Flood Risk Management Worksheet

Part 1: Flood Control Structures

- Watch the video <u>"How do Flood Control Structures Work?"</u> on YouTube.
- Fill out the following table on the benefits and drawbacks of the different flood control methods.

Flood Control Structure	Description	Benefits	Drawbacks
Levees			
Diversions			
Dams / Reservoirs			
Strategic Development			

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Flood: Causes and Mitigation Strategies for Civil Engineers Activity – Flood Risk Management Worksheet

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Part 2: River Management Stakeholders

- Watch the video <u>"How "levee wars" are making floods worse</u>" on YouTube.
- Read the following hypothetical scenario:

The City of Hendrum, MN, (300 residents) received a proposal from a wealthy residential developer who wants to pay for the installation of levees along the Red River and Wild Rice River north of Hendrum to build a country club community between the two rivers. This community will include large riverside homes for commuters to Fargo or Grand Forks, and a country club with a pool and beautiful destination golf course. Six miles downstream of Hendrum is Halstad, MN (600 residents). The residents of Halstad fear that this development will cause increased flood damage to their community because the inundation of flood waters will increase due to the presence of levees upstream. However, both cities would benefit greatly from an increase in money being spent in their communities.



Discussion:

What are the pros and cons of installing the levees and creating this country club community?

Pros	Cons

Do you think the levees should be installed? Provide reasoning that supports your decision.

Describe an alternative flood control method that either community could use to improve the flood risk management for both communities. (Hint: Look at Part 1 for ideas!)



