

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:

White Rock Aggregate LLC & Nelcon, Inc
304 Jellison Road
Kalispell, MT 59901

2. Type of action: Application for Beneficial Water Use Permit 76LJ 30072061

3. Water source name: Groundwater

4. Location affected by project: W2W2 of Section 36 and the E2NESE of Section 35, Township 30N, Range 21W, Flathead County, Montana

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

The Applicant proposes to divert and use groundwater from a pit for industrial and fisheries use January 1st thru December 31st from a point located in the W2W2 Section 36, Township 30N, Range 21W, Flathead, Montana . The place of use is generally located in the W2W2 Section 36 and the E2NESE of Section 35, Township 30N, Range 21W, Flathead, Montana (Figure 1). No flow rate is associated with this permit; it is a groundwater pit. The Applicant is requesting 1,101.12 AF for industrial purposes. The industrial use includes gravel extraction, aggregate washing and dust suppression. Once gravel mining is finished the 41.93 acre pit will be reclaimed and turned into a 41.93 acre fish pond. The Applicant is requesting 939.92 AF for fisheries use. The reclaimed pit volume is smaller because the walls will be tapered to 3:1 slopes versus the pit which had nearly vertical walls. The two pit volumes are not cumulative; this permit will reflect the maximum diverted volume of 1,101.12 AF associated with the industrial use. 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
- U.S. Natural Resource Conservation Service (NRCS); web soil survey
- Montana Historical Society

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.*

The applicant proposes to divert groundwater; depletions to the following two surface water sources could occur. Flathead River and Flathead Lake are not listed by DFWP as chronically or periodically dewatered. Upon analysis by the Department the source aquifer, Flathead River, and Flathead 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 2014 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. The Flathead River was categorized as having insufficient data to asses any use. The Applicant is proposing to utilize groundwater. The total volume of water potentially depleted from the two surface water sources is 136.8 AF and is expected to have little or no effect on the water quality of these sources.

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 discharge from the source aquifer to the Flathead River and Flathead Lake in an amount equivalent to their consumptive use. 136.8 AF of 1,101.12 AF of water that is diverted is consumed. Groundwater flow paths immediately surrounding the pit will be altered due to the proposed project. The source aquifer is hydraulically connected to the Deep Aquifer in Flathead Valley. Groundwater and surface water quality will not be negatively impacted.

Determination: No 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.*

1. Gravel extraction started in the southeastern corner of the property and will progress in a reverse S-pattern from south to north. The site will be mined in 10 phases. At full build out gravel mining operations will expose 41.93 acres of water. The pit will have nearly vertical walls. The maximum depth of the pit will be 35 feet; the water table will range from 12-15 feet below ground surface. Maximum water depth will be 23 feet. The maximum volume of the pit will be 964.39 AF (41.93 ft × 23 ft).

2. Mining facilities and equipment will be moved around the property as mining progresses and includes a Telsmith 24-ft by 40-ft Jaw Plant, LJ Classic with a 45-inch cone crusher and a Fabtec 5-ft by 14-ft wash plant. A Flygt portable submersible pump (model BS-2670) and 6-inch high density polyethylene main line transport the water from the pit to the gravel washing plant. The aggregate wash plant utilizes approximately 430 GPM; total consumed volume is 3.7 AF. A Flygt portable submersible pump will produce approximately 430 GPM at 110 feet of total dynamic head.

3. Dust suppression activities will utilize an on-site filling station; a gas powered Honda WD 20X centrifugal pump and water trucks. Water will be diverted from the pit to the filling station and then pumped into the trucks for them to dampen haul roads within the mine site. An average of 16,000 gallons per day, 6 days a week will be used for dust suppression April 15 thru October 15; the use is 100% consumptive. Total consumed volume for dust suppression is 7.7 AF.

4. The fish and wildlife pond will be created within the permitted mine area after final reclamation. The reclaimed fish pond will be 41.93 acres and have a flat bottom with 3:1 sides. The bottom area will cover a total of 28.90 acres. The maximum water depth will be 23 feet. The maximum volume of the reclaimed pit is 814.55 AF. Evaporation will total 125.37 AF. The pond has been designed to maximize fish habitat.

The proposed project shall not impact any channels, barriers, riparian areas and dams. Groundwater flow to surface waters 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."*

The Montana Natural Heritage Program and DFWP websites were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project.

According to the Montana Natural Heritage Program in Township 30N, Range 21W there are three plant species of concern. Deer Indian Paintbrush (*Castilleja cervina*), Latah Tule Pea (*Lathyrus bijugatus*), and Aloina moss (*Aloina brevirostris*). Agriculture or human development has occurred on or around this parcel of land for many years; any impacts to sensitive plant species has most likely already occurred.

The Bull Trout (*Salvelinus confluentus*) is listed as threatened by the USFS. The Westslope Cuthroat Trout (*Oncorhynchus clarkii lewisi*) and Bald Eagle (*Haliaeetus leucocephalus*) are listed as sensitive by the USFS. The Pygmy Whitefish (*Prosopium coulteri*), Hoary Bat (*Lasiurus cinereus*), Little Brown Myotis (*Myotis lucifugus*), Great Blue-Heron (*Ardea Herodias*), Brown Creeper (*Certhia americana*), Evening Grosbeak (*Coccothraustes vespertinus*) and Bobolink (*Dolichonyx oryzivorus*) are rated as S3 or S3B by the state of Montana. Meaning their populations are potentially at risk because of limited and or declining numbers. An adequate quantity of water will still exist in all sources of water to maintain existing populations of fish should they exist there currently. Agriculture or human development has occurred on or around this parcel of land for many years; any impacts to sensitive mammal species most likely has already occurred. No impact.

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.*

Once gravel mining in finished the pit will be reclaimed and turned into a fish pond. The Applicant will follow MTFWP policies and acquire a stocking permit before they stock the pond. Fish, wildlife and waterfowl habitat will be created as a result of this gravel pit.

Determination: No 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 silt loam. The soil drainage class is well drained. Soils within the place of use are not susceptible to saline seep. The stability of the soil profile and moisture content will be altered due to the creation of the gravel pit. Aggregate will be removed from the site and a large pit created. The pit has been approved by MT DEQ. The approved remediation plan includes reclaiming the pit to a fishery. No degradation of soil quality shall occur.

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 creation of a new gravel pit north of the Applicants existing gravel pit will remove/disturb existing vegetation. Noxious weeds could be established or spread around the perimeter of the pit. The Applicant will follow Flathead County polices that are in place to manage noxious weeds.

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.*

Adverse air quality impacts from increased air pollutants are not expected as a result of this project. The Applicant will pump water from the pit and distribute it around the property via trucks for dust abatement. No air pollutants were identified as resulting from the applicants proposed use of groundwater.

Determination: No 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 is not located on state or federal land.

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

All impacts to land, water and energy have been identified and no further impacts are anticipated.

Determination: No impact.

HUMAN ENVIRONMENT

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

The project is located in an area with no locally adopted environmental plans.

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.*

The proposed project will not inhibit, alter or impair access to present recreational opportunities in the area. The project is not expected to create any significant pollution, noise, or traffic congestion in the area that may alter the quality of recreational opportunities. The proposed place of use and diversion do not exist on land designated as wilderness.

Determination: No impact.

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? None identified.
- (b) Local and state tax base and tax revenues? None identified.
- (c) Existing land uses? None identified.
- (d) Quantity and distribution of employment? None identified.
- (e) Distribution and density of population and housing? None identified.
- (f) Demands for government services? None identified.
- (g) Industrial and commercial activity? None identified.
- (h) Utilities? None identified.
- (i) Transportation? None identified.
- (j) Safety? None identified.

(k) Other appropriate social and economic circumstances? None identified.

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

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. Describe any mitigation/stipulation measures: None identified.

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 reasonable alternatives were identified in the EA.

PART III. Conclusion

1. Preferred Alternative: None identified.

2. Comments and Responses: None.

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:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

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

Name: Melissa Brickl

Title: Hydrologist/Water Resource Specialist

Date: December, 18 2015