

ENGAGING STUDENTS AND TEACHERS IN BUILDING ECOLOGICAL SOLUTIONS TO COASTAL COMMUNITY HAZARDS (BESCCH)

Ecological Design Challenge Rubric									
Category	4. Exemplary	3. Very Good	2. Fair	1. Poor	Category Total				
 Solution(s) for stabilizing the shoreline 	Student demonstrated exemplar engineering solutions that could result in practical applications for reducing flooding against future superstorms, high tides and high winds.	Student demonstrated very good engineering solutions that could result in practical applications for reducing flooding against future superstorms, high tides and high winds.	Student demonstrated fair engineering solutions and had some practical applications, but revisions would be needed prior to impacting flooding against future superstorms, high tides and high winds.	Student demonstrated poor or no engineering solutions and would need revisions prior to being applied that would result in reducing flooding against future superstorms, high tides and high winds.					
2. Solution(s) for creating and maintaining shoreline habitat.	Student demonstrated exemplar and innovative solutions that could result in practical applications for protecting plants, animals and the ecological conditions of shoreline habitats.	Student demonstrated very good solutions that could result in practical applications for protecting plants, animals and the ecological conditions of shoreline habitats.	Student demonstrated fair solutions and had some practical applications, but revisions would be needed prior to applying solutions for protecting plants, animals and the ecological conditions of shoreline habitats.	Student demonstrated poor or no significant revisions would be needed prior to applying solutions for protecting plants, animals and the ecological conditions of shoreline habitats.					

3.	Upland area	Student	Student	Student	Student demonstrated	
	structural features	demonstrated	demonstrated very	demonstrated fair	poor or no engineering	
	related to human	exemplar and	good engineering	engineering solutions	solutions and would need	
	activities	innovative	solutions that	but would need	significant revisions that	
		engineering solutions	reduced the impact	revisions that could	could reduce the impact	
		that reduced the	on coastal shoreline	reduce the impact on	on coastal shoreline by	
		impact on coastal	by human activities.	coastal shoreline by	human activities.	
		shoreline by human		human activities.		
		activities.				
4.	Ecological	Student clearly	Student	Student	Student demonstrated	
	monitoring and	demonstrated	demonstrated very	demonstrated fair	poor or no resiliency	
	site study for	exemplar and	good resiliency	resiliency solutions to	solutions to ecological	
	resiliency	practical resiliency	solutions to	ecological monitoring	monitoring and needs	
	solutions	solutions to	ecological	but needs additional	significant revisions for the	
		ecological	monitoring.	explanation for the	practical execution of the	
		monitoring.		practical execution of	limited solutions that were	
				the solutions that	presented.	
				were presented.		
-	Lice of Technology	Student	Student	Student	Student demonstrated a	
5.	ose of Technology	domonstrated	domonstrated a good	domonstrated a fair		
	and final	avemplaruse of	uemonstrated a good	uemonstrated a fair	for research data	
	presentation	exemplar use of	for recearch data	for recearch data	for research, data	
		reconnologies for	for research, data	for research, data	documentation, and did	
		collection and	documentation and	documentation: and	not procent or only in part	
		documentation and	procented their	procented their	provided their findings by	
		procented their	findings using	findings by using	using tochnology that was	
		findings using	technology in a clear	technology that was	not easily understood by	
		technology in a clear	and understandable	in a nartially	the intended audience	
		and understandable	format to the	understandahle	the intended addience.	
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