 (61%) in Meadow Village, and 2,078.00 (39%) in Mountain Village. The distribution of SFEs by use was approximately 79% residential and 21% commercial.

There is about an 18-month lag time for the construction to occur before the new SFE is actually using water. With consideration of lag time, at the end of 2021 there were an estimated 3,183 SFE in Meadow Village, 1,983 SFE in Mountain Village, and a total for the service area of 5,166. This lag time is factored into determining the unit water use rates.

For the purpose of source capacity planning, this version of the Plan is using a 20-year growth period ending in 2042. SFE forecasts were based on the steady-growth models fit to the SFE data for the period 2015 through 2021 (**Figure 3**). In year 2042, Meadow Village is estimated at 9,065 SFE and Mountain Village at 3,561 SFE.⁴

As shown, the 75% confidence limits expand beyond the data used to fit the model, which ended in 2021. The low end of the confidence limit, if it were to occur, would reflect a reduction in growth rate. The high end is controlled by the District and therefore is not unavoidable. It would only occur if the District was able to determine adequate service capacity was available to accommodate the SFEs. SFE forecasts are also provided at five year intervals in **Table 1**.

Year	Year Meadow Village		District Total	
2025	4,083	2,291	6,374	
2030	5,162	2,608	7,770	
2035	6,527	2,969	9,497	
2040	8,253	3,381	11,634	
2042	9,065	3,561	12,626	

Table 1. SFE Forecasts

2.1 Undeveloped SFEs with Committed Service

Undeveloped SFEs with committed service are summarized in **Table 2**. A discussion of these SFE allocations is provided below.

Based on county parcel data within the District service area there are 161 vacant lots in Madison County (Mountain Village) and 180 vacant lots in Gallatin County (Meadow Village). These lots occur in platted subdivisions and have committed service from the District. On average, there are about 2.0 SFE per lot, resulting in an estimated 322 SFE that are committed for Mountain Village and 360 SFE that are committed for Meadow Village.

⁴ These projections are based on the data and model used. Use of other data and models can result in different projections.



Figure 3. Growth Projection Plots

Lone Moose Meadows condominiums also are only partially developed and have additional SFEs with committed service. The agreement for services with the District (August 1, 2003) identifies a total of 76.80 SFEs corresponding to 48 units. Presently, there are 40.85 SFEs in service, leaving 35.96 SFEs that will connect when the 48 units are completed. There are 28 units in service at this time and 20 units that can be constructed in the future. The additional SFEs for Lone Moose will add to the Mountain Village total.

There is an agreement (March 29, 2001) for sewer services to Lone Moose that provides for the equivalent of 900 SFEs of discharge to the District's wastewater treatment plant, but does not commit the District to providing potable water supply. The agreement specifies that Lone Moose will be able to discharge 38.3 million gallons of sewage per year to the treatment plant and actually does not designate SFEs.

Big Sky Resort, LLC has an SFE pool presently estimated at 600 SFE. These SFE are allocated to Mountain Village and provide water and sewer service commitments. Town Center Phase II LLC has 569.44 SFEs allocated for both water and sewer services. These SFEs apply to Meadow Village. Big Sky Community Housing Trust, Inc. has 587 SFEs for water and sewer services. These SFEs are primarily allocated to Mountain Village.

Description	Water SFEs	Sewer SFEs					
Meadow Village							
Platted Subdivisions	360	360					
Town Center Phase II	570	570					
TOTAL	930	930					
	Mountain Village						
Platted Subdivisions	322	322					
Lone Moose Condominiums	36	36					
Lone Moose Sewer Only	0	900 (approx.) ^A					
Big Sky Resort LLC	600	600					
Big Sky Comm. Housing Trust Inc.	587	587					
TOTAL 1545 2445							
^A Equivalent SFEs are shown; committed service is for 38.3 Mgal/yr.							

Table 2. Undeveloped SFEs with Committed Service

3. WATER SUPPLY SOURCES

This section documents the water supply sources and how they are used in the water system. The information is presented with respect to Meadow Village and Mountain Village. Well logs for the supply wells are provided in **Appendix A**.

3.1 Meadow Village

The Meadow Village system includes the entire Meadow Village area and the Hidden Village subdivision. The District primarily operates wells MV-1, MV-2, and MV-3 in Meadow Village (**Figure 4**, **Table 3**). Wells MV-4 and MV-5 are not presently needed on a regular basis for the current demand, however, both wells will be used more frequently as demand increases. The Meadow Village total source capacity is 975-gpm. Production rates for wells MV-1, MV-2, and MV-3 were determined from meter data. The rates for MV-4 and



Figure 4. Meadow Village Wells and Tanks

MV-5 are based long-term pumping rates observed in the SCADA system by District staff.

Well ID	Instantaneous Rate (gpm)	Annual Volume (afy)				
MV-1 (F, L, S)	250	403				
MV-2 (F, S)	230	371				
MV-3 (F, S)	95	153				
MV-4 (F, S)	200	323				
MV-5 (F, S) 200 323						
Total 975 1,573						
gpm – gallons per minute; F – flow meter installed; L – water level sensor installed; S – monitored through the Supervisory Control and Data Acquisition (SCADA) system						

Table 3. Meadow Village Well Capacities

The DEQ source capacity standard for groundwater is maximum day demand with the largest well out of service. Because Meadow Village can be supplied from Mountain Village, the largest well on the system is presently MTN-6 located in Mountain Village (a future split of the Mountain Village system would result in well MTN-1 being designated the largest well). Therefore, the Meadow Village system is credited with the total well capacity of 975 gpm to achieve the maximum day demand.

There are six additional wells in Meadow Village that are not in use, but have been approved for use in the public water system. The Hidden Village (HV #1, HV #2) and Aspen Grove (AG #1, AG #2, AG #3) wells have been used for supply in the past. The Blue Grouse (BG) well is approved as a public water well, but it has not been approved as a completed well and does not have a water right. These wells are not considered in this Plan as water supply sources. The associated water rights, however, are planned for use with additional diversions consisting of either new or existing wells (as discussed in a section below). The District could consider abandoning these wells to avoid maintenance costs.

The Meadow Village water system includes three operating storage tanks with a total storage volume of 1.3M gallons. These include the Hidden Village (1M gal) and Sweet Grass tanks (250K and 50K gal). These tanks are filled directly from the Meadow Village distribution system. The Aspen Grove tank (260K gal) is filled from the Mountain Village pipeline and provides storage within the Aspen Grove subdivision.

Meadow Village wells MV-1 through MV-5 are equipped with ultra-violet (UV) disinfection treatment to achieve 99.99% virus inactivation (also referred to as 4-log), meeting the requirements for full-time microbial treatment of groundwater. UV treatment is operated only when wells MV-4 and MV-5 are in operation. Under this condition, which corresponds to peak demand, the five Meadow wells (MV-1 thru MV-5) are treated with UV disinfection. Off-peak supply is provided from wells MV-1 through MV-3 without UV disinfection as these wells are approved for use without treatment requirements. There are dual treatment trains to provide redundancy. Each train is rated for 995 gallons per minute. The UV facility is located at the west end of Spotted Elk Road in Meadow Village

3.2 Mountain Village

The Mountain Village system includes the entire Big Sky Resort area, Lone Moose condominiums, and Aspen Grove subdivision, and also sells water to Yellowstone Club. The District routinely operates wells MTN-1, MTN-2, MTN-4, and MTN-7 in Mountain Village (**Figure 5**, **Table 4**). Wells MTN-5 and MTN-6 are rarely used due to poor aesthetic quality caused by naturally occurring hydrogen sulfide gas odor. Well MTN-3 is not



Figure 5. Mountain Village Wells, Tanks and Booster Stations

being presently used due to recurring coliform detections. As discussed below, wells MTN-3, MTN-5, and MTN-6 can be treated to enable regular use of these sources. The Lone Moose wells LM-1 and LM-2 provide supply only to Lone Moose condominiums (**Figure 6**).

The presently installed pumping capacities are based on observed rates of discharge from the wells obtained from SCADA and prior testing.⁵ The effective rates are based on the actual well usage for the current system, where well MTN-6 is only being used as the largest well and otherwise is not used to supply water to the system -- it could be used in an emergency. The recommended pumping rates are adjusted rates based on recent pumping tests for wells MTN-3⁶, MTN-5, MTN-6⁷, and wells LM-1 and LM-2⁸ and apply only when these wells are put into regular service. Annual volumes are the volume of water produced by continuous operation of the well except for wells MTN-5, MTN-6, LM-1 and LM-2. These wells are in flow limiting aquifers and the volumes are based on aquifer modeling of drawdown over a five year period.

Additional hydraulic analysis of MTN-5 was completed based on pumping during snowmaking in the 2021 – 2022 ski season (**Appendix B**). This analysis generally confirmed the design rate of 110 gpm (a rate of 98 gpm was estimated), and that a larger annual volume of 140 acre-feet per year may be feasible.

Well ID	Installed Rate (gpm)	Effective Rate (gpm)	Recommended Rate (gpm)	Annual Volume (afy)
MTN-1 (F ^A)	250	250	250	403
MTN-2 (F ^A)	95	95	95	153
MTN-3 (F ^A)	115	0	150	242
MTN-4 ^B (F, S)	100	100	100	161
MTN-7 ^c (F, S)	205	55	55	89
MTN-5 (F)	180	0	110	140
MTN-6 (F)	450	450	110	60
LM-1, LM-2 (F, S)	100	40	40	25
Total	1495	990	910	1274

Table 4. Mountain Village Well Capacities

gpm – gallons per minute; afy – acre feet per year; F – flow meter installed; L – water level sensor installed; S – monitored through the Supervisory Control and Data Acquisition (SCADA) system.

^A Flow metering of these wells occurs as a combined total through the Hill booster station flow meter. The Cascade booster station also is equipped with a discharge flow meter.

^B MTN-4 and MTN-7 rates are for sustained simultaneous pumping.

^cMTN-7 production up to 150 gpm (7-day average) is dedicated to Yellowstone Club.

Mountain Village Subsystems

⁵ Morrison-Maierle, Inc. (1986) Aquifer Tests with Report of Results, Mountain Village Wells No. 1, 2, and 3, prepared for Lone Mountain Springs Water Company, February 28, 1986. The Hill booster clear well was accurately measured at 10.66 by 22.72 feet horizontal area, and volume of 1811.62 gallons per foot as part of this work.

⁶ Western Groundwater Services, LLC (2017) Mountain Village Well No. 3 Rehabilitation Report, report to Big Sky County Water and Sewer District No. 363. (Appendix B)

⁷ Western Groundwater Services (2018) Mountain Wells #5 and #6 Video Log and Pump Testing Report, prepared for Big Sky County Water and Sewer District No. 363. (Appendix B)

⁸ Western Groundwater Services (2009) Lone Moose Meadows Well No. 1 Pumping Test Report, prepared for Big Sky County Water and Sewer District No. 363. (Appendix B)



Figure 6. Lone Moose Wells and Tank

3.2.1 Future Split System

In order to make all of the Mountain Village wells functional, water treatment is necessary for wells MTN-3, MTN-5, and MTN-6. This improvement is required to meet water demand beyond approximately year 2038 as discussed in a later section of the report.

Based on the existing piping layout, treatment feasibility requires the Mountain Village system be split into two subsystems (**Figure 7**). The lower Resort Area system would be supplied by wells MTN-1, MTN-2, MTN-4, and MTN-7 and will remain untreated. Wells LM-1 and LM-2 would also provide untreated supply to the Lone Moose condominiums. The Resort Area system would also provide untreated supply to Yellowstone Club. Storage for the Resort Area would use the recently refurbished 500K gallon Mountain Village tank.

The upper Cascade system would be supplied by wells MTN-3, MTN-5, and MTN-6 that would be treated at a new facility located at the Cascade booster station. Treatment would include removal of sulfide odor and 4-log virus disinfection. This system would serve existing and new services that connect to the distribution system above the Cascade booster station. The Cascade system would use the 1.5M gallon Cascade Tank.

There would be interties between the Resort Area and Cascade systems to enable supplemental supply from one to the other. The DEQ standard for maximum day demand with the largest well out of service would designate well MTN-1 as the largest well for both systems. **Table 5** summarizes the wells and capacities for the split systems.

	Resort Area	Cascade				
Well ID	Rate (gpm)	Rate (gpm)				
MTN-1	250					
MTN-2	95					
MTN-3		150				
MTN-4	100					
MTN-7	55					
MTN-5		110				
MTN-6		110				
LM-1, LM-2	40					
Total	540	370				
Total (DEQ) ^A	290	370				
^A Assumes the largest well MTN-1 is out of service.						

Table 5. Well Capacities for Resort Area and Cascade Systems (Future)

3.2.2 Mountain Village Booster Pumping Stations

The existing Mountain Village system uses two booster pumping stations to lift water to the elevation of the 1.5M gallon Cascade tank (Hill and Cascade boosters). Most of this water then returns to the Resort Area part of the system via a series of pressure reducing valves. Splitting of the Mountain Village system into the Resort Area and Cascade systems eliminates the additional pumping of Resort Area water (including Lone Moose, Aspen Grove, and Yellowstone Club) with a cost savings from reduced electrical power use. The Hill booster pumping capacity is presently 750 gpm, while the Cascade booster has a maximum rate of about



Figure 7. Resort Area and Cascade Systems (Future)

850 gpm. These rates are sufficient for the existing water use beyond the present planning period of 2042.

3.2.2.1 Cascade Meter Evaluation July 2022

Flow metering data for the Cascade booster station were confirmed by installing a portable ultrasonic flow meter at the booster station for the period from July 7 to July 18, 2022.⁹ The lay length for the ultrasonic meter was not ideal, but generally acceptable (three diameters upstream and two diameters downstream). The setup and calibration of the meter were underestimating sonic velocity, suggesting some deviation from an ideal configuration (sonic velocity was manually corrected based on the values of a water temperature chart provided by the manufacturer).

Over the period of seven days, the ultrasonic meter consistently measured slightly lower flow than was measured by the permanently installed meter of the booster station. The deviation ranged from 5.1% to 7.2%, or about 18,500- to 39,000-gallons per day. Daily pumped volume ranged from 326,000- to 512,000-gallons. The maximum daily flow rates measured by the ultrasonic meter were 11- to 26-gpm below the reported maximum from the SCADA system. The ultrasonic meter data do not indicate there is a significant error in the Cascade meter. The ultrasonic meter in this application is not considered to be more accurate than the Cascade meter--either one could be found to be closer to the actual flow rate.

3.3 Flow and Level Monitoring

The five active wells in Meadow Village (MV-1 thru MV-5) are equipped with flow meters connected into the SCADA system. With the exception of well MV-1, these wells do not have water level instruments. One of the improvements identified in this Plan is to install pumping water level sensors in these wells, and to have these data monitored and archived through the SCADA system.

Flow metering of the Mountain Village wells includes MTN-1, MTN-4 and MTN-7. The Hill and Cascade booster stations also are both equipped with discharge flow meters. Flow rate data from these meters are monitored and archived in the SCADA system. Pumping water level data are not available for any of the Mountain Village wells. One of the improvements identified would install water level sensors for each well (MTN-1 thru MTN-7) with monitoring and archive of these data through the SCADA system. The District is in the process of installing meters on wells MTN-5 and MTN-6, and is encouraged to install meters on MTN-2 and MTN-3 as/when feasible in the future.

4. WATER USE AND DEMAND PROJECTION

This section presents water use data collected through the SCADA system. Data were reviewed from 2014 through 2021. Unit water use rates per SFE are developed from these data and then applied to the SFE growth rates to estimate future water demand.

4.1 Meadow Village

Meadow Village is experiencing increasing water use over the past three years (**Figure 8**). Summary statistics for the period from 2014 through 2021 are provided in (**Table 6**). Maximum water use for this

⁹ The Siemens FUP1010 meter was furnished and installed by Western Groundwater Services, LLC. It was mounted in direct (minimum) mode onto 8-5/8 inch diameter schedule 40 steel pipe, and used Universal D2 transducers. It was battery powered for the duration of testing. Rate and volume readings were recorded to memory at 1-minute intervals. The meter data have been provided to the District in Excel format.





period occurred in year 2021 and totaled 362,000 gpd and 406 afy. This total annual water use is well below the water rights volume of 1,554 afy. Maximum day in 2021 was 850,000 gpd, or equivalently 590 gpm, resulting in an estimated peaking factor of 2.35. The maximum day demand was 61% of installed source capacity (975 gpm).

For demand projection, the key parameters are the unit water use rates for average day demand (ADD/ SFE) and maximum day demand (MDD/SFE). The SFEs for 2020 and 2021 are adjusted for lag time to reflect actual SFEs using water. The lag time occurs for the period of construction after the SFE permit is approved. 50% of the 2020 SFEs were used and 0% of the 2021 SFEs were used in assessing these unit water use rates. The 90th percentile values estimated from these data (years 2014 – 2021) are used in future demand projections.

Year	ADD gpd	ADD afy	MDD gpd	MDD gpm	PF	SFE	ADD/SFE gpd/SFE	MDD/SFE gpd/SFE
2014	294,462	330	689,000	478	2.34	2363.28	125	292
2015	210,829	236	625,000	434	2.96	2478.93	85	252
2016	264,706	297	673,000	467	2.54	2663.89	99	253
2017	268,468	301	645,000	448	2.40	2905.56	92	222
2018	245,276	275	634,000	440	2.58	2954.08	83	215
2019	225,192	252	419,000	291	1.86	3165.72	71	132
2020	286,287	321	706,000	490	2.47	3182.77	90	222
2021	362,232	406	850,000	590	2.35	3182.77	114	267
					90 th	Percentiles	117	274
ADD – average day demand, gallons per day (gpd) and acre-feet per year (afy); MDD – maximum day demand (gpd, gpm); PF – peaking factor, MDD/ADD; SFE – single family equivalent. Unit water use rates for future demand projection shown in Bold .								

Table 6. Meadow Village Water Use Summary, 2014-2021

Future water demand was estimated by applying unit water use rates to SFE growth projections (**Table 7**). The ADD value is presented in annual acre-feet so that it can be directly compared to water right volume. Meadow Village annual water use is projected to remain less than the water rights volume until sometime after 2042. The MDD value is presented in gallons per minute to provide direct comparison to installed pumping capacity.

These data show that by 2030 (2032 with lag time adjustment), the installed pumping capacity of Meadow Village wells will likely be insufficient to meet maximum day demand (**Figure 9**). The existing supply can accommodate approximately 1,858 additional SFEs, which includes 930 SFEs for which service is committed and 928 new SFEs. These SFEs bring the Meadow Village total to 5,162, a 50% increase in service population from 2021.



Figure 9. Source Capacity Surplus Projection

Year SFE		ADD afy	MDD gpm				
2025	2025 4,083		778				
2030	5,162	677	984				
2035 6,527		856	1244				
2040 8,253 1082 1573							
2042 9,065 1189 1727							
SFE – single family equivalent; ADD – average day demand, acre-feet per year (afy); MDD – maximum day demand, gallons per minute (gpm)							

Table 7. Meadow Village Water Demand Projection, 2025-2042

4.2 Mountain Village

Mountain Village water use has been declining for the past several years (**Figure 10**). The plotted data are from the Cascade booster station flow meter, which is a total production measurement including the water that served Lone Moose condominiums, the Aspen Grove subdivision, and that is sold to Yellowstone Club. Summary data for this same period, but excluding water sold to Yellowstone Club (YC), generally indicate the same declining trend, with 2019 being a slight exception (**Table 8**). The declining trend is attributed to effective leak detection and repair, and conservation measures.

Usage data for 2021 indicates a total volume for Mountain Village, including Lone Moose condominiums and the Aspen Grove subdivision, of 276 afy. This annual volume is substantially less than the permitted water right volume. There is some additional volume related to snowmaking that may reach about 60 afy, bringing the total use to about 336 afy for Mountain Village. This annual volume does not include any of the water sold to YC which also includes additional water rights.

Maximum day demand trends from a peak in 2014 of 717 gpd/SFE to a low in 2021 of 241 gpd/SFE. The maximum day demand realized in 2021 had a pumping rate of only 326 gpm. For the purpose of projecting future water demand, the 2021 unit water use rates are used directly for future demand projection. Water demand for selected years to 2042 are provided in **Table 9**.

The existing Mountain Village source capacity, excluding supply from wells MTN-3, MTN-5, and MTN-6 can provide 540 gpm of capacity (using well MTN-6 as the largest well). This includes 55 gpm from well MTN-7 and assuming a sustainable rate of 40 gpm for the Lone Moose wells. This capacity will meet the maximum day demand of Mountain Village until year 2038 (**Figure 9**), accommodating 1,132 additional SFEs, all of which are committed, and bringing the total Mountain Village SFEs to 3,210, a 40% increase in population as compared to 2021.

Additional source capacity for supply beyond 2038 can be obtained by providing water treatment of wells MTN-3, MTN-5, and MTN-6. This additional supply would accommodate 740 SFEs, which would be fully developed in about year 2046. These additional SFEs include 413 SFEs that are already committed and 327 new SFEs. When these wells are treated, a rate reduction for well MTN-6 results in well MTN-1 becoming the largest well. Consequently, the installed capacity would be 910 gpm and the capacity with the largest well out of service would be 660 gpm.



Page 21

Year	ADD gpd	ADD afy	MDD gpd	MDD gpm	PF	SFE	ADD/SFE gpd/SFE	MDD/SFE gpd/SFE
2014	426,352	478	1,234,000	857	2.89	1722.16	248	717
2015	351,077	393	927,000	644	2.64	1738.83	202	533
2016	299,656	336	676,000	469	2.26	1761.67	170	384
2017	293,828	329	727,000	505	2.47	1826.45	161	398
2018	295,064	331	597,000	415	2.02	1856.57	159	322
2019	294,436	330	664,000	461	2.26	1922.89	153	345
2020	278,994	313	568,000	394	2.04	1942.61	144	292
2021	246,185	276	469,000	326	1.91	1942.61	127	241
ADD – average day demand, gallons per day (gpd) and acre-feet per year (afy); MDD – maximum day demand (gpd, gpm); PF – peaking factor, MDD/ADD; SFE – single family equivalent Unit water use rates for future demand projection shown in Bold								

Table 8.	Mountain	Village	Water Use	Summary,	2014-2021
----------	----------	---------	-----------	----------	-----------

Table 9. Mountain Village Water Demand Projection, 2025-2042

Year	SFE	ADD afy	MDD gpm			
2025	2,291	325	384			
2030	2,608	370	437			
2035	2,969	422	498			
2040	3,381	480	567			
2042 3,561 506 597						
SFE – single family equivalent; ADD – average day demand, acre-feet per year (afy); MDD – maximum day demand, gallons per minute (gpm)						

4.2.1 Resort Area and Cascade Systems (Future)

The Resort Area and Cascade systems may be created in the future in relation to adding water treatment for wells MTN-3, MTN-5, and MTN-6. SFE distribution in 2021 to the Resort Area and Cascade systems is approximately 1,140 SFE and 938 SFE, respectively. This distribution was determined by allocating SFEs to subdivisions and other selected properties that would be served through the Cascade system. The Cascade SFEs were then subtracted from the Mountain Village total SFE to obtain the Resort Area system SFEs. For growth projection, it was assumed the Resort Area may realize 200 new SFE over the planning period to 2042, with the remainder of the projected growth, or 1,283 SFE, being added to Cascade.

Water demand projections for the Resort Area and Cascade systems are provided in **Table 10**. Well capacities of existing wells with respect to both rate and annual volume are satisfactory to meet the demands in year 2042, indicating there are no new source capacity requirements through this planning period. It is necessary, however, to make improvements for treatment of wells MTN-3, MTN-5, and MTN-6, and this work will include pumping equipment replacements.

Table 10. Resort Area and Cascade Demand Projections

Year	SFE	ADD afy	MDD gpm						
	Resort Area System								
2021	1,140	162	191						
2042	1,340	190	225						
Supply Capacity Supply Capacity (MTN-1, MTN-2, MTN-4, MTN-7, LM-1, LM-2) 832 ^A 290 ^B									
Cascade System ^c									
2021	938	133	157						
2042	2,220	315	372						
Supply Capacity (MTN-3, MTN-5, MTN-6) 442 370									
SFE – single family equivalent; ADD – average day demand, acre-feet per year (afy); MDD –									
maximum day demand, gallons per minute (gpm)									
^A Assumes 89 afy from MTN-7 based on 55-gpm of available capacity year round.									
^B This rate does not include well MTN-1 (250 gpm)									
^c Includes additionally	Cheyenne Rd, Heavy Ru	inner Rd, Sioux Rd, Sum	mit View Dr, Washakie						
Rd, and White Otter Rd.									

4.2.2 Yellowstone Club Purchased Water Use

The District sells water to Yellowstone Club (YC) through an agreement established in March 2003. The agreement specifies that up to 216,000 gpd of water will be sold to YC based on a seven-day average calculated from Monday through Sunday. Water is conveyed from the Mountain Village resort area via a booster station and pipeline to the YC water system. The booster station discharge is metered and data are archived to the District SCADA system. These data show that YC use over the period from 2014 through 2021 included excursions that exceeded the agreement, but the use has been in compliance since 2018 and exhibits a declining trend (**Figure 11**).



Western Groundwater Services

5. WATER RIGHTS

The District owns water rights that appropriate sufficient water capacity to serve the public water system. This section is providing summary information on the water rights. Additional information is also provided in **Appendix C**.

5.1 Meadow Village Rights

There are three water rights for Meadow Village including two Statement of Claims and one Provisional Permit (**Table 11**). Change filings were made to these rights to add new and existing diversions. The total rate and volume that is appropriated by these rights exceeds the 2042 projected demand.

5.2 Mountain Village Rights

There are six water rights for Mountain Village including three Statements of Claims and three Provisional Permits (**Table 12**). The permit filing for wells MTN-5 and MTN-6 specified a volume inclusive of these new wells and also existing wells MTN-1, MTN-2, and MTN-3. These five wells are permitted for the total volume of 592 af per year. Volumes shown for MTN-1, MTN-2 and MTN-3 are not included in the total volume (shown in grey). These rights are designated for Commercial use, which should be changed to Municipal use in future filings.¹⁰ The rate and volume appropriated exceeds the 2042 projected demand for Mountain Village.

5.3 Other Groundwater Rights

Other groundwater water rights are owned by the District that can be used in the public water system (**Table 13**). These rights can be used for the designated wells, and can be used to add new diversions onto the public water system. These rights have a mixture of domestic uses. They should be changed to Municipal use in future filings.

5.4 Surface Water Rights

The District also owns two surface water rights that are both Statement of Claims and were filed for the same acreage (**Table 14**). In 2016 the District filed a change on these rights for a project that isolated Little Coyote pond from the West Fork Gallatin River (not yet constructed). The change included reallocation of a fraction of the rights for Municipal use within the District service area. A diversion for municipal use is likely to have limited benefits to the District due to the late priority dates of the rights.

5.5 Place of Use

Water rights owned by the District have a Place of Use (POU) that extends over the Meadow or Mountain Villages where the water is put to beneficial use (**Figure 12**). Meadow Village water rights have a POU that extends throughout the Meadow Village area. Mountain Village water rights have a POU that extends over the Mountain Village area, and into the Yellowstone Club (YC) to the south (outside the service area). This extension to YC occurred in relation to the well MTN-7 water right filing. The existing POU does not, however, extend over the entire service area. In future filings the District should designate the entire service area as the POU and should list all of the water rights as part of a manifold system within the service area.

¹⁰ Municipal use allows a replacement well up to 450 gpm to be constructed without filing a change application. A replacement well filing is required using Form 634. Other uses must file a substantially more complex change application that includes a detailed review and public notice.

. []					PRIORITY	CO	MPLETION					
WELL ID		WR NO		ТҮРЕ	DATE	DA	TE	USE		RATE	E (gpm)	VOL (af)
HV-1 (MV1, MV2	2, MV3)	41H 12	2634 00	CLAIM/CHANGE	04/01/71	12/	/31/2033	Mur	nicipal	85		68.73
- MV-1 (MV2, MV	3, HV1)	41H 12	2635 00	CLAIM/CHANGE	04/01/71	12/	/31/2033	Mur	nicipal	220		177.89
MV-1 - MV-5, H	/-1	41H 10	7416 00	PERMIT/CHANGE	11/15/99	12/	/31/2033	Mur	nicipal	985		1,307.38
						TOT	AL	1,29	0	1,554.00		
Table 12. Moun	tain Village	e Water F	Rights									
				PRIORITY	COMPLETI	ON						
WELL ID	WR NO.		TYPE	DATE	DATE		USE		RATE (g	pm)	VOL (af)
MTN-1	41H 1226	36 00	CLAIM	01/30/74	NA	Commercial		al [240		194.06	
MTN-2	41H 1226	37 00	CLAIM	01/30/74	NA		Commercial		80		64.69	
MTN-3	41H 133733 00 CLAIM		CLAIM	01/30/74	NA		Commercial		180		145.54	
MTN-4	1TN-4 41H 61672 00 PERMIT		10/21/86	12/31/2033		Commercial		124		150.00		
MTN-5, MTN-6	N-6 41H 100737 00 PERMIT		04/02/97	12/31/2033		Commercial		925		592.00		
MTN-7	41H 30001796 PERMIT		04/25/02	12/31/2033		Commercial		300		241.84		
AValue in parent	^A Value in parentheses is volume without MTN-7 water right.						ΤΟΤΑΙ		1.849		983.84	(742.00) ^A

Table 13. Other Groundwater Water Rights

			PRIORITY	COMPLETION			
WELL ID	WR NO.	TYPE	DATE	DATE	USE	RATE (gpm)	VOL (af)
					Mult. Domestic		
AG-2, AG-3	41H 100681 00	PERMIT	05/13/97	12/31/2032	Lawn/Garden	50	33.52
HV-2	41H 61673 00	PERMIT	10/21/86	12/31/2033	Municipal	116	90.00
LM-1, LM-2	41H 115506 00	PERMIT	04/04/01	12/31/2032	Mult. Domestic	190	201.70
					TOTAL	356	325.22

Table 14. Surface Water Rights

			PRIORITY	COMPLETION			VOL
SURFACE WATER NAME	WR NO.	TYPE	DATE	DATE	USE	RATE (gpm)	(af)
WEST FORK GALLATIN R	41H 148445 00	CLAIM/CHANGE	6/23/1902	12/31/2037	Fish., Irr., Municipal	9.10	120.46
WEST FORK GALLATIN R	41H 148446 00	CLAIM/CHANGE	5/15/1952	12/31/2037	Fish., Irr., Municipal	9.10	120.46
					TOTAL	18.20	240.92

Page 26





Figure 12. Water Rights Place of Use

6. SOURCE CAPACITY IMPROVEMENTS

6.1 Water Conservation

Water conservation planning and implementation has a primary purpose of reducing water use. This section evaluates conservation measures that will defer new source capacity development through water use reductions.

Water use can be separated into indoor and outdoor uses. Indoor uses account for approximately 67% of water use, with outdoor uses accounting for the remaining 33%.¹¹ The outdoor use is additive to the indoor use during summer months and is predominantly landscape irrigation. It is a primary driver of source capacity requirements for public water systems.

Reuse of treated wastewater effluent for irrigation can be considered a form of conservation. Communities have used reuse water for domestic lawn and garden irrigation by installing separate distribution systems for this use. Lawn and garden reuse in the Meadow Village area is considered to have a small but costly benefit and is not considered for these reasons.

Reduced irrigation from the public water system is considered the preferred alternative for conservation at Big Sky. It reduces use from the potable system and reduces overall consumptive use of the local water resources.

6.1.1 Indoor Water Use Conservation

Growth occurring in the District after about 1994 would generally be using fixtures with water use ratings consistent with modern fixtures. Indoor water audits of existing residences could be offered by the District as an educational measure for owners, and also for the District to gather data on the types of indoor uses that could be improved to result in water conservation. Gallatin River Task Force provides a rebate program on their website for residential and commercial properties, and also addresses outdoor conservation. The District contributes financially to this effort. There is opportunity for the District to expand this partnership.

6.1.2 Outdoor Water Use Conservation

Outdoor residential water use is dominated by irrigation of lawns. Conservation literature emphasizes a transition to much smaller irrigated areas totaling about 500 square feet (ft²), or approximately 22- by 22-feet (ft).¹²

Based on air-photo analysis of 16-residences in Meadow Village irrigated areas ranged from 2,463- to 14,025-ft², with a mean value of 8,315 ft².¹³ These areas included lawns, shrubs and trees. They show up as dark green on air-photos and are shown to be artificially irrigated based on contrast with adjacent lands. A reduction to 500-ft² of total irrigated area could reduce irrigation water use by 94% on average ((1-500/8315)*100%).

¹¹ In 2021, Meadow Village water use was estimated as 66.67% indoor and 33.33% outdoor.

¹² Vickers, A. (2001) <u>Water Use and Conservation</u>, WaterPlow Press, Amherst, MA, 446 pp. AWWA (2017) Water Conservation Programs – A Planning Manual, Manual of Water Supply Practices M52, 2nd Edition.

^{13 1} acre = $43,560 \text{ ft}^2$.

The reduction in maximum day demand was estimated for reduced irrigation in Meadow Village for year 2021. Applied only to residential properties (79%) and assuming that only 25% of existing properties modify their landscape plan to achieve a 500 ft² irrigated area, the maximum day demand is reduced from 274 gpd/SFE to 258 gpd/SFE. By the same assumptions, the average day demand is reduced from 117 gpd/SFE to 110 gpd/SFE.

To estimate future reductions in maximum day demand, it was assumed the District requires all future residences to limit irrigated area to 500 ft², therefore resulting in 100% participation (the District could apply the same restrictions to commercial land uses). Future SFEs would therefore have a maximum day demand of 189 gpd/SFE. The total unit rate of water use for maximum day combines the existing and future SFEs to assess the water use reduction through the planning period to 2042 (**Tables 15** and **16**). Calculations shown assume that 25% of existing residential SFEs (that existed in 2021) reduce irrigated area to 500 ft² before year 2025.

X	CEE	C C		MDD gpd/	MDD	MDD	
Year	SFE	Ť	1-1	SFE^	MDD gpm	Reduction	
2025	4,083	0.78	0.22	243	688	11.6%	
2030	5,162	0.62	0.38	231	830	15.7%	
2035	6,527	0.49	0.51	223	1009	18.9%	
2040	8,253	0.39	0.61	216	1236	21.4%	
2042	9,065	0.35	0.65	213	1343	22.3%	
SFE – single family equivalent; f – fractional contribution of year 2021 SFEs; 1-f – fractional contribution of future SFEs; MDD – maximum day demand; MDD Reduction – decline in MDD relative to non-conserving MDD estimates from Table 6. ^ MDD (gpd/SFE) = f * 258 + (1-f) * 189							

Table 15. Reduced Irrigation Impact – Maximum Day Demand

Table 16. Reduced Irrigation Impact – Average Day Demand

				ADD gpd/		ADD		
Year	SFE	f	1-f	SFE ^A	ADD afy	Reduction		
2025	4,083	0.78	0.22	103	473	11.6%		
2030	5,162	0.62	0.38	99	571	15.7%		
2035	6,527	0.49	0.51	95	694	18.9%		
2040	8,253	0.39	0.61	92	850	21.4%		
2042	9,065	0.35	0.65	91	924 22.3%			
SFE – single family equivalent; f – fractional contribution of year 2021 SFEs; 1-f – fractional contribution of future SFEs; ADD – average day demand; ADD Reduction – decline in ADD relative to pop-conserving ADD estimates from Table 6								
^A ADD (gpd/	SFE) = f * 110	+ (1-f) * 81; 1	afy = 325,828	gallons/year.				

These estimates show a conservation program that reduces residential irrigation to 500 ft² may result in a maximum day demand reduction of 22% by year 2042. As compared to status quo residential irrigation (cf. 1,727 gpm, Table 6), maximum day demand is reduced by 384 gpm in year 2042, the equivalent of about two new water supply wells. Present worth of these facilities is approximately \$1M. The same reduction percentages are realized for the average day demand, resulting in a reduction of 265 afy (86 million gallons)

by year 2042. In addition to reduced capital costs for new wells, there are also reduced operations and maintenance costs due to reduced pump and treatment runtimes.

There is likely to be incentive and support costs for the conservation program with respect to reducing irrigated areas on existing properties. The benefit of requiring new development to adhere to reduced irrigated areas does not have an associated cost and results in 65% of the benefit by year 2042.

6.1.3 Conservation Plan and Program

The exercise above demonstrates the potential benefit of residential irrigation reduction. Additional conservation measures will further reduce indoor and outdoor uses. The next steps for the District are to implement conservation measures, the first of which should be reduced irrigation. Additional measures can be implemented in subsequent years. Other conservation measures that could be included in future years include, for example:

- Water audits
- Water wise landscape public education
- Irrigation technology
- Rain sensors (as controls for automatic irrigation)
- Soil tensiometers (as controls for automatic irrigation)
- Indoor fixtures and appliances
- Water billing rate structure
- Leak detection and repair
- Service line replacements

Many programs exist that can be reviewed and used as a basis for assessment and implementation of conservation measures. These programs normally include an array of educational, incentive-based, and mandatory measures. The District should realize that only the mandatory measures result in 100% participation—a critical factor of program success. Educational and incentive programs typically have less than 25% participation and require more effort per unit of participation than mandatory measures. These non-mandatory efforts may be construed more as conservation lip-service rather than actual conservation. Because conservation reduces overall water use, the District will need to assess revenue impacts and make adjustments to prevent shortfalls.

6.2 Groundwater Development

6.2.1 Meadow Village

The ability to develop new groundwater capacity in Meadow Village is considered limited, although some additional capacity can likely be developed from the alluvial aquifer. Bedrock wells in surrounding upland areas also have limitations due to conflicts with private wells and the ability to obtain water rights. Of the bedrock formations, the Madison appears to be the only option for a bedrock well in Meadow Village.

6.2.1.1 Alluvial Aquifer

Wells at Meadow Village produce from the alluvial aquifer on the north side of the golf course, with an average capacity of 200 gpm. Recent work that included mapping of the alluvium thickness was used to assess the potential for new well sites (**Figure 13**).¹⁴ This work shows the alluvium thickness declines east of

¹⁴ Western Groundwater Services, LLC (2020) Meadow Village Aquifer Modeling Analysis for Indirect Potable Reuse and Firelight Meadows Subdivision Groundwater Discharge, report to AE2S (9/24/20).

well MV-4 and west of well MV-5.

Potential new production well sites are shown within the area of suitable alluvium thickness and also with maximum offset from adjacent wells (test wells TW-4 and TW-5). The TW-4 site is located within the golf course driving range and may not be available.

New production wells at these locations would have some interference effect on neighboring existing wells that could result in a decline in capacity. However, the offset distances are similar to existing wells MV-1, MV-2 and MV-3, suggesting that excessive interference may not be realized. Based on a simplified hydraulic analysis possible interference drawdown of 15% to 45% was estimated. The analysis used production rates from the new wells of 100- and 200-gpm. In total, two new wells may develop an additional 200- to 400-gpm of production. The primary risk is lost capacity from existing wells, which could be assessed from the test wells.

The impact on surface water of these sites would be similar to the existing wells, enabling new production wells to be added onto existing water rights (41H 107416 00) by filing of a change application. It would also be necessary to file a beneficial use application to add additional rate for the new wells. These filings require DNRC approval and public notice, and therefore have associated risk. The application filings could be made prior to construction of production wells.

New alluvial wells would likely have a requirement for full-time microbial treatment. The preferred option would be to upgrade the UV treatment system to accomodate the two new wells.

6.2.1.2 Bedrock Aquifers

Potential for water development in bedrock aquifers at Meadow Village has so far been shown to be difficult (**Figure 14**). Development of bedrock wells in Meadow Village is not recommended at this time but may be of greater interest in the future.

In section 1 (T7S, R3E) two wells were drilled for Gallatin Peaks Land Development, LLC. A production well was drilled to 800 feet (Uplands #1), and a test well (Test Well 1) was drilled to 840 feet. Both wells were developing groundwater from the Muddy sandstone and an intrusive sill at the same horizon. Uplands #1 was denied a water right permit due to a determination of insufficient recharge by DNRC. Test Well 1 was drilled through additional sandstone in the Thermopolis shale. Air-lift pumping indicated a maximum rate of 70 gpm and the water had a moderately strong hydrogen sulfide odor.

The District owns the Blue Grouse well that was re-entered and deepened from 960 to 1250 feet to fully penetrate the Kootenai aquifer. Total production from the well was estimated at 35 gpm and there was a moderately high iron concentration of 0.8 milligrams per liter (mg/L). The well is presently not completed.

The Madison aquifer is the remaining target and has not been drilled locally. Prior to moving ahead with a Madison well, a technical analysis should be completed to determine the likelihood of satisfactory yield and quality, and also the ability to add the well onto existing water rights.





Figure 13. Meadow Village Test Well Locations



Figure 14. Meadow Village Bedrock Wells
Source Capacity Plan 2022 Update

6.2.2 Mountain Village

Starting in 2019 the District has constructed 10 test wells to explore for additional water supply in Mountain Village (**Figure 15**). The explorations targeted aquifers in alluvium, intrusive igneous rocks, and sedimentary rocks.

The last test well (TW#9) included in the drilling contract and targeting sedimentary rocks of the Kootenai formation was started in August 2021. It was drilled and cased to 100 ft and then terminated when the adjacent land owner (Middle Fork Properties, LLC) threatened a restraining order for using the access road through their property, thereby blocking the District from completing the drilling project. These aquifer targets and the locations drilled generally represent the availability of groundwater in the Mountain Village area. There are no obvious aquifer targets that were not included in the test well drilling project.

Documentation of the results of test well drilling are provided in three reports.¹⁵ A summary of the test well drilling results follows:

- The alluvium test wells #3 and #4 penetrated clay and clay-bound gravel identified as glacial till and then entered bedrock. There was no productive alluvium aquifer encountered;
- Test wells #1, #5, #6, #10, and #11 were targeting intrusive igneous rocks. The intrusive rock was drilled and found to be non-water bearing, although test well #6 also penetrated the top of the Kootenai formation at 995-ft and was air-lift pumped at approximately 150 gpm;
- Test wells #2 and #7 targeted the Kootenai formation. Test wells #2 and #7 fully penetrated the formation and were air-lifted at rates of 150- to 250-gpm, respectively. Pump testing of both wells indicated a permeable formation local to the wells but that was limited in recharge resulting in much lower sustained capacity;
- Test well #8 was drilled to the top of the Kootenai formation. It was producing in excess of 250 gpm from the overlying Thermopolis formation, from both fractured shale and the basal sandstone. It was pump tested and a similar result was obtained as for test wells #2 and #7, which both responded to pumping in test well #8.

Test wells #7 and #8 were being considered for completion as production wells, but this consideration has been deferred based on water use analysis for Mountain Village and additional hydraulic analysis related to pumping from supply well MTN-5 for snowmaking during the 2021-2022 ski season (**Attachment B**). The snowmaking hydraulic analysis showed that conversion of test wells #7 and #8 to production wells would have limited benefit to the overall Mountain Village supply. At the same time, water use for Mountain Village has declined substantially since 2015, resulting in no immediate need for new capacity until beyond 2042.

The test well project showed that shallow groundwater development accessible using air-rotary drilling (approximately 700-800 ft depths) was unlikely to result in high yield wells. Where good permeability was encountered and moderately high rates of air-lift pumping could be achieved during drilling, sustainability of the discharge was not indicated by pump testing. Well yields were estimated to range from 70- to 110-gpm, and annual volumes were estimated at 25- to 56-acre-feet. There was also substantial interference drawdown among test wells #2, #7, #8, and water supply well MTN-5, resulting in reduced yield for multiple

¹⁵ Memorandum, 1/5/2022, Re: 2021 Mountain Village Test Wells (#8, #10); Memorandum, 1/21/2021, Re: 2020 Mountain Village Test Wells (#3, #4, #5, #6, #7, #11); Memorandum, 2/14/2019, Re: 2019 Mountain Village Test Wells (#1, #2)



Figure 15. Mountain Village Test Well Location Map

Source Capacity Plan 2022 Update

completions (i.e., pumping rates and annual volumes are not directly additive for the wells due to pumping interference drawdown).

Drilling deeper wells to the Kootenai and the Madison aquifer is not recommended at this time, as testing data do not support greater yield potential. The data do not support deeper wells would be found to result in higher well capacity or annual volumes (there is some rate increase potential due to greater available drawdown in deeper wells). The deeper wells also require a change in drilling method to mud rotary in order to ensure a stable borehole can be maintained. The depths range from 1,100 to 2,800 ft. The deeper wells have estimated drilling contractor costs on the order of \$400,000 to \$2,500,000. These costs are considered prohibitively high for exploration given there is no immediate need for new source development at Mountain Village and prior Kootenai test wells exhibited limited recharge conditions.

Although a Madison test well has not been drilled, there is limited Madison outcrop in the area to the north suggesting potential for limited recharge to the formation. The geological structure also is not anticipated to undergo substantial change between the depth of the Kootenai formation and the depth of the Madison formation suggesting similar limited recharge could be found in the Madison. There is potential that acid stimulation of a Madison well would increase production¹⁶, however, handling the spent acid solution in the Big Sky area is logistically difficult. The spent acid solution has very high total dissolved solids (e.g. 20,000 mg/L TDS) and must be transported to legal disposal sites, possibly to eastern Montana. There would be on the order of 50- to 100-trips to purge the well of the spent acid solution. Significant spill potential exists and presents additional liability to the District.

The location of test well #9 is on the Andesite Mountain anticline to the east of where the other test wells were drilled. This location has been shown to support wells with favorable pumping test results.¹⁷ A production well at this location is estimated to yield 200- to 250-gpm of water supply but may contain iron and manganese requiring treatment (actual yield and water quality will not be known until the test well is completed). Due to the geology of this area (east dipping sedimentary rock at angles of 30- to 40-degrees), it is possible to build multiple wells in proximity to one another without drawdown interference. It may be possible to develop 500-gpm of total capacity from two or three wells. Supply from this location would have the most efficient use for Lone Moose, Aspen Grove, and Meadow Village. It would likely not be used in Mountain Village due to the pumping requirements and other required infrastructure. Due to proximity of the Middle Fork channel, water right permitting may be difficult, and therefore, water right filings should be made and approved prior to construction of production wells or related infrastructure.

6.3 Surface Water

6.3.1 West Fork Gallatin River

The District water rights for the West Fork Gallatin River allow for diversion of up to 138.85 afy for municipal use. The total rate of withdrawal for these water rights is 18.2 cfs. Diversions under these water rights have a period of use from June 1 to October 15 annually, a period of 137 days. The total volume if produced over this period averages 229 gpm.

¹⁶ The limestone formation can be dissolved by hydrochloric acid resulting in increased permeability to the well.

¹⁷ Memorandum, 11/12/2021, Re: Middle Fork Properties LLC – Water Supply Well Transfer Evaluation.

The late priority dates of these water rights (1902, 1952) generally preclude this diversion. For this reason, construction of the necessary infrastructure to use the rights is not recommended. This infrastructure would cost on the order of \$2,000,000, as full compliance with the surface water treatment rule is required for use of surface water in the potable system.

6.3.2 Gallatin River Mainstem

The Gallatin River mainstem is accessible for a water supply to the District at a location near to the intersection of Highways 191 and 64. This supply alternative would divert water from the channel for treatment and distribution in the Meadow Village service area. The depletion effect of the diversion on the channel would be offset by discharge of treated effluent from the Water Resources Reclamation Facility (WRRF). This discharge would likely need to be direct in order to offset surface water depletions.

There are at least two critical permitting factors for this supply alternative. Water right permitting may be confounded by the present rules that require a change application to be filed for mitigation to offset depletions to a surface water. The District may need to work with DNRC to pass new legislation that provides a water right for treated effluent from a wastewater treatment plant, or other equivalent options.

The second factor is the ability to obtain a discharge permit for the treated effluent directly discharged to a surface water. The Gallatin River is undergoing review for impaired status, which if designated as impaired, could preclude a direct discharge. Otherwise, a direct discharge may be permitted with a mixing zone, as is typically done around the State. The discharge permit application would likely need to show an overall benefit to the Gallatin watershed is being achieved (e.g., by reducing the concentrations of nutrients from other sources) in order to gain public acceptance.

6.4 Direct Potable Reuse

Direct potable reuse (DPR) is sourced directly from the treated effluent of the District's Water Resources Reclamation Facility (WRRF). The conceptual model for DPR considered for the District would further treat a fraction of the WRRF discharge by reverse osmosis (RO), and then mix the RO treated water (i.e., permeate) directly with groundwater pumped from water supply wells.¹⁸ The RO waste stream (i.e., concentrate) would be mixed into the WRRF discharge and be used for non-potable reuse or permitted discharges to ground-and surface-waters. Disinfection with chlorine and maintaining a chlorine residual in the distribution system would be required for DPR.

The major hurdles for the District to implement DPR will be governmental and societal. Montana presently does not allow DPR in public water systems, and citizens are likely to oppose it. These hurdles can be overcome but take time on the order of 5- to 10-years (as evidenced in CA and TX where DPR has been implemented). Trace levels of contaminants can occur in DPR water with unknown, if any, health effects, individually or synergistically. Such contaminants can become significant obstacles to community acceptance of DPR.

One of the critical limits for DPR is how the concentrate impacts irrigation water quality. The RO concentrate would be discharged back into the treated effluent for irrigation use, or other disposal methods (e.g., snowmaking, groundwater discharge). A target level for DPR could be 150 gpm of permeate for use in the public water system, with 50 gpm of concentrate. The actual rates that could be implemented would be determined through a PER study and pilot testing.

¹⁸ Other supplementary treatment processes are included pre- and post-RO treatment.

Source Capacity Plan 2022 Update

Obtaining 150 gpm for DPR is a significant benefit to the public water system and also to the treated effluent reuse. The annual reuse of DPR at 150 gpm is slightly more than 78 million gallons, and can occur over the full year. As the WRRF discharge increases, it should be possible to also increase the rate of DPR.

6.4.1 DPR Preliminary Engineering Report

A preliminary engineering study should be completed to assess treatment processes required to implement DPR in the District and to work with DEQ to develop regulations that permit DPR in Montana. This study is likely to determine other options than RO, or other processes to be used in conjunction with RO (e.g., UV). A critical factor of this study will be assessment of removing and or transforming pharmaceuticals and personal care products, and associated treatment by-products.¹⁹

7. PREFERRED ALTERNATIVES AND BUDGETS

This section summarizes preferred alternatives for the Source Capacity Plan 2022 Update. Budget estimates are provided in **Table 17**, and an implementation schedule is provided on **Figure 16**.

A timeline plot shows improvements to the Meadow Village source capacity required to meet demand in 2042 (**Figure 17**). These improvements include new Meadow Village wells and implementation of DPR, both of which would occur in future Source Capacity Plan updates. The timeline assumes Meadow test wells are successful and lead to new vertical wells with 250 gpm of combined total capacity put into service in 2035. It is also assumed DPR becomes a viable water source and is put into service by 2040 at 150 gpm.

Water development at the test well TW#9 site is not presently included in the District's source development planning. However; should this site become accessible, additional groundwater source capacity would be available primarily as a source to Meadow Village.

7.1 Conservation

This alternative would limit outside irrigation using water from the public water system to no more than 500 square feet (ft²). It would provide an incentive based program for existing properties and would make the requirement mandatory for all new properties. There would be up to an approximately 22% reduction in water use by year 2042 in Meadow Village (Mountain Village was not evaluated but would realize some benefit). The District could develop and implement this program in-house. Because the alternative is being implemented in-house, there is no cost estimate included.

7.2 Meadow Village Alluvial Test Wells

This alternative constructs two test wells in the Meadow Village alluvial aquifer and includes two pumping tests to evaluate interference among the test well locations and existing Meadow Village wells. If the results of testing are favorable, the District can proceed to file for water rights. Pending approval of the water right filings, the District can construct permanent production wells and connect the wells to the public water system. The budget for this alternative is including only the test well constructions and pumping tests. If conditions were favorable, a water right filing would be the next step. Once approved, the District would then move ahead with construction of new production wells.

¹⁹ Unregulated compounds and treatment by products are also referred to as contaminants of emerging concern (CECs).

7.3 Well Water Level Instruments

This alternative installs water level measuring instruments into the District wells (14 wells in total) and connects the instruments to the SCADA system. The instrument readings will be available real-time for operation of the system and will be archived for subsequent analysis. The budget for this alternative includes the work to install and make fully operable the water level sensors including:

- Pump work to install deployment tubes down the wells;
- Conduit installation from the wells to the SCADA panel;
- Communication wiring from each sensor to SCADA;
- Downhole pressure transducers (i.e., sensors); and
- SCADA programming services.

7.4 Direct Potable Reuse (DPR)

This alternative prepares a preliminary engineering report (PER) to implement DPR in the Meadow Village water system. The purpose of the alternative is to work with DEQ to formulate regulations for DPR in public water systems. The PER will also develop the initial planning and budgeting for a DPR pilot facility to be operated over a period of several years. The actual scope of work may vary and would be determined by the consulting engineer for the project. The budget for this alternative is for the preparation of the PER.

Table 17. Preferred Alternatives Budget Estimates

Activity	Contractor	Engineer	Contingency	Total
Conservation	Not applicable	Staff	Not applicable	Staff
Well Water Level Instruments/SCADA	\$ 195,795	\$ 48,949	\$ 24,474	\$269,218
Meadow Village Alluvial Test Wells	\$ 59,500	\$ 34,700	\$ 14,130	\$108,330
Direct Potable Reuse PER	Not applicable	\$ 50,000	Not applicable	\$50,000
			TOTAL	\$434,218

Activity	2022	2023	2024	2025
Conservation				
Water Level Sensors				
Meadow Village Test Wells				
Direct Potable Reuse PER				

Figure 16. Implementation Schedule





Figure 17. Meadow Village Improvements

APPENDIX A – WATER SUPPLY WELL LOGS

iontana	Ground				e nepo	10 11				
		MONTAN	A WELL LOG RE	PORT			Other Options			
This well le record of v encounter Water Info well owner	og reports the vork done with ed. This repor rmation Cente 's responsibil	activities of a nin the boreho t is complied er (GWIC) dat ity and is NOT	licensed Montan ble and casing, ar electronically from abase for this site Γ accomplished b	a well driller, se ad describes the n the contents c e. Acquiring wat y the filing of th	erves as amoun of the Gr ter rights is report	the offic t of wat ound- is the	cial <u>Plot this site on a topographic map</u> er <u>View scanned document (2/21/2008 6:21:57 PM)</u>			
Site Name	BIG SKY W	ATER AND S	EWER DISTRIC	Γ - MEADOW	Sectio	n 7: We	ell Test Data			
VILLAGE - GWIC Id: 1 DNRC Wat	WELL 1 03505 M er Right: W1	IEADOW 22635-00	VILLAGE (TEST V	NO. 1 WELL)	Total Depth: 50 Static Water Level: 11 Water Temperature:					
Section 1:	Well Owner				_					
Owner Nam BIG SKY OF Mailing Add SPOTTED E City	e Montana Iress Elk Road	State	Zip Code		Pump Test * Depth pump set for test _ feet. 200 gpm pump rate with _ feet of drawdown after _ hours of pumping. Time of recovery _ hours. Dependent of test					
BOZEMAN		MT	59715		Pumpir	ng wate	r level <u>19</u> feet.			
Section 2: Location Township Range Section Quarter Sections 06S 03E 36 SW¼ SW¼ SW¼ NE¼ County Geocode						* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.				
Latitude	e Lon	aitude	Geomethod	Datum	Section 8: Remarks					
45.2686	111	.3007	MAP	NAD27	0					
Altitu	ıde	Method	Datum	Date	Sectio	n 9: we				
623	60				Geolog	gic Sou	Irce			
Addition		Bloc	:k	Lot	Unassi	gnea I				
					From	10	Description			
0	Deserves				0	1				
MONITORIN	IG (1)	se of water			12	12	WHEAT & PEA SIZE GRAVELS CLAYBOUND LARGER GRAVELS @ 13FT 10 GPM @ 17FT			
Section 4:	Type of Wor	k			19	21	VERY FINE TIGHT CLAYBOUND SANDS LITTLE WATER			
Drilling Meth	od: CABLE				21	23	SAME AS ABOVE BUT MORE CLAYS WET			
Section 5:	Well Comple	etion Date			23	24	FINE SANDS & GRAVEL (DIRTY) CLEAN GRAVELS LENSE @ 24FT			
Date well co	mpleted: Sunda	ay, August 09, 1	970		24	31	CLEANER FINE SANDS & GRAVELS 20 GPM @ 28FT			
0		ation Details	_		31	34	SMOOTH PEA SIZE GRAVELS DIRTY NOT MUCH WATER			
Section 6: Borobolo di	well Constru	lction Details	5		34	38	VERY LOOSE COARSE CLEAN GRAVELS 40 GPM WATER			
	ameter				38	41	SANDS LITTLE AMOUNT OF GRAVELS			
0 50	6				41	44	LOOSE CLEAN GRAVELS FINE TO COARSE LOTS OF WATER			
Casing	Wall	Pressure			44	50	FINE TO COARSE SAND & GRAVELS DIRTY & TIGHT WATER @ 47FT NOT MUCH AT 50FT			
From To D	ameter Thickr	ness Rating	Joint Type		50	50	SHALES			
0 50 6			STEEL							
Completion	(Perf/Screen)									
From To D 27 31 6 34 38 6	iameter Openi	Size of Openings 1/4X2IN 1/4X2IN	Description SLOTS SLOTS	Driller All wor the Mo of my k	Certific k perfor ntana v nowled	cation med and reported in this well log is in compliance with vell construction standards. This report is true to the best lge.				
41 44 6		1/4X2IN	SLOTS			Na	me:			
Annular Sp	ace (Seal/Grou	t/Packer)				Compa	any: VAN DYKEN DRILLING INC			
From To D	escription	Cont. Fed?			License No: WWC-1					
		\$			Date Completed: 8/9/1970					

Montana's Gr	ound-Wate	er Informa	tion Center (G	WIC) Si	te Repoi	rt V.	11.2008 Page 1 of 1			
	I	MONTANA	WELL LOG REP	ORT			Other Options			
This well log re record of work encountered. T Water Informat well owner's re	eports the act done within t This report is tion Center (C esponsibility a	ivities of a li he borehole complied ele GWIC) datat and is NOT a	censed Montana and casing, and ectronically from the base for this site. A accomplished by the	well driller, s describes th he contents Acquiring wa he filing of th	erves as le amount of the Gro ater rights his report.	the offi t of wat ound- is the	cial <u>Plot this site on a topographic map</u> ter <u>View scanned document (2/21/2008 6:25:22 PM)</u>			
Site Name: BIC	SKY OF M	ONTANA * \$	SPOTTED ELK 2		Sectio	n 7: We	ell Test Data			
GWIC Id: 1035 DNRC Water R	07 ight: P04966 ME2	6-00 Adow V	ILLAGE N	10.2	Total D Static V	epth: 5 Vater L	i9 Level: 14			
Section 1: Wel	I Owner				Water	Tempe	rature:			
Owner Name BIG SKY OF MO	NTANA				Pump	Test *				
Mailing Address	5				Depth p	oump s	et for test _ feet.			
City BIG SKY	St M	a te ⊤	Zip Code 59716		<u>285</u> g pumpin Time of Recove	pm pur ig. f recove erv wate	np rate with _ feet of drawdown after <u>9.5</u> hours of ery _ hours. er level _ feet.			
Section 2: Loc	ation				Pumpir	ng wate	er level <u>25</u> feet.			
Township 06S	Range 03E	Section 36	Quarter S SE¼ SE½	ections 4 NW1⁄4	* Durin	a the w	ull test the discharge rate shall be as uniform as			
GALLATIN	County		Geocod	e	possibl Sustair	possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.				
Latitude 45.269017	Longi 111.30	tude 02446 Nethod	Geomethod TRS-SEC	Datum NAD83	Section	n 8: Re	emarks			
Aintude	I.	letitou	Datum	Date	Section	n 9. W	ell I og			
Addition		Block	I	Lot	Geolog	gic Sou	ILCE			
					Unassi	gned				
Section 3: Pro	posed Use o	of Water			From	То	Description			
PUBLIC WATER	SUPPLY (1)				0	4	TOPSOIL			
					4	24	CLAYBOUND GRAVEL			
Section 4: Typ	e of Work				24	32				
Drilling Method: C	ABLE				32	36				
Section 5: Wel	I Completion	n Date			30	31	CLEAN SAND & GRAVELS 30 GPM			
Date well comple	ted: Saturday,	June 12, 198	2		57	44	I OTS OF WATER-NICE FINE GRAVEL-TEST 50 GPM 2ET			
					44	46	DRAWDOWN			
Section 6: Wel	I Construction	on Details			46	47	TIGHTER GRAVEL-20 GPM			
From To Diame	tor				47	49	PEA GRAVEL & COARSE-LOTS OF WATER			
0 59	6				49	50	PEA & WHEAT & SOME LARGER GRAVELS LOTS OF			
Casing					50	57	COARSE GRAVEL-MOST PLACES TESTED 20 GPM			
ĬI	Wall	Pressure			57	59	SOFT GREY SHALE			
From To Diame	ter Thickness	Rating Jo	oint Type							
0 59 6			STEEL							
Completion (Per	f/Screen)									
From To Diame	# of ter Openings	Openings [Description		Driller	Certifi	cation			
37 56 6		1/4IN	SLOTS		All worl	k perfo	rmed and reported in this well log is in compliance with			
Annular Space (Seal/Grout/Pa	cker)			of mv k	nana v nowlec	dae.			
	C	ont.				Na	me:			
From To Descri	ption Fe	ed?				Compa	any: VAN DYKEN DRILLING INC			
0 0 DRILL	CUTTINGS				L	icense	No: WWC-306			
					Date (Comple	ted: 6/12/1982			

r									
		MONTANA	WELL LOG REP	ORT				Other Options	
This well log rep record of work of encountered. Th Water Information well owner's res	oorts the s done with his report on Cente sponsibilit	activities of a in the boreho is complied e r (GWIC) data y and is NOT	licensed Montana le and casing, and electronically from t abase for this site. accomplished by	well driller, se describes the he contents c Acquiring wat the filing of thi	erves as amount of the Gro er rights is report.	the of of wa ound- is the	icial ter	Plot this site on a topographic map View scanned document (2/21/2008 6:20:44 PM)	
Site Name: BIG	SKY WA	TER AND SI	EWER DISTRICT -	MEADOW	Section	n 7: W	ell T	est Data	
VILLAGE - WEL GWIC Id: 16698 DNRC Water Ri	1EADOW 9507-00	VILLAGE	NO. 3	Total Depth: 67 Static Water Level: 33 Water Temperature:					
Section 1: Well	Owner				D	.			
Owner Name LONE MOUNTAIN Mailing Address	N SPRING	S			Depth p 247 g	bump om pu	set fo mp ra	or test _ feet. ate with feet of drawdown after 24 hours of	
SPOTTED ELK RO	OAD	01-1-	7		pumpin	g.	·	- —	
BIG SKY		MT	59716		Recove Pumpir	recov ery wa ig wat	/ery _ ter le er lev	<u>1.5</u> hours. vel <u>33</u> feet. /el <u>47</u> feet.	
Section 2: Loca	ation								
Township 06S C	Range 03E County	Section 36	Quarter Sec NW1/4 SW1/4 SE Geococ	tions ¼ NW¼ le	* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.				
GALLATIN	Long	itudo	Coomethod	Dotum					
45.2688	Long 111	.304	MAP	NAD27	Section	า 8: R	emar	rks	
Altitude		Method	Datum	Date	Sectio	n 9: W	ell L	oa	
			_		Geolog	jic So	urce	-5	
			Block	Lot	Unassigned				
NIEADOW VILLAC					From	From To Description			
Section 3: Prop	osed Us	e of Water			0		3 TOF	PSOIL	
PUBLIC WATER S	SUPPLY (1)			3	5	SAN		
Section 4: Type	of Work				50	6		E GRAVEL	
Drilling Method: FC	ORWARD	ROTARY			66	6	SH/		
2g									
Section 5: Well	Complet	tion Date							
Date well complete	ed: Thursd	ay, April 14, 19	88						
Section 6: Well	Constru	ction Details					1		
Borehole dimens	ions								
From To Diamete	er						<u> </u>		
0 67	6						<u> </u>		
Casing		1_							
From To Diama	Wall	Pressure							
			STEEL		Driller	Certif	icatio	on	
Completion (Perf	/Screen)		OTLL		All work	c perfo	ormed	d and reported in this well log is in compliance with	
	# of	Size of			the Mo	ntana	well	construction standards. This report is true to the best	
From To Diamet	er Openir	ngs Openings	Description		of my k	nowle	dge.		
52.6 67 6			OPEN HOLE			N	ame:		
Annular Space (S	eal/Grout	/Packer)				Comp	any:	VAN DYKEN DRILLING INC	
From To Dooorin						icens	e NO:	VVVU-380 4/14/1088	
0 20 CEMEN		-			Date	Jourhi	sieu.	טטטו ודו וד	

MONTANA WELL LOG REPORT **Other Options** This well log reports the activities of a licensed Montana well driller, serves as the official Plot this site on a topographic map record of work done within the borehole and casing, and describes the amount of water View scanned document (8/1/2007 2:13:45 PM) encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report. Site Name: BIG SKY WATER AND SEWER Section 7: Well Test Data GWIC Id: 236777 MEADOW VILLAGE NO. 4 Total Depth: 56 Static Water Level: 10.4 Section 1: Well Owner Water Temperature: 7.22 **Owner Name BIG SKY WATER AND SEWER** Pump Test * Mailing Address P.O. BOX 363 Depth pump set for test 54 feet. City State Zip Code 305 gpm pump rate with 21.7 feet of drawdown after 72 hours of **BIG SKY** MT 59716 pumping. Time of recovery 72 hours. Well Address Recovery water level 10.42 feet. LITTLE COYOTE Pumping water level _ feet. City State Zip Code Section 2: Location * During the well test the discharge rate shall be as uniform as Township Range Section **Quarter Sections** possible. This rate may or may not be the sustainable yield of the well. NW1/4 SW1/4 NE1/4 06S 03E 36 Sustainable yield does not include the reservoir of the well casing. County Geocode GALLATIN Section 8: Remarks Geomethod TOTAL COMPLETION 6/30/2007 Latitude Longitude Datum TRS-SEC NAD83 45 270837 111 299848 Section 9: Well Log Method Datum Date Altitude **Geologic Source** Addition Block Lot Unassigned From To Description 0 2 TOPSOIL Section 3: Proposed Use of Water 2 13 BOULDERS AND CLAY PUBLIC WATER SUPPLY (1) 13 18 BOULDERS 18 26 MORE CLAY BOULDERS Section 4: Type of Work 26 30 OPEN CLAY AND ROCKS Drilling Method: CABLE TOOL 30 34 CLAY AND SMALL GRAVEL **Section 5: Well Completion Date** 34 39 CLAY AND SAND Date well completed: Wednesday, December 20, 2006 39 44 CLAY AND SAND BUT OPEN HOLE 44 47 GRAVEL AND WATER **Section 6: Well Construction Details** 47 56 SHALE **Borehole dimensions** From To Diameter 0 28 20 0 56 16 Casing Wall Pressure **Driller Certification** То Diameter Thickness Rating Joint From Туре All work performed and reported in this well log is in compliance with STEEL 0.375 WELDED 36 16 the Montana well construction standards. This report is true to the best 46 56 14 0.375 WELDED STEEL of my knowledge. Completion (Perf/Screen) Name: J MAHURIN # of Size of Company: MAHURIN DRILLING From To Diameter Openings Openings Description License No: WWC-358 SCREEN-CONTINUOUS-46 14 36 1 Date Completed: 12/20/2006 STAINLESS Annular Space (Seal/Grout/Packer) Cont. From To Description Fed?



Western Groundwater Services

		MONTAI	NA WELL L	OG REPOR	т	Other Options				
This well log record of wor encountered Information C owner's resp	reports the rk done with . This report Center (GWI onsibility an	activities of a in the boreh is complied C) database d is NOT ac	a licensed M ole and casi electronicat for this site complished	fontana well ing, and des lly from the o . Acquiring v by the filing	driller, so cribes the contents of water righ of this re	erves as t e amount of the Gro nts is the v port.	he offi of wat und-W vell	cial ter Vater	Plot this site on a topographic map View scanned document (8/1/2007 2:13:39 PM)	
Site Name: B	IG SKY WA	TER AND S	SEWER			Section	7: We	ell Tes	st Data	
GWIC Id: 236 Section 1: W Owner Name BIG SKY WATH Mailing Addre	6778 ME fell Owner er and sew ss	ADOW	VILLA	GE NO.	5	Total Depth: 57 Static Water Level: 16.3 Water Temperature: 7.22 Pump Test *				
City BIG SKY Well Address LITTLE COYO	O. BOX 160670 ity State Zip Code G SKY MT 59716 iell Address						Depth pump set for test <u>54</u> feet. <u>292</u> gpm pump rate with <u>20.2</u> feet of drawdown after <u>63</u> hours of pumping. Time of recovery <u>72</u> hours. Recovery water level <u>16.8</u> feet			
City	State	Z	Zip Code			Pumpin	g wate	er leve	I_feet.	
Section 2: Location * During the well test the discharge rate shall be as uniform a possible. This rate may or may not be the sustainable yield of Sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform a possible. This rate may or may not be the sustainable yield does not include the reservoir of the well can be as uniform.									at the discharge rate shall be as uniform as may or may not be the sustainable yield of the well. bes not include the reservoir of the well casing. s	
Latitude 45.267197 Altitude	Lo 111 9	ngitude .307642 Method	Geome TRS-S Da	ethod SEC tum	Datum NAD83 Date	Section Geolog	9: We	ell Log urce	9	
Addition		Blo	ck	Lot		Unassig	nea Te	Deeer	intion	
Section 3: Pr PUBLIC WATE Section 4: Ty Drilling Method Section 5: W Date well comp Section 6: W Borehole dime	e of Water	r 23, 2006 Is			0 1 5 10 15 33 46 49 50	1 5 10 15 33 46 48 50 57	TOPS CLAY ROCK GRAV GRAV MOST BOUL SILTY DARK	OIL LARGE ROCK (AND GRAY GRAVEL (EL AND SAND (EL AND SAND		
0 28 28 57 Casing	16		Brocouro	1	1	Driller (Certific	cation	1	
From To D	iameter T	hickness	Rating	Joint WELDED	Type STEFI	All work the Mor	perfoi itana v	rmed a vell co	and reported in this well log is in compliance with nstruction standards. This report is true to the best	
47 57 14	4 0	.375		WELDED	STEEL	ot my kr	nowled	dge.		
Completion (P	erf/Screen)					_	Na	me: J.		
From To Dian	# of neter Openin	Size of gs Openings	s Descriptior	n		Li	compa	No: W	WC-358	
37 42 14		.070	SCREEN-C STAINLESS	ONTINUOUS	;-	Date Completed: 11/23/2006				
42 47 14	.110	SCREEN-C	ONTINUOUS	-						
Annular Space From To Desc 0 28 CEM 33 33 K PA	e (Seal/Grout Cont cription Fed? IENT	/Packer)								

http://mbmggwic.mtech.edu/sqlserver/v11/reports/SiteSummary.asp?gwicid=236778&agency=mbmg&se... 4/24/2008



Western Groundwater Services

lo

0

DRILL CUTTINGS

MONTANA WELL LOG REPORT **Other Options** This well log reports the activities of a licensed Montana well driller, serves as the official Plot this site on a topographic map record of work done within the borehole and casing, and describes the amount of water View scanned document (2/21/2008 6:12:28 PM) encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report. Site Name: BIG SKY OF MONTANA * WELL #1 Section 7: Well Test Data GWIC Id: 103499 HIDDEN VILLAGE NO. 1 Total Depth: 45 Static Water Level: 8 Section 1: Well Owner Water Temperature: **Owner Name BIG SKY OF MONTANA** Bailer Test * Mailing Address 45 gpm with _ feet of drawdown after 2 hours. Zip Code City State Time of recovery _ hours. BOZEMAN MT 59715 Recovery water level feet. Pumping water level 18 feet. Section 2: Location **Quarter Sections** Township Range Section * During the well test the discharge rate shall be as uniform as SE¼ NW¼ 06S 03E 35 possible. This rate may or may not be the sustainable yield of the well. Geocode County Sustainable yield does not include the reservoir of the well casing. GALLATIN Latitude Longitude Geomethod Datum Section 8: Remarks 111.324213 TRS-SEC NAD83 45.269927 Altitude Method Datum Date Section 9: Well Log 6410 **Geologic Source** Addition Block Lot Unassigned From To Description 0 3 SOILS Section 3: Proposed Use of Water 3 9 BUFF COLOR CLAY W/ BOULDERS EMBEDDED MONITORING (1) 9 22 BUFF COLOR CLAYBOUND GRAVELS & BOULDERS Section 4: Type of Work 22 29 CLAYBOUND MUSHY SANDS SOME GRAVELS Drilling Method: CABLE 31 SILT SAND & GRAVELS SOME WATER 29 31 37 FINE SANDS RUST COLOR **Section 5: Well Completion Date** 37 38 SHALE LENSE Date well completed: Monday, July 27, 1970 38 45 SANDSTONE WATER 45 45 COLORADO SHALE Section 6: Well Construction Details **Borehole dimensions** From To Diameter 0 45 6 Casing Wall Pressure Joint Type From To Diameter Thickness Rating 45 STEEL **Driller Certification** Completion (Perf/Screen) All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best # of Size of of my knowledge. From To Diameter Openings Openings Description Name: 44 6 1/4X2IN SAW SLOTS 34 Company: VAN DYKEN DRILLING INC Annular Space (Seal/Grout/Packer) License No: WWC-1 Cont. From To Description Fed? Date Completed: 7/27/1970

```
http://mbmggwic.mtech.edu/sqlserver/v11/reports/SiteSummary.asp?gwicid=103499&agency=mbmg&se... 4/24/2008
```

Montana's	Groun	d-Water	Informa	ation	Center (GW	VIC) Site	e Repo	rt V.	11.2008 Page 1 of 2		
		MC	ONTANA	WELL	LOG REPOR	RT			Other Options		
This well lo record of w encountere Water Info well owner	og report vork don ed. This rmation ('s respo	the activi e within the report is co Center (GV nsibility and	ities of a l e borehole omplied e VIC) data d is NOT	icense e and d lectron base f accom	ed Montana we casing, and de ically from the or this site. Ac iplished by the	ell driller, se scribes the contents o quiring wa filing of th	erves as e amoun of the Gr ter rights is report	the offi t of wat ound- s is the	icial <u>Plot this site on a topographic map</u> ter <u>View scanned document (2/21/2008 6:14:01 PM)</u>		
Site Name:		MOUNTAI		GS * H	IDDEN VILLA	GE 2	Sectio	n 7: W	ell Test Data		
GWIC Id: 1	03501	HIDD	EN V	ILL	AGE NO	. 2	Tatal Dapth: 665				
Section 1:	Well Ow	vner					Static \	Nater L	Level: -210		
Owner Nam	e						Closed Water	l-in Pre Tempe	ssure: 91 psi rature:		
Mailing Add	NTAIN SH I ress	RINGS					D	T = = (*			
5		_					Pump	lest "			
City BIG SKY		Stat MT	e	Zip 597) Code 716		Depth	pump s	set for test _ feet.		
2.0 0							pumpir	ng.			
Section 2:	Locatio	n Denge	Continu		Querter See	tiono	Time o Recove	f recov erv wat	ery _ hours. er level feet.		
06S	ib	03E	35		SW1/4 NW1/4	SW1/4	Pumpir	ng wate	er level <u>531</u> feet.		
	Cour	nty			Geocode						
GALLATIN Latitud	e	Longitu	de	Geo	omethod	Datum	* Durin	ig the w	vell test the discharge rate shall be as uniform as		
45.2653	77	111.3306	656	TF	RS-SEC	NAD83	Sustair	nable y	ield does not include the reservoir of the well casing.		
Altitu	o o	Met	thod		Datum	Date	Section 8: Demarks				
Addition	0		Block	Ĩ	Lo	t	Sectio	11 O. NE			
							Sectio	n 9: W	ell Log		
Section 3:	Propose	ed Use of V	Water				Geolog	gic Soι	urce		
PUBLIC WA	TER SUP	PLY (1)					From	То	Description		
Section 4:	Type of	Work					0	6	TOPSOIL		
Drilling Methe	od: AIR R	OTARY					6	57	SAND AND GRAVEL		
Section 5:	Well Co	mpletion [Date				57	137	SHALE - BLACK TO GRAY - MODERATELY HARD - FISSILE OIL STAINED 99-137 FEET		
Date well cor	mpleted: I	Monday, Jun	ne 16, 198	6			137	140.5	SANDSTONE - GRAY - VERY FINE TO FINE GRAINED - WITH THIN OIL STAINED SHALE STRINGERS - WATER		
Section 6:	Well Co	nstruction	Details				140.5	143	SHALE - BLACK SOFT CLAYEY - OIL STAINED		
Borehole di	mension	S					143	146.5	SANDSTONE - GRAY VERY FINE TO FINE GRAINED		
0 665	7						154	155	SANDSTONE - GRAY VERY FINE TO FINE GRAINED		
Casing						-	155	160	SHALE - GRAY TO BLACK CLAYEY OIL STAINED		
From To	Diameter	Wall Thickness	Pressure Rating	Joint	Туре		160	170.5	SANDSTONE - GRAY VERY FINE TO FINE GRAINED - HARD TIGHT - OIL STAINED BETWEEN 160 AND 166.5		
0 500 6	6				STEEL]	170.5	174	SHALE AND SANDSTONE - ALTERNATING 0.25 INCH		
0 65.8 7	7	0.280					174	195.5	SHALE - DARK BROWN TO GRAY - OIL STAINED - FEW		
Completion	(Perf/Sci	reen)				<u>'</u>		100.0	THIN SANDSTONE STRINGERS		
		# of	Size	of	Description]	195.5	197	GRAINED- HARD TIGHT		
502 505 4 5							199	SHALE - DARK BROWN TO GRAY - OIL STAINED SANDSTONE - GRAY - VERY FINE TO FINE GRAINED -			
525 528	4.5				SLOTS	1	199	200.5	HARD TIGHT - OIL STAINED		
548 551	548 551 4.5 SLOTS								cation		
571 574	71 574 4.5 SLOTS								All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best		
617 620	4.5 4.5				SLOTS	1	of my k	knowled	dge.		
640 643	4.5				SLOTS]		Na			
Annular Spa	ace (Seal	Grout/Pack	(er)				1	Company: STINGER WELL DRILLING			
	escriptio	Cont.					Date	Comple	ted: 6/16/1986		

500 CEMENT

0 RUBBER

0

0

	MONTA	NA WELL LOG REP	ORT			Other Options	
This well log reports to record of work done well encountered. This rep Water Information Ce well owner's responsi	he activities of within the bore port is complie nter (GWIC) d bility and is NO	a licensed Montana hole and casing, and d electronically from t atabase for this site. DT accomplished by t	well driller, so describes the contents of Acquiring wa the filing of th	erves as the official e amount of water of the Ground- iter rights is the nis report.			
Site Name: BIG SKY	WATER AND	SEWER DISTRICT -	MEADOW	Sectior	n 7: Well	Test Data	
VILLAGE - WELL 2	DITE		.т.т.				
GWIC Id: 155405 Section 1: Well Owne Owner Name	er BLUE	GROUSE WE	i Lu Lu	Total De Static W Closed- Water T	Total Depth: 1170 Static Water Level: -265.65 Closed-in Pressure: 115 psi Water Temperature:		
BIG SKY CO WATER & Mailing Address	SEWER			Pump 1	Test *		
PO BOX 160670				Depth p	oump set	for test _ feet.	
City	State	Zip Code		<u>35</u> gpr	m pump	rate with _ feet of drawdown after <u>72</u> hours of	
BIG SKY	MT	59716		pumping	g.	v 1.25 hours	
Section 2: Location				Recove	rv water	level 0 feet.	
Townshin Ra	nga Sacti	on Quarter 9	Sections	Pumpin	g water	level <u>737</u> feet.	
06S 0	3E 36	SW¼ SW	14 NE14				
County		Geocod	le	* During	a the we	Il test the discharge rate shall be as uniform as	
GALLATIN				possible	e. This ra	ate may or may not be the sustainable vield of the well	
Latitude L	ongitude	Geomethod	Datum	Sustain	able yiel	d does not include the reservoir of the well casing.	
45.2694	111.3	MAP	NAD27			_	
Altitude	Method	Datum	Date	Section	1 8: Rem	narks	
Addition		Block	Lot	WELL D	EEPENE	D FROM 960 FT TO 1250 FT IN 1998	
BLUE GROUSE HILLS		BIOOK	Lot	Sectior	n 9: Well	Log	
				Geolog	ic Sour	ce	
Section 3: Proposed	Use of Water			300SDN	, MS - SEI	DIMENTS (PALEOZOIC)	
PUBLIC WATER SUPPL	Y (1)			From	To D	escription	
Section 4: Type of W	ork			0	26 G	RAVEL WITH SAND	
Drilling Method: ROTAR	Y Y			25	48 S	AND & GRAVEL	
2				48	50 S	ANDY CLAY	
Section 5: Well Com	pletion Date			50	106.5 D	ARK SHALE WITH SILTSTONE STRINGERS	
Date well completed: Frid	day, January 02,	1998		106.5	122 L	IMESTONE & SANDSTONE STRINGERS	
Section 6. Wall Cons	truction Data	ile		122	170 R	ED BLACK SHALE	
Borehole dimensions	Struction Deta	115		170	246 R	ED/BROWN SILTSTONE & SANDSTONE	
From To Diameter				246	386 B		
0 805 12				300	405 5 B		
805 1250 8				405.5	414 D	ARK GRAY/BLACK SANDSTONE	
Casing				414	474 A	NDESITE	
M	/all Press	sure		474	481.5 L	IGHT GRAY SANDSTONE	
From To Diameter T	hickness Ratin	g Joint Type		481.5	483 B	LACK SHALE	
-2 800 8 0	.250	THREADED A53B	STEEL	483	524 G	RAY SANDSTONE	
780 1170 6		A53B	STEEL	Driller (Certifica	ition	
Completion (Perf/Scree	n) # of	Size of		All work	c perform	ned and reported in this well log is in compliance with	
From To Diameter	Openings	Openings Descrip	tion	the Mor	ntana we	Il construction standards. This report is true to the bes	
1170 1250 8		OPEN H	IOLE		nowleag	e.	
Annular Space (Seal/G	out/Packer)	1	1		Nam		
	Cont.				iconso M	•• W/W/C-512	
From To Description	Fed?			Date C	Complete	d: 1/2/1998	
0 800 CEMENT				Dute	Sinplote		

Si G A	ite Name WIC Id: 1 dditional	: BIG SKY 55405 Lithology	WATER AND SEWER DISTRICT - MEADOW VILLAGE - WELL 2 Records								
F	rom	То	Description								
	524	524 805 GRAY/DARK GRAY SHALE & SILTSTONE									

805	812	BROWN/GRAY SANDSTONE
812	820	GRAY/WHITE SANDSTONE
820	822	BROWN/GRAY SANDSTONE
822	829	WHITE/GRAY SANDSTONE
829	836	SHALELY SILTSTONE
836	857	WHITE/GRAY SANDSTONE
857	861.5	RED SHALE
861.5	862.5	WHITE/GRAY SANDSTONE
862.5	878	SILTSTONE & SHALES
878	905	LIGHT GRAY/BROWN FISSILE SHALE
905	915	BLACK SHALE WITH INTERBEDDED GRAY
915	917	LIGHT GRAY LIMESTONE THINLY INBEDDED
917	929	FINE GRAINED BLACK/GRAY SHALE
929	935	BLACK SHALE WITH LENSES OF LIMESTONE
935	939	MOTTLED DARK GRAY SANDSTONE
939	955	GRAY SHALE
955	960	MOTTLED BROWN/GRAY SHALE
960	963	SHALE MUDSTONE MOTTLED BLUE/GREEN TO GRAY HARD
963	964	GRAY TO BLACK FINE GRAINED LIMESTONE
964	990	SHALE/MUDSTONE MOTTLED RED & GRAY WHT & BLK SANDST
990	1035	DARK GRAY LIMESTONE W/SOME RED SHALE
1035	1042	RED FINE GRAINED SHALE/MUDSTONE
1042	1046	RED TO BROWN CLAY
1046	1087	GRAY TO MAROON SILICIFIED MUDSTONE W/SOME LIMESTN
1087	1124	BLUE/GREEN TO RED SILICIFIED SHALE SLIGHTLY BROKEN
1124	1134	LIGHT GRAY FINE GRAINED STONE HARD
1134	1138	MAROON/RED SHALE/MUDSTONE
1138	1143	LIGTH GRAY FINE GRAINED STONE HARD SLIGHTLY BROKEN
1143	1172	MAROON/RED W/SOME GRAY SHALE MUDSTONE FINE GRAINED
1172	1186	BLACK WHITE GRAY BROWN SANDSTONE ROUNDED
1186	1223	BLACK/WHITE/GRAY/BROWN SANDSTONE
1223	1250	DARK GRAY TO GRAY QUARTZITE HARD

Site Name	Site Name: LONE MOUNTAIN SPRINGS * HIDDEN VILLAGE 2								
Additional	GwiC id: 103501 Additional Lithology Records								
From	То	Description							
200.5	227	SHALE - BLACK TO GRAYISH BROWN TO DARK GREENISH- GRAY. HARD EXCEPT FOR 203-208 WHICH IS SOFT AND CLAYEY - FISSILE - OIL STAINED							
227	239	SANDSTONE - DARK GRAY FINE TO MEDIUM GRAINED - HARD TIGHT TO 237 - OIL STAINED							
239	297	SHALE - DARK GRAY TO DARK GREENISH GRAY TO 252 FEET THEN DARK REDDISH BROWN TO 265 FEET THEN DARK GRAY TO BLACK. FISSILE - BECOMES A SANDY SHALE AT 270 FEET. OIL STAINED BETWEEN 281 AND 285 FEET.							
297	302.5	SANDSTONE - REDDISH BROWN - VERY FINE TO FINE GRAINED - HARD - FRACTURED AT 299-302 FEET.							
302.5	330	SHALE - DARK GREENISH GRAY TO DARK REDDISH BROWN							
330	356	SANDSTONE - DARK GREENISH GRAY TO DARK REDDISH BROEN AND GRAY - VERY FINE TO FINE GRAINED - SHALE STRINGERS FROM 330 TO 337 FEET. SLIGHT OIL STAIN FROM 347 TO 350 FEET.							
356	512	SHALE - DARK GREENISH GRAY - DARK BROWN BLACK AND DARK RED. HARD AND SOFT INTERVALS - THIN BENTONITE STRINGERS FROM 390 TO 469 FEET. SCATTERED THIN SANDSTONE STRINGERS THROUGHOUT ENTIRE INTERVAL							
512	544	SANDSTONE - GRAY VERY FINE TO FINE GRAINED - SOFT SILTY - MAKING WATER							
544	609	ANDESITE PORPHYRY - DARK GREENISH GRAY - HARD BUT FRACTURED OR JOINTED - MAKING WATER							
609	648	SANDSTONE - GRAY VERY FINE TO FINE GRAINED - FRACTURED FROM 616-619 FEET. SLIGHT OIL STAIN AT 630-632 FEET. BECOMES SHALEY SANDSTONE AT 645- 648 FEET. MAKING WATER							
648	665	SHALE - SANDY FISSILE - MODERATELY HARD - TIGHT OIL STAINED FROM 653-665 FEET.							

MONTANA WELL LOG REPORT

Other Options

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Plot this site on a topographic map View scanned document (2/21/2008 5:28:02 PM)

Site Name: LON	NE MOOSE	MEADOWS		Section 7: Well Test Data				
GWIC Id: 17008	3 LO	NE MOO	DSE NO. 1	1				
•	•				Total Depth: 200			
Section 1: Well	Owner				Static Water Level. 29 Water Temperature			
Owner Name					Water remperature.			
LONE MOOSE MI	EADOWS				Air Test *			
Mailing Address								
205 E. MENDENF	IALL	Chata	Zin Code		100 gpm with drill stem set at <u>56</u> feet for <u>24</u>	_ hours.		
		State	ZIP Code		Time of recovery <u>1</u> hours.			
BOZEIVIAN		IVI I	59715		Recovery water level 29 feet.			
Section 2: Loca	ation				amping water level <u>-rec</u> reet			
Township	Range	Section	Quarter S	ections				
06S	03E	28	NE¼ S	SW1/4	During the well test the discharge rate shall b	e as unitorm as		
C	County		Geocod	е	uussiule. This rate may or may not be the sust Sustainable vield does not include the reservo	an able yield of the Well. ir of the well casing		
GALLATIN					Sustainable yield does not include the leselvo	" or the well cashiy.		
Latitude	Longit	ude	Geomethod	Datum	Section 8: Remarks			
45.28102	111.365	5423	TRS-SEC	NAD83				
Altitude	Ν	Nethod	Datum	Date	Section 9: Well Log			
					Geologic Source			
Addition		Block	I	Lot	Unassigned			
					From To Description			
Section 3: Pron		of Wator			0 34 CLAY W/BROKEN SANDSTONE			
DOMESTIC (1)	03eu 03e 0	of water			34 52 RED TO GRAY SANDSTONE			
DOMEOTIO (1)					52 82 GRAY SHALE & SANDSTONE			
Section 4: Type	of Work				82 200 BLACK & WHITE SANDSTONE			
Drilling Method: R	OTARY							
Section 5: Well	Completio	n Date						
Date well complete	ed: Wednesda	ay, November	11, 1998					
	• • •							
Section 6: Well	Constructi	on Details						
Borehole dimens	ions							
From To Diame	ter							
0 25	12							
25 100	8							
100 200	6							
Casing	Mall	Dracaura			I			
From To Diama	tor Thicknes	Pressure			All work portformed and reported in this well be	a is in compliance with		
	0.200				the Montana well construction standards. This	report is true to the best		
	U.322		VELDED SIEEL		of my knowledge.			
	/Screen)	Size of			Name:			
	eter Onenin	as Opening	s Description		Company: HAGGERTY DRILLING			
100 200 6		33 Shermid			License No: WWC-353			
	Cool/Grout/Do	ackor)	UPEN HULE		Date Completed: 11/11/1998			
	eal/Grout/Pa	Cont			Sate completed. 17/17/1990			
From To Descrip	otion	Fed?						
0 25 RENITO		ENT						

Page	1	of	1

	M	ONTANA	WELL LOG R	REPOR	T			Other Options
This well log rep record of work d encountered. Th Water Informatio well owner's res	ports the activ lone within the his report is co on Center (GV ponsibility and	ities of a l e borehol omplied e VIC) data d is NOT	licensed Monta e and casing, a lectronically fro base for this si accomplished	ana we and dea om the ite. Acc by the	Il driller, s scribes th contents quiring wa filing of th	erves as e amount of the Gro ater rights nis report.	the offi of wat ound- is the	cial <u>Plot this site on a topographic map</u> er <u>View scanned document (2/21/2008 5:28:55 PM)</u>
Site Name: LON	IE MOOSE M	EADOW	S			Section	n 7: We	ell Test Data
GWIC Id: 18721	2 LON	IE MO	OSE NO	. 2		Total D	anthi 1	00
Section 1. Well	Owner					Static V	eptn: 1 Vater L	evel: 12
Owner Name	o uno					Water	Tempe	rature:
LONE MOOSE ME	ADOWS					Bumn '	Toot *	
Mailing Address						Pump	lest	
LONE MOOSE ME	ADOWNS					Depth p	oump s	et for test <u>70</u> feet.
City	Stat	te	Zip Code			<u>200 g</u>	om pur	np rate with _ feet of drawdown after <u>24</u> hours of
BIG SKY	MI		59716			pumpin Time of	g. Fracovi	ary 20 hours
Section 2: Loca	tion					Recove	erv wat	er level 12 feet.
Townshin	Range	Section	Quart	er Sect	tions	Pumpir	ig wate	er level <u>48</u> feet.
06S	03E	28	NE	E1/4 SW1	/4	-		
С	ounty		Geo	code		* Durin	a tha u	cell test the discharge rate shall be as uniform as
GALLATIN	-					possibl	e. This	rate may or may not be the sustainable vield of the well.
Latitude	Longitud	le	Geomethod		Datum	Sustain	able y	ield does not include the reservoir of the well casing.
45.28102	111.36542	23	TRS-SEC		NAD83			
Altitude	Ме	thod	Datum		Date	Section	n 8: Re	emarks
Addition		Block	τ.	Lot	t	Section	n Q• W/	
						Geoloc	ic Sou	
						Unassi	aned	
Section 3: Prop	osed Use of	Water				From	То	Description
DOMESTIC (1)						0	5	TOP SOIL
Section 4: Type	of Work					5	35	GRAVEL
Drilling Method: RC	DTARY					35	60	SHALE & SANDSTONE
U U						60	90	GREY SANDSTONE
Section 5: Well	Completion	Date				90	100	GREY & BROWN BEDROCK
Date well complete	ed: Thursday, N	ovember 1	6, 2000					
Section 6: Well	Construction	Dotaile						
Borehole dimensi	ons	Details						
From To Diamet	er							
0 20	12							
20 46	8							
46 100	7							
Casing								
	Wall	Pressure						
From To Diame	ter Thickness	Rating	Joint T	уре		Driller	Certifi	cation
-2 46 8		 	WELDED S	TEEL		All work	c perfoi	rmed and reported in this well log is in compliance with
20 100 6	(Serece)		THREADED	VC		the Mor	ntana v	vell construction standards. This report is true to the best
	teen)	Size of				of my k	nowled	lge.
From To Diamet	er Openings	Openings	Description				Na	me:
80 100 6		050 IN	FACTORY SLO	TTED			Compa	any: OKEEFE DRILLING CO
Annular Space (S	eal/Grout/Pacl	ker)				L	icense	No: WWC-462
		Con	t.			Date 0	Comple	ted: 11/16/2000
From To Descrip	tion	Fed	?					
0 20 QUIK GI	ROUT		7					

0 43

43 6X8 FORMATION PACKER

20 BENTONITE

0

					e nepo		
		MONTANA \	WELL LOG REPO	ORT			Other Options
This well log re record of work encountered. T Water Informa well owner's re	eports the ac done within This report is tion Center (esponsibility a	tivities of a lic the borehole complied ele GWIC) datab and is NOT a	censed Montana of and casing, and ectronically from the ase for this site. A ccomplished by the	well driller, se describes the he contents of Acquiring wa he filing of th	erves as e amount of the Gro ter rights is report.	the offic of wate ound- is the	cial <u>Plot this site on a topographic map</u> er <u>View scanned document (2/21/2008 5:27:34 PM)</u>
Site Name: LO	NE MOOSE	MEADOWS			Sectio	n 7: We	ell Test Data
GWIC Id: 1658 Section 1: Wel	⁷⁴ LOI Ⅱ Owner	NE MOO	SE TEST	WELL	Total D Static V	epth: 2 Vater L	20 evel: 0
Owner Name					Water	I emper	ature:
LONE MOOSE N	/IEADOWS				Δir Tea	:t *	
Mailing Address	6						
205 E MENDENH	HALL				<u> 100 g</u>	pm with	n drill stem set at <u>215</u> feet for <u>1</u> hours.
City		State	Zip Code		Time o	f recove	ery <u>1</u> hours.
BOZEMAN		MT	59715		Recove Pumpir	ery wate ng wate	er level <u>0</u> feet. r level <u>215</u> feet.
Section 2: Loc	ation						
Township	Range	Section	Quarter S	ections	* Durin	g the w	ell test the discharge rate shall be as uniform as
000	County	20	Geocod	e	possibl	e. This	rate may or may not be the sustainable yield of the well.
GALLATIN	ocumy		000000		Sustair	nable yi	eld does not include the reservoir of the well casing.
Latitude	Longit	ude	Geomethod	Datum	Sectio	n 8: Re	marks
Altitude	111.000	Vethod	Datum	Date	•	• · · · ·	
	-				Sectio	n 9: we	
Addition			Block	Lot	Geolog	gic Sou	rce
LONE MOOSE M	IEADOWS			1	Unassi	gnea	
					From	То	Description
Section 3: Pro	posed Use o	of Water			0	4	TOPSOIL
DOMESTIC (1)					4	45	
Section 4: Typ	e of Work				45	60	SHALE & SANDSTONE
Drilling Method: F	ROTARY				60	92	GRAY SANDSTONE
Drining Mourou. I					92	102	
Section 5: Wel	II Completio	n Date			102	110	
Date well comple	ted: Wednesd	ay, July 23, 19	97		110	160	
					160	220	BLACK & WHITE SPECKLED ROCK
Section 6: We	II Constructi	on Details					
Borehole dimen	sions						
From To Diam	eter						
0 220	6						
	Wall	Prossure					
From To Diame	ter Thicknes	s Rating Jo	oint Type				
-2 48 6	0.250	W	FI DED STEEL		Driller	Certific	cation
Completion (Per	rf/Screen)				All wor	k perfor	med and reported in this well log is in compliance with
	# of	Size of			the Mo	ntana w	vell construction standards. This report is true to the best
From To Diam	neter Openin	gs Openings	Description		of my k	nowled	ge
48 220 6			OPEN HOLE			Na	me:
Annular Space (Seal/Grout/Pa	acker)				Compa	INY: HAGGERTY DRILLING
	Cont.				L	icense.	No: WWC-353
From To Descri	iption Fed?				Date	Complet	ted: 7/23/1997

Date Completed: 7/23/1997

Montana's Ground-Water Information Center (GWIC) | Site Report | V.11.2008

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Site Nar	me:	RADICK	JOHN *	ASPEN G	ROVE				Section	n 7: We	II Test Data
GWIC Id	d: 1	59764	ASF	EN G	GROVE	NO.	1	(TW)	Total De	epth: 18	80
Section	1:	Well Owi	ner						Static W	/ater Le	evel: 71
Owner N	lam	е							Water T	emper	ature:
RADICK	JOF	ΗN							Dump 1		
Mailing A	Add	ress							Pump	est	
PO BOX	160	011							Depth p	ump se	et for test feet.
City			5	State	Zip (Code			<u>45</u> gpr	n pump	o rate with _ feet of drawdown after 8.5 hours of pumping.
BIG SKY	,		Ν	ЛТ	5971	6			Time of Recove	recove ry wate	ery _ hours. er level _ feet.
Section	2:	Location							Pumpin	g wate	r level <u>100</u> feet.
Tow	nsh	nip	Range	Sect	ion	Quarte	er Secti	ons			
0)6S		03E	34	1	SW1⁄4	SW¼ S	E¼	* During	n the w	ell test the discharge rate shall be as uniform as possible. This
		Cou	nty			Geod	ode		rate ma	v or ma	av not be the sustainable vield of the well. Sustainable vield
GALLATI	IN								does no	ot includ	de the reservoir of the well casing.
La	titu	de	Long	gitude	Geor	nethod		Datum			Ŭ
45.2	2618	395	111.:	34081	TRS	S-SEC		NAD83	Section	8: Re	marks
A	Altit	ude		Method		Datum		Date			
A . I. 1947					I -				Section	9: We	ll Log
Addition				ы	OCK		Lot		Geolog	ic Sou	rce
									Unassig	ned	
Section	3:	Propose	d Use of	Water					From	То	Description
There are	e no	uses assi	aned to the	is well.					0	14	CLAYBOUND GRAVELS AND BOULDERS
			J						14	21	CLAY AND BROKEN SHALE
Section	4:	Type of \	Nork						21	31	SHALE CLAY SOFT BROWN
Drilling M	letho	od: ROTAF	RY						31	41	WEATHERED SANDSTONE GRAY SOFT WITH HARD SPOTS
									41	43	BLACK SHALE SOFT
Section	5:	Well Con	npletion	Date	_				43	46	BROWN CLAY SOME SHALE
Date well	l cor	npleted: T	uesday, Ju	uly 30, 1990	6				46	54	D. GRAY SHALE AND CLAY SOFT
Santian	6.		etructio	n Dotaila					54	72	SANDSTONE CLAY SOME SHALE VERY MIXED
Borehole	o. Da dir	nensions	Siluciio	n Delans					72	84	BLACK SHALE CLAY 70-75 FT 5 GPM
FromTo		iameter							84	91	SHALE LIGHT GRAY
0 2	201	10							91	95	STICKY CLAY AND SHALE
2018	20	6							95	102	BLACK SHALE CLAY
Casing		0							102	104	SANDY SHALE HARDER D. GRAY 102-103 12 GPM
			Wall	Pressu	Ire				104	116	SHALES CLAY COLOR VARIES GRAY BROWN
From To	。	Diameter	Thicknes	s Rating	Joint	Type			116	121	GREENISH GRAY SHALE
-1 7 56	6.5	6	0.250		WELDED	STEEL			Driller (Certific	ation
40 18	80	4.5	0.200	160.00	WELDED	PVC			All work	perfor	med and reported in this well log is in compliance with the
Completi	ion	(Perf/Scre	l	100.00					Montan	a well o	construction standards. This report is true to the best of my
		#	of	Size of					knowled	lge.	
From To	b D	iameter C	penings	Openings	Description					N	ame:
60 80) 4	.5 2	0	.025X1IN	FACTORY S	LOTTED				Comp	oany: HAYES DRILLING
100 12	204	.5 2	0	.025X1IN	FACTORY S	LOTTED				License	e No: WWC-361
160 18	30 4	5 2	0	025X1IN	FACTORYS				Date	Compl	eted: 7/30/1996
	· • [^	- 14	-						·		

160 180 4.5 20 Annular Space (Seal/Grout/Packer)

From	То	Description	Cont. Fed?
0	20	CEMENT GROUT	

Plot this site on a topographic map View scanned document (2/21/2008 6:08:29 PM)

Montana's Ground-Water Information Center (GWIC) | Site Report | V.11.2008

Site Name: GWIC Id: 15 Additional	RADICK JO 59764 Lithology Ro	HN *ASPEN GROVE
From	То	Description
121	126	REDDISH BROWN SHALE HARD
126	134	SANDSTONE BLUISH GRAY
134	135	BLACK SHALE
135	145	SANDSTONE GRAY HARD
145	180	SHALES AND CLAY VARIETY OF COLORS RED BROWN GRAY BLACK

MONTANA WELL LOG REPORT

Other Options

Plot this site on a topographic map

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water View scanned document (2/21/2008 6:07:26 PM) encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Zip Code

Geomethod

TRS-SEC

Block

Datum

59716

2

Quarter Sections

SF1/4

Datum

NAD83

Date

Lot

Geocode

ASPEN GROVE NO.

State

Section

34

MT

Longitude

111.336936

Method

Range

03E

County

Section 7: Well Test Data

Total Depth: 640 Static Water Level: 80 Water Temperature:

Pump Test *

Depth pump set for test 240 feet. 18 gpm pump rate with _ feet of drawdown after 192 hours of pumping. Time of recovery 96 hours. Recovery water level 80 feet. Pumping water level 186 feet.

* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.

Section 8: Remarks

Section 9: Well Log

Geologic Source

Unassi	gnea	
From	То	Description
0	8	CLAY BOUND GRAVEL
8	30	SOFT SHALE
30	340	SANDSTONE & SHALE
340	410	BLUE & GRAY SHALE
410	438	SANDSTONE
438	500	BLACK & GRAY SHALE
500	515	BLUE SHALE
515	640	BLACK & GRAY SHALE

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name: Company: BRIDGER DRILLING INC License No: WWC-425 Date Completed: 6/4/1998

ASPEN GROVES Section 3: Proposed Use of Water

Site Name: RODDICK SKIP * PW-2

GWIC Id: 169476

Owner Name

City

BIG SKY

GALLATIN

Addition

Mailing Address PO BOX 160011

Section 1: Well Owner

RODDICK SKIP * PW-2

Section 2: Location

Township

06S

Latitude

45.264592 Altitude

DOMESTIC (1)

Section 4: Type of Work

23 CEMENT 640 10/20 GRAVEL

Drilling Method: ROTARY

Section 5: Well Completion Date

Date well completed: Thursday, June 04, 1998

Section 6: Well Construction Details

Boreh	ole	dimension	s						
From	То	Diameter							
0	23	10							
23	640	6							
Casin	g								
			Wa	II		Pressur	е		
From	То	Diamete	r Thi	cknes	SS	Rating		Joint	Туре
-3	57	6	0.2	50				WELDED	STEEL
14	640	4						WELDED	PVC
Comp	letio	n (Perf/Sc	reen)						
			# of		Siz	ze of			
From	То	Diameter	Oper	nings	Op	enings	D	escription	
240	640	4			.02	25X1.5IN	F/	ACTORY SI	OTTED
Annul	ar S	pace (Sea	/Grou	ut/Pac	ke	r)			
From	То	Descripti	on	Cont Fed?					

Montana's Ground-Water Information Center (GWIC) | Site Report | V.11.2008

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Other Options

Plot this site on a topographic map View scanned document (2/21/2008 6:07:38 PM)

Site Name: RODDI	CK SKIP * P	W-3					Section 7: Well Test Data
GWIC ld: 169477	A	SPEN	GRO	/E	NO	. 3	
							Total Depth: 529
Section 1: Well Ov	vner						Static Water Level: 42
Owner Name							
RODDICK SKIP * PW	/-3						Pump Test *
Mailing Address							
PO BOX 160011							Depth pump set for test _ feet.
City	Stat	e	Zip Coo	de			<u>80</u> gpm pump rate with _ feet of drawdown after <u>69</u> hours of pumping.
BIG SKY	IVI I		59716				Time of recovery <u>72</u> hours.
Section 2: Locatio	n						Pumping water level 55 feet.
Townshin	Pango	Section		Quart	or Soct	ione	ramping naterioren <u></u> room
065	03E	34		Quart	SE1/	10115	
Co		54		Geo	code		* During the well test the discharge rate shall be as uniform as possible. T
GALLATIN	unty			000	oouc		rate may or may not be the sustainable yield of the well. Sustainable yield
Latitude	Longitu	de	Geome	thod		Datum	does not include the reservoir of the well casing.
45.264592	111.3369	936	TRS-S	SEC		NAD83	Section 8: Remarks
Altitude	Ме	thod	Da	tum		Date	Section 6. Remarks
							Section 9: Well Log
Addition			Bloc	:k		Lot	Geologic Source
ASPEN GROVES							Linassigned
Section 3: Propos	ed Use of Wa	ater					
DOMESTIC (1)							
0 (i	Manla						
Section 4: Type of	WORK						35 42 GRAY SANDSTONE
Drilling Method: ROTA	AR Y						42 69 BLACK & GRAY SHALE
Section 5: Well Co	mpletion Da	te					69 76 LIMESTONE
Date well completed:	Thursday, June	e 04. 1998					76 88 BLACK & GRAY SHALE
		,					88 91 LIMESTONE
Section 6: Well Co	nstruction D	Details					91 102 GREEN SHALE
Borehole dimension	s						102 109 GRAY SANDSTONE
From To Diameter							109 138 SILTSTONE & SHALE
0 22 10							138 215 GRAY RED & BLACK SHALE
22 529 6							215 233 SANDSTONE & SILTSTONE
Casing							233 387 BLACK GRAY GREEN & BLUE SHALE
	Wall	Pre	ssure				387 390 HARD GRAY SANDSTONE
From To Diame	ter Thickn	ess Rat	ting J	loint	ŀ	Туре	390 392 SOFT GRAY SHALE
-3 38 6	0.250	- í	V	VELDE	D	STEEL	Driller Certification
15 529 4			i i			PVC	All work performed and reported in this well log is in compliance with the
	reen)						Montana well construction standards. This report is true to the best of my
Completion (Perf/Sc		e of					knowledge.
Completion (Perf/Sc	#of Siz						Nomo
Completion (Perf/Sc From To Diameter	# of Siz	enings Des	cription				Name:
Completion (Perf/Sc From To Diameter 372 384 4	# of Siz Openings Op 50	enings Des SCF	cription REEN-CON	TINUC	US-ST	AINLESS	Company: BRIDGER DRILLING INC
Completion (Perf/Sc From To Diameter 372 384 4 511 516 4	# of Siz Openings Op 50 50	enings Des SCF	cription REEN-CON	TINUC	US-ST	AINLESS	Company: BRIDGER DRILLING INC License No: WWC-425

Unassig	gned	
From	То	Description
0	10	CLAY & ROCKS
10	35	SHALE
35	42	GRAY SANDSTONE
42	69	BLACK & GRAY SHALE
69	76	LIMESTONE
76	88	BLACK & GRAY SHALE
88	91	LIMESTONE
91	102	GREEN SHALE
102	109	GRAY SANDSTONE
109	138	SILTSTONE & SHALE
138	215	GRAY RED & BLACK SHALE
215	233	SANDSTONE & SILTSTONE
233	387	BLACK GRAY GREEN & BLUE SHALE
387	390	HARD GRAY SANDSTONE
390	392	SOFT GRAY SHALE
Drillor (Contific	ation

Page 1 of 2

Montana's Ground-Water Information Center (GWIC) | Site Report | V.11.2008

Site Name GWIC Id: Additiona	: RODDICK \$ 69477 Lithology R	SKIP * PW-3 ecords
From	То	Description
39	2 394	HARD GRAY SANDSTONE
39	433	SOFT GRAY SHALE
43	3 441	GRAY SANDSTONE
44	1 512	GRAY SHALE
51	2 529	SANDSTONE

NOTICE OF COMPLETION OF GROUNDWATER Burgan APPROPRIATION BY MEANS OF WEIP and Grade Developed after January 1, 1962 (Under Chapter 237 Montana Session Laws, 1961, as amended) his form to be prepared by driller, and three copies to be filed y the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. lease answerfall questions. If not applicable, so state, otherwise the orm may be returned. Dwner Ig. Sky. of Northana Water Signa Sky. Montana For Administrator's Use Videress File State well started Aug. 12, 1972 Oute of well Britlind (Dug, driven, bored or drilled) quipment used Churn Britlind (Churn drill, rotary or other) Vater Use: Domestic Municipal Stock Irrigation Industrial Drainage Other Si* Garden/Lawn	of ory 10U op of 2 20 32 32 34 50 65 78 78	gravel depth height NTA Ground 20 20 32 32 32 32 32 32 32 32 32 32 32 32 32	, shale, sandstone, etc. Show at which water is found and to which water rises in well. AIN VILLAGE NO. d (Elev. above sea level) (Elev. above sea lev
Developed after January 1, 1992 [V (Under Chapter 237 Montana Session Laws, 1961, as amended) T his form to be prepared by driller, and three copies to be filed T with the county Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. T lease answerfall questions. If not applicable, so state, otherwise the form may be returned. For Administrator's Use Wwner Big. Size For Administrator's Use Notes File GW 1 Water well started Mig. 12, 1972 GW 1 water Use: Domestic Municipal Churn drill, rotary or other) Vater Use: Domestic Municipal Stock I Irrigation Industrial Drainage Other Ki* Garden/Lawn	100 op of 0 20 32 34 50 65 78	N T A Ground 20 32 34 50 65 78 80	AIN VILLAGE NO. (Elev. above sea level) Clay with Gravel & Roc Tight Glay & Fine Grav Fine Gravel in Glay Loose Glay bound Gravel Gravel in Glay Loose Silty Sand (like Guick Sand) Gravel in Clay tight
Under Chapter 237 Montana Session Laws, 1961, as amended) his form to be prepared by driller, and three copies to be filed y the owner with the County Clerk and Recorder in the county in which the well is located, last copy to be retained by driller. lease answerball questions. If not applicable, so stafe, otherwise the orm may be returned. wher	op of (700) 20) 32) 34) 50) 65) 78) 78) 	65 80 80	(Elev. above sea level) Clay with Gravel & Roc Tight Clay & Fine Grav Fine Gravel in Clay Loose Clay bound Gravel Gravel in Clay Loose Silty Sand (like Suick Sand) Gravel in Clay Light
Init form to be prepared by driller, and fines copies in the county in which the county clerk and Recorder in the county in which the well is located, last copy to be retained by driller. Ilease answerfall questions. If not applicable, so state, otherwise the orm may be returned. Owner Big Dwner Big Sig Sig Value For Administrator's Use File File Sig Sig Value For Administrator's Use File GW 1 Completed Sig Oute Sig Oute Sig Oute Sig Oute Sig Sig Sig Value Contains Oute Sig Oute Sig Oute Sig Oute Sig Oute Oute Oute Oute Oute Sig Oute Sig Oute Chura drill, rotary or other) Vater Vater Operation Other Industrial Drainage <	20 20 32 34 50 65 78 	20 32 34 50 65 78 80	Clay with Gravel & Roc Tight Clay & Fine Grav Fine Gravel in Clay Loose Clay bound Gravel Gravel in Clay Loose Silty Sand (like Outek Sand) Gravel in Clay Light
Idease answerhall questions. If not applicable, so state, otherwise the orm may be returned. Owner Iterational Owner Iterational Notes For Administrator's Use Iddress File Iddress File Iddress GW 1 Oate well started Iterational Outer well started Iterational Outer well Iterational Industrial Iterational Industrial Iterational Industrial Iterational Industrial Iterational Iterational Iterational Iterational Iterat	20 32 34 50 65 78	32 34 50 65 78 80	Tight Clay & Fine Grav Fine Gravel in Clay Loose Clay bound Gravel Gravel in Clay Loose Silty Sand (like Guick Sand) Gravel in Clay tight
Dwner Big Sky Northana Address File Mg Sky Hontana Date well started Aug. 11, 1972 Date well started Aug. 12, 1972 Date well started Aug. 12, 1972 Date well started Aug. 12, 1972 Oug, driven, bored or drilled) (Dug, driven, bored or drilled)	32 34 50 65 78	34 50 65 78 80	Fine Gravel in Clay Loose Glay bound Gravel Gravel in Clay Loose Silty Send (like Outok Send) Gravel in Clay tight
Downer Big Sky For Administrator's Use Address File Mg Sky Hontana Date well started Aug. 11, 1972 Date well started Aug. 11, 1972 GW 1 Completed GW 1 completed Mg. 1.8, 1972 ype of well Drifflad Oug, driven, bored or drilled) cquipment used Guiran Brifflad (Chura drill, rotary or other) Vater Use: Domestic Municipal Stock Irrigation Industrial Drainage Other Garden/Lawn	34 50 65 78	50 65 78 80	Loose Glay bound Gravel Gravel in Clay Loose Silty Sand (like Outok Sand) Gravel in Clay tight
Address File Age Sky, Montana File Date well started Aug. 11, 1972 Completed Aug. 12, 1972 ype of well Brt11 ad (Dug, driven, bored or drilled) iquipment used Churn Brd11 (Churn drill, rotary or other) Vater Use: Domestic Industrial Drainage Other Carden/Lawn	34 50 65 78	50 65 78 80	Gravel in Clay Loose Silty Send (like Outok Send) Gravel in Clay tight
Mg Sky, Hontana Date well started Aug., 11, 1972 GW 1 completed Mg., 18, 1972 GW 1 Course drilled Course drill, rotary or other) Vater Use: Domestic Municipal Stock Industrial Drainage Other Stock Industrial Drainage Other Stock Pascribe Regresstion	50 65 78	65 78 80	Gravel in Clay Loose Silty Sand (like Oulok Sand) Gravel in Clay tight
Date well started Aug. 11, 1972 completed inter 18, 1972 gup of well	<u>65</u> 78	<u>78</u> 80	Silty Send (like Outek Send) Gravel in Clay tight
completed inter 18, 1972 (Dug, driven, bored or drilled) quipment used Churn Brill (Churn drill, rotary or other) Nater Use: Domestic A Municipal Stock I Irrigation I Industrial Drainage Other * Garden/Lawn I		<u>80</u>	Graval in Clay tight
ype of well			
ype or well			
Image: Comparison of the second se			
Nater Use: Domestic (1) Municipal Stock Irrigation - Industrial Drainage Other (3)* Garden/Lawn -			<u></u>
Industrial Drainage Other 1 Garden/Lawn			
Describe Regreation			
Describe Alona Cava Va			
IEE If used for irrigation industrial drainage or other Evolain			
state number of acres and location or other data (i.e. Lot, Block			
and Addition)			
Size of Size and From To PERFORATIONS			
Hole of Casing Kind From To			
8 8 5/8 21 50			
		<u>/</u>	
N Static water level			
X Pumping water level			
measured to measure the measured to measure the measur			
w began.	· ·		
Well developed by			
for基梁hours. PowerPump			
Remarks: (Gravel packing, cementing,			
s packers, type of shutory)			
NE 14 NE 14 Sec			
T05N R3LE	4		
INDICATE LOCATION OF WELL AND PLACE OF USE, IF POSSIBLE.	<u></u>		
EACH SMALL SQUARE REPRESENTS 40 ACRES.			
Driller's Signature			
Driller's Address 2103 Bridger Drive			
Remaining Manhana 12		601	Show exact depth of bottom

MOUNTAIN VILLAGE NO. 1

Montana Bureau of Mines and Geology Ground-water Information Center Site Report BIG SKY OF MONTANA * WELL #1

Location Information

GWIC Id: 108809 Location (TRS): 06S 03E 30 AA County (MT): MADISON DNRC Water Right: Not Reported PWS Id: Block: Not Reported Lot: Not Reported Certificate of Survey: Not Reported Source of Data: LOG Latitude (dd): 45.2892 Longitude (dd): -111.3951 Geomethod: TRS-TWN Datum: 1927 Addition: Not Reported Type of Site: WELL

Plot this site on a topographic map

Well Construction and Performance Data (measurements are reported below land surface)

Total Depth (ft): 64.50 Static Water Level (ft): 10.00 Pumping Water Level (ft): 46.50 Yield (gpm): 240.00 Test Type: PUMP Test Duration: 16.00 Drill Stem Setting (ft): Recovery Water Level (ft): Recovery Time (hrs):

Driller License: WWC017 Completion Date: Aug 18, 1972 Special Conditions: None Reported Is Well Flowing?: No Shut-In Pressure: Geology/Aquifer: Not Reported Well/Water Lice: PLIREC WATER SUPPL

How Drilled: CHURN

Driller's Name: JONES

Well/Water Use: PUBLIC WATER SUPPLY

Hole Diamete	r Informatio	on	Casing Information						
No hole diamet	er records we	re found.	From (ft)	To (ft)	Dia (in)	Description			
			-2.0	64.5	8.0				
Annular Seal	Information	I	Completion I	nformation					
From (ft)	To (ft)	Description	From (ft)	To (ft)	Dia (in)	Description			
6.0	16.0	GROUTED	49.5	64.5	8.0 .04	SLOT SCREEN			

Lithology Information

From (ft)	To (ft)	Description
0.0	20.0 CLAY W/ GRAVEL & ROCK	
20.0	32.0 TIGHT CLAY & FINE GRAVEL	
32.0	34.0 FINE GRAVEL IN CLAY LOOSE	
34.0	50.0 CLAYBOUND GRAVEL	
50.0	65.0 GRAVEL IN CLAY LOOSE	
65.0	78.0 SILTY SAND (LIKE QUICKSAND)	
78.0	80.0 GRAVEL IN CLAY TIGHT	

These data represent the contents of the GWIC databases at the Montana Bureau of Mines and Geology at the time and date of the retrieval. The information is considered unpublished and is subject to correction and review on a daily basis. The Bureau warrants the accurate transmission of the data to the original end user. Retransmission of the data to other users is discouraged and the Bureau claims no responsibility if the material is retransmitted. Note: non-reported casing, completion, and lithologic records may exist in paper files at GWIC.

Vactor V P	County XXXXXXXXXX
3 GW 2 Revised 1969 13-3M-10/69 STATE OF MONTANA ADMINISTRATOR OF GROUNDWATER CODE MONTANA WATER RESOURCES BOARD	DRILLER'S LOG [] H6577 Indicate the character, color, thick-
NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION BY MEANS OF WELL Developed after January 1, 1962	gravel, shale, sandstone, etc. Show depth at which water is found and height to which water rises in well. MOUNTAIN VILLAGE NO.
(Under Chapter 237 Montana Session Laws, 1961, as amended)	Top of Ground (Elev. above sea level)
This form to be prepared by driller, and three copies to be filed by the owner with the County Clerk and Recorder in the county in which well is located last copy to be retained by driller.	Prom To (Foot)
Please answer all questions. If not applicable, so state, otherwise the form may be returned.	10 17 Graval
Owner	17 40 Provel in Clay 11 the
Address	40 50 Crown? in May Loose
	-50 55 Volley Clay
Date well started	-53 - 56 - Groy Clay
completed	<u>50 50 Shale</u>
Type of well	
Equipment used	
Water Use: Domestic 🖾 Municipal 🗋 Stock 🗋 Irrigation 🗋	
Industrial 🔲 Drainage 🗌 Other 💭 * 🛛 Garden/Lawn 🗌	
*DescribeEecreation	
USE: If used for irrigation, industrial, drainage or other. Explain, state number of acres and location or other data (i.e. Lot, Block	
and Addition)	
and Addition).	
and Addition)	
and Addition). ESTIMATED ANNUAL WITHDRAWAL	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Size and From (Feet) (Feet) Bole of Casing 21 4-3 Size (Feet) (Feet) (Feet) B 3 5/8 21 4-3 (Feet) (Feet) (Feet) (Feet) (Feet) B 2 3 5/8 21 4-3 (Feet)	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Prom Prom Prom Prom Prom Prom Prom Prom Prom Prom Prom Prom Prom PERFORATIONS Kind Size PERFORATIONS Kind Prom (Feet) PERFORATIONS Kind Prom PERFORATIONS Kind Prom PERFORATIONS Size PERFORATIONS PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS Size PERFORATIONS PERFORATIONS Size PERFORATIONS PERFORATIONS Size PERFORATIONS PERFORATIONS Size PERFORATIONS PERFOR	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Velable N Size of Octains Size Octains	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Size and Weight of Casing 8 3 5/8 2 1 4.3 Size (Feet) (Feet) 8 3 5/8 2 1 4.3 Size (Feet) (Feet) 8 2 50 (Feet) 4.3 N Static water level	* * · · · · · · · · · · · · · · · · · ·
and Addition). ESTIMATED ANNUAL WITHDRAWAL Reference and	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Size and Weight Hole of Casing 8 3 5/8 21 43 00 2 2 250 20070 • 250 2001210 N N N N N N N N N N N N N	
and Addition). Static of Weight of Central WithDRAWAL Rest of State and of Central Weight of Centre Weight of Cen	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Step of Hole Step and of Callss Prom (Feet) To (Feet) PERFORATIONS B::::::::::::::::::::::::::::::::::::	
and Addition). ESTIMATED ANNUAL WITHDRAWAL Size of Size and Office (Feel) (Fe	

M:108810 #2

MOUNTAIN VILLAGE NO. 2

Montana Bureau of Mines and Geology Ground-water Information Center Site Report BIG SKY OF MONTANA * WELL #2

Location Information

GWIC Id: 108810 Location (TRS): 06S 03E 30 AA County (MT): MADISON DNRC Water Right: Not Reported PWS Id: Block: Not Reported Lot: Not Reported Certificate of Survey: Not Reported Source of Data: LOG Latitude (dd): 45.2892 Longitude (dd): -111.3951 Geomethod: TRS-TWN Datum: 1927 Addition: Not Reported Type of Site: WELL

Well Construction and Performance Data (measurements are reported below land surface)

Total Depth (ft): 50.00 Static Water Level (ft): 9.00 Pumping Water Level (ft): 37.00 Yield (gpm): 80.00 Test Type: PUMP Test Duration: 17.50 Drill Stem Setting (ft): Recovery Water Level (ft): Recovery Time (hrs): How Drilled: CHURN Driller's Name: JONES Driller License: WWC017 Completion Date: Aug 22, 1972 Special Conditions: None Reported Is Well Flowing?: No Shut-In Pressure: Geology/Aquifer: Not Reported Well/Water Use: PUBLIC WATER SUPPLY

well/water	Use;	PUBLIC	WATER	SUPPLY	

nule Diamete	er Informatio	bn	Casing Inform	nation		
No hole diamet	er records we	re found.	From (ft)	To (ft)	Dia (in)	Description
			-2.0	50.0	8.0	
Annular Seal	Information	1	Completion I	nformation		
From (ft)	To (ft)	Description	From (ft)	To (ft)	Dia (in)	Description
6.0	16.0	GROUTED	40.0	50.0	8.0 .04	SLOT SCREEN

. . .

...

Description

- -

Lithology Information

Hole Dismeter Information

From (ft)	To (ft)
0.0	16.0 GRAVEL & ROCKS
16.0	17,0 GRAVEL
17.0	40.0 GRAVEL INCLAY TIGHT
40.0	50.0 GRAVEL IN CLAY LOOSE
50.0	55.0 YELLOW CLAY
55.0	56.0 GREY CLAY
56.0	60.0 SHALE

These data represent the contents of the GWIC databases at the Montana Bureau of Mines and Geology at the time and date of the retrieval. The information is considered unpublished and is subject to correction and review on a daily basis. The Bureau warrants the accurate transmission of the data to the original end user. Retransmission of the data to other users is discouraged and the Bureau claims no responsibility if the material is retransmitted. Note: non-reported casing, completion, and lithologic records may exist in paper files at GWIC.

Plot this site on a topographic map

NOTI		STATE OF RATOR OF NA WATE	F MONTA GROUNI R RESOUR	NA WATER C CES BOAR GROUN		AN 3 0 IS	74 Ren of	Indicat ness o gravel, depth	DRILLER'S LOG/17657 the the character, color, thick- f strata such as soil, clay, sand, , shale, sandstone, etc. Show at which water is found and
	PPROPR	IATION sloped afte	BY MEA	ANS OF 1, 1962	WELL		MOTT	height	to which water rises in well.
(Under C	hapter 237	Montana	Session [®] L	aws, 1961,	, as amond	ed)	Top of	Ground	(Elev. above sea level)
This form t	o be prep	ared by c	friller, and	d three co	pies to be	filed	From (Feet)	To (Feet)	RE
which the	well is loca	ated, last o	opy to b	e retained	by driller.		_0_	15	Top Soil & Blay bou
form may b	ver all ques	l.	ot applica	DIE, SO STA	ie, oinerwis	se me	15	17	Graval
Ourses	en Steve	of Non		<u></u>			17	_32	Clay bound Gravel_
Owner	A			For Admi	nistrator's U	se	32	37	Mastly Glay
Address			Fi	le	·····		37	64	Pine Sand
. 191 <u>.</u> g. 340	Y. Pont	ana							(maya) with May
Date well s	tarted 🞎	* 25,	1972 g	W 1				- 24	
com	pleted .A	g. 29.	1972				50	-55	Ulay
Type of we	11	11ed		driven bored	or drilled)		55	78	_Shale
Equipment	used	urn or	111	, unven, bored	or armed)		·		
Water Ilse	Domestic	ГЖ Ми	nicipal 🗖	hurn drill, rotar Stock Г	ry or other) irricati	on 🗂			
		Destrong			Garden /I a				
indu		Dramaye			Carden/ Lav	···· []			
*Describe	ed for irri	gation, inc	lustrial, d	rainage or	r other. Ex	xplain.			
state	number of	acres and	location of	or other da	ita (i.e. Lot,	Block		<u> </u>	الد کې لاله کې نوبا چې کې کې کې بري نور چې کې کې کې د. د د د د د د د د د د د د د د د د د د
and A	Addition).		, , , , , , , , , , , , , , , , , , ,						
una /									-
ESTIMATED	ANNUAL	WITHDRAV	WAL	a parta di seta se dan	****				
ESTIMATED Size of Drilled Hole	ANNUAL Size and Weight of Casing	WITHDRAV From (Feet)	WAL		PERFORATION	NS To			
ESTIMATED Size of Drilled Hole	ANNUAL Size and Weight of Casing	WITHDRAV	VAL	Kind Size	PERFORATION From (Feet)	NS To (Feet)			
ESTIMATED Size of Drilled Hole	ANNUAL Size and Weight of Casing B 5/9 OD 22 -250	WITHDRAN (Feet) 21 20090	WAL	Kind Size	PERFORATION From (Feet)	NS (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # .250	WITHDRAN (Feet) 21. 22. 21. 21. 21. 21. 21. 21. 21. 21.	VAL	I Kind Size	PERFORATION (Feet)	NS (Feet) etc. (Feet)			
ESTIMATED Stre of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # .250	WITHDRAN (Feet) 21 22 21 21 21 21 21 21	VAL	I Kind Size	PERFORATION (Feet)	To (Feet)			
ESTIMATED Street of Hole	ANNUAL Size and Weight of Casing # 5/8 OD # .250	WITHDRAV From (Feet) 21 22 20 21 21 21 21 21 21 21 21 21 21 21 21 21	VAL	Kind Size	PERFORATION (Feet)	To (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # •250	WITHDRAV From (Feet) 21. 22. 21. 21. 21. 21. 21. 21. 21. 21.	VAL	Kind Size	PERFORATION From (Feet)	To (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # .250	WITHDRAV From (Feet) 21 21 21 21 21 21 21 21 21 21 21 21 21	VAL	Kind Size	PERFORATION (Feet)	(Feet)			
ESTIMATED Size of Drilled Hole	ANNUAL Size and Weight of Casing # 5/8 OD # .250	WITHDRAV From (Feet) 21 22 21 22 21 21 21 21 21 21 21 21 21	VAL	ic water le sured	Vel	NS (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing \$ 5/8 OD # •250 N	WITHDRAV From (Feet) 21. 4.0099 ground	VAL	kind Size	Vel	To (Feet)			
ESTIMATED Size of Drilled Hole	ANNUAL Size and Weight of Casing # 5/8 00 # .250	WITHDRAV From (Feet) 21 22 21 22 21 21 21 21 21 21 21 21 21	VAL	ic water le ping water issured	vel	(Feet) (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # .250 N	WITHDRAV From (Feel) 21. above ground	VAL	kind Size size size size size size size size s	vel	To (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/8 OD # .250 N	WITHDRAV From (Feet) 21 20 21 21 20 21 21 21 21 21 21 21 21 21 21 21 21 21	VAL	ic water le ping water sured	vel gallons minores aff d by Pump vel packing of shutoff).	rs (Feet)			
ESTIMATED Size of Drilled Role	ANNUAL Size and Weight of Casing # 5/3 OD # • 250 · N · · · · · · · · · · · · ·	WITHDRAV	VAL	kind Size size size size sured	vel	rs (Feet)			
ESTIMATED Size of Drilled Role &**	ANNUAL Size and Weight of Cading \$ 5/8 OD # •250 N N S 4 .NE14 S S	WITHDRAV	VAL	kind Size size size size size size size size s	vel	rs (Feet)			
ESTIMATED Size of Drilled Hole &** W W NEV T6S INDICATE	ANNUAL Size and Weight of Casing # 5/3 OD # • 250 · 250	WITHDRAV	VAL	ic water le size size size ic water le ping wate sured	vel	rs (Feet)			
ESTIMATED Stra of Drilled Role &**	ANNUAL Size and Weight of Casing 3 5/8 OD 2 • 250 • 2	WITHDRAV From (Feel) 21. Could C	VAL	kind Size size size size size size size size s	vel	To (Feet)			
ESTIMATED Size of Drilled Hole Role W W NEV. T6S INDICATE EACH SM. Driller's Si	ANNUAL Size and Weight of Casing \$ 5/3 OD # 250 N N N S 4 .NE14 S LOCATION ALL SQUAF gnature	WITHDRAV Prom (Feel) 21. 22. 22. 23. 24. 24. 24. 24. 24. 24. 24. 24	VAL	kind Size size size size size size size size s	vel	rs (Feet)			
W ESTIMATED Stra of Drilled Role Role W W W W M MEV T6S INDICATE EACH SML Driller's Si	ANNUAL Size and Weight of Casing 3 5/3 OD 2 • 250 • 2	WITHDRAV From (Foot) 21. 22. 23. 24. 24. 24. 24. 24. 24. 24. 24	VAL	kind Size size size size size size size size s	vel	To (Feet)			

MOUNTAIN VILLAGE NO. 3

Montana Bureau of Mines and Geology Ground-water Information Center Site Report BIG SKY OF MONTANA * WELL #3

Location Information

GWIC Id: 108811 Location (TRS): 06S 03E 30 AA County (MT): MADISON DNRC Water Right: Not Reported PWS Id: Block: Not Reported Lot: Not Reported Certificate of Survey: Not Reported Source of Data: LOG Latitude (dd): 45.2892 Longitude (dd): -111.3951 Geomethod: TRS-TWN Datum: 1927 Addition: Not Reported Type of Site: WELL

Plot this site on a topographic map

Well Construction and Performance Data (measurements are reported below land surface)

Total Depth (ft): 63.00 How Drilled: CHURN Static Water Level (ft): 10.00 Driller's Name: JONES Pumping Water Level (ft): 46.00 Driller License: WWC017 Yield (gpm): 180.00 Completion Date: Aug 29, 1972 Test Type: PUMP Special Conditions: None Reported Test Duration: 39.00 Is Well Flowing?: No Drill Stem Setting (ft): Shut-In Pressure: Recovery Water Level (ft): Geology/Aquifer: Not Reported Recovery Time (hrs): Well/Water Use: PUBLIC WATER SUPPLY

Hole Diameter Information			Casing Information					
No hole diamete	er records we	re found.	From (ft)	To (ft)	Dia (in)	Description		
			-2.0	63.0	8.0			
Annular Seal	Information	l	Completion I	nformation				
From (ft)	To (ft)	Description	From (ft)	To (ft)	Dia (in)	Description		
6.0	16.0	GROUTED	48,0	63.0	8.0.04	SLOT SCREEN		

Lithology Information

From (ft)	To (ft)	Description
0.0	15.0 TOPSOIL & CLAYBOUND GRAVEL	
15.0	17.0 GRAVEL	
17.0	32.0 CLAYBOUND GRAVEL	
32.0	37.0 MOSTLY CLAY	
37.0	40.0 FINE SAND	
40.0	50.0 GRAVEL W/ CLAY	
50.0	55.0 CLAY	
55.0	78.0 SHALE	

These data represent the contents of the GWIC databases at the Montana Bureau of Mines and Geology at the time and date of the retrieval. The information is considered unpublished and is subject to correction and review on a daily basis. The Bureau warrants the accurate transmission of the data to the original end user. Retransmission of the data to other users is discouraged and the Bureau claims no responsibility if the material is retransmitted. Note: non-reported casing, completion, and lithologic records may exist in paper files at GWIC.

					-		-
	I		WELL LOG REPO	ORT			Other Options
This well log re record of work of encountered. T Water Information well owner's res	ports the act done within t his report is ion Center (C sponsibility a	ivities of a lic he borehole complied ele GWIC) datab and is NOT a	censed Montana of and casing, and ectronically from the ase for this site. A ccomplished by the	well driller, se describes the he contents c Acquiring wat he filing of thi	erves as t e amount of the Gro er rights is report.	he offic of wat ound- is the	cial <u>Plot this site on a topographic map</u> er <u>View scanned document (2/21/2008 5:57:53 PM)</u>
Site Name: LOI		AIN SPRING	S		Sectior	n 7: We	ell Test Data
GWIC Id: 10349	MOUN	ITAIN	VILLAGE	NO. 4	Total D	anth: 1	00
Section 1: Well	Owner				Static V	/ater L	evel: 40
Owner Name					Water 7	emper	rature:
LONE MOUNTAIN	N SPRINGS				Pump 1	Fest *	
Mailing Address							
PU BUX 1	St	ato	Zin Code		Depth p	ump s	et for test _ feet.
BIG SKY	M	T	59716		g	a. a.	inp rate with _ leet of drawdown after <u>24</u> hours of
					Time of	recove	ery _ hours.
Section 2: Loca	ation				Recove	ry wate	er level _ feet.
Township	Range	Section	Quarter S	ections	Fumpin	y wate	
065	03E	30	NE /	4			
MADISON	Jounty		Geocode		* During	g the w	rell test the discharge rate shall be as uniform as
Latitude	Longi	tude	Geomethod	Datum	Sustain	able vi	ield does not include the reservoir of the well casing.
45.286825	111.39	8381	TRS-SEC	NAD83			
Altitude	N	lethod	Datum	Date	Sectior	1 8: Re	emarks
Addition			Block	Lot	Section	9. Wa	all Log
MOUNTAIN VILLA	AGE				Geolog	ic Sou	Irce
					Unassi	ned	
Section 3: Prop		of Water			From	То	Description
PUBLIC WATER S	SUPPLY (I)				0	1	TOPSOIL
Section 4: Type	e of Work				1	24	LOOSE CLAYBOUND GRAVEL SOME COARSE-WET
Drilling Method: F	ORWARD RO	TARY			24	58	CLAYBOUND GRAVEL
		D			58	87	CLAY & CHIPPED ROCK
Section 5: Well	Completion	1 Date	284		87	90	
	eu. Fliuay, No		504		90	104	
Section 6: Well	Construction	on Details			104	145	
Borehole dimens	ions				143	149	GREY SHALE-SOFTER
From To Diame	ter				151	178	HARD GREY SHALE
0 400	6				178	188	SANDSTONE
Casing	Wall	Dragoure			188	220	BLACK SHALE-HARD
From To Diam	eter Thickne	ess Rating	Joint Type		220	400	GRANITE
0 78 8			STEEL				
20 400 6			PVC				
Completion (Perf	/Screen)				Driller	Certific	cation
	# of	Size of			All work	perfor	rmed and reported in this well log is in compliance with vell construction standards. This report is true to the best
From To Diame	ter Openings	S Openings D	Description		of my ki	nowled	lge.
200 400 6			RILLED HOLES			Na	me:
Annular Space (S	Seal/Grout/Pa	ont				Compa	any: VAN DYKEN DRILLING INC
From To Descrip	otion Fe	ed?			L	icense	No: WWC-380
0 20 CEMEN	IT				Date C	omple	ted: 11/16/1984
0 0 DRILL (CUTTINGS						
Screened	Intervals fro	m Morrison-I	Maierle (1986)	7			
141-14	6						
211-21	- 6						
281-28	~ 6						
392-39	- 7						
				1			

384-389 ft

State law requires that the Jureau's copy be filed by the	valar well	dellar	
	Valer Weil	onner with	in 60 days after completion of the well.
Name Caccado Subdure #1	f) Du	iration of test	Pumping time 72 hrs.
SASCHORE DOVUISION	g) He	COVERY LIME	A/ hrs.
Z CURRENT MAILING ADDRESS	pu	imping stopp	ed nrs. arter
	bours	is intended b	o yield 100 opm or more shall be tested for a period of 8
	condu	cted continu	ously at a constant discharge at least as great as the in-
I WELL LOCATION WELL HS	tende shall	d appropriation be collected	on. In addition to the above information, water level data
Ton-ship to NIC Property of the Court of the	form,	TE. All	and toolded on the Department a "Aquiter lest Data"
Govnituat Of Lot Block	a pres	sure gauge Ih	half be equipped with an access port 1/2 inch minimum or
Subdivision flame	movat	He caps are a	cceptable as access ports.
Tract Num Let	11. WAS V	VELL PLUGO	ED OR ABANDONED? Yes K No
E PRCTOSED USE: Domestic K Stock J Irrigation T	Il yes,	how?	
Other specify	12. WELL	LOQ	
S. TYPE OF WORK	Dep	(h (fl.) To	
New well 🔣 Method, Dug 🗔 Bored 🗍	0	10	Formetion
Deepered () Cable (Driven ()	80	97	Caraciturian lack
Rolary K Jetled	92	170	HAAd Shales
L DIMENSIONS: Diameter of Hole	170	207	Mard Samdetown 200 99
Una 12 in from 0 ft. to 207 ft.	201	212	Soft Sticky Clark 400 0
Cia II. from ft. to ft.			Stogen before grouting?
II. to II.		<u> </u>	- too gam Alton grouting
Casing Steet			
Threaded Weided Dia from the			
Type A 53 8 Wall Thickness . 322	}	 	
Casing Plastic Dia fromft to ft			
Weight Dia fromft. toft.			
PERFORATIONS: Yes No 🖡			
Size of perforations in the			
periorations from fit to fit			
perforations fromfl. to fl	ŀ	├	
perforations fromfl. tofl.			
SCREENS: Yes 🗄 No 🙀			
Manufacturer's Name			
Dia Stotaire Model No	<u> </u>		
Dia Stot size from ti to ft.			
GRAVEL PACKED: Yes Ti Nobe Signation of			
Gravel placed from the local state of gravel			
GROUTED: To what depth? (Acc 4)			······································
Material used in grouting CERCART SLIDE & 180' to SURFAC	-7	Geent	ad by Big Sty Cancelere
WELL HEAD COMPLETION	<u> </u>	Cacare	y frank Brund up
Pitless Adapter C Yes D No			
PVMP ((installed)		└──── ┤	
Manufacturar's name			
Type Model No HP			ATTACH ADDITIONAL SHEETS IF NEOEBSARY
WELL TEST DATA	18. DATE O	OMPLETED_	10-4-93
The information requested in this section is required for all wells. All depth	14. DRILLE	NCONTRAC	TOR'S CERTIFICATION
All wells under 100 open must be tested for a missing.	This we	Il was drilled	under my jurisdiction and this report is true to the best of
vide the following information:		rieuge.	
al Ar Pump K Bailer		í	8-29-94
ing; closed in pressure psi, psi,	Kan-	Alan .	
other, (specify)	Flow New	£ 19×	my many Inc.
" Depth al which pump is set for test 168 + Pump		110 \$	JUCKE Rd R.
e) Pumping water level /// // // // // // // // // // // // /	Address		in internet
pumping began.		Man	Mant 200
1	Signature		License No.
		1	
NONTANA DEPARTMENT OF NATURAL RESOURCE		DNSERM	
NONTANA DEPARTMENT OF NATURAL RESOURC	ES & CO	NSERV. 444-	ATION DNRC
NONTANA DEPARTMENT OF NATURAL RESOURC 520 EAST SIXTH AVENUE HELENA, MONTANA 50	ES & CC	0N8ERV. 444- A41 Co	ATION DNRC

:

5

OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficiarly for the intended purpose.
State law requires that the Jureau's copy be filed by the	valar well	dellar	
		onner with	in 60 days after completion of the well.
Name Caccado Subdure #1	f) De	iration of test	Pumping time 72 hrs.
SASCHORE DOVUISION	9) He	COVERY LIME	Ac/d hrs.
Z CURRENT MAILING ADDRESS	pu	imping stopp	ed, Drs. after
	bours	is intended b	o yield 100 cpm or more shall be tested for a period of 8
	condu	cted continu	ously at a constant discharge at least as great as the in-
I WELL LOCATION WELL HS	tende shall	d appropriation be collected	on. In addition to the above information, water level data
Ton-ship to NIC Property of the Court of the	form,	TE. All	and tocorded on the Department's "Aquiter fest Data"
Govnituat Of Lot Block	a pres	sure gauge Ih	nail de equipped with an access port 1/2 inch minimum or lat will indicate the shut in pressure of a flowing well. De
Subdivision flame	movat	He caps are a	cceptable as access ports.
Tract Num Let	11. WAS Y	VELL PLUGO	ED OR ABANDONED? Yes K No
E PRCTOSED USE: Domestic K Stock J Irrigation T		how?	
Other specify	12. WELL	LOQ	
S. TYPE OF WORK	Dep	(h (fl.) To	. .
New well 🔣 Method, Dug 🗔 Bored 🗍		10	Formation
Deepered () Cable (Driven ()	80	97	- Caraciucad Rock
Rolary K Jetled	92	170	HAAd Shales
L DIMENSIONS: Diameter of Hole	170	207	Mard Sandetown 200 991
Una 12 in from 0 ft. to 207 ft.	201	212	Soft Slicky Clark ADD a
Cia II. from ft. to ft.			Storgen before granting y
II. to II.		<u> </u>	- too gam Alton grouting
Casing Steet	· · · · · · · · · · · · · · · · · · ·		
Threaded Weided Dia from the			
Type A 53 8 Wall Thickness . 322	J	 	
Casing Plastic Dia fromft to ft			
Weight Dia fromH. toH.			
PERFORATIONS: Yes No 🖡			
Size of perforations in the	L		
periorations from fit to fit			
certorations fromfl. tofl.			
perforations fromfl. tofl.			
SCREENS: Yes 🗄 No 🙀			
Manufacturer's Name			
Dia Stotaire Model No	<u> </u>		
Dia Stot size from the			
GRAVEL PACKED: Yes Ti Nobe Signation of			
Gravel placed from the local state of gravel			
GROUTED: To what depth? (Acc 4)			······································
Material used in grouting CERCART SLIDE & 180' to SURFAC	-7	Geent	and by Big Sty Concutere
WELL HEAD COMPLETION	<u> </u>	Cacu	y fram Bound up
Pitless Adapter E Yes E No			
PUMP (II installed)			
Manufacturaria nama			
Type Model No HP			ATTACH ADDITIONAL SHEETS W NEORDSARY
WELL TEST DATA	18. DATE C	OMPLETED_	10-4-93
The information requested in this section is required for all wells. All depth	14. DAILLE	NCONTRAC	TOR'S CERTIFICATION
All wells under 100 opm must be insted for a minimum of an in	This we	Il was drilled	under my jurisdiction and this report is true to the best of
vide the following information:	niy kitu	nieuge.	
al ArPump K BailerBailer	•	1	8-29-94
ing; closed in pressure psi, ft. If flow-	Kar_	Alan	at Day a
other, (specify) valve,reducers,	Firm Man	11177	ery westing Inc.
" Depth al which pump is set for test ICS		140 9	Jucke Rd R.
e) Pumping water level // // // // // // // // // // // // //	Address		i Dikeyns
pumping began.	81	Man	Minut 202
1	Signatur		License No.
NONTANA DEPARTMENT OF NATURAL RESOURC	ES & CO	DNSERV	
NONTANA DEPARTMENT OF NATURAL RESOURCE	ES & CO	NSERV. 444-	ATION DNRC
NONTANA DEPARTMENT OF NATURAL RESOURC	ES & CO	0N8ERV 444-	ATION DNRC

:

5

OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficiarly for the intended purpose.

MOUNTAIN VILLAGE NO. 6

WELL LO)G R	EPC	R
---------	------	-----	---

Form No 603(A 2-89)

File No. 94-597-10

ij

State law requires that the dreau's copy be filed by the water well driller within 60 Jafter completion of the well. 1. WELLOWNER Duration of test: Pumping time 24 hrs. 0 BOYNE USA INC. Recovery time _____ Recovery water level Name ... 41.4 ft.al 3 hrs. after 2. CURRENT MAILING ADDRESS pumping stopped. Wells intended to yield 100 gpm or more shall be tested for a period of 8 hours or more. The test shall follow the development of the well, and shall be conducted continuously at a constant discharge at least as great as the in-P.O. BOX 160001 BIGSKY, MONTANA 59716 tended appropriation. In addition to the above information, water level data 3. WELL LOCATION WELL #6 shall be collected and recorded on the Department's "Aquiler Test Data" Section 19 SE - 14 NE 1/4 ... SW form NOTE: All wells shall be equipped with an access port 1/2 inch minimum or a pressure gauge that will indicate the shut-in pressure of a flowing well. Re-EW County GALLATIN Township ____ NS Range 3 6 Goyn't Lot Block , or Lot movable caps are acceptable as access ports. Subdivision Name _ 11. WAS WELL PLUGGED OR ABANDONED? Yes X No Tract Number If yes, how?_ 4. PROPOSED USE: Domestic [Stock [] Irrigation [] Other Xspecify PUBLIC SUPPLY WELL. 12. WELLING Depth (ft.) From 5. TYPE OF WORK: Formation To Method: Dug **I**) New well Ð Bored U TOP 5 ROCK-FILL DIRT Deepened 1B Cable П Driven Th: 5 20 SHATTER ROCK-SAND STONE-LIME X Reconditioned G Rolary Jetted [] STONE BLACK 20 40 SILT FINE SAND-SANDY CLAY-SHATTER 6. DIMENSIONS: Diameter of Hole ROCK-SAND STONE-BLACK SHALE Dia. 12 0 ____ In. from . ft. to 200 ft. SAND STONE-LIGHT GREEN SHALE 40 43 Dia in. from fl. to ft 43 STREAKS SANDY CLAY-SAND STONE~ 45 Dia in. from ft. to ft. LIGHT GREEN SHALE 7. CONSTRUCTION DETAILS: 45 47 SAND STONE-LIGHT GREEN SHALE Dia8 5/8 from ±2 fl. to 200 Casing: Steel £ 47 48 TRACES SANDY CLAY-SAND STONE-Threaded 🛛 Welded 🏝 Dia_ from_ _ft. to_ _ft GREEN & BLACK SHALE Type A53 ____ Wall Thickness_ .322 48 60 HARD-SAND STONE-GREEN & BLACK SHALE Casing: Plastic Dia. from. ft. to ft 60 65 SAND STONE-BLACK & GRAY SHALE Weight Dia. ____ from ft. to _ft 65 110 BLACK SAND STONE-GRAY SHALE PERFORATIONS: Yes 🖪 No 🗗 110 115 CRAY TRACE CLAY-SAND STONE-BLACE HOLTE Type of perforator used ... & GRAY SHALE Size of perforations _ 3/16 in. 115 119 in. by SAND STONE-BLACK & GRAY SHALE 1920 HOLES perforations from 160 200 ft to ft 119 121 GRAY SAND STONE-VERY HARD perforations from _ 121 ft. to _ft. 122 ROCK-GREEN & GRAY SAND STONE _ perforations from ft. to "ft. 122 125 ROCK-PINK & GRAY SAND STONE-HAR 125 ROCK-BLACK & GREEN SAND STONE 130 SCREENS: Yes 🛛 Not 130 145 GRAY ROCK-GREEN & BLACK SAND ST NE Manufacturer's Name BLACK & GRAY SAND STONE-BLACK 145 151 Type ____ Model No. TRACE SHALE Slot size Dia. from ft.10 ft. 151 165 BLACK SHALE Dia. ____ Slot size from ft. to , ft. 165 167 BLACK SHALE **GRAVEL PACKED:** Yes 🗋 No Size of gravel 167 178 TRACE OF QUARTZ-BLACK SHALE Gravel placed from , ft. ft. to 178 179 GRAY SHALE GROUTED: To what depth? _ 60 11. 179 180 TRACE QUARTZ-BLACK SHALE Material used in grouting . NEAT CEMENT 180 200 BLACK SHALE 8. WELL HEAD COMPLETION: Pitless Adapter Yes XNo 9. PUMP (if installed) Manufacturer's name ATTACH ADDITIONAL SHEETS IF NECESSARY Type ____ Model No. .HP. 13. DATE COMPLETED 7-27-96 10. WELL TEST DATA 14. DRILLER/CONTRACTOR'S CERTIFICATION The information requested in this section is required for all wells. All depth measurements shall be from the top of the well casing. This well was drilled under my jurisdiction and this report is true to the best of my knowledge. All wells under 100 gpm must be tested for a minimum of one hour and provide the following information: 7~30-96 100 X Air Pump Bailer Date Static water level immediately before testing_ 14 ft. If flow **RED TIGER DRILLING** ing: closed-in pressure _____ Flow controlled by: _____ psi. _ gpm valve, Firm Neg reducers, other, (specify) _____ Depth at which pump is set for test. BOX 659 MANHATTAN, MONTANA 59741 191 C) 62 gpm Add The pumping rate: <u>490</u> Pumping water level 24 ft. at hrs. after 386 pumping began. License No. **MONTANA DEPARTMENT OF NATURAL RESOURCES & CONSERVATION** 1520 EAST SIXTH AVENUE HELENA, MONTANA 59620-2301 444-6610

DEPARTMENT COPY

DRiLLER: Please give this copy to the well owner to complete reverse side. OWNER: Complete reverse side and send to DNRC when the well is completed and the water has been used beneficially for the intended purpose.

Montana's Ground-Water Information Center (GWIC) | Site Report | V.11.2008

MONTANA WELL LOG REPORT

This well log reports the activities of a licensed Montana well driller, serves as the official record of work done within the borehole and casing, and describes the amount of water encountered. This report is complied electronically from the contents of the Ground-Water Information Center (GWIC) database for this site. Acquiring water rights is the well owner's responsibility and is NOT accomplished by the filing of this report.

Site Name: BIG SKY WATER AND SEWER DISTRICT

GWIC Id: 205931 MOUNTAIN VILLAGE NO.

Section 1: Well Owner

Owner Name

BIG SKY WATER AND SEWER DISTRICT Mailing Address PO BOX 161097

City BIG SKY

MT

State

Zip Code 59716

Block

Lot

Section 2: Location

Township	Range	Section	Quarter Sec	tions		
06S	03E	30	NW¼ NW¼ NE	¼ NE¼		
	County		Geocode	•		
MADISON						
Latitude	Lo	ngitude	Geomethod	Datum		
45.290145	111.397756		0145 111.397756		TRS-SEC	NAD83
Altitude		Method	Datum	Date		

Addition

MOUNTAIN VILLAGE WELL #7

Section 3: Proposed Use of Water PUBLIC WATER SUPPLY (1)

Section 4: Type of Work Drilling Method: ROTARY

Section 5: Well Completion Date

Date well completed: Tuesday, November 27, 2001

Section 6: Well Construction Details

Borehole dimensions

	Diameter	То	From
	16	30	0
]	12	312	30

Cooling

Casing	g										
From	Тс)	Diame	ter	Wall F Thickness F		P R	ressure ating	Joint	Туре	
-2	28	0	8		0.250)	1			STEEL	
Comp	Completion (Perf/Screen)										
				# of		Size of					
From	То	Di	ameter	Oper	nings	Opening	s	Descriptio	n		
270	280	8		18		1X3IN		TORCH OR PLASMA CUTS			
Annul	Annular Space (Seal/Grout/Packer)										

From	То	Description	Cont.
FIOIII	10	Description	reur
0	92	BENTONITE GROUT	
251	251	FORMATION PACKER	
252	252	FORMATION PACKER	

Section 7: Well Test Data

Total Depth: 312 Static Water Level: 40 Water Temperature:

Pump Test *

7

Depth pump set for test <u>275</u> feet. <u>400</u> gpm pump rate with <u>230</u> feet of drawdown after <u>1</u> hours of pumping. Time of recovery <u>1</u> hours. Recovery water level <u>40</u> feet. Pumping water level <u>270</u> feet.

* During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.

Section 8: Remarks

BACK FILLED WITH CUTTINGS AND BENTONITE CHIPS

Section 9: Well Log

Geologic Source

Unassig	gnea	
From	То	Description
0	60	NO RECORDS
60	65	LT. GRAY SHALE
65	75	LT. GRAY/ BROWN SANDSTONE
75	102	DARK GRAY SHALE
102	107	SHALE
107	112	DARK GRAY SHALE
112	175.5	DARK GRAY SHALE
175.5	183	GRAYISH BLUE SANDSTONE
183	205	LT. BLUE SILTSTONE
205	231	LT. BLUE/ PURPLE SHALE
231	233	ANDESITE SILL
233	241	BLACK SHALE
241	246	ANDESITE SILL
246	247	GRAY SHALE
247	249	ANDESITE SILL
Daillead	0	

Driller Certification

All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:

Company: OKEEFE DRILLING CO License No: WWD-82 Date Completed: 11/27/2001

Other Options

Plot this site on a topographic map View scanned document (2/21/2008 6:03:21 PM)

Site Name: BIG SKY WATER AND SEWER DISTRICT GWIC Id: 205931 Additional Lithology Records							
From	То	Description					
249	250	GRAY AND BLACK SHALE					
250	251	GRAY SILTSTONE					
251	282	ANDESITE SILL					
282	294	GRAY GREEN SILTSTONE					
294	296	ANDESITE SILL					
296	300	LT. BROWN QUARTZITE SANDSTONE THERMOPOLIS SANDSTONE					
300	312	BLACK SHALE					

APPENDIX B – SNOWMAKING MEMO

MEMORANDUM

To: Ron Edwards, Jim Muscat Big Sky County WSD



Fr: Mark Cunnane

6595 Bear Claw Lane • Bozeman, MT 59715 (406) 585-5947

Re: Aquifer Response to Well MTN#5 Pumping for Snowmaking 2021-2022

1. INTRODUCTION AND SUMMARY

Public water system well MTN#5 was used for snowmaking water supply for the 2021-2022 ski season. The well was manually adjusted to discharge about 30- to 40-gpm for a period of 52-days, beginning on 11/12/21 and ending on 1/3/22. Water level instruments set into test wells TW#2, TW#7, and TW#8 responded to pumping and these data were analyzed to further assess yield potential and aquifer properties (**Figure 1**).¹ Well logs are attached.

Well MTN#6 was not monitored during snowmaking. However, prior testing has shown that wells MTN#5 and MTN#6 do not have a hydraulic connection. This result also would indicate that well MTN#6 is not likely to be hydraulically connected to the test wells.

Water level data analyzed for the snowmaking pumping period showed that aquifer response eventually followed a trend for a lower transmissivity formation, estimated at about 200 ft²/d. This trend was established starting about 4- to 4.5-days after discharge from well MTN#5 began. This result is providing more information that can be used to evaluate well design capacities.

The results of this analysis indicate that operation of MTN#5 and TW#8 (as a new production well) results in the highest capacity. Under this condition, the two well system can produce 125-gpm as a maximum design capacity, and 170 acre-ft per year as the annual volume. Well MTN#5 would be operated with a design capacity of 85-gpm and TW#8 would be operated with a design capacity of 40-gpm. The annual volumes would be 120- and 50-acre-feet per year, respectively.

Individually, wells MTN#5 and TW#8 can produce about 100- and 70-gpm, respectively. The individual annual volumes would be 140- and 70- acre-feet. Completing TW#8 as a new production well would add only 25-gpm and 30-acre-feet of capacity to the Mountain Village system (above the existing supply from MTN#5). Given that the discharge from TW#8 would likely require treatment for iron and manganese, its cost effectiveness is doubtful.

Test well TW#7 would not be completed as a production well, as it has limited drawdown and this factor results in lower yield among the wells. Test well TW#2 also would not be completed as a production well, primarily due to limited yield and costs. A new well would need to be constructed at the TW#2 location and the connection to the water system would be more costly due to greater offset from existing infrastructure.

¹ These instruments are owned by the District and are installed in the wells to provide long-term monitoring of static water levels. There is no instrument installed into MTN#5 as the well casing appears to have a dogleg at the top of the well that blocks passage of a downhole instrument.

2. HYDRAULIC ANALYSIS

Test wells TW#2, TW#7, and TW#8 are equipped with down-hole In-Situ, Inc. Level TROLL 500 pressure transducers (owned by District). Water level data collected during the MTN#5 pumping period show immediate and similar response to pumping in each of the test wells (**Figure 2**). Static water levels recovered to a slightly lower static level. This condition likely reflects a declining static water level through the winter months (about 2- to 3- feet of decline over 100-days).

Hydraulic analysis of these data results in estimated aquifer transmissivity of about 150 ft²/d (**Figure 3A** – **3C**), and is consistent among the three test wells. The estimated transmissivity is directly proportional to the MTN#5 discharge rate. A value of 40-gpm was used in hydraulic analyses.²

A bounded aquifer model, as used for the shorter pumping tests in the test wells (conducted in 2019 to 2021) is shown to be a poor fit to the snowmaking data (**Figure 3D**). An averaged fit to the snowmaking data obtained for an unbounded confined aquifer model by applying a least squares fitting method results in aquifer transmissivity of 198 ft²/d and storativity of 0.0002 (**Figure 3E**). These parameter values were used to estimate design capacities.

3. DESIGN CAPACITIES

Analysis was completed to assess optimal pumping capacities for well MTN#5 and test wells TW#7 and TW#8, assuming the test wells were converted to permanent production wells. Linear superposition equations were developed for the drawdown at each pumping well, resulting in one equation per well. The system of equations was then solved for discharge rate by imposing the well maximum drawdowns as solution constraints.³ The solution was applied to determine the maximum total capacity for the multiple pumping wells. Analysis was completed for a three well system, and also a two well system that included only MTN#5 and TW#8.

Drawdown constraints were determined for each well based on the well constructions. Well MTN#5 has up to 150-ft of drawdown. Test well TW#7 has only 60-ft of drawdown, and test well TW#8 has 107-ft of drawdown.⁴ Analysis was completed for maximum design rate based on 180-days of continuous pumping, and also for maximum annual volume, based on 5-years of continuous pumping. These time periods were selected given the conditions of a low transmissivity confined bedrock aquifer, which can have limited recharge.

² E.g., If the discharge were actually only 30-gpm, transmissivity would be overestimated by 33% using the rate of 40 gpm in the calculations.

³ Solutions were obtained using Excel's Solver add-in program.

⁴ These drawdown limits were obtained from the pumping test data files, which are different than the static water levels listed on the well logs.

The optimal three-well system resulted in no pumping from TW#7, which was required in order to maintain the drawdown in the well at 60-ft. There is no reason to use this constraint if the well cannot be pumped. In the two well system, with MTN#5 and TW#8, a solution was obtained resulting in optimal design capacities as shown in **Table 1**.

Table 1. Optimal Design Capacities

Well ID		Design Rate (gpm)	Annual Volume (af/yr)
MTN#5		85	120
TW#8		40	50
	TOTAL	125	170

When pumped individually, and based on the confined aquifer model as described above, wells MTN#5 and TW#8 could be pumped at 98- and 70-gpm. The annual volumes would be 140- and 100-acre-feet, respectively. There is a benefit of only 25 gpm and 30 acre-feet by pumping simultaneously from both well MTN#5 and test well TW#8. There may also be some benefit with respect to source of supply redundancy.



Figure 1. Well Location Map







Western Groundwater Services

Time (min)

Time (min)

-28.

-28.

Page 6

ATTACHMENTS

WELL LOGS

(st	Mounta	in Village #5	Year Built: 2004	GWIC No.: 248989	
Jepth (ft bç	Geologic Unit	Lithology (well data from driller log)	Graphic Log	Well Construction	
0 10 20 		0, 80 Fractured rock (presumed shale)		Static Water Level, -1.4 0 ft, 6/4/18 - Pitless unit (with check valve) -2 3	0 0 0
50 — 60 — 70 — 80 —					0 0 0
- 90 —	Cretace	80, 92 Sandstone (125 gpm)		8-5/8 inch casing, 0.322- 9	0
100	eous Thermopolis Shale (Kmt)	92, 170 Hard shales (200 gpm)		inch wall, 28.55 lb/ft Cement seal 4-1/2 inch column pipe (black steel, 8 @ 21', T&C) 12-inch borehole -1 -1 -1 -1 -1 -1 -1 -1 -1 -1	00 10 20 30 40 50 60
- 180 — - 190 — - 200 —		170, 207 Hard sandstone (Air lifting 400 gpm before grouting; 200 gpm after grouting)		Check valve (Flomatic 80DI) Submersible pump (Goulds 7WALC, 4- stage) Submersible motor (Franklin, 25hp, 460VAC, 3P, 33, 5A)	80 90 200
210 —		207, 212 Soft, sticky clay		8-inch open hole	210
220 -					20 220
230				2	<u>2</u> 30







APPENDIX C – WATER RIGHTS

MEADOW VILLAGE NOS. 1, 2, 3, 4, 5 HIDDEN VILLAGE NO. 1

PROVISIONAL PERMIT NO: 41H 107416 00 COMPLETION DATE: 12/31/2033

This permit was filed in 1999 by the District for 985 gpm and 1,307.38 acre-feet per year from the listed diversions. It was originally filed for Meadow Village Nos. 1 – 3, and Hidden Village No. 1. In 2007, Meadow Village Nos. 4 and 5 were added by a change application. Pursuant to a request by the District in 2015, the Completion Date was extended to 12/31/2033.

Page 1 of 2 General Abstract

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 107416 Version: 2 -	-00 PROVI - CHANGE A	SIONAL	_ PERM RIZATIC	IT N									
	Ve	rsion Status:	ACTIVE	Ξ										
Owners:	BIG SKY CO	UNTY WATE	ER & SE	WER D	IST #:	363	MEADOW	VILLAGE	NOS.	1,	2,	З,	4,	5
	% RON EDW PO BOX 160 BIG SKY, MT	/ARDS 1670 [59716-067()				HIDDEN	VILLAGE	NO.	1				
Priority Date:	NOVEMBER	15, 1999 at	11:30 A	.M.										
Enforceable Priorit	y Date: NOV	EMBER 15,	1999 at	11:30 A	.м.									
Purpose (use):	MUNICIPAL													
Maximum Flow Rate:	985.00 GPM													
Maximum Volume:	1,307.38 AC-	·FT												
Source Name:	GROUNDWA	ATER												
Source Type:	GROUN	DWATER												
Point of Diversion and Me	eans of Diversi	on:												
ID	Govt Lot	<u>Qtr Sec</u>	Sec	Twp	Rge	County	7							
1		SWSWNE	36	6S	3E	GALLA	ATIN							
Period of Diversion	:JANUARY 1	TO DECEM	3ER 31											
Diversion Means:	WELL													
Static Water Level:	11.00 FEET													
Casing Diameter:	6.63 INCHES	3												
Pump Size:	25.00 HP													
2		SESENW	36	6S	3E	GALLA	ATIN							
Period of Diversion	JANUARY 1	TO DECEM	BER 31											
Diversion Means:	WELL													
Well Depth:	59.00 FEET													
Static Water Level: Casing Diameter:	6 00 INCHES	3												
Pump Size:	20.00 HP													
3		S2SENW	36	6S	3E	GALLA								
Period of Diversion	IANI IARY 1		3ER 31											
Diversion Means:	WELL	IO DECEM												
Well Depth:	67.00 FEET													
Static Water Level:	33.00 FEET													
Casing Diameter: Pump Size:	8.00 INCHES	5												
1 ump 5120.	10.00 111		25	68	25	CALL								
4				03	SE	GALLA								
Diversion Means:	WELL	TO DECEIVIN	SER 31											
Well Depth:	45.00 FEET													
Static Water Level:	8.00 FEET													
Casing Diameter:	6.63 INCHES	6												
Pump Size:	7.50 HP													
5		NESWNE	36	6S	3E	GALLA	ATIN							
Period of Diversion	:JANUARY 1	TO DECEM	3ER 31											
Diversion Means:														
Static Water Level:	10.40 FEET													
Casing Diameter:	16.00 INCHE	S												

ID		Govt Lot	<u>Qtr Sec</u>	Sec	Twp	Rge	County
6			NENWSW	36	6S	3E	GALLATIN
Peri	od of Diversion	JANUARY 1	TO JANUAR	Y 1			
Dive	ersion Means:	WELL					
Well	l Depth:	57.00 FEET					
Stati	ic Water Level:	16.30 FEET					
Casi	ng Diameter:	16.00 INCHE	S				
Purpose (U	Use):	MUNICIPAL					
Volu	me:	1,307.38 AC	-FT				
Peri	od of Use:	JANUARY 1	to DECEMB				
Plac	e of Use:						
ID	Acres	Govt Lot	<u>Qtr Sec</u>	Sec	Twp	Rge	<u>County</u>
1			S2	25	6S	3E	GALLATIN
2				26	6S	3E	GALLATIN
3				27	6S	3E	GALLATIN
4				33	6S	3E	GALLATIN
5			SE	34	6S	3E	GALLATIN
6				35	6S	3E	GALLATIN
7				36	6S	3E	GALLATIN
8			N2	31	6S	4E	GALLATIN
9			N2SW	31	6S	4E	GALLATIN
10				1	7S	3E	GALLATIN
11			NE	2	7S	3E	GALLATIN

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE ASSOCIATED WHICH MEANS THE RIGHTS SHARE THE SAME OTHER.

107416-00 122634-00 122635-00

ASSOCIATED RIGHT

THIS PERMIT IS ASSOCIATED TO WATER RIGHT NOS. 41H-P49666-00, 41H-I69587-00, 41H-W122634-00, AND 41H-W122635-00. THEY SHARE COMMON WELLS, WHICH ARE MANIFOLD INTO AN EXISTING SYSTEM, USED TO SUPPLY THE MEADOW VILLAGE/ HIDDEN VILLAGE SERVICE AREA.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP MONTHLY WRITTEN RECORDS OF THE FLOW RATE AND VOLUME MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. CONTACT THE REGIONAL OFFICE FOR THE CURRENT ADDRESS. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726

PROGRESS REPORT REQUIRED

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE RECORDS MUST BE SUBMITTED TO THE WATER RESOURCES REGIONAL OFFICE. CONTACT THE REGIONAL OFFICE LISTED BELOW TO OBTAIN THEIR CURRENT ADDRESS. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726 FORM NO 601 R11/96 STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 48 NORTH LAST CHANCE GULCH PO BOX 201601 HELENA MONTANA 59520-1601 **Permit to Appropriate Water** THIS PROVISIONAL PERMIT TO APPROPRIATE WATER IS ISSUED TO: BIG SKY COUNTY WATER & SEWER DIST #363 C/O RON EDWARDS PO BOX 160670 BIG SKY MT 59716 UPON FINDING THAT THE REQUIREMENTS OF SECTION 85-2-311 MCA HAVE BEEN MET. PERMIT NUMBER: 107416-41H PRIORITY DATE: NOVEMBER 15, 1999 AT 11:30 A.M. SOURCE: GROUNDWATER DIVERSION: MEANS: WELL PERIOD OF DIVERSION: 01/01-12/31 SWSWNE SEC. 36 TWP. 06S RGE. 03E GALLATIN CO MEANS: WELL PERIOD OF DIVERSION: 01/01-12/31 SESENW SEC. 36 TWP. 06S RGE. 03E GALLATIN CO MEANS: WELL PERIOD OF DIVERSION: 01/01-12/31 S2SENW SEC. 36 TWP. 06S RGE. 03E GALLATIN CO MEANS: WELL PERIOD OF DIVERSION: 01/01-12/31 SWSWNE SEC. 35 TWP. 06S RGE. 03E GALLATIN CO TOTAL FLOW RATE: 985.00 GPM TOTAL VOLUME: 1,307.38 ACRE FEET PER YEAR 985.00 GPM UP TO 1307.38 AC-FT (01/01-12/31) USE : FOR MUNICIPAL S2 SEC, 25 TWP. 06S RGE. 03E GALLATIN CO FOR MUNICIPAL PLACE OF USE: SEC. 26 TWP. 06S RGE. 03E GALLATIN CO FOR MUNICIPAL SEC. 27 TWP. 06S RGE. 03E GALLATIN CO FOR MUNICIPAL SEC. 33 TWP. D6S RGE. D3E GALLATIN CO FOR MUNICIPAL SE SEC. 34 TWP. D6S RGE. D3E GALLATIN CO FOR MUNICIPAL SEC. 35 TWP. 06S RGE. 03E GALLATIN CO FOR MUNICIPAL SEC. 36 TWP. 06S RGE. 03E GALLATIN CO FOR MUNICIPAL N2 SEC. 31 TWP. 06S RGE. 04E GALLATIN CO FOR MUNICIPAL N2SW SEC. 31 TWP. 06S RGE. 04E GALLATIN CO FOR MUNICIPAL SEC. 1 TWP. 07S RGE. 03E GALLATIN CO FOR MUNICIPAL NE SEC. 2 TWP. 07S RGE. 03E GALLATIN CO FOR MUNICIPAL

CONTINUED

FORM NO 601 R11/86 STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION Permit to Appropriate Water PAGE 2 PERMIT_NUMBER: 107416-41H ** <u>COMPLETION DEADLINE</u>: THE DEADLINE TO COMPLETE THIS PERMIT AND FILE A NOTICE OF COMPLETION OF PERMITTED WATER DEVELOPMENT (FORM 617) IS <u>DECEMBER 31, 2015</u>. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, BY DECEMBER 31, 2015. OTHERWISE, THE PERMIT IS VOID. ** <u>PRIOR RIGHTS</u>: THIS PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER; THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW. ** <u>BACKFLOW PREVENTOR</u>: PURSUANT TO SECTION 85-2-505, MCA, TO PREVENT GROUNDWATER CONTAMINATION, AN OPERATIONAL BACK FLOW PREVENTOR MUST BE INSTALLED AND MAINTAINED BY THE APPROPRIATOR IF A CHEMICAL OR FERTILIZER DISTRIBUTION SYSTEM IS CONNECTED TO THE WELL. ** ASSOCIATED RIGHTS: THIS PERMIT IS ASSOCIATED TO WATER RIGHT NOS. 41H-P49666-00, 41H-I69587-00, 41H-W122634-00, AND 41H-W122635-00. THEY SHARE COMMON WELLS, WHICH ARE MANIFOLD INTO AN EXISTING SYSTEM, USED TO SUPPLY THE MEADOW VILLAGE/ HIDDEN VILLAGE SERVICE AREA. ** WATER MEASUREMENT RECORDS REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP MONTHLY WRITTEN RECORDS OF THE FLOW RATE AND VOLUME MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. CONTACT THE REGIONAL OFFICE FOR THE CURRENT ADDRESS. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE S0 IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726 BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726 ** <u>PROGRESS REPORT</u>: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE RECORDS MUST BE SUBMITTED TO THE WATER RESOURCES REGIONAL OFFICE. CONTACT THE REGIONAL OFFICE LISTED BELOW TO OBTAIN THEIR CURRENT ADDRESS. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726 ** <u>OWNERSHIP UPDATE</u>: IF THE OWNERSHIP CHANGES ON ANY PORTION OF OR ALL OF THIS RIGHT, A WATER RIGHT OWNERSHIP UPDATE, FORM 608, MUST BE FILED WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION. FAILURE TO COMPLY WITH ANY OF THE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THE WATER RIGHT GRANTED BY THIS PERMIT. R WITNESS WATER RESOURCES REGIONAL MANAGER DATE: AUGUST 29, 2000 WATER RIGHTS BUREAU, WATER RESOURCES DIVISION

June 14, 2007 Change Application #: 41H-30026963

Page 1 of 3 Change Authorization

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

CHANGE AUTHORIZATION

UPON FINDING THE REQUIREMENTS OF SECTION 85-2-402, MCA HAVE BEEN MET, APPLICATION TO CHANGE WATER RIGHT NUMBER 41H-30026963 SUBMITTED ON MARCH 5, 2007, IS APPROVED.

Application From:	BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716 0670	MEADOW VILLAGE NOS. 1, 2, 3, 4, 5 HIDDEN VILLAGE NO. 1
Water Right Number(s) Changed:	Wr #ExtType41H-10741600PROVISIONAL PERMIT	(This change added MV-4 and MV-5)
Authorization Limits Flow Rate:	985.00 GPM	
Volume: Change Description:	1,307.38 AC-FT	a .
THIS CHANGE ADDS MANIFOLD TO SUPPL FEET REMAINS UNCH	TWO ADDITIONAL WELLS TO THE FOUR PERMITTED WELLS. ALI Y THE PERMITTED PLACE OF USE. THE PERMITTED 985 GPM, U HANGED.	L SIX WELLS WILL BE JP TO 1,307.38 ACRE-
COMPLETION DEADL THE DEADLINE TO CO CHANGE OF APPROP MEET THE DEADLINE 2015 OTHERWISE	INE DMPLETE THIS AUTHORIZATION AND FILE A PROJECT COMPLET RIATION WATER RIGHT (FORM 618) IS <u>DECEMBER 31, 2015</u> , IF , FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, BY THE AUTHORIZATION IS VOID	TION NOTICE FOR YOU CANNOT DECEMBER 31,

CONDITIONAL APPROVAL

THIS AUTHORIZATION IS LIMITED TO THE AMOUNT OF THE HISTORIC USE RECOGNIZED BY THE DEPARTMENT IN THIS PROCEEDING AS SUBJECT TO CHANGE, AND WILL THEREAFTER NOT EXCEED THAT AMOUNT. IF THE HISTORIC USE IS REDUCED UNDER ADJUDICATION PROCEEDINGS PURSUANT. TO TITLE 85, CHAPTER 2, PART 2, MCA, THIS AUTHORIZATION WILL BE LIMITED TO A LESSER AMOUNT.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS CHANGE AUTHORIZATION.

Witness Signature

DATE ISSUED: JUNE 14, 2007

Water Resources Divis

June 14, 2007 Change Application #: 41H-30026963 Page 2 of 3 Change Authorization

THE IN AN ASTERISK	IFORMATION SH (*) HAS BEEN PLAC	HOWN BELC	OW REFL	ECTS TH	E ENTIRE BY THIS CI	WATER RI	GHT. ORIZATION.
Water Right Number:	41H 107416-00	PROVISION		Т			
water regnereamber.	Version: 2 CHA	NGE AUTHO		1			
	Vorsion	Status: ACTIN	/=	•			
	v er storr s	Status, ACIA					
Owners:	BIG SKY COUNT % RON EDWARD PO BOX 160670 BIG SKY, MT 597	Y WATER & S S 16 0670	EWER DI	ST #363			
Priority Date:	NOVEMBER 15, 1	999 at 11:30	A.M.				
Enforceable Priori	ty Date: NOVEMBI	ER 15, 1999 a	t 11:30 A.	M.	~		
Purnose (use):	MUNICIPAL	· · · · · · · · · · · · · · · · · · ·	12 ¹				
Maximum Flow Pater	985 00 GPM			ν. K			
Maximum Volume:	1 307 38 AC-FT			13. 		~~	
Waximum volume.	COOLINDWATER	and a start of the	1997-1991 1997-1991 1997-1991	$\frac{A^{\prime\prime}}{a^{\prime\prime}} = B_{\prime}B_{\prime}$	1. I.	· · ·	
Source Name:	GROUNDWATER				Se Sugar		44 ₆₁
Source Type:	GROUNDWA	IER			an a		
*Point of Diversion and M	leans of Diversion:					18 19 B	
ID	Govt Lot	Qtr Sec	Sec	Twp	Rge	County	
1		SWSWNE	36	6S	3E	GALLATIN	u . 195
Period of Diversion:	JANUARY 1 TO I	DECEMBER 3	1				- 14 - 14 - 14 - 14 - 14 - 14 - 14 - 14
Diversion Means:	WELL						
Well Depth:	50.00 FEET						· · ·
Static Water Level:	11.00 FEET						
Casing Diameter;	6.63 INCHES						
Pump Size:	25.00 HP	io,		4	199		an dhainn a' thail an thail an thail an thail an thail an thail an thail and that the second se
2		SESENW	36	6S	3E	GALLATIN	n de la companya de l Na companya de la comp
Period of	JANUARY 1 TO [DECEMBER 3	11	21	A happen has		i a
Diversion:	4			a See			. ²⁴
Diversion Means:	WELL		άģ.			,	
Well Depth:	59.00 FEET						
Static Water Level:	14.00 FEET		ê şe			۰ : ۱ مربع	n de de La companya
Casing Diameter:	6.00 INCHES			1997 - 1997 -	and all a	Si iliyaa muu aasa taa ay	in and
Pump Size:	20.00 HP			Star Star	n an ai Sala	an gan Mar dit	2°
3	and the second s	S2SENW	36	6S	3E	GALLATIN	200 - 12 1300 - 12
Period of Diversion:	JANUARY 1 TO [DECEMBER 3	d i		V And A		
Diversion Means:	WELL		dis.			1. Na 1.	
Well Depth:	67.00 FEET	an Maria ang Par		2 ** <#}	ર છે. આ		
Static Water Level:	33.00 FEET		an R	$\sigma \sim \gamma \gamma$			d" at
Casing Diameter:	8.00 INCHES	- 14 14					
Pump Size:	15.00 HP		,i				
4		SWSWNE	35	6S	3E	GALLATIN	
Period of	JANUARY 1 TO I	DECEMBER 3	3 1 1 1 1 2 2	Yerk ,			
Diversion:		and a second	i a	·	8. S	स्त १४ अनुरोधिति हो	
Diversion Means:	WELL				er s generi		
Well Depth:	45.00 FEET	× *:		¥ ,	e in gan	24.1	
Static Water Level	; 8.00 FEET		122.5				
Casing Diameter:	6.63 INCHES		25. 147	-14 ¹			
Pump Size:	7.50 HP					2 ¹⁴	
*5		NESWNE	36	⁶ 6S	3E	GALLATIN	
Period of Diversion:	JANUARY 1 TO I	DECEMBER 3	31				
Diversion Means:	WELL						
wen Depth:	10 40 FEET						
Static Water Level							
Casing Diameter:	10.00 INCHES		20	60	05		
Donio d of			30	65	JE	GALLATIN	
Diversion.							
Diversion Means	WELL						
Well Depth:	57.00 FEET						
Static Water Level	: 16.30 FEET						
Casing Diameter:	16.00 INCHES						

June 14, 2007 Change Application #: 41H-30026963

5 6		SE	34 35	6S 6S	3E 3E	GALLATIN GALLATIN	
7			36	6S	3E	GALLATIN	
8		N2	31	6S	4E	GALLATIN	
9		N2SW	31	6S	4E	GALLATIN	
10			1	75	3E	GALLATIN	
11	14 g.	NE.	2	7S	3Ę	GALLATIN	
	14	al and		1.2.3	n na star		

ASSOCIATED RIGHT

THIS PERMIT IS ASSOCIATED TO WATER RIGHT NOS. 41H-P49666-00, 41H-I69587-00, 41H-W122634-00, AND 41H-W122635-00. THEY SHARE COMMON WELLS, WHICH ARE MANIFOLD INTO AN EXISTING SYSTEM, USED TO SUPPLY THE MEADOW VILLAGE/ HIDDEN VILLAGE SERVICE AREA.

WATER MEASUREMENT-INLINE FLOW METER REQUIRED

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP MONTHLY WRITTEN RECORDS OF THE FLOW RATE AND VOLUME MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. CONTACT THE REGIONAL OFFICE FOR THE CURRENT ADDRESS. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726

PROGRESS REPORT REQUIRED

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE RECORDS MUST BE SUBMITTED TO THE WATER RESOURCES REGIONAL OFFICE, CONTACT THE REGIONAL OFFICE LISTED BELOW TO OBTAIN THEIR CURRENT ADDRESS. BOZEMAN - PH: 406-586-3136 FAX: 406-587-9726.

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670

PROVISIONAL PERMIT/CHANGE AUTHORIZATION NUMBERS:

41H 12263500 41H 107416-00 41H 30026963 41H 6167399 41H 12263499

(Change Authorization) (Provisional Permit) (Change Authorization) (Change Authorization) (Change Authorization)

APPROVED

The requests for additional time to complete these projects are approved because the appropriator has shown diligence in completing the projects or shown good cause for not completing the projects.

The notice of completion deadlines are extended to December 31, 2033.

PROGRESS REPORTS DUE⁻ Currently Required (See Extension of Time Decision)

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601



MEADOW VILLAGE NO. 1 MEADOW VILLAGE NOS. 2, 3 HIDDEN VILLAGE NO. 1

STATEMENT OF CLAIM NO:41H 122635 00COMPLETION DATE:12/31/2033 (Change Auth.)

This statement of claim was originally filed by Big Sky of Montana Inc. for 220 gpm and 355 acre-feet. It appears that in 1986 the Water Court reexamined the claim and determined a volume of 177.89 acre-feet per year. This reduced volume first appears in 1994 under the owner Lone Mountain Springs Water Utility, who transferred the right to the District in 1999. In 1999 a change authorization was approved adding Meadow Village Nos. 2 and 3, and Hidden Village No. 1 as diversions on the right and changing the use to Municipal. In 2015 the District filed for an extension on the Change Authorization, which was granted to 12/31/2033.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

A version with a more recent operating authority date exists. Contact DNRC for details.

Water R	light Number:	41H 122	635-00 STATE	MENT	OF CL/	AIM					
		Version:	2 CHANGE A	UTHO	RIZATI	ON					
			Version Status:	ACTIV	Έ						
		THIS AUT RECOGN CHANGE USE IS R CHAPTEI AMOUNT	THORIZATION I IZED BY THE D , AND WILL THI EDUCED UNDE R 2, PART 2, MC	S LIMIT EPAR ⁻ EREAF R ADJ CA, THI	TED TO TMENT TER NO UDICA ⁻ IS AUTH	THE A IN THI DT EXC FION P HORIZA	MOUNT OF TH S PROCEEDIN EED THAT AN ROCEEDINGS ATION WILL BE	HE HISTORIC U IG AS SUBJEC MOUNT. IF THE PURSUANT TO E LIMITED TO A	ISE T TO HISTORIC D TITLE 85, A LESSER		
Owners	:	BIG SKY % RON E PO BOX BIG SKY	COUNTY WATE DWARDS 160670 MT 59716-0670	ER & S	EWER	DIST #3	363	MEADOW	VILLAGE	NO.	1
Priority	Date:	APRIL 1.	1971					MEADOW	VILLAGE	NO.	2
Ē	nforceable Prior	ity Date: A	PRIL 1, 1971					MEADOW	VILLAGE	NO	З
Purpose	(use):	MUNICIP	AL					IIIDON	VILLINGE	NO.	1
Maximu	m Flow Rate:	220.00 G	PM					HIDDEN	VILLAGE	NO.	T
Maximu	m Volume:	177.89 A	C-FT								
Source 1	Name:	GROUNE	WATER								
So	ource Type:	GRC	UNDWATER								
Point of <u>ID</u> 1	Diversion and M	Ieans of Div <u>Govt Lot</u>	ersion: <u>Qtr Sec</u> SWSWNE	<u>Sec</u> 36	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN				
Pe Di	eriod of Diversio iversion Means:	n: JANUAR WELL	Y 1 TO DECEM	3ER 31							
2			SESENW	36	6S	3E	GALLATIN				
Pe Di	eriod of Diversio iversion Means:	n: JANUAR WELL	Y 1 TO DECEMI	3ER 31							
3			S2SENW	36	6S	3E	GALLATIN				
Pe Di	eriod of Diversio iversion Means:	n: JANUAR WELL	Y 1 TO DECEMI	3ER 31							
4			SWSWNE	35	6S	3E	GALLATIN				
Pe Di	eriod of Diversio iversion Means:	n: JANUAR WELL	Y 1 TO DECEMI	3ER 31							
Period o	of Use:	JANUAR	Y 1 to DECEME	ER 31							
P	ace of Use:										
ID 1 2 3 4 5 6 7 8 9	<u>Acres</u>	<u>Govt Lot</u>	<u>Qtr Sec</u> S2 SE N2 N2SW	Sec 25 26 27 33 34 35 36 31 31	<u>Twp</u> 6S 6S 6S 6S 6S 6S 6S 6S	Rge 3E 3E 3E 3E 3E 3E 3E 4E 4E	County GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN				
10 11			NE	1 2	7S 7S	3E 3E	GALLATIN GALLATIN				

Remarks:

THE WATER RIGHTS LISTED FOLLOWING THIS STATEMENT ARE ASSOCIATED. THEY SHARE THE SAME WELLS. P049666-00, P107416-00, W122634-00, W122635-00

Remarks:

AUTHORIZATION TO CHANGE THE PLACE OF USE, POINTS OF DIVERSION, PURPOSE OF USE ISSUED 08/28/00. NOTICE OF COMPLETION DUE 12/31/15. SEE 41H-G(W)122635-00 .

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/94.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE.

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

		- Kacacana
Form No. 76-0 R2/80	de	HIEN &
1. 1	STATEMENT OF CLAIM	
122635	41H FOR EXISTING WATER RIGHTS MAR 1	5 1982 §
GA-U 10-105-01-01	For the Water Courts of the State of Montana BOZEMAN F	D.N.R.C.
40 1. Owner of Water Righ	ht BIGSKY OF MONTANA INC /	Anddle Initial
Co-Owner or Other Interest Owner	/////	Anddle Initial
Address P.O. B	071	8
City BIG SKY	State MONTANA Zip Code 3	9716 8
Home Phone No.	Business Phone No.	§
2. Person completing f	form TOUT / RAYMOND /	
Address P.O. B	30× 806	S
City BIG SK	Y State Zip Code 5	9716
Home Phone No. 9	895- 4304 Business Phone No. 995-4211	
FR Fish Raceway FW Fish & Wildlif CM Commercial IN I Industrial MC I Municipal	ys Geothermal MN I Mining fe NV Navigation PG Power Generation FP Fire Protection RC Recreation As Agricultural Spraying OT Other OF Oil Well Flooding Explain	
4. Source of Water:	(Check Only One)	8
Spring	Name	8
🗙 Well	Name Sootted Elk	ş
Stream	Name Tributary of	Š.
Lake	Name Stream	8
	Tributary of	§
Reservoir	Name Stream	§
	Tributary of	§
5. Point of Diversion:	County GALLATIN	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	SIN 1/4 SW 1/4 NE 1/4, Section 36, T 6 #/S, R 3	E/ 🖤 🖇
181	Lot, Block, Subdivision Meadow Village	د §
6) Means of Diversion:	🗙 Well	S
0	Pump Capacity 200 gpm	8
pM	 Headgate with ditch or pipeline Instream use Other Explain 	
7. Means of Conveyand	ce: Ditch Instream Pipeline Other:	

	☐ City or Tov	wn	Othe	er: E	xplain			11/2/1			8
Lot,	Block,	1/4	1⁄4	1/4,	Section 36	<u>, т</u>	6	_ # /Ŝ,	R	3	_E/
Lot,	Block,	1/4		<u>E</u> 1/4,	Section 35	E_, T_	6	M /S,	R	3	E/
Lot,	Block,S	1/2 5	1/2 A	1 <u>E</u> 1/4,	Section 3	5_, T_	6	U /S,	R	3	_Ę/
Lot,	Block,	1/4	1/4	1⁄4,	Section	, T	-	_N/S,	R	-	Ē/
Lot,	Block,	1/4	1/4	1/4,	Section	, T_		_N/S,	R <u>`</u> ∵	v	E/
Subdivision	FADOW VI	LLAGE	= ¢	Sw	ect gras	is h	11/3	5			
. Flow rate claimed:	220	-		cubic fe gallons miner's	eet per seco per minute inches	nd					
. Period(s) of use:	JAN I	/ to			31						
196295 1	Month	Day	Month	1	Day						
. Check one:	Decreed V	Water Rig	iht		Priority c	late or d	ate o	f first	use		
	Filed App	propriation	n Right	R	INAMI J	uly .	1	1	19	71	
	X Use Wate	r Right		0	Hour	Month	Day	Y	Yea	ar	
Attach copies of the Attach copies of aer show point of divers	e Decree, Recor rial photographs sion, place of us	rd of Filin s, U.S. Ge se, place	g or Proo ological S of storag	f of Use Survey n e, and c	e Right. naps or sucl conveyance	n other c facilities	locun	nents	nec	essa	ry f
Attach copies of the Attach copies of aer show point of divers Notarized Statemen	e Decree, Recor ial photographs sion, place of us t signed by clai	rd of Filin s, U.S. Ge se, place i mant.	g or Proo ological S of storag	f of Use Survey n e, and c	e Right. maps or sucl conveyance	n other c facilities	locun	nents	nec	essa	ry ·
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN	e Decree, Recor rial photographs sion, place of us t signed by clai	rd of Filin s, U.S. Ge se, place mant.	g or Proo ological S of storag	f of Use Survey n e, and c	e Right. naps or sucl conveyance	n other c facilities	locun s.	nents	nec	essa	ry '
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN	e Decree, Recor rial photographs sion, place of us t signed by clai	rd of Filin s, U.S. Ge se, place imant.	g or Proo ological S of storage) .ss.	f of Use Survey n e, and c	e Right. naps or sucl conveyance	n other c facilities	locun s.	nents	nec	essa	ry '
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of <u>Galla</u>	Decree, Recor rial photographs sion, place of us t signed by clai	rd of Filin s, U.S. Ge se, place mant.	g or Proo ological S of storage) .ss. _)	f of Use Survey n e, and c	e Right. naps or sucl conveyance	n other c facilities	locun	nents	nec	essa	ry '
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galld I, Regulate ar is signed to it as the	e Decree, Recor rial photographs sion, place of us t signed by clai A t being the cla claimant, know	imant of t	g or Proo ological S of storage) :ss.) this claim eents of th	f of Use Survey n e, and c , having of exist nis claim	e Right. maps or sucl conveyance g been duly ting water rig n and the ma	sworn, ght, and	depo the p d thin	se ar erson gs sta	nec nd sa who ated	essa ay th ose n there	at an
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galld I,	e Decree, Recor rial photographs sion, place of us t signed by clai A t being the cla claimant, know	imant of t	g or Proo ological S of storage) :ss.) this claim eents of th	f of Use Survey n e, and c , having of exist nis claim	e Right. naps or sucl conveyance g been duly ting water rig n and the ma	sworn, ght, and	depo the p d thin	se ar erson gs sta	nec nd sa who ated	essa ay th ose n there	at an
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galld I, Reguined being of Jegal age ar is signed to it as the true and correct.	e Decree, Recor rial photographs sion, place of us t signed by clai A t being the cla claimant, know	imant of t	g or Proo ological S of storage) :ss.) this claim ents of th	, having of e, and c	e Right. naps or sucl conveyance g been duly ting water rig n and the ma	sworn, ght, and	depo the p d thin	se ar erson gs sta	nec nd sa who ated	ay th ose n there	at an a
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galla I, Galla being of fegal age ar is signed to it as the true and correct.	e Decree, Recor rial photographs sion, place of us t signed by clai	imant of t	g or Proo eological S of storage) :ss.) this claim eents of th	f of Use Survey n e, and c of exist nis claim	e Right. maps or such conveyance g been duly ting water right and the ma	sworn, ght, and tters and	depo the p d thin	se ar erson gs sta	neco nd sa who ated	ay th bse n there	at an
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galld I. Raymon being of egal age ar is signed to it as the true and correct.	e Decree, Recor rial photographs sion, place of us t signed by clai A Him Him Claimant, know	imant of this	g or Proo ological S of storage) :ss.) this claim cents of th	f of Use Survey n e, and c of exist nis claim	e Right. maps or such conveyance g been duly ting water right and the ma	sworn, ght, and tters and March	depo the p d thin	se ar erson gs sta	neco nd sa who ated	ay those n there 82	at an a
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galld I, being of fegal age ar is signed to it as the true and correct.	e Decree, Recor rial photographs sion, place of us t signed by clai A d being the cla claimant, know	imant of t	g or Proo ological S of storage) :ss.) this claim eents of th	, having of existing	e Right. maps or such conveyance g been duly ting water right and the ma	sworn, ght, and tters and March	depo the p d thin	se ar erson gs sta	neco nd sa who ated	essal ay th ose n there 82	at an a :
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galla I, <u>Rouffing</u> being of fegal age ar is signed to it as the true and correct.	e Decree, Recor rial photographs sion, place of us t signed by clai A t m t being the cla claimant, know	imant of this	g or Proo	, having of existing of existing of existing fills claim	e Right. maps or such conveyance g been duly ting water right and the main day of 	sworn, ght, and tters and March	depo the p d thin	se ar erson gs sta	neco nd sa a who ated	essal ay th ose n there 82	at an :
Attach copies of the Attach copies of aer show point of divers Notarized Statemen STATE OF MONTAN County of Galla I. <u>Reufmond</u> being of fegal age ar is signed to it as the true and correct. Subscribed and swo	e Decree, Recor rial photographs sion, place of us t signed by clai A t m t being the cla claimant, know	imant of t	g or Proo ological S of storage) :ss.) this claim ents of th 7th	, having of exist nis claim	e Right. maps or such conveyance g been duly ting water right and the main day of 	sworn, ght, and tters and March Montan	depo the p d thin	se ar erson gs sta	neco nd sa who ated	essal ay th ose n there 82	at an a

*

00	(DVRS RSRV POU RMRK OWNR) COMMENTS REF. RIGHT. MAX COMBINED VOLUME FOR ALL RIGHTS AF MAX COMBINED ACRES FOR ALL RIGHTS SUPPLEMENTAL RIGHT. PURPOSE ID AND CLAIM ID OF REF. RIGHT SUPPLEMENTAL RIGHT. PURPOSE ID AND CLAIM ID OF REF. RIGHT ************************************	0.00 36 06S 03E GA 0.00 SE 35 06S 03E GA 0.00 S2S2NE 35 06S 03E GA	0.00 ACRES PERIOD OF USE 199999997 CRES VER. ACRES WRS 19 19 LOT BLK 0TR SEC SEC TWP RGE CO REMARKS 0.00 36 06S 03E GA	WELL	IG SKY OF MONTANA 1X 1 IG SKY MT 59716	ABSTRACT OF CLAIM FOR EXISTING WATER RIGHTS 635-00 PRIORITY DATE:* 08:00 07/01/1971 TYPE OF RIGHT: USE CLAIM RECEIVED: 03/15/82 FEE PAID: \$40 MAX RATE: 220.00 G (MI) MAX VOLUME: 355.00 AF/YEAR MAX ACRES: 0.00
----	--	--	--	------	--	--

05/31/94

 $(1, \infty)$

PAGE 1

ACKNOWLEDGEMENT OF WATER RIGHT TRANSFER FROM DEPARTMENT OF NATURAL RESOURCES AND CONSERVATON STATE OF MONTANA

WATER RIGHT NUMBER 41H -W-122635-00

PLEASE NOTE THAT THIS WATER RIGHT IS IN A TEMPORARY PRELIMINARY OR PRELIMINARY DECREE ISSUED BY THE MONTANA WATER COURTS. THE NEW OWNER MAY WISH TO DETERMINE THE STATUS OF THIS RIGHT IN THE ONGOING ADJUDICATION BY THE MONTANA WATER COURTS.

OWNERS :	LONE MOUNTAIN SPRING PO BOX 160066	G WATER UTILITY	
	BIG SKY	MT 59716	FILMER
PRIORITY DATE:	APR 1, 1971		FILMED
FLOW RATE:	220.00 GALLONS PE	ER MINUTE (G)	
VOLUME:	177.89 ACRE FEET	PER YEAR (AF)	JUN 141994
SOURCE :	WELL		
PURPOSE :			
USE	FLOW	VOLUME (AF) ACRES	PERIOD OF USE
COMMERCIAL	220.00 G	177.89	JAN 1 TO DEC 31

POINTS OF DIVERSION AND MEANS OF DIVERSION:

WELL:	DT BLK	QTR SEC	SEC	TWP	RGE	COUNTY				
		SWSWNE	36	06S	03E	GALLAT	IN			
PLACE OF	USE FOR ACRES	COMMERCIA	L: IT BLM	(QT	R SEC	SEC	TWP	RGE	COUNTY	
001 002 003				\$2	SE S2NE	36 35 35	06S 06S 06S	03E 03E 03E	GALLATIN GALLATIN GALLATIN	
Ē. a	<u>** TRA</u> UPON A CLAIM, DEPART RIGHT	NSFER OF O CHANGE IN THE PART MENT OF NA TRANSFER C	WNERSH OWNER IES TO TURAL ERTIFI	HIP: RSHIP THE RESOU	OF AL TRANS RCES FORM	L OR A Fer Sh AND Co 608.	NY PO ALL F NSERV PURSU	RTION ILE W ATON ANT T	OF THIS ITH THE A WATER O	

SECTION 85-2-424, MCA.

REMARKS: NOTICE OF TRANSFER RECEIVED 1/20/94.

FORM NO. 620 R10/97

USE:

State of Montana Department of Natural Resources and Conservation 48 N. Last Chance Gulch • PO Box 201601 • Helena, Montana 59620-1601



NO. 1

NO. 2 NO. 3 NO. 1

Authorization to Change Appropriation Water Right PURSUANT TO SECTION 85-2-402, MCA, APPLICATION TO CHANGE A WATER RIGHT

NO. 41H G(W)122635-00 SUBMITTED ON FEBRUARY 12, 1999 IS APPROVED.

OWNER:	BIG SKY COUNTY WATER & SEWER DISTRICT NO. 363 C/O RON EDWARDS	MEADOW	VILLAGE	N
	PO BOX 160670	ADDS DI	VERSION	S:
	BIG SKY, MT 59716	MEADOW	VILLAGE	N
WATER RIGHT:	STATEMENT OF CLAIM	MEADOW	VILLAGE	N
NUMBER:	41H-W122635-00	HIDDEN	VILLAGE	N
PRIORITY DATE:	APRIL 1, 1971			
SOURCE:	GROUNDWATER			

THE DEPARTMENT AUTHORIZES THE FOLLOWING CHANGES:

COMMERCIAL

NEW PURPOSE: MUNICIPAL USE

<u>NEW PLACE OF USE:</u> S2 SEC 25, SEC 26, SEC 27, SEC 33, SE SEC 34, SEC 35, SEC 36 T06S R03E; N2 SEC 31, N2SW SEC 31, T06S R04E; SEC 1, NE SEC 2 T07S R03E, GALLATIN COUNTY

ADDITIONAL POINTS OF DIVERSION: SESENW SEC 36, S2SENW SEC 36, SWSWNE SEC 35, T06S R03E, GALLATIN COUNTY

**COMPLETION DEADLINE:

THE DEADLINE TO COMPLET THIS AUTHORIZATION AND FILE A NOTICE OF COMPLETION OF CHANGE OF APPROPRIATION WATER RIGHT (FORM 618) IS DECEMBER 31, 2015. IF EYOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, AT LEAST THIRTY DAYS BEFORE DECEMBER 31, 2015. OTHERWISE, THE AUTHORIZATION IS VOID.

**PROGRESS REPORT REQUIRED:

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE REPORTS MUST BE SENT TO THE BOZEMAN WATER RESOURCES REGIONAL OFFICE.

**WATER MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CASE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME FORM NO. 620 R10/97

 State of Montana

 Department of Natural Resources and Conservation

 48 N. Last Chance Gulch · PO Box 201601 · Helena, Montana 59620-1601



Authorization to Change Appropriation Water Right

THE CHANGE IS ASSOCIATED TO WATER RIGHT NUMBERS: 41H-P49666-00, 41H W107416, 41H I069587-00 AND 41H 122634-00. THIS IS MANIFOLD INTO AN EXISTING SYTEM, USED TO SUPPLY THE MEADOW VILLAGE/HIDDEN VILLAGE SERVICE AREA.

**CONDITIONAL APPROVAL

THE APPROVAL OF THIS CHANGE IS NOT BE CONSTRUED AS RECOGNITION BY THE DEPARTMENT OF THE WATER RIGHTS INVOLVED. ALL WATER RIGHTS ARE SUBJECT TO POSSIBLE MODIFICATION UNDER THE PROCEEDINGS PURSUANT TO TITLE 85, CHAPTER 2, MCA, AND 85-2-404, MCA.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS AUTHORIZATION TO CHANGE.

Jam R Mark	So off mit so
WITNESS	WATER RESOURCES DIVISION August 28, 2000

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670

PROVISIONAL PERMIT/CHANGE AUTHORIZATION NUMBERS:

41H 12263500 41H 107416-00 41H 30026963 41H 6167399 41H 12263499

(Change Authorization) (Provisional Permit) (Change Authorization) (Change Authorization) (Change Authorization)

APPROVED

The requests for additional time to complete these projects are approved because the appropriator has shown diligence in completing the projects or shown good cause for not completing the projects.

The notice of completion deadlines are extended to December 31, 2033.

PROGRESS REPORTS DUE⁻ Currently Required (See Extension of Time Decision)

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601


HIDDEN VILLAGE NO. 1 MEADOW VILLAGE NOS. 1, 2, 3

STATEMENT OF CLAIM NO:41H 122634 00COMPLETION DATE:12/31/2033 (Change Auth.)

This statement of claim was originally filed by Big Sky of Montana Inc for 85 gpm and 137 acre-feet per year from the Hidden Village No. 1 well. In 1986, DNRC reexamination reduced the volume to 68.73 acre-feet per year. In 1999, Lone Mountain Spring Water Utility transferred ownership to the District. Also in 1999, the District filed a change authorization that was approved adding Meadow Village Nos. 1, 2 and 3 as diversions on the right and changing the use to Municipal. In 2015, the District filed for an extension on the change to 12/31/2033.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

A version with a more recent operating authority date exists. Contact DNRC for details.

Water Right Number:	41H 122	634-00 STATE	MENT	OF CLA	AIM					
	Version:	2 CHANGE A	AUTHO	RIZATIO	ON					
		Version Status:	ACTIV	Έ						
	THIS AUT RECOGN CHANGE USE IS R CHAPTEI AMOUNT	HORIZATION I IZED BY THE D , AND WILL THI EDUCED UNDE R 2, PART 2, MG	S LIMIT EPAR EREAF ER ADJ CA, THI	TED TO TMENT TER NO UDICAT	THE A IN THI DT EXC FION P HORIZA	MOUNT OF T S PROCEEDI CEED THAT A ROCEEDING TION WILL B	THE HISTORIC NG AS SUBJE MOUNT. IF TH S PURSUANT SE LIMITED TO	USE CT TO E HISTORIC TO TITLE 85, A LESSER		
Owners:	BIG SKY % RON E PO BOX	COUNTY WATE DWARDS 160670	ER & S	EWER I	DIST #3	363	HIDDEN	VILLAGE	NO.	1
Defenity Deter	BIG SKY,	MI 59716-067	0				MEADOW	VILLAGE	NO.	1
Enforceable Pric	AFNLI,	DDII 1 1071					MEADOW	VILLAGE	NO.	2
Purpose (use):		AI					MEADOW	VILLAGE	NO.	3
Maximum Flow Rate:	85.00 GP	M								
Maximum Volume:	68.73 AC	-FT								
Source Name:	GROUNE	WATER								
Source Type:	GRC	UNDWATER								
Point of Diversion and ID 1	Means of Div Govt Lot	ersion: <u>Qtr Sec</u> SW/SW/NE	<u>Sec</u> 35	Twp 6S	Rge 3E	<u>County</u> GALLATIN				
Period of Divers	ion:JANUAR	Y 1 TO DECEM	BER 31							
2		SWSWNE	36	6S	3E	GALLATIN				
Period of Divers Diversion Means	ion:JANUAR	Y 1 TO DECEM	BER 31							
3		SESENW	36	6S	3E	GALLATIN				
Period of Divers Diversion Means	ion:JANUAR s: WELL	Y 1 TO DECEM	BER 31							
4		S2SENW	36	6S	3E	GALLATIN				
Period of Divers Diversion Means	ion:JANUAR s: WELL	Y 1 TO DECEM	BER 31							
Period of Use:	JANUAR	Y 1 to DECEME	BER 31							
Place of Use:										
ID Acre 1 2 3	<u>S Govt Lot</u>	<u>Qtr Sec</u> S2	<u>Sec</u> 25 26 27	<u>Twp</u> 6S 6S 6S	<u>Rge</u> 3E 3E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN				
4 5 6 7 8		SE N2	33 34 35 36 31	65 6S 6S 6S	3E 3E 3E 3E 4E	GALLATIN GALLATIN GALLATIN GALLATIN				
9 10 11		N2SW NE	31 1 2	6S 7S 7S	4E 3E 3E	GALLATIN GALLATIN GALLATIN				

Remarks:

THE WATER RIGHTS LISTED FOLLOWING THIS STATEMENT ARE ASSOCIATED. THEY SHARE THE SAME WELLS. P049666-00, P107416-00, W122634-00, W122635-00.

Remarks:

AUTHORIZATION TO CHANGE THE PLACE OF USE, POINTS OF DIVERSION, PURPOSE OF USE ISSUED 08/28/00. NOTICE OF COMPLETION DUE 12/31/15. SEE 41H-G(W)122634-00.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/94.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

Form No 76 O R2/80		RECEIVED
3263° STATE	EMENT OF CLAIM	
		MAR 1 9 1902
GA-U For the Water Ca		MONTANA D.N.R.C.
10-105-01-01 FOI THE WATER CO		OMANABUZEMAN HELD UFFICE
4) 1 Owner of Water Bight 13/6 SIFY	NE MANIE THE	1
		First Middle Initial
Interest Owner		
Address P_{0} , $\beta_{0} \neq I$,	First Middle Initial
City Big Stry St	ate Mont	Zip Code 59716
Home Phone No. 995- 4211	Business Phone No	
2. Person completing form $T_{AU} + T_{AU}$	1 Par	mond I J
Address P. A 13a Q DL		First Middle Initial
City Big Sty Mont st	ate Montand	Zip Code 59716
Home Phone No. 995-4304	Business Phone No.	995-4211
3. Use: (Check Only One) FR Fish Raceways GE Geother FW Fish & Wildlife NV Naviga CM Commercial FP Fire Pr IN Industrial AS Agricu MC Municipal OF Oil We	ermal MN MN M ation PG F rotection RC F Iltural Spraying OT C ell Flooding Expla	Mining Power Generation Recreation Other in
4. Source of Water: (Check Only One)		
Spring Name		
Well Name Mobil Home	& Hidden Village,	
Stream Name	Tributary	of
L Lake Name	Stream	
Reservoir Name	Stream	
Tributary of		
5. Point of Diversion: County Gallan	lin	
5W 1/4 5W 1/4	NF 1/4, Section 35, T	6 ∰/S, R_3 E/∰
Lot, Block	, Subdivision	
6. Means of Diversion: X Well	-	
Pump ~	Capacity 85	_gpm
\mathcal{R} \mathcal{R} \mathcal{R} \mathcal{R} \mathcal{R} \mathcal{R} Headgate with \Box Instream use	n aitch or pipeline	
☐ Other	Explain	
7. Means of Conveyance: Ditch	 Instream Other: 	

2

1112	stream	City or	r Town	🗌 Ot	her: E	xplain				÷.,	i.		• •
	Lot	Block,	1/4	1/4	5W 1/4.	Section	35	. т	6	1 /S.	R	3	E/W
	Lot.	Block.	1/4	1/4	1/4.	Section	~~~	. т		N/S.	R	1	≉ E/W
· · · · · · · · · · · · · · · · · · ·	Lot .	Block	1/4	1/4	1/4	Section		, т		N/S	B		
	Lot	Block	/^4	/4		Section		'' T	1	, 1.		31	_,'
e		Block	74		74,	Section_		'' T		M/S	n		
Subdivi	,	BIOCK,	74	74	74,	Section_				14/0,			
Oubain	31011					<u> </u>						7.1	2.5
9. Flow ra	te claimed:	8	35	¤	cubic fe gallons miner's	eet per s per min inches	econd ute \						
10 Volume	claimed:	127		àcte	feet ner	vear			(•)				
ro. volume	claimed.	-101-		acre	leet per	ycai							
11. Period(s	s) of use:	_Jan /		to <u>DE</u>	<u>C/</u>	31 Day							
12 Chack			od Water F	light		Prior	ity data	or da	to of	firet	1186		
12. CHECK	Sile.			ion Diabt	8.	no AM	Tue	orua p		11150	10"	71	
	• •		Appropriat	ion Right	0.0	Hour	Month	<u>c_</u> /_	Day		Ye	ar	5
			Vater Right										
			11 NOV 1111			Right							
13. Attach	copies of th	he Decree, Re	ecord of Fi	ling or Pro	of of Use	; munit.							
13. Attach	copies of ti	he Decree, Re	ecord of Fi	ling or Pro	oof of Use	: night.							
13. Attach	copies of the copies of a	he Decree, Re erial photogra	ecord of Fi aphs, U.S. (ling or Pro Geologica	l Survey n	naps or :	such ot	her do	ocum	ents	пес	esșa	ry to
13. Attach	copies of the copies of a copi	he Decree, Re erial photogra ersion, place o	ecord of Fi aphs, U.S. (of use, plac	ling or Pro Geologica ce∙of stora	oof of Use I Survey n age, and c	naps or s conveyar	such ot ice faci	her do litiés.	ocum	ents	nec	esșa	ry to
13. Attach	copies of the copies of the copies of a co	he Decree, Re erial photogra rsion, place o	ecord of Fi aphs, U.S. (of use, plac	ling or Pro Geologica ce∙of stora	oof of Use I Survey n age, and c	naps or a conveyar	such ot ice faci	her do lities.	ocum	ents	nec	esşa	ry to
13. Attach	copies of the copies of a copies of a copies of a copies of a contract of diverged Stateme	he Decree, Re erial photogra ersion, place o ent signed by	ecord of Fi aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce∙of stora	of of Use I Survey n age, and c	naps or sconveyar	such ot ice faci	her do lities.	ocum	ents	nec	esșa	ry to
13. Attach	copies of the copies of a oint of dive ed Stateme	he Decree, Re erial photogra ersion, place o ent signed by NA	ecord of Fi aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce∙of stora)	oof of Use I Survey n age, and c	naps or s	such ot ice faci	her do lities.	ocum	ents	nec	esşa ."	ry to
13. Attach	copies of the copies of a bint of dive ed Stateme OF MONTA	he Decree, Re erial photogra ersion, place o ent signed by	ecord of Fi aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce of stora) :ss.	of of Use I Survey n age, and c	naps or s	such ot ice faci	her do lities.	ocum	ents	nec	esşa	ry to
13. Attach Attach show po 15. Notarize STATE County	copies of the copies of the copies of a co	he Decree, Re erial photogra ersion, place of ent signed by NA	ecord of Fi aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce of stora) .:ss.)	oof of Use I Survey n age, and c	naps or : conveyar	such ot ice faci	her do lities.	ocum	ents	nec	esşa	ry to
13. Attach Attach show po 15. Notariz STATE County 1,	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u>	he Decree, Re erial photogra insion, place of ant signed by NA Id I n d J Jour	ecord of Fil aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce of stora) .:ss.)	of of Use I Survey n age, and c	naps or s conveyar	such ot nce faci duly sw	her do lities. orn, c	lepos	ents e an	nec	esşa '*	ry to nat I,
13. Attach Attach show p 15. Notariz STATE County I, being o	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> /	he Decree, Re erial photogra rision, place of ent signed by NA Id I I n and being the	ecord of Fi aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce of stora) :ss.)	, having	naps or s conveyar	such ot nce faci duly sw er right,	orn, c	lepos	ents e an rson	nec who	ay th	ry to nat I,
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> /	he Decree, Re erial photogra insion, place of int signed by NA Id I I n and being the he claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.) (ing or Pro Geologica ce of stora) (:ss.) of this clai	, having m of exist this claim	g been of ting wate	such ot nce faci duly sw er right, e matter	orn, c and t s and	lepos he pe thing	ents e an rson is sta	nec who ated	ay those n	ry to nat I, name e are
13. Attach Attach show p 15. Notariz STATE County I, being o is signe true and	copies of the copies of a point of dive ed Stateme OF MONTA of <u>Ca</u> flegal age to it as the d correct)	ne Decree, Re erial photogra rision, place of ant signed by NA Id I I n and being the ne claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.	ling or Pro Geologica ce of stora) :ss.) of this clai	, having , having m of exist this claim	g been of ting wate	such ot ace faci duly sw er right, matter	orn, c and t s and	lepos he pe thing	ents e an rson is sta	nec ad s who	esşa ay th ose n there	ry to and I, ame e are
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> / auf <u>more</u> f legal age ed to it as the d correct)	ne Decree, Re erial photogra ersion, place of ant signed by NA Id I n and being the ne claimant, k	claimant.) Geologica ce of stora) :ss.) of this clai	, having , having m of exist this claim	g been of ting wate and the	such ot nce faci duly sw er right, matter	orn, o and t s and	lepos he pe thing	ents e an rson is sta	nec ad s who ated	ay those n	ry to aat I, ame e are
13. Attach Attach show p 15. Notariz STATE County I, being o is signe true and	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> flegal age d to it as the d correct)	he Decree, Re erial photogra rision, place of ant signed by NA Id I n and being the he claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.) Geologica ce of stora) :ss.) of this clai	, having m of exist	g been of ting wate	such ot ace faci duly sw er right, matter	orn, c and t s and	lepos he pe thing	ents rson s sta	nec who ated	esşa ay th ose n there	ry to ame e are
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> / d correct)	ne Decree, Re erial photogra rision, place of the signed by NA Id I I n and being the ne claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.) Seologica ce of stora) :ss.) of this clai ontents of	, having m of exist this claim	g been of ting wate and the	duly sw er right, matter	orn, orn, orn, orn, orn, orn, orn, orn,	lepos he pe thing	ents rson s sta	nec who ated	ay those n	ry to
13. Attach Attach show po 15. Notariz STATE County I, being o is signe true and	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> / cumor f legal age to it as the d correct	he Decree, Re erial photogra insion, place of ant signed by NA Id I n and being the he claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.) Geologica ce of stora) :ss.) of this clai	, having m of exist this claim	g been of ting wate and the day of	duly sw er right, matter	orn, c and t s and	depos he pe thing	ents le an rson ls sta	nec who ated	ay those n	at I, ame are
13. Attach Attach show p 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> / d to it as the d correct) bed and sw	he Decree, Re erial photogra rision, place of ant signed by NA I d f i n and being the he claimant, k	claimant.	ling or Pro Geologica ce of stora) :ss.) of this clai	, having mof exist this claim	g been of ting wate and the day of	duly sw er right, matter	orn, c and t s and	lepos he pe thing	ents rson s sta	nec who ated	ay those n there	ny to
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of diverse ed Stateme OF MONTA of <u>Ca</u> / d to it as the d correct?	he Decree, Re erial photogra rision, place of ant signed by NA Id I n and being the he claimant, k	claimant.) Geologica ce of stora	, having m of exist this claim	g been of ting wate and the day of	such ot ice faci duly sw er right, matter	orn, c and t s and	depos he pe thing	ents e an rson is sta	nec ad s who ated	ay those n	ry to
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> flegal age to it as the d.correct) bed and sv	ne Decree, Re erial photogra rision, place of ant signed by NA Id I I n I J Journ and being the ne claimant, k	ecord of Fi aphs, U.S. (of use, place claimant.	ling or Pro Geologica ce of stora) :ss.) of this clai ontents of	_, having m of exist this claim	g been of ting wate and the day of	duly sw er right, matter	orn, c and t s and	depos he pe thing	e an rson is sta	nec ad s who ated	ay those n there	ry to
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of diverse ed Stateme OF MONTA of <u>Ca</u> / d to it as the d correct.	he Decree, Re erial photogra int signed by NA Id I n and being the he claimant, k	ecord of Fil aphs, U.S. (of use, plac claimant.) Geologica ce of stora) :ss.) of this clai ontents of	, having mof exist this claim	been of ting water and the day of State of Mor	duly sw er right, matter	orn, c and t s and	depos he pe thing	ents e an rson is sta	nec ad s who ated	ay those n there	ing to
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of dive ed Stateme OF MONTA of <u>Ca</u> flegal age to it as the correct) bed and sw	he Decree, Re erial photogra int signed by NA Id I I n and being the he claimant, k	claimant.	ling or Pro Geologica ce of stora) :ss.) of this clai ontents of / /	, having mof exist this claim	g been of ting wate and the day of State of Mor	duly sw er right, matter	orn, c and t s and	depos he pe thing	ents rson s sta	nec ad s who ated	essa ay th ose n there	ry to
13. Attach Attach show po 15. Notarize STATE County I, being o is signe true and Subscri	copies of the copies of a oint of diverse ed Stateme OF MONTA of <u>Ca</u> / fugal age ad to it as the d correct.	he Decree, Re erial photogra ersion, place of ant signed by NA Id I n and being the he claimant, k	claimant.	ling or Pro Geologica ce of stora) :ss.) of this clai ontents of / / Notaty Residi	, having mof exist this claim	been of ting wate and the day of State of Mor	tuly sw er right, matter	orn, c and t s and	lepos he pe thing	ents e an rson s sta	nec ad s who ated	essa ay th ose n there	

09/13/83 03/15/82 FEE PAID: \$40	TE 85.G REMARKS	ES FOR ALL RIGHTS	
DF NATURAL RESOURCES AND CONSERVATION DF CLAIM FOR EXISTING WATER RIGHTS 36/01/1971 TYPE DF RIGHT: FILED CLAIM RECEIVED MI) MAX VOLUME: 137.00 AF/YEA	716 LOT BLK -QTR-SEC SEC - TWP RGE CO SWSWNE 35 06S 03E GA YIELD RA 599999997 9 LOT BLK QTR-SEC-SEC TWP RGE CO SW 35 06S 03E GA		IFIED (FRDM: _CLMNTS MAP _GRID DN FLNG) COMMENTS _ VONE GIVEN COMMENTS
DEPARTMENT ABSTRACT ABSTRACT ABSTRACT CLAIM ID 4 IH -W-122634-00 PRIDRITY DATE:* 08:00 C CLAIM ID 4 IH -W-122634-00 PRIDRITY DATE:* 08:00 C OWNERS: (M) - C BIG SKY DF MONTANA	BIG SKY MT 597 SOURCES: WL 01 WELL SOURCES: WL 01 0.000 USE: CM 01 0.000 USE: CM 01 0.000 PARCELS: 001 0.000	ADDENDUMS: _YES NO (DVRS RSRV _POU _RMRK SUPPLEMENTAL _IF_REF. RIGHT, MAX COMBINED VOLUM RIGHTS: IF SUPPLEMENTAL RIGHT, PURPOSE ID ************************************	SOURCE NAME OK: YES NO (FROM: USGS TOPO MAP IYPE CD (S/G) OK: YES NO COMMENTS POD OK: WL 01 YES NO LAPPEARS CORRECT _UNVERI PROOF OF USE: CLAIMED FRIY DATE OK: YES LUO NO ELOW RATE OK: YES NO COMMENTS VOLUME OK: YES NO COMMENTS VOLUME OK: YES NO COMMENTS PERIOD OF USE OK: LYES NO COMMENTS PERIOD OF USE OK: LYES NO COMMENTS

SELECTED OTHER USE CLAIMS BASIN 41H ABSTRACT OF WATER RIGHT

WATER RIGHT NUMBER 41H -W-122634-00

QWNERS: BIG SKY OF MONTANA INC PO BOX 1 BIG SKY MT 59716 PRIORITY DATE: APR 1, 1971 ELOW_RATE: 85.00 GPM

VOLUME: 68.73 ACRE FEET PER YEAR

SOURCE: WELL

PURPOSE [USE]: COMMERCIAL

PERIOD OF USE: JAN 1 TO DEC 31

POINTS OF DIVERSION AND MEANS OF DIVERSION:

LOT BLK QTR SEC SEC TWP RGE COUNTY

SWSWNE 35 06S 03E GALLATIN WELL

2

PLACE OF USE FOR COMMERCIAL

OOI SW 35 06S 03E GALLATIN REMARKS: SEE GENERAL FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR FURTHER DELINEATION OF THIS RIGHT.

PAGE 129

FORM NO. 620 R10/97 State of Montana Department of Natural Resources and Conservation 48 N. Last Chance Gulch · PO Box 201601 · Helena, Montana 59620-1601 Authorization to Change Appropriation Water Right PURSUANT TO SECTION 85-2-402, MCA, APPLICATION TO CHANGE A WATER RIGHT NO. 41H G(W)122634-00 SUBMITTED ON FEBRUARY 12, 1999 IS APPROVED. HIDDEN VILLAGE NO. 1 **BIG SKY COUNTY WATER & SEWER DISTRICT #363** OWNER: % RON EDWARDS ADDS DIVERSIONS: PO BOX 160670 MEADOW VILLAGE NO. 1 BIG SKY, MT 59716 MEADOW VILLAGE NO. 2 STATEMENT OF CLAIM WATER RIGHT: MEADOW VILLAGE NO. 3 41H W122634-00 NUMBER: PRIORITY DATE: APRIL 1, 1971 SOURCE: GROUNDWATER USE: COMMERCIAL THE DEPARTMENT AUTHORIZES THE FOLLOWING CHANGES: NEW PURPOSE: **MUNICIPAL** S2 SEC 25, SEC 26, SEC 27, SEC 33, SE SEC 34, SEC 35, SEC NEW PLACE OF USE: 36 T06S R03E; N2 SEC 31, N2SW SEC 31 T06S R04E; SEC 1, NE SEC 2 T07S R03E, GALLATIN COUNTY ADDITIONAL POINTS OF DIVERSION: SWSWNE SEC 36, SESENW SEC 36, S2 SENW SEC 36 T06S R03E, GALLATIN COUNTY **WATER MEASUREMENT RECORDS REQUIRED: THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CASE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN WATER. RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME. PROGRESS REPORT REQUIRED: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE REPORTS MUST BE SENT TO THE BOZEMAN WATER RESOURCES REGIONAL OFFICE. **ASSOCIATED REMARK: THIS CHANGE IS ASSOCIATED TO WTER RIGHT NOS. 41H P49666-00, 41H-P107416-00, 41H I069587-00 AND 41H W122635-00. THEY SHARE COMMON WELLS, WHICH ARE MANIFOLD INTO AN EXISTING SYSTEM. USED TO SUPPLY THE MEADOW VILLAGE/HIDDEN VILLAGE SERVICE AREA.

FORM NO. 620 R10/97

 State of Montana

 Department of Natural Resources and Conservation

 48 N. Last Chance Gulch · PO Box 201601 · Helena, Montana 59620-1601



Authorization to Change Appropriation Water Right

**COMPLETION DEADLINE:

THE DEADLINE TO COMPLETE THIS AUTHORIZATION AND FILE A NOTICE OF COMPLETION OF CHANGE OF APPROPRIATION WATER RIGHT (FORM 618) IS DECEMBER 31, 2015. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, AT LEAST THIRTY DAYS BEFORE DECEMBER 31, 2015. OTHERWISE, THE AUTHORIZATION IS VOID.

**	CO	N	ID	11	[]	0	N	J,	A	L	A	P	P	R	0	V	IA	L
		_	_				_	_	_			_	_	_	_		_	

THE APPROVAL OF THIS CHANGE IS NOT BE CONSTRUED AS RECOGNITION BY THE DEPARTMENT OF THE WATER RIGHTS INVOLVED. ALL WATER RIGHTS ARE SUBJECT TO POSSIBLE MODIFICATION UNDER THE PROCEEDINGS PURSUANT TO TITLE 85, CHAPTER 2, MCA, AND 85-2-404, MCA.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS AUTHORIZATION TO CHANGE.

WITNESS

WATER-RESOURCES DIVISION AUGUST 28, 2000

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670

PROVISIONAL PERMIT/CHANGE AUTHORIZATION NUMBERS:

41H 12263500 41H 107416-00 41H 30026963 41H 6167399 41H 12263499

(Change Authorization) (Provisional Permit) (Change Authorization) (Change Authorization) (Change Authorization)

APPROVED

The requests for additional time to complete these projects are approved because the appropriator has shown diligence in completing the projects or shown good cause for not completing the projects.

The notice of completion deadlines are extended to December 31, 2033.

PROGRESS REPORTS DUE⁻ Currently Required (See Extension of Time Decision)

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601



HIDDEN VILLAGE NO. 2

PROVISIONAL PERMIT NO: 41H 61673 00 COMPLETION DATE: 12/31/2033

This permit was approved in 1987 for 116 gpm and 90 acre-feet per year from Hidden Village No. 2, as the sole point of diversion, which remains the only diversion on the right to-date. It was transferred to the District in 1999. The District subsequently filed a change application to change the use to Municipal and also to modify the Place of Use. Extension of time to complete the right was also filed by the District in 2015, and is approved for 12/31/2033.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

man nght number.	41H 61673-	00 PROVIS		PERMI	T DN				
	Version: 2 Ve	ersion Status:		/F					
Owners:	BIG SKY CC % RON EDV PO BOX 160 BIG SKY, M	DUNTY WATE VARDS 0670 T 59716-067(ER & S	EWER [DIST #3	363			
Priority Date:	OCTOBER 2	21, 1986 at 01	I:41 P.	M.					
Enforceable Prior	ity Date: OCT	OBER 21, 19	986 at (01:41 P.I	M.				
Purpose (use):	MUNICIPAL								
Maximum Flow Rate:	116.00 GPM								
Maximum Volume:	90.00 AC-FT								
Source Name:	GROUNDWATER								
Source Type:	GROUN	IDWATER							
Point of Diversion and M	leans of Diversi	on:							
<u>ID</u> 1	Govt Lot	<u>Qtr Sec</u> SWNWSW	<u>Sec</u> 35	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN			
Period of Diversio Diversion Means:	n: JANUARY 1 WELL	TO DECEM	BER 31	1					
Purnose (Use).	MUNICIPAL								
1 u1 pose (Use).									
Volume:	90.00 AC-F	Г							
Volume: Period of Use:	JANUARY 1	to DECEMB	ER 31						
Volume: Period of Use: Place of Use:	JANUARY 1	to DECEMB	ER 31						
Volume: Period of Use: Place of Use: <u>ID Acres</u>	JANUARY 1	to DECEMB	ER 31 <u>Sec</u>	Twp	Rge	<u>County</u>			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u>	JANUARY 1	to DECEMB Qtr Sec S2	ER 31 <u>Sec</u> 25	Twp 6S	Rge 3E	<u>County</u> GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2	90.00 AC-FI JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2	ER 31 <u>Sec</u> 25 26	<u>Twp</u> 6S 6S	Rge 3E 3E	<u>County</u> GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2	ER 31 <u>Sec</u> 25 26 27 22	<u>Twp</u> 6S 6S 6S	<u>Rge</u> 3E 3E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2	ER 31 <u>Sec</u> 25 26 27 33 24	<u>Twp</u> 6S 6S 6S 6S	<u>Rge</u> 3E 3E 3E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5 6	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2 SE	ER 31 <u>Sec</u> 25 26 27 33 34 35	<u>Twp</u> 6S 6S 6S 6S 6S	Rge 3E 3E 3E 3E 3E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5 6 7	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2 SE	ER 31 <u>Sec</u> 25 26 27 33 34 35 36	<u>Twp</u> 6S 6S 6S 6S 6S 6S	Rge 3E 3E 3E 3E 3E 3E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5 6 7 8	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2 SE	ER 31 25 26 27 33 34 35 36 31	Twp 6S 6S 6S 6S 6S 6S 6S	Rge 3E 3E 3E 3E 3E 3E 3E 4F	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5 6 7 8 9	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	to DECEMB <u>Qtr Sec</u> S2 SE N2 N2SW	ER 31 25 26 27 33 34 35 36 31 31	Twp 6S	Rge 3E 3E 3E 3E 3E 3E 4E 4E	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN			
Volume: Period of Use: Place of Use: <u>ID</u> <u>Acres</u> 1 2 3 4 5 6 7 8 9 10	90.00 AC-F1 JANUARY 1 <u>Govt Lot</u>	r to DECEMB <u>Qtr Sec</u> S2 S2 SE N2 N2SW	ER 31 25 26 27 33 34 35 36 31 31 1	Twp 6S 6S	Rge 3E 3E 3E 3E 3E 3E 4E 4E 3E	<u>County</u> GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN GALLATIN			

Remarks:

ASSOCIATED RIGHT

THE CHANGE IS ASSOCIATED TO WATER RIGHT NUMBERS: 41H P49666-00, 41H P107416, 41H I069587-00, 41H W 122634-00, AND 41H W122635-00. THIS IS MANIFOLDINTO AN EXISTING SYSTEM, USED TO SUPPLY THE MEADOW VILLAGE/HIDDEN VILLAGE SERVICE AREA.

GROUNDWATER WASTE & CONTAMINATION

THIS RIGHT IS SUBJECT TO SECTION 85-2-505, MCA, REQUIRING A WELL BE CONSTRUCTED SO IT WILL NOT ALLOW WATER TO BE WASTED OR CONTAMINATE OTHER WATER SUPPLIES OR SOURCES, AND A FLOWING WELL MUST BE CAPPED OR EQUIPPED SO THE FLOW OF THE WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE.

GROUNDWATER WELL - ACCESS PORT

THE FINAL COMPLETION OF THE WELL(S) MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MEASURED.

CHANGE AUTHORIZATION REMARKS

AUTHORIZATION TO CHANGE THE PLACE OF USE, PURPOSE OF USE ISSUED 08/28/00. NOTICE OF COMPLETION DUE 12/31/15 . SEE 41H-G(P)061763-00 .

IMPORTANT INFORMATION

THIS PERMIT WILL BE USED IN CONJUNCTION WITH STATEMENT OF CLAIM NO. 122634-41H.

Remarks:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

WATER MEASUREMENT - ANNUAL DATA

MEASUREMENT DATA: 1998 00000.00 GPM 00000.00 AC-FT

WATER MEASUREMENT INFORMATION (OLD)

THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATERS DIVERTED, INCLUDING THE PERIOD OF TIME, AND SHALL SUBMIT SAID RECORDS UPON REQUEST TO THE WATER RESOURCES REGIONAL OFFICE LISTED BELOW. BOZEMAN, MT PH: 406-586-3136 FAX: 406-587-9726

WATER MEASUREMENT INFORMATION (OLD)

THE APPROPRIATOR SHALL INSTALL AN ADEQUATE FLOW METERING DEVICE TO ALLOW THE FLOW RATE AND VOLUME OF WATER DIVERTED TO BE RECORDED.

PROGRESS REPORT REQUIRED

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE REPORTS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE.

OWNERSHIP UPDATE RECEIVED

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 1520 EAST SIXTH AVENUE HELENA, MONTANA 59620	
Permit to Appropriate Water	
THIS PROVISIONAL PERMIT TO APPROPRIATE WATER IS HEREBY ISSUED TO:	0
LONE MOUNTAIN SPRINGS WATER UTILITY PO BOX 1 BIG SKY MT 59716	HIDDEN VILLAGE NO. 2
UPON FINDING THAT THE REQUIREMENTS OF SECTION 85-2-311 MCA HAVE BEEN MET.	
PERMIT NUMBER: 61673-G41H	0 0
PRIORITY DATE: OCTOBER 21, 1986 AT 1:41 P.M.	ð A
SOURCE: GROUNDWATER WELL	Č
TOTAL FLOW RATE: 116.00 GPM	Č.
TOTAL VOLUME: 90.00 ACRE FEET PER YEAR	8
A <u>Diversion point</u> : Swnwsw sec. 35 twp. 06s rge. 03e gallatin co	27 27
USE: 116.00 GPM UP TO 90.00 AC-FT (JAN 01 - DEC 31) For commercial	0000,500 0000,500
A <u>PLACE_DF_USE</u> : SW SEC. 35 TWP. 06S RGE. 03E GALLATIN CO For commercial	1000 200
DIVERSION_MEANS: PUMP	ð S
** <u>REQUIREMENTS FOR PERMIT HOLDER</u> : The deadline for completion of this permit, and filing of the notice of completion of permitted water development (form 617) shall be <u>november 30, 1991</u> , verifying that the appropriation of water has been completed as permitted.	20 20 20 20 20 20 20 20 20 20 20 20 20 2
** <u>PRIOR RIGHTS</u> : THIS PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER; THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW.	
** <u>CONTAMINATION, FLOWING WELLS</u> : This permit is subject to section 85-2-505, MCA, requiring that all Wells be constructed so they will not allow water to be wasted, or contaminate other water supplies or sources, and all flowing wells shall be capped or equipped so the flow of water may be stopped when not being put to beneficial use.	
** <u>MEASURING DEVICE</u> : THIS PERMIT IS SUBJECT TO THE CONDITION THAT THE PERMITTEE SHALL INSTALL AN ADEQUATE FLOW METERING DEVICE IN DRDER TO ALLOW THE FLOW GRATE AND VOLUME OF WATER DIVERTED TO BE RECORDED. THE PERMITTEE SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATERS DIVERTED, INCLUDING THE PERIOD OF TIME, AND SHALL SUBMIT SAID RECORDS TO THE DEPARTMENT UPON REQUEST.	
** <u>PROGRESS_REPORT</u> : THIS PERMIT IS SUBJECT TO THE PERMITTEE SUBMITTING A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS PERMIT BY NOVEMBER 30 OF EACH YEAR TO THE WATER RIGHTS BUREAU FIELD OFFICE, 1201 EAST MAIN, BOZEMAN MT 59715.	
** <u>FURTHER INFORMATION:</u> This permit will be used in conjunction with statement OF claim no. 122634-41H.	
FAILURE IO COMPLY WITH ANY IERMS AND CONDITIONS HEREIN MAY RESULT IN THE LOSS OF THE WATER RIGHT GRANIED BY THIS PERMIT.	
** <u>TRANSFER OF OWNERSHIP</u> : UPON A CHANGE IN OWNERSHIP OF ALL OR ANY PORTION OF THIS PERMIT, THE PARTIES TO THE TRANSFER SHALL FILE WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION A WATER RIGHT TRANSFER CERTIFICATE, FORM 608, PURSUANT TO SECTION 85-2-424, MCA.	
DATE: MARCH 31,1987 WATER RIGHTS BUREAU, WATER RESOURCES DIVISION	8
	<u>포</u> 범

FORM NO. 620 R10/97

State of Montana Department of Natural Resources and Conservation 48 N. Last Chance Gulch · PO Box 201601 · Helena, Montana 59620-1601



Authorization to Change Appropriation Water Right

PURSUANT TO SECTION 85-2-402, MCA, APPLICATION TO CHANGE A WATER RIGHT NO. 41H G(P)061673-00 SUBMITTED ON FEBRUARY 12, 1999 IS APPROVED.

OWNER: BIG SKY COUNTY WATER & SEWER DISTRICT #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716

WATER RIGHT: PERMIT TO APPROPRIATE WATER

NUMBER: 41H P061673-00

PRIORITY DATE: OCTOBER 21, 1986

SOURCE: GROUNDWATER

USE: COMMERCIAL

THE DEPARTMENT AUTHORIZES THE FOLLOWING CHANGES:

NEW PURPOSE: MUNICIPAL

<u>NEW PLACE OF USE:</u> S2 SEC 25, SEC 26, SEC 27, SEC 33, SE SEC 34, SEC 35, SEC 36 T06S R03E; N2 SEC 31, N2SW SEC 31 T06S R04E; SEC 1, NE SEC 2 T07S R03E, GALLATIN COUNTY

**ASSOCIATED REMARK:

THE CHANGE IS ASSOCIATED TO WATER RIGHT NUMBERS: 41H P49666-00, 41H P107416, 41H I069587-00, 41H W122634-00, AND 41H W122635-00. THIS IS MANIFOLD INTO AN EXISTING SYSTEM, USED TO SUPPLY THE MEADOW VILLAGE/HIDDEN VILLAGE SERVICE AREA.

**COMPLETION DEADLINE:

THE DEADLINE TO COMPLETE THIS AUTHORIZATION AND FILE A NOTICE OF COMPLETION OF CHANGE OF APPROPRIATION WATER RIGHT (FORM 618) IS DECEMBER 31, 2015. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, AT LEAST THIRTY DAYS BEFORE DECEMBER 31, 2015. OTHERWISE, THE AUTHORIZATION IS VOID.

**WATER MEASUREMENT RECORDS REQUIRED:

APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED IN-LINE FLOW METER AT A POINT IN THE DELIVERY LINE APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN MONTHLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CASE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE BOZEMAN WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME FORM NO. 620 R10/97

State of Montana Department of Natural Resources and Conservation

48 N. Last Chance Gulch · PO Box 201601 · Helena, Montana 59620-1601

Authorization to Change Appropriation Water Right

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. THE REPORTS MUST BE SENT TO THE BOZEMAN WATER RESOURCES REGIONAL OFFICE.

**CONDITIONAL APPROVAL

THE APPROVAL OF THIS CHANGE IS NOT BE CONSTRUED AS RECOGNITION BY THE DEPARTMENT OF THE WATER RIGHTS INVOLVED. ALL WATER RIGHTS ARE SUBJECT TO POSSIBLE MODIFICATION UNDER THE PROCEEDINGS PURSUANT TO TITLE 85, CHAPTER 2, MCA, AND 85-2-404, MCA.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS AUTHORIZATION TO CHANGE.

WITNESS

WATER RESOURCES DIVISION AUGUST 28, 2000

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670

PROVISIONAL PERMIT/CHANGE AUTHORIZATION NUMBERS:

41H 12263500 41H 107416-00 41H 30026963 41H 6167399 41H 12263499

(Change Authorization) (Provisional Permit) (Change Authorization) (Change Authorization) (Change Authorization)

APPROVED

The requests for additional time to complete these projects are approved because the appropriator has shown diligence in completing the projects or shown good cause for not completing the projects.

The notice of completion deadlines are extended to December 31, 2033.

PROGRESS REPORTS DUE⁻ Currently Required (See Extension of Time Decision)

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601



LONE MOOSE NOS. 1, 2

PROVISIONAL PERMIT NO: 41H 115506 00 COMPLETION DATE: 12/31/2032

This permit was approved for 190 gpm and 201.70 acre-feet per year from the two wells listed as diversions and for Multiple Domestic use. Ownership was transferred to the District in 2003. The District filed for extension of time which was approved for 12/31/2032.

2

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 115506-00 Version: 1 C) PROVI DRIGINAL	SIONA RIGHT	L PERM	1IT					
Owners:	Versi BIG SKY COUN % RON EDWAI PO BOX 16067 BIG SKY, MT 5	on Status: NTY WATE RDS 0 9716-0670	ACTIV ER & SI	E Ewer [DIST #3	363	LONE	MOOSE	NOS.	1.
Priority Date:	APRIL 4, 2001 a	at 04:20 P	.M.							
Enforceable Priorit	ty Date: APRIL	4, 2001 at	04:20 I	P.M.						
Purpose (use):	MULTIPLE DO	MESTIC								
Maximum Flow Rate:	190.00 GPM									
Maximum Volume:	201.70 AC-FT									
Source Name:	GROUNDWATE	ER								
Source Type:	GROUNDV	VATER								
Point of Diversion and M	eans of Diversion	:								
<u>ID</u> 1	Govt Lot	<u>Qtr Sec</u> NESW	<u>Sec</u> 28	<u>Twp</u> 6S	Rge 3E	<u>County</u> GALLATIN				
Period of Diversion Diversion Means: Well Depth: Static Water Level Casing Diameter: Pump Size: 2 Period of Diversion Diversion Means: Well Depth: Static Water Level Casing Diameter: Pump Size:	a: JANUARY 1 TC WELL 100.00 FEET 12.00 FEET 8.00 INCHES 20.00 HP a: JANUARY 1 TC WELL 100.00 FEET 8.00 INCHES 20.00 HP	DECEME NESW DECEME	28 28 3ER 31	65	3E	GALLATIN				
Reservoir: Current Capacity:	OFF STREAM Govt Lot N 1.38 ACRE-FE	<u>Qtr Sec</u> IESENW ET	<u>Sec</u> 28	<u>Twp</u> 6S	Rge 3E	<u>County</u> GALLATIN				
Purpose (Use):	MULTIPLE DO	MESTIC								
Housenoids: Volume:	201 70 AC-FT									
Period of Use:	JANUARY 1 to	DECEMB	FR 31							
Diago - 6 I										
IDAcres1	Govt Lot	<u>Qtr Sec</u> NESW	<u>Sec</u> 28	<u>Twp</u> 6S	Rge 3E	<u>County</u> GALLATIN				

Remarks:

OWNERSHIP UPDATE RECEIVED

OWNERSHIP UPDATE TYPE 608 # 11374 RECEIVED 11/10/2003.



STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 48 NORTH LAST CHANCE GUICH P.O.BOX 201601 HELENA, MONTANA 59620-1601

PERMIT TO APPROPRIATE WATER

UPON FINDING THE REQUIREMENTS OF SECTION 85-2-301, MCA, HAVE BEEN MET, THIS PROVISIONAL PERMIT IS GRANTED.

Water Right Number:	41H 115506 Version: 1 Status: AC	00 PROVIS ORIGINAL I TIVE	SIONAL F RIGHT	PERMIT				LONE	MOOSE	NOS.	1,	2
Owners:	LONE MOOS 1000 LONE I BIG SKY, MT	SE MEADOV MOOSE DR F 59716	VS LLC		and succession							
Priority Date:	APRIL 4, 200)1 at 04:20 P	.M.	ATALAS -			ų.,					
Purpose (use):	MULTIPLE D	OMESTIC	and a second s									
Maximum Flow Rate:	190.00 GPM		ala da contra anti- Silica - Ala Sila - Ala Ala Sila - Ala Sila - Ala	an an an an Arrien a Arrien an Arrien an A Arrien an Arrien an A	1999 - 2002 - 1997 1997 - 2002 - 1997 1997 - 2003 - 1997 - 1997							
Maximum Volume:	201.70 AC-F	T atomic and a second	and a second and a s	addingson som solv so	an a	enne van een se		ż.				
Source:			ox Not · Not · : : : : : : : : : : : : : : : : :	N 	ara - 1.67800-586000							
Šõurce Name:	GROHNDWA	TER	- 1998 - 1997 -			and being over 1 and the second		N				
Point of Diversion and M	eans of Diversio	in:	Contraction and the second	Need and the second second	··· 2289 ··· 6666997.	 k¹ = k² = 1, k² =	196 - 29 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196 - 196	1. No 1.				
i ID	Govt Lot	Qtr Sec	Sec	<u>Twp</u>	Rge	County	ana na mana a T	· 9.	ί.			
1. <u>1</u>	<u></u>	NESW	28	6S	3E	GALLATIN						
Diversion Means:				n en		and the second second second						
Static Water Level:	12.00 FEET					State of the second		ħ.	1. A.			
Casing Diameter:	8.00 INCHES	i.	in a dapa -		, Sales -		9 	8				
Pump Size:	20.00 HP			. 6 ⁹								
2	74 - 74	NESW	28	6S	3E	GALLATIN			۰			
Diversion Means:	WELL		110.31		JA BY	한 이번 1919년 1일 교실 지원의 1월 1일			ά <i>ι</i>			
Well Depth:	100.00 FEET						4		ŝi.			
Static water Level:	29:00 FEET											
Casing Diameter:		\$.					2:2:2:2:2:2:2:2:2:2:2:2:2:2:2:2:2:2:2:		2			
Pump Size: Period of Diversion:	JANILIARY 1.1		=R 31				erregi		·			
			-ixoi						w St.			
Reservoir:	OFF STREAM	N	Contraction of the second s	n see		a	ant ant Sant Sant Sant Sant Sant Sant Sa		- 			
	GOALTOL	NESENIA	28	<u>Iwp</u>	<u>Rge</u>		and the second s					
	e angenedilitit M		20	00	JL	OALLAINS	1004 WARDS - 2012		1.U			
Cumuly Constants					annaiste annaiste Annaiste annaiste annaiste Annaiste annaiste ann							
Current Capacity:	1.38 ACRE-1	"EEI		a de la comercia de l	n andrean a Altra a			1. 				
Purpose (Use):	MULTIPLE D	OMESTIC		약 같이 있다. 같이 있는 것은 것은 것은 것이 있는 것이 있는 것이 있다. 같이 같이 같	1000 - 2000 000000000 1000000000	1. State of the second s		je				
Households:				\$#1 	n age and a	and the second		L				
Volume:	201.70 AC-F	Ι.		acazati E Southe Jac. 191	a - Inneres and a - A	S. 1. 1.	2.11	A				
Period of Use:	JANUARY 1	to DECEMB	ER 31			in Mari	Sector f	d ⁹				
Place of Use:	~ ~		- 2004 M () (4)	Nort			15 M 15					
\underline{ID}_{1} <u>Acres</u>	Govt Lot	Otr Sec	Sec	Twp	Rge	County						
1 %	station of the	INEOVV	20	60	3E	GALLATIN						
	· · · · ·					and the second						
COMPLETION DEADLI	NE		Sec. 9. 198			AND STATE						

THE DEADLINE TO COMPLETE THIS PERMIT AND FILE A PROJECT COMPLETION NOTICE (FORM 617) IS DECEMBER 31, 2012. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, BY DECEMBER 31, 2012. OTHERWISE, THE PERMIT IS VOID.

BACKFLOW PREVENTOR

PURSUANT TO SECTION 85-2-505, MCA, TO PREVENT GROUND WATER CONTAMINATION, AN OPERATIONAL BACKFLOW PREVENTOR MUST BE INSTALLED AND MAINTAINED BY THE APPROPRIATOR IF A CHEMICAL OR FERTILIZER DISTRIBUTION SYSTEM IS CONNECTED TO THE WELL.

IF THE OWNERSHIP CHANGES ON ANY PORTION OF OR ALL OF THIS RIGHT, A WATER RIGHT OWNERSHIP UPDATE, FORM #608, MUST BE FILED WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION.

x

THIS PROVISIONAL PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER, THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW.

World uses	Sporth Vindo
Vitness Signature	Water Resources Division
DATE ISSUED: April 11, 2002	

NOTICE OF ACTION FOR EXTENSION OF TIME

Big Sky Water & Sewer District No. 363 %Ron Edwards PO Box 160670 Big Sky, MT 59716

PROVISIONAL PERMIT/AUTHORIZATION NUMBER:

41H 115506-00

APPROVED

The request for additional time to complete this project is approved because the appropriator has shown diligence in completing the project or shown good cause for not completing the project.

The notice of completion deadline is extended to December 31, 2032.

PROGRESS REPORT DUE: NONE

K-8E 3/26/13

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation

Water Resources Division PO BOX 201601 Helena, MT 59601-1601



ASPEN GROVES NOS. 2, 3

PROVISIONAL PERMIT NO: 41H 100681 00 COMPLETION DATE: 12/31/2032

This permit was filed in 1999 for 50 gpm and 33.52 acre-feet per year from two wells for Lawn & Garden, Multiple Domestic, and Fire Protection. The wells are referred to as Aspen Groves Nos. 2 and 3. Water rights were transferred to the District in 2006. The District filed for extension of time and was approved for completion by 12/31/2032.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 100681-		SIONA	AL PERM	1IT		ASPEN	GROVE	NOS.	2,	3
	version.			, _							
Owners:	BIG SKY CO % RON EDW PO BOX 160 BIG SKY, MT	rsion Status: UNTY WATE (ARDS 670 59716-067(ACTINER & S	/E EWER [DIST #	363					
Priority Date:	MAY 13, 199 [°]	7 at 12:53 P.	M.								
Enforceable Pric	ority Date: MAY	13, 1997 at	12:53	P.M.							
Purpose (use):	LAWN AND (GARDEN									
	MULTIPLE D OTHER PUR FIRE PROTE	OMESTIC POSE ECTION									
Maximum Flow Rate:	50.00 GPM										
Maximum Volume:	33.52 AC-FT										
Maximum Acres:	3.06										
Source Name:	GROUNDWA	TER									
Source Type:	GROUN	DWATER									
Point of Diversion and	Means of Diversio	on:	a			<i>a</i> .					
<u>ID</u> 1	<u>Govt Lot</u>	<u>Qtr Sec</u> SWSWSE	<u>Sec</u> 34	<u>Twp</u> 6S	Rge 3E	<u>County</u> GALLATIN					
Period of Divers Diversion Means Well Depth: Static Water Ley Casing Diameter Pump Size: 2	ion: MAY 1 TO O WELL 180.00 FEET vel: 71.00 FEET : 6.00 INCHES 2.00 HP	CTOBER 15	34	65	ЗE	GALLATIN					
2		3003003E	34	03	35	GALLATIN					
Period of Divers Diversion Means Well Depth: Static Water Le Casing Diameter Pump Size:	ion: MAY 1 TO O S: WELL 340.00 FEET vel: 68.00 FEET :: 6.00 INCHES 3.00 HP	CTOBER 15									
Purpose (Use):	LAWN AND	GARDEN									
Irrigation Type: Volume:	SPRINKLER 3.06 AC-FT										
Period of Use:	MAY 1 to OC	TOBER 15									
Place of Use: <u>ID</u> <u>Acre</u> 1 3.0	es <u>Govt Lot</u> 6	<u>Qtr Sec</u> SE	<u>Sec</u> 34	Twp 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN					
Total: 3.0	6										
Purpose (Use): Households: Volume: Period of Use:	MULTIPLE D 89 29.91 AC-FT JANUARY 1	OMESTIC	ER 31								
Place of Use:		04-6	C -	т	D.	Corret					
<u>ID</u> <u>Acre</u> 1	<u>s Govt Lot</u>	<u>Qtr Sec</u> SE	<u>Sec</u> 34	1wp 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN					
Purpose (Use): Volume:	OTHER PUR 0.55 AC-FT	POSE									

Period of Use: JANUARY 1 to DECEMBER 31

Place of Use:

I face of	Use.						
ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			SE	34	6S	3E	GALLATIN

Remarks:

WATER MEASUREMENT-INLINE FLOW METER REQUIRED

THE APPROPRIATOR SHALL INSTALL AN IN-LINE FLOW METER APPROVED BY THE REGIONAL MANAGER AT A POINT IN THE DELIVERY LINE APPROVED BY THE REGIONAL OFFICE TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP YEARLY WRITTEN RECORDS OF THE FLOW RATE AND VOLUME MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR. THE REGIONAL MANAGER MAY ALSO REQUEST MEASUREMENT RECORDS AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

PROGRESS REPORT REQUIRED

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. SUBMIT REPORTS TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

OWNERSHIP UPDATE RECEIVED

OWNERSHIP UPDATE TYPE 608 # 968 RECEIVED 02/04/2002. OWNERSHIP UPDATE TYPE 608 # 30963 RECEIVED 03/01/2006.



FORM NO.601 R11/96

STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 48 NORTH LAST CHANGE GUI CH. P.O. BOX 201601 HELENA MONTANA 59820-1601

Permit to Appropriate Water

PERMIT NUMBER: 100

100681-41H

BY NOVEMBER 30 OF EACH YEAR. THE REGIONAL MANAGER MAY ALSO REQUEST MEASUREMENT RECORDS AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW.

BELOW. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

** <u>PROGRESS REPORT</u>: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. SUBMIT REPORTS TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

** TRANSFER OF OWNERSHIP: UPON A CHANGE IN OWNERSHIP OF ALL OR ANY PORTION OF THIS PERMIT, THE PARTIES TO THE TRANSFER SHALL FILE WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION A WATER RIGHT TRANSFER CERTIFICATE, FORM 608, PURSUANT TO SECTION 85-2-424, MCA.

FAILURE TO COMPLY WITH ANY OF THE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THE WATER RIGHT GRANTED BY THIS PERMIT.

PAGE 2

WITNESS Jan R Mark

WATER RESOURCES REGIONAL MANAGER

DATE: SEPTEMBER 03, 1997 WATER RIGHTS BUREAU, WATER RESOURCES DIVISION

FILMED

Form No. 616 R12/2008

NOTICE OF ACTION FOR EXTENSION OF TIME

Big Sky Water & Sewer District No. 363 %Ron Edwards PO Box 160670 Big Sky, MT 59716

PROVISIONAL PERMIT/AUTHORIZATION NUMBER:

41H 100681-00

APPROVED

The request for additional time to complete this project is approved because the appropriator has shown diligence in completing the project or shown good cause for not completing the project.

The notice of completion deadline is extended to December 31, 2032.

PROGRESS REPORT DUE: November 30, 2013

- 8 3/26/13

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation

Water Resources Division PO BOX 201601 Helena, MT 59601-1601



MOUNTAIN VILLAGE NO. 1

STATEMENT OF CLAIM NO:41H 122636 00COMPLETION DATE:January 30, 1974

This statement of claim was filed in 1982 for 240 gpm and 387 acre-feet per year of Commercial use from the listed diversion, now colloquially named Mountain Village No. 1. The right was verified in ca. 1983 without changes. DNRC reexamined the right and reduced the volume to 194.06 acre-feet in ca. 1985. The volume of this right was subsequently rolled into Permit 41H 100737 00 (see this right below) at the request of the Applicant (Boyne USA, Inc.). The right was transferred to the District in 1999. The completion date for claims cannot be extended.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 122636-00 STATEMENT OF CLAIM Version: 3 POST DECREE	MOUNTAIN VILLAGE NO. 1
Owners:	Version Status: ACTIVE BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670	
Priority Date:	JANUARY 30, 1974	
Enforceable Priorit Type of Historical Right:	y Date: JANUARY 30, 1974 USE	
Purpose (use): Maximum Flow Rate:	COMMERCIAL 240.00 GPM	
Maximum Volume:	194.06 AC-FT	
Source Name:	GROUNDWATER	
Source Type:	GROUNDWATER	
Point of Diversion and Me ID 1	eans of Diversion: <u>Govt Lot</u> <u>Qtr Sec</u> <u>Sec</u> <u>Twp</u> <u>Rge</u> <u>County</u> SWSESE 19 6S 3E MADISO	N
Period of Diversion Diversion Means: Subdivision:	JANUARY 1 TO DECEMBER 31 WELL CASCADE SUBD (BIG SKY) BLOCK: 001	
Period of Use:	JANUARY 1 to DECEMBER 31	
Place of Use:		
$\frac{\mathbf{ID}}{1}$ Acres	Govt LotQtr SecSecTwpRgeCountySE196S3EMADISC	N
Subdivisio 2	m: CASCADE SUBD (BIG SKY) BLOCK: 001 NW 29 6S 3E MADISC	N
Subdivisio 3	m: CASCADE SUBD (BIG SKY) BLOCK: 006 NE 30 6S 3E MADISC	N
Subdivisio	on: CASCADE SUBD (BIG SKY) BLOCK: 006 NE 30 6S 3E MADISC	N
Subdivisio	m: CASCADE SUBD (BIG SKY)	

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE ASSOCIATED WHICH MEANS THE RIGHTS SHARE THE SAME PLACE OF USE.

100737-00 122636-00 122637-00 133733-00

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/94. NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

\rightarrow \sim			
Form No. 76-0 R2/80	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
122636	STATEMENT OF CLAIM	vi	ST.
	41H FOR EXISTING WATER RIC	GHTS MAR 15	1982
UND I	OTHER USE	ES MUNTANA	D.N.R.C.
11/17-00	For the Water Courts of the State	of Montana Fil	LD OFFICE
10-105-01-01			•
1. Owner of Water Riv	ght BIG SKY OF MONTANA	INC	
Co-Owner or Other	Last	First	Middle Initial
Interest Owner	/	/	
Address PA	Bax 1	First	Middle Initial
City BIG SK	State MONTANA	Zip Code	5.9716
Home Phone No.	Business Phone	e No. 995-4211	
2 Person completing	form TAUT I PAN	YMAND	\mathcal{T}
2. reisen completing	Last	First	Middle Initial
Address 1.0.	30× 806	7. 0.1	
City <u>BIG SF</u>	State 70NTANA		397/6
Home Phone No.	Business Phone	e No. 773 - 92 11	
3. Use:	(Check Only One)		
FW Fish & Wild	life NV Navigation P	PG Power Generation	
см 🕱 Commercial	FP Fire Protection	Recreation	
IN 🗌 Industrial	AS Agricultural Spraying	or 🗌 Other	
MC Municipal	of Oil Well Flooding	Explain	
4. Source of Water:	(Check Only One)		
Spring	Name		
🗙 Well	Name HILL	б 167	
Stream	Name Tr	ibutary of	
🗌 Lake	Name St		
	Tributary of		
Reservoir	Name St	ream	
	Tributary of		
5. Point of Diversion:	County Madison		
	SW 1/4 SE 1/4 SE 1/4, Section 19	, T 6 % /S, R	3 E/1
.01	Lot, Block, Subdivisi	on CASCADE	
FPMagne at Diversion			
Co. Wears of Diversion	Pump Capacity) gpm	
P	M Headgate with ditch or pipeline		
ſ	Instream use		
	Other Explain		///
7. Means of Conveya	Other Explain nce: Ditch Instream		

1

				, second		~~~~~	~~~~					
8.	Place of Use:	County MA	DISON	/	1111-1-		_				<u>.</u>	• •
	L Instream	└ City or T	own		her:	Explain _	RES	ORI	Γ	I	-	•
	Lot,	Block,	^{1/4}	1⁄4	SE V	, Section	19_	T	6_3	/S, R_	3	_E/
	<u> </u>	Block,	1/4	^{1/4}	A/E	*, Section_	30	· ' _	6_¶ / /	из, н_ NS р	3	_E/
		Block,	1/4		NE V	A, Section	30	, ' т	<u>د</u>	15, R_	3	 E/1
		Block	1/4	/4 - 1/4	/ · · · · · · · · · · · · · · · · · · ·	Section		, ' т		//S R		E/W
	Subdivision	CASCAD	E			,		· · · ·				
9.	Flow rate claim	ned:	240	X	cubic gallon miner'	feet per s s per min s inches	second					
10.	Volume claime	d: 3	87	acre	e-feet per	year						
11.	Period(s) of use	e: JAN Month	/to Day		FC /	3/ Day						
12.	Check one:	Decree	d Water Rig	ht		Prior	ity date	or da	te of f	irst us	е	
		Filed A	ppropriation	Right	÷	8:00AM	1 Oct	1	1	119	772	
		🗴 Use Wa	ter Right			Hour	Month		Day	Y	ear	
12	Attach conies	of the Decree Rec	ord of Filin	a or Pr	oof of Us	e Right	×					
15.	Allacii copies (or the Decree, nec		yorr		e night.	3 83					
14.	Attach copies of show point of of	of aerial photograp diversion, place of	hs, U.S. Ge use. place	ologica of stor	al Survey age, and	maps or conveya	such ot nce faci	her do lities.	cume	nts neo	cessa	ry to
		(2.)			•							
15.	Notarized State	ement signed by c	aimant.									
	STATE OF MON	ντανα)								
	OTATE OF MOI	La du		:ss.			65 - 197					
	County of	adisean	A	_)			11					
ĸ	I, <u>Harfin</u> being of legal a is signed to it a true and correc	ge and being the claimant, know	laimant of t	his cla ents of	, havir im of exi this clai	ng been o sting wat m and the	duly sw er right, e matter	orn, d and th s and	lepose he pers things	e and s son wh s stated	say th lose r d ther	nat I, name e are
		· · · · · · · · · · · · · · · · · · ·	V	, 								
1				(<u></u>								
	Subscribed and	d sworn before me	this	7th		dav of	Ma	rch		1	982	
				Notary	Har II	e State of Mo	ntana Mônt	Je	un	e		
				Resid	ing at		,		-	÷		
				My Co	ommissio	on expires	s <u>1/</u>	15/83				
sse	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		ssssss s	mm	~~~~	~~~~~	mm	server a		s	00000	00000

*

2 3

1.0

~

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	09/13/83
ABSTRACT OF CLAIM FOR EXISTING WATER RIGHTS	
CLAIM ID 41H -W-122636-00 (CONTINUED)	
PROOF OF USE: CLAIMED FLOW RATE OK: VES NO NONE GIVEN COMMENTS	
CLAIMED PRTY DATE DK: YES VND COMMENTS 6W2 FILING DATE 15 01/30/7	
FLOW RATE DK: WES NO COMMENTS	And a second sec
VOLUME OK: VES NO COMMENTS	a second and the second se
PRIORITY DATE OK: LYES _NO (_APPLIED LAST MONTH OF YR _APPLIED LAST DAY OF MONTH) COMMENTS	
AIR PHOTO VERIFICATION OF DEVELOPMENT: PHOTO DAVE PHOTO DATE	
ΡΗΟΤΟ ΡΑΤΕ.	(a) A provide a state of the second state o
PHOTO DATE PHOTO DATE	(4) ²
TELEPHONE CONTACT: _YES 40 DATE COMPLETED // BY COMMENTS	
LETTER CONTACT: _YES LOO DATE COMPLETED _/ BY COMMENTS	
OWNERSHIP:YES 40 DATE COMPLETED _/ BY COMMENTS	and the second se
INTERVIEW:YESYO DATE COMPLETEDBY COMMENTS	
FIELD INVESTIGATION: YES NO APPROVED BY DATE CHECKED / BY COMMENTS	La construction de la constructi
GENERAL REMARKS:	1 1 1 1
	The second secon
	(* ~ t) *
	A DESCRIPTION OF A DESC
	2005. 2005
Provide and the state of the	initial and a restrict in the second se
ante a constructiones de la serie de la serie de la serie a se	z (Ma) a s a z s s sub
INVESTIGATED BY PARE & COMPANY DATE WILLIGH	
	(a) S

TEMPORARY PRELIMINARY DECREE GALLATIN RIVER BASIN BASIN 41H ABSTRACT OF WATER RIGHT

WATER RIGHT NUMBER 41H -W-122636-00

DWNERS:	BIG SKY DF	MONTANA	INC		
	BIG SKY			MT	59716
		_			

PRIDRITY DATE: JAN 30, 1974

FLOW RATE: 240.00 GPM

VOLUME: 194.06 ACRE FEET PER YEAR

SOURCE: WELL

PURPOSE (USE): COMMERCIAL

PERIOD OF USE: JAN 1 TO DEC 31

POINTS OF DIVERSION AND MEANS OF DIVERSION:

LO	T	BLK	QTR	SEC	SEC	TWP	RGE	COUNTY	
_								and the second se	

001	SWSESE	19	065	0 3E	MADISON	MELI
-----	--------	----	-----	------	---------	-------------

PLACE OF USE FOR COMMERCIAL

	ACRES	LOT BLK	QTR SEC	SEC	TWP	RGE	COUNTY
001 002 003 004		001 006 006	SU NW NU	19 29 30 30	06S 06S 06S 06S	03E 03E 03E 03E	MADISON NADISON MADISON MADISON

REMARKS: SUBDIVISION:

Ì

CASCADE

SEE GENERAL FINDINGS OF FACT AND CONCLUSIONS OF LAW FOR FURTHER DELINEATION OF THIS RIGHT.

. 5 . 4

MOUNTAIN VILLAGE NO. 2

STATEMENT OF CLAIM NO:41H 122637 00COMPLETION DATE:January 30, 1974

This statement of claim was filed in 1982 for 80 gpm and 129 acre-feet per year for Commercial use from the listed diversion, now colloquially known as Mountain Village No. 2. DNRC verified the right in ca. 1983, and then reduced the volume to 64.09 acrefeet in ca. 1985. The volume was rolled into Permit 41H 100737 00 (see this right below) at the request of the Applicant (Boyne USA, Inc.). The right was transferred to the District in 1999. The completion date for claims cannot be extended.
STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Nu	mber:	41H 122 Version:	:637-00 3 PO	STATE ST DEC	MENT (REE	OF CLA	IM	M	IOUNT	AIN	VILLAG	E	NO.	2
Owners:		BIG SKY % RON I PO BOX BIG SKY	Version Status: ACTIVE SIG SKY COUNTY WATER & SEWER DIST #363 6 RON EDWARDS O BOX 160670 SIG SKY, MT 59716-0670 ANUARY 30, 1974											
Priority Date:		JANUAR	ANUARY 30, 1974											
Enforceab Type of Historic	le Priority al Right:	y Date:	JANUAR	Y 30, 197	74									
Purpose (use): Maximum Flow	Rate:	COMME 80.00 GF	RCIAL M											
Maximum Volur	ne:	64.69 AC	C-FT											
Source Name: Source Ty	pe:	GROUN GRO	GROUNDWATER GROUNDWATER											
Point of Diversion <u>ID</u> 1	on and Me	ans of Div Govt Lot	version: <u>(</u> NE	Qtr Sec NENE	<u>Sec</u> 30	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>Count</u> MADI	<u>ty</u> ISON					
Period of I Diversion Subdivisio	Diversion: Means: on:	JANUAR WELL CASCAE	XY 1 TO I	DECEME	BER 31 (Y)									
I ciliou or Osc.		JANUAI	VI I IO L		EK 31									
Place of U	se: <u>Acres</u>	Govt Lot	<u>(</u>	<u>Qtr Sec</u>	Sec	Twp	Rge	Coun	<u>ity</u>					
1	Subdivisio	on:	CASCAI	SE DE SUBE NW	19 0 (BIG \$ 29	6S SKY) BL 6S	3E .OCK: 3E	MAD 001 MAD	ISON					
3	Subdivisio	on:	CASCAI	DE SUBE NE	0 (BIG \$ 30	SKY) BL 6S	OCK: 3E	006 MAD	ISON					
4	Subdivisio Subdivisio	on: on:	CASCAI CASCAI	DE SUBE NE DE SUBE	0 (BIG \$ 30 0 (BIG \$	SKY) BL 6S SKY)	.OCK: 3E	006 MAD	ISON					

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE ASSOCIATED WHICH MEANS THE RIGHTS SHARE THE SAME PLACE OF USE.

100737-00 122636-00 122637-00 133733-00

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/1994. NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/1999.

Form No 76-O R2/80	STATEMENT OF CLAIM	RECEIVED MAR 1 5 1982
MA-U 10-105-01-01 F	or the Water Courts of the State of Monta	MONTANA D.N.R.C.
1. Owner of Water Right	BIG SIXY OF MONT. INC	/ Ø
. Co-Owner or Other Interest Owner	Last First	// Middle Initial
Address <u>P. O.</u> City <u>B & S K }</u> Home Phone No. 9 9	30x 1 State MONFANA 7.5-4211 Business Phone No.	Zip Code77716
2. Person completing fo Address $\vec{P}(0)$	TOUT I RAYMOND Last First	2/ Middle Initial
City 1316 SK	YState MONTANA	Zip Code <u>59716</u>
3. Use: ((FR Fish Raceways FW Fish & Wildlife CM Commercial IN Industrial MC Municipal	Check Only One) GE Geothermal MN A Mining NV Navigation PG Power FP Fire Protection RC Recrea AS Agricultural Spraying OT Other OF Oil Well Flooding Explain	Generation ation
4. Source of Water: (Spring N N Woll	Check Only One) Iame	200000000000000000000000000000000000000
Stream N	lame Tributary of	
🗌 Lake 🛛 N	lame Stream	
Reservoir N	laine Stream ributary of	
5. Point of Diversion: C	county <u>MADISON</u> <u>NE ¼ NE ¼</u> , Section <u>30</u> , T <u>6</u>	. ∰/S, R <u>3</u> E/∰
GMeans of Diversion:	ot, Block, Subdivision X Well X Pump Capacity_ <u>80</u> gpm U Headgate with ditch or pipeline U Instream use Other Explain	n
7. Means of Conveyance	: Ditch Instream X Pipeline Other:	

22

•

and the second	an a	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	serres.	enere.	mm	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	en e	errer a
8. Place of Use: Co	ounty^	1ADISO	N				:		a	· ·
Instream	City or Tow	n 🛛	Other	: E	xplain	RE	SOR	T	A'	
Lot,/	Block,	1/4	VA_51	<u> </u>	Section	19	т_6_	•)/S, 'R	3.	E/®
Lot,6	Block,	1/4	1/4 <u>N</u>	W_1/4,	Section_	29	т_6	K#/S, R	3	E/0
Lot,6	Block,	1/4	1/4 N	<u>E</u> 1⁄4,	Section_	30	т_6_	_ 1 \$%/S, R_	3	_E/@
Lot,	Block,	1/4	1/4 N	<u>E</u> 1/4,	Section_	30	т_6	_ ∦ /S, R	3	E/#
Lot,	Block,	1/4	1/4	1⁄4,	Section_		т	N/S, R		E/W
Subdivision	CASCAP	E					7.948			
9. Flow rate claimed:	80		□ c _⊠ g □ n	ubic fe allons niner's	et per se per minu inches	econd ite				
10. Volume claimed:	129	a	acre-fe	et per y	/ear					
AT DAVID AL USA	1 1	/ to	12	, 3	31					
Teriod(s) of use.	Month	Day IO	Month		Day					
 12. Check one: 13. Attach copies of the 	Decreed V Filed Appr Use Water	Vater Right ropriation Rig Right d of Filing or	ght · Proof	<u>ව</u> of Use	Priori <i>00 AN</i> ^{Hour} Right.	ty date <u>Oe †</u> Month	or date (/	of first us //_/9 ayY	ie 172 ^{(ear}	
14. Attach copies of ae show point of divers	rial photographs sion, place of us	, U.S. Geolog e, place of s	gical S torage	urvey n , and c	naps or s onveyan	such oth ce facil	ities.	ments ne	cessa	ry to
15. Notarized Statemen	t signed by clair	nant.								
STATE OF MONTAN	A)								
County of A	171SCN	::	SS.							
. D	1.1 7 4	Ľ				1 V				
being of legal age a is signed to it as the true and correct.	nd being the clai	mant of this the contents	claim s of thi	naving of exist s claim	been d ing wate and the	uly swo er right, i matters	orn, dep and the and thi	ose and person wl ngs state	say th hose n d there	at I, ame e are
Subscribed and swi	orn before me th	nis /2	5+4		day of	Ma	0 (1)	-	08	2
Subscribed and Swe	sin berore me, tr	<u> </u>	8_10 <u>79/</u>		/	(771	N			<u> </u>
	e)		otary Pob	he to the	Cine State of Mon	tana	\sum_{i}	Jen	ne	-
		Re	sidina	at	B	s Sk	y N	ONTAN	A	
	1.05	My	Comr	nission	expires	_ 1/1	5/83			
		91								

*

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	09/13/83
CLAIM ID 41H -W-122637-00 PRIORITY DATE:* 08:00 10/30/1972 TYPE OF RIGHT: USE	LAIM RECEIVED: 03/15/82 FEE PAID: \$40
TYPE CODE: G MAX RATE: B0.00 G (MI) MAX VOLUME:	129.00 AF/YEAR MAX ACRES: 0.00
OWNERS\$ (M) C BIG SKY DE MONTANA BDX-1 BDX-1	
BIG SKY MT 59716	8 1
Line A. OTR-SEC SEC TWP RGE	CO
L. SOURCES: WL 01 WELL NENENE 30 06S 03E	MA YIELD RATE 80 G
USE: CM 01 0.00 ACRES PERIOD OF USE 1999999997	MARK CARDING THE RECORDER AND ADDRESS OF THE PARTY OF T
ACRES VER. ACRES WRS 19 19 LOT BLK QTR SEC SEC TWP RGE	CO REMARKS
PARCELS: 001 0.00 001 SE 19 06S 03E	MA
002 0.00 005 0.00 005 006 006 006 005 03E	MA
003 0.00 06S 03E	MA
004 0.005 005 03E	MA
TDTAL 0.00	
	1 To the second seco
Late a part of a first statement of the	(a) a second se second second sec
¹ The constraints of the state of the s	
EMARKS: SB-01 MA-CASCADE	(c) yes
ADDENDUMS: _YESDVRSRSRVPOURMRKOWNR.) COMMENTS	(a) A. B. M.
	COMBINED ACRES FOR ALL RIGHTS
	DF REF. RIGHT

COMPARISON STATISTICS: VOLUME BASED-ON FLOW RATE AND PERIOD OF USE 130.133	AF/YR OVERCLAIMED VOLUME
BASIN DK: YES NO COMMENTS	
SOURCE NAME OK: VYES NO (FROM: USGS TOPO MAP	
L TYPE CD (S/G) DK: YES NO COMMENTS	
POD. DK WL 01 _YES _NO _APPEARS_CORRECT _UNVERIFIED (FROM: _CLMNTS MAP _GRID ON FLN	5) COMMENTS
	<u>Ч</u>
	Mr.K.
	a termina a substant of the Second

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION	/60	/13/83
CLAIM ID 41H -W-122637-00 (CONTINUED)		
PRODE OF USE: CLAIMED FLOW RATE OK: VES NO NONE GIVEN COMMENTS	 A second of the second s	
CLAIMED PRTY DATE DK: YES NO COMMENTS OW 2 FINW ON 30 19	<i>'</i> ע	
FLOW RATE OK: LES NO COMMENTS	consistent of manufacture of the constraint of the second se	
VOLUME OK: WES OMMENTS		
PRIORITY DATE OK: LES NO (APPLIED LAST MONTH OF YR APPLIED LAST DAY OF MONTH) CO PERIOD OF USE OK: YES NO COMMENTS	MENTS	- 1000 - 1000
AIR PHOTO VERIFICATION OF DEVELOPMENT: PHOTO ADVE PHOTO DATE	(a) A set of the se	
PH010_PH016_	A set a s	
PHOTO DATE		
TELEPHONE CONTACT: YES WO DATE COMPLETED // BY COMMENTS	2 III WARD DUTY MANAGEMENT	
LETTER CONTACT:YES KO DATE COMPLETED _/ BY COMMENTS		
OWNERSHIP:YESNO DATE COMPLETED BY COMMENTS	and a second	
INTERVIEW:YES VNG DATE COMPLETED BY COMMENTS		1
FIELD INVESTIGATION: _YES WO APPROVED BY DATE CHECKED BY COMMENT		
GENERAL REMARKS:	(*)	ar: : : re
	(a) and (b) and (b)	「「「「「「「」」」「「」」」「「」」」」
	A CONTRACTOR OF A CONTRACTOR O	
and the second of the second		
	$ f_{ij} = \frac{1}{2} (f_{ij} ^2 + f_{ij} ^2)$	
are set of the set of	and and an a second state of the second state of t	
$\mathcal{O}_{\mathcal{O}} = \mathcal{O}_{\mathcal{O}} = \mathcal{O}_{\mathcal{O}}$	i M M	
INVESTIGATED BY DAIL & Charach DATE 6, 11, 54	8. 	D D S
REVIEWED BY	A ANALY AND AND ANALY AND ANALY AND	

TEMPURARY PRELIMINARY DECREE GALLATIN RIVER BASIN BASIN 41H ABSTRACT OF WATER RIGHT

WATER RIGHT NUMBER 41H -W-122637-00

OWNERS:	BIG SKY DF	MUNTANA	INC	100) 1000
	BIG SKY		MT	5971

PRIDRITY DATE: JAN 30, 1974

FLOW RATE: EU.00 GPM

VOLUME: 64.69 ACRE FEET PER YEAR

SOURCE: WELL

PURPOSE (USF): COMMERCIAL

PERIOD OF USE: JAN 1 TO DEC 31

POINTS OF DIVERSION AND MEANS OF DIVERSION:

IT BLK QIR SEC SEC IMP RGE CLUNIN	LOT BLK	QTR S	SEC	SEC	TWP	RGE	COUNTY
-----------------------------------	---------	-------	-----	-----	-----	-----	--------

1	NENENE	30	065	03E	MADISON	WELL
---	--------	----	-----	-----	---------	------

6

PLACE OF USE FOR COMMERCIAL

	ACRES	Lar	3LK	OTR	SEC	SEC	TWP	RGE	COUNTY
001			601		SE	19	065	03E	MADISON
002			006		NW	29	065	03E	MADISON
E00			006		NE	30	065	03E	MADISON
004					NE	30	065	OJE	MADISON

REMARKS: SUBDIVISION: CASCADE

SEE GENERAL FINDINGS UF FACT AND CONCLUSIONS OF LAW FOR FURTHER DELINEATION OF THIS RIGHT.

FTL MT N SEP 171993

ŀ

PAGE 3123

MOUNTAIN VILLAGE NO. 3

STATEMENT OF CLAIM NO:41H 133733 00COMPLETION DATE:January 30, 1974

This statement of claim was filed in 1982 for 180 gpm and 290 acre-feet per year for Commercial use from the listed diversion, now colloquially known as Mountain Village No. 3. DNRC verified the rate and volume of the right in ca. 1983, and then reexamined the right reducing the volume to 145.54 acre-feet in ca. 1985. The volume was rolled into Permit 41H 100737 00 (see this right below) at the request of the Applicant (Boyne USA, Inc.). The right was transferred to the District in 1999. The completion date for claims cannot be extended.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Nu	mber:	41H 133 Version:	3733-00 3 PC	STATEI DST DECI	MENT	OF CLA	IM]	MOUN'	TAIN	VILLAGE	NO.	3
Owners:		BIG SKY % RON PO BOX BIG SKY	Versio COUN EDWAR 160670 7, MT 59	n Status: , TY WATE DS 716-0670	ACTIVI R & SE	E EWER D	IST #3	363					
Priority Date:		JANUAR	XY 30, 19	974									
Enforceat	ole Priorit	y Date:	JANUAF	RY 30, 197	74								
Type of Historic	al Right:	USE											
Purpose (use):		COMME	RCIAL										
Maximum Flow	Rate:	180.00 G	βPM										
Maximum Volu	me:	145.54 A	C-FT										
Source Name:		GROUNDWATER											
Source Ty	pe:	GRO	DUNDW	ATER									
Point of Diversion	on and Me	ans of Div	version:										
<u>ID</u> 1		<u>Govt Lot</u>	NV	<u>Qtr Sec</u> VNENE	<u>Sec</u> 30	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>Coun</u> MAD	<u>ity</u> ISON				
Period of Diversion Subdivisio Period of Use:	Diversion Means: on:	: JANUAF WELL CASCAI JANUAF	RY 1 TO DE SUBI RY 1 to I	DECEMB D (BIG SK DECEMBI	ER 31 (Y) ER 31								
Place of U	Jse:	C (T (O 1	G	T	D	C					
$\frac{\mathbf{ID}}{1}$	Acres	Govt Lot		<u>Qtr Sec</u> SF	<u>Sec</u> 19	<u>1 wp</u> 6S	<u>Rge</u> 3F	MAD	nty DISON				
·	Subdivisio	on:	CASCA) (BIG S	SKY) BL	OCK:	001					
2	~			NW	29	6S	3E	MAD	DISON				
3	Subdivisio	on:	CASCA	DE SUBL	30 (BIG 3	SKY) BL 6S	.OCK: 3F	MAD	DISON				
-	Subdivisio	on:	CASCA) (BIG S	SKY) BL	OCK:	006					
4	Subdivisio	on:	CASCA	NE DE SUBD	30) (BIG \$	6S SKY)	3E	MAD	DISON				

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE ASSOCIATED WHICH MEANS THE RIGHTS SHARE THE SAME PLACE OF USE.

100737-00 122636-00 122637-00 133733-00

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/94.

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

Ċ Concerconorconorconorconorconorconorconor	MARKAN	
Form No. 76-0 R2/80		nfoemen
	STATEMENT OF CLAIM	KEGENER §
133733	FOR EXISTING WATER RIGHTS	mar 1 5 1982 💲
MA-U	OTHER USES	MONTANA DNR.C.
10-105-01-01	For the Water Courts of the State of Montana	BOZEMAN FIELD OFFICE
40		
1. Owner of Water Rigr	Last First	/ Middle Initial
Co-Owner or Other	/	, 8
Address 7	Last First	Middle Initial
City PIC SKY		Zip Code .59716
Home Phone No.	995 - 4211 Business Phone No.	
2. Person completing f	orm TOUT RAYMOND	· J 8
Address 17 A	Last First	Middle Initial
City BIG SKY	State MONT	Zip Code 59716
Home Phone No	Business Phone No	
3. Use:	(Check Only One)	202
FR Fish Raceway	S GE Geothermal MN Mining	Sector Se
CM 🕱 Commercial	FP Fire Protection RC Recreation	
IN 🗌 Industrial	AS Agricultural Spraying OT Other	S
MC Municipal	OF Oil Well Flooding Explain	§
4. Source of Water:	(Check Only One)	Š
Spring	Name	8
Well	Name <i>LAKE</i>	. 8
☐ Stream	Name Tributary of	§
Lake	Name Stream	
Beservoir	Name Stream	3
	Tributary of	
5. Point of Diversion:	County MADISON	8
	NW 1/4 NE 1/4 NE 1/4, Section 30, T 6	₽/S, R3E/₩
257 100	Lot, Block, Subdivision	8
6 Means of Diversion:	Well	e e e e e e e e e e e e e e e e e e e
v	Pump Capacity 180 gpm	
Pr	Headgate with ditch or pipeline Instream use	ŝ
(Other Explain	
7. Means of Conveyand	e: 🗌 Ditch 🗌 Instream	SS
-	🕅 Pipeline 🗌 Other:	

é

/

	FEFFFFFFFFFFFFFFFFFFFFFFFFFFFF	PRAPAPPAPPPAPPPPP	REPPRPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	* * PARAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
///////////////////////////////////////		~~~~~~~~~~~~~~~ ~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

Instream City or town W. Other: Explain $\cdot_M E S GHI$ Lot, Block, W. W. Section 19 , T. G. WS, R. Z. Lot, Block, W. W. M. Section 19 , T. G. WS, R. Z. Lot, Block, W. W. M. Section 20 , T. G. WS, R. Z. Lot, Block, W. W. M. Section 30 , T. G. WS, R. Z. Lot, Block, W. W. W. Section 30 , T. G. WS, R. Z. Lot, Block, W. W. W. Section 30 , T. G. WS, R. Z. Subdivision G. A.S.C.A.D.F. Cubic feet per second mine* inches Month Div Month Div Month Div Month Div Month Div No E. Schook on the contents of the Decreed Water Right Priority date or date of first use T. Filed Appropriation Right Month Div Month Div Year Month Div		Place of Use:	County		ADIS				Dro	10				
Dot.			, ப	City or To	wn	A) Othe	er: E	-xplain _	TES	OR	<u> </u>	5 	-	
Lot, 6 Block, W W, ME W, Section 20 T 6 Block, R 7 6 Block, R R 7 6 Block, R 7 6 Block, R R R R E Lot, Block, R M M M M Mostion C C Block, R M <t< td=""><td>5</td><td>Ľot,</td><td></td><td>Block,</td><td>V4</td><td>1/4</td><td>5<u>E</u> 1/4</td><td>, Section_</td><td>19</td><td>, T</td><td>6</td><td>I/S, R</td><td></td><td>E/</td></t<>	5	Ľot,		Block,	V4	1/4	5 <u>E</u> 1/4	, Section_	19	, T	6	I/S, R		E/
Lot, Block, W W, NE, W. Section, 20, T, 6, WS, R, 7, E Lot, Block, W W, NE, W. Section, 20, T, 6, WS, R, 3, E Subdivision CASCADE 9. Flow rate claimed: 1800 Care feet per second gallons per minute miner's inches 10. Volume claimed: 190 acre-feet per year 11. Period(s) of use: 7AN 1 1 Filed Appropriation Right Filed Appropriation Right Bay Month Day Waster Right Nomin Oct. 1 1 1 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. Nomin Day Vear 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. 17. Notarized Statement signed by claimant. State of MONTANA) 19. County of	125	Lot,	6	Block,	1/4	1/4	W 1/4	, Section_	29	т	6 9	//S, R	3	E/
Lot, Block, M M. A.E. W. Section	¹³⁰⁰ 9	Lot,	6	Block,	1/4	^{1/4} _ ^	<u>1</u> E_1/4.	, Section_	30	, т	6	//S, R	3	E/
Lot, Block, M, W, Section, T, NS, R E Subdivision CASCADE 9. Flow rate claimed: 180 cubic feet per second gallons per minute miner's inches 10. Volume claimed: 190 acre-feet per year 11. Period(s) of use: JAN / 1 o DEC / 31 Month Day 12. Check one: Decreed Water Right Filed Appropriation Right Site M Oct. 1 / 1 / 1972 Use Water Right 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. W Notarized Statement signed by claimant. STATE OF MONTANA State copies of Montana Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 19 82 Subscribed and sworn before me, this 7th day of March 17 83 Subscribed and sworn before me, this 7th day of March 17 83 Subscribed and sworn before me, this 7th day of March 17 83 Subscribed and sworn before me, this 7th		Lot,		Block,	1/4	V4_ _ N	E 1/4	, Section_	30	т	6 .	//S, R	3	E/
Subdivision CASCADF 9. Flow rate claimed: Image: Claime: Image: Claime: <td></td> <td>Lot,</td> <td>~</td> <td>Block,</td> <td>1/4</td> <td>1/4</td> <td>1/4</td> <td>, Section_</td> <td></td> <td>, T</td> <td>N</td> <td>I/S, R_</td> <td></td> <td>E/</td>		Lot,	~	Block,	1/4	1/4	1/4	, Section_		, T	N	I/S, R_		E/
9. Flow rate claimed: 180 Cubic feet per second galons per minute miner's inches 10. Volume claimed: 190 acre-feet per year 11. Period(s) of use: JAN 1 J 12. Check one: Decreed Water Right Priority date or date of first use Image: Filed Appropriation Right Filed Appropriation Right Stand Month Jay 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. 19. Notarized Statement signed by claimant. State of MONTANA) State OF MONTANA) iss. 1. Harther Copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. (13) Notarized Statement signed by claimant. iss. State OF MONTANA) 1. Harther Copies and say that being of legal age akd being the charmant of this claim of existing water right, and the person whose nan is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct. Subscribed and sworn before me, this 7th day of March 19_82		Subdivision	_G A	ISCA	DE									
10. Volume claimed: 190 acre-feet per year 11. Period(s) of use: \overrightarrow{JAN} 1 1 \overrightarrow{Dgy} to \overrightarrow{DFC} 1 31 12. Check one: Decreed Water Right Priority date or date of first use \overrightarrow{Filed} Appropriation Right \overrightarrow{Burn} \overrightarrow{OCT} 1 1 1972 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. (13) Notarized Statement signed by claimant. State of MONTANA)	9.	Flow rate claime	d:	180	0	¤	cubic fo gallons miner's	eet per s per min inches	econd ute					
11. Period(s) of use: \overrightarrow{JAN} \overrightarrow{I} 10 \overrightarrow{DEC} \overrightarrow{IJ} 12. Check one: Decreed Water Right Filed Appropriation Right \overrightarrow{BUM} \overrightarrow{Day} \overrightarrow{Vear} \overrightarrow{Month} \overrightarrow{Month} \overrightarrow{Day} \overrightarrow{Vear} \overrightarrow{Month} Mo	10.	Volume claimed:		290	_	acre-f	eet per	year						
12. Check one: Decreed Water Right Priority date or date of first use Filed Appropriation Right State M. Oct. / / / / / / / / / / / / / / / / / / /	11	Period(s) of use:	7	ANI	/ +	DEC	1:	3/						
12. Check one: Decreed Water Right Priority date or date of first use Filed Appropriation Right Filed Appropriation Right Filed Appropriation Right Mour Mourin Oct. Image: Cot. 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. Image: Cot. Image: Cot. Image: Cot. Image: Cot.		01100(0) 01 000.		Month	Day	Mont	1	Day						
12. Check one: Decreed Water Right Priority date or date of first use Filed Appropriation Right Filed Appropriation Right Image: Check of filed Appropriation Right Mour Mouth Oct. Image: Check of filed Appropriation Right Mour Mouth Oct. Image: Check of filed Appropriation Right 13. Attach copies of the Decree, Record of Filing or Proof of Use Right. Image: Check of Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. Image: County of Check of Montana) Ss. County of Check of Montana) Ss. Image: County of Check of the claimant of this claim of existing water right, and the person whose nan is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct. Subscribed and sworn before me, this 7th day of March 19_82 March of State of Montana Big Sky, Montana Big Sky, Montana My Commission expires 1/15/83														
Filed Appropriation Right E.I.O.M. Hour Oc.T. Month I <	12.	Check one:		Decreed	Water Ri	ght		Prior	ity date	or da	te of f	irst us	е	
Image: Subscribed and sworn before me, this 7th day of March 19 82 Image: Subscribed and sworn before me, this 7th day of March 19 82 Image: Subscribed and sworn before me, this 7th day of March 19 82 Image: Subscribed and sworn before me, this 7th day of March 19 82 Image: Subscribed and sworn before me, this 7th day of 19 82 Image: Subscribed and sworn before me, this 7th 115 783			Ţ.	Filed Ap	propriatio	on Right	6	B:00 AM	Oct.	/	Dav	1 19	72	
13. Attach copies of the Decree, Record of Filing or Proof of Use Right. 14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. (1). MACH (1). Motarized Statement signed by claimant. STATE OF MONTANA) (1). Motarized Statement signed by claimant. STATE OF MONTANA) (2). County of			X	Use Wat	er Right			HUUI	WORTH		Day	T	eal	
14. Attach copies of aerial photographs, U.S. Geological Survey maps or such other documents necessary show point of diversion, place of use, place of storage, and conveyance facilities. 13. Notarized Statement signed by claimant. STATE OF MONTANA)	13.	Attach copies of	the De	cree, Reco	ord of Filin	ng or Proc	of of Use	e Right.						
In an opine of diversion, place of use, place of storage, and conveyance facilities. Image: State of Montana, inclusion of diversion, place of use, place of storage, and conveyance facilities. Image: State of Montana, inclusion of diversion, place of use, place of storage, and conveyance facilities. Image: State of Montana, inclusion of diversion, place of use, place of storage, and conveyance facilities. Image: State of Montana, inclusion of diversion, place of use, place of storage, and conveyance facilities. Image: State of Montana, inclusion of the claim of this claim of existing water right, and the person whose nan is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct. Subscribed and sworn before me, this	14	Attach conice of	aorial	botograph		ological	Survey	mane or	such of	hor do	nume	nte ner	000000	
The Notarized Statement signed by claimant. STATE OF MONTANA) Scounty of Madison I March I March I March I I I March I I I I I I I I I I I I I I I I I I I I I I	14. /	show point of div	version	, place of u	use, place	e of storag	e, and o	conveyar	ice facil	lities.	cune	115 119(Lessal	y
Image: State of Montana) Subscribed and sworn before me, this 7th Subscribed and sworn before me, this 7th March 19 Big Sky, Montana Big Sky, Montana My Commission expires 1/15/83		alec		u un un un deux deux men (1992) en la de										
STATE OF MONTANA County of	(13/	Notarized Statem	nent sic	ned by cla	aimant.									
State of Montana () Solution (Mad/Son () I. <u>Madminical Tourt</u> , having been duly sworn, depose and say that being of legal age and being the claimant of this claim of existing water right, and the person whose nan is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct. Subscribed and sworn before me, this <u>7th</u> day of <u>March</u> <u>19</u> 82 <u>March</u> <u>115/83</u>	\cup		-	12	¢.									
County of <u>Madison</u> , having been duly sworn, depose and say that being of legal age and being the claimant of this claim of existing water right, and the person whose nan is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct.		STATEOFMONT	ANA) :ss.								
1. Main form for the state of the claimant of this claim of existing water right, and the person whose name is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct. Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before me, this 7th day of March 19_82 Subscribed and sworn before 7th day of March 19_82 Subscribed and sworn before 8tig Sky, Montana 8tig Sky, Montana My Commission expires 1/15/83		1.	dien	h A)								
being of legal age and being the claimant of this claim of existing water right, and the person whose name is signed to it as the claimant, know the contents of this claim and the matters and things stated there a true and correct.		County of <u>Ma</u>	4/30	VII	-				names assess		epose	and s	say tha	at
Subscribed and sworn before me, this 7th day of March 19_82 We lary Public for the State of Montana Big Sky, Montana Residing at My Commission expires 1/15/83	8	County of <u>Ma</u>	UN.	Tout			, having	g been o	JULY SW	orn, d		on wh	iose na	ап
Subscribed and sworn before me, this <u>7th</u> day of <u>March</u> <u>19</u> <u>82</u> <u>March</u> <u>119</u> <u>82</u> <u>March</u> <u>115/83</u>		County of <u>Ma</u>	e and b	èing the cli	aimant of	this claim	, having of exis	g been d ting wat	er right,	and th	ne pers			a
Subscribed and sworn before me, this <u>7th</u> day of <u>March</u> . <u>19</u> <u>82</u> <u>March</u> <u>115/83</u>		County of <u>Ma</u> , <u>Raypnovic</u> being of legal age s signed to it as true and correct	e and b the cla	èing the cla imant, know	aimant of w the con	this claim tents of th	, having of exis his clain	g been o ting wate n and the	er right, matter	and the sand	ne pers things	stated	there	
Subscribed and sworn before me, this <u>7th</u> day of <u>March</u> <u>19 82</u> <u>March</u> <u>19 82</u> <u>Wetary Public for the State of Montana</u> <u>Big Sky, Montana</u> <u>Residing at</u> <u>1/15/83</u>		County of <u>Manager</u> Deing of legal age s signed to it as true and correct.	e and b the cla	èing the cla imant, know	aimant of w the con	this claim tents of th	, having of exis his clain	g been o ting wate n and the	er right, matter	and the sand	ne pers things	stated	d there	
Subscribed and sworn before me, this <u>7th</u> day of <u>March</u> <u>19</u> <u>82</u> <u>March</u> <u>115/83</u>		County of <u>Manaver</u> being of legal age s signed to it as true and correct.	e and b the cla	eing the cli imant, know	aimant of w the con	this claim tents of th	, having of exis his clain	g been o ting wate n and the	er right, matter	and the sand	ne pers things	stated	d there	
Big Sky, Montana My Commission expires 1/15/83		County of <u>Ma</u> being of legal ago s signed to it as true and correct.	e and b the cla	èing the cla imant, know	aimant of w the con	this claim tents of th	, having of exis his clain	g been d ting wat n and the	auly sw er right, matter	and the sand	ne pers things	statec	d there	
Hotary Public for the State of Montana Big Sky, Montana Residing at My Commission expires 1/15/83		County of <u>Manager</u> being of legal age s signed to it as true and correct.	e and b the cla	èing the cla imant, know	atmant of w the con	this claim tents of th	, having of exis his clain	g been o ting wate n and the	More	and the sand	ne pers things	stated	d there	
Hotary Public for the State of Montana Big Sky, Montana Residing at My Commission expires 1/15/83		County of <u>Manager</u> being of legal age s signed to it as true and correct.	e and b the cla	before me,	atmant of w the con	this claim tents of th	, havin of exis is clain	g been o iting wate n and the day of	Mar	and the sand	things	stated	9 <u>82</u>	
Big Sky, Montana Residing at		County of <u>Ma</u> being of legal ago s signed to it as true and correct.	e and b the cla	eing the cla imant, know	atmant of w the con	this claim tents of th	, having of exis his clain	g been d iting wat n and the day of	Mar	ch	ne pers	statec	9 <u>82</u>	
Big Sky, Montana Residing at My Commission expires1/15/83		County of <u>Manager</u> being of legal age s signed to it as true and correct.	sworn t	eing the cla imant, know	atmant of w the con	this claim tents of th 7th	, having i of exis his clain	g been o ting wate n and the day of	Mar	ch	things		9_82	
My Commission expires 1/15/83		County of <u>Manager</u> being of legal age s signed to it as true and correct.	sworn t	before me,	atmant of w the con	this claim tents of th 7th	, having of exis his claim	g been d iting wate n and the day of day of	Mar	ch	things	1	9 <u>82</u>	
		County of <u>Ma</u> being of legal ago s signed to it as true and correct.	e and b the cla	before me,	atmant of w the con	this claim tents of th 7th Residin	, having of exis his clain	g been o ting wat n and the day of State of Moo Big Sky	Mar Mar Mar, Mont	ch	ne pers things	1	9 <u>82</u>	
		County of <u>Manager</u> being of legal age s signed to it as true and correct.	sworn b	eing the cla imant, know	atmant of w the con	this claim tents of th 7th Residin My Com	, having of exis his clain	g been o ting wat n and the 	Mar Mar Mar Mar	ch			9 82	

3

· ,

	12	\$40	00.00	42, 42,			30	. 10.							ž			la M	ļ		****	ж		8	0	*:	J.	、イント
	09/13/83	3/15/82 FEE PAID:	MAX ACRES:				180 G		REMARKS										FOR ALL RIGHTS		****	IMED VOLUME						
		AIM RECEIVED: 0	90.00 AF/YEAR			CO	MA YIELD RATE		CO	MA	MA	MA	MA AM			201			COMBINED ACRES	DF REF. RIGHT	******	F/YR - DVER CLA				COMMENTS		15
	TION	с s	N			RGE	03E		RGE	03E	03E	03E	0 3E						MAX	1	***	800 AF		ENTS		FLNG		
	SERVA	RIGHT SE				TWP	06S		TWP	065	06S	065	06S					0.624	- AF		***	292.8		COMN		ND D		
	CON	ATER HT: U	DLUME			SEC	30		SEC	19	29	30	30						1	1	RM ##			RVEY]		3		
	ES AND	RIGH	IAX VI			SEC	NENE		SEC	SE	MN	ШN	BN]		DI LO	SE		WR SU		A MAP		
	OURCE	PE OF	4 (I			QTR	MMN		QTR									S	- STF	MIM I	ICATI	OF U		1		-LMN I		
17.1	L RES	Z TY E	Z			BLK		12.5	BLK	100	900	900						IMMEN	RIGH	ID CL	/ERIFI	RIOD				- wr		
	AT URA	1/197				L01		16666	LOJ	1	1	ĩ	1	1				R) CC	IR ALL	A I	ELO	ND PE				LFR(
	L L	1000	5		716			66666	19_									AWD	ME FC	1	L + + + 1	RATE A				(IFIEL		
	TMENT	1 RACT 8:00			59			SE 19	ĩ	1	1		1					RMRK	VOLU	OSE I	**	LOW R		D MAP		CNVE		
	DEPAR	ABS E:* 0	S		TM			oF U	S 19									, D	BINED	PURP	** * *	NO		S TOP		י ק		
		Y DAT	30.00	đ				ER I OD	ES WR	1	1		1					۹ >	X COM	IGHT.	***	BASED	NTS -	-use	NTS	СОККЕ		
		I OR I T	16	NTAN				ES P	ACR					-				_RSR	T. MA	TAL R	****	LUME	COMME	FROM:	COMME	LAKS		
		PRI	TE:	OF MC				ACRE	VER	1		1	1	1		10		VRS	RIGH	EMEN	****	ND	No	DN N	No	AHA-		
		3-00	AX RA	SKY 1	SKY		MELL	0.00	RES	0.00	0.00	0*0	0.00	0*0		SCADE		-	REF.	SUPPL	****	\	ËS.	, ⁽¹⁾	ËS.	z		2
		13373	w ع	C BIG BOX	BIG				AC	15	524		GI	61 01		GA-CA	1	S'	IF	IF	***	STICS	21	- اک	51	Yes.		
		- M- H	CODE:	(W)			L 01	M 01		001	005	003	004	TOTAL		8 01		YES	1		****	STATI		. ж	(C) OK	5		
		ID 4 1)	LYPE	37054 37 19 4 60			S: W	Ū		ELS:						s: s		:SWO	MENTA		****	ISON	: YO	NAME	0 (S/	: «L		
		AIM		WNERS			DURCE:	SE:		PARCI						EMARK		DDEND	UPPLE	I GHTS	****	OMPAR	ASIN	OURCE	YPE C	an ak		
		ō) 6 2	0	Su.	27 272	S	0			122			1		R	. 8	A	S	2	*		8	S	- 1	n Mari	И 22	
		5				,												3										

09/13/83

2

NO	
NSERVATI	OTCUTC
0	100
AND	A M
ESOURCES	EVICTIMU
R	aus
NATURA	CI A TM
Ч	L
DEPARTMENT	TUNDISHA

ABSTRACT OF CLAIM FOR EXISTING WATER RIGHTS

CLAIM ID 41H -W-133733-00 (CONTINUED)

188 11 Geo

hib.	COMMENTS						NTS		20	145	а	ā
2 FILING 01/30 1	LIED LAST DAY OF MONTH) (0T0 DATE	OTO DATE	COMMENTS	COMMENTS	COMMENTS	BY COMMEN					
- LND _ NONE GIVEN	ST MONTH OF YR _APP	10 10 10 PH	IOTOPH	LETEDBY	LETED _/_/ BY	LETEDBY	BY DATE CHECKED					
FLOW RATE OK: _YES PRTY DATE OK: _YES S ND COMMENTS	S NO COMMENTS S' NO (APPLIED LA S NO COMMENTS	OF DEVELOPMENT: PH	YES LAG DATE COMP	YES NO DATE COMP	YES NO DATE COMP	YES LUD DATE COMP	YES NO APPROVED					
PROOF OF USE: CLAIMED CLAIMED FLOW RATE OK: USES	VOLUME OK: LAES PRIORITY DATE OK: LAES PERIOD OF USE OK: VES	AIR PHOTO VERIFICATION	TELEPHONE CONTACT:	LETTER CONTACT:	OWNERSHIP:	INTERVIEW:	FIELD INVESTIGATION:	GENERAL REMARKS:	10 (R) R R (R) (R)	02	1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 12 75 - K

_ DATE 6.11.84

INVESTIGATED BY

ŝ

`ABSTRACT OF WATER RIGHT CLAIM AS MODIFIED BY THE WATER COURT GALLATIN RIVER BASIN 41H

WATER RIGHT NUMBER 41H -W-133733-00

IMPORTANT NOTICE

AN ASTERISK (*) HAS BEEN PLACED NEXT TO EACH ITEM CHANGED BY ORDER OF THE MONTANA WATER COURT AFTER ISSUANCE OF THE PREVIOUS DECREE.

OWNERS:	LONE MOUNTAIN SPRI	NG WATER	UTILITY
	BIG SKY	MT	59716
PURPOSE	(USE): COMMERCIAL		

SOURCE : WELL SOURCE TYPE: GROUNDWATER

PRIORITY DATE: JANUARY 30, 1974 TYPE OF HISTORICAL RIGHT: USE

180.00 GPM (.40 CFS) FLOW RATE:

145.54 AF VOLUME:

PERIOD OF USE: JANUARY 01 TO DECEMBER 31

POINT OF DIVERSION:

.,

ł

1

۲

LOT BLK QTR SEC SEC TWP RGE COUNTY

-	-	
	- 4	

NWNENE 30 06S 03E MADISON

PLACE OF USE FOR COMMERCIAL:

	ACRES	LOT	BLK	QTR SEC	SEC	TWP	RGE	COUNTY	
001	x		001	SE	19	06S	03E	MADISON	
002			006	NW	29	065	03E	MADISON	
003			006	NE	30	06S	03E	MADISON	
004				NE	30	065	03E	MADISON	

REMARKS:

SUBD: CASCADE

NOTICE OF WATER RIGHT TRANSFER RECEIVED 01/20/94.

THE FOLLOWING POTENTIAL ISSUES WERE IDENTIFIED DURING CLAIMS EXAMINATION OR DURING PREVIOUS WATER COURT PROCEEDINGS. THESE ISSUES MAY REMAIN UNRESOLVED IF NO OBJECTIONS ARE FILED DURING × × × ¥ ¥ × THE NEXT OBJECTION PERIOD. × ¥ ¥ × × × ¥ × WATER RIGHT CLAIMS W122636-00, W122637-00, AND W133733-00 MAY BE DUPLICATE CLAIMS. ¥ × × ¥ ¥ × THE PRIORITY DATE MAY BE QUESTIONABLE. THE DATE OF × × FILING THE FORM GW2, NOTICE OF COMPLETION OF GROUNDWATER APPROPRIATION, IS JANUARY 30, 1974. ¥ ¥ ¥ ×



07/28/97 PAGE 1

MOUNTAIN VILLAGE NO. 4

PROVISIONAL PERMIT NO:41H 61672 00COMPLETION DATE:December 31, 2033

This provisional permit was filed in 1986 for 124 gpm and 150.00 acre-feet per year for Commercial use from the listed diversion, colloquially known as Mountain Village No. 4. The right was transferred to the District in 1999. In 2018, the District filed for an extension of time and was approved for a completion date of 12/31/2033.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 61672-00 PR Version: 1 ORIG	OVISIONAL INAL RIGHT	PERMI	Г	MOUNTAIN	VILLAGE	NO.	4
	Version St	atus: ACTIV	Έ					
Owners:	BIG SKY COUNTY N % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716	NATER & S -0670	EWER D	IST #3	63			
Priority Date:	OCTOBER 21, 1986	at 01:40 P.I	M.					
Enforceable Priorit	ty Date: OCTOBER 2	21, 1986 at (01:40 P.M	И.				
Purpose (use):	COMMERCIAL							
Maximum Flow Rate:	124.00 GPM							
Maximum Volume:	150.00 AC-FT							
Source Name:	GROUNDWATER							
Source Type:	GROUNDWATE	R						
Point of Diversion and M	eans of Diversion:							
<u>ID</u> 1	Govt Lot Qtr	<u>Sec</u> <u>Sec</u> /NE 30	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>County</u> MADISON			
Period of Diversion Diversion Means:	HIST STATES IN THE STATES INTENDED IN THE STATES INTO STATES	CEMBER 31						
Purpose (Use):	COMMERCIAL							
Volume:	150.00 AC-FT							
Period of Use:	JANUARY 1 to DEC	EMBER 31						
Place of Use:								
<u>ID</u> <u>Acres</u> 1 2 3	<u>Govt Lot</u> <u>Qtr</u>	Sec Sec SE 19 NW 29 NE 30	<u>Twp</u> 6S 6S 6S	<u>Rge</u> 3E 3E 3E	County MADISON MADISON MADISON			

Remarks:

GROUNDWATER WASTE & CONTAMINATION

THIS RIGHT IS SUBJECT TO SECTION 85-2-505, MCA, REQUIRING A WELL BE CONSTRUCTED SO IT WILL NOT ALLOW WATER TO BE WASTED OR CONTAMINATE OTHER WATER SUPPLIES OR SOURCES, AND A FLOWING WELL MUST BE CAPPED OR EQUIPPED SO THE FLOW OF THE WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE.

GROUNDWATER WELL - ACCESS PORT

THE FINAL COMPLETION OF THE WELL(S) MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MEASURED.

IMPORTANT INFORMATION

THIS WELL IS MANIFOLD AND USED IN CONJUNCTION WITH STATEMENT OF CLAIM NO.S 122636-41H, 122637-41H AND 133733-41H.

WATER MEASUREMENT - ANNUAL DATA

MEASUREMENT DATA: 1998 00000.00 GPM 00070.12 AC-FT

WATER MEASUREMENT INFORMATION (OLD)

THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATERS DIVERTED, INCLUDING THE PERIOD OF TIME, AND SHALL SUBMIT SAID RECORDS UPON REQUEST TO THE WATER RESOURCES REGIONAL OFFICE LISTED BELOW. BOZEMAN, MT PH: 406-586-3136 FAX: 406-587-9726

WATER MEASUREMENT INFORMATION (OLD)

THE APPROPRIATOR SHALL INSTALL AN ADEQUATE FLOW METERING DEVICE TO ALLOW THE FLOW RATE AND VOLUME OF WATER DIVERTED TO BE RECORDED.

OWNERSHIP UPDATE RECEIVED

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.

an' FORM NO. 601 86/86 STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION HELENA, MONTANA 59620 Permit to Appropriate Water THIS PROVISIONAL PERMIT TO APPROPRIATE WATER IS HEREBY ISSUED TO: LONE MOUNTAIN SPRINGS WATER UTILITY PO BOX 1 BIG SKY MT 59716 UPON FINDING THAT THE REQUIREMENTS OF SECTION 85-2-311 MCA HAVE BEEN MET. PERMIT_NUMBER: 61672-G41H OCTOBER 21, 1986 AT 1:40 P.M. PRIORITY DATE: SOURCE: GROUNDWATER WELL TOTAL_FLOW_RATE: 124.00 GPM 150.00 ACRE FEET PER YEAR TOTAL_VOLUME: NENWNE SEC. 30 TWP. 065 RGE. 03E MADISON CO DIVERSION POINT: 124.00 GPM UP TO USE: 150.00 AC-FT (JAN 01 - DEC 31) FOR COMMERCIAL SE SEC. PLACE_DE_USE: 19 TWP. O6S RGE. 03E MADISON CO FOR COMMERCIAL NW SEC. 29 TWP. 065 RGE. 03E MADISON CO FOR COMMERCIAL NE SEC. 30 TWP. 065 RGE. 03E MADISON CO FOR COMMERCIAL DIVERSION MEANS: PUMP ** REQUIREMENTS FOR PERMIT HOLDER: THE DEADLINE FOR COMPLETION OF THIS PERMIT, AND FILING OF THE NOTICE OF COMPLETION OF PERMITTED WATER DEVELOPMENT (FORM 617) SHALL BE NOVEMBER 30, 1996, VERIFYING THAT THE APPROPRIATION OF WATER HAS BEEN NOVEMBER 30, 1996, VER PRIOR RIGHTS: ** THIS PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER; THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW. MEASURING DEVICE: ** <u>MEASURING DEVICE</u> THIS PERMIT IS SUBJECT TO THE CONDITION THAT THE PERMITTEE SHALL INSTALL AN ADEQUATE FLOW METERING DEVICE IN ORDER TO ALLOW THE FLOW RATE AND VOLUME OF WATER DIVERTED TO BE RECORDED. THE PERMITTEE SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATERS DIVERTED, INCLUDING THE PERIOD OF TIME, AND SHALL SUBMIT SAID RECORDS TO THE DEPARTMENT UPON REQUEST. ** <u>PROGRESS_REPORI</u>: THIS PERMIT IS SUBJECT TO THE PERMITTEE SUBMITTING A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS PERMIT BY NOVEMBER 30 OF EACH YEAR TO THE WATER RIGHTS BUREAU FIELD OFFICE, 1201 EAST MAIN, DF BOZEMAN MT 59715. ** FURTHER INFORMATION: THIS WELL IS MANIFOLD AND USED IN CONJUNCTION WITH STATEMENT OF CLAIM NO.S 122636-41H, 122637-41H AND 133733-41H . ** <u>CONTAMINATION, FLOWING WELLS</u> THIS PERMIT IS SUBJECT TO SECTION 85-2-505, MCA, REQUIRING THAT ALL WELLS BE CONSTRUCTED SO THEY WILL NOT ALLOW WATER TO BE WASTED, OR CONTAMINATE OTHER WATER SUPPLIES OR SOURCES, AND ALL FLOWING WELLS SHALL BE CAPPED OR EQUIPPED SO THE FLOW OF WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE. THE FINAL COMPLETION OF THE WELL MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THAT THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MEASURED. REALLURE_ID_COMPLY_WITH_ANY_IERMS_AND_CONDITIONS_HEREIN_MAY_RESULT_IN HTHE_LOSS_DE_IHE_WATER_RIGHT_GRANIED_BY_THIS_PERMIT. ** IRANSFER OF OWNERSHIP: UPON A CHANGE IN OWNERSHIP OF ALL OR ANY PORTION OF THIS PERMIT, THE PARTIES TO THE TRANSFER SHALL FILE WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION A WATER RIGHT TRANSFER CERTIFICATE, FORM 608, PURSUANT TO SECTION 85-2-424, MCA. 150 ADMINISTRATIVE ASST RONALD J GUSE WITNESS DATE: MARCH 31,1987 WATER RIGHTS BUREAU, WATER RESOURCES DIVISION

	27) 27)
FORM NO. 601 R6/86 STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 1520 EAST SIXTH AVENUE HELENA, MONTANA 59820	
Permit to Appropriate Water	
THIS PROVISIONAL PERMIT TO APPROPRIATE WATER IS HEREBY ISSUED TO: Lone mountain springs water utility PO Box 1 BIG SKY MT 59716	
UPON FINDING THAT THE REQUIREMENTS OF SECTION 85-2-311 MCA HAVE BEEN MET.	MOUNTAIN VILLAGE NO. 4
PERMIT_NUMBER: 61672-G41H	S.
<u>PRIORITY DATE:</u> OCTOBER 21, 1986 AT 1:40 P.M.	
SOURCE: GROUNDWATER WELL	
TOTAL_FLOW_RATE: 124.00 GPM	8
TOTAL VOLUME: 150.00 ACRE FEET PER YEAR	8
DIVERSION POINT: NENWNE SEC. 30 TWP. 06S RGE. 03E MADISON CO	
USE: 124.00 GPM UP TO 150.00 AC-FT (JAN 01 - DEC 31) For commercial	
PLACE OF USE: SE SEC. 19 TWP. 065 RGE. 03E MADISON CO FOR COMMERCIAL	
NW SEC. 29 TWP. 06S RGE. 03E MADISON CO For commercial	
NE SEC. 30 TWP. 065 RGE. 03E MADISON CO For commercial	
DIVERSION_MEANS: PUMP	22
** <u>REQUIREMENTS FOR PERMIT HOLDER</u> : THE DEADLINE FOR COMPLETION OF THIS PERMIT, AND FILING OF THE NOTICE DOF COMPLETION OF PERMITTED WATER DEVELOPMENT (FORM 617) SHALL BE NOVEMBER 30, 1996, VERIFYING THAT THE APPROPRIATION OF WATER HAS BEEN ACOMPLETED AS PERMITTED.	
** <u>PRIOR RIGHTS</u> : THIS PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER; THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW.	
** <u>MEASURING DEVICE</u> : THIS PERMIT IS SUBJECT TO THE CONDITION THAT THE PERMITTEE SHALL SINSTALL AN ADEQUATE FLOW METERING DEVICE IN ORDER TO ALLOW THE FLOW RATE AND VOLUME OF WATER DIVERTED TO BE RECORDED. THE PERMITTEE SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATERS DIVERTED, INCLUDING THE PERIOD OF TIME, AND SHALL SUBMIT SAID RECORDS TO THE DEPARTMENT UPON REQUEST.	
** <u>PRDGRESS_REPORT</u> : THIS PERMIT IS SUBJECT TO THE PERMITTEE SUBMITTING A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS PERMIT BY NOVEMBER 30 OF EACH YEAR TO THE WATER RIGHTS BUREAU FIELD OFFICE, 1201 EAST MAIN, BOZEMAN MT 59715.	
** <u>EURTHER INFORMATION</u> : THIS WELL IS MANIFOLD AND USED IN CONJUNCTION WITH STATEMENT OF CLAIM NO.S 122636-41H, 122637-41H AND 133733-41H.	
** <u>CONTAMINATION, FLOWING WELLS</u> THIS PERMIT IS SUBJECT TO SECTION 85-2-505, MCA, REQUIRING THAT ALL WELLS BE CONSTRUCTED SO THEY WILL NOT ALLOW WATER TO BE WASTED, OR CONTAMINATE OTHER WATER SUPPLIES OR SOURCES, AND ALL FLOWING WELLS SHALL BE CAPPED OR EQUIPPED SO THE FLOW OF WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE.	
THE FINAL COMPLETION OF THE WELL MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THAT THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MMEASURED.	
GEAILURE ID COMPLY WITH ANY TERMS AND CONDITIONS MEREIN MAY RESULT IN GIHE LOSS OF THE WATER RIGHT GRANTED BY THIS PERMIT.	
** TRANSFER DF_OWNERSHIP: UPON A CHANGE IN OWNERSHIP OF ALL OR ANY PORTION OF THIS PERMIT, THE PARTIES TO THE TRANSFER SHALL FILE WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION A WATER RIGHT TRANSFER CERTIFICATE, FORM 608, PURSUANT TO SECTION 85-2-424, MCA.	
WITNESS ADMINISTRATION ASST: RONALD J GUSE	
March - Harver Styrson which Rights Burgho, which Resources Bivision	

Form No. 616 R12/2008

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670

PROVISIONAL PERMIT/AUTHORIZATION NUMBER:

41H 61672-00

APPROVED

The request for additional time to complete this project is approved because the appropriator has shown diligence in completing the project or shown good cause for not completing the project.

The notice of completion deadline is extended to December 31, 2033.

PROGRESS REPORT DUE: NONE

Water Resources Regional Office

518/18

Date

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601



MOUNTAIN VILLAGE NOS. 5, 6 (formerly Cascade Nos. 5 and 6)

PROVISIONAL PERMIT NO:41H 100737 00COMPLETION DATE:December 31, 2033

This provisional permit was filed in 1997 for 925 gpm and 592 acre-feet per year for Commercial use from the listed diversions, colloquially known as Mountain Village Nos. 5 and 6. The applicant (Boyne USA, Inc.) rolled the volumes of 41H 122636 00 (MTN-1), 41H 122637 00 (MTN-2), and 41H 133733 00 (MTN-3) into the volume of this right. The rates associated with MTN-1, MTN-2, and MTN-3 were not changed. The combined appropriation is limited to 592 acre-feet per year. The right was transferred to the District in 1999. The District filed for an extension of time and was approved for completion on 12/31/2033.

Page 1 of 2 General Abstract

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number	MOUNTAIN VILLAGE NOS. 5, 6	
Water Right Rumber.	Version: 1 ORIGINAL RIGHT This water right also limits tota	ıl
	Version Status: ACTIVE annual production from Mountain	
Owners:	BIG SKY COUNTY WATER & SEWER DIST #363 Village Nos. 1 - 3 plus 5 & 6 % RON EDWARDS PO BOX 160670 to 592 af/yr. BIG SKY, MT 59716-0670	
Priority Date:	APRIL 2, 1997 at 04:15 P.M.	
Enforceable Priorit	Date: APRIL 2, 1997 at 04:15 P.M.	
Purpose (use):	COMMERCIAL COMMERCIAL USE IS FOR THE MOUNTAIN VILLAGE COMPLEX, ALSO USED FOR MULTIPLE DOMESTIC.	
Maximum Flow Rate:	925.00 GPM	
Maximum Volume:	592.00 AC-FT	
Source Name:	GROUNDWATER	
Source Type:	GROUNDWATER	
Point of Diversion and Mo	ans of Diversion:	
<u>1</u>	NWSWSE 19 6S 3E MADISON	
Period of Diversion Diversion Means: Well Depth: Casing Diameter: Pump Size:	JANUARY 1 TO DECEMBER 31 WELL 212.00 FEET 8.00 INCHES 20.00 HP	
2	SENESW 19 6S 3E MADISON	
Period of Diversion Diversion Means: Well Depth: Static Water Level: Casing Diameter: Pump Size:	JANUARY 1 TO DECEMBER 31 WELL 200.00 FEET 14.00 FEET 8.63 INCHES 75.00 HP	
Purpose (Use): Volume:	COMMERCIAL 592.00 AC-FT	
Period of Use:	JANUARY 1 to DECEMBER 31	
Place of Use: <u>ID</u> <u>Acres</u> 1 2 3	Govt LotQtr SecSecTwpRgeCounty196S3EMADISONNW296S3EMADISONN2306S3EMADISON	

MOUNTAIN VILLAGE COMPLEX, AND CASCADE SUBDIVISION.

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE ASSOCIATED WHICH MEANS THE RIGHTS SHARE THE SAME PLACE OF USE.

100737-00 122636-00 122637-00 133733-00

Remarks:

ASSOCIATED RIGHT

THIS PERMIT IS ASSOCIATED TO WATER RIGHT NOS. 41H-W122636-00, 41H-W133733-00, AND 41H-W122637-00. THIS IS A MANIFOLD SYSTEM, AND THEY HAVE OVERLAPPING PLACES OF USE. THE COMBINED APPROPRIATION SHALL NOT EXCEED 592 ACRE-FEET PER ANNUM.

GROUNDWATER WASTE & CONTAMINATION

THIS RIGHT IS SUBJECT TO SECTION 85-2-505, MCA, REQUIRING A WELL BE CONSTRUCTED SO IT WILL NOT ALLOW WATER TO BE WASTED OR CONTAMINATE OTHER WATER SUPPLIES OR SOURCES, AND A FLOWING WELL MUST BE CAPPED OR EQUIPPED SO THE FLOW OF THE WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE.

GROUNDWATER WELL - ACCESS PORT

THE FINAL COMPLETION OF THE WELL(S) MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MEASURED.

WATER MEASUREMENT - STATIC WATER MEASUREMENTS REQUIRED

THE APPROPRIATOR SHALL INSTALL AN IN-LINE FLOW METER APPROVED BY THE REGIONAL MANAGER AT A POINT IN THE DELIVERY LINE APPROVED BY THE REGIONAL OFFICE TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL TAKE STATIC WATER LEVEL MEASUREMENTS. IF THE SOURCE IS A FLOWING WELL, THE APPROPRIATOR SHALL INSTALL A PRESSURE MONITORING DEVICE APPROVED BY THE REGIONAL MANAGER TO MEASURE HYDROSTATIC PRESSURE OF THE AQUIFER. STATIC WATER LEVEL MEASUREMENTS SHALL BE RECORDED ONLY AT A TIME WHEN THE WATER LEVEL IS STATIC. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP MONTHLY WRITTEN RECORD OF THE FLOW RATE, VOLUME, AND STATIC LEVEL MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR. THE REGIONAL MANAGER MAY ALSO REQUEST MEASUREMENT RECORDS AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

SPECIAL MEASUREMENT REPORT TYPE INFORMATION

CHARTS 02 & 08

PROGRESS REPORT REQUIRED

THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. SUBMIT REPORTS TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

DEPARTMENT RIGHT OF ACCESS

THIS PERMIT IS SUBJECT TO THE AUTHORITY OF THE DEPARTMENT TO REVOKE THE PERMIT IN ACCORDANCE WITH 85-2- 314, MCA, AND TO ENTER ONTO THE PREMISES FOR INVESTIGATIVE PURPOSES IN ACCORDANCE WITH 85-2-115, MCA.

OWNERSHIP UPDATE RECEIVED

NOTICE OF WATER RIGHT TRANSFER RECEIVED 03/05/99.



FORM NO.601 R11/96

STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION 8 NORTH LAST CHANCE GULCH P.O. BOX 201601

Permit to Appropriate Water

PERMIT NUMBER: 100737-41H

SUPPLIES OR SOURCES, AND A FLOWING WELL MUST BE CAPPED OR EQUIPPED SO THE FLOW OF THE WATER MAY BE STOPPED WHEN NOT BEING PUT TO BENEFICIAL USE. THE FINAL COMPLETION OF THE WELL(S) MUST INCLUDE AN ACCESS PORT OF AT LEAST .50 INCH SO THE STATIC LEVEL OF THE WELL MAY BE ACCURATELY MEASURED.

OF THE WELL MAY BE ACCURATELY MEASURED. ** WATER MEASUREMENT RECORDS REQUIRED: THE APPROPRIATOR SHALL INSTALL AN IN-LINE FLOW METER APPROVED BY THE REGIONAL MANAGER AT A POINT IN THE DELIVERY LINE APPROVED BY THE REGIONAL OFFICE TO RECORD THE FLOW RATE AND VOLUME OF WATER DIVERTED. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. THE APPROPRIATOR SHALL TAKE STATIC WATER LEVEL MEASUREMENTS. IF THE SOURCE IS A FLOWING WELL, THE APPROPRIATOR SHALL INSTALL A PRESSURE MONITORING DEVICE APPROVED BY THE REGIONAL MANAGER TO MEASURE HYDROSTATIC PRESSURE OF THE AQUIFER. STATIC WATER LEVEL MEASUREMENTS SHALL BE RECORDED ONLY AT A TIME WHEN THE WATER LEVEL IS STATIC. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP MONTHLY WRITTEN RECORD OF THE FLOW RATE, VOLUME, AND STATIC LEVEL MEASUREMENTS AND SHALL SUBMIT THE RECORDS BY NOVEMBER 30 OF EACH YEAR. THE REGIONAL MANAGER MAY ALSO REQUEST MEASUREMENT RECORDS AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OR MODIFICATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE ACCURATELY. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726 ** PROGRESS REPORT:

** <u>PROGRESS REPORT</u>: THE APPROPRIATOR SHALL SUBMIT A PROGRESS REPORT OF THE WORK COMPLETED UNDER THIS RIGHT BY NOVEMBER 30TH OF EACH YEAR UNTIL COMPLETION OF THE PROJECT. SUBMIT REPORTS TO THE WATER RESOURCES REGIONAL OFFICE AT THE ADDRESS LISTED BELOW. 151 EVERGREEN DRIVE, SUITE C, BOZEMAN, MT 59715 PH: 406-586-3136 FAX: 406-587-9726

** <u>DEPARTMENT RIGHT OF ACCESS:</u> THIS PERMIT IS SUBJECT TO THE AUTHORITY OF THE DEPARTMENT TO REVOKE THE PERMIT IN ACCORDANCE WITH 85-2- 314, MCA, AND TO ENTER ONTO THE PREMISES FOR INVESTIGATIVE PURPOSES IN ACCORDANCE WITH 85-2-115, MCA.

** <u>TRANSFER OF OWNERSHIP</u>: UPON A CHANGE IN OWNERSHIP OF ALL OR ANY PORTION OF THIS PERMIT, THE PARTIES TO THE TRANSFER SHALL FILE WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION A WATER RIGHT TRANSFER CERTIFICATE, FORM 608, PURSUANT TO SECTION 85-2-424, MCA.

FAILURE TO COMPLY WITH ANY OF THE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THE WATER RIGHT GRANTED BY THIS PERMIT.

mark WITNES

DATE

JULY 08, 1997 WATER RIGHTS BUREAU, WATER RESOURCES DIVISION



PAGE 2



THIS PAGE WAS EXTRACTED FROM DNRC DOCUMENTS FOR 41H 100737 00.

ATTACHED COMMENTS

2.) SOURCE OF WATER SUPPLY

This beneficial water use permit application is for two recently constructed production wells in Big Sky's Mountain Village. These wells are situated 800' apart and are located directly south of White Otter Road. Well #1 and #2 will be manifolded together and discharge into a 1.5 million gallon storage tank. This tank, which will be constructed during the summer season, shall be positioned in the upper portion of the Cascade Subdivision. Each of these wells is under the ownership of Boyne USA and Lone Mountain Springs, Inc. Not only will the water from these wells be utilized within the Cascade Subdivision, but also throughout the entire Mountain Village complex. The enclosed Capital Improvements Plan illustrates the specific locations of the wells.

4.) MEANS OF DIVERSION

Both wells have been constructed. At the present time, each well has been pump tested; however, pumps have not yet been sized or selected.

Well #1 is 212' deep and contains no perforations or screens. (See the enclosed well log.) MTN-5

Well #2 is 200' deep and is perforated from 160' to 200'. (See the enclosed well log.) MTN-6

9.) AMOUNT OF WATER, PURPOSE OF USE, AND PERIOD OF USE

The flow rate that is being requested (**925 gpm**) on this application was determined by our aquifer testing activities (step drawdown, constant rate, and recovery tests). Well #1 was pumped at a rate greater than **225 gpm** for approximately 17 hours. Drawdown equilibrium was achieved at a depth of 169.07' under a pumping rate of 225 gpm. Well #2 was stressed at a rate of **700 gpm** for 18 hours. Stabilized drawdown occurred at a depth of 86.7' under this pumping rate. For convenience, all aquifer testing data is provided in this submittal.

In order to apply for the correct volume of water (592 ac-ft), the total average daily water demand for the entire Mountain Village had to be determined. According to the enclosed **Engineer's Report**, the current average daily demand is 341,740 gpd. Over the next twenty years, an increase of 186,357 gpd is anticipated. Thus, the total average daily demand shall be **528,097 gpd**.

Over a years time, an average daily demand of 528,097 gpd will accumulate to a demand volume of 592 ac-ft.

528,097 gpd X 365 days = 192,755,405 gallons/year

192,755,405 gallons X 1 cf/7.48 gallons = 25,769,439 cf/year

25,769,439 cf/year X 1 ac-ft/43,560 cf = 592 ac-ft



Form No. 616 R



2/2017

NOTICE OF ACTION FOR EXTENSION OF TIME

BIG SKY COUNTY WATER & SEWER DISTRICT NO. 363 PO BOX 160670 BIG SKY, MT 59716

PROVISIONAL PERMIT/AUTHORIZATION NUMBER

41H 10073700

APPROVED

The request for additional time to complete this project is approved because the appropriator has shown diligence in completing the project or shown good cause for not completing the project.

The notice of completion deadline is extended to December 31st, 2033

PROGRESS REPORT DUE: NONE

Water Resources Regional Office

151

Date

NOTICE

Montana Department of Natural Resources and Conservation Water Resources Division PO BOX 201601 Helena, MT 59601-1601

MOUNTAIN VILLAGE NO. 7

PROVISIONAL PERMIT NO:41H 30001796COMPLETION DATE:December 31, 2033

This well and its water right were completed as part of an agreement between the District and several land development companies (Developers, **Appendix C**).¹ The provisional permit application was filed by the District in 2002 using data and information provided by Developers' consultant. The permit provides for 300 gpm and 241.84 acre-feet per year from the listed diversion, colloquially known as Mountain Village No. 7. The DNRC hydrogeologist memorandum summarizes substantial interference impacts of MTN-7 on existing well MTN-4. The District filed for an extension of time in 2014 that was approved for 12/31/2033.

¹ Yellowstone Mountain Club, LLC, Yellowstone Development, LLC, Spanish Peaks Development, LLC, Blixseth Group, Inc., and Lone Moose Meadows, LLC.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

Water Right Number:	41H 300017 Version: 1 -	96 PROVIS - ORIGINAL	SIONAI RIGHT	_ PERMI	Т	MOUNTAI	EN	VILLAGE	NO.	7
Owners:	Ve BIG SKY CC % RON EDW PO BOX 160 BIG SKY, M	ersion Status: DUNTY WATE VARDS 0670 F 59716-0670	ACTIV ER & S	'E EWER D	IST #3	363				
Priority Date:	APRIL 25, 20	002 at 11:58	A.M.							
Enforceable Priorit	ty Date: APR	IL 25, 2002 a	at 11:58	3 A.M.						
Purpose (use):	COMMERCI	AL								
Maximum Flow Rate:	300.00 GPM									
Maximum Volume:	241.84 AC-F	Т								
Maximum Acres:	36.50									
Source Name:	GROUNDWA	ATER								
Source Type:	GROUN	DWATER								
Point of Diversion and M	eans of Diversi	on:								
$\frac{\text{ID}}{1}$	Govt Lot	Qtr Sec	<u>Sec</u> 30	Twp 6S	Rge	County				
Period of Diversion Diversion Means: Well Depth: Static Water Level Casing Diameter:	: JANUARY 1 WELL 280.00 FEET : 40.00 FEET 12.00 INCHE	TO DECEME	3ER 31							
Reservoir:	OFF STREA	M <u>Qtr Sec</u> SESWNE	<u>Sec</u> 31	Twp 6S	<u>Rge</u> 3E	<u>County</u> MADISON				
Current Capacity:	1.84 ACRE-	FEET								
Purpose (Use): Volume: Period of Use:	COMMERCI 241.84 AC-F JANUARY 1	AL T to DECEMB	ER 31							
Place of Use:										
ID Acres 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	<u>Govt Lot</u>	Qtr Sec S2SWSW W2 S2SE N2 S2 S2 NE	Sec 6 31 5 8 1 36 31 21 9 30 29 25 20	wp 7S 6S 7S 7S 7S 6S 7S 6S 7S 6S 7S 6S 6S	Kge 3E 3E 3E 3E 2E 2E 3E 3E 3E 3E 3E 3E 3E 3E 3E 3E 3E	County MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON MADISON				

Remarks:

Remarks:

ASSOCIATED RIGHT

THIS WATER RIGHT WILL BE ASSOCIATED WITH THE FOLLOWING WATER RIGHTS VIA A MANIFOLD SYSTEM, 41H-17415. 41H-61672, 41H-100737, 41H-122636.

WATER MEASUREMENT-WATER USE MEASURING DEVICE

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN YEARLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY. - 200 2007 - 20

STATE OF MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

Ł

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

PERMIT TO APPROPRIATE WATER

UPON FINDING THE REQUIREMENTS OF SECTION 85-2-311, MCA, HAVE BEEN MET, THIS PROVISIONAL PERMIT IS GRANTED.

Water Right Number:	41H 30001796 PROVISIONAL PERMIT Version: 1 ORIGINAL RIGHT Status: ACTIVE	MOUNTAIN VILLAGE NO. 7
Owners:	BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716 0670	the the second of the second o
Priority Date: Purpose (use): Maximum Flow Rate: Maximum Volume:	APRIL 25, 2002 at 11:58 A. Marata success devices and a serve a se	
Maximum Acres: Source: Source Name:		
Point of Diversion and Me	ans of Diversion:	
ID 1 Diversion Means: Well Depth: Static Water Level; Casing Diameter: Period of Diversion:	Govt Lot Qtr Sec Sec Twp Rge NWNENE 30 6S 3E WELL 30.00 FEET 40.00 FEET 12:00 INCHES JANUARY 1 to DECEMBER 31	<u>County</u> WADISON
Reservoir:	OFF STREAM <u>Govt Lot</u> <u>Otr Sec</u> <u>Sec</u> <u>Twp</u> <u>Rec</u> <u>SESWNE</u> <u>31</u> <u>6</u> S <u>3E</u>	County WADISON
Purpose (Use): Volume: Period of Use: Place of Use: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	County MADISON

COMPLETION DEADLINE

THE DEADLINE TO COMPLETE THIS PERMIT AND FILE A PROJECT COMPLETION NOTICE (FORM 617) IS DECEMBER 31, 2013. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, BY DECEMBER 31, 2013. OTHERWISE, THE PERMIT IS VOID.

ASSOCIATED RIGHT

THIS WATER RIGHT WILL BE ASSOCIATED WITH THE FOLLOWING WATER RIGHTS VIA A MANIFOLD SYSTEM, 41H-17415. 41H-61672, 41H-100737, 41H-122636.

WATER MEASUREMENT-WATER USE MEASURING DEVICE

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT APPROVED WATER USE MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN YEARLY RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER DIVERTED INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES FLOW RATE AND VOLUME ACCURATELY.

BACKFLOW PREVENTOR

PURSUANT TO SECTION 85-2-505, MCA TO PREVENT GROUND WATER CONTAMINATION, AN OPERATIONAL BACKFLOW PREVENTOR MUST BE INSTALLED AND MAINTAINED BY THE APPROPRIATOR IF A CHEMICAL OR FERTILIZER DISTRIBUTION SYSTEM IS CONNECTED TO THE WELL.

IF THE OWNERSHIP CHANGES ON ANY PORTION OF OR ALL OF THIS RIGHT, A WATER RIGHT OWNERSHIP UPDATE, FORM#608, MUST BE FILED WITH THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION.

> THIS PROVISIONAL PERMIT IS SUBJECT TO ALL PRIOR EXISTING WATER RIGHTS IN THE SOURCE OF SUPPLY. FURTHER, THIS PERMIT IS SUBJECT TO ANY FINAL DETERMINATION OF EXISTING WATER RIGHTS, AS PROVIDED BY MONTANA LAW.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS PROVISIONAL PERMIT.

pssen oue Witness Signature

Water Resources Division

11. 11

DATE ISSUED: NOVEMBER 14, 2003

Page 2 of 2 Permit

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION



<u>ie of Moniai</u>

WATER RESOURCES DIVISION (406) 444-6601 TELEFAX NUMBERS (406) 444-0533 / (406) 444-5918 DIRECTOR'S OFFICE (406) 444-2074 TELEFAX NUMBER (406) 444-2684

48 NORTH LAST CHANCE GULCH PO BOX 201601 HELENA, MONTANA 59620-1601

To: Porter Desanko, Water Rights Specialist Bozeman Water Resources Regional Office

From: Bill Uthman, Hydrogeologist Water Management Bureau

Date: July 23, 2003

Re: Big Sky Water and Sewer District Application #30001796-41H

Introduction

Big Sky Water & Sewer District has applied for a Water Use Permit for a groundwater appropriation in NW NE NE Section 30 of Township 6 South, Range 3 East near Big Sky in Madison County. The application requests 300 gallons per minute (gpm) and up to 241.84 acre-feet per year from January 1 to December 31, inclusive each year for domestic and irrigation uses. The groundwater appropriation will be obtained from well #7 drilled to 280 feet and completed in a fractured igneous sill intruded into the Muddy Sandstone Formation with production zones from 253 to 280 feet. Well yield and drawdown tests were conducted at 300 gpm for 34 hours.

Discussion

The applicant demonstrated that groundwater is physically available at a 300-gpm discharge from well #7 for 34 hours, which is longer than the proposed periods of cyclic pumping. The yield tests also demonstrated that well #7 and existing well #4, located about 255 feet away, create significant mutual drawdown interference impacts. The applicant states that the mutual drawdown interference is acceptable, but that pumping schedules for each well need to be carefully controlled to prevent excessive pumping, that would create adverse drawdown impacts that would cause decreases in well production. The applicant recommends that pumping periods for well #7 be limited to cyclic pumping of up to 12 hours per day to prevent excessive drawdown interference in well #4. Each pumping period will be followed by a 12-hour period of water-level recovery. The importance of cyclic pumping is emphasized in the applicant's documentation and also is reflected in the proposed annual volume of 241.84 acre-feet to be appropriated. Only by adhering to a cyclic pumping schedule of up to 12 hours per day can the applicant limit the appropriated volume to that requested and also prevent significant drawdown impacts to well #4.

STATE WATER PROJECTS BUREAU (406) 444-6646 WATER MANAGEMENT BUREAU (406) 444-6637 WATER OPERATIONS BUREAU (406) 444-0860 WATER RIGHTS BUREAU (406) 444-6610 The applicant addressed the potential for adverse impact to other water users by explaining that all groundwater rights in Section 30 are those of the Big Sky Water & Sewer District. However, in Township 6 South, Range 2 East there are water rights registered to other water users. There is 1 groundwater right in Section 20 about 1 mile from well #7 and 5 groundwater rights in Section 24, the closest of which is about 5,000 feet away. The applicant did not demonstrate whether these wells would be impacted by the proposed appropriation. The applicant states that there are probably no immediate and observable impacts to the neighboring wells. However, hydrogeologic principles suggest that there will be a long-term adjustment of the potentiometric surface as a result of the proposed groundwater appropriation. The volume to be pumped from the aquifer will be obtained from the existing natural supply of water, that includes surface water and aquifer storage. If the aquifer is not hydrologically connected to a surface-water source, the groundwater appropriation will be obtained entirely from aquifer storage with a resulting eventual decline of the potentiometric surface throughout the area.

The applicant also is required to address the potential for adverse impacts to surface-water availability because the proposed appropriation is located within the Upper Missouri River Basin that is legislatively closed to new surface-water appropriations. The applicant states that the aquifer is confined and lies more than 250 feet below ground surface; thus, they argue that the aquifer is not in "direct connection" with any surface-water source in the vicinity of the well.

Conclusion

The applicant demonstrated that groundwater is physically available at a 300-gpm discharge for a 34-hour period, which is longer than the proposed periods of cyclic pumping. The applicant emphasizes that well #7 should only be pumped cyclically to limit drawdown impacts and prevent reductions in well production. The proposed cyclic pumping of 12 hours per day also is reflected in the proposed volume to be appropriated.

The applicant addressed the potential for adverse impact to other water users by stating that they own all water rights within a radius of about 1 mile. Although the applicant contends that they will not adversely impact other water users, they have not addressed this issue through groundwater-level monitoring or predictive analysis. The groundwater appropriation is expected to cause some eventual decline of the potentiometric surface, but it is unknown if it will be adverse. The applicant addressed the potential for impact to surface water by explaining that the aquifer is confined and is not in "direct connection" with area streams.

Form No. 616 R12/2008

NOTICE OF ACTION FOR EXTENSION OF TIME

Big Sky County Water & Sewer District No. 363 PO Box 160670 Big Sky, MT 59716

PROVISIONAL PERMIT/AUTHORIZATION NUMBER:

41H 30001796

APPROVED

The request for additional time to complete this project is approved because the appropriator has shown diligence in completing the project or shown good cause for not completing the project.

The notice of completion deadline is extended to December 31, 2033

PROGRESS REPORT DUE: NONE

January 17, 2014

Water Resources Regional Office

NOTICE

Montana Department of Natural Resources and Conservation

Water Resources Division PO BOX 201601

Helena, MT 59601-1601



SURFACE WATER RIGHT MIDDLE FORK WEST GALLATIN RIVER

STATEMENT OF CLAIM NOS: 41H 148445 00 & 41H 148446 00 COMPLETION DATE: 12/31/2037 (Change Authorization)

The District filed a change application for these statements of claims in 2016 as part of a project to modify Little Coyote pond to an off-stream reservoir and to change the allowed types of use. The new uses include Municipal for up to 139.85 acre-feet during the period from 6/1 to 10/15 annually within the District service area.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

A version with a more recent operating authority date exists. Contact DNRC for details.

Water Right Number:	41H 148445-0	00 STATE	MENT	OF CLA	MM					
	Version: 5 CHANGE AUTHORIZATION									
	Ver	sion Status:	ACTIV	E						
	THIS AUTHOR RECOGNIZED CHANGE, AN USE IS REDU CHAPTER 2, I AMOUNT.	RIZATION I D BY THE D D WILL THE ICED UNDE PART 2, MO	S LIMIT EPART EREAF R ADJI CA, THI	ED TO MENT TER NC JDICAT S AUTH	THE A IN THIS T EXC TON P IORIZA	MOUNT OF S PROCEED EED THAT A ROCEEDING ATION WILL	THE HISTORIC USE ING AS SUBJECT TO AMOUNT. IF THE HISTORIC AS PURSUANT TO TITLE 85, BE LIMITED TO A LESSER			
Owners:	BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716-0670									
Priority Date:	JUNE 23, 190	2								
Enforceable Priorit	ty Date: JUNE	23, 1902								
Purpose (use):	MUNICIPAL FISHERY INSTREAM F	ISHERY								
Irrigation Type:	SPRINK	LER								
Maximum Flow Rate:	9.10 CFS									
Historical Flow Rate:	9.10 CFS									
Maximum Volume:	120.46 AC-FT									
Historical Diverted Volume:	120.46 AC-FT									
Historical Consumptive Volume:	99.27 AC-FT									
Source Name:	WEST GALLA	TIN RIVER	, WEST	FORK						
Source Type:	SURFAC	E WATER								
Point of Diversion and M	eans of Diversio	n: Otr See	See	True	Dao	Country				
<u>1</u>	GOVI LOI	SESENE	<u>36</u>	6S	3E	GALLATIN				
Period of Diversion Diversion Means:	I: JANUARY 1 1 HEADGATE	TO DECEMI	BER 31			Flow Rate:	9.10 CFS			
2		SESENE	36	65	ЗE					
Period of Diversion Diversion Means:	UNE 1 TO O	CTOBER 1	5	00	0L	OALLATIN				
3		NENESE	31	6S	4E	GALLATIN				
Period of Diversion Diversion Means:	UNE 1 TO O	CTOBER 1	5							
	WATER IMPO	OUNDED IN	LITTLE ACE OF	E COYO F USE.	TE PC	ND IS DIVER	RTED BY PUMP AND			
Reservoir:	OFF STREAM	Reservo	ir Name	LITTL	E COY	OTE POND				
	Govt Lot	<u>Qtr Sec</u> SESENE	<u>Sec</u> 36	Twp 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN				
Diversion to Reserv	voir: DIVERSI	ON # 1								
Dam Height:	11.50 FEET									
Depth: Surface Area:										
Current Canacity	14.00 ACRE-	FEET								
Period of Use:	JUNE 1 to OCTOBER 15									

April 18, 2022 41H 148445-00

Page 2 of 4 General Abstract

Purpose (Use):

Period of Use: JUNE 1 to OCTOBER 15

MUNICIPAL

Place of	Use:						
ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			NE	25	6S	2E	GALLATIN
2				19	6S	3E	GALLATIN
3			W2SWSW	20	6S	3E	GALLATIN
4			S2SW	25	6S	3E	GALLATIN
5			SW	26	6S	3E	GALLATIN
6			SWSE	26	6S	3E	GALLATIN
7			S2	28	6S	3E	GALLATIN
8			S2NW	28	6S	3E	GALLATIN
9			NW	29	6S	3E	GALLATIN
10				30	6S	3E	GALLATIN
11				33	6S	3E	GALLATIN
12			S2	34	6S	3E	GALLATIN
13			NW	34	6S	3E	GALLATIN
14				35	6S	3E	GALLATIN
15				36	6S	3E	GALLATIN
16			N2	31	6S	4E	GALLATIN
17			W2SW	31	6S	4E	GALLATIN
18				1	7S	3E	GALLATIN
19			NE	2	7S	3E	GALLATIN
20			W2W2	3	7S	3E	GALLATIN
21				4	7S	3E	GALLATIN
22			E2	5	7S	3E	GALLATIN
23			E2NW	5	7S	3E	GALLATIN

Purpose (Use):

FISHERY Period of Use: JUNE 1 to OCTOBER 15

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			E2SENE	36	6S	3E	GALLATIN

Purpose (Use): **INSTREAM FISHERY**

> Period of Use: JUNE 1 to OCTOBER 15

Place of U	Use:						
ID	Acres	Govt Lot	<u>Qtr Sec</u>	Sec	Twp	Rge	County
1			E2SENE	36	6S	3E	GALLATIN
2			SWNW	31	6S	4E	GALLATIN
3			S2SENW	31	6S	4E	GALLATIN
4			S2SWNE	31	6S	4E	GALLATIN
5			SWSENE	31	6S	4E	GALLATIN
6			N2NESE	31	6S	4E	GALLATIN
7			NWSW	32	6S	4E	GALLATIN
8			S2NESW	32	6S	4E	GALLATIN
9			S2NWSE	32	6S	4E	GALLATIN
10			S2NESE	32	6S	4E	GALLATIN

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE. 148445-00 148446-00

THE MEANS OF DIVERSION, VOLUME, AND PERIOD OF DIVERSION WERE AMENDED BY THE WATER COURT PURSUANT TO SECTION 85-2-233(6), MCA.

STARTING IN 2008, PERIOD OF DIVERSION WAS ADDED TO MOST CLAIM ABSTRACTS, INCLUDING THIS ONE.
WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

41H 148445-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148445-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT THE FULL HISTORICALLY DIVERTED VOLUME OF 52.97 AF TO THE HISTORICAL POINT OF DIVERSION IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR.

THE PROTECTED REACH ENCOMPASSES THE STRETCH OF THE WEST FORK OF THE WEST GALLATIN RIVER FROM LITTLE COYOTE POND AT A POINT IN THE SESENE OF SECTION 36, T06 S, R03 E, TO THE WEST FORK?S CONFLUENCE WITH THE WEST GALLATIN RIVER AT A POINT IN THE SENESE OF SECTION 33, T06 S, R04 E. THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 35.00 GPM ALONG THIS REACH BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 159.8 GPM ALONG THIS REACH FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A TEMPORARY INSTREAM PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 319.6 GPM OR A 30-DAY PULSED FLOW RATE OF 70.00 GPM, BOTH EQUATING TO 42.38 AF OF CONSUMED VOLUME BEING PROTECTED EACH YEAR.

41H 148445-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148445-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A 30-DAY PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF HISTORICALLY CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT PLAN - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH INSTREAM FLOW PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 70.00 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 319.6 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 70.00 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN

MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER RIGHT OWNERSHIP UPDATE RECEIVED 03/05/1999.

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

WATER MEASUREMENT RECORDS REQUIRED - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE PROTECTED REACH OF THE WEST FORK OF THE WEST GALLATIN RIVER IN GALLATIN COUNTY ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST DURING THE TEMPORARY CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

GENERAL ABSTRACT

A version with a more recent operating authority date exists. Contact DNRC for details.

Water Right Number:	41H 14844	46-00 STATE	EMENT	OF CLA	MM		
	Version:	5 CHANGE A	AUTHO	RIZATIO	N		
		Version Status:	ACTIV	E			
	THIS AUTH RECOGNIZ CHANGE, USE IS RE CHAPTER AMOUNT.	HORIZATION I ZED BY THE D AND WILL THI DUCED UNDE 2, PART 2, MO	S LIMIT DEPART EREAF ER ADJI CA, THI	ED TO MENT TER NC UDICAT S AUTH	THE A IN THIS T EXC TON P IORIZ	MOUNT OF S PROCEED CEED THAT / ROCEEDING ATION WILL	THE HISTORIC USE ING AS SUBJECT TO AMOUNT. IF THE HISTORIC AS PURSUANT TO TITLE 85, BE LIMITED TO A LESSER
Owners:	BIG SKY C % RON EE PO BOX 10 BIG SKY, I	COUNTY WAT WARDS 60670 MT 59716-067	ER & SI 0	EWER [DIST #3	363	
Priority Date:	MAY 15, 19	952					
Enforceable Priori	ty Date: MA	AY 15, 1952					
Purpose (use):	MUNICIPA FISHERY INSTREAM	L 1 FISHERY					
Irrigation Type:	SPRI	NKLER					
Maximum Flow Rate:	9.10 CFS						
Historical Flow Rate:	9.10 CFS						
Maximum Volume:	120.46 AC	-FT					
Historical Diverted Volume:	120.46 AC-	FT					
Historical Consumptive Volume:	99.27 AC-F	Т					
Source Name: Source Type:	WEST GAI SURF	LATIN RIVER	, WEST	FORK			
Point of Diversion and M	eans of Diver	sion:					
<u>ID</u> 1	<u>Govt Lot</u>	<u>Qtr Sec</u> SESENE	<u>Sec</u> 36	<u>Twp</u> 6S	Rge 3E	<u>County</u> GALLATIN	
Period of Diversion Diversion Means:	I: JANUARY HEADGAT	1 TO DECEM E	BER 31			Flow Rate:	9.10 CFS
2		SESENE	36	6S	3E	GALLATIN	
Period of Diversion Diversion Means:	UNE 1 TO INSTREAM	OCTOBER 1	5				
3		NENESE	31	6S	4E	GALLATIN	
Period of Diversion Diversion Means:	INSTREAM	OCTOBER 1	5				
	WATER IN CONVEYE	IPOUNDED IN D TO THE PL	I LITTLE ACE OF	E COYO F USE.	TE PC	ND IS DIVE	RTED BY PUMP AND
Reservoir:	OFF STRE	AM Reservo	oir Name	e LITTL	E COY	OTE POND	
	<u>Govt Lot</u>	<u>Qtr Sec</u> SESENE	<u>Sec</u> 36	<u>Twp</u> 6S	<u>Rge</u> 3E	<u>County</u> GALLATIN	
Diversion to Reser	voir: DIVE	RSION # 1					
Dam Height:	11.50 FEE	T T					
Depth: Surface Area:	2.50 ACRE	I ES					
Current Capacity:	14.00 ACF	RE-FEET					
Period of Use:	JUNE 1 to	OCTOBER 1	5				

April 18, 2022 41H 148446-00

Page 2 of 4 General Abstract

Purpose (Use):

Period of Use: JUNE 1 to OCTOBER 15

MUNICIPAL

Place of U	Use:						
ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			NE	25	6S	2E	GALLATIN
2				19	6S	3E	GALLATIN
3			W2SWSW	20	6S	3E	GALLATIN
4			S2SW	25	6S	3E	GALLATIN
5			SW	26	6S	3E	GALLATIN
6			SWSE	26	6S	3E	GALLATIN
7			S2	28	6S	3E	GALLATIN
8			S2NW	28	6S	3E	GALLATIN
9			NW	29	6S	3E	GALLATIN
10				30	6S	3E	GALLATIN
11				33	6S	3E	GALLATIN
12			S2	34	6S	3E	GALLATIN
13			NW	34	6S	3E	GALLATIN
14				35	6S	3E	GALLATIN
15				36	6S	3E	GALLATIN
16			N2	31	6S	4E	GALLATIN
17			W2SW	31	6S	4E	GALLATIN
18				1	7S	3E	GALLATIN
19			NE	2	7S	3E	GALLATIN
20			W2W2	3	7S	3E	GALLATIN
21				4	7S	3E	GALLATIN
22			E2	5	7S	3E	GALLATIN
23			E2NW	5	7S	3E	GALLATIN

Purpose (Use):

FISHERY Period of Use: JUNE 1 to OCTOBER 15

Place of Use:

ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			E2SENE	36	6S	3E	GALLATIN

Purpose (Use): **INSTREAM FISHERY**

> Period of Use: JUNE 1 to OCTOBER 15

Place of U	Jse:						
ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
1			E2SENE	36	6S	3E	GALLATIN
2			SWNW	31	6S	4E	GALLATIN
3			S2SENW	31	6S	4E	GALLATIN
4			S2SWNE	31	6S	4E	GALLATIN
5			SWSENE	31	6S	4E	GALLATIN
6			N2NESE	31	6S	4E	GALLATIN
7			NWSW	32	6S	4E	GALLATIN
8			S2NESW	32	6S	4E	GALLATIN
9			S2NWSE	32	6S	4E	GALLATIN
10			S2NESE	32	6S	4E	GALLATIN

Remarks:

THE WATER RIGHTS FOLLOWING THIS STATEMENT ARE SUPPLEMENTAL WHICH MEANS THE RIGHTS HAVE OVERLAPPING PLACES OF USE. THE RIGHTS CAN BE COMBINED TO IRRIGATE ONLY OVERLAPPING PARCELS. EACH RIGHT IS LIMITED TO THE FLOW RATE AND PLACE OF USE OF THAT INDIVIDUAL RIGHT. THE SUM TOTAL VOLUME OF THESE WATER RIGHTS SHALL NOT EXCEED THE AMOUNT PUT TO HISTORICAL AND BENEFICIAL USE. 148445-00 148446-00

THE MEANS OF DIVERSION, VOLUME, AND PERIOD OF DIVERSION WERE AMENDED BY THE WATER COURT PURSUANT TO SECTION 85-2-233(6), MCA.

STARTING IN 2008, PERIOD OF DIVERSION WAS ADDED TO MOST CLAIM ABSTRACTS, INCLUDING THIS ONE.

41H 148446-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148446-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT THE FULL HISTORICALLY DIVERTED VOLUME OF 52.97 AF TO THE HISTORICAL POINT OF DIVERSION IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR.

THE PROTECTED REACH ENCOMPASSES THE STRETCH OF THE WEST FORK OF THE WEST GALLATIN RIVER FROM LITTLE COYOTE POND AT A POINT IN THE SESENE OF SECTION 36, T06 S, R03 E, TO THE WEST FORK?S CONFLUENCE WITH THE WEST GALLATIN RIVER AT A POINT IN THE SENESE OF SECTION 33, T06 S, R04 E. THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 35.00 GPM ALONG THIS REACH BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 159.8 GPM ALONG THIS REACH FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A TEMPORARY INSTREAM PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 319.6 GPM OR A 30-DAY PULSED FLOW RATE OF 70.00 GPM, BOTH EQUATING TO 42.38 AF OF CONSUMED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

41H 148446-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148446-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT PLAN - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH INSTREAM FLOW PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 70.00 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 319.6 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN

MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 70.00 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER RIGHT OWNERSHIP UPDATE RECEIVED 03/05/1999.

WATER MEASUREMENT RECORDS REQUIRED - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE PROTECTED REACH OF THE WEST FORK OF THE WEST GALLATIN RIVER IN GALLATIN COUNTY ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST DURING THE TEMPORARY CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.



Page 1 of 15 Change Authorization

STATE OF MONTANA

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

1424 9TH AVENUE P.O.BOX 201601 HELENA, MONTANA 59620-1601

CHANGE AUTHORIZATION

UPON FINDING THE REQUIREMENTS OF SECTION 85-2-402, MCA HAVE BEEN MET, APPLICATION TO CHANGE WATER RIGHT NUMBER 41H-30104096 SUBMITTED ON FEBRUARY 13, 2017, IS APPROVED.

Application From:	BIG SKY COU % RON EDW PO BOX 1600 BIG SKY, MT	UNTY ARDS 570 5971	WATER & SEWER DIST #363 6 0670
Water Right Number(s) Changed:	Wr# 41H-148445	Ext	Type STATEMENT OF CLAIM
in annotation changean	41H-148445	00	STATEMENT OF CLAIM
	41H-148446	00	STATEMENT OF CLAIM
	41H-148446	00	STATEMENT OF CLAIM

Authorization Limits

Flow Rate: 18.20 CFS

Volume: 240.92 AC-FT

Change Description:

THE APPLICANT IS AUTHORIZED TO CHANGE THE PURPOSE, PLACE OF USE, POINT OF DIVERSION, AND PLACE OF STORAGE FOR STATEMENT OF CLAIMS 41H 148445-00 AND 41H 148446-00.

THE NEW PURPOSES ARE MUNICIPAL, TEMPORARY INSTREAM FLOW, AND FISHERY. THE APPLICANT IS AUTHORIZED TO CHANGE 161.73 AF TO A MUNICIPAL PURPOSE AND TO CHANGE ITS PLACE OF USE TO THE SERVICE AREA OUTLINED BY THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY FOR THE BIG SKY COUNTY WATER AND SEWER DISTRICT #363.

THE CAPACITY AND SURFACE AREA OF THE RESERVOIR WILL BE REDUCED, MAKING A TOTAL OF 7.15 AF OF WATER AVAILABLE. THIS VOLUME OF WATER WILL BE PROTECTED ALONG THE INLET CHANNEL AND DIVERSION WORKS FOR A FISHERY PURPOSE.

THE POINT OF DIVERSION FOR LITTLE COYOTE POND IS AUTHORIZED TO BE CHANGED FROM AN ON-STREAM DAM TO A HEADGATE AND WILL REMAIN WITHIN THE SAME 10-ACRE LEGAL LAND DESCRIPTION, IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY.

THE APPLICANT IS AUTHORIZED TO CHANGE TEMPORARILY THE PURPOSE OF A PORTION OF THE VOLUME TO INSTREAM FLOW IN THE WEST FORK OF THE WEST GALLATIN RIVER FOR A PERIOD OF FIVE YEARS. UP TO 52.97 AF OF HISTORICALLY DIVERTED VOLUME IS PROTECTABLE TO THE LOCATION OF THE NEW HEADGATE IN THE SESENE OF SECTION 36, T06, R03 E, GALLATIN COUNTY. THE HISTORICALLY CONSUMED VOLUME OF 42.38 AF IS PROTECTABLE ALONG A DOWNSTREAM REACH FROM LITTLE COYOTE POND TO THE CONFLUENCE OF THE WEST FORK WITH THE WEST GALLATIN RIVER AT A POINT IN THE SENESE OF SECTION 33, T06 S, R04. THE APPLICANT SHALL TAKE STREAMFLOW MEASUREMENTS AT A SUITABLE CROSS-SECTION LOCATED NEAR THE NENESE OF SECTION 31, T06 S, R04 E, GALLATIN COUNTY.

COMPLETION DEADLINE

THE DEADLINE TO COMPLETE THIS AUTHORIZATION AND FILE A PROJECT COMPLETION NOTICE FOR CHANGE OF APPROPRIATION WATER RIGHT (FORM 618) IS <u>DECEMBER 31, 2037</u>. IF YOU CANNOT MEET THE DEADLINE, FILE A FORM 607, APPLICATION FOR EXTENSION OF TIME, BY <u>DECEMBER 31, 2037</u>. OTHERWISE, THE AUTHORIZATION IS VOID.

CONDITIONAL APPROVAL

THIS AUTHORIZATION IS LIMITED TO THE AMOUNT OF THE HISTORIC USE RECOGNIZED BY THE DEPARTMENT IN THIS PROCEEDING AS SUBJECT TO CHANGE, AND WILL THEREAFTER NOT EXCEED THAT AMOUNT. IF THE HISTORIC USE IS REDUCED UNDER ADJUDICATION PROCEEDINGS PURSUANT TO TITLE 85, CHAPTER 2, PART 2, MCA, THIS AUTHORIZATION WILL BE LIMITED TO A LESSER AMOUNT.

TEMPORARY CHANGE/PERMIT OR INTERIM PERMIT EXPIRATION THIS RIGHT EXPIRES ON OCTOBER 17, 2022.

FAILURE TO COMPLY WITH ANY OF THESE TERMS AND CONDITIONS MAY RESULT IN THE LOSS OF THIS CHANGE AUTHORIZATION.

Witness Signature

DATE ISSUED: OCTOBER 27, 2017

Water Resources Division



AN ASTERISH	((*) HAS BEEN PLA	CED NEXT TO	EACH IT	EM ALTERED	BY THIS	CHANGE AUTHO	RIZATION.
Vater Right Number:	41H 148445-00	STATEMEN	T OF CLA	MIM			
	Version: 5-CH	ANGE AUTHO	RIZATIO	N			
	Version	Status: ACTI	VE				
)wners:	BIG SKY COUNT % RON EDWARI PO BOX 160670 BIG SKY, MT 59	TY WATER & S DS 716 0670	SEWER	DIST #363			
Priority Date:	JUNE 23, 1902						
Enforceable Prior	rity Date: JUNE 23	1902					
Purpose (use):	MUNICIPAL FISHERY INSTREAM FISH	ERY					
Maximum Flow Rate:	9.10 CFS						
listorical Flow Rate:	9.10 CFS						
faximum Volume:	120.46 AC-FT						
listorical Diverted	120.46 AC-FT						
listorical Consumptive Volume:	99.27 AC-FT						
Source Name:	WEST GALLATIN	NRIVER, WES	TFORK				
Source Type:	SURFACE W	ATER					
Point of Diversion and N	teans of Diversion:						
<u>ID</u> •1	Govt Lot	Qtr Sec SESENE	Sec 36	Twp 6S	Rge 3E	County GALLATIN	
Period of Diversion	I: JANUARY 1 TO	DECEMBER	31			Flow Rate:	9.10 CFS
Diversion Means:	HEADGATE						
*2		SESENE	36	6S	3E	GALLATIN	
Period of Diversion	n: JUNE 1 TO OC	TOBER 15					
Diversion Means:	INSTREAM	NENECE	.04	00	45	CALLATIN	
Bariad of Diversion		TOPER 15	31	05	46	GALLATIN	
Diversion Means:	INSTREAM	TOBER 15					
Paramater	OFF STREAM	Deserve	ir Name	UTTLECO	VOTE PO	ND	
Keservon.	Govt Lot	Otr Sec	Sec	Twp	Rge	County	
	Just Los	SESENE	36	6S	3E	GALLATIN	
Dam Height:	11.50 FEET						
Depth:	10.00 FEET						
Surface Areas	2.50 ACRES						
Surface Areas							

October 27, 2017

•9 •10



Page 3 of 15 ange Authorization

Change Application #	: 41H-30104096					C	h
*Purpose (Use):	MUNICIPAL						
Volume:	80.87 AC-FT						
Period of Use:	JUNE 1 to OCT	OBER 15					
*Place of Use:							
ID	Acres Govt Lot	Otr Sec	Sec	Twp	Rge	County	
*1		NE	25	6S	2E	GALLATIN	
*2		SI 375	19	6S	3E	GALLATIN	
*3		W2SWSW	20	6S	3E	GALLATIN	
*4		S2SW	25	6S	3E	GALLATIN	
*5		SW	26	6S	3E	GALLATIN	
*6		SWSE	26	6S	3E	GALLATIN	
•7		S2	28	6S	3E	GALLATIN	
*8		S2NW	28	6S	3E	GALLATIN	
•9		NW	29	6S	3E	GALLATIN	
*10			30	6S	3E	GALLATIN	
*11			33	6S	3E	GALLATIN	
*12		S2	34	65	3E	GALLATIN	
*13		NW	34	65	3E	GALLATIN	
*14			35	65	3E	GALLATIN	
*15			36	65	35	GALLATIN	
*16		N2	31	65	4F	GALLATIN	
*17		W2SW	31	65	45	GALLATIN	
*18			1	75	35	GALLATIN	
*19		NE	2	75	3E	GALLATIN	
*20		W2W2	3	78	3E	GALLATIN	
*21			4	75	35	GALLATIN	
*22		F2	5	75	3E	GALLATIN	
*23		E2NW	5	75	3E	GALLATIN	
Purnose (Use):	FISHERY						
Volume:	3.57 AC-FT						
Period of Use:	JUNE 1 to OCT	OBER 15					
*Place of Use:							
ID 11	Acres Govt Lot	Otr Sec	Sec	Twp	Rge	County	
		EZSENE	30	05	JE	GALLATIN	
Purpose (Use):	INSTREAM FIS	HERY					
Volume:	26.49 AC-FT						
Period of Use:	JUNE 1 to OCT	OBER 15					
*Place of Use:							
ID	Acres Govt Lot	Qtr Sec	Sec	Twp	Rge	County	
		E2SENE	36	6S	3E	GALLATIN	
*2		SWNW	31	6S	4E	GALLATIN	
•3		S2SENW	31	6S	4E	GALLATIN	
*4		S2SWNE	31	6S	4E	GALLATIN	
•5		SWSENE	31	6S	4E	GALLATIN	
*6		N2NESE	31	6S	4E	GALLATIN	
•7		NWSW	32	6S	4E	GALLATIN	
*8		S2NESW	32	6S	4E	GALLATIN	
*9		S2NWSE	32	6S	4E	GALLATIN	

S2NESE

32

6S

4E

GALLATIN

WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

41H 148445-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148445-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT THE FULL HISTORICALLY DIVERTED VOLUME OF 52.97 AF TO THE HISTORICAL POINT OF DIVERSION IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR.

THE PROTECTED REACH ENCOMPASSES THE STRETCH OF THE WEST FORK OF THE WEST GALLATIN RIVER FROM LITTLE COYOTE POND AT A POINT IN THE SESENE OF SECTION 36, T06 S, R03 E, TO THE WEST FORK?S CONFLUENCE WITH THE WEST GALLATIN RIVER AT A POINT IN THE SENESE OF SECTION 33, T06 S, R04 E. THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 35.00 GPM ALONG THIS REACH BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 159.8 GPM ALONG THIS REACH FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A TEMPORARY INSTREAM PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 319.6 GPM OR A 30-DAY PULSED FLOW RATE OF 70.00 GPM, BOTH EQUATING TO 42.38 AF OF CONSUMED VOLUME BEING PROTECTED EACH YEAR.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

41H 148445-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148445-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR, ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A 30-DAY PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF HISTORICALLY CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH, IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT PLAN - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH INSTREAM FLOW PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 70.00 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 319.6 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START

AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 70.00 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT INFORMATION

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND): THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT RECORDS REQUIRED - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE PROTECTED REACH OF THE WEST FORK OF THE WEST GALLATIN RIVER IN GALLATIN COUNTY ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST DURING THE TEMPORARY CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.



THE INFORMATION SHOWN BELOW REFLECTS THE ENTIRE WATER RIGHT. AN ASTERISK (*) HAS BEEN PLACED NEXT TO EACH ITEM ALTERED BY THIS CHANGE AUTHORIZATION. Water Right Number: 41H 148445-00 STATEMENT OF CLAIM Version: 3 - CHANGE AUTHORIZATION Version Status: ACTIVE Owners: BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716 0670 **Priority Date:** JUNE 23, 1902 Enforceable Priority Date: JUNE 23, 1902 Purpose (use): FISHERY IRRIGATION MUNICIPAL 9.10 CFS Maximum Flow Rate: 9.10 CFS **Historical Flow Rate:** Maximum Volume: 120.46 AC-FT **Historical Diverted** 120.46 AC-FT Volume: **Historical Consumptive** 99.27 AC-FT Volume: Maximum Acres: 60.00 WEST GALLATIN RIVER, WEST FORK Source Name: SURFACE WATER Source Type: *Point of Diversion and Means of Diversion: ID Govt Lot Qtr Sec Sec Twp Rge County • 1 SESENE GALLATIN 36 6S 3E Period of Diversion: JANUARY 1 TO DECEMBER 31 9.10 CFS Flow Rate: Diversion Means: HEADGATE OFF STREAM Reservoir Name: LITTLE COYOTE POND *Reservoir: Qtr Sec Sec Twp Rge County Govt Lot 36 SESENE 65 3E GALLATIN 11.50 FEET Dam Height: 10.00 FEET Depth: 2.50 ACRES Surface Area: Current Capacity: 14.00 ACRE-FEET *Purpose (Use): FISHERY Volume: 3.57 AC-FT JUNE 1 to OCTOBER 15 Period of Use: *Place of Use: ID Acres Govt Lot Qtr Sec Sec Twp Rge County *1 E2SENE 36 65 3E GALLATIN Purpose (Use): IRRIGATION Climatic Area: 5-LOW Volume: 26.49 AC-FT JUNE 1 to OCTOBER 15 Period of Use: Place of Use: Acres Govt Lot ID Qtr Sec Sec Twp Rgc County 100.00 SE 36 65 3E GALLATIN 1 2 100.00 SW 36 65 3E GALLATIN 3 35.00 S2S2NE GALLATIN 36 **6**S 3E 5.00 GALLATIN SENW 36 65 3E 4 240.00 Total:

October 27, 2017



County

Page 7 of 15

Change Application #: 41H-30104096

*Purpose (Use):	M	JNICIPAL	
Volume:	80	.87 AC-FT	
Period of Use:	JU	NE 1 to OCTO	OBER 15
*Place of Use:			
ID	Acres	Govt Lot	Qtr Sec
-1			NE

-1	NE	25	6S	2E	GALLATIN
*2		19	6S	3E	GALLATIN
*3	W2SWSW	20	6S	3E	GALLATIN
*4	S2SW	25	6S	3E	GALLATIN
*5	SW	26	6S	3E	GALLATIN
*6	SWSE	26	6S	3E	GALLATIN
•7	S2	28	6S	3E	GALLATIN
*8	S2NW	28	6S	3E	GALLATIN
*9	NW	29	6S	3E	GALLATIN
*10		30	6S	3E	GALLATIN
*11		33	6S	3E	GALLATIN
*12	S2	34	6S	3E	GALLATIN
*13	NW	34	6S	3E	GALLATIN
*14		35	6S	3E	GALLATIN
*15		36	6S	3E	GALLATIN
*16	N2	31	6S	4E	GALLATIN
*17	W2SW	31	6S	4E	GALLATIN
*18		1	75	3E	GALLATIN
*19	NE	2	7S	3E	GALLATIN
*20	W2W2	3	7S	3E	GALLATIN
*21		4	7S	3E	GALLATIN
*22	E2	5	7S	3E	GALLATIN
*23	E2NW	5	7S	3E	GALLATIN

Sec

Twp

Rge

41H 148445-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148445-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A 30-DAY PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF HISTORICALLY CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

THE IRRIGATION PLACE OF USE AUTHORIZED IN THIS VERSION IS A MAXIMUM OF 60 ACRES WITHIN THE HISTORICAL 240-ACRE PLACE OF USE.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT INFORMATION

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

Page 9 of 15 Change Authorization

THE INFORMATION SHOWN BELOW REFLECTS THE ENTIRE WATER RIGHT. AN ASTERISK (*) HAS BEEN PLACED NEXT TO EACH ITEM ALTERED BY THIS CHANGE AUTHORIZATION. Water Right Number: 41H 148446-00 STATEMENT OF CLAIM Version: 3 - CHANGE AUTHORIZATION Version Status: ACTIVE **Owners:** BIG SKY COUNTY WATER & SEWER DIST #363 % RON EDWARDS PO BOX 160670 BIG SKY, MT 59716 0670 **Priority Date:** MAY 15, 1952 Enforceable Priority Date: MAY 15, 1952 Purpose (use): FISHERY IRRIGATION MUNICIPAL 9.10 CFS Maximum Flow Rate: 9.10 CFS **Historical Flow Rate:** Maximum Volume: 120,46 AC-FT **Historical Diverted** 120.46 AC-FT Volume: **Historical Consumptive** Volume: 99.27 AC-FT Maximum Acres: 60.00 WEST GALLATIN RIVER, WEST FORK Source Name: SURFACE WATER Source Type: *Point of Diversion and Means of Diversion: ID Govt Lot Qtr Sec Sec Twp Rge County • 1 SESENE GALLATIN 36 **6**S 3E Period of Diversion: JANUARY 1 TO DECEMBER 31 Flow Rate: 9.10 CFS **Diversion Means: HEADGATE** OFF STREAM *Reservoir: Reservoir Name: LITTLE COYOTE POND Qtr Sec Sec Govt Lot Twp Rge County SESENE 36 **6**S 3E GALLATIN Dam Height: 11.50 FEET 10.00 FEET Depth: 2.50 ACRES Surface Area: Current Capacity: 14.00 ACRE-FEET Purpose (Use): FISHERY Volume: 3.58 AC-FT JUNE 1 to OCTOBER 15 Period of Use: *Place of Use: ID Acres Govt Lot Qtr Sec Sec Twp County Rge *1 E2SENE 36 65 GALLATIN 3E IRRIGATION Purpose (Use): Climatic Area: 5-LOW Volume: 26.48 AC-FT JUNE 1 to OCTOBER 15 Period of Use: Place of Use: ID S Cost Lot Counts Oto P. Dat

		200 0000	10.0.0	A	1.1.1.1	
1	100.00	SE	36	6S	3E	GALLATIN
2	100.00	SW	36	6S	3E	GALLATIN
3	35.00	S2S2NE	36	6S	3E	GALLATIN
4	5.00	SENW	36	6S	3E	GALLATIN
Total:	240.00					

Page 10 of 15 Change Authorization

and a ship and a	
*Purpose (Use):	MUNICIPAL

Volume: 80.86 AC-FT Period of Use: JUNE 1 to OCTOBER 15

*Pleas of User

ID	Acres Govt Lot	Qtr Sec	Sec	Twp	Rge	County
•1		NE	25	6S	2E	GALLATIN
*2			19	6S	3E	GALLATIN
*3		W2SWSW	20	6S	3E	GALLATIN
•4		S2SW	25	6S	3E	GALLATIN
*5		SW	26	6S	3E	GALLATIN
*6		SWSE	26	6S	3E	GALLATIN
•7		S2	28	6S	3E	GALLATIN
*8		S2NW	28	6S	3E	GALLATIN
•9		NW	29	6S	3E	GALLATIN
10			30	6S	3E	GALLATIN
11			33	6S	3E	GALLATIN
12		S2	34	6S	3E	GALLATIN
13		NW	34	6S	3E	GALLATIN
14			35	6S	3E	GALLATIN
15			36	6S	3E	GALLATIN
16		N2	31	6S	4E	GALLATIN
17 //		W2SW	31	6S	4E	GALLATIN
18			1	75	3E	GALLATIN
19		NE	2	7S	3E	GALLATIN
20		W2W2	3	7S	3E	GALLATIN
21			4	75	3E	GALLATIN
22		E2	5	75	3E	GALLATIN
23		E2NW	5	75	3E	GALLATIN

WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

41H 148446-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148446-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

THE IRRIGATION PLACE OF USE AUTHORIZED IN THIS VERSION IS A MAXIMUM OF 60 ACRES WITHIN THE HISTORICAL 240-ACRE PLACE OF USE.

WATER MEASUREMENT INFORMATION

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

Page 13 of 15 Change Authorization

Purpose (Use):	MUNICIPAL			
Volume:	80.86 AC-FT			
Period of Use:	JUNE 1 to OCTOBER 1			
*Place of Use:				
115				

ID	Acres Govt Lot	Qtr Sec	Sec	Twp	Rge	County
-1		NE	25	6S	2E	GALLATIN
*2			19	6S	3E	GALLATIN
*3		W2SWSW	20	6S	3E	GALLATIN
*4		S2SW	25	6S	3E	GALLATIN
*5		SW	26	6S	3E	GALLATIN
*6		SWSE	26	6S	3E	GALLATIN
*7		S2	28	6S	3E	GALLATIN
*8		S2NW	28	6S	3E	GALLATIN
•9		NW	29	6S	3E	GALLATIN
*10			30	6S	3E	GALLATIN
•11			33	6S	3E	GALLATIN
*12		S2	34	6S	3E	GALLATIN
*13		NW	34	6S	3E	GALLATIN
*14			35	6S	3E	GALLATIN
*15			36	6S	3E	GALLATIN
*16		N2	31	6S	4E	GALLATIN
*17		W2SW	31	6S	4E	GALLATIN
*18			1	7S	3E	GALLATIN
*19		NE	2	7S	3E	GALLATIN
*20		W2W2	3	75	3E	GALLATIN
*21			4	75	3E	GALLATIN
*22		E2	5	7S	3E	GALLATIN
*23		E2NW	5	7S	3E	GALLATIN

Purpose (Use):	FISHERY					
Volume:	3.58 AC-FT					
Period of Use:	JUNE 1 to OCT	OBER 15				
*Place of Use:						
ID	Acres Govt Lot	Qtr Sec	Sec	Twp	Rge	County
21		E2SENE	36	6S	3E	GALLATIN

Purpose (Use):	IN	STREAM FIS	HERY				
Volume:	26	48 AC-FT					
Period of Use:	JU	INE 1 to OCT	OBER 15				
*Place of Use:							
ID	Acres	Govt Lot	Qtr Sec	Sec	Twp	Rge	County
*1			E2SENE	36	6S	3E	GALLATIN
*2			SWNW	31	6S	4E	GALLATIN
*3			S2SENW	31	6S	4E	GALLATIN
*4			S2SWNE	31	6S	4E	GALLATIN
*5			SWSENE	31	6S	4E	GALLATIN
*6			N2NESE	31	6S	4E	GALLATIN
•7			NWSW	32	6S	4E	GALLATIN
*8			S2NESW	32	6S	4E	GALLATIN
*9			S2NWSE	32	6S	4E	GALLATIN
*10			S2NESE	32	6S	4E	GALLATIN

41H 148446-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - FISHERY CHANGE (LITTLE COYOTE POND):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148446-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 5.90 GPM ALONG THE NEW INLET AND DIVERSION WORKS IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 26.96 GPM ALONG THE NEW INLET AND DIVERSION WORKS FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A FISHERIES PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE IS A CONTINUOUS FLOW RATE OF 11.80 GPM OR A PULSED FLOW RATE OF 53.92 GPM, BOTH EQUATING TO 7.15 AF OF CONSUMED AND DIVERTED VOLUME BEING PROTECTED EACH YEAR.

THE TOTAL DIVERTED VOLUME FOR STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00 IS 240.92 AC-FT. UNDER THIS CHANGE AUTHORIZATION, THE SUM OF THE VOLUMES FOR THE INDIVIDUAL PURPOSES IS 221.85 AC-FT. A VOLUME OF 19.06 AC-FT IS UNATTRIBUTED TO A SPECIFIC PURPOSE.

41H 148446-00 FLOW RATES NOT TO EXCEED VOLUME LIMITATION - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

IN THE EVENT THAT THE APPROPRIATOR MAKES A CALL FOR WATER OR A WATER COMMISSIONER IS APPOINTED, THE FOLLOWING OPERATION OF PROTECTION REPRESENTING UNDIVIDED, CONTINUOUS FLOW RATES OF WATER RIGHT 41H 148446-00 MUST BE FOLLOWED TO PREVENT EXCEEDING FLOW RATE AND VOLUME LIMITATIONS ON THE WATER RIGHT. THE APPROPRIATOR MAY PROTECT THE FOLLOWING AMOUNTS.

THE APPROPRIATOR MAY PROTECT THE FULL HISTORICALLY DIVERTED VOLUME OF 52.97 AF TO THE HISTORICAL POINT OF DIVERSION IN THE SESENE OF SECTION 36, T06 S, R03 E, GALLATIN COUNTY, BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR.

THE PROTECTED REACH ENCOMPASSES THE STRETCH OF THE WEST FORK OF THE WEST GALLATIN RIVER FROM LITTLE COYOTE POND AT A POINT IN THE SESENE OF SECTION 36, T06 S, R03 E, TO THE WEST FORK?S CONFLUENCE WITH THE WEST GALLATIN RIVER AT A POINT IN THE SENESE OF SECTION 33, T06 S, R04 E. THE APPROPRIATOR MAY PROTECT A CONTINUOUS FLOW RATE OF 35.00 GPM ALONG THIS REACH BETWEEN JUNE 1 AND OCTOBER 15 OF EACH YEAR. ALTERNATELY, THE APPROPRIATOR MAY PROTECT A PULSED FLOW RATE OF 159.8 GPM ALONG THIS REACH FOR A PERIOD OF 30 DAYS EACH YEAR.

THE TOTAL FLOW RATE PROTECTED FOR A TEMPORARY INSTREAM PURPOSE UNDER BOTH WATER RIGHTS INVOLVED IN THIS CHANGE AUTHORIZATION IS A CONTINUOUS FLOW RATE OF 319.6 GPM OR A 30-DAY PULSED FLOW RATE OF 70.00 GPM, BOTH EQUATING TO 42.38 AF OF CONSUMED VOLUME BEING PROTECTED EACH YEAR.

WATER MEASUREMENT - MUNICIPAL DIVERTED VOLUME LIMITATION:

UNDER BOTH STATEMENTS OF CLAIM 41H 148445-00 AND 41H 148446-00, THE APPROPRIATOR MAY DIVERT A COMBINED MAXIMUM OF 139.85 AF ANNUALLY FROM LITTLE COYOTE POND FOR MUNICIPAL PURPOSES.

WATER MEASUREMENT PLAN - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH FISHERY PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 11.80 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 53.92 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 11.80 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT PLAN - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR SHALL INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1 OF EVERY YEAR WHICH INSTREAM FLOW PROTECTION PLAN THEY WILL FOLLOW FOR THAT YEAR. AS DESCRIBED IN THIS DOCUMENT, THE TWO PROTECTION PLANS ARE TO PROTECT, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00, (1) A DISTRIBUTED FLOW RATE OF 70.00 GPM FROM JUNE 1 TO OCTOBER 15 OR (2) A PULSED FLOW RATE OF 319.6 GPM FOR A 30-DAY PERIOD. THE APPROPRIATOR SHALL ALSO INFORM THE BOZEMAN WATER RESOURCES OFFICE THE START

AND END DATES OF THE 30-DAY PERIOD.

IF THE APPROPRIATOR ELECTS TO PROTECT THE DISTRIBUTED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER MONTH. IF THE APPROPRIATOR ELECTS TO PROTECT THE PULSED FLOW RATE, THEN MEASUREMENTS SHALL BE TAKEN A MINIMUM OF ONCE PER WEEK.

IF THE APPROPRIATOR DOES NOT INFORM THE BOZEMAN WATER RESOURCES OFFICE BY JUNE 1, THEN THE DEFAULT PLAN OF OPERATION FOR THIS AUTHORIZATION SHALL BE A DISTRIBUTED FLOW RATE OF 70.00 GPM THAT IS PROTECTABLE FROM JUNE 1 TO OCTOBER 15, UNDER BOTH WATER RIGHTS 41H 148445-00 AND 41H 148446-00.

WATER MEASUREMENT INFORMATION

WATER MEASUREMENT RECORDS REQUIRED - TEMPORARY INSTREAM CHANGE (WEST FORK OF THE WEST GALLATIN RIVER):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE PROTECTED REACH OF THE WEST FORK OF THE WEST GALLATIN RIVER IN GALLATIN COUNTY ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST DURING THE TEMPORARY CHANGE AUTHORIZATION. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT RECORDS REQUIRED - FISHERY CHANGE (LITTLE COYOTE POND):

THE APPROPRIATOR OR A DESIGNEE SHALL MEASURE THE WATER PROTECTED ALONG THE NEW INLET AND DIVERSION WORKS OF LITTLE COYOTE POND ACCORDING TO THE MEASUREMENT PLAN DESCRIBED IN THIS DOCUMENT USING DEPARTMENT-APPROVED MEASURING DEVICES. MEASUREMENT RECORDS SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES SO THEY ALWAYS OPERATE PROPERLY AND MEASURE FLOW RATE ACCURATELY.

WATER MEASUREMENT - MUNICIPAL VOLUME MEASUREMENT RECORDS REQUIRED:

THE APPROPRIATOR SHALL INSTALL A DEPARTMENT-APPROVED MEASURING DEVICE AT A POINT APPROVED BY THE DEPARTMENT. WATER MUST NOT BE DIVERTED UNTIL THE REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING. ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE VOLUME OF ALL WATER DIVERTED, INCLUDING THE PERIOD OF TIME. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT RECORDS MAY BE CAUSE FOR REVOCATION OF A PERMIT OR CHANGE. THE RECORDS MUST BE SENT TO THE WATER RESOURCES REGIONAL OFFICE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICE SO IT ALWAYS OPERATES PROPERLY AND MEASURES THE VOLUME ACCURATELY.