Social Aspects of Dam Removal – An Engineer's Perspective



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Overview

- Why consider social aspects?
- How people think about nature
- How people act
- Keys to success
- Real world experiences











Why Consider Social Aspects

- Most dam removal projects are driven by ecological and dam safety considerations
- However.....



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How People Think About Nature

- Intrinsic value of nature
 - Restoration of natural systems for nature's own sake
- Utilitarian value
 - Nature's value as perceived for human benefit
- Most people express support for the concept of intrinsic value
 - However.....







How People Act

- The intellectual struggle between intrinsic and utilitarian value may be dictated by the significance of direct impact to the individual
- Things people often value in practice:
 - Their view (river vs. lake)
 - Their recreation (kayaking vs. pontoon boating)
 - Their memories (community gatherings, personal)
 - Their money (property values, taxes)













How People Act

- These values have generally been reflected in policies and funding
 - Dam removal funds > dam construction funds
- However.....
 - State of Michigan pumped out ~\$250M to reconstruct dams following 2020 failures
 - Feds have invested billions in latest infrastructure bills











Keys to Success

People and communities vary – on size solution doesn't fit all

- <u>Understand the issues</u>
 - Property ownership issues
 - Historical vs. Historic?
 - Recreation
 - Lake vs. River
 - Angler concerns
 - Public use
 - Fears/Misconceptions
 - River flows
 - Flooding



SAVE THE BOARDMAN



BROOK TROUT

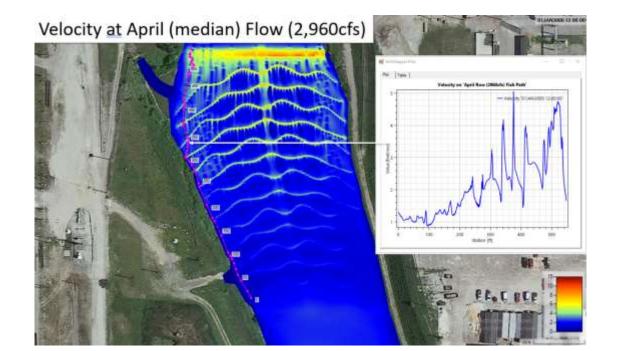




Keys to Success

- Mitigate the issues
 - Information
 - Pictures
 - Computer modeling results
- You will not please everyone
 - Some people like lakes better than rivers
 - Other beneficial uses (flood control, water supply, property values, etc.) may prevail











Picture is worth • 1,000 words



View Looking North from S. State Street White River Restoration



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Prepared by:

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Views are for Illustrative Purposes only.

ELEMENTS STUDIO . View Location Map





• Picture is worth 1,000 words



View Looking South from S. State Street

White River Restoration White Cloud, MI Views are for Illustrative Purposes only.



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For more information, contact: Dan DeVaun, P.E. ddevaun@geiconsultants.com or come visit our booth!



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