

Cost Scenarios for the Huron River at Argo Pond

Retire Argo Dam and Restore Natural Channel		Rehabilitate and Maintain Argo Dam and Pond	
ONE-TIME COSTS UNDER THIS SCENARIO		MOST COSTS ARE ON-GOING UNDER THIS SCENARIO	
PERMIT/CONSULTANT FEES*		(\$300,000)	REPAIR THE TOE DRAIN
Conceptual Design	(\$20,000)	(\$50,000)	PURCHASE HARVESTER (apportioned to Argo, 25% of total cost of \$200k)
Field Data Collection <small>already completed: bathymetric cross-section survey; preliminary sediment monitoring)</small>	(\$5,000)	(\$20,000)	ANNUAL VEGETATION MANAGEMENT
Engineering Design	(\$20,000)	(\$20,000)	ANNUAL DAM MAINTENANCE
Permitting	(\$40,000)	(\$17,500)	ANNUAL DAM INSURANCE
Specification & Bidding	(\$5,000)	(\$45,000)	5-year Maintenance
Construction Oversight	(\$25,000)	(\$250,000)	15-20 year Maintenance (due in 2012 years)
Administration & Stakeholder Relations	(\$12,000)	(\$900,000)	Rebuild Millrace/Remove Portage
CATEGORY SUBTOTAL	(\$127,000)	cost needed	Upgrade RR Crossing to Bandemer
DAM REMOVAL CONSTRUCTION		(\$1,840,000)	Dredge Impoundment (potential future costs)
Dam Removal	(\$50,000)		
Temporary Access Road	(\$75,000)		
Rip Rap	(\$10,000)		
CATEGORY SUBTOTAL	(\$135,000)		
SEDIMENT MANAGEMENT			
Rock Control Structures (potential)	(\$48,000)		
Silt Fence	(\$8,000)		
Rip Rap	(\$5,000)		
Sediment Excavation	(\$85,000)		
Slope Restoration	(\$25,000)		
NAP Site Restoration (natural approach to stabilizing streambanks, promote native vegetation) - est. based on MDNR experience, Mill Creek project, and NAP capacity	(\$150,000)		
CATEGORY SUBTOTAL	(\$321,000)		
SUB-TOTAL	(\$583,000)		
GENERAL CONTINGENCY 10%	(\$58,300)		
ENGINEERING PROJECT OVERSIGHT <small>assumes the City hires a contractor; cost is reduced if City staff handles tasks</small>	(\$60,000)		
PROJECT TOTAL	(\$701,300)		
PROVIDE RECREATION AMENITIES			
Replace pedestrian bridge <small>mid-range between City est. of \$500k and Washtenaw Co. project of \$125k</small>	(\$300,000)		
Establish rowing at other ponds <small>costs based on use of Gallup, Barton and Belleville and past boathouse cost of \$50k</small>	(\$400,000)		
SCENARIO NET EXPENSE WITH RECREATION AMENITIES	(\$1,401,300)		
		(\$1,602,500)	SCENARIO NET EXPENSE WITHOUT IMPOUNDMENT DREDGING + UNKNOWN COST TO UPGRADE RR CROSSING
Value of 30 ACRES OF WATERFRONT LAND ACQUIRED	\$3,000,000	(\$3,442,500)	SCENARIO NET EXPENSE WITH IMPOUNDMENT DREDGING + UNKNOWN COST TO UPGRADE RR CROSSING

Based on actual expenses from Mill Creek Dam removal (2008), adjusted

blue indicates task eligible for grant funding

"The argument that makes the strongest case for dam removal is Dam Safety: which includes dam condition, cost for repairs, cost of maintenance, and potential risk to life & property (both through potential breach & attractive nuisance issues). Therefore, dam safety is always linked to economics and liability." ~ Laura Wildman, Chief Engineer for American Rivers who's worked on 125 dam removals