

BOARDMAN RIVER FEASIBILITY STUDY
 WORK ORDER/CONTRACT SUMMARY
 March 24, 2008

WORK AREA DESCRIPTION, CATEGORY & TASK	BORDMAN RIVER DAMS COMMITTEE				GRAND TRAVERSE BAND		
	W.O. # 1 \$20,000 (100%)	W.O.# 2 \$34,900 (100%)	W.O.# 3 \$13,000 (100%)	W.O.# 4 \$80,000 (28%)	ENVIRONMENTAL BASELINE \$114,500 (100%)	RIVER CROSS SECTIONS \$60,000 (100%)	ENGINEERING BASELINE \$20,000 (100%)
(Percent Complete thru 3/08)							
<i>1) Communications and Public Education</i>							
a) Stakeholder Survey							
i. One-on-one interviews							
ii. Focus groups							
iii. Survey							
iv. Phone Survey							
b) Web-based Communication							
i. Discipline Reports							
ii. Interactive Maps							
iii. A Calendar of Events							
iv. On-Line Survey							
v. News Bulletins							
vi. Graphical Displays							
vii. Intranet for the ECT Team							
viii. Community Forum							
c) General Communications							
i. Speaker's Bureau							
ii. Presentations							
iii. Workshops							
iv. Media Updates							
v. Semi-Regular Columns							
vi. Communications Subcommittee							
<i>2) Determine & Document Existing Conditions</i>							
a) Environmental							
i. Fish and Wildlife Surveys					\$67,000		
ii. Vegetative Surveys					\$44,000		
iii. Water Quality							
iv. Sediment Contamination				\$4,000			

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b) Engineering							
i. Groundwater							
ii. Structural and Operational Evaluations				\$12,000			\$20,000
iii. Surface and Underwater Surveys			\$13,000		\$3,500	\$60,000	
iv. Hydrologic, hydraulic (to be coordinated with USACE effort to avoid duplication)							
1. Hydrologic							
2. Hydraulic							
3. Geomorph							
v. Geotechnical							
vi. Sediment Management; Report Review & Strategy							
vii. Existing Floodplain							
viii. Road Crossings							
c) Economic		\$34,900					
i. Costs Baseline							
ii. Economic Impact				\$42,000			
iii. Property Valuation							
iv. Tax Revenue							
d) Societal Stakeholder Survey							
i. Historic and Current Land Use							
ii. Property Ownership							
iii. Cultural Resources				\$14,000			
iv. Recreational							
v. Population and Land Use							
vi. Water Rights							
vii. Community Infrastructure							
viii. Community Identity							
e) NEPA Documentation							

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(Percent Complete thru 3/08)							
3) Identification of Alternatives							
a) Problems and Opportunities							
b) Study Objectives and Constraints							
c) Formulation of Alternatives							
i. No Action Alternative							
ii. Dam Removal							
iii. Full Rehabilitation							
iv. Partial Removal							
v. Modifications							
vi. Fisheries Management							
d) Determination of Expected End State and Transition							
e) NEPA Process							
4) Evaluation of Alternative Plants							
a) Environmental	\$10,000						
i. Resident and Migratory Species							
ii. Habitat Impacts							
iii. Protection from Environmental Threats							
iv. Vegetative Changes							
v. Water Quality							
vi. Potential Impacts to Ground Water Supplies							
vii. Contam Sediment							
b) Engineering	\$10,000						
i. Dam Struct / OP							
ii. Groundwater Supply							
iii. Impacts to Water Use							
iv. Flood Characteristics							
v. Sediment and Erosion							
vi. Stream Stability and Control							
vii. Cost Evaluating of Dam Removal							

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c) Economic							
i. Property Valuation							
ii. Recreational Benefits							
iii. Regional and Local Transitions							
iv. Financing Option							
d) Societal							
i. Cultural Resources							
ii. Community Risks/Liabilities							
iii. Property Ownership							
iv. Water Rights							
v. Societal Impacts							
vii. Recreational Opportunities							
viii. Community Identity							
viii. Transportation							
5) Selection of Preferred Alternative							
6) NEPA Documentation							
a) Habitat							
b) Vegetation							
7) BRDC Support							
				\$8,000			