## Prediction of sediment gas production from sediment properties

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Anaerobic degradation of sediment organic matter leads to production of gas  $(CH_4 + CO_2)$ 





## Problem

## (1) Effects in the water

Decreases density, viscosity, strength, delays consolidation, changes rheology, increases O<sub>2</sub> consumption, increases erosion, obstructs sonic depth finding

## (2) Effects on land

Extraction and treatment of landfill gas necessary, settlement of constructions from dredged material

- (3) Emission of greenhouse gas  $CH_4$
- (4) Explosive gas mixtures
- Understand controls on degradability of organic matter
- Predict gas production from standard sediment properties



