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Coes Reservoir Legacy Pollution

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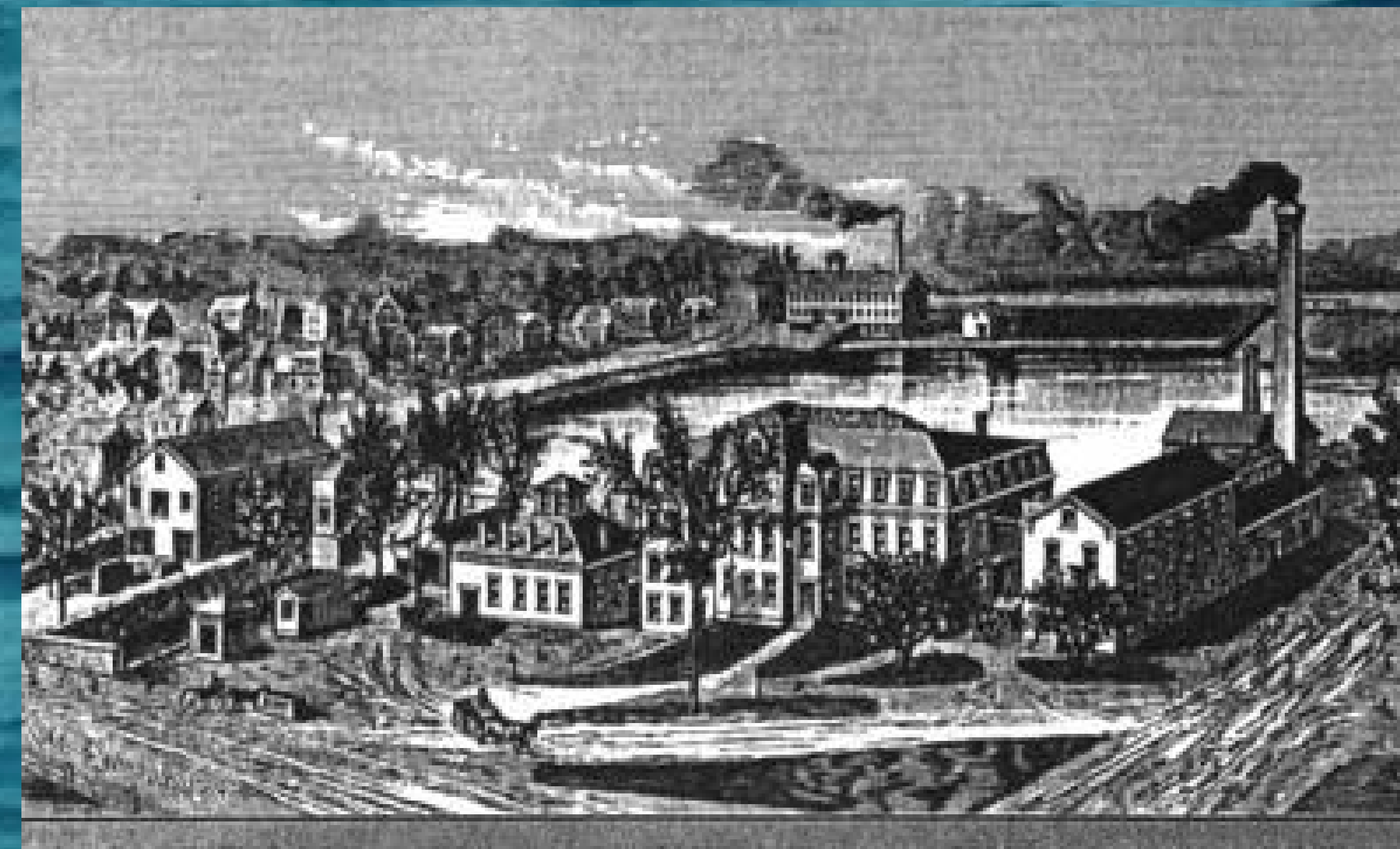
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Coes Reservoir Legacy Pollution

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Background & Issue:

- Coes Reservoir has a long history of factories lining its waters, and dumping heavy metals into the water.
- These heavy metals are making the soil and water toxic, impacting the environment and people of Worcester.



COES SQUARE FACTORY OF COES WRENCH COMPANY.

-One of three factories that dumped into Coes Reservoir, Coes Wrench Factory 1898

Implementation Plan:

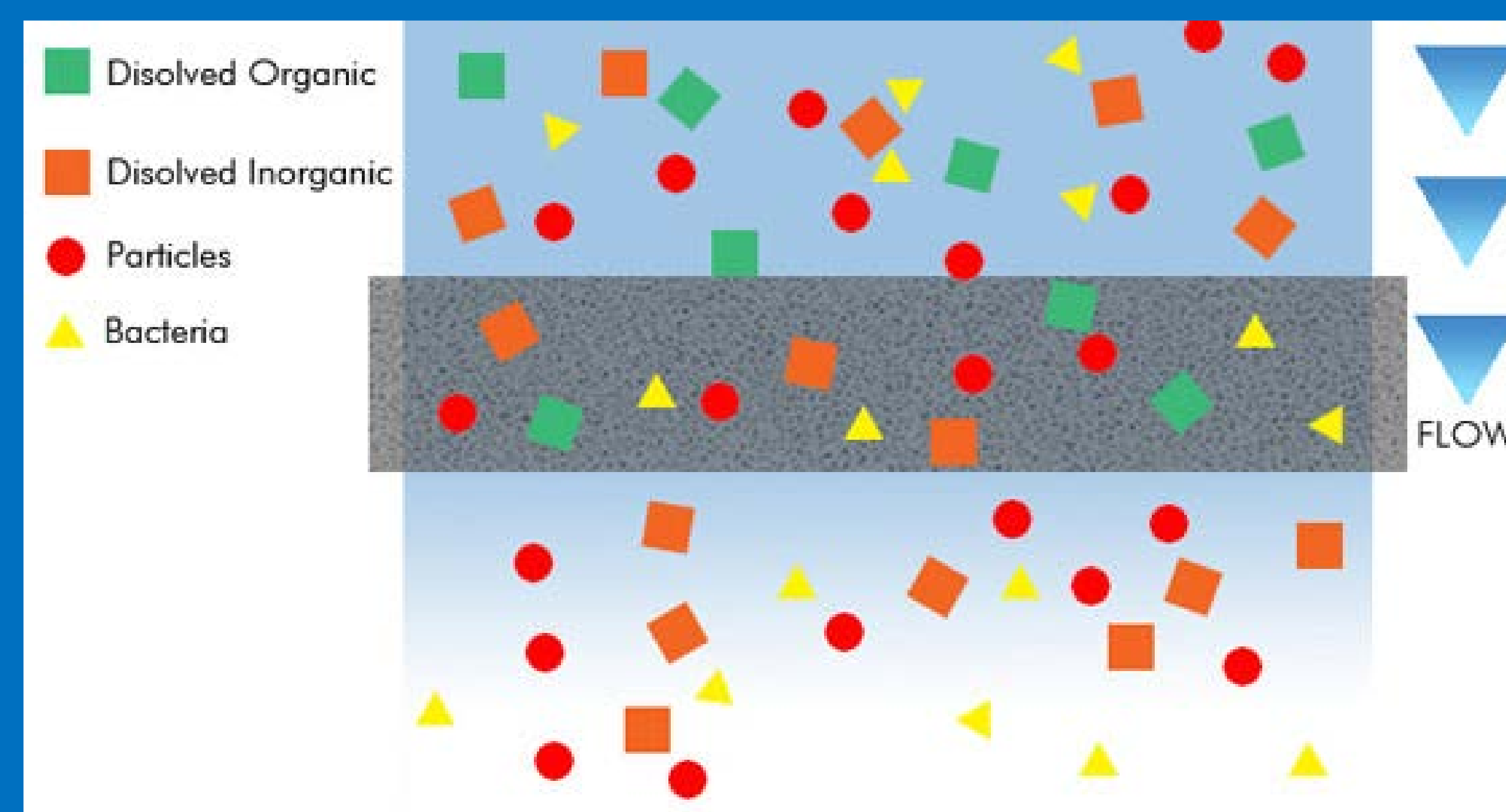
1. Test waters downstream and in Coes
2. Based on results, choose solution to implement

If,	Then,
Heavy metals in Coes & downstream	Implement both solutions
Heavy metals only in Coes sediment	Implement activated carbon
No heavy metals present in either sample	See how deep heavy metals are in sediment in Coes, determine if it is safe or not to leave it alone. If unsafe, implement activated carbon

Solutions:

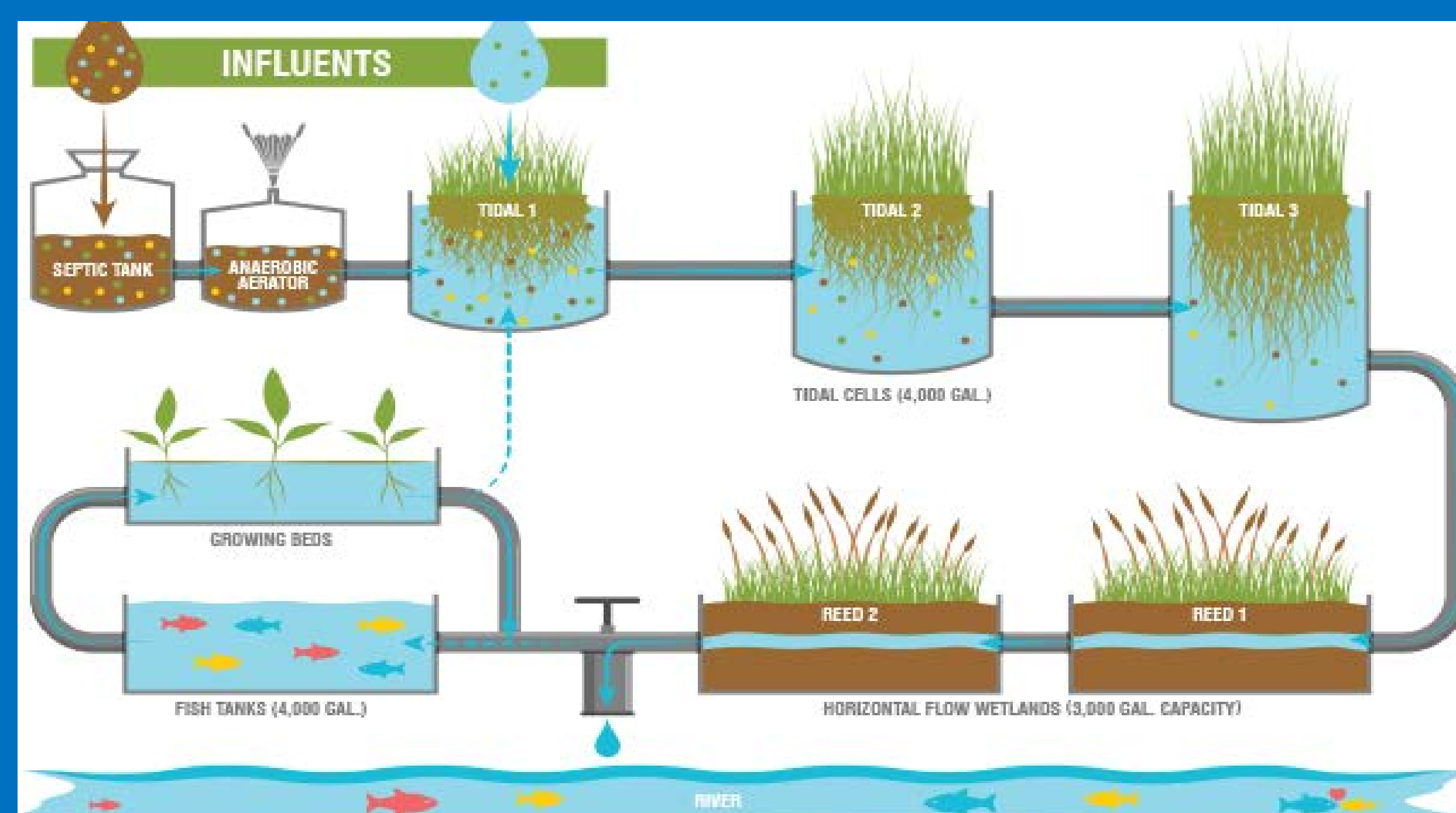
Activated Carbons

- capture and store organic compounds/chemicals



Living Machines

- Uses natural filtering processes to clean the water. Living machines are able to filter out E.Coli, Phosphates, and heavy metals.



-As a result, Coes Beach has been shut down. This impacts locals in a major way.



-With the solutions available and after deciding which to use, Coes Reservoir can become a staple of the community

Solution	Cost	Benefits
Living Machine	\$300,000 - \$20,000 in equipment - \$280,000 in labor	Able to filter over 2,000 gallons of water per day
Activated Carbon	\$500 to 1000 per metric ton * full cost dependent on test results	Able to effectively eliminate heavy metal from sediment