



Environmental Commission Meeting

Wednesday, October 20, 2010

Meeting - 7:15 p.m. to 9:30 p.m.

2100 Campus Drive SE, Rochester, MN

Agenda

- 7:15 1. Call to Order – Eric Counselman
- Approve Minutes of September 15, 2010 (2-3)
- 7:20 2. Recommendation on Restoration of the Zumbro River in Oronoco (4-6)
- 9:00 3. Round the Table
- 9:30 4. Adjourn

Enclosure - 2010 Environmental Awards Nominations (7-8)

- The Environmental Commission is again co-hosting the annual environmental awards program with Rochester Public Utilities. Environmental Commission members are invited to make award nominations. The award nominations are due October 22, 2010. The awards program will be held on January 27, 2011, at the Rochester Golf & Country Club.

The next meeting of the Environmental Commission Meeting will be held *November 17, 2010*, Whitewater and Cascade Rooms, 2100 Campus Drive SE, Rochester, MN.

ENVIRONMENTAL COMMISSION MEETING

September 15, 2010

Members Present: Eric Counselman, Chris Larson, Jim Bier, Charlie Fried, Phil Lermon, Laura Forsman, Michael Wojcik, and Nathan Redalen

Staff Present: John Harford, Terry Lee, and Michelle Rysavy

Guests Present: Skip Langer (Olmsted SWCD), Barb Huberty (Rochester Public Works), and Steve Pollack

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1. Call to Order – Eric Counselman

- Approve Minutes of August 18, 2010

Jim Bier moved and Michael Wojcik seconded the motion to approve the minutes as presented. Motion carried (8 Ayes, 0 Nays).

2. Shoreland Mapping and Buffer Compliance Update

Skip Langer, Olmsted Soil & Water Conservation District, presented overviews of the Shoreland Mapping work in Olmsted County that was recently completed by Ross Hoffman as well as the buffer compliance work being done by the SWCD and Planning Department. Mr. Langer responded to questions from the Environmental Commission.

3. Proposed Addition to the County's Water Monitoring Networks

Terry Lee, Water Coordinator, requested Environmental Commission support for including funding in the 2011 budget for Trophic State Index monitoring at the 11 lakes and reservoirs in the county.

Michael Wojcik moved and Nathan Redalen seconded the motion to recommend County Board approval for one-time levy funding of \$1,500. Motion carried (8 Ayes, 0 Nays).

4. County Water Plan Extension Request

Nathan Redalen moved and Chris Larson seconded the motion to extend the Olmsted County Water Plan one year. Motion carried (8 Ayes, 0 Nays).

5. **Round the Table**

6. **Adjourn**

Phil Leron moved and Michael Wojcik seconded the motion to adjourn the meeting.

Eric Counselman adjourned the meeting at 9:00 p.m.

Respectfully submitted,

Eric Counselman, Chair

Terry Lee, Environmental Resource Services
TL:mr

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REQUEST FOR ENVIRONMENTAL COMMISSION ACTION

AGENDA DATE: October 20, 2010 **ITEM NO.** _____

PREPARED BY: Terry Lee, Olmsted County

ITEM: Recommendation on Restoration of the Zumbro River in Oronoco

In the early morning hours of September 24, 2010, floodwaters overtopped the Oronoco dam and caused the failure of the embankment on the north side of the dam. On September 27, the Minnesota Department of Natural Resources dam safety engineers assessed the damage and on September 30 recommended that the dam not be used to retain water until 1) the repairs to the adjoining bridge are completed, 2) a condition assessment of the dam is completed showing that the dam is safe, 3) a hydraulic analysis is completed showing that the dam can safely pass the design flood event, and 4) the Dam Operation and Maintenance Manual has been updated and approved. Additionally, the dam safety engineers are requiring that a berm be added to the upstream area of the dam to prevent future floods from flowing through the area that was eroded on the north side of the dam.

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On October 13, Joe Palen, the City Engineer for Oronoco wrote "Olmsted County, the City of Oronoco and project stakeholders are faced with the decision as to whether the dam is reconstructed or removed. If the dam is removed the Zumbro River could be reshaped into a riverine system and the lakebed enhanced for wildlife and recreational use. If the dam is repaired or reconstructed, it may need to be expanded to meet current dam design standards."

He provided the following estimates for the costs of river restoration and lake restoration.

- 1) River restoration total approximate cost - \$3,050,000 to \$4,450,000.
 - Dam removal - \$250,000 to \$400,000
 - River stabilization - \$350,000 to \$500,000
 - Stream management - \$200,000 to \$300,00
 - Stream related enhancement projects - \$1,250,000 to \$2,000,000

Approximately \$1 to \$1.2 million would also be needed to repair the County Road 18 (CR 18) bridge to pre-flood condition.

- 2) Lake restoration total approximate cost – \$2,250,000 to \$4,500,000.
 - Dam repair/expansion spillway to meet current design standards - \$1.25 to \$1.75 million
 - Dam replacement if flood resulted in extensive damage to dam structure - \$3 million.

Approximately \$1.245 to \$1.5 million may also be needed to expand CR 18 to accommodate dam expansion to meet current design standards. Restoring the

lake would also require approximately \$10 million for dredging to depths that would accommodate recreational use.

Palen also noted “The decision to remove or repair the Lake Shady dam will be difficult and either of the options will require significant hydraulic, structural, geotechnical and environmental evaluation and study. The decision as to what will happen to the CR 18 bridge, dam, and Lake Shady will also have significant visual, recreational and environmental impact on the City of Oronoco moving forward.”

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Lake Shady Stakeholder Group

In 2009, at the request of the Olmsted County Commissioners, 24 people were invited to participate in a Lake Shady Stakeholder Group charged with making a recommendation on the future of the lake -- to either restore an open water lake or restore a free flowing stream reach. Fifty-five people participated in the group’s meetings including 20 natural resource professionals representing five different local, state, and federal agencies. The stakeholders met 10 times and held two public information meetings. Nine formal presentations were made to the stakeholder group on topics that included lakebed ownership, current and historic lake sedimentation rates, stream restoration options, changes in the Zumbro River and Lake Shady fishery, dredging options, lake depths and shoreland topography, structural integrity of the dam, and dam safety.

The stakeholder group concluded that more information was needed before a specific recommendation could be made. The group recommended:

- a sediment characterization study be done to identify a) limits on the beneficial use of the sediment that has been deposited into the lake since the lake was formed and b) the economic value of the underlying glacial deposits of sand and gravel;
- a study be done to assess the current sediment loading rates into and out of Lake Shady;
- a State Attorney General opinion be gotten regarding the ownership of the lakebed.
- an economic analysis be done to identify costs and benefits of the two restoration options – restoring the area to an open water lake or restoring it to a free-flowing stream reach; and
- an analysis be conducted to determine what ecological system (river or lake) would provide the most sustainable system for water quality, flood control, and recreation.

Summary of information from the Lake Shady Stakeholder Group report:

Lake restoration -- Lake Shady has existed near continuously since the first dam was constructed in 1855 and the lake is central to the community’s history and identity. The current dam is the fourth dam constructed on the Zumbro River in Oronoco. The first three dams were for hydropower production. The current dam was constructed primarily to provide flat-water recreation. City of Oronoco residents have consistently expressed support for restoring the lake and the City maintains a standing committee solely for that purpose. Restoring the lake would require that the dam be repaired or replaced and a significant volume of sediment be removed from the lakebed in order to provide adequate water depth and quality for its recreational

use. Restoring the lake would also require that the County commit to the long term operation, maintenance, and safety of the dam, and that the City and/or County succeed in getting the agreements and funding needed to dredge the lake.

Stream restoration – much of the original lake area west of Hwy 52 has already reverted to a riverine system. This was evident during winter drawdowns of the pool as is particularly evident at this time. Restoring the Zumbro River to a free-flowing stream reach would at a minimum require that the dam be removed or at least partially removed and that lakebed sediments be stabilized. A significant issue affecting river restoration is ownership of the land that will be exposed if the dam is removed. Because of the complexity of that issue, a State Attorney General's opinion is being requested.

Olmsted County owns the dam and is ultimately responsible for its operation and maintenance. The City of Oronoco has been operating the dam under an agreement with the County. In 2009, the County contracted with Ayers and Associates to complete a structural assessment of the dam and identify needed maintenance. At that time, Ayers found the dam to be structurally sound. The County Board committed to performing the immediately needed maintenance but did not commit to the long term operation and maintenance of the dam. The County continues to be liable for the structure of the dam and potential damage resulting from it.

Background information that was provided to the Lake Shady Stakeholder Group can be viewed at:

http://www.co.olmsted.mn.us/departments/environment/lake_shady_stake_holders_group.asp.

The Lake Shady Stakeholder Group will meet on October 18th to review the current circumstances of the dam and lakebed and make a recommendation. Their recommendation will be provided to the Environmental Commission in advance of the October 20th Meeting.

Action Requested: Staff is requesting an Environmental Commission recommendation to the County Board regarding the restoration of Middle Fork Zumbro River in Oronoco.



CALLING FOR NOMINATIONS!

Olmsted County and Rochester Public Utilities are seeking nominations for the 2010 Environmental Achievement Awards. These awards are given to individuals, organizations, farms, and businesses who have made a significant contribution to environmental quality in Olmsted County.

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The goal of the awards program is to promote innovative approaches to environmental challenges, encourage environmental thinking in business and farm decision making, and develop an environmental and conservation ethic in Olmsted County.

The awards will be presented at an evening program on January 27, 2011 at the Rochester Golf & Country Club.

2010 AWARD CATEGORIES:

Nominations are sought for outstanding environmental achievement by **individuals, families, youth, organizations, or businesses** in any or all of the following categories:

- Renewables
- Conservation
- Energy
- Water
- Agriculture
- Education
- Climate Change
- Other

APPLICATION INSTRUCTIONS:

Complete the application and send with any supporting materials (see second page) to:

Michelle Rysavy
 Olmsted County Environmental Commission
 2117 Campus Drive SE
 Rochester, MN 55904
 phone: (507) 328-7180
 fax: (507) 328-6728
 email: Rysavy.Michelle@co.olmsted.mn.us

Nominations are due on or before Friday, October 22, 2010.
 A list of previous award winners may be found at www.rpu.org.

ENVIRONMENTAL ACHIEVEMENT AWARDS NOMINATION

1. Category (see above list) _____

2. Nominated Individual, Family, Youth, Organization, Farm, or Business (circle one):

Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone (_____) _____ Evening Phone (_____) _____

E-mail Address _____

3. Nominating Individual, Organization, or Business:

Contact Name _____

Organization or Business Name _____

Address _____

City _____ State _____ Zip _____

Daytime Phone (_____) _____ Evening Phone (_____) _____

E-mail Address _____

Signature _____

ENVIRONMENTAL ACHIEVEMENT AWARDS NOMINATION SUPPORTING INFORMATION SHEET

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1. What was the nominee's project or activity?

2. When and where did the project or activity take place?

3. What are the key accomplishments and benefits to the environment?

4. Where did you hear about this program?



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