

**MSD Project Risk Assessment Template**

ID	Risk Item	Effect	Cause	Likelihood	Severity	Importance	Action to Minimize Risk	Owner
1	Unable to achieve a laminar water fall.	The desired projection screen effect would not be attainable.	The liquid being used to achieve the effect would be moving too turbulently to achieve a pleasant and usable water fall.	Likelihood - 2	Severity -2	Reduce	Test and design a pouring spout that would most effectively create the most laminar water fall.	DeMayo, Matthews
2	Servo “dam” is unable to control the water fall flow effectively.	The waterfall would be one standard size at all times and would not be able be manipulated with any special effects.	The water will surge around the servo “dams” and create turbulent patches at the ends of the waterfall that would cause the entire sheet to be turbulent.	Likelihood - 2	Severity - 2	Reduce	Design a water stopper that wouldn't cause the water to surge around the “dams” creating a severely turbulent flow.	DeMayo, Matthews, Watkins, Sheron
3	Unable to provide a usable interface to control special effects.	There would be no way to modify how the water is controlled to adjust the projection	An interface port and/or interface software /hardware would be absent or non-	Likelihood - 1	Severity - 2	Reduce	Ensure that the interface design is incorporated early in the design process.	Sheron, Watkins

		image on the waterfall.	functional on the device					
4	Unable to create a self contained water cycle.	Leaking and/or not catching the water efficiently into the catch trough.	The water being pumped up to the upper trough is either unable to keep up with the water being poured or too much water will be pumped to the upper trough.	Likelihood - 2	Severity - 1	Reduce	Create a catch trough that will reduce water loss due to splashing and also ensure that the pumps being used will be able to maintain a efficient water cycle.	DeMayo, Matthews
5	Unable to shield the circuitry from the water effectively.	There would be a possibility of electrocution and/or failure of electrical components of apparatus.	There would be an inability to seperate the water from the electronics.	Likelihood - 1	Severity - 3	Prevent	Ensure by design that the electrical components are sufficiently isolated from any possible water contact.	DeMayo, Matthews, Sheron, Watkins
6	Structural instability causing the entire device to collapse.	The entire machine would be destroyed because of a structural failure.	Insufficient structural support and/or material selection could cause the entire machine to collapse.	Likelihood - 1	Severity - 3	Prevent	Ensure by design that the structure will be capable of supporting both the static and dynamic loads from the machine and the moving water.	DeMayo, Matthews
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Likelihood scale	Severity scale
1 - This cause is unlikely to happen	1 - The impact on the project is very minor. We will still meet deliverables on time and within budget, but it will cause extra work
2 - This cause could conceivably happen	2 - The impact on the project is noticeable. We will deliver reduced functionality, go over budget, or fail to meet some of our Engineering Specifications.
3 - This cause is very likely to happen	3 - The impact on the project is severe. We will not be able to deliver, or what we deliver will not meet the customer's needs.

<b>"Importance Score" (Likelihood x Severity) – use this to guide your preference for a risk management strategy</b>	
Prevent	Action will be taken to prevent the cause(s) from occurring in the first place.
Reduce	Action will be taken to reduce the likelihood of the cause and/or the severity of the effect on the project, should the cause occur
Transfer	Action will be taken to transfer the risk to something else. Insurance is an example of this. You purchase an insurance policy that contractually binds an insurance company to pay for your loss in the event of accident. This transfers

	the financial consequences of the accident to someone else. Your car is still a wreck, of course.
Accept	Low importance risks may not justify any action at all. If they happen, you simply accept the consequences.