



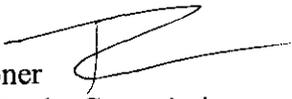
Dave Heineman
Governor

STATE OF NEBRASKA

DEPARTMENT OF NATURAL RESOURCES
Ann Bleed
Acting Director

March 15, 2006

IN REPLY TO:

TO: Kristal Stoner 
Game and Parks Commission

FROM: Tracy Zayac
Department of Natural Resources

SUBJECT: Consultation Concerning Endangered or Threatened Species
Platte River Basin

I have enclosed copies of the applications or petitions described below for your review to comply with § 37-807, R.R.S., 1943, as amended.

Please note your determination of: (1) no effect; (2) may affect; (3) needs further study. Please send a statement of how you want to proceed for all designations of (2) or (3). Sign and date on the lines provided and return to me at the address listed on this stationery.

Determination

Description of Application/Project

2

MT-9, Application for a municipal and rural domestic ground water transfer permit for the city of North Platte, for proposed wells to be located in Sections 17, 18, and 30, Township 15 North, Range 30 West of the 6th P.M., and in Sections 13, 23, 24, and 25, Township 15 North, Range 31 West of the 6th P.M. in Lincoln County.

See attached

5-9-06

Date


Game and Parks Commission

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NATURAL RESOURCES

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Enclosures

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gpc



Nebraska Game and Parks Commission

2200 N. 33rd St. / P.O. Box 30370 / Lincoln, NE 68503-0370

Phone: 402-471-0641 / Fax: 402-471-5528 / www.outdoornebraska.org

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May 10, 2006

MAY 18 2006

Tracy Zayac
Department of Natural Resources
301 Centennial Mall South, 4th Floor
P.O. Box 94676
Lincoln, NE 68509-4676

DEPARTMENT OF
NATURAL RESOURCES

Re: MT-9, Application for a municipal and rural domestic ground water transfer permit for the city of North Platte.

Dear Ms. Zayac,

Please make reference to your letter dated March 15, 2006. This letter is in response to your request for a threatened and endangered species review of a ground water transfer for the city of North Platte. As we understand it, this project involves the removal of existing wells and transferring the well field location to Sections 17, 18, and 30 Township 15 North, Range 30 West of the 6th P.M. and in Sections 13, 23, 24, and 25 Township 15 North, Range 31 West of the 6th P.M. in Lincoln County. We have completed our review of the proposed site under Neb. Rev. Stat. § 37-807 (3) of the Nongame and Endangered Species Conservation Act and we offer the following comments.

We did find records of state listed species in the area that may be adversely affected by placing a new well field at the headwaters of Whitehorse Creek. The tributary of Whitehorse Creek, which is just south of the proposed well field location, has records of northern redbelly dace (*Phoxinus eos*), which is listed as threatened in Nebraska. The plains topminnow (*Fundulus sciadicus*) has been recorded in Whitehorse Creek and has been identified as a Tier 1 at-risk species by the Nebraska Natural Legacy Project (Schneider et. al 2005). Tier 1 species are those species that are globally or nationally most at-risk of extinction and occur in Nebraska. Conservation of these species is needed to prevent future state/federal listings. There are wet meadows surrounding Whitehorse Creek that have the potential to provide habitat for both American burying beetle (*Nicrophorus americanus*) and western prairie fringed orchid (*Platanthera praeclara*). The American burying beetle is federally and state listed as endangered and the western prairie fringed orchid is federally and state listed as threatened. Both of these species have the potential to occur within the area affected by the proposed project.

Northern Redbelly Dace

The northern redbelly dace is a member of the minnow family. This species will reach three inches in length with two dark side stripes with a lighter area between them. The northern redbelly dace is found in the headwaters of clear, cool, high quality streams. Potential factors that influence spawning include the water temperature and photoperiod. In Nebraska, this species spawns from April until August. This species is often found in association with finescale dace, which is also listed in Nebraska as threatened.

Plains Topminnow

The plains topminnow inhabits vegetated backwaters and headwaters and shallow parts of rivers and streams. Specifically it is found in clear, slow-moving streams with aquatic vegetation, quiet pools of small creeks and backwaters and overflow pools of larger streams. This species is considered to be nearly endemic to Nebraska, meaning that the species' distribution occurs primarily in Nebraska (Schneider et. al 2005).

American Burying Beetle

The American burying beetle is a member of the carrion beetle family Silphidae. They are an important part of the nutrient cycling process as they recycle decaying materials back into the ecosystem. These beetles are nocturnal and search widely for carrion. This species is found in a variety of habitats including grassland prairie, forest edge, scrubland and wet-mesic areas such as wet meadows, streams, and wetlands. The causes for the decline of this species are complex and remain unresolved, but likely relate to habitat fragmentation, use of artificial lighting, and degradation of habitats that result in declines of small birds and mammals that the American burying beetle uses for reproduction purposes (Nebraska Game and Parks Commission 1995). In Nebraska, the American burying beetle has been observed from April 1 to October 29, with peak periods of activity extending from June through August.

Western Prairie Fringed Orchid

Western prairie fringed orchid occurs in native tall or mixed-grass prairies that are associated with wet meadows at least part of the year. Although the plant can be a colonizer species and grow on disturbed areas, it is found in greatest abundance on high quality prairie. This plant blooms in late June to July.

From the groundwater model assessment report of the proposed city of North Platte well field prepared by Miller and Associates Consulting Engineers, PC for the Platte River Cooperative Hydrology Study Technical Committee, the model predicted that the flows of Whitehorse Creek will be reduced as a result of the proposed pumping location and rate. The flow will be reduced from approximately 6cfs to 5cfs, an approximate reduction of 16% over 48 years, with the greatest impact occurring in the first 25 years of the well field operation. Figure 31 of this report illustrates the area where the High Plains Aquifer will have reduced saturated thickness. From this figure, it is apparent that the headwaters of the Tributary of Whitehorse Creek are within the area delineated by these contours lines, which indicates that this creek is also likely to have a decline in flows as a result of the well field. Alteration of the hydrology of these streams may adversely affect the fish species in question.

The lowering of the aquifer levels also has the potential to drain wet meadows associated with these two creeks. Drying out of the wet meadows would make them unsuitable habitat for the western prairie fringed orchid and may also negatively affected the American burying beetle, should either of these species occur there.

In order to discern whether the above-mentioned species will be impacted, a survey for the presence of northern redbelly dace, finescale dace and plains topminnow will need to be conducted for the entire length of Whitehorse Creek and the Tributary of Whitehorse Creek. Given the connectivity of these creeks, there is potential for these species to occur in both creeks. These surveys can be completed anytime during the summer. Surveys for American burying beetle also need to be conducted. These surveys need to be conducted from the third week of May to the 3rd week of June and again approximately the second week of August to September 15th. Surveys for western prairie fringed orchid should be completed during the flowering period which is typically mid to late June through mid July in a given year. Surveys for American burying beetle and western prairie fringed orchid should be conducted in suitable habitat within the Whitehorse Creek drainage.

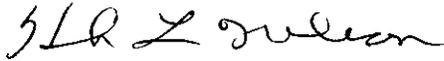
Surveys should be conducted by qualified biologists and the results, including a description of the survey methods and dates, should be submitted to the Nebraska Game and Parks Commission (NGPC) for review. Should populations of threatened or endangered species be documented in the surveys, NGPC staff will develop recommendations to avoid, minimize, or mitigate negative impacts to the species in question.

The Commission made the above determinations based on a review of the material you sent, aerial photographs, topographic maps and our Nebraska Natural Heritage Database. We have determined that the proposed project “may affect” state listed threatened or endangered species.

All federally listed threatened and endangered species are also state listed. However, for assessment of potential impacts on federally listed, candidate or proposed threatened or endangered species, please contact Steve Anschutz, Nebraska Field Office, U.S. Fish and Wildlife Service, 203 W. Second St., Grand Island, NE 68801.

Thank you for the opportunity to comment. If you have any questions or need additional information, please feel free to contact me.

Sincerely,



Kirk Nelson
Assistant Director
Nebraska Game and Parks Commission

Cc Steve Anschutz, USFWS
Frank Albrecht, NGPC
Carey Grell, NGPC
Kristal Stoner, NGPC
Chris Miller, Miller Associates

References:

Nebraska Game and Parks Commission. 1994. *Nebraska's Threatened and Endangered Species: Pearl, Northern, Redbelly and Finescale Dace*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

Nebraska Game and Parks Commission. 1995. *Nebraska's Threatened and Endangered Species: American Burying Beetle*. Nebraska Game and Parks Commission, Lincoln, Nebraska.

Schneider, R., M. Humpert, K. Stoner, G. Steinauer. 2005. *The Nebraska Natural Legacy Project – A Comprehensive Wildlife Conservation Strategy*. Nebraska Game and Parks Commission, Lincoln, Nebraska.