

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Revised 10-00

Note: Instructions to DNRC staff for preparing this EA can be found at:
http://www.dnrc.state.mt.us/eis_ea.html

Part I. Proposed Action Description

1. **Applicant/Contact name and address: CITY OF BOZEMAN, PO BOX 1230 BOZEMAN, MT 59771**
2. **Type of action: INSTALL A WELL**
- 3.
4. **Water source name: GROUNDWATER**
5. **Location affected by action: SWSWSW SEC 1, S ½ SEC 2, N ½ SEC 11, NE SE SEC 11, W ½ SEC 12 T2S R5E**
6. **Narrative summary of the proposed project and action to be taken: THE CITY OF BOZEMAN DESIRES TO APPROPRIATE GROUNDWATER IN THE KIRK PARK WELL No. 2 AT A RATE OF 200 GPM WITH ANNUAL VOLUME OF 20 ACRE-FEET. THE WATER WILL BE USED FOR IRRIGATION OF TURF IN A MUNICIPAL PARK. THE IRRIGATED AREA FOR KIRK PARK WELL No. 2 HAS BEEN ESTIMATED AT 8 ACRES. WITH AN ANNUAL APPLICATION RATE OF 2.5 ACRE-FEET PER ACRE. THE PLACE OF DIVERSION IS DESIGNATED AS T2S, R5E, NWSENE SEC 11**
7. **Agencies consulted during preparation of the Environmental Assessment: STATE HISTORIC PRESERVATION OFFICE, MONTANA BUREAU OF MINES AND GEOLOGY, USDA SOIL SURVEY MAP, MONTANA NATURAL HERITAGE PROGRAM.**

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: STEP PUMPING TEST DATA INDICATE THE SITE OF THE KIRK PARK WELL No.2 IS CAPABLE OF WELL YIELDS IN EXCESS OF 200 GPM. THEREFORE IT IS

CONCLUDED THAT A RATE OF GROUNDWATER DESIRED FOR APPROPRIATION, 200 GPM, IS PHYSICALLY AVAILABLE AT THIS WELL SITE.

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: APPLICATION WILL BE UTILIZING GROUNDWATER AT A RATE OF 200 GPM. THE PROJECT WILL HAVE NO IMPACT ON ANY LISTED (WATER QUALITY IMPAIRED OR THREATENED) STREAMS.

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 THEIS MODEL FOR FLOW OF GROUNDWATER TO A WELL IN A CONFINED AQUIFER WAS CHOSEN FOR CALCULATIONS. THIS MODEL SHOWED ADEQUATE AMMOUNTS OF FLOW.

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.

Determination: THE CONSTRUCTION OF THIS WELL WAS COMPLETED ON 6/27/00. THE DRILLER LISENCE # 386. AS THIS PROJECT IS UTILIZING GROUND WATER, THERE WILL BE NO CHANNEL IMPACTS, FLOW MODIFICATIONS, BARRIERS OR IMPACTS TO RIPARIAN AREAS.

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: ACCORDING TO THE MONTANA NATURAL HERITAGE PROGRAM, THERE ARE NO THREATENED OR ENDANGERED SPECIES, OR SPECIES OF SPECIAL CONCERN, WITHIN THE PROJECT AREA.

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: NO KNOWN WETLANDS EXIST IN THE PROJECT AREA.

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

Determination: NOT APPLICABLE - THIS APPLICATION WILL BE USING GROUNDWATER.

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: THE WATER FROM THE DIVERSION WILL BE CONTROLLED THROUGH A SPRINKLER SYSTEM. THE CITY IRRIGATED THE AREA WITH MUNICIPAL WATER PRIOR TO THIS WELL. CHANGING WATER SOURCES SHOULD HAVE NO IMPACTS IN THIS AREA.

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: THE LAND IS A PARK. THE WATER TO BE USED IS FOR IRRIGATING TURF. BY KEEPING THE TURF IRRIGATED AND MAINTAINED THE CITY MAY ACTUALLY KEEP NOXIOUS WEEDS FROM PROPAGATING.

Air quality

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

Determination: THE ADDITION OF A WELL WILL LIKELY HAVE NO EFFECT ON AIR QUALITY.

Historical and archeological sites

Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: THE WELL WILL BE DRILLED IN THE CITY OF BOZEMAN, IN A CITY PARK.

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: : NO ADDITIONAL IMPACTS ON OTHER ENVIRONMENTAL RESOURCES WERE IDENTIFIED

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 WELL IS TO BE DRILLED IN THE CITY FOR THE CITY. IT IS THE CITIES GOAL TO PROVIDE PARKS WITH HEALTHY VEGETATION. THE WELL WILL HELP PROVIDE THIS AT LESS EXPENSE.

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: THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

Human health

Assess whether the proposed project impacts on human health.

Determination: THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT 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? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(b) Local and state tax base and tax revenues ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(c) Existing land uses ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(d) Quantity and distribution of employment ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(e) Distribution and density of population and housing ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(f) Demands for government services ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(g) Industrial and commercial activity ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(h) Utilities ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(i) Transportation ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

(j) Safety ? THE AREA IS FREQUENTED BY CHILDREN. THERE IS AN INCREASED POSSIBILITY OF ELECTRICAL SHOCK.

(k) Other appropriate social and economic circumstances ? THE ADDITION OF A WELL TO PROPAGATE TURF WILL HAVE NO APPARENT IMPACT.

2. Secondary and cumulative impacts on the physical environment and human population: NO SECONDARY OR CUMMULATIVE IMPACTS HAVE BEEN IDENTIFIED.

3. 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: THE CITY COULD CONTINUE TO USE MUNICIPAL WATER AT AN INCREASED COST COMPARED TO WELL WATER.

PART III. Conclusion

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 ADEQUATE FOR THIS ACTION BECAUSE THERE WILL BE NO SIGNIFICANT IMPACTS; THEREFORE AN EIS IS NOT REQUIRED

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

Name: PORTER DASSENKO

Title: WATER MANAGEMENT SPECIALIST III

Date: 10/30/00

Name:

Title:

Date: