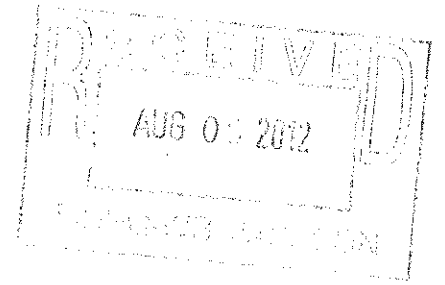




Huron
River
Watershed
Council

Protecting the river since 1965

1100 N. Main Street Suite 210
Ann Arbor, MI 48104
(734) 769-5123
www.hrwc.org



August 3, 2012

Mr. James Sallee
Michigan Department of Environmental Quality
Water Resources Division
Jackson District Office
301 E. Louis Glick Highway
Jackson, MI 49201-1535

RE: Comments concerning DEQ Application File Number 12-81-0027-P

Dear Mr. Sallee:

The Huron River Watershed Council (www.hrwc.org) is a nonprofit coalition of Huron Valley residents, businesses, and local governments, and the only entity dedicated to protecting and restoring the Huron River system. Since HRWC was formed in 1965, we have served as a place where local units of government, citizens and businesses have discussed problems and sought solutions to critical issues affecting the river. While we work to bridge political boundaries by building partnerships between and among communities, we are, at times, compelled to register opposition to our partners' desired uses of the river when we determine the balance of proposed impact to be negative.

The permit application under your review to dredge and fill and construct two whitewater parks in the Huron River, fill in adjacent wetlands and 100-year floodplain, and construct a boardwalk across existing wetlands should not be granted in its current version for numerous reasons that demonstrate inconsistency with Part 301, Inland Lakes and Streams, of NREPA, 1994 PA 451, as amended.

- **IMPACTS TO FLOW AND THE ROLE OF CLIMATE CHANGE**

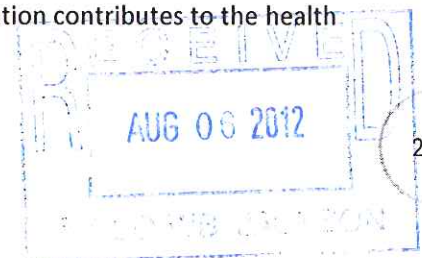
Great Lakes climate scientists expect more periods of drought over the next 30 to 50-years that will result in low flows such as we've experienced on the Huron River in July and August, 2012 (http://glisa.umich.edu/great_lakes_climate/background.php). The documented flow problems at Argo Dam and the Argo Cascades (July 31, 2012 letter to Ms. Molly Wade, City of Ann Arbor from Mr. Chris Freiburger, Fisheries Division, MDNR, "Flow release through Argo Dam and the Argo Headrace") during a low flow period highlight, at best, the challenges of multiple-use resource management and, at worst, the desiccation of Michigan rivers when recreational use is prioritized at

the expense of other uses, namely shared natural resources. This problem will be exacerbated if the proposed structures are built. Moreover, a likely unintended consequence of the structures being built will be City leaders and staff finding they have to choose one whitewater feature over the other when flows are insufficient to keep both recreation features open.

- **IMPACTS TO STREAM FUNCTION**

The applicant proposes to install two whitewater structures. Whitewater structures, like all man-made in-stream structures, have the potential to negatively impact stream hydrology and hydraulics, sediment transport, channel morphology, and ecology, which collectively are known as stream function. The design of the proposed features for the Huron River project is comparable to other whitewater parks in other states where the following impacts have been recorded. Our concerns are consistent with those of the Michigan Stream Team (Michigan Stream Team White Paper, Whitewater Parks, Draft-5/6/12).

1. Whitewater structures can impact stream hydrology and hydraulics. Low-flow dams/weirs incorporated into certain whitewater structures reduce channel width by up to 90 percent, creating velocity barriers to organism passage and potentially increasing shear stress on downstream bed and banks.
2. These narrow weirs can create stagnant pools that strand aquatic organisms and raise water temperature.
3. Many whitewater structures are “low head” dams and have similar effects of a low head dam. Dams interfere with sediment transport by creating sediment deposition zones in the pools between structures, which in turn may eliminate preferred fish habitat, interfere with downstream drifting of macroinvertebrates, and lower dissolved oxygen concentrations. Whitewater structures may also interfere with the transport of small and large organic materials. Organic material transport plays a crucial role in stream health, from fallen leaves that are food for macroinvertebrates to large woody debris that provides sediment retention in stream channels and cover for fish.
4. Whitewater structures can create passage barriers or stranding hazards for fish and other aquatic organisms due to a combination of high water velocities, inadequate water depths, high vertical drops, turbulence, and lack of space for resting cover. The measured velocities over current white water structures are greater than the known velocity capabilities of most of the native fish species present in Michigan rivers.
5. The porous streambed and banks in rivers are essential habitat for fish and macroinvertebrates -- macroinvertebrates such as the state threatened freshwater mussel species that was positively identified in this section of the Huron River on July 25, 2012 by ecologists with the University of Michigan and HRWC. Additionally, this habitat functions to exchange water between the ground and river, assist in nutrient and carbon assimilation, and moderate river temperatures. Grouted whitewater structures eliminate habitats in the spaces between rocks and block the interplay between the river, land, and groundwater.
6. The proposed whitewater structures include large rocks, benches, terraces, or viewing platforms, which can displace riparian vegetation. Riparian vegetation contributes to the health



of the river by providing shade, bank stabilization, large woody debris, and habitat for aquatic and terrestrial wildlife. Riparian vegetation also improves water quality by removing excess nutrients, preventing sedimentation from bank erosion, and lowering water temperature. Whitewater structures also increase the amount of rock in the stream or riparian corridor, which can increase water temperatures.

- **PRECLUSION OF OTHER RIVER-BASED RECREATION**

The social impact of these whitewater structures is also an issue, in that modification of the channel to maximize whitewater recreation precludes other recreational uses. The waters of the Huron River, like all rivers in Michigan, are “waters of the state” and, as such, are for all residents of the state to enjoy and steward.

- **HUMAN HEALTH CONCERNS**

Although human health impacts are outside the purview of your review authorities, we are perplexed by the applicant’s and the City’s desire to locate whitewater structures in this specific location that is directly downstream of the Allens Creek outflow. Kayakers would be expected to have partial- and full-body contact with these waters, which are located in an *E. coli* TMDL watershed. Water quality monitoring results collected by HRWC show that bacterial contamination of Allens Creek continues to greatly and frequently exceed state levels for safe human contact (<http://www.hrwc.org/our-work/programs/water-quality-monitoring/>).

To summarize, HRWC has very serious concerns regarding the activities proposed in this permit application pertaining to insufficient flows, impacts to stream function, preclusion of other river-based recreation, and human health concerns. While we recognize that balancing recreational and other uses of the river is necessary for responsible river and watershed management, permitting these activities would not be a step forward in river and watershed management for the Huron River. Thank you for the opportunity to comment on this application and do not hesitate to contact either of us with questions or clarifications.

For the river,



Laura Rubin,
Executive Director
lrubin@hrwc.org
734.769.5123 x606



Elizabeth Riggs,
Deputy Director
eriggs@hrwc.org
734.769.5123 x608



cc: Evan Pratt, Board Chair, HRWC
Molly Wade, City of Ann Arbor; HRWC
Craig Hupy, City of Ann Arbor; HRWC
Chris Freiburger, MDNR
Jeff Braunscheidel, MDNR
Todd Losee, MDEQ
Eunice Burns, HRWC
Dick Norton, HRWC
Janis Bobrin, HRWC
Scott Munzel, HRWC
Cheryl Darnton, HRWC
Steve Francoeur, HRWC

