



## M E M O R A N D U M

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**TO:** Mayor and City Council Members

**FROM:** John Paulson, Environmental Specialist  
Kent Exner, City Engineer

**RE:** Shoreland Ordinance Mitigation Process

**DATE:** 3/17/2010

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Rain gardens have been identified as the most likely best management practice that may be utilized in mitigating for reduced infiltration within Hutchinson's shoreland districts. The proposed Minnesota State Shoreland Rule permits communities with knowledgeable staff to evaluate proposed stormwater infiltration mitigation measures. The requirement is to infiltrate the first 1" of runoff from the impervious surfaces that are in excess of 25% of lot coverage. Nonconforming lots of record would also need to infiltrate the volume from the surface area that is in excess of 25% if requesting to increase or alter any existing impervious areas.

City staff has identified the following steps in the event a mitigation process for a granted variance within a shoreland district is implemented. These will be in addition to existing variance requirements such as identifying hardship.

- Rain garden must be designed in accordance with the Minnesota Stormwater Manual's criteria
- Verify soil type and infiltration rate associated with the site
- Verify 3 feet of separation is maintained from the bottom of the garden to ground water
- If receiving sheet flow from impervious surfaces pretreatment is required
- Setbacks from buildings, lot lines, and utility easements apply to mitigation practice
- If an underdrain is needed (Type C or D soils) how will it access the city stormwater utility system
- An operation and maintenance (O&M) plan and agreement with associated title restriction or deed covenants will be needed to ensure that the practice will continue to operate according to its original design
- Access and drainage easements will be considered or included in the O&M Plan to allow city staff access for maintenance and repair if a rain garden is not properly maintained or is removed without prior approval.

The measures referenced above will allow for proper treatment of water volume and quality. Alternative mitigation measures considered in the future would follow many of these same guidelines.

City staff welcomes your comments and will assist the council in any way we can.