DRAFT RESOLUTION TO PAC ON THE HRIMP REPORT RECOMMENDATIONS 5-19-2009

Submitted by Commissioners David Barrett and Gwen Nystuen

1) Whereas the Huron River Impoundment Management Plan (HRIMP) Committee has produced a report with recommendations on the management of the four dams owned by the city on the Huron River, and

2) Whereas the Park Advisory Commission (PAC) supports many of the recommendations, and

3) Whereas the hearings and communications since the April release of the HRIMP report have produced additional information and options for the repair of the headrace and earthen embankment below Argo dam that offer the potential of the least expensive course of action to meet the immediate requirements of the state¹ as well as improvements in the access to pathways and use by canoes and kayaks while continuing the other water recreational uses, including the four rowing teams, and

4) Whereas the implementation of the HRIMP recommendations will require significant additional staff and capital expenditure from Parks & Recreation, Parks Operations, and Natural Area Preservation that are not reflected in the budgets to be adopted for 2010 and 2011, and

5) Whereas the HRIMP report recommends two courses of action with regard to Argo dam, 1) remove Argo dam, or 2) leave the dam and Argo Pond as is, but make necessary repairs to the headrace and embankment² by using the hybrid solution without the whitewater component, and

6) Whereas either of the two courses will require substantial funding and time for completion in a period of extreme financial pressure from the national, state and local recession that is projected to result in a General Fund deficit of approximately 8 million or 10% of the General Fund for FY10 and FY11combined, and will require significant cuts to City services in all areas through at least 2010 and 2011, and

7) Whereas "Argo dam is not failing. The structure with the gates is in very good shape and is well maintained. The MDEQ office of dam safety wants us to repair old toe drains along the millrace embankment. Those drains are not working properly but there is no sign of any failure there either. We inspect the dam regularly and have contingency plans in place if any issues are identified." (M. Naud 5-19-2009)

8) Whereas there are alternate solutions for repair and management of the headrace and embankment that leave Argo dam and Argo Pond in their current state as the main element of the most central regional city park, and second most popular park in the city with its open water and view of the river valley, a major entry to the city, with a board walk, pathways, newly completed Bandemere Park with disc golf, picnicking, parking and boating facilities, and

8) Whereas the alternate solutions maintain the option of restoring hydroelectric generation from Argo Dam in the future when it may again be economically feasible and needed, and

9) Whereas the restoration of the of the middle section of the Huron to a river ecosystem through the City of Ann Arbor is a desirable long term goal, it will require that all four dams be removed, a scenario that is not currently feasible⁴, and

10) Whereas the removal of Argo dam impoundment that is less than 2 miles from Barton dam and therefore cannot be expected to produce a significant improvement in water quality and

biological diversity that would offset the loss of Argo pond, the central park feature for the Downtown and west side of Ann Arbor, and

11) Whereas the current use of Argo pond services four successful rowing programs, A2 Pioneer High, Huron High, AARC & the University of Michigan, programs that have thrived on Argo Pond, their preferred and optimal water space, and

12) Whereas the city of Ann Arbor recently spent over \$300k to develop Bandemere Park and customizing it to accommodate rowing, and

13) Whereas alternate locations to provide for the rowing community as promised in the HRIMP report face difficult and likely lengthy negotiations and expenses, particularly Barton where there are legal and site issues.

Be it therefore resolved that Park Advisory Commission (PAC) recommends that City Council:

1) accept the Huron River Impoundment Management Plan (HRIMP) report, and establish a very broadly based River Stewardship Committee to address:

- i) aquatic vegetation management that identifies best management practices (BMP) and also funding
- ii) the questions regarding sedimentation, toxins, water temperature and fisheries for which there is inadequate scientific information to make decisions
- iii) propose a timeline and costs for sustainable use of the dams and their future removal or replacement, and

2) direct the implementation of the HRIMP recommendations that require minimal capital funds and additional staff during 2009-2011, and

3) approve immediate engineering appraisal of the alternate options for the repair of the headrace and earthen embankment toe drains below Argo dam that offer the potential of the least expensive courses of action that would meet the immediate requirements of the state,² as well as those for a water course or portage for canoes and kayaks, and

4) provide funds for additional responsibilities assigned to Parks and Recreation, Park Operations, and Natural Area Preservation that will be required for any adopted recommendations to be implemented in 2009-2011, and

5) accept the course of action for Argo dam that retains Argo Dam³ and Argo Pond with the repair of the toe drains in the embankment below the dam with BMP flow controls, and appropriate design of the water supply to the headrace, and plan to create a water bypass or suitable portage for canoes and kayaks, and

6) establish lines of responsibility within the city departments and staff for implementing recommended actions of the Huron River Impoundment Management.

Notes:

¹ "The toe drain failure is complicated by the dense growth of trees and brush on the raceway embankment and by the inability to block the flow of water into the raceway during an emergency. The toe drain system should be repaired immediately, and a means of blocking flow into the raceway canal should be devised as soon as possible. In addition, at a minimum, dead and

leaning trees should be removed from the raceway embankment as soon as possible." DEQ 11— 18-2004

² The Dam Safety office of the DEQ in April of 2008 following a December 2007 Dam Safety Inspection Report recommended "that a contingency plan be developed to rapidly shut off flow to the headrace in the event of concerns over the headrace" and would "like the plan to include provision that the embankment crest and toe be visually inspected every two weeks, at a minimum, and after any significant wind storms to detect potential stability issues with the embankment, including uprooted trees, new or increased seepage or flow from the toe drains, and embankment sloughs", and further that the "headrace contingency plan is intended to be a short term plan . . . "

³ Local engineer Joe O'Neal's construction company worked on the embankment portion of Argo dam in 1972 following flood damage to the dam that was rebuilt at that time, making it the newest of the dams. Joe O'Neal wrote the following email to Matt Naud 5/14/2009. It provides some of the ideas that have been proposed and are worthy of serious consideration as alternate solutions to the "Argo in" or "Argo out" scenarios that are both extremely expensive and complex. There are potentially less expensive options.

"Another way to solve the problem (assuming that there is a valid headrace embankment toe drain problem) would be to greatly restrict the flow into the headrace and lower the headrace water elevation so as to let only two cances pass. Thus, a portage would be required at both ends of the headrace. Going one step further, an ingenious water feature designer/landscape architect could design a whitewater "thing" at both ends of the headrace, eliminate all portages and create a great cance ride. This idea would need much further engineering and thought than I have given to it; however, I am confident that the right person(s) could create an exceptional river feature and solve all toe drain problems, etc., etc. The lower head reduces the pressure on the embankment and reduces tremendously the amount of water that would be discharged in the unlikely event of an embankment failure.

Clearly, as we discussed yesterday, the fastest way to address this question is by placing a stoplog in the slots in the "little canoe bridge" just east of the main dam. That is why the slots are there. I am trying to verify, but I think we supplied a stoplog to the city for this purpose at the time Argo was constructed. In any event, such a stoplog, with its low head and short length, would be very easy for an engineer to design and easier yet to fabricate."

⁴ Removal of Barton Dam is unlikely because the impoundment serves as the reservoir for over 85% of the city water supply and it also generates hydroelectricity economically. Its removal would be the cornerstone of restoring a riverine ecosystem to the Middle Huron. Superior Dam outside the city, east of Geddes dam, also generates hydroelectricity, and therefore is unlikely to be removed in the near future. Geddes Dam, on the east side of Ann Arbor, creates the impoundment for Gallup and Furstenberg Parks, Huron Hills Golf Course, and Ruthven Park (not developed NE corner featuring a glacial kame). This location and the attraction of the expanse of open water, bridges and trails, playgrounds, and boat facilities, is the most visible and popular park area in Ann Arbor. Argo Dam serves the center and west side of the Ann Arbor in the same manner, and while smaller provides the new board walk, Bandemere disc golf, and picnic areas that are added to connecting trails, biking, hiking, and many types of water recreation enjoyed by a wide range of ages and economic classes. From a park use point of view, a linear stretch of river does not begin to provide the recreational attraction and use that the expanse of water of an Argo Pond provides.

END OF DRAFT

Statement of the goals of the HRIMP Committee: April 1009 (bold added)

Huron River and Impoundment Management Plan

Our vision for the future of the Huron River in Ann Arbor can be summarized as: A healthy Huron River ecosystem that provides a diverse set of ecosystem services. We envision a swimmable, fishable and boatable river, **including both free-flowing and impounded segments**, which is celebrated as Ann Arbor's most important natural feature and contributes to the vibrancy of life in the city. The river and its publicly-owned shoreline and riparian areas create a blue and green corridor across the city that contains restored natural areas and adequate, well-sited public trails and access. Ample drinking water, effective wastewater removal and a full range of high quality passive and active recreation and education opportunities are provided to the citizens of Ann Arbor. Ongoing public engagement in the river's management leads to greater stewardship and reduced conflict among users. Our approach to management creates a model that other communities upstream and downstream emulate.