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Phytoremediation is an Important Tool for Reducing Mining Pollution

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Organized in partnership with the [Midvale, Utah Rotary Club](#), community fishponds in eastern Uganda provide [sustenance and financial support](#) to local communities.



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Fish for Life

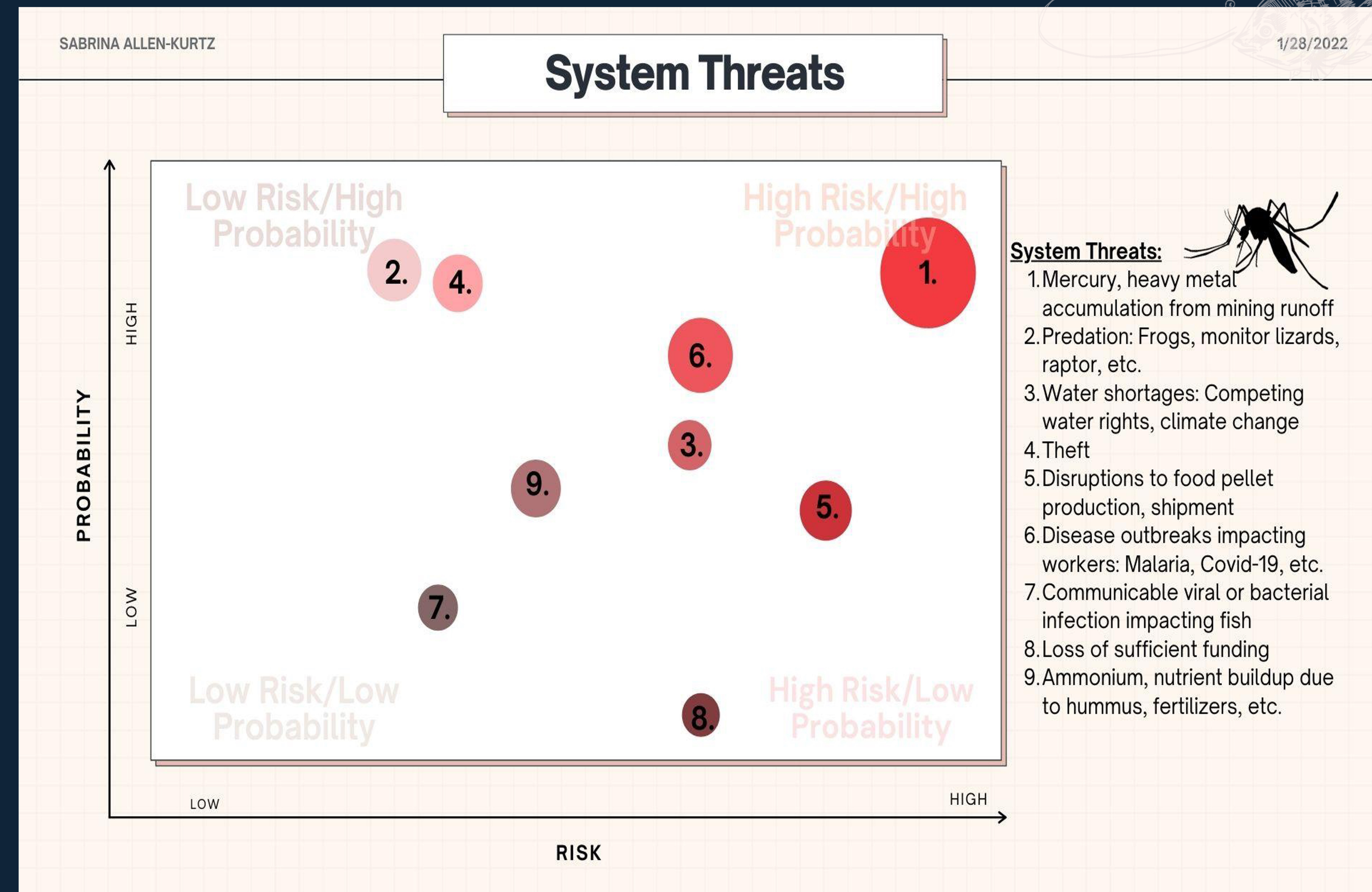
Ideal Life Vision's Uganda Community Fishponds were established to improve community health and nutrition. However, a variety of outside factors threaten the long-term resilience of the project.



The 4 Rs

I utilized the System-Centric Threats & Resilience Methodology to **analyze threats and vulnerabilities** within community fishponds in Uganda. My research was oriented towards **providing viable recommendations** to community leaders and organizers.

Phytoremediation is an important tool for reducing mining pollution.



Various threats were considered and weighted according to risk and probability.

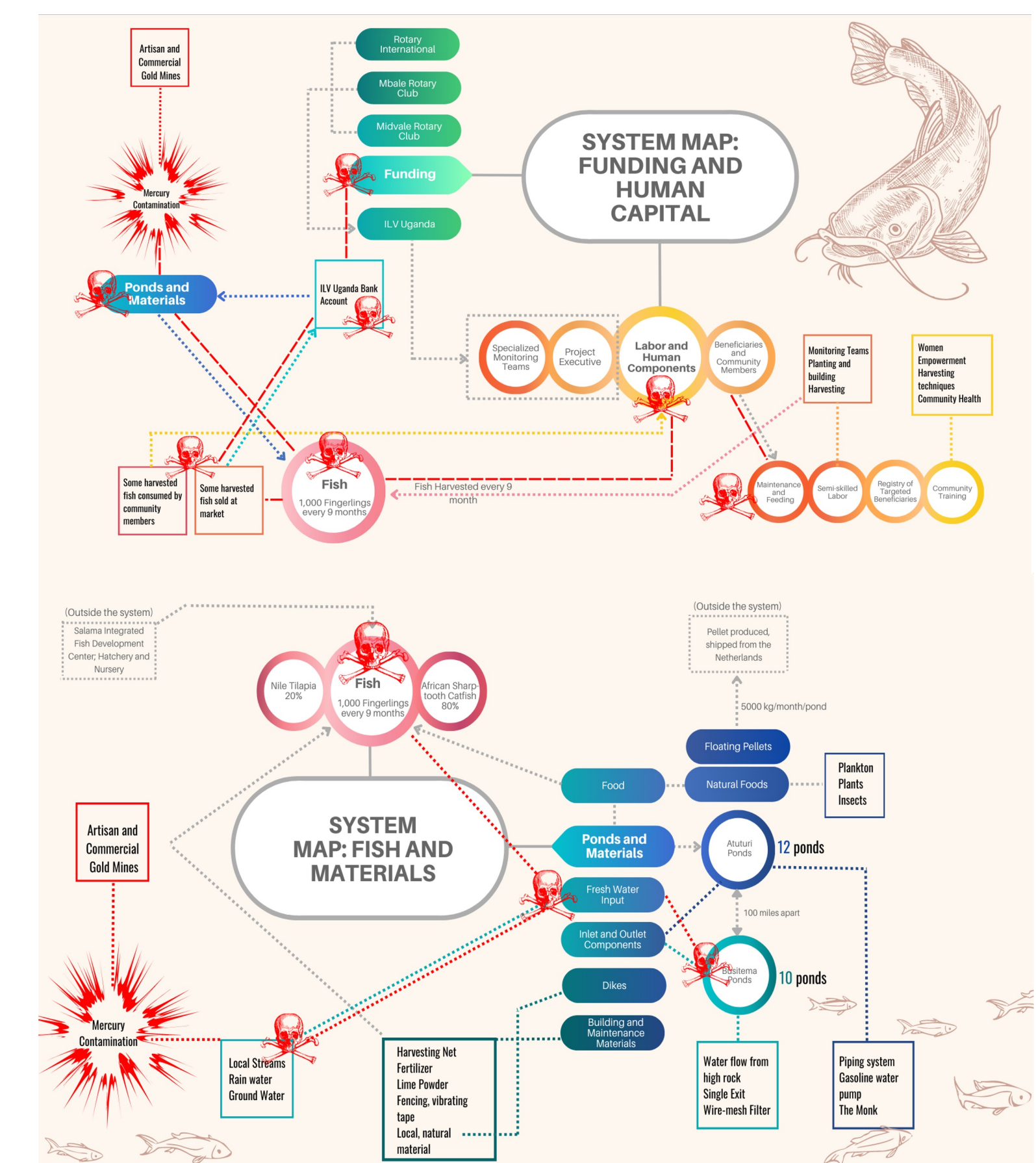
Mining waste and phytoremediation

The greatest threat to the Community Fishponds is mercury pollution caused by local mining operations.

Without intervention, mercury pollution negatively impacts fish productivity and survival while also creating negative health outcomes for community members.

Key recommendations include:

- Plant **bamboo** for the purpose of **phytoremediation**.
- Adopt a monitoring system** to test mercury levels in water and fish.
- Partner with non-profits to **advocate for greater government oversight** of mining activity.



Mercury pollution disrupts a variety of essential facets of the fishpond system, including both human capital and physical aspects.

Broader impacts

This project provides insight into potential tools to mitigate mining and industrial pollution within Utah.