EA Form R 1/2007

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: Lorin Krass
   1340 Rafter Rd.
   Hogeland MT, 59529

2. Type of action: Application to Change a Water Right No. 40J 30104657.

3. Water source name: Groundwater.

4. Location affected by project: The historical location for 307.0 acres of irrigation is generally the West half of the Northeast quarter and the Northwest quarter of Section 3, Township 35 North, Range 24 East, Blaine County, in addition to the South quarter of the Northwest quarter and the West quarter of the Southeast quarter and the Southwest quarter of Section 34, Township 36 North, Range 24 East, Blaine County. The historical point of diversion for water right 40J 167179 is located in the Southwest quarter of the Southwest quarter of the Northeast quarter of Section 3, Township 35 North, Range 24 East, Blaine County. In November of 2001, two wells were added to the system because the three original wells were no longer producing enough water. In the Northeast Quarter of the Southwest Quarter of the Northwest Quarter, Section 3, Township 35 North, Range 24 East a well was drilled to a depth of 80.0 feet on November 19, 2001 and is listed as GWIC ID # 193374. A second additional point of diversion, GWIC ID # 193382, was drilled to a depth of 72.0 feet and is located in the Northeast Quarter of the Southeast Quarter of the Northeast Quarter of Section 34, Township 36 North, Range 24 East. See Figure 1 on the following page for a project location overview.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The applicant proposes to change the historical place of use and add four points of diversion to the Statement of Claim in order to represent the actual configuration of the system. The DNRC shall issue a change authorization if the applicant proves the criteria in §85-2-402 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment: United States Geological Survey, Montana Natural Heritage Program, Natural Resources Conservation Service (NRCS) Soils Data Website, Department of Environmental Quality, National Wetlands Inventory Website, and the Natural Resources Information System.

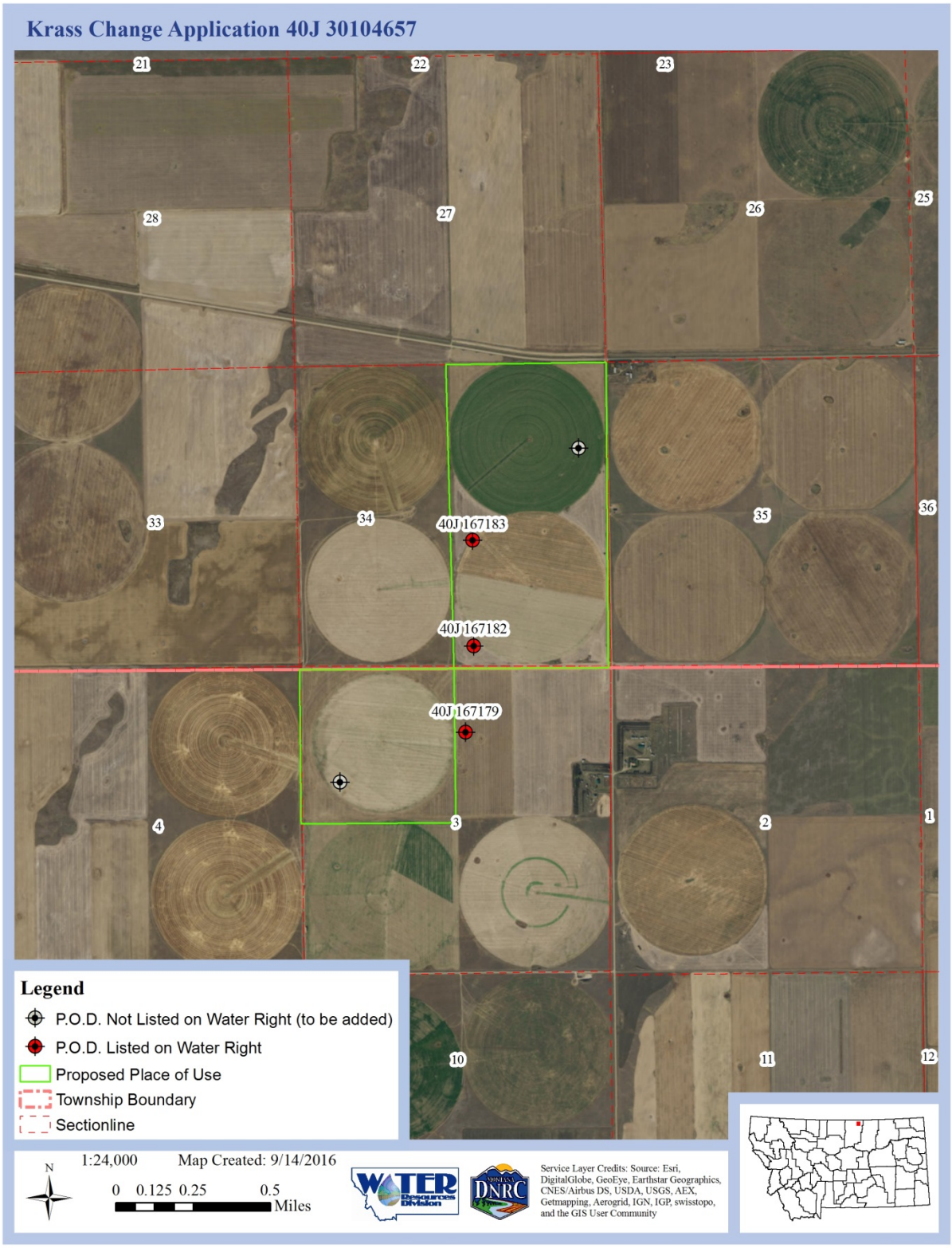

Figure 1-An overview of the historical points of diversion and the proposed changes that will be made to water right 40J 167179. The points of diversion that service 40J 167182 and 40J 167183 will also be added to water right 40J 167179.

Part II. Environmental Review

1. **Environmental Impact Checklist:**

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY, AND DISTRIBUTION

Water quantity- The Department of Fish, Wildlife, & Parks reported that there are two periodically dewatered streams located within Basin 40J. However, these streams include Clear Creek and Beaver Creek, both of which are located approximately 50.0 miles away from the points of diversion.

Determination: The proposed project will not affect any preexisting dewatered streams.

Water quality-The proposed change involves a groundwater source.

Determination: Assessment not applicable.

Groundwater-Two wells were added to the system in November of 2001. According to the Department's analysis for this specific case, no increase in consumptive use is proposed through the Change Application. Therefore, no additional analysis of the aquifer was completed by a Department Hydrologist.

Determination: Impacts to groundwater quality/supply will be equal to the impacts that have been occurring since 1974, when the historical water right was put to use.

Diversion Works-The diversion system was last changed in 2001 with the addition of two wells.

Determination: No impacts pertaining to the diversion works are expected because no changes are proposed.

UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species-According to the Montana Natural Heritage Program, there are two animal species of concern identified for Township 35 North, Range 24 East and five animal species of concern identified for Township 36 North, Range 24 East. To see a list and additional information regarding the species of concern, see Table 1 (T35N, R24E) and Table 2 (T36N, R24E) on the following page.

Determination: The place of use has been irrigated and farmed historically, and no land use changes are proposed through the Change Application. It is unlikely that the proposed project will have any impact to migratory patterns, breeding, or pose a habitat threat to any species of concern. This project is not affected by the Sage Grouse Habitat Conservation Program.

Table 1-Two species of concern are identified for Township 35N, Range 24 East.

Species of Concern
2 Species
Filtered by the following criteria:
Township = 035N024E (based on mapped **Species Occurrences**)

BIRDS (AVES) — ***2 SPECIES***
TOWNSHIP = 035N024E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Buteo regalis Ferruginous Hawk	*Accipitridae* Hawks / Kites / Eagles	G4	S3B			SENSITIVE		Sagebrush grassland
		Species Occurrences verified in these Counties: Beaverhead, Blaine, Broadwater, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Prairie, Roosevelt, Rosebud, Sheridan, Stillwater, Teton, Toole, Valley, Wheatland, Yellowstone						
Centrocercus urophasianus Greater Sage-Grouse	*Phasianidae* Upland Game Birds	G3G4	S2		SENSITIVE	SENSITIVE		Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Bowman, Butte, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Harding, Hill, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Rosebud, Silver Bow, Slope, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone						

Table 2-Five species of concern are identified for Township 36N, Range 24 East.

Species of Concern
5 Species
Filtered by the following criteria:
Township = 036N024E (based on mapped **Species Occurrences**)

BIRDS (AVES) — ***5 SPECIES***
TOWNSHIP = 036N024E (based on mapped Species Occurrences)

SCIENTIFIC NAME / COMMON NAME / TAXA SORT	FAMILY (SCIENTIFIC) / FAMILY (COMMON)	GLOBAL RANK	STATE RANK	USFWS	USFS	BLM	MNPS THREAT CATEGORY	HABITAT
Anthus spragueii Sprague's Pipit	*Motacillidae* Pipits	G4	S3B			SENSITIVE		Grasslands
		Species Occurrences verified in these Counties: Blaine, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Gallatin, Garfield, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Pondera, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux **State Rank Reason:** Although population trends in Montana appear to be relatively stable in recent years, populations have been in decline over the long run and the species faces threats from covertype conversion, overgrazing, exotic plant invasions, altered fire regimes, and mowing prior to fledging of young.						
Calcarius ornatus Chestnut-collared Longspur	*Calcariidae* Longspurs and Snow Buntings	G5	S2B			SENSITIVE		Grasslands
		Species Occurrences verified in these Counties: Big Horn, Blaine, Butte, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Fallon, Fergus, Garfield, Glacier, Golden Valley, Hill, Judith Basin, Lewis and Clark, Liberty, Mccone, Musselshell, Petroleum, Phillips, Powder River, Prairie, Richland, Roosevelt, Rosebud, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Valley, Wheatland, Wibaux, Yellowstone **State Rank Reason:** Species has a negative short-term population trend and faces threats from loss of native prairie grassland habitats and altered frequency, intensity, and spatial distribution of grazing and fire regimes it is dependent on.						
Centrocercus urophasianus Greater Sage-Grouse	*Phasianidae* Upland Game Birds	G3G4	S2		SENSITIVE	SENSITIVE		Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Bowman, Butte, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Gallatin, Garfield, Golden Valley, Harding, Hill, Madison, Mccone, Meagher, Musselshell, Park, Petroleum, Phillips, Powder River, Prairie, Rosebud, Silver Bow, Slope, Stillwater, Sweet Grass, Treasure, Valley, Wheatland, Wibaux, Yellowstone						
Numenius americanus Long-billed Curlew	*Scolopacidae* Sandpipers	G5	S3B			SENSITIVE		Grasslands
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Cascade, Chouteau, Custer, Daniels, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Judith Basin, Lake, Lewis and Clark, Liberty, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Sheridan, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone						
Spizella breweri Brewer's Sparrow	*Emberizidae* Sparrows	G5	S3B			SENSITIVE		Sagebrush
		Species Occurrences verified in these Counties: Beaverhead, Big Horn, Blaine, Broadwater, Carbon, Carter, Chouteau, Custer, Dawson, Deer Lodge, Fallon, Fergus, Flathead, Gallatin, Garfield, Glacier, Golden Valley, Granite, Hill, Jefferson, Lake, Lewis and Clark, Liberty, Lincoln, Madison, Mccone, Meagher, Missoula, Musselshell, Park, Petroleum, Phillips, Pondera, Powder River, Powell, Prairie, Ravalli, Richland, Roosevelt, Rosebud, Sanders, Silver Bow, Stillwater, Sweet Grass, Teton, Toole, Treasure, Valley, Wheatland, Wibaux, Yellowstone **State Rank Reason:** Species faces threats from loss of sagebrush habitats it is dependent on as a result of habitat conversion for agriculture and increased frequency of fire as a result of weed encroachment and drought.						

Wetlands-According to the U.S. Fish and Wildlife Service National Wetlands Inventory, there are 16 freshwater emergent wetlands located within the proposed place of use (see Figure 2 on the following page). The largest freshwater emergent wetland was measured at 1.8 surface acres. The total surface area covered by the 16 wetlands is approximately 5.0 acres.

Determination: The proposed changes are not expected to impact wetlands.

Ponds-No ponds or reservoirs are associated with the project.

Determination: Assessment not applicable.

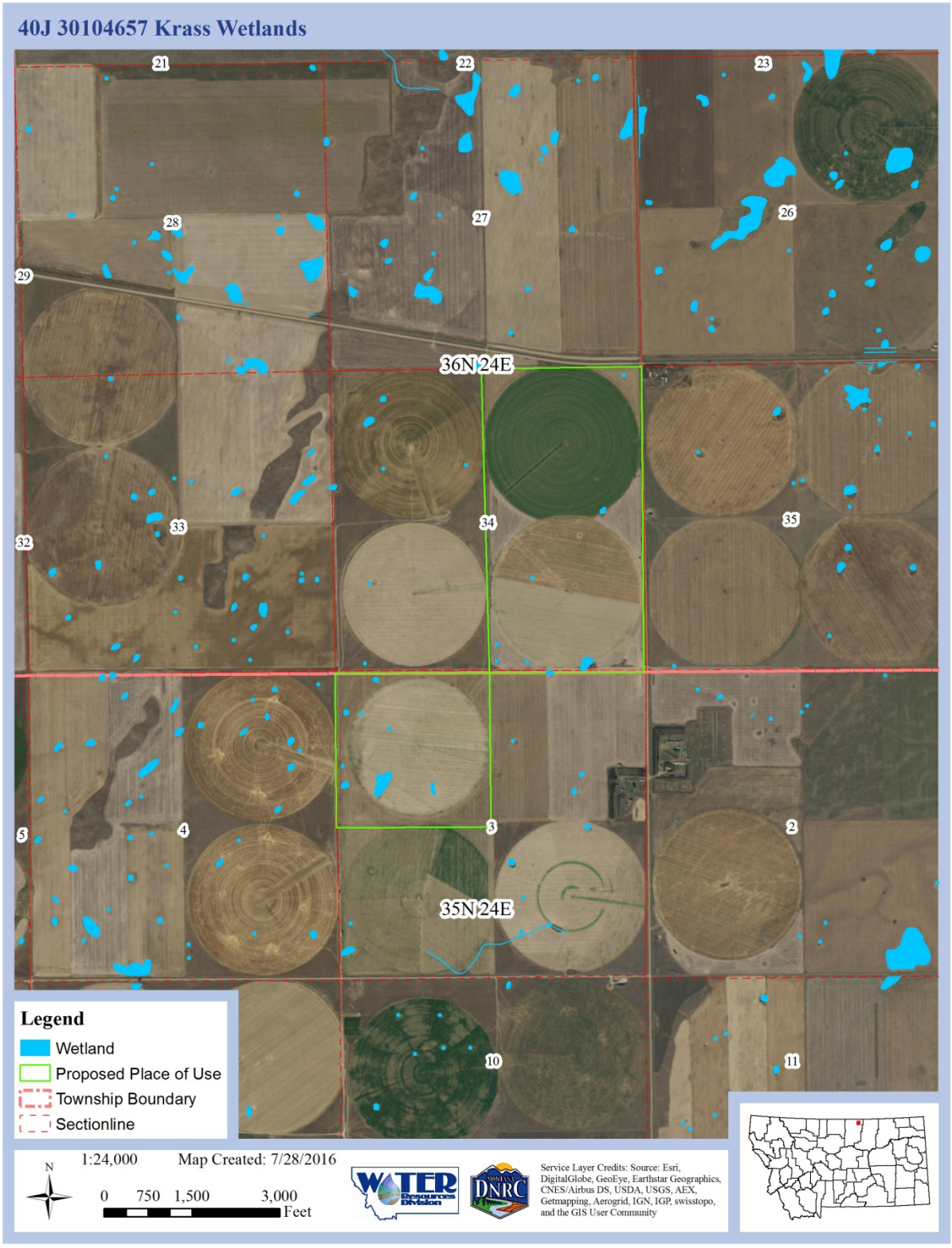

Figure 2-The location of wetlands within and adjacent to the proposed place of use.

GEOLOGY/SOIL QUALITY, STABILITY, AND MOISTURE-At the proposed place of use, soils are composed of Telstad loam (slightly saline to moderately saline) as identified by the Natural Resources Conservation Service. The fields at the proposed place of use have already been irrigated for about ten years, and no land use changes were proposed.

Determination: It is unlikely that the proposed changes will result in an increase of saline seep or further degrade soil quality.

VEGETATION COVER, QUANTITY, AND QUALITY/NOXIOUS WEEDS-No impacts are expected because the fields already exist and no land cover changes are proposed.

Determination: It is the responsibility of the landowner to ensure noxious weeds do not become out of control.

AIR QUALITY-The pumps selected are electric driven.

Determination: No deterioration of air quality or adverse effects on vegetation due to an increase in air pollutants is expected.

HISTORICAL AND ARCHEOLOGICAL SITES-N/A: The proposed project does not lie within State or Federal land boundaries.

Determination: No assessment of unique archeological or historic sites has been performed.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY -No additional impacts on other environmental resources were identified.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS –Currently, no environmental plans or goals have been identified in the area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES –No wildlife areas or recreational land are situated adjacent to the proposed project area. Recreational and wilderness activities will not be affected by the project.

HUMAN HEALTH –Human health will not be affected by the project.

PRIVATE PROPERTY –No adverse effect on private property rights is anticipated from this development.
*Yes___ No_**x**_*

OTHER HUMAN ENVIRONMENTAL ISSUES –

Impacts on:

(a) *Cultural uniqueness and diversity?* No significant impact.
(b) *Local and state tax base and tax revenues?* No significant impact.
(c) *Existing land uses?* No significant impact. Proposed project is consistent with other land uses in the region.
(d) *Quantity and distribution of employment?* No significant impact.
(e) *Distribution and density of population and housing?* No significant impact.
(f) *Demands for government services?* No significant impact.
(g) *Industrial and commercial activity?* No significant impact.
(h) *Utilities?* No significant impact.
(i) *Transportation?* No significant impact.
(j) *Safety?* No significant impact.
(k) *Other appropriate social and economic circumstances?* No significant impact.

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

   Secondary impacts: No secondary impacts have been identified.

   Cumulative impacts: No cumulative impacts have been identified.

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

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: The applicant would not be able to develop the project as proposed.

   Alternative one: Approve the application if the applicant proves the statutory criterion has been met.

Part III. Conclusion

1. ***Preferred alternative:*** Alternative one.

2. ***Comments and Responses:*** None to date.

3. ***Finding:***
   *Yes___ No_**x**_ Based on the significance criteria evaluated in this Environmental Assessment, is an EIS required?*

   An Environmental Assessment is the appropriate level of assessment for the proposed action because no significant impacts have been identified.

Name: Mike Mahowald
Title: Water Resource Specialist
Date: September 14, 2016