

MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
WATER RESOURCES DIVISION
WATER RIGHTS BUREAU

ENVIRONMENTAL ASSESSMENT

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of action:** Water use permit application no. 40E-101086-00
Water right change application no.
Petition or Other Action:
2. **Applicant/Contact name and address:** Ronald Watson, PO Box 982,
Glasgow, MT 59230
3. **Water source name:** Fort Peck Reservoir, tributary of Missouri River
4. **Location affected by action:** SESWNE Sec 26, T26N R40E, Valley County
5. **Narrative summary of the proposed project and action to be taken:** The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311, MCA, are met. The applicant is requesting to pump water from Fort Peck Reservoir at a rate of 300 gpm up to 250 AF from April 1 to October 31 and pipe it into an existing 3.1 AF reservoir in the SWSWNE Sec 23, T26N R40E. From there, water will be pumped and piped to sprinkle irrigate approximately 100 acres for the lawns, gardens and parks of a proposed 60 residential unit subdivision.
6. **Agencies consulted during preparation of the environmental assessment:**
Valley County Sanitarian, Glasgow, MT (Cameron Schipp);
State of Montana, Dept. of Fish, Wildlife and Parks, Glasgow, MT

PART II. ENVIRONMENTAL REVIEW

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

Soils/Geologic Features:

Degradation of soil quality or alteration of soil stability, moisture content, geologic substructure, unique geologic features, archeological sites?

The area is contoured with rolling hills with relatively level areas suitable for housing and drainfields. A field survey was conducted by the Valley County Sanitarian during the summer of 1996. Borings were made at random locations, percolation tests performed and soils tested. It was determined there would be minimal effect.

Erosion:

Alteration of erosion or siltation patterns which modify stream beds or lake shores?

The land is well drained by natural draws and rolling hills, sloping toward Fort Peck Reservoir. The development will use the existing contours as much as possible. Roads will be developed on high ground

eliminating the need for road cuts; culverts will be installed where necessary. About 130 acres of the affected land has been dryland strip farmed for many years to grow grain, with about 50% of the land being summer fallowed each year. The subdivision plan is to develop about 120 acres with the remaining acreage left for drainage structures and an existing reservoir in the area. Approximately 20 acres of the developed land will be cleared for roads leaving 100 acres that can be irrigated to create lawns, gardens and parks for the proposed 60 residential unit subdivision. The development will progress in stages, with about 10-12 lots developed at a time, leaving the remaining land under agriculture. This slow phase of development should help minimize the erosion problem. As grass replaces the farming operation, runoff and erosion will decrease. There is also an existing reservoir located in the center of the property which will serve to assist in controlling any erosion which may occur during construction.

Vegetation/Noxious weeds:

Change in or adverse affect on diversity and production of local plant species including any unique or endangered species (including trees, shrubs, grass, and aquatic plants)? Establishment or spread of noxious weeds?

The native vegetation in the area consists of dry land grasses, including varieties of wheatgrass, needle grass, blue grama, and some sage. The property will be developed in 10-12 lots at a time with the remaining area to continue in agriculture. Prior to building on the lots, they will be seeded into dryland grass (crested wheat) and will be sprayed for noxious weeds. Weed control has been practiced for many years and noxious weeds are under control. Around the reservoir, located in the center of the property, are cottonwood trees and various native shrubs. The existing trees will be preserved and additional trees are planned.

Air:

Deterioration of air quality, or adverse effects on vegetation due to increased air pollutants.

No significant impacts identified.

Water:

Alteration of surface water or groundwater quality including but not limited to temperature, dissolved oxygen or turbidity or quantity or distribution?

The shallowest known aquifer in the area is over 100 feet deep. There are no known wells within several miles from the development. There are some wells over three miles away from the development which use an aquifer over 500 feet deep. These wells are artesian and contain high sodium levels making them unusable for potable water and irrigation. At this time, it is planned that the residential units will use septic systems and cisterns for storage of potable water hauled from Glasgow or Town of Fort Peck. The applicant is also looking into hooking up to a proposed rural water system in the area, if economically feasible.

Floodplain:

Changes in drainage patterns, course or magnitude of flood flows, or exposure of people/property to hazards (flood)?

There is adequate drainage towards Fort Peck Reservoir. The small reservoir located within the development will help reduce chances of flooding to the property below. Duck Creek Subdivision is below and downstream from this proposed subdivision yet it is expected that the dangers from flooding is quite minimal. Rainfall in the area is minimal.

Wildlife Habitat/Migration:

Deterioration of critical fish or wildlife habitat? Creation of a barrier to the migration or movement of fish or wildlife?

This area is visited by upland birds, whitetail deer and ducks. Minimal effects are expected.

Endangered Species:

Adverse effects on any unique or endangered species?

The local Montana State Fish, Wildlife and Parks Biologist was contacted and indicated there were no known endangered species in this area.

HUMAN ENVIRONMENT

Existing Land Use:

Alteration of or interference with the productivity or profitability of the existing land use of an area?

The area is currently in agriculture. It is expected that the proposed subdivision will be more profitable to the applicant.

Historical Significance:

Destruction or alteration of a natural area of scientific or educational value or prehistoric or paleontological importance?

No known historical features in the area. The area has been disturbed by agriculture for many years which may have destroyed historical features. The land not being cultivated does not have any structures nor is it likely there would be any historical features due to the sloping draws in the area.

Populace:

Alteration of the location, distribution, density, or growth rate of the human population of an area? Alteration of social structure of community?

Valley County has a rural environment with farming and ranching being the primary economics. The population has dropped in excess of 50% from 1960 to 1990, largely due to the closure of the Glasgow Air Force Base. The increased population due to this new development is not expected to cause any significant problems.

Transportation:

Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?

The existing Duck Creek Road provides the primary access to both the Duck Creek area and the proposed development. It is a heavy duty, gravel county road. The new development has two accesses to the south into the Duck Creek development and two new accesses are planned to the west. No roads will be closed. Road traffic on the Duck Creek

Road is estimated to be about 45 cars per hour and traffic within the Duck Creek development is estimated to be 15 cars per hour. The increase traffic should not cause any significant congestion. Snow removal on these roads will be done by the County on their priority system.

Safety:

Creation of any health hazard or affect on existing emergency response or evacuation plans?

Emergency services are provided by the County, Town of Fort Peck and Glasgow. It was evaluated and determined by these agencies that no new emergency services are planned as a result of the new development.

Public Services:

Have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? Have an effect upon local or state tax base?

There are two school systems which can be used by the children of this area, one in Glasgow and the other in Nashua. Both provide bus transportation from a bus stop located about 1 mile from the new development. Both systems have the capacity for any increase in the number of students that could be generated due to this new development.

Utilities:

Creates need for new or altered facilities for any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?

The utilities necessary for this new development are electricity, telephone and irrigation water. Water: Again, it is planned that potable water will be hauled from Glasgow or the Town of Fort Peck to cisterns installed by the lot owners. There are commercial haulers who deliver water to other existing residential units in the area which the lot owners can use or they can haul their own water. Sewage: No sewage facilities are planned; all units will use septic systems at the lot owner's expense. The County Sanitarian will provide guidance for system installation. Electric power: There is an existing primary electrical line located about 1000 feet of the property. Distribution from this line to the area within the development will be installed by the appropriate electric company, as necessary. Telephone Service: Telephone service will be provided and underground cabling will be installed in the road easement. Natural Gas: There is no natural gas in the area.

Aesthetics:

Alteration of any scenic vista or recreation opportunity or creation of an aesthetically offensive site to the public?

No significant impacts identified.

Other:

No significant impacts identified.

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2. **Secondary and cumulative impacts:** None
3. **Reasonable alternatives to the proposed action, including the no action alternative:** No significant impacts have been identified. If the permit is not issued, an alternative irrigation water source would be necessary. Options include the lot owners hauling their irrigation water as well as their potable water, which would be quite costly and time consuming. Another option is for the proposed Fort Peck Rural Water District (FPRWD) to also consider irrigation water in their development plans. In discussing this with a representative of FPRWD, they are apparently in their final planning stages and irrigation water was not included in the original plans nor is it expected to be considered due to the exorbitant cost of the project. A third option is not to develop the land at all.

PART III. CONCLUSION

Based on the significance criteria evaluated in this EA, is an EIS required? No

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

It is of my opinion that there will be no significant impacts to the environment, therefore, no EIS is required. The Valley County Sanitarian also evaluated the proposed subdivision development and determined there should be no significant impacts.

PREPARED BY:

NAME: Dixie Brough
TITLE: Water Resource Specialist
DATE: December 31, 1997