



Concept Plan of Altered Dam

### Dam Mitigation

Humboldt's proximity to the Des Moines River has created a variety of recreational activities within the community. Unfortunately, the existing Joe Reasoner dam serves as a barrier for not only recreational purposes, but also for fish heading north up the river. Due to this hindrance, a series of navigable drops, known as rock rapids, have been proposed to mitigate the dam and allow for these activities to take place.

Implementation of the rock rapids can be carried out through two different options. In option 1, half of the existing dam structure will remain while the other half is transformed by the rock rapids to provide the gradual change in grade needed to mitigate the height of the dam. This would allow some functions of the dam to continue, while also allowing fish and boaters the ability



Option 1: Dam with One Side Altered (roped-off area on the upstream side to prevent boaters from going over dam)



Option 2: Dam with Both Sides Altered

to pass through. At the top of the dam, a roped off area would be enforced to keep water activities away from the currents of the dam. The second option does not call for a roped off area as it would be rock rapids stretched from one side of the river to the other. In both examples, a pedestrian bridge is designed to allow trail users to cross the dam and connect to other trails throughout Humboldt. By mitigating the dam, the community hopes to see environmental and economic benefits by creating a draw for kayakers, canoers, and fishers from inside and outside of Humboldt. This project would require a feasibility study of the structural integrity of the existing dam structure and coordination with the Iowa Department of Natural Resources.

# Humboldt

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### Design Team

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