

# Plans for the Bear River Whitewater Park/City Park Meeting Minutes

Date: Monday, November 9, 2009, 1:30pm

Attendees: Rachel Smolinski (LTBB), Kira Davis (LTBB), Jacqueline Pilette (LTBB), Christopher Grobbel (Grobbel Environmental Planning Associates), Tim Knutsen (Beckett & Reader)

- I. Tim and Chris said that a firm from Boulder, CO that specializes in whitewater parks was working with them to develop plans for the Bear River project and will be providing design, engineering, and planning assistance. Funding would be through TIF revenues (taxes); (bond is supposed to be proposed to Petoskey Dec. 4, 2009 according to Al Hanson as of 12-3-09). Work would be along approximately 2 miles of riverfront. The Bear River is on limestone/dolomite escarpment – it runs fast and drops 75-100 feet. There were several dams historically located along the river for industrial use from Sheridan St. to the mouth of the river, but were removed; the dam known as the “chutes” located below Bridge Street is now a waterfall.

Goals: provide improved recreational use; improve water quality (by increasing dissolved oxygen through increasing turbulence and flow); create better access including parking. Provide rip-rap structures, add lots of boulders, create “put-in/take-out” spots along the river for kayakers at several stages along the river.

- II. Trail along river needs to meet ADA (Americans with Disabilities Act) requirements. Trail as it is needs some work – possibly wood chips or something eco-friendly to stabilize the trail without unnecessarily increasing impervious surfaces which may cause more problems and might be a liability in winter months as well as require regular salting/shoveling (unless it is closed in the winter).
- III. Rachel said something about talk of a community garden though this isn't included in the current plans as far as Chris and Tim were aware.
- IV. Concerns/Issues/Further Questions:
  - a. Spawning issues: Use and timing - need to know if water park use will impede migrations; need to identify times of peak fish migration during the year and make sure that use and reconfiguration of the river for the whitewater park will not impede fish passage. Need to know if this will actually increase fish habitat - Chris or Tim may want to contact LTBB Natural Resources Department for more information on fish surveys and

their opinion of the project and possible suggestions for fisheries and wildlife.

*Construction of the stream improvements will have to be scheduled around fish migration times to minimize impact. We'd be interested to find out what the LTBB Natural Resources Department can provide regarding any information we can use for construction scheduling. Regarding actual impact post-construction, our consultant tells us this may improve habitat (increasing oxygen content in the water, for example) but none of the structures are large enough to impeded fish migration.*

- b. The rip rap that will be installed will require heavy machinery in the river to place boulders – this process needs to be vetted more thoroughly: how will this be done (e.g. will river diversion be necessary, etc)? Need to ensure that fisheries and other wildlife will not be adversely affected by the machinery in the river as well as rip rap boulders. Rip rap along the rivers edge should be minimized as much as possible and instead using more bio-friendly stabilization that will actually encourage plants to grow and hold the soil in those dynamic areas.

*Our consultant tells us that much of the work will be able to be done from the shoreline, which is good news. We are in the process of applying for the MDEQ permit and this item has good detailed criteria. We don't believe that river diversion will be necessary, although coffer dams may be used. The goal is to build the improvements during low flow in summer.*

*Our plans have been developed further and show slope stabilization seeding (native mix) with biodegradable erosion matting in areas near the parking lot. We also are asking for a unit price for this item, so it's very possible the implementation of this method could expand.*

- c. Rip rap: the current plan is to use limestone boulders – need to make sure that it is safe – big safety issues with an open kayak park like this. Also, it would be better to use materials with less jagged edges/more rounded like materials in a river would be naturally.

*We're all on the same page here. The Specifications call for stone indigenous to the area and we have the ability to reject or accept samples and sources.*

- d. Erosion issues: Engineering needs to vet impact on expected future river and morphology impacts – these types of parks are more common out west, but soils and substrate here is different than in the west – the Bear River valley is steep and in Midwest we have more silty-sediment deposits along rivers than the west and it is not clear if the proposed major hydrological changes would negatively impact the river and floodplain as

well as the stability of the river valley which is surrounded by development (including housing).

- i. Has anything like this been done before in the Midwest (with our soils, etc?) –not exactly, but there are somewhat similar projects that have been completed around Kalamazoo and Midland (Dow) for remediation projects (to increase DO). This is a concern as it is unclear how the reconfiguration.

*I believe the attached response from our consultant covers this, but we discussed the subject at a recent meeting with the City. REP has actually done similar improvements across the Midwest and the eastern seaboard, and the consultant actually commented on the relative stability of the soil types here in relation to some of the soils dealt with in the Boulder area – apparently lots of silts and clays, which was news to me also.*

- e. Invasive species: there are some invasives already present in the river valley – need to ID them and work on eradication and replacement with local, native species suitable for that environment. Invasives identified along the river/floodplain: black swallowwort, Japanese barberry, non-native mustards and forget-me-nots, possibly invasive honeysuckle as well. (Possibly something we could also work on either as part of this project or trying to get other funding to supplement the work that is currently being done).

According to Al Hansen, the State has performed an inventory of invasive species in the river valley, and issued a grant toward efforts to remove invasive species within the river valley. I believe the implementation of the State grant takes place starting this summer. Caution will be taken to minimize spread of invasives during construction; for example, we are containing all excavated soils on-site to prohibit the spread of invasives to other areas. We'd be more than happy to work with LTBB regarding this cause if it can't be adequately addressed during

- f. Other suggestions: fix the parking lot near overhead bridge at Mineral Park to eliminate the stream of sediment flowing directly into river there – add a natural vegetation buffer strip 10-15 feet along the waters edge here and along the park; don't mow to waters edge at park and leave buffer strip (though they currently don't fertilize so that's good); stabilize and fix erosion issues along the floodplain/river valley using native vegetation if possible (or other environmentally-friendly means/technologies).

*A good suggestion and one that has been incorporated into the plans. The City is requiring the lot to have curb and gutter to facilitate maintenance, but rather than drain the lot underground into storm sewer, we're outletting the lot in three areas, where it will drain into depressed rain gardens. The gardens will be seeded with a suitable native seed mix. A*

*side benefit to this is that it reduces the amount of mowed grass in that area.*

- g. The proposed bathroom at the park could be solar powered, also consider E-loo facility – naturally composting, open type (see: [www.eloo.us](http://www.eloo.us)).

*We've shared this with the City but they're not prepared to make such an installation.*

- V. End of meeting: Lastly, if anyone has ideas for habitat improvements please feel free to send ideas to the LTBB Environmental Services Dept.: email [environmentalservices@lbbodawa-nsn.gov](mailto:environmentalservices@lbbodawa-nsn.gov), or call 231-242-1574.