

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

APPLICATION TO CHANGE WATER)	PRELIMINARY DETERMINATION TO GRANT CHANGE
RIGHT NO. 41P 30072726 BY THE CITY OF)	
SHELBY)	

On March 4, 2016, the City of Shelby (Applicant) submitted amendments to Application to Change Water Right No.41P 30072726 originally received April 2, 2015 by the Havre Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). This Application seeks changes to Water Right Statements of Claim (SOC) Nos. 41P 192877 and 192879. The Department published receipt of the Application on its website. The Department sent a Deficiency Letter on April, 18, 2016 and the Applicant provided a response on June 2, 2016. The Application was determined to be correct and complete as of June 28, 2016. As part of the combined project, the Applicant submitted to Change Water Right No.41P 30072725 to change Water Right Claim Nos. 41P 192878, 41P 192880, 192881 and 192882 and Beneficial Water Use Provisional Permits (Permits) Nos. 41P 4489, 41P 4490, and 41P 58129. which is subject to a separate review and preliminary determination. Environmental Assessment for this Application was completed on July 27, 2016.

INFORMATION

The Department considered the following information submitted by the Applicant.

Application as filed:

- Form 606 dated April 2, 2015
- Form 606-TCA dated April 2, 2015
- Application Amendments dated March 4, 2016
- Deficiency Letter Responses dated June 2, 2016
- Well Logs
- Shelby Well Field Pump Test - KLJ Engineering
- Water System Modeling Report – KLJ Engineering

- Water Service Area Design and Record Drawings
- The 1961 Preliminary Engineers Report on Water Supply and Distribution System for Shelby, Toole County, Montana by Stanley J. Thill, Conrad, Montana (1961 PER)
- Application for Reservation of Water for the City of Shelby by Aquoneering, Roger Perkins, Laurel Montana, August 1988 (1988 Reservation Application)
- Preliminary Engineering Report Water System Improvements prepared for City of Shelby, Montana by Kadrmas, Lee & Jackson Engineers and Surveyors Planners (KLJ), 2010 (2010 PER), and correspondence with KLJ, the Applicant's engineer

Information within the Department's Possession/Knowledge

- Claim Files for SOCs Nos. 41P 192877 and 192879
- Environmental Assessment dated July 27, 2016

The Department has fully reviewed and considered the Environmental Assessment and evidence and argument submitted with this Application and **preliminarily determines** pursuant to the Montana Water Use Act (Title 85, chapter 2, parts 3 and 4, MCA) as follows.

WATER RIGHTS TO BE CHANGED

FINDINGS OF FACT

1. The water rights proposed to be changed include four SOCs (41P 192877 and 192879). All of the aforementioned water rights are for year-round municipal use. This change application is being processed by the Department conjunctively with Change Application 41P 30072725. The amount of water the Applicant is seeking to change through both Applications is up to 2,895.00 GPM for a total cumulative volume of up to 1124.90 AF. The amount of water being changed in this Application is a flow rate of up to 399.00 GPM and a volume no to exceed 187.48 AF.
2. The Applicant seeks to change the following Water Rights itemized in the following two tables grouped by water right type:

STATEMENTS OF CLAIM PROPOSED FOR CHANGE (EXCLUDING WATER RIGHTS INCLUDED IN APPLICATION TO CHANGE A WATER RIGHT 41P 30072725)

Water Right No. (41P)	Well No.	Priority Date	Source	Flow Rate (GPM)	Period of Use	Historic Per Capita pre-1973 (AF)
192877	1	6/6/1940	Groundwater	241.00	May 1 -Oct	93.74
192879	3	7/7/1939	Groundwater	158.00	May 1 -Oct	93.74

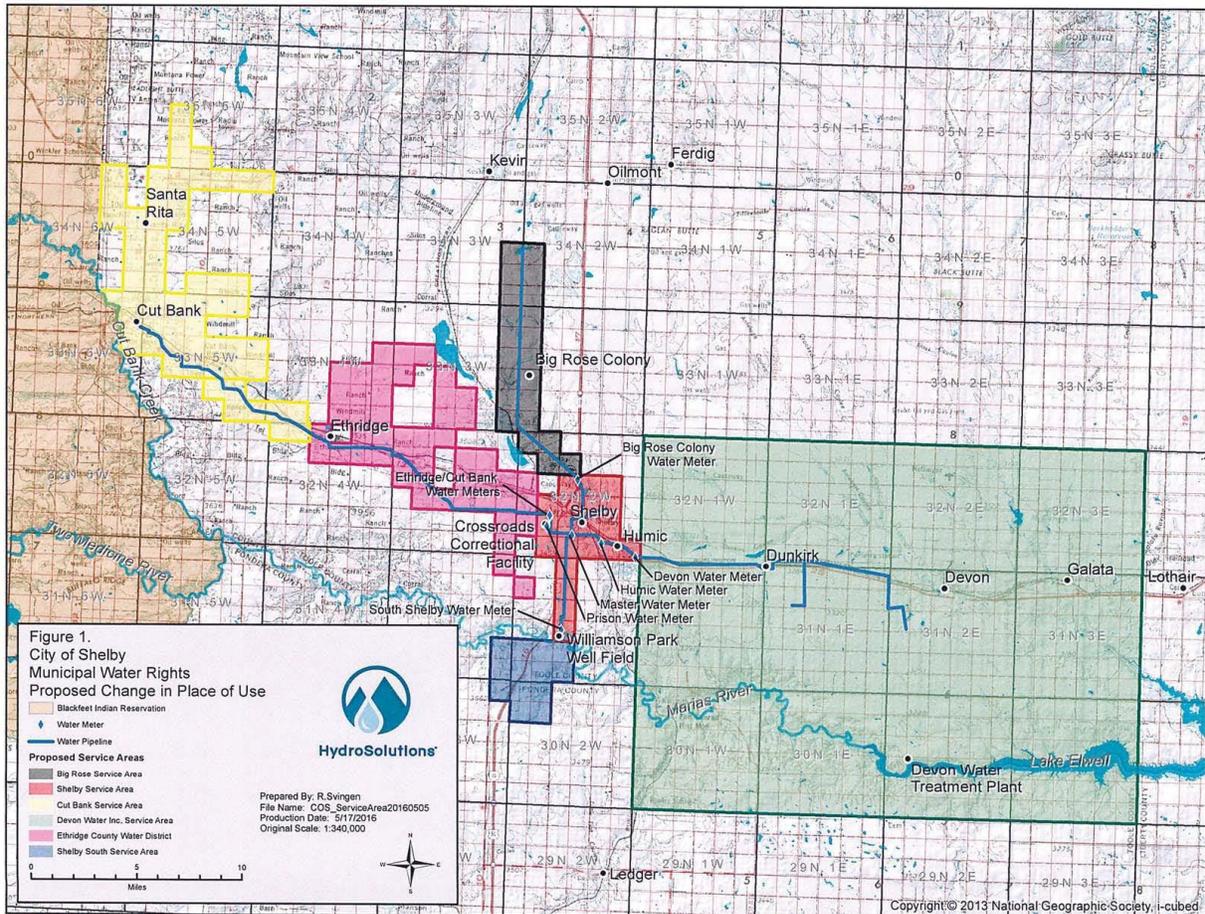
CHANGE PROPOSAL

FINDINGS OF FACT

3. This Application, in conjunction with Change Application 41P 30072725, proposes changes to the point of diversion so that all 13 points of diversion located in a shallow well field near the Marias River would be included on each water right as the system is physically manifold.

4. This Application also proposes to temporarily change the place of use so that water historically used within the City of Shelby could serve the City of Shelby, the Crossroads Correctional Facility (Prison), a humic fertilizer facility (Humic), and would be used by the communities of Devon, Dunkirk, Ethridge, and Big Rose Colony as their primary water source. The requested change in place of use would also include the City of Cut Bank which also provides water to the Cut Bank North Glacier County Water and Sewer District and would be supplemental to their existing water rights. The Applicant requests that the change in place of use be temporary and would revert back to the original place of use after a 10 year period of time. It is anticipated that the North Central Montana Regional Water Authority (NMRWA) will be operational and will be able to serve the communities located outside of the City of Shelby.

5. The following map depicts the general location of the Applicant’s project:



§85-2-402 and - 407, MCA, CRITERIA

GENERAL CONCLUSIONS OF LAW

6. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant’s burden to prove change criteria by a preponderance of evidence is “more probably than not.”); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in §85-2-402(2), MCA, are:

(2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:

(a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.

(b) The proposed means of diversion, construction, and operation of the appropriation works are adequate . . .

(c) The proposed use of water is a beneficial use.

(d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use . . .

7. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶8; In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company (DNRC Final Order 1991).

8. A temporary change in use of a water right is subject to additional conditions pursuant to §85-2-407, MCA, which provides:

Temporary changes in appropriation right. (1) Except as provided in 85-2-410, an appropriator may not make a temporary change in appropriation right for the appropriator's use or another's use except with department approval in accordance with 85-2-402 and this section.

(2) Except as provided in subsection (9), a temporary change in appropriation right may be approved for a period not to exceed 10 years. A temporary change in appropriation right may be approved for consecutive or intermittent use.

(3) An authorization for a temporary change in appropriation right may be renewed by the department for a period not to exceed 10 years. There is no limitation on the number of renewals the appropriator may seek. Renewal of an authorization for a temporary change in appropriation right requires notice to the department by the appropriator. Upon receipt of the notice, the department shall notify other appropriators potentially affected by the renewal and shall allow 90 days for submission of new evidence of adverse effects to other water rights. A temporary change authorization may not be renewed by the department if it determines that the right of an appropriator, other than an appropriator described in subsection (7), is adversely affected.

(4) (a) During the term of the original temporary change authorization, the department may modify or revoke its authorization for a temporary change if it determines that the right of an appropriator, other than an appropriator described in subsection (7), is adversely affected.

(b) An appropriator, other than an appropriator identified in subsection (7), may object: (i) during the initial temporary change application process; (ii) during the temporary change renewal process; and (iii) once during the term of the temporary change permit.

(5) The priority of appropriation for a temporary change in appropriation right is the same as the priority of appropriation of the right that is temporarily changed.

(6) Neither a change in appropriation right nor any other authorization right is required for reversion of the appropriation right to the permanent purpose, place of use, point of diversion, or place of storage after the period for which a temporary change was authorized expires.

(7) A person issued a water use permit with a priority of appropriation after the date of filing of an application for a temporary change in appropriation right under this section may not object to the exercise of the temporary change according to its terms, the renewal of the authorization for the temporary change, or the reversion of the appropriation right to its permanent purpose, place of use, point of diversion, or place of storage. Persons described in this subsection must be notified of the existence of any temporary change authorizations from the same source of supply.

(8) If a water right for which a temporary change in appropriation right has been approved is transferred as an appurtenance of real property, the temporary change remains in effect unless another change in appropriation right is authorized by the department.

(9) If the quantity of water that is subject to a temporary change in appropriation right is made available from the development of a new water conservation or storage project, a temporary change in appropriation right may be approved for a period not to exceed 30 years unless a renewal is obtained pursuant to subsection (3).

This Application proposes to permanently change the points of diversion and temporarily change the place of use for up to 10 years.

HISTORIC USE AND ADVERSE EFFECT

FINDINGS OF FACT

9. All of the Applicant's water supply is obtained from a well field located approximately 6 miles south of the City of Shelby and one mile east of Interstate 15 along the north side of the Marias River. The entire well field consists of 13 wells drilled to a total depth ranging from 31 to 50 feet below ground surface (bgs). Wells are completed in alluvial deposits of the old river bed and are hydraulically connected to surface flows in the Marias River. The depth of the aquifer varies in each well. Water pumped from the individual wells is comingled and pumped in a transmission line to the south side of Shelby where it enters the City's distribution system. Water is distributed throughout the City to meet municipal demands.

10. As previously described in Finding of Fact No. 1 of this document, the water rights proposed to be changed include two SOCs. The City was also granted a reservation of water pursuant to the Final Order of the Board of Natural Resources and Conservation (Water Reservation 41P 71891). This water reservation is not included in either of the City's change applications currently before the Department.

Historic Use SOCS

11. The wells that serve as the historic points of diversion for six of the well located in the well field were completed for each of the SOCs included in this change application and the four SOCs included in Change Application No 41P 30072725.

12. The historic municipal use for the City of Shelby is described in a preliminary engineering report (PER) completed in 1961. The 1961 PER states that separate six and eight inch cast or steel lines transmitted water from the wells into a common twelve inch steel line running from the well field area to the top of the breaks, a distance of approximately 1,500 feet. From the top of the breaks, the transmission line transitions into a twelve inch wooden line. The report states that the wooden lines was a source of considerable trouble due to collar and pipe leaks and were replaced with concrete lines after 1973. The wooden line was held together by steel bands that were badly corroded. The wooden line transmitted water to one of two terminal storage tanks.

13. According to the 1961 PER, no water treatment occurred at that time. Terminal storage tanks included a one million gallon concrete tank located at the southwest edge of town, and a 100,000 gallon elevated steel tank located north of the city. The 1961 PER reported that the tank had undergone several recent repairs; however, there were indications that leaks were still occurring. The 100,000 gallon storage tank was placed on the north side of town in 1957. The 1961 PER reports the storage tank was in fair condition.

14. Historically, water diversions were measured but do not appear to be recorded until the early 1980s. The 1961 PER indicates that the terminal storage tank, which was a 1 million gallon concrete tank at the south side of Shelby, had a propeller water meter, but it was not accurately measuring and recording flow. The 1961 PER indicated that the meter was likely worn and underestimating the amount of flow.

15. The four SOCs included in this Application claim a total volume of 1,850 AF. However, the amount of water available for the proposed changes in use shall be limited to the amount put to historical beneficial use. Because historic water use records do not exist, estimates of historic use are based on census data and water use of 250 gallons per capita day (gpcd), which is consistent with previous historic use analysis conducted by the Department for municipal use.

16. Given the leaky nature of the municipal system as it existed prior to 1973 and as described in the 1961 PER, 250 gpcd provides a reasonable estimate of historic diverted volume. According to census data, the City of Shelby's peak population occurred in 1960 at 4,017. At 250 gpcd, the maximum historic diversions totaled 1,124.90 AF per year. System efficiencies have improved due to the replacement distributions lines and storage tanks and other distribution system improvements, most occurring after 1973. The purposes of Domestic and Commercial were estimated to account for 60% of the total diverted volume, and Lawn and Garden purposes accounted for 40% of the diverted volume. The four SOCs subject to Change Application 41P 30072725 were included in this analysis as they have been historically used in combination with the two SOCs subject to this Application.

17. Wastewater is collected via a municipal wastewater collection system and conveyed to the City's wastewater treatment facility. The 1988 Reservation Application described a facultative sewage lagoon system located along Medicine Rock Coulee southeast of the City, which is a tributary to the Marias River. The 1988 Reservation Application reported an average

effluent flow of 0.33 million gallons per day. The Reservation Application goes on to report that very little to no flow was discharged from the lagoon during the summer months of July and August. The Application stated that most flow during other months was depleted by evaporation in the lagoons or by vegetation evapo-transpiration in Medicine Rock Coulee. Therefore, the diverted volume for the historic municipal use is considered to be 100% consumed.

18. Historic information about the pumps that were used at each well was provided. The Applicant's existing well field pumps were tested on October 2-3, 2013 by the Applicant's engineer to evaluate pump capacity of the well field. According to the Applicant, the pump test occurred during a period of relatively low groundwater levels. The Applicant's engineer concluded that total flow capacity of all wells located within the well field is approximately 2,271.00 GPM, or 3,270,000 gallons per day (gpd). Well No. 6 was not included in the well field test and Well No. 2 is limited by problems noted with the well casing and screen at the time the well field capacity test took place. For the purposes of examining the historic flow capacity, it is noted that Well No. 5 test result exceeded the flow limitation of SOC 41P 192881.

19. I find the following amounts totaling 2,895.00 GPM up to 1,124.90 AF annually to represent the Applicant's historical municipal use as represented in the following table:

Water Right No. (41P)	Well No.	Priority Date	Source	Flow Rate (GPM)	Period of Use	Historic Per Capita pre-1973 (AF)
192878	2	10/1/1946	Groundwater	300.00	Year-Round	234.35
192880	4	10/12/1946	Groundwater	300.00	Year-Round	234.35
192881	5	12/26/1963	Groundwater	350.00	Year-Round	234.35
192882	6	12/26/1963	Groundwater	250.00	Year-Round	234.35
192877	1	6/6/1940	Groundwater	241.00	May 1 - Oct	93.74
192879	3	7/7/1939	Groundwater	158.00	May 1 - Oct	93.74
4489	7	12/26/1974	Groundwater	240.00	Year-Round	0.00
4490	8	12/26/1974	Groundwater	111.00	Year-Round	0.00
58129	9 through 13	6/10/1985	Groundwater	945.00	Year-Round	0.00
				2895.00		1124.90

Note that SOCs 192878, 192880, 192881 and 192882 and Provisional Permits 4489, 4490 and 58129 are included in Application to Change a Water Right No. 41P 30072725 and represent 2,496.00 GPM up to 937.42 AF of the Applicant's total historic use.

Adverse Effect

20. A change in the point of diversion is requested to better represent the historical and operational nature of the Applicant's well field, because all water is comingled and the well field is operated in manifold as one unit to meet municipal demands.

21. Consistent with current operations, water would be diverted from each well and pumped into the clear well where it comingles with water from other wells (all from the same groundwater source) and then pumped in a single transmission line through the water treatment system to the south side of Shelby. From there, Shelby water would be stored in tanks and distributed throughout the City or distributed in pipelines to the outlying communities within the proposed service area.

22. In total, the Applicant proposes to provide water to six separate water service areas. The areas are generally grouped by geography or organizational entity. Each of the separate areas to be served has a proposed volume allocation. The six areas to be served include:

- Shelby Service Area (includes Prison and Humic facility)
- Shelby South
- Ethridge County Water District
- Big Rose Service Area
- Devon-Dunkirk
- Cut Bank Water Service Area

23. Based on existing water use records, water use planning factors, and water use agreements between the Applicant and communities in the proposed service area, the expected volume (expressed in AF) to be diverted by the Applicant's municipal well field is estimated below in the following table:

	Shelby	Prision	Humic	Ethridge	Big Rose	Devon-Dunkirk	Cut Bank	Shelby South
Total Expressed in AF	443.60	62.80	67.20	12.80	4.30	62.10	448.10	24.00

24. Actual water use will vary year to year for each community, and will be measured to ensure the amount of water authorized through this change is not exceeded.

25. The Applicant provided a plan explaining how any water appropriated under the proposed change in water use. The plan includes monitoring existing and proposed water meters throughout the City's internal distribution network, and also includes plans to meter service pipelines for outlying water service areas. The Applicant provided a water meter map which provided a schematic of the water reservation place of use, the City of Shelby's water distribution network, and the City's existing and proposed water system meters.

26. Each of the identified water service areas will be isolated with valves and water meters so that Shelby can monitor and control the conveyance and use of water to each of the service areas. Currently, a master meter measures all water used by the City of Shelby, the Prison, Ethridge, and the Big Rose Colony. In the future, the master meter will also include water provided to Devon-Dunkirk, Cut Bank Water Service Area, and the Humic facility. The total water used by the system is automatically recorded within the system telemetry.

27. Other metered locations include the Prison, Ethridge, Big Rose Colony, Humic Facility, Devon, Cut Bank, and Shelby South. These water meters will be monitored and tabulated monthly by the City's public works department and compared to proposed volume allocations proportioned to expected monthly and total usage rates.

28. City of Shelby water use, which includes the 161.0 AF allocated under the City's Water Reservation shall be calculated by subtracting the sum of meters for the Prison, Ethridge, Big Rose, Devon, Humic, and Cut Bank from the Master Meter.

29. This change authorization together with Change Authorization 41P 30072725 shall be subject to the following conditions, limitations or restrictions upon issuance:

1) WATER MUST NOT BE DIVERTED PURSUANT TO CHANGE AUTHORIZATIONS 41P 30072725 AND 41P 30072726 TO ANY INDIVIDUAL PLACE OF USE AUTHORIZED IN

SAID CHANGE AUTHORIZATIONS UNTIL A REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING AT THE SPECIFIED METER LOCATION CORRESPONDING TO THE PARTICULAR PLACE OF USE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES IN PROPERLY FUNCTIONING CONDITION SO THAT THE VOLUMES ARE ACCURATELY MEASURED.

2) ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL RECORD MONTHLY VOLUME OF ALL WATER INDIVIDUALLY METERED AT EACH METER LOCATION. THE VOLUME OF WATER AT EACH METER LOCATION SHALL NOT EXCEED THE FOLLOWING AMOUNTS EXPRESSED IN ACRE FEET:

	Shelby Master Meter	Cut Bank Meter	Prison, Humic, Ethridge, Big Rose, Devon-Dunkirk and Shelby South Meter Locations
January 1 -April 30	312.50	124.48	64.80
May 1 -October 31	656.20	261.42	136.00
November 1 -December 31	156.20	62.24	32.40
Total	1124.90	448.10	233.20

3) RECORDS SHALL BE SUBMITTED MONTHLY AND A SUMMARY PROVIDED BY JANUARY 31 OF EACH YEAR TO THE DEPARTMENT’S WATER RESOURCES HAVRE REGIONAL OFFICE AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE AUTHORIZATION.

30. There is no change in the historic timing of diversion. Therefore, there will not be an adverse effect resulting from the proposed change in points of diversion or place of use. The Applicant will operate all points of diversion associated with their municipal water rights as they have operated historically. The Department finds that the diverted volume for the historic municipal use is 100% consumed. As such, there are no return flows that would be available for other appropriators. Therefore, the proposed changes in this Application would not create an adverse effect through the alteration of historic patterns of return flow.

31. The seasonal and daily timing of diversions from the source aquifer would remain the same as historic diversion. No adverse effect will be experienced by other water users because

the maximum flow rate of the proposed use is less than the historical diverted flow of the existing water rights under this proposed change.

32. The proposed use of groundwater in the amounts of 399.00 GPM up to 187.48 AF is to be withdrawn from a well field located in the Marias River shallow alluvial aquifer. This is in combination with Change Application No. 41P 30072725, which proposes to change an additional flow of up to 2,496.00 GPM and a volume of up to 937.40 AF, resulting in a total maximum combined flow rate of no more than 2,895.00 GPM and a volume of up to 1,124.90 AF. The 1,124.90 AF is the total combined volume. From November 1 through April 30, the total maximum flow rate shall be no greater than 1,872.00 GPM for a volume of up to 937.42 AF. An additional volume of 187.50 AF will be authorized from May 1 through October 31.

33. There is no adverse effect to existing water users from the continuation of using these municipal water rights and permits. The amount of water that is diverted by the City of Shelby will be measured and recorded as part of the agreement the City has with each community.

34. Currently, a master water meter that measures all water diverted from the well field is located near the storage tank on the south side of Shelby. Other water meters maintained by the Applicant measures or will measure water going to the service areas proposed in this application.

35. Based on the analysis comparing the Applicant's historical municipal use to the proposed new municipal use, the Department finds that proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons, other perfected or planned uses, developments for which a permit or certificate has been issued, or for which a state water reservation when a condition to measure and report the Applicant's water use to the Department is applied as described more fully in the Preliminary Determination section of this document.

CONCLUSIONS OF LAW

36. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to water right may not expand the consumptive use of the underlying right or remove the well-

established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)(“quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only”); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).¹

37. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11,103 P.2d at 1072-74; Matter of

¹ DNRC decisions are available at:
http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.²

38. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the “historic use” of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department’s obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.³

39. Applicant seeks to change existing water rights represented by its Water Right Claim Nos. 41 P 192878, 192880, 192881 and 192882. The “existing water rights” in this case are those as they existed prior to July 1, 1973, because with limited exception, no changes could have been made to those rights after that date without the Department’s approval. Analysis of adverse effect in a change to an “existing water right” requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In McDonald v. State, the Montana Supreme Court explained:

The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to

² See also Holmstrom Land Co., Inc., v. Newlan Creek Water District, 185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff’s subsequent right).

³A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; see also Matter of Clark Fork River Drainage Area, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

40. With regard to Beneficial Water Use Permit Nos. 4489, 4490, and 58129 the nature of the inquiry into use of a beneficial water use permit granted after 1973 is similar that applied to an existing water right, only the inquiry evaluates the post-approval beneficial use of water pursuant to the terms of the permit.

41. A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review*, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, Memorandum, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9, 1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).⁴

⁴ Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado

42. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G761 By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); Admin. R.M. 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water

Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)(“[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right.”); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 - 57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)(“We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

users).⁵

43. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 7

44. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the “amount historically consumed” and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law—that an appropriator has a right only to that amount of water historically put to beneficial use—developed in concert with the rationale that each subsequent appropriator “is entitled to have the water flow in the same manner as when he located,” and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department’s determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

⁵ The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana’s water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell’s flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass’n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(citing Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

Hohenlohe, at ¶¶ 42-45 (internal citations omitted).

45. The Department’s rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. Admin.R.M. 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. Admin.R.M. 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. Admin.R.M. 36.12.1901 and 1903.

Historic Use

46. Based upon the Applicant’s evidence of historic use, I conclude that the Applicant has proven by a preponderance of the evidence the historic use as follows:

Water Right No. (41P)	Well No.	Proirity Date	Source	Flow Rate (GPM)	Period of Use	Historic Per Capita pre-1973 (AF)
192878	2	10/1/1946	Groundwater	300.00	Year-Roun	234.35
192880	4	10/12/1946	Groundwater	300.00	Year-Roun	234.35
192881	5	12/26/1963	Groundwater	350.00	Year-Roun	234.35
192882	6	12/26/1963	Groundwater	250.00	Year-Roun	234.35
192877	1	6/6/1940	Groundwater	241.00	May 1 -Oct	93.74
192879	3	7/7/1939	Groundwater	158.00	May 1 -Oct	93.74
4489	7	12/26/1974	Groundwater	240.00	Year-Roun	0.00
4490	8	12/26/1974	Groundwater	111.00	Year-Roun	0.00
58129	9 through 13	6/10/1985	Groundwater	945.00	Year-Roun	0.00
				2895.00		1124.90

Note that SOCs 192878, 192880, 192881 and 192882 and Provisional Permits 4489, 4490 and 58129 are included in Application to Change a Water Right No. 41P 30072725 and represent 2,496.00 GPM up to 937.42 AF of the Applicant's total historic use.

Furthermore, the evidence establishes that historically, there were no return flows from the Applicant's historic use of the above water rights. (FOF Nos. 11-19)

Adverse Effect

47. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, I conclude that Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. §85-2-402(2)(b), MCA.(FOF Nos. 20-35)

BENEFICIAL USE

FINDINGS OF FACT

48. The Applicant proposes to use water for municipal use. Municipal use is defined as a beneficial use of water pursuant to §85-2-102(4)(a), MCA.

49. The purpose of changing the City's municipal water service area or place of use is to include nearby communities which are in need of a reliable source of good quality water. The application also changes the points of diversion for all seven water rights to common points of diversion that would be shared amongst all of the water rights. The need exists to provide a critical and reliable water source to multiple communities until the North Central Montana Regional Water Authority (NCRMWA) pipeline is built.

50. Changes to the points of diversion on each water right will result in all wells being recognized as multiple points of diversion on each water right. Since all municipal water comingles during treatment and transmission, this change better reflects actual use of the well field.

City of Shelby

51. Portions of the City of Shelby have grown outside of the limits of the legal land descriptions referenced by DNRC above, although the primary water use by the City of Shelby remains within that legal land description. The purpose of the applications is to include those portions of the current corporate limits that have grown outside the previous boundaries into the Place of Use and also to include those areas served by the City of Shelby, adjacent to, but outside of the current incorporated limits. Specifically, water use within the City of Shelby Service Area is primarily focused (majority of use) within the historical legal land descriptions (Sec. 21, 22, 27 & 28 in Twp. 32N. Rge. 2W) , but also includes two primary outlying areas including the Crossroads Prison and Humic Growth Solutions (Humic), a new manufacturing facility that will be constructed on the east side of Shelby.

City of Cut Bank

52. A Preliminary Engineering Report (PER) of the City of Cut Bank's water system was completed in 2012. The report demonstrated Cut Bank's need for a supplemental water supply due to continued severe water shortages. Cut Bank Creek is the source of water for the City of Cut Bank. This water source experiences rapid changes in turbidity and color making it difficult to treat at times. Creek flows during the late summer dry season and during the winter months get very low and sometimes do not yield sufficient water to satisfy community needs. During these times, the City is forced to place restrictions on water use. At times, streamflows in Cut Bank Creek become inadequate to the point that there is a very real risk of not being able to deliver water to the City of Cut Bank's water treatment plant. During these times, City staff has needed to dam the intake to ensure some flow into the plant. Even with temporary dams placed, at flows less than 15 to 20 CFS, it may not be possible to deliver creek water directly to the water treatment plant. Basically, at these low flows, the raw water pumps begin to cavitate and are not able to pump water to the plant.

53. Based on 62 years of gaging records collected by the USGS, the following low streamflow occurrences and duration of streamflow conditions of less than the required 20 CFS necessary to operate Cut Bank's water treatment plant :

Continuous StreamFlow Duration	Occurrence of Summer Stream Flow less than 20 CFS	Occurrence of Winter Stream Flow StreamFlow than 20 CFS
1 day	18 occurrences	33 occurrences
10 days	13 occurrences	24 occurrences
20 days	8 occurrences	19 occurrences
40 days	4 occurrences	14 occurrences
80 days	2 occurrences	2 occurrences

54. As described in the PER, water delivery to Cut Bank from the City of Shelby provides for an interim solution to meet a critical need until the (NCMRWA) project is in operation. The City of Cut Bank has an established agreement with the NCMRWA to deliver the needed water. Due to the fact that the City of Cut Bank obtains its drinking water from a surface water supply, the source water is classified as highly sensitive to contamination according to the Montana Source Water Protection Program sensitivity criteria. Supplemental City of Shelby water would provide a source of water with a lower contamination risk and a more reliable supply.

Ethridge

55. City of Shelby currently supplies a reliable source of treated water to the unincorporated town of Ethridge with a population of 60 for domestic lawn and garden use through a pipeline constructed in 2003. A reliable local water source is not currently available to Ethridge.

Big Rose Colony

56. City of Shelby currently supplies a reliable source of treated water to the Big Rose Hutterite Colony for domestic, lawn and garden, and stock use. Currently, the colony does not have any water rights of record with the Department. A reliable local water source is not available to Big Rose Colony.

Devon and Dunkirk

57. Devon Water Inc. currently provides water from the Tiber Reservoir (Lake Elwell) for the towns of Devon and Dunkirk and surrounding water service area which includes a population

of 75. Water is pumped directly from Tiber Reservoir into a raw water reservoir where it is filtered. Also occurring at the raw water reservoir includes the addition of a flocculent to reduce turbidity, and the water is chlorinated. Because Devon Water Inc. obtains its drinking water from Tiber Reservoir which is a surface water supply, the sensitivity of the source water is classified as highly sensitive to contamination, as described by the Montana Source Water Protection Program sensitivity criteria. In order to obtain a more reliable source of good quality water, Devon and Dunkirk will be connected to the NCMRWA system when the system is operational. Current upgrades to the water treatment facility are required to bring it in compliance. It is more cost-effective to obtain water from the City of Shelby until NCMRWA water is available.

Shelby South

58. The Shelby South area is included as an amendment to the Applicant's proposed place of use. Water use for Shelby South would support additional municipal growth for the City of Shelby. Municipal water would be made available to 36 tracts of land located south of the Marias River including existing and proposed developments and stock use. The water pipeline to these tracts will be installed as part of the NCMRWA system, which will eventually make its way to Conrad and beyond. Service to these tracts by the City of Shelby would be an interim solution until the NCMRWA system is built. Another reliable source of potable water is not available to support these tracts. The water pipeline is currently being designed and is planned to be constructed in 2016.

59. Based on existing water use records, water use planning factors, and water use agreements the Applicant has with communities in the proposed service area, the expected flow rate and volume to be diverted by the Applicant's municipal well field is estimated in the following tables:

CONCLUSIONS OF LAW

60. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana" McDonald, 220 Mont. at 532, 722 P.2d at 606.

61. The analysis of the beneficial use criterion is the same for change authorizations under §85-2-402, MCA, and new beneficial permits under §85-2-311, MCA. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. Admin. R.M. 36.12.1801; E.g., Bitterroot River Protective Association v. Siebel, *Order on Petition for Judicial Review*, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (*affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, *Order Affirming DNRC Decision*, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant’s argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)(“The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes.”); §85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).; In the Matter of Beneficial Water Use Permit No. 41H-30013678 by Baker Ditch Company, DNRC Statement of Opinion (June 11, 2008)(change authorization denied - no credible evidence provided on which a determination can be made of whether the quantity of water requested is adequate or necessary to sustain the fishery use, or that the size or depth of the ponds is adequate for a fishery); Matter of Application for Permit No. 76LJ-24668 by Hammell (DNRC Proposal for Decision 1981)(Applicant requested enough water to irrigate 22 acres. Permit was reduced because applicant only provided evidence that 5 acres would actually be irrigated.); Matter of Application for Permit No. 41I-28224 by Loomis/Edenfield (DNRC Proposal for Decision 1982)(Applicant requested permit for 900 gpm up to 49.5 ac/ft/yr. Evidence only demonstrated an actual need for 600 gpm and 33 ac/ft/yr. Belief that 900 gpm/49.5 ac/ft/yr would be needed to satisfy increased production at some point in the future “not in accord with the fixed and definite plan for the use of water that is the hallmark of an initiation of an appropriation.” Accordingly, permit only granted for 600 gpm and 33 ac/ft/yr.).

62. Applicant proposes to use water for municipal use which is a recognized beneficial use. §85-2-102(4), MCA. The Applicant has proven by a preponderance of the evidence municipal is a beneficial use and that 1,124.90 AF of diverted volume and 2,895.00 GPM flow rate of water requested is the amount needed to sustain the beneficial use. §85-2-402(2)(c), MCA (FOF Nos. 48-59)

ADEQUATE DIVERSION

FINDINGS OF FACT

63. All points of diversion are wells. A copy of each well log completed by a well driller licensed by the State of Montana is included in the Application. The Applicant's engineer conducted a field pump test of the well field in 2013. The well field pumping test found a total maximum pumping rate of 2,895.00 GPM, or 3,270,000 gpd with limitations on Wells 2 and Well 6 out of production at the time the test was conducted. These totals are greater than the total peak day demand estimated to be 2,450,434 gpd. Therefore, the Department finds that the existing diversion facilities are adequate.

64. Water will be measured at multiple points throughout the City's transmission and pipeline systems. Water use to each community served in the proposed service area will be metered. A master water meter that meters all diverted flow is located on the south end of Shelby.

65. The Applicant will record daily water use, peak flow rates, and totalized monthly and annual volumes for the total diverted flow. The total monthly volume will be metered and recorded to each community in the proposed service area and for residential use in the City of Shelby. Service area water is tracked for water use agreement purchases.

66. The Applicant's engineer completed a water system model to assess the capability of the City's water system to handle the additional demands. Water is pumped into the clear well from all points of diversion according to their individual pumping schedules. From the clear well, four booster pumps pump the water through the water treatment system where it is disinfected. From the treatment plant, water is pumped to the south side of Shelby and the volume is recorded at the location of the master water meter. From here, water is pumped through the aid of several

booster pumps to the south tank, airport tank, shop tank, and prison tank. Check valves are located along the lines at selected locations to prevent backflow. Water meters are located at selected locations and will record the amount of water distributed the Prison, Ethridge, Big Rose Colony, Cut Bank, Shelby South and Devon.

67. The system serving the Prison includes three booster pumps that deliver water from the City's water tank on the south side of Shelby to the prison via a 12-inch PVC line. A 500,000 gallon water tank stores water at the prison. A water meter exists at the prison near the water tank. A 12-inch PVC line extends north from the prison to serve Ethridge and Cut Bank.

68. The Ethridge service area is served from a 4-inch main line that is connected to the 12-inch waterline extending north from the prison. Water distribution lines within the Ethridge service area also include 1, 2, and 3-inch lines. An existing water pipeline extends north of Shelby to Big Rose Colony. The pipeline was constructed in 2004 and water use is metered by the Applicant. The water meter is located where the system connects to the Applicant's pipeline on the north side of Shelby.

69. Design drawings for the North Central Montana Regional Water Authority (NCRMWA) pipeline from Shelby to Cut Bank have recently been completed. The pipeline will be a 16-inch pipeline extending from Shelby to Cut Bank. The pipeline would connect into the City's existing 12-inch waterline north of the prison, where water would be metered. The proposed pipeline would parallel the existing Ethridge pipeline and then continue northwest to the City of Cut Bank where it would connect into Cut Bank's existing water distribution system.

70. A one million gallon storage reservoir exists on the southeast side of the City of Cut Bank which is filled to maintain pressure and meet system demands within the corporate city limits. The tank is able to be filled both by water treated on the northwest side of the City of Cut Bank by the City's water treatment plant, and also by City of Shelby water entering the distribution system. Controls at set elevation points within the storage tank trigger a demand for water from City of Cut Bank's water treatment plant.

71. The City of Cut Bank water treatment plant lies on the west side of Cut Bank Creek on the Blackfeet Indian Reservation. A water main, separate from the main that serves the City of

Cut Bank, serves the Seville subdivision located on the Blackfeet Indian Reservation. The Seville water main is isolated by a manually operated valve and is also metered. The practice and management policy of the City of Cut Bank water treatment plant is to manually open the valve to the Seville tank and fill only with treated water obtained from Cut Bank Creek. Once the Seville tank is full, the Seville isolation valve will be closed and isolate the Seville system from the City of Cut Bank system.

72. Water from Shelby to the Devon-Dunkirk service area will be conveyed via a 4-inch waterline serving a total of 25 connections. The system is designed to be orifice limited to provide a maximum of 2.3 GPM per service connection. The constant flow rate would be fed into an existing distribution system which consists of cisterns at each service connection. Existing cisterns vary in size from 500 gallons to 10,000 gallons, with the average cistern having a capacity of 3,000 gallons. Water use would include a community water depot where water could be trucked throughout the proposed service area. In addition to domestic and lawn and garden water use, water would be used to satisfy agricultural spraying demands. Agricultural spraying requires potable water to be mixed with chemicals at rates of 5 to 10 gallons of water per acre. Each farmer within the proposed service area treats an average of 6,000 acres of dry-land crops multiple times per year through aerial application. Water use would be metered by the Applicant where the proposed Devon pipeline would connect to the City's distribution system.

CONCLUSIONS OF LAW

73. Pursuant to §85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6th Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); *In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC* (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).

74. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. §85-2-402 (2)(b), MCA. (FOF Nos. 63-72).

POSSESSORY INTEREST

FINDINGS OF FACT

75. This application is for supply of water to the City of Shelby and adjacent service area including the Prison and Humic Facility. Municipal supply will also be provided to Ethridge, Big Rose Colony, Devon-Dunkirk, and the City of Cut Bank Service Area, which includes Cut Bank proper, North Cut Bank Water District and a six mile section along the water pipeline extending from the west edge of the Ethridge County Water District service area. The Applicant has established water service agreements through contracts. It is clear that the ultimate user will not accept the supply without consenting to the use of water. Admin. R. Mont. 36.12.1802. The applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

CONCLUSIONS OF LAW

76. Pursuant to §85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also Admin.R.M. 36.12.1802. Pursuant to ARM. 36.12.1802, where the application is for a municipal use or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use.

77. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. §85-2-402(2)(d), MCA. (FOF No. 75)

PRELIMINARY DETERMINATION

The Department determines the applicant may, in conjunction with Change Application 41P 30072725, change the point of diversion so that all 13 points of diversion located in a shallow well field near the Marias River generally located in the SW of Sec. 21, Twp. 31N, Rge. 2W, Toole County would be included on each water right as the system is physically manifold. The change in point of diversion for these water rights will be a permanent change.

The Department determines the applicant may also temporarily change the place of use so that water historically used within the City of Shelby could serve the City of Shelby including Shelby South, Prison, Humic facility along with the communities of Devon, Dunkirk, Ethridge, and Big Rose Colony and the City of Cut Bank. The points of diversion will include all 13 wells on the following municipal water rights: 41P 192877 and 41P 192879 along with 41P 192878 00, 41P 192880 00, 41P 192881 00, 41P 192882 00, 41P 4489 00, 41P 4490 00, and 41P 58129 00 included in Application to Change a Water Right 41P 30072725. The requested change in place of use would also include the City of Cut Bank, which would be supplemental to their existing water rights. The following are the locations of the proposed places of use:

Shelby Water Service Area		
Township	Range	Section
31N	02W	4, 9, 16, 21
32N	02W	14, 15, 16, 20, 21, 22, 23, 26, 27, 28, 29, 32, 33, 34, 35, 36
Shelby South Water Service Area		
Township	Range	Section
31N	03W	25, 36
31N	02W	28, 29, 30, 31, 32, 33
30N	02W	5, 6, 7, 8
30N	03W	1
Big Rose Water Service Area		
Township	Range	Section
32N	02W	5, 6, 8, 9
33N	02W	6, 7, 18, 19, 30, 31
33N	03W	1, 12, 13, 24, 25, 36
34N	02W	19, 30, 31
34N	03W	24, 25, 36
Ethridge County Water District		
Township	Range	Section
31N	02W	7
31N	03W	1
32N	02W	18, 19, 30
32N	03W	4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 17, 18, 20, 21, 22, 23, 24, 25, 36
32N	04W	1, 2, 4, 9, 10, 11, 12
33N	03W	14, 18, 19, 21, 27, 28, 33, 34
33N	04W	13, 22, 23, 24, 25, 26, 27, 34, 35, 36
Devon Water Inc. Service Area		
Township	Range	Section
30N	01E	1-36
30N	01W	1-36
30N	02E	1-36
30N	03E	1-36
31N	01E	1-36
31N	01W	1-36
31N	02E	1-36
31N	03E	1-36
32N	01E	1-36
32N	01W	1-36
32N	02E	1-36
32N	03E	1-36

Cut Bank Water Service Area			
Township	Range	Section	
32N	04W	5,6	
33N	04W	31, 32	
33N	05W	2, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 26, 27, 35, 36	
33N	06W	1, 2(NE1/4, NENW, SENW, L4, L5, L8, L7, L6, L9), 11(L1, L2), 12(N1/2, SE1/4, NESW, SESW, L1, L2), 13(W1/2, NENW, SENW, SENW, NWSW, NESW, SESW, L1, L2)	
34N	05W	1, 2, 3, 4, 5, 6, 7, 8, 17, 18, 19, 30, 31, 33, 34, 35	
34N	06W	2, 3(E1/2 E1/2), 10(E1/2 E1/2), 11, 13, 14, 15(E1/2 E1/2), 24, 25, 36	
35N	05W	20, 29, 32, 33	

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 41P 30072726 should be GRANTED subject to the following conditions:

1) WATER MUST NOT BE DIVERTED PURSUANT TO CHANGE AUTHORIZATIONS 41P 30072725 AND 41P 30072726 TO ANY INDIVIDUAL PLACE OF USE AUTHORIZED IN SAID CHANGE AUTHORIZATIONS UNTIL A REQUIRED MEASURING DEVICE IS IN PLACE AND OPERATING AT THE SPECIFIED METER LOCATION CORRESPONDING TO THE PARTICULAR PLACE OF USE. THE APPROPRIATOR SHALL MAINTAIN THE MEASURING DEVICES IN PROPERLY FUNCTIONING CONDITION SO THAT THE VOLUMES ARE ACCURATELY MEASURED.

2) ON A FORM PROVIDED BY THE DEPARTMENT, THE APPROPRIATOR SHALL RECORD MONTHLY VOLUME OF ALL WATER INDIVIDUALLY METERED AT EACH METER LOCATION. THE VOLUME OF WATER AT EACH METER LOCATION SHALL NOT EXCEED THE FOLLOWING AMOUNTS EXPRESSED IN ACRE FEET:

	Shelby Master Meter	Cut Bank Meter	Prison, Humic, Ethridge, Big Rose, Devon-Dunkirk and Shelby South Meter Locations
January 1 -April 30	312.50	124.48	64.80
May 1 -October 31	656.20	261.42	136.00
November 1 -December 31	156.20	62.24	32.40
Total	1124.90	448.10	233.20

3) RECORDS SHALL BE SUBMITTED MONTHLY AND A SUMMARY PROVIDED BY JANUARY 31 OF EACH YEAR TO THE DEPARTMENT’S WATER RESOURCES HAVRE REGIONAL OFFICE AND UPON REQUEST AT OTHER TIMES DURING THE YEAR. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE AUTHORIZATION.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and §85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§85-2-310, -312, MCA.

DATED this day of September 30, 2016

/s/Matt Miles

Matt Miles, Deputy Regional Manager
Havre Regional Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 30th day of September 2016, by first class United States mail.

ABIGAIL J. ST. LAWRENCE
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