Kinni Corridor Project
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MINUTES

Kinni Corridor Project Committee Meeting
Thursday, Mar. 30, 2017 at 4-5:30 p.m.
City Hall – Training Room

The Kinni Corridor Committee met on March 30, 2017. Those in attendance included Lisa Moody, Patricia LaRue, Susan Reese, Dave Fodroczi, Jason Egerstrom, Dan Toland, Gary Horvath, Kevin Westhius, Chris Blasius, Rita Kosak, Mary Zimmermann, Bob Kost, Buddy Lucero, Julie Bergstrom, Keri Schreiner, Angie Bond, Reid Wronski and Mark Lobermeier.

Buddy Lucero called the meeting to order.

Meeting Minutes

The meeting minutes from the February 16, 2017 Committee Meeting were presented and approved.

1. **Tech Talk No. 3**

   Buddy reminded the committee that our next Tech Talk on April 6 will be moved to St. Bridget church.

2. **Tech Talk No. 2 – River Ecology – Reaction and Discussion**

   The Committee discussed their impressions of the River Ecology Tech Talk. In general, the Committee thought we had a strong panel, but the logistics and process, especially when it comes to Q/A left something to be desired. Some felt like we should have a second tech talk on this topic.

   More time for engagement with the presenters would be helpful, even if we go beyond 8:00 pm. More time for questions would be helpful. Some members of the committee felt like dam removal was avoided as a topic and we failed to address how river ecology would be viewed with or without the hydro facilities.

For future tech talks, we need to establish a Q/A process – identify yourself, ask one question per person, and not enter into a conversation. The moderator role needs to be more effective in future events.

Some on the Committee believed that the vast majority of those in attendance wanted to discuss dams, recognizing that Tech Talk 4 and 5 are intended to address the topic. If we use a panel in the future, the Committee would like to review the questions in advance. Others would like a future river ecology topic to address everything the City has accomplished (stormwater, buffers, etc.)

Two members of the public in attendance also commented. Michael Page thought the meeting was good, but the community didn't get specific issues answered and that the issue of dam removal appeared to have been avoided. Peter Dahm agreed that we needed to address the difference in river ecology with and without the dams, and that we should have emphasized tools like the City's Storm Water Utility to help defer some of the anticipated costs.

3. Updates

3.1 Chamber Presentation: Buddy provided an update on his presentation to the Chamber. There was only one question form the group.

3.2 Technical Studies: Mark provided a handout entitled Technical Studies Update (attached).

3.3 Planning Update: Bob Kost demonstrated the current version of the planning frameworks his team is working on. The frameworks establish the base line conditions for the corridor plan, starting with corridor definition (1 mile either side of the river), land use (Main Street as the heart), community assets, access activities, watershed and flood plain, ecology and environment, recreation and open space, local/regional food, motorized transportation, active transportation networks and utilities. Land ownership is still be developed. Bob suggested that the next step would be for staff to review the draft framework documents and then provide them to the Committee for their review before making available to the public.

3.4 Friends of the Kinni Report on Dam Removal: Mark informed the Committee that he and the technical team have started to review the report and that it will be provided to the Committee and presented at a future Committee meeting. He emphasized that it represents one option of what might happen in the corridor.

4. Committee Discussion

4.1 Committee Charter and Role: Mark re-introduced the charter for the Committee that was developed at the beginning of the project. He discussed that he would recommend that the Committee not ask questions in a public forum but instead bring those questions to the Committee meetings where they can be addressed by the entire Committee.

4.2 Tech Talk Preparation: The Committee agreed that we should have a special meeting to specifically address the questions to be covered by the Tech Talk #4 presentation regarding the City's hydro facilities and the FERC relicensing process. The Committee believes that we need more input from downtown

business owners and that we address not only the dams but stormwater as well. It was stated that we need to consider the past and current efforts of the City (regarding stormwater) as well as the current condition of the river beyond just that segment around the two hydo facilities. The Committee asked about having FERC or the DNR participate. Mark indicated that notices should be going out to the official FERC list of interested parties.

5. Public Engagement

Mary Zimmermann discussed upcoming community events and the opportunities for promoting the planning process. She also discussed the idea to conduct some smaller group meetings with downtown business owners. Mary mentioned "ambassador training" and that she is working on a brochure. Rita mentioned that the agenda for the St. Croix Summit was being finalized. Buddy and Dave are making presentations.

6. Public Comments

There were no additional comments from members of the public present at the meeting.

7. Looking Forward: Next Steps

The next steps for the Committee include the April 6 Tech Talk, the May 11 Committee Meeting and Tech Talk 4 on May 18. Invites for a special meeting regarding Tech Talk 4 will be sent after the meeting.

8. The meeting adjourned around 5:30 pm.

Kinnickinnic River Corridor Plan

Technical Studies Update

March 30, 2017

The Technical Team continues to make progress as planned. We are in the early stages of our project, reviewing and inventorying existing reports and existing data before proceeding with in depth evaluations. The following is a list of anticipated studies or evaluations:

Anticipated Studies

- Impact to public infrastructure.
- Hydrologic and hydraulic modeling of the river and watershed response (storm water).
- Analysis of the health and future of Lake George and Lake Louise (impoundments).
- Assessment of geomorphic conditions
- Sediment impacts in the riverine system.
- Wildlife and plant biodiversity assessments.
- Impact on threatened or endangered species, migration, population vigor and vitality.
- Recreational use impacts.
- Local and regional economic impacts
- Impacts and opportunities for both public and privately-owned properties.
- Quantifying the effect of relicensing and potential dam removal on the future vision of the corridor and the overall health of the Kinnickinnic River

The role of the technical analysis is to support the goals of the corridor planning effort and the community input. . We are developing design parameters to be evaluated under the influence of the following scenarios:

1. The dams remain in place (with or without power generation)
2. One of the dams is removed
3. The two dams are removed

Within the next two months, we will define the key elements to be evaluated under each of the scenarios and estimate a range of costs associated with them. We will conduct a work-session with the planning team to provide initial information and share our findings.

One important task at hand is the evaluation of the findings of a recent report, "Restoration of the Kinnickinnic River through Dam Removal Feasibility", submitted to the Friends of the Kinnickinnic River. Once we have reviewed the report we will be discussing its technical significance and value for our project.

Some specific progress associated with each of the disciplines is as follows

Hydrology, River Modeling and Stream Ecology

Numerous reports and documents and reports have been reviewed as part of the initial; steps of the technical analysis. The following summarized some of those documents:

FIS_55093CV000A.pdf (FEMA Flood Insurance Study for Pierce Co, WI; Effective Nov 2011) and FIS_55109CV000a.pdf (FEMA Flood Insurance Study for St Croix Co, WI; Effective March 2009).

FEMA Flood Insurance Studies (FIS) for Pierce and St Croix Counties establish regulatory floodplain zones for the Kinnickinnic River upstream of and through the City of River Falls and the corridor study area. The studies also describes engineering methods including the hydrologic and hydraulic analyses that were completed to support the development of the FIS and floodplain mapping.

Key parameters from a review of the FIS as they relate to the Kinnickinnic Corridor Study:

1. The Kinnickinnic River and its floodplain are designated as a FEMA Zone AE detailed floodplain with a defined floodway through the study corridor. Any projects or modifications with fall within the designated floodplain must be compliant with the requirements set by the FEMA National Flood Insurance Program and the more restrictive State of Wisconsin floodplain management statutes as defined in NR 116, along with local floodplain zoning regulations.
2. The effective FEMA hydrologic and hydraulic models were developed by SEH and consist of HEC-2 hydraulic models not containing the areas influenced by the dams and HEC-HMS models for the hydrologic analysis and high-water elevations for area influenced by the dams.
3. Both dams have large fixed crest spillways which pass flows over the dam in a run-of-the-river operation with little to no peak flow attenuation or flood protection to the downstream system. The dams impact the water surface profile upstream for approximately 1,500 feet from the Junction Falls dam through Lake George and 2,200 feet from the Powell Falls dam through Lake Louise.

4. Dam removal would result in a general lowering of flood profile for the base discharge and lower the more frequent flood events through the Lake George and Lake Louise areas. The effective hydraulic model will have to be extended downstream through the location of the falls to evaluate the overall flow conditions and potential water surface profiles with removal.

Kinnickinnic River Priority Watershed Project (The Wisconsin Nonpoint Source Water Pollution Abatement Program; Wisconsin DNR, April 1999)

This report was prepared under the Wisconsin Nonpoint Source (NPS) Water Pollution Abatement Program. It includes a description of the Kinnickinnic River watershed, sources of nonpoint pollution along with management goals and objectives. While the report is somewhat dated, it provides a myriad of information that is useful and applicable to the Kinnickinnic Corridor Study area. The report also includes a historical account of key activities within the Kinnickinnic River watershed dating back prior to the 1850's.

Key parameters from a review of the report as they relate to the Kinnickinnic Corridor Study:

1. In 1975, the State of Wisconsin requested dam operations to be modified from peaking to run of river operation.
2. Major nonpoint sources of pollution include runoff and erosion from established urban areas and rapidly developing areas, eroding agricultural lands, eroding streambanks, runoff from livestock wastes and agricultural practices.
3. Thermal Pollution Control Objectives: Best Management Practices should be utilized during land development so that "effective" impervious cover is no greater than 15%; maximize infiltration of stormwater to minimize thermal pollution.

Kinnickinnic River at River Falls, Wisconsin Thermal Study (USACE, October 2003)

This study was completed to develop a thermal model to aid in evaluating the effectiveness of various storm water management plans on the coldwater fishery downstream of River Falls. A CE-QUAL-W2 model was developed as part of the study to aid in evaluating how storm water may alter the temperature and flow regimes of the Kinnickinnic River.

Information from the USACE Thermal Study that may be applicable to the Kinnickinnic Corridor Study:

1. The bathymetry for the river sections was estimated from HEC-2 data files originally developed from cross sections used in the city's flood insurance study (FIS report, 2002). The reservoirs' bathymetries were estimated from several different sources, including cross section surveys, a topographic map of Lake George completed as a school project, and volume and surface area data furnished by the River Falls Municipal Utility. The study suggests updating the model with more detailed bathymetry once available.
2. The water temperatures discharging from the dams can vary significantly depending on the amount of surface water that is flowing over the dam's weir, the flow through the penstock and the temperature profile at the dam.
3. At present, updating the 2003 model is not part of the scope of our investigation. This effort is likely to occur during relicensing our license surrender.

Coldwater Fish and Fisheries Working Group Report (Wisconsin Initiative on Climate Change Impacts, released February 2011)

While not specific to the Kinnickinnic River, this study discusses how the distribution of some coldwater fish in Wisconsin may change with climate warming and change. A discussion of adaptation strategies is also discussed to lessen the impacts of climate change on coldwater fisheries.

Recommended strategies from the Report to lessen the impacts of climate warming on trout which may be applicable to the Kinnickinnic Corridor Study:

1. Environmental management strategies to offset the impact of rising air temperatures and changes in precipitation. These may include land, riparian, and water management and stream restoration.
2. Identify potential impacts of climate change to coldwater resources and allocating management resources to those coldwater habitats most likely to realize success.
3. Proactive application of strategies will help protect coldwater fisheries from impacts of a changing climate.

River Falls Municipal Utilities Wastewater Treatment Plant Facts (from City Website)

The information on the website provides a summary of the influent and effluent data for the River Falls WWTP. September 2016 was the only data reviewed for this summary. Further information regarding the City's discharge permit and operational plans will be part of the corridor plan.

Information from the review that may be applicable to the Kinnickinnic Corridor Study:

1. The design flow for the WWTP is 1.8 MGD (approximately 3 cfs) and the average influent flow for September 2016 was an influent of 1.37 MGD and effluent of 1.46 MGD.
2. TSS Influent of 72,000 lbs into WWTP and effluent of 2,200 lbs discharged to Kinnickinnic River.

Lake George and Lake Louise, Sediment Assessment Report (Inter-Fluve, March 2016)

This study was completed for the City by Inter-Fluve to evaluate existing sediment conditions in the upper and lower impoundments, Lakes George and Louise, respectively. The main focus of the work was to assess the quantity and quality of impounded sediment behind both dams, and to determine the potential volume of sediment that may be evacuated or need to be excavated in the event of dam removal.

Information from the Sediment Study that may be applicable to the Kinnickinnic Corridor Study:

1. The total estimated volume of impounded sediment in Lake George was 166,800 cubic yards. The majority of these sediments are sands (~80%) with a significant portion of fines (silts and clays; ~20%)
2. The total estimated volume of impounded sediment stored in Lake Louise is 163,800 cubic yards. Sediment samples consisting of roughly 65% sand and 35% fines (organics, silts, and clay).
3. The River Falls dams act as sediment traps.
4. Sediment sampling data suggest that the sediment within the ponds has contaminant concentrations generally less than their respective effects concentrations, although there were

exceptions (Total PCBs and PAHs exceeded threshold effect concentrations (TECs) in a few samples). Concentrations of mercury, lead, nickel, arsenic, and hexavalent chromium exceed their respective TECs were present in some of the off channel floodplain sediments.

Dam Removal and Stream Morphology

Inter-Fluve recently deliver their report to the FOTK regarding dam removal. The technical team will evaluate the report for inclusion in the corridor plan. Inter-Fluve is tentatively planning to complete a field reconnaissance level geomorphic and sediment fate analysis of the Kinni on April 5 and 6.

Natural Resources

From a natural resources perspective, we have been identifying a diverse group of factors that are anticipated to require consideration with the potential removal of one or both of the dams. These factors include fisheries, wetlands, vegetation, macroinvertebrates, floodplain, nutrients, sediment transport, bank stability, water temperature, groundwater, and hydrologic changes. For each of these factors, we have provided general consideration for if there would likely be an improvement, a decline in area or quality, or no anticipated change. Some factors are fairly clear and have a distinct direction, most are more complicated and would have a range of effects. It is intended that for each of these factors we continue with a high-level analysis, but provide the opportunity to elaborate into specific topics as additional detail is warranted. In this manner, we can sort out quickly which topics require additional analysis, and which ones are either irrelevant, not anticipated to change, or would not be a significant factor in decision making. The finalization of this matrix of natural resource effects will be developed in conjunction with existing studies and other analyses currently being completed.

Relicensing and FERC Requirements

TRC will be preparing materials and participating in the May 18 Tech Talk. The first part of this presentation will cover existing hydro facilities and the second part will address the FERC licensing process (covered by TRC). Discussions are on-going as to the best ways to get project information to regulators. TRC is reviewing and compiling existing data regarding the FERC licensing process as it pertains to the City of River Falls. A draft report should be available for technical team review by April 7th. TRC will continue to be on standby to review the technical scope of impact assessments against FERC requirements and schedules, meeting with the technical team to review results and review the final technical memorandums. These reviews will be conducted when materials are received from the team.