

MEMORANDUM

TO: Programs, Projects and Operations Subcommittee

FROM: Ralph Puls and Marlin Petermann

SUBJECT: Pigeon/Jones Watershed Site #15 , Nebraska Environmental Trust Fund Application and Nebraska Department of Environmental Quality Application for funding

DATE: August 5, 2008

The Pigeon/Jones Watershed Site #15 near Hubbard in Dakota County is a project that has been approved by the District Board. An illustration of the Master Plan is shown in an attachment. A project Fact Sheet is also attached. This is a P-MRNRD project that will provide a multitude of benefits including recreation, flood control, water quality, wildlife habitat, sediment retention and other valuable benefits to the project area. This project has an approval for Nebraska Resources Development Fund dollars pending availability of funds. The Resources Development Funding has been tentatively approved in the amount of up to but not to exceed 65% of the approximately \$10 million project cost.

The Nebraska Environmental Trust Fund is a potential source of additional funding for this project that the P-MRNRD should explore. The P/J project fits well with three or more of the Trust board Funding Categories: Habitat, Surface and Ground Water and Soil Management, and it satisfies all of the Project Eligibility Criteria established for NETF (a copy of the Categories and Eligibility Criteria is attached). Management proposes that the P-MRNRD requests a total of \$2,000,000; \$1,000,000 per year for two years.

The Project Work Plan includes the preparation of a Section 319 application for funding and this process has been initiated with the formation of a Technical Advisory Team. Other steps in the program must be completed with the end result being the request for funding.

It is Management's recommendation that the Subcommittee recommend to the Board that the General Manager be authorized to submit grant applications to the Nebraska Department of Environmental Quality and the Nebraska Environmental Trust Fund for Pigeon/Jones Site #15 Project.

STANDARDS OF EVALUATION

Grant applications are evaluated against several standards established by the Trust Board and by state law and regulation. These standards are summarized in this section for easy reference.

Trust Board Funding Categories Any project or portion of a project funded by the Nebraska Environmental Trust must achieve one or more of the following Trust category areas. These category areas are equally important.

Habitat: actions to preserve or restore native habitats and areas critical to at-risk, rare or endangered species; other preservation actions for at-risk, rare or endangered species including actions to understand ecosystem relationships which inform sound management; community habitat enhancement emphasizing native and ecologically appropriate plantings which provide food and shelter for wildlife; actions to inform and educate which contribute to the attainment of this category.

Surface and Ground Water: actions to preserve or restore lakes, streams and ground water from degradation or depletion; actions to research, design or foster best management practices; actions to conserve water and/or efficiently and effectively manage water use; actions to inform and educate which contribute to the attainment of this category.

Waste Management: actions promoting and implementing source reduction, waste management or toxicity reduction; actions promoting and implementing the development of recycling markets; actions promoting and implementing reuse and other disposal diversion actions; actions to inform and educate which contribute to the attainment of this category.

Air Quality: actions promoting and implementing clean air strategies; actions to research, design or foster best management strategies; actions to inform and educate which contribute to the attainment of this category.

Soil Management: actions and strategies to preserve, conserve and restore soil health; actions to research, design or foster the implementation and management of these strategies; actions to inform and educate which contribute to the attainment of this category.

Project Eligibility Criteria All projects must meet all of the following criteria to be considered for funding. For the complete text of the regulations defining eligibility, please see our website link to Title 137, Chapter 5.

1. The applicant must demonstrate that the project is environmentally acceptable. The project shall not cause harm to the environment and results in a net gain for the environment.
2. The project must have clear and direct environmental benefits.
3. The project must make a real contribution to achieving the Trust Board's environmental categories.
4. The project must provide public benefits.
5. The funds requested will provide assistance only to proposals which are deemed technically feasible.
6. The funds requested will provide assistance only to proposals which are deemed financially feasible.
7. The funds requested shall not be used to provide direct assistance to regulatory programs.
8. The funds requested shall not be used to implement actions mandated by regulations except remediation.
9. The funds requested shall not pay for private benefits or provide assistance to projects whose benefits are primarily private in nature. (See "Guidance for Private, For-Profit Applicants", page 3, for a discussion of this criterion.)



**P-MRNRD Pigeon/Jones Creek
SITE 15 MASTER PLAN
SEPTEMBER 2007**



Lower Park and Trail Guide

Legend

- Open Area
- Recreation Study
- Recreation Study
- Recreation Study
- Recreation Study

0 200 400
Feet

Technical Feasibility

Tie-Back Levee and Off-Line Storage Area

- * The tie-back levee will increase the efficiency of the Pigeon Creek Levee System allowing complete confinement of floods up to and including the 100-year storm event. A significant portion of flood flows currently bypass the Levee System.
- * The off-line storage area will provide for temporary storage of a portion of the flow in the Levee System. This will prevent localized flooding at downstream bridge crossings where the Levee System has limited conveyance capacity.
- * Flow into the off-line storage area will be controlled by lowering a portion of the right-bank levee to allow diversion of flows that exceed downstream bridge capacity. Flows will be slowly released back into the Levee System via small culverts.

Site 15 Reservoir & Road Realignments

- * The Site 15 dam embankment will require placement of approximately 465,000 CY of earth fill borrowed from the 300-foot wide auxiliary spillway located on the west abutment of the dam.
- * Site 15 will impound a 200 surface-acre main reservoir and 28 surface-acres of sediment basins.
- * The main reservoir will have a mean depth of 17 feet and a maximum depth of 50 feet at the dam embankment.
- * The existing 200th Street and Luton Ave. will be realigned. The new roads will form the sediment basin embankments.
- * Dakota County has approved the preliminary road realignment geometry and has entered into an inter-local agreement with the P-MRNRD to pay 50% of the local portion of the road realignment costs (up to \$350,000) and to maintain the county and park roads.
- * One residence will be inundated and two more will be impacted by the recreation area. The NRD is working with the homeowners to find suitable relocation sites adjacent to the park boundary.

Site 15 Recreation Area

- * The Site 15 recreation area includes 228 surface-acres of water and 595 acres of park land.
- * The reservoir will have a 5 mph or "no-wake" speed restriction.
- * A handicap accessible fishing pier, jetties and off-shore breakwaters are planned to protect the shoreline and improve angler access.
- * The recreation area includes a 3.8 mile hiking/biking trail around the main body of the reservoir.
- * Equestrian-related activities are a major focus of this site. The site Master Plan includes an equestrian campground and 10 miles of equestrian trails.
- * This site is uniquely suited to mountain biking. Coordination with regional mountain biking associations resulted in the incorporation of two single-track mountain biking trails. The final trail design will be coordinated with the associations who are hoping to hold yearly sanctioned meets at the site.
- * The recreation area also features separate RV and tent campgrounds and three day-use areas.

Economic Feasibility

Project Costs (\$9,973,334)

- * Total project costs include the planning, design, permitting, land rights and construction of the dam, in-lake facilities, recreation area, levee tie-back at the new South Bluff Road bridge and Pigeon/Jones Creek ditch off-line storage area.

Project Benefits (\$856,448)

- * Annual flood control benefits total \$61,100 (2005 dollars.)
- * Annual recreation benefits total \$795,348 (at current rec. day value of \$7.03.)

Project Rate of Return on Investment

- * Project Internal Rate of Return (IRR) is 5.9%.

Environmental Feasibility

Cultural Resources Investigation

- * University of Nebraska-Lincoln Department of Anthropology and Geography Division of Cultural Resource Management (DCRM) conducted a Cultural Resources Investigation for Site 15. The previously identified archeological site 25DK32 was investigated with no findings of any archeological features. DCRM recommends that additional investigation be conducted via surface stripping with heavy equipment once land rights are acquired. Any burials located would be exhumed and re-located in accordance with State and Federal laws and in cooperation and coordination with the Omaha Tribe.
- * The Omaha Tribe was contacted with the Cultural Resources Investigation results and indicated, through personal communication, that the Tribe has no objections to the planned project.

Wetland and Threatened and Endangered Species Investigation

- * Project wetland impacts will be very limited and creation of the reservoir is expected to more than mitigate the impacts.
- * No threatened or endangered species or critical habitats were found at the project site.

Project Schedule

July, 2007: NRC Approves Future Funding of Project

Final Design: Fall 2007 – Summer 2008

Land Rights Acquisition: Spring 2008 – Spring 2009

Construction of Dam, In-Lake Facilities, Roads, Downstream Levee Improvements: Summer 2009 - Fall 2010

Design of Recreation Facilities: 2009

Construction of Recreation Facilities: 2010-2011

Park Open: Fall 2011/Spring 2012

Financial Feasibility

Nebraska Resources Development Fund Contribution: \$6,482,667(65% of Project Costs)

Papio-Missouri River Natural Resources District: \$3,490,317

Dakota County: \$350,000 (or 50% of local road improvement costs, whichever is less)

Nebraska Game & Parks Commission: (Motorboat Access Facilities-To Be Determined)