Riverine and Lakebed Restoration Planning Public Meeting No. 3

April 4, 2011

Bonestroo

Public Involvement Efforts to Date:

- DNR presentation of Dam Removal and Lakebed Restoration Concepts – October, 2010
- Public Information Meeting #1 – February 22, 2011
- Riverine and Lakebed Restoration Planning Charrette – March 5, 2011
- Public Information Meeting #3 – April 4, 2011

Project Related Documentation:

- Public Information Meeting discussion materials available on the City of Oronoco Website. Look for the "Flood 2010 Information" link in the left column
- Lake Shady Stakeholders Report
  - 55 stakeholders including 20 natural resource professionals met 10 times during 2009
  - Reports and presentations available on Olmsted County Website
  - http://www.co.olmsted.mn.us/environmentalresourceservices/Pages/LakeShadyStakeholdersGroup.aspx
- Mn/DNR website documentation on similar project completed throughout Minnesota
  - http://www.dnr.state.mn.us/eco/streamhab/reconnecting_rivers.html

Public Meeting No. 3 Goals

- Discuss park planning concepts for the proposed restoration of the riverine system and lakebed
- Solicit input from stakeholders on restoration planning concepts
- Develop a collective vision for the proposed Riverine and Lakebed redevelopment

Public Comments on Past Lakebed Redevelopment Concepts

- Homeowner privacy and security is a concern. Shift river to east and eliminate path between homes and river
- Highway noise should be decreased
- Screen highway from view
- Prefer passive recreation options
- Prefer a natural resources based park
- Create water fowl habitat
- Minimize City maintenance
- Accommodate people with disabilities

Public Comments on Past Lakebed Redevelopment Concepts

- City doesn't need more ball fields
- Existing shoreline needs to be cleaned up – walls fixed / removed
- Campground doesn't need additional capacity
- Plan should consider broader watershed issues and water quality
- Lots of history associated with the Lake – Historical interpretation
- Opportunity to connect the proposed park with City streets by extending 2nd Street to the west
- Liked the idea of preserving views and creating smaller, intimate spaces

CO. RD. 12
FUTURE DISC GOLF OR ATHLETIC FIELDS
CONNECT TO EXISTING PARK
HISTORIC INTERPRETIVE KIOSK
ALTERNATE PEDESTRIAN CROSSING BRIDGE
CANOE LAUNCH & FISHING PIER
PEDESTRIAN BRIDGE
CONNECT TO CITY STREETS
FUTURE PARKING
MOWED TRAIL
MINNESOTA AVENUE
MIDDLE FORK ZUMBRO RIVER
FOREST BUFFER ALONG TH 52
WETLAND AREA
BITUMINOUS TRAIL
EXISTING CULVERT TO FLOW OVERLAND INTO WETLAND AREAS
PRESERVE VIEWS
NARROW RIVER 20' & ADD PORTAGE WAY
HIGHWAY 52
WEST FRONTAGE ROAD
CENTER STREET
HISTORIC INTERPRETIVE KIOSK
CONNECT TO ROAD
EXISTING DNR CANOE LAUNCH
SOUTH BRANCH ZUMBRO RIVER
CANOE LANDING & SCENIC OVERLOOK
TRAIL CONNECTION UNDER HIGHWAY
CITY OF ORONOCO, MINNESOTA
Lake Shady Park Master Plan
April 4, 2011
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River and Lakebed Concept Components Include

- Dam Removal
- Gradual Rapids Construction
- Riverine System Restoration
- Lakebed and Wetland Restoration
- Lakebed to be developed into a natural resources based park with passive recreational opportunities

Dam Removal

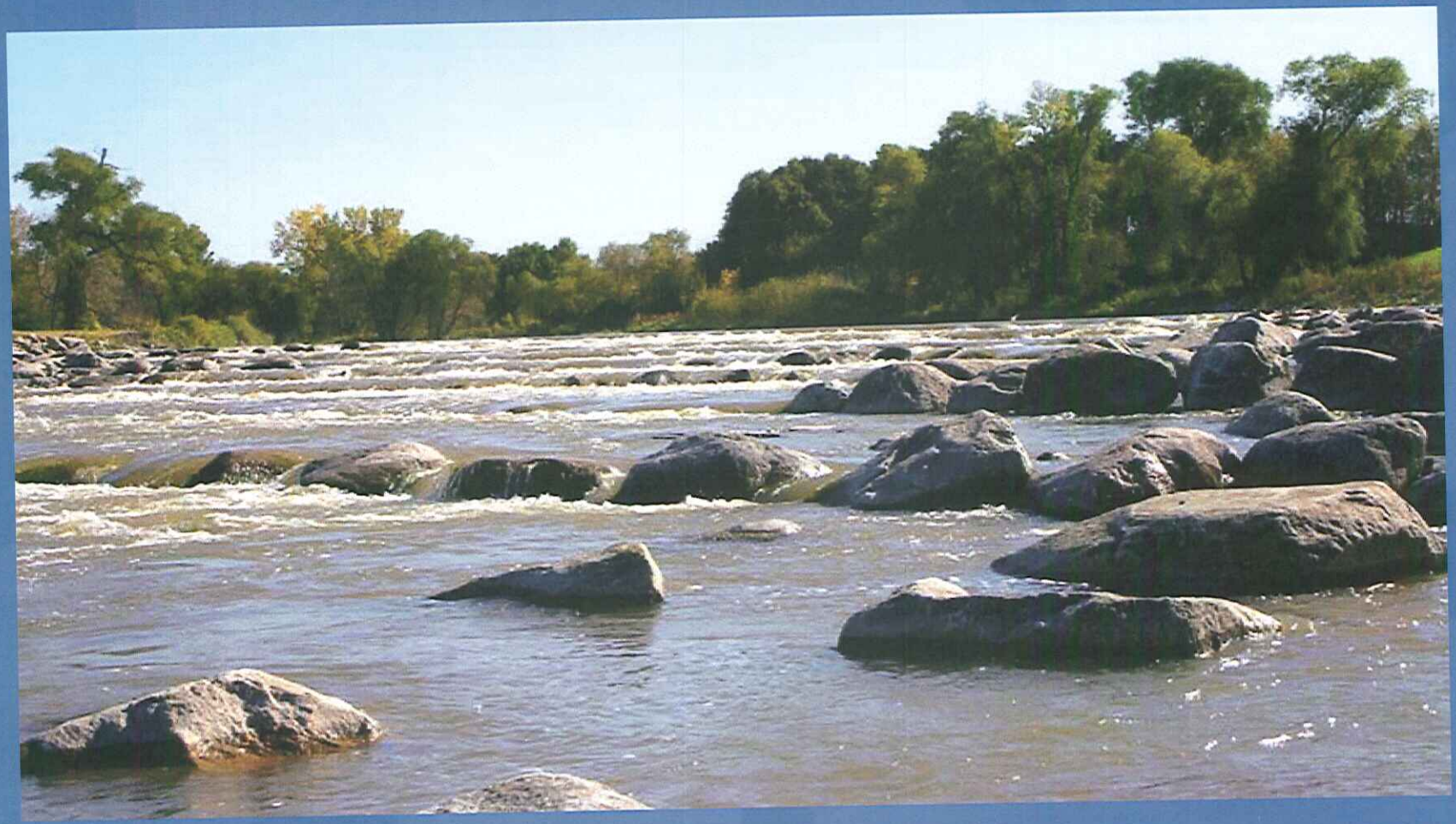
- Dam grade control function to be replace by Gradual Rapids construction
- Some concrete from the dam could be used in restoration improvements
- Estimated Project Costs ~ $264,000

Gradual Rapids Features

- ~ 600 rapids with ~ 7 feet of drop though a series of 12 rock weirs and pools
- Constructed with a combination of large boulders and riprap
- Low impact portage way along north shore of river connects rapids to existing DNR canoe launch
- Fish passage and habitat
- Kayaking
- Estimated Project Costs ~ $1 million

Crookston Rapids Construction

Crookston Rapids



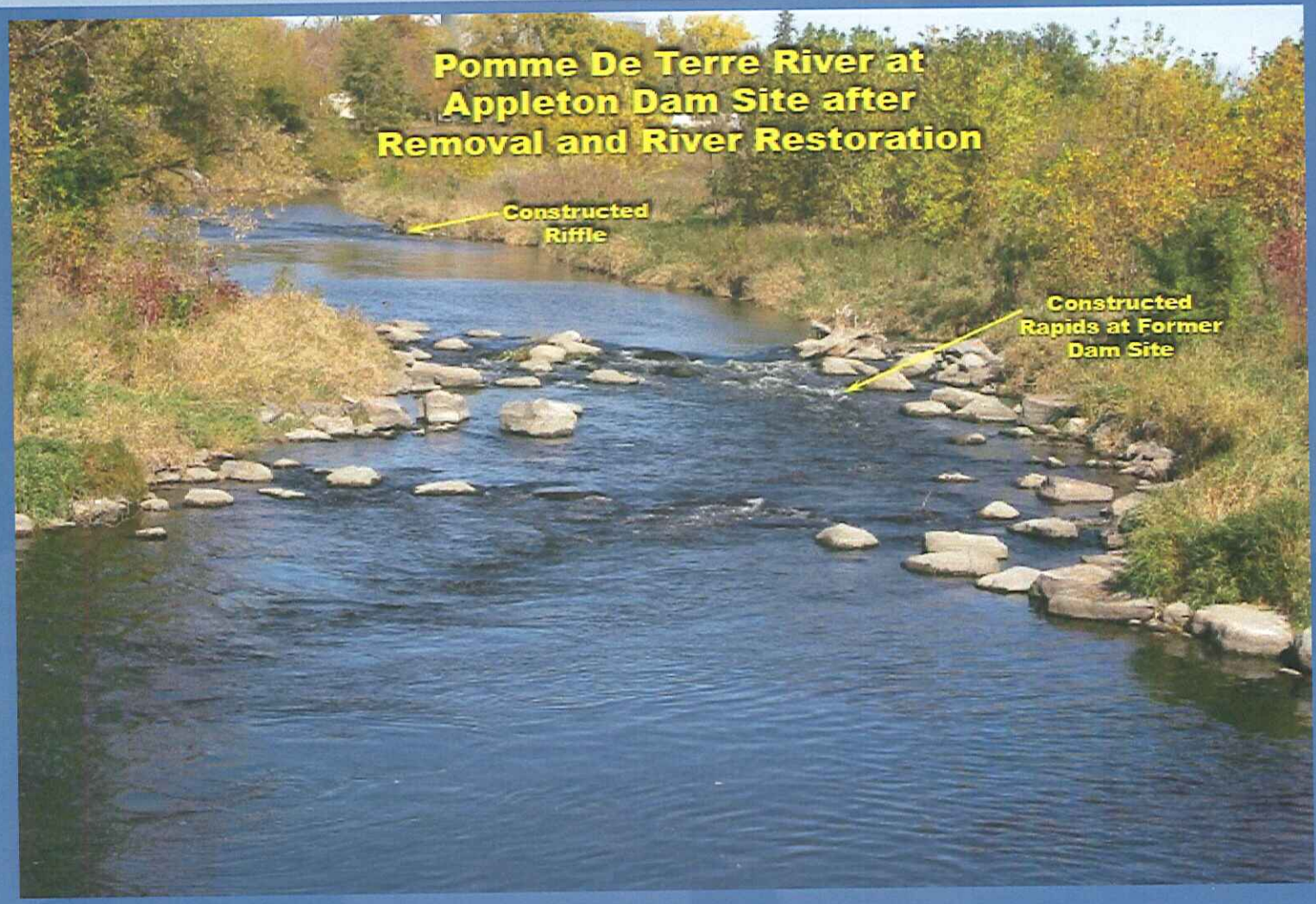
Dawson Rapids

Hutchinson Rapids

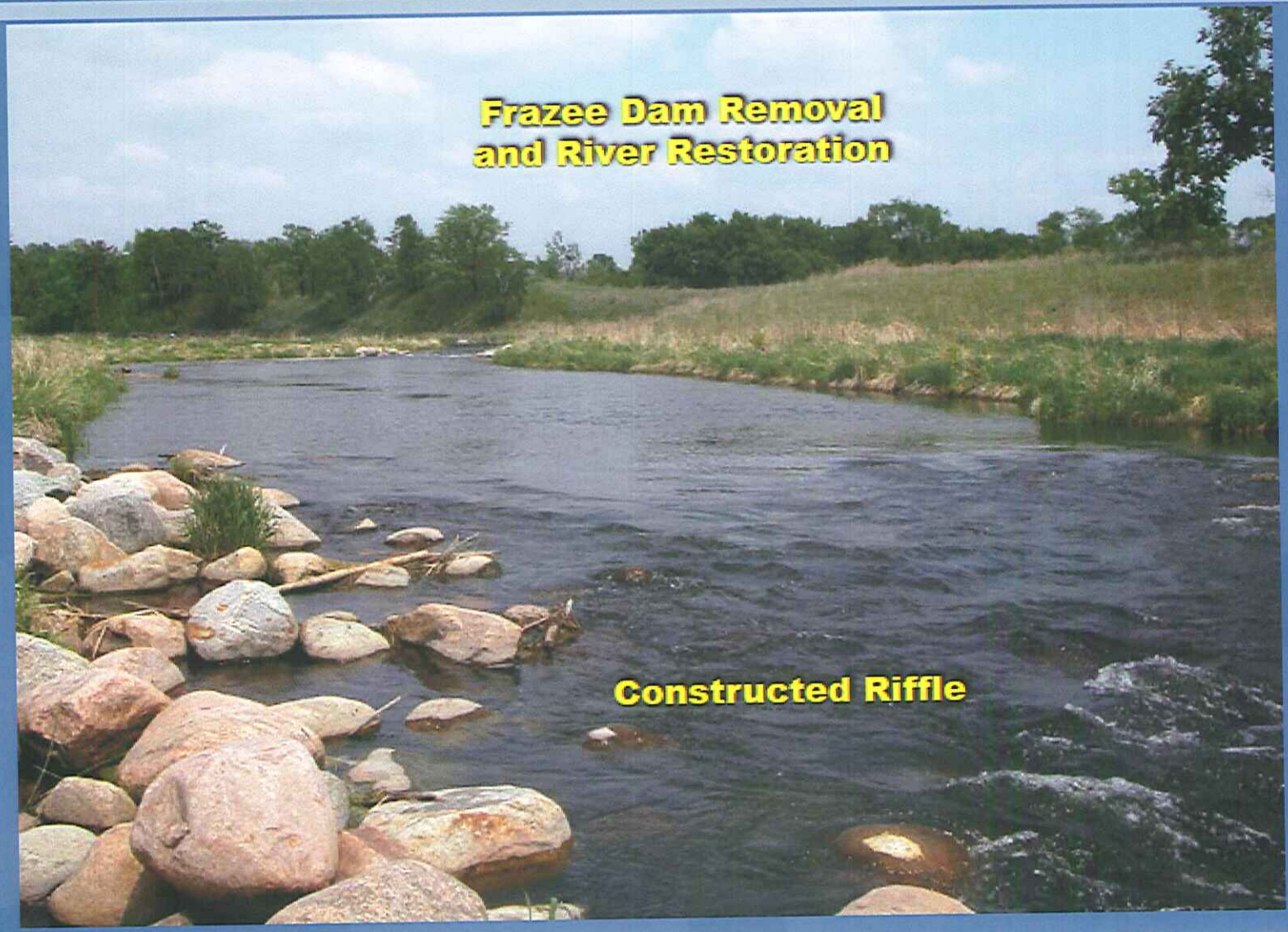
Riverine System Restoration

- ~ 5230 feet of river restoration
- ~ 8 Riffles with downstream pools and toe-wood bank protection including tree / shrub plantings
- Riffles constructed with a combination of large boulders and riprap
- Enhance fish habitat
- Trees and shrubs planted long along erosion susceptible stream banks
- Estimated Project Costs ~ $1.3 million

Riverine System Restoration



Riverine System Restoration



Lakebed and Wetland Restoration Features

- Total impacted lakebed ~ 90 acres
- ~ 5 wetland / open water features totaling ~ 7.5 acres
  - Approximately 4 feet deep with surrounding 20:1 aquatic bench
  - Intercept flows from adjacent storm sewer & ditches
- ~16.25 acres of tree plantings
  - Combination of 1" trees and seedlings
- ~54.5 acres of native grasses
  - Deep rooted to stabilize existing lakebed sediment
- Estimated Project Costs ~ $1 million

Lakebed / Park Area Passive Recreational and Access Improvements

- Combination of 10' wide bituminous trail (~8,000') and mowed pathways (~4100')
- Pedestrian Bridge ~ 250' long x 12' wide
  - Alternate location for pedestrian bridge advantages / disadvantages
- TH 52 Underpass
  - Connects east and west Oronoco
  - Provides access for maintenance equipment
- Canoe Landings and Fishing Pier
- Historical Interpretative Kiosks, Park Benches
- Estimated Project Costs ~ $1.3 million

Future Lakebed / Park Area Active Recreational Improvements

- Future Disk Golf
- Parking Facilities
- Expansion of picnic area

Total Project Cost Estimate:

- Dam Removal ~ $264,000
- Gradual Rapids Construction ~ $1 million
- Riverine System Restoration ~ $1.3 million
- Lakebed and Wetland Restoration ~ $1 million
- Lakebed / Park Area Passive Recreational and Access Improvements ~ $1.3 million
- TOTAL ~ $4.95 million

Project Challenges To Be Address

- Property ownership / land acquisition
- Sediment management
- Channel restoration
- Fisheries impacts
- Economic Impacts
- Historical preservation requirements
- CSAH 18 bridge protection
- Consensus building amongst stakeholders
- Project funding
- Agency permitting (DNR, MPCA, ACOE, MN/DOT)
- Environmental documentation

Planning Process - Next Steps

- Public Information Meeting No. 3 — April 4, 2011
- Finalize Planning Concepts and Technical Memorandum — April 15, 2011
- Present Documentation to the State Legislature as part of Bonding / Flood Recover Assistance — April 18, 2011

Discussion

Questions/Comments

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