

Friends of Casco Bay
Climate Change and Casco Bay: A Fund for Technology, Monitoring, and Community Engagement
Campaign Goal

	cost per unit	number units		Category Subtotal		Total
Equipment to run three Continuous Monitoring Stations						
YSI EXO2 sondes and sensors						
EXO2 sonde	\$ 8,040	8		\$ 64,320		
Dissolved oxygen sensor (DO)	1,960	8		15,680		
Chlorophyll of two types: <i>a</i> and blue green	3,480	8		27,840		
Colored/flourescent dissolved organic matter (CDOM/fDOM)	2,595	8		20,760		
Temperature and pH	560	8		4,480		
Wiper/conductivity/temperature	1,650	8		13,200		
Turbidity sensor	1,800	8		14,400		
Cable/logger	3,200	2		6,400		
					\$ 167,080	
Telemetry	8,000	1		8,000		
Installation and uplink	4,900	1		4,900		
					12,900	
Sensors for pCO ₂	7,200	2		14,400		
Loggers for pCO ₂	3,000	2		6,000		
					20,400	
Modified lobster trap	300	3	5		4,500	
Allowance for replacement	6,097	3			18,291	
Allowance for overhead			5%		11,159	
Allowance for inflation of replacement costs			5%		4,818	
Total equipment						\$ 239,148
Annual costs:						
Costs to maintain one station on an annual basis						
Sonde precalibration cleaning (staff time)	59	1	20		1,180	
Sonde calibration and equipment preparation (staff time)	59	1	20		1,180	
Travel time (staff time)	59	1	20		1,180	
On-site sonde swap time (staff time)	59	1	20		1,180	
Travel - mileage	0.545	40	20		436	
Data preparation and quality assurance (staff time)	59	3	20		3,540	
					8,696	
For three stations					3	
					26,088	
Insurance on 8 sondes and 4 pCO ₂ sensors					7,000	
Annual sonde repair and pCO ₂ sensor calibration	3,200	4			12,800	
Allowance for annual replacement of certain probes					3,000	
					22,800	
					48,888	
For ten years					10	
Total maintenance						488,880
Allowance for increasing staff capacity						173,639
Annual estimate for data analyses, summaries, community presentations and meetings						
Staff time - data analyses	59	151	3		26,727	
Staff time - data presentation - formats, etc.	59	150	1		8,850	
Staff time - communications about data	59	15	12		10,620	
					46,197	
For ten years					10	
Total for ten years of data analyses and community interaction						461,970
Campaign costs				staffing, materials, travel, mailings, events	10%	136,364
GOAL						\$ 1,500,000
Summary						
Equipment, maintenance, and insurance		31%		\$ 467,147		
Staff time and travel		60%		896,489		
Campaign		9%		136,364		
				\$ 1,500,000		