Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:
   Utility Solutions, LLC
   P.O. Box 10098
   Bozeman, MT 59719

2. Type of action: Combined application (HB831), 30046241-41H, 30046242-41H, 30046243-41H

3. Water source name: Groundwater

4. Location affected by project: Water will be used in the Utility Solutions, LLC service area, which has an expanded general service area being represented by this action from Huffine Lane as a south boundary to Baxter Lane as a north boundary, and from Love Lane as an east boundary to the West Gallatin River as a west boundary. The points of diversion for the wells are in Sec.11 and in the E2 Sec. 14, and the recharge basin is located in the NWNENE, Sec. 11, all of which are located in T2S, R4E, Gallatin, County, Montana.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This group of applications application received on June 29, 2009 by applicant, Utility Solutions, represents a combined application. The request of the permit application is for 3420 GPM and up to 1140.68 acre-feet for municipal use. The applicant will be using change applications 41H-30046243 and 41H-30046242 to mitigate 113.84 acre-feet of consumptive use by mitigating with 113.84 acre-feet to be diverted into the aquifer recharge basins. Altogether, the applications represent the HB 831 process as they use mitigation of existing water rights to compensate for potential depletions to the water resource.

The applicant provided the following information in the submittal of their permit: This application is to divert ground water from January 1 through December 31 at a rate of 3420 gpm up to 1140.68 acre-feet from groundwater to be used for municipal purposes. The service area is an expansion of previous permitted Utility Solutions service areas. The Utility Solutions service area encompasses the area surrounding the community of Four Corners, Montana, along the western edge of the Gallatin Valley. The water demand under this application includes the Triple Creek Meadows Subdivision with 421 single family living units, the Dykstra Farms subdivision with 400 single family living

units, and the remaining properties in the Utility Solutions service area totaling 5031.65 single family units.

The points of groundwater diversion are eight wells producing from the quaternary alluvial aquifer in the Gallatin Valley. Five of those wells are in the Northstar well field and three of the wells are in the Gallactic Park well field.

Utility Solutions LLC currently collects wastewater from its service area and pumps it to the wastewater treatment facility at Elk Grove where it is treated, then pumped to a rapid infiltration basin to recharge the Quaternary alluvial aquifer. In addition to the recharge of treated wastewater into the aquifer, Utility Solutions, LLC uses existing surface water rights to divert water from the Gallatin River during the period of seasonally high flow and recharges the alluvial aquifer with that water through recharge basins located north of the Northstar well field.

The DNRC shall issue a permit if the applicant proves that the criteria in 85-2-311 are met.

6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana State Historic Preservation Office
National Wetlands Inventory – website
Montana Department of Environmental Quality
Montana Fisheries Information System

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity **-** *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: The source is groundwater from eight wells. Groundwater has no designation as chronically dewatered. If this groundwater were to recharge surface water in the area, there may be some affect to the West Gallatin River. Although, The applicant will be using change applications 41H-30046243 and 41H-30046242 to mitigate 113.84 acre-feet of consumptive use by mitigating with 113.84 acre-feet to be diverted into the aquifer recharge basins. The West Gallatin is considered chronically dewatered by DFWP from Shedd's Bridge (Four Corners) to the mouth, and periodically dewatered from Gallatin Gateway to Shedd's Bridge.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: Groundwater in the area is identified as Class 1 for protection purposes. This is the base class used unless sampling shows a specific conductance greater than 1000 microsiemens. Sampling for area subdivision proposals has shown the specific conductance to be below this level (per telecommunication with DEQ).

Effluent from septic systems containing nitrates and pathogenic microorganisms can infiltrate groundwater and reach supply wells. Elevated levels of nitrates in drinking water can cause various health effects including a serious illness in infants known as "blue baby syndrome". Microbial contaminants including fecal coliform, E coli, and cryptosporidium may cause gastrointestinal problems with certain people.

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: A total of 8 wells in the east half of Section 11, Township 2 South, Range 4 East, Gallatin, County, obtain water from the Tertiary system with a depth to 500 feet. Water can flow from the upper Quaternary to the Tertiary along various lenses. Alluvium consists of an average of 55 feet of uniformly coarse sand and gravel (Hacket, et.al., 1960).Test wells for Utility Solutions, LLC. Application were drilled into the Tertiary formation consisting of "a mixture of coarse grained sand and gravel interbedded with layers of fine grained sand, silty sand, sandy and silty clay, sandstone, welded tuff, and hard, blocky clay". Quaternary-and Tertiary-age aquifers probably are interconnected to differing degrees. The applicant will be using change applications 41H-30046243 and 41H-30046242 to mitigate 113.84 acre-feet of consumptive use by mitigating with 113.84 acre-feet to be diverted into the aquifer recharge basins.

The main sources of recharges to groundwater within this area is seepage from irrigation canals, tributaries of the West Gallatin River and its tributaries and discharges the area through evapotranspiration by riparian vegetation, or leaves the area as underflow (Hacket et.al, 1960).

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The Natural Heritage Program was contacted. Bald Eagles are a threatened species that may be seen within the proposed area. Westslope Cutthroat may inhabit the water of the West Gallatin River. These species would not be directly affected by the issuance of this permit. Indirect affects could occur by this development, because the groundwater in this area is connected to the river (see above discussion on groundwater).

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: Any functional wetlands that exist within the proposed Utility Solutions, LLC service area may be affected by the creation of this proposed development.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: This application is not proposing to construct ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: Soil quality may be enhanced with addition of additives such as topsoil, and fertilizer to domestic lawns and gardens. Moisture content may change as lawns are irrigated. Soil stability should be unchanged. There is no evidence of saline seep.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: Existing vegetation cover will be altered by the subdivision. Noxious weeds may spread if the lot owners don't control them.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: Air quality may be altered if any of the proposed homes have woodstoves, or fireplaces. Additional vehicles will create additional auto emissions.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: There are several recorded historic sites within the designated search locales. SHPO feels that there is a low likelihood that cultural properties will be impacted. A cultural inventory is unwarranted at this time.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: There will be additional demand for energy, and materials, to supply the proposed expanded utility area.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: The Utility Solutions service area has been approved by the Public Service Commission.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: This area is private property, with no access to public recreational or wilderness activities. The project is located on private land, with no access to recreational or wilderness activities. No impact identified.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No impact to human health has been identified.

PRIVATE PROPERTY - *Assess whether there is any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: Private property rights are not expected to be impacted by this action.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No impacts identified.

(*b)* *Local and state tax base and tax revenues?* No impacts identified.

(c) *Existing land uses?* No impacts identified.

(*d)* *Quantity and distribution of employment?* No impacts identified.

(e) *Distribution and density of population and housing?* No impacts identified.

(f) *Demands for government services?* No impacts identified.

(g) *Industrial and commercial activity?* No impacts identified.

(h) *Utilities?* No impacts identified.

(i) *Transportation?* No impacts identified.

(j) *Safety?* No impacts identified.

(k) Other appropriate social and economic circumstances? The water resource may benefit due to properly treated effluent and a metered water system.

2. ***Secondary and cumulative impacts on the physical environment and human population:*** Secondary impacts to the physical environment or human population have not been identified. It appears that this water source is hydraulically connected to the West Gallatin River. The cumulative impact of additional wells could impact water users on the river. A mitigation plan has been approved by the department and is being processed with this permit as is required by HB 831. The cumulative impact on human population will increase for those people living in the Four Corners area.

Secondary Impacts No secondary impacts have been identified

Cumulative Impacts No cumulative impacts have been identified

3. ***Describe any mitigation/stipulation measures:*** Mitigation or stipulations are not planned at this time. The applicant is filing a change application to remove ground from irrigation. The applicant owns the water rights that will be used to mitigate potential loss from the West Gallatin River.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

No Action Alternative: This alternative would not subdivide the ground, and maintain the current use.

Proceed Alternative: Proceed with the application as filed. Require the applicant to show they have met the criteria as required by HB831. Proceed with public notice.

PART III. Conclusion

1. ***Preferred Alternative.*** No preferred alternative identified.

2 ***Comments and Responses.*** None received at this time.

3. ***Finding:***

*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: Significant impacts have not been identified. An EIS is not required for this action

Name of person(s) responsible for preparation of EA:

Name: Porter Dassenko
Title: Water Resource Specialist
Date: 2/3/2010