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Research Team 1-CODE

Defining Our Problem

The current wicked problem that affects the people, animals, and plants is the pond in my neighborhood, behind my house. The water levels in the pond in my backyard back at home tend to rise a lot when it rains heavily. The water levels already rise slightly when it rains, but the water levels rise higher when the village of Lynwood doesn't clean the grass out of the pond from when they come to cut people's yards. When the village doesn't come to clean up the grass that they've cut, that grass goes into the pond, drains and blocks them. We also have fountains in the ponds, but a lot of the time the village either doesn't put both fountains in and they don't turn them both on. This is relevant because, though fountains in a pond make the scene look aesthetically pleasing, the main purpose of the fountains is to control the algae, add adequate oxygen, improve water quality/clarity, and reduce accumulation of bottom sediment. But with the fountains not being in the ponds and not turned on, they are not doing what they were placed to do. The rising water levels are affecting the people of the community, because days after it rains people are seeing dead frogs on the streets of their communities, but also dead frogs in their water wells. I personally have seen dead frogs in our water wells and on the streets, days after it has rained. I personally have seen the fountains either not be on or only one be put in, but even when there's one fountain on, I can see from my window view and from just sitting on my patio. When I stand near the pond close to the rock, I am able to see the drains; there are about 3-4 drains total in the pond. The rising water levels also affect the plants that are down by the pond. The water levels affect the plants because that rising water is oversaturating the soil which turns into the plants dying because they are not adapted to standing water. The standing water prevents oxygen which also kills the plant roots. The lack of oxygen causes the plant to be aggravated

which leads to the roots not absorbing the right amount of nutrients and moisture. This problem has an undefined solution because since the village of Lynwood doesn't come back to clean up the grass that has been cut the drains will continue to get clogged. But if the village does ever come to clean up after themselves, the irreversible problem would now shift to the amount of pond life now on land because even when it rains heavily the water levels will still rise just not as much, still allowing pond life to come onto land. If the village does ever decide to clean the drains out, I personally think that heavy rain could be an issue because when it does rain heavily at home the water levels rise slightly but not necessarily to the point where pond life are easily getting out and onto people lawns; if frogs are already on the rocks down by the ponds there no control over what they might do and where they might go.

The pond in my backyard could be considered a wicked problem. A wicked problem is a social or cultural problem that is difficult/impossible to solve because of its complex and interconnected nature. There are characteristics of a wicked problem: vague problem definition, undefined solution, no end point, irreversible, unique, and urgent. This pond is a vague problem definition because the mayor, clerk, and trustees don't personally deal with the issue that residents in my community deal with; they don't feel like it is a major deal. The rain itself is not the issue because one can't control the weather, the main issue is the village not cleaning up after themselves. This problem has no end point because the village does decide to clean the cut grass out of the pond, the new problem would shift to the amount of water animals that died from the rising water levels would need to be cleaned up around the neighborhood. The rising water levels are irreversible because the village never comes back to clean up after themselves the clogging will continue to happen. This problem is also unique because although the drains being clogged might be the problem with water levels rising in my pond it might not be the same issue for other

ponds around the world that are having the same issues. There are neighborhoods with ponds not too far from mine, but the only difference between between the problems is that those neighborhoods are adamant in keeping their neighborhoods clean and efficient in their construction buildings, while to the residents Lynwood it seems as if our workers are not efficient in their construction buildings and just do their jobs when they feel like it.

This problem is also urgent because with water levels rising, animals in the water get out and make their way into water wells but have no way of getting out, so they end up dying. If the village does decide to clean the pond out, the people of higher positions in the village of Lynwood would have to collectively agree on a solution to help solve the problem in the neighborhood, which is not likely to happen. Wicked problems will always be a thing, but communities and individuals can come together to address them through collaborative, adaptive approaches, and recognizing that there might not be one single solution but ongoing compromise and innovation. In order to fully address the problem there needs to be clear communication among stakeholders, integrate diverse perspectives, and embrace the iterative process, flexible strategies for progress.



Resources

- Photo of pond- screenshot of backyard from- mother's location
- Window well photo- google screenshot