Lake Major Dam Replacement - Total Project Cost Estimate February 11, 2020

Description	NSUARB Approval Amount	Final Project Cost	Note
Concept Design			
Concept Design Cost (MECO) (completed)	$133,763.35	$133,763.35	
Change Orders (MECO) (completed)	$248,286.66	$242,548.00	
Concept Design Sub-Total	***$382,050.01***	***$376,311.35***	
Detailed Design & Regulatory Approvals			
Strum - Wetland Delineation (completed)	$5,939.09	$5,939.09	
Strum - Environmental Assessment (completed)	$48,500.00	$48,500.00	
Strum - Additional consulting for NSE regulatory approval		$161,493.71	1
Envirosphere Consultants (completed)	$22,133.92	$38,648.27	
CRM Group (Archaeological) (completed)	$40,000.00	$34,126.03	
Clean Foundations (DFO Offset Assessment) (completed)	$21,222.00	$21,222.00	
MECO Detailed Design Services *	$254,260.00	$281,952.00	2
MECO - Additional consulting tasks for NSE regulatory approval		$153,861.60	3
Legal Fees & Private Property Compensation		$41,612.27	4
Detailed Design & Regulatory Approvals Sub-Total	**$392,055.01**	**$787,354.97**	
Construction			
MECO Tendering Services *	$15,660.00	$15,660.00	
Estimated Construction Cost (incl 25% contingency)	$5,626,119.00		
Tendered Construction Price		$3,996,000.00	5a
Construction Change Orders		$1,511,546.10	5b
Estimated vs Actual Unit Quantities Difference		$293,015.90	5c
Materials Testing/ QA-QC for Dam Construction *	$100,000.00	$20,448.80	
Little Salmon River Monitoring During Construction (Envirosphere) *	$20,000.00		
DFO Offsetting (Method 1) *	$240,775.00	$213,291.25	
MECO Construction Phase Services *	$291,060.00	$1,168,069.47	6
MECO Commissioning and Record Information *	$35,621.00	$35,621.00	
Strum - Construction Support		$25,940.00	7
HRM Salmon River Bridge Study - Cost Share		$13,307.00	
MECO - Warranty Review/Deficiency Monitoring/NSE Approval Support (AL)		$12,025.00	
Construction Sub-Total	**$6,329,235.00**	**$7,304,924.52**	
Construction and Design Total	**$7,103,340.02**	**$8,468,590.84**	
(* Contingency on uncompleted work) (20%)	$191,475.20	$0.00	
Subtotal	**$7,294,815.22**	**$8,468,590.84**	
Net HST (4.286%)	$312,655.78	$362,963.80	
Sub Total	**$7,607,471.00**	**$8,831,554.64**	
Halifax Water Staff Time to date (2017)	$54,797.72		
HW Technical Services and Engineering	$50,000.00		
Halifax Water Costs (All Staff time/Overheads/Interest/Expenses)		$196,933.38	8
Future Halifax Water Cost 2020/2021 (AL)		$5,000.00	
Sub Total	**$7,712,268.72**	**$9,033,488.02**	
Overhead/Interest (1%)	$77,122.69	$83,738.27	
Total Estimated Cost	**$7,789,391.41**	**$9,117,226.29**	

Additional amount of funding required ***$1,327,834.89***

$1,330,000.00 **Rounded**

CWWF Funding Amount $3,388,287.00

	Budget Amount
Funding approved by HRWC Board - March 27, 2014	$ 200,000.00
Funding Approved by NSUARB - July 27 2015	$ 400,000.00
HRWC 2016/17 Capital Budget - Lake Major Dam Replacement	$ 100,000.00
HRWC 2017/18 Capital Budget - Lake Major Dam Replacement	$ 3,701,104.00
Total	$ 4,401,104.00

Total Project Cost vs Halifax Water Capital Budgets $5,728,939.29

Additional amount of funding required (Rounded Total) $1,330,000.00