CITY OF DES MOINES	Council Communication Office of the City Manager	Date	December 7, 2009
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## **AGENDA HEADING:**

Approving acceptance of a \$250,000 Iowa Department of Natural Resources (DNR) REAP grant for Gray's Lake Shoreline Stabilization and Restoration.

### SYNOPSIS:

Recommend approving acceptance of a \$250,000 DNR REAP grant for Gray's Lake Shoreline Stabilization and Restoration to pay for development.

# FISCAL IMPACT:

<u>Amount</u>: \$300,000 total \$250,000 REAP Grant \$50,000 G.O Bonds

<u>Funding Source</u>: 2009-2010 CIP, G.O. Bonds from Gray's Lake Park Improvements, CP040, PKS990000, PKS 140, page 12.

### **ADDITIONAL INFORMATION:**

The purpose of the Resource Enhancement and Protection (REAP) Grant is to enable the DNR, acting for the State of Iowa, to assist the City in the development of land and the enhancement and protection of open space areas, in this case, Gray's Lake Shoreline. This project received the highest score out of eight total REAP applications from other Iowa cities with populations over 25,000.

This grant will enable the restoration and stabilization of 2000 lineal feet of shoreline along the eastern bank of Gray's Lake (see map attached to Roll Call). This will create a more functional and natural shoreline through re-grading, stabilization and native plantings. Large organic debris (tree trunks and branches) will be removed from the adjoining Raccoon River banks and placed along the shoreline to provide fish habitat and disperse wave action.

The grant provides 100 percent of development costs, up to the award amount of \$250,000. The City's contribution is estimated at \$50,000 for engineering and design. All work specified in the project proposal must be completed by December 31, 2011.

This project is consistent with the Gray's Lake Master Plan as well as the Gray's Lake Natural Area Enhancement proposal. Following the Park's inundation by the Flood of 2008, the City contracted with

an environmental ecology firm, Pizzo & Associates, Ltd., to address landscape and shoreline restoration and establishment of a sustainable park landscape. The shoreline stabilization and restoration portion of Pizzo's proposal is the most urgent and proposed first step in implementation.

Stabilizing and restoring the eastern edge of the lake into a gradual, functioning, naturally-vegetated shoreline results in the following positive impacts:

- Provides native habitat for fish and birds in the area and attract insects such as the Monarch butterfly, the mosquito-eating dragonfly, native songbirds, and large-bodied waterfowl;
  - ✓ Provides birders and other naturalists increased opportunities for enjoyment due to improved natural habitat, along both the riverbank and restored shoreline.
- Reduces erosion through the extensive root systems of native plantings and large organic debris which disperses waves;
  - ✓ Reduces erosion and associated damage from major flood events which will enable the park to reopen more quickly, while reducing labor hours and costs associated with flood recovery efforts;
  - ✓ Reduces and may eventually eliminate the need to purchase replacement plants following a flood event since resilient native plants can survive annual and larger event flooding as well as temperature extremes and therefore will rarely need replacement; and
  - ✓ Lowers maintenance costs after establishment of the plant material.
- Improves water quality by filtering water that flows into the eastern shoreline from the river;
- Discourages Canada Geese from perching along the shoreline;
- Creates new educational opportunities for programmed classes as well as less formal visitor learning brought about through interpretive signage with information on wetlands, prairies, floodplain woodlands, native plants and animals inhabiting the area;
- Improves park patron safety by directing them toward new, safe viewing or fishing locations and access points with low slopes which reduce risk of slippage. Native plantings in some areas will purposefully deter pedestrians from accessing too close to the shoreline, while large organic debris that will be placed along the edge of the shore will act as an emergency safety net for those who may slip into the water; and
- Entices more people to visit the Park or plan special events there due to the improved aesthetic and enhanced educational and recreational opportunities.

Upon completion of this restoration, ongoing management will include monitoring and treating for invasive plant population and monitoring for erosion while native plants are becoming established. Proper stewardship includes selective herbicide application, seed collection and supplemental seeding/planting, prescribed fire, mowing and monitoring. Maintenance by a professional ecological restoration firm, particularly during the 1 to 3 year establishment period, is a goal. Volunteers will be involved in a stewardship process; this will be a community strengthening and educational exercise that supplements a permanent and structured stewardship program.

This project advances the following City goals:

Pride in Community Assets: The City will set the standard for constructing and maintaining attractive buildings, parks, and infrastructure that represent our world-class city and generate civic pride.

Public Safety: Residents and visitors will experience a sense of safety in <u>all</u> neighborhoods and in all activities.

Sustainable Green Community: Des Moines will be a leader in setting policies and practicing service delivery innovations that promote environmental sustainability. Des Moines will offer safe, reliable, and convenient transportation alternatives that reduce reliance on automobiles and parking facilities.

#### **PREVIOUS COUNCIL ACTION(S): NONE**

#### **BOARD/COMMISSION ACTION(S): NONE**

#### ANTICIPATED ACTIONS AND FUTURE COMMITMENTS: NONE

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