

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:*

F.H. Stoltze Land & Lumber Co.  
P.O. Box 1429  
Columbia Falls, MT 59912

2. *Type of action:* Application for Beneficial Water Use Permit 76LJ 30064042

3. *Water source name:* Groundwater

4. *Location affected by project:* The place of use is generally located S2SESE of Section 2, Township 30 north, Range 21 west, Flathead County, Montana.

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

The Applicant, F.H. Stoltze Land and Lumber, Co., is requesting a supplemental appropriation of groundwater to be used for industrial and power generation puposes. The proposed point of diversion is associated with provisional permit 76LJ 123074-00, which is authorized to divert water from a well (GWIC 85881) at a rate of 150 GPM up to 11 AF for industrial use from January 1<sup>st</sup> to December 31<sup>st</sup>. The Applicant proposes to divert ground water, by means of well (GWIC 85881), from January 1<sup>st</sup> to December 31<sup>st</sup>. No additional flow is requested because 76LJ 123074-00 provides sufficient flow; a volume of 133.9 AF is requested. Total combined flow rate for the proposed appropriation and 76LJ 123074-00 will not exceed 150 GPM and 144.9 AF. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

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

-U.S. Fish and Wildlife Service and Montana Natural Heritage Program: Endangered, Threatened Species and Species of Special Concern, Wetland Mapper program

-Montana Department of Fish Wildlife & Parks (DFWP); Dewatered Stream Information

-Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information and PWS Drinking Water Watch databases

## **Part II. Environmental Review**

### **1. Environmental Impact Checklist:**

<h2><b>PHYSICAL ENVIRONMENT</b></h2>
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### **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.*

The Applicant proposes to divert groundwater using the same point of diversion associated with water right 76LJ 123074-00. The production well (GWIC ID 85881) was completed in 1969 to a depth of 378 feet below ground surface. Department hydrogeologist's James Heffner and Russell Levens in a memo dated January 10, 2011 state in the upper Flathead Valley groundwater levels in the deep alluvial aquifer are effectively controlled by the Flathead River and Flathead Lake. A new groundwater use will reduce the discharge from the aquifer to the river and lake in an amount equivalent to their consumptive use. The aquifer that the production well was drilled in was found to be hydraulically connected to the deep alluvial aquifer and therefore Flathead River/Lake. Based on the difference in water level elevations in the deep alluvial aquifer and the elevation of the base of the sandy unit that interacts with Trumbull Creek, the Department of Natural Resources (DNRC or Department) determined the Creek was not hydraulically connected to the deep alluvial aquifer and therefore would not be depleted from pumping associated with the proposed project. The Flathead River is not listed by DFWP as chronically dewatered. Upon analysis by the Department Flathead River/Lake were found to have water in excess of that requested by the Applicant.

*Determination:* No impact

**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.*

According to the Montana Department of Environmental Quality's (MDEQ) Clean Water Act Information Center in 2012 Flathead Lake was listed as having one or more uses impaired due to one or more of the following probable causes: mercury, nitrogen (total), phosphorous (total), polychlorinated biphenyls and sedimentation/siltation. Flathead River was categorized as having insufficient data to assess any use and Trumbull Creek was not listed within their database. The Applicant is in compliance with MDEQ requirements for disposal of waste water associated with industrial use and has filed the necessary permits. The Department finds that the proposed project will not aggravate any of the probable causes of impairment to Flathead Lake identified by the MDEQ.

*Determination:* No impact.

**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.

The proposed use will reduce the discharge from the deep alluvial aquifer to Flathead River in an amount equivalent to their consumptive use. 11-18% of the 133.9 AF of water that is diverted will eventually return to the Flathead River. The Department determined Trumbull Creek was not hydraulically connected to the deep alluvial aquifer and therefore would not be depleted from pumping associated with the proposed project. Ground water quality shouldn't be impacted, however seeing how the environment responds to anthropogenic influences randomly and unexpectedly water chemistry or groundwater flow paths could be slightly altered due to the proposed project.

*Determination:* Slight Impact.

**DIVERSION WORKS** - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

The completed production well was drilled by a licensed well driller (license # WWC-52) in accordance with MCA Title 37, Chapter 43 and ARM Title 36, Chapter 21. This well (GWIC ID 85881) was completed in 1969 to a depth of 378 feet below ground surface, has a casing diameter of 8 inches from -2 to 341 feet and 6 inches from 335 to 378 feet, a static water level of 83 feet, and a copper louver screen between 341-371 feet. The proposed project will use this existing well. The well will be capable of pumping at a rate of 150 GPM. The well will contain a 25 horsepower Grundfos 150S250-12 submersible pump. A variable frequency drive will maintain constant pressure to the filters and limit flow rate. Once in the treatment room water will flow through a 3 inch steel pipe and pass through 3 foot diameter multimedia filters. After the filters the flow will be split into two streams – one to the cooling tower and the other to the water softeners (2 vessels) then reverse osmosis system and new boiler. Pipe diameters throughout the rest of the system vary between 1.5 - 3 inches and are made of PVA or steel. Waste water (multimedia filter backwash, cooling tower bleed, softener regeneration, reverse osmosis reject and air compressor condensate) will be discharged to a pond where it will either be evaporated or returned to the shallow aquifer via seepage. The proposed project shall not impact any channels, barriers, riparian areas and dams. Flow paths to surface waters and within the aquifer will be modified; however modeling done by Department hydrogeologists show that no significant negative impact will occur to existing water users and surface/groundwater resources.

*Determination:* No impact.

#### **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."

According to the US Fish and Wildlife Service, Montana Natural Heritage Program and DFWP in Township 30N, Range 21W there are no endangered plants or plant species of concern. There are no animal species of concern or endangered animals. Bull Trout are identified as a species of concern in the Flathead drainage. An adequate quantity of water will still exist in the Flathead River to maintain existing populations of Bull Trout. The rate, timing and location of groundwater discharged into Flathead River will potentially change, but Department analysis found the proposed use will not adversely affect senior water users nor dewater either source. Therefore, pumping will not influence threatened, endangered, current or potential species of concern.

*Determination:* No impact.

**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:* N/A project does not involve wetlands or critical riparian habitats.

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

A pond will be used to collect and treat wastewater generated from the plant. All necessary paperwork has been filed with the MDEQ and the company is in compliance with all regulations for the disposal of wastewater from industrial purposes. The mill pond will not negatively impact existing wildlife, waterfowl or fisheries resources.

*Determination:* No significant impact.

**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.*

According to soil survey data provided by the NRCS, soil within the place of use consists mostly of silty loam, sandy loam, silty clay loam and sands. Soils within the area are non-saline to very slightly saline (0.0 - 4.0 mmhos/cm). The proposed use shall not degrade soil quality or stability within the proposed place of use. Soil moisture content will not change.

*Determination:* No impact.

**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.*

The proposed project will utilize an existing well. Impacts to existing vegetation might occur, however they will not be outside the range of current disturbances due to current plant operations.

*Determination:* No impact.

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

The cooling towers associated with the plant will produce water vapor, thus influencing water vapor concentrations of the atmosphere. The plant has filed all necessary paperwork with the MDEQ and is in compliance with all air quality regulations.

*Determination:* No significant impact.

**HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

*Determination:* N/A - project not located on State or Federal Lands.

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

There should be no significant impacts on other environmental resources of land and water from this proposed use. The cogeneration plant will create electricity, thus increasing the supply of power in the Flathead Valley.

*Determination:* No significant impact.

<h2 style="text-align: center;">HUMAN ENVIRONMENT</h2>
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**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

This proposed use is not inconsistent with locally adopted environmental plans and goals for Flathead County.

*Determination:* No impact.

**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:* N/A, the proposed place of use and diversion do not exist on land designated as wilderness.

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

There should be no significant negative impact on human health from this proposed use.

Determination: No impact.

**PRIVATE PROPERTY** - Assess whether there are 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: No impact.

**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 impact
- (b) Local and state tax base and tax revenues? No impact
- (c) Existing land uses? No impact
- (d) Quantity and distribution of employment? No impact
- (e) Distribution and density of population and housing? No impact
- (f) Demands for government services? No impact
- (g) Industrial and commercial activity? No impact
- (h) Utilities? No impact
- (i) Transportation? No impact
- (j) Safety? No impact
- (k) Other appropriate social and economic circumstances? No impact

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No impact.

Cumulative Impacts: This proposed use of water is expected to have no negative impact on surface water and will not impact the quantity and quality of ground water.

**3. *Describe any mitigation/stipulation measures:***

No mitigation is required. The Applicant is required to 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 January 31<sup>st</sup> 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.

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: NA***

*PART III. Conclusion*

1. ***Preferred Alternative:*** To issue the permit and allow this project to continue.
2. ***Comments and Response:*** None to report.
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:*

No significant environmental impacts were identified, no EIS required.

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

*Name:* Melissa Brickl  
*Title:* Hydrologist/Specialist  
*Date:* 3.5.2013