

<b>Project Risk Register</b>	<b>Team:</b>								
<b>Project Manager Name:</b>									
Risk Identification	Risk Statement		Probability (%)	Impact (\$)	Exposure (\$)	Mitigation	Contingency	Triggers	Assignee
	Condition	Consequence							
Briefly describe the identified risk	Capture the "likely cause" of the risk. Be detailed enough so that you can start forming mitigation plans.	Capture the result of the risk, should it happen.	Estimate of the probability the risk will occur. (use this probability in your Monte Carlo Analysis)	Estimate of the amount of impact or severity of the risk. (use this as worst case in Monte Carlo)	Probability x impact in \$. Sort by this column to prioritize biggest \$ risks. (use this as most likely case in Monte Carlo)	Document plans to lower the probability or to lower the impact ahead of time.	Identify what would have to be done if the risk were to become reality.	Identify what would prompt you to execute the contingency plan.	Identify who is responsible for tracking this risk and its changes in probability and impact. The assignee is not necessarily the person responsible for solving the problem, as risks often require escalation outside the team.
Error in design creation and issue with in design implementation/execution	The likely cause of this risk would be due to PM skill, limitation of knowledge of design creation, or poor definition around project requirements	Time and resources wasted redoing the design plan and working to fix the implementation errors			\$ -	Extensive research and planning in design creations and ensuring implementation team is trained and knowledgeable will reduce risk	Time would be spent to redo the design or redo the implementation process to fix any errors	Any sign of error in the implementation process either with the actual implementation or the design compatibility	<b>project team lead</b>
Issue with in design implementation/execution	The likely cause of this risk would be limitations in the quality of work output by the team which is more subject to error due to less control	The project may be completed over budget or take longer than anticipated				Ensure the project plan is often reviewed and all parties involved with the project communicate status updates regularly. That way the PMO can be proactive to address any slips in timeline or issues	The timeline may have to be extended to address issues or more money spent to expedite work so that the project can be back on track with the plan	A slip in the project timeline that is over what is agreed upon per contract.	<b>PM</b>
Shortage of resources (PM employees) to complete tasks	Unlikely due to the fact that all of the employees work for the PM	The project would stall due to lack of employees to execute tasks			\$ -	Ensure that we have ample employees to complete the tasks and extra employees in the event some of the workers are unable to work.	We would either need to find more workers or pause the project until we had enough workers	If we were unable to proceed with scheduled tasks due to lack of employees	<b>PM</b>
Contractors hired by the client will be performing the actual work, which is a risk as there work quality is unknown, plus the client will have to describe the project effort in their contract, which may result in confusion around scope of work	The likely cause of this risk would be a lack of communication given that the client is coordinating the selection of sub-contractors and hiring them for their work	The project may be completed over budget or take longer than anticipated				Involve the PM company with the client and subcontractor discussions around the scope of work and commitment dates for completion of work. This would also involve agreement around budget	The client would have to allow the PM participation early on in the project with the discussions of all subcontractors.	The kickoff meeting of this project would prompt the coordination of this effort.	<b>PM</b>
Error in estimating the time it will take to complete the project, taking longer than expected	Likelihood decreases with the more knowledge the PM has of the project and everything involved in executing it	Upset client due to being off schedule, possible increase in cost of labor and other materials			\$ -	Ensure PM is knowledgeable of all the steps and processes involved and allows ample time to complete each task	We would have to reevaluate the overall project timeline, notify the client, and work to complete as soon as possible	Being behind schedule	<b>PM</b>
Shortage of technical experts	A key hydrogeologists is heavily engaged in a project in Brazil. Her backup is the a junior person and it's the first project of this type he has worked on	The project would stall due to the constraint of resources who can address technical problems. They may not be available or be working in an alternate time zone. This project may not be the key hydrogeologists main priority.			\$ -	Find the backup professional hydrogeologist who are available at most of time	Call the key hydrogeologists back and let she solve the technical problems	If there are some technical problems that the junior person cannot solve	<b>PM</b>
Client's suggestions might delay the project	This client is a hands-on person, wanting to engage in and discuss all aspects of the project	The client might come up with some unreasonable requests or suggestions, the client may change the scope after all parties are on board with the plan			\$ -	Make a contract to point out what aspect of the project can the client discuss and what cannot	Using professional reasons and evidences to let she knows she is wrong	The client wants to engage in and discuss some aspects of project which she is unfamiliar with	<b>PM</b>
Client wants to be hands on	This client is a hands-on person, wanting to engage in and discuss all aspects of the project	Time to review the project and decisions made with the client will have to be taken into consideration within the project plan				Involve the client in meetings and set an expectation for the meeting cadence. Also, establish who is the point person for the client to avoid any issues with them communicating with several individuals.	Establish a process for the client to provide input. If input would change the scope of work, communicate implications of any changes. Have good documentation to rationalize why decisions were made.	When there is input by the client.	<b>Project team lead</b>
Complications with the technology	Treatment system technology is not well tested and often requires additional design and testing	Technology failure and/or time spent on additional design and testing could push back deadlines			\$ -	Incorporate additional time to test technology into original timeline to create buffer for possible extra work	The overall time line will need to be altered or time on other aspects will need to be adjusted to make up for lost time	Any complications with the technology or indication that design and testing has exceeded the allotted amount of time	<b>Project team lead</b>
Client does allow change orders, but not without significant justification. If a change is needed, there may be delay in receiving approval for the change.	The client is adverse to change orders without significant justifications for the change.	This may cause a delay in timeline and may impact cost of materials if we need to later expedite goods after project change is approved, but materials are needed within a shorter lead time.			\$ -	Have a robust review process to make decisions as the decisions can't be modified easily.	Understand the change process by the client to know what is required in the event of a change and have a robust review process prior to decisions/design implementation	This would be established at the beginning of the project	<b>Technical Lead</b>
The project is assumed to have a fixed-price contract, this is not vetted out with the client and may not be the case.	The likely cause is a contract is not finalized/generated for the project between the client and ourselves.	The risk is that we may be on the hook financially if there is any impact to the project budget.			\$ -	Ensure financial obligations for this project are clearly specified by a contract.	The company would be on the hook for more money than planned for; the company may be sued	This would be established at the beginning of the project	<b>Project team lead</b>
Quality representatives have limited time and are very busy	This may delay the review and approval process for the project	This could cause a delay in the project timeline			\$ -	Communicate expectations for quality - both when and how long their services are need throughout the project. Discuss if one person can be dedicated to this project	Work with the quality individuals to define expectations; consider hiring a quality contractor	If there is little to no quality support and they are now the bottleneck and unable to commit to a completion date for tasks	<b>PM</b>
The ion exchanger selected is a new product and requires additional design and testing efforts	This new device may be more difficult to troubleshoot as it is new to the market. The project will require additional testing.	This could cause a delay in the project timeline			\$ -	Involve the team/company who installed the first ion exchanger. Develop a working relationship with the manufacturer of the device	Additional testing, additional communication with technical experts to troubleshoot errors	If there are any issues with the device testing / install	<b>Technical Lead</b>
The contaminant is trichloroethylene, a known solvent which would pose to be a lower risk but we need to verify that is the only contaminant	This is a known contaminant and common in this situation. If it were a mix of contaminants or a different contaminant we would require additional project steps to evaluate what is present.	This would delay the project, could be costly to test, and may change the scope of the project materials or plan			\$ -	Consider ordering any common equipment/materials required to handle this chemical as that would be low risk because it can be used for this and future projects. Get the chemical evaluation done as early as possible, potentially even work with the client to do this before the official project is started to fully define scope	If there were a different chemical, the project may need to be replanned as the scope would change	If there was confirmation of more/different contaminants	<b>Project team lead</b>
The ground water is assumed to be non-potable and local drinking water is >10 miles away.	There is low risk in contaminating drinking water as we are a good distance away, but we need to assess if this project would have an impact >10 miles away.	This could have legal implications if we were to contaminate a city's drinking water.			\$ -	There would need to be a step in the project plan and budget to account for a land (survey) evaluation to ensure drinking water will not be compromised.	Communication to the government would have to occur ASAP to inform them drinking water may be compromised. Additional work and precautions may need to be taken if survey shows we may be impacting drinking water.	This would be prompted after the evaluation of the land and continuously monitored per project plan	<b>PM</b>
Stakeholders are eager for the project to finish.	The likely cause may be any set back would be seen as negative to the stakeholders.	Company reputation could be compromised.			\$ -	Communicate the project completion date with a buffered date that will take project risk into account	The company's reputation would be potentially compromised	After planning is completed, this would have to be evaluated by the PM	<b>PM</b>