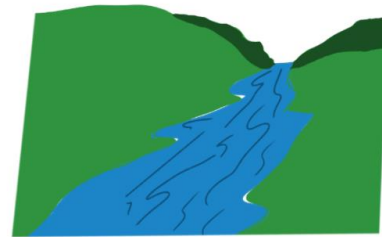


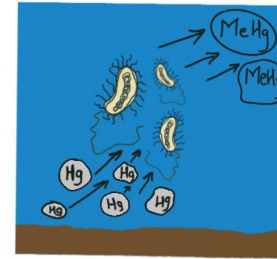
Effects of vegetation on methylmercury concentrations and loads in a mercury contaminated floodplain



Precious metal mining in the Sierra Nevadas made California the leading producer of mercury (Hg) in the US.

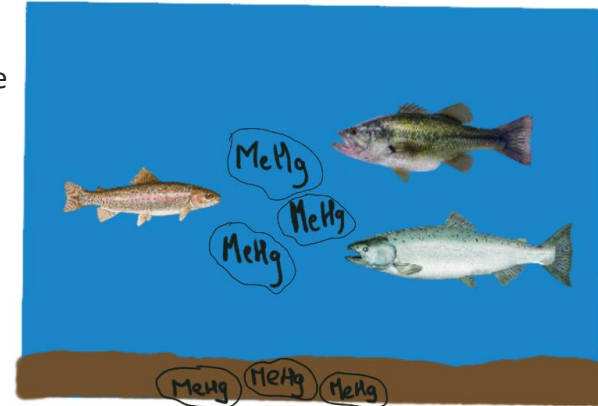


Historical gold mines are a significant source of Hg to the Sacramento-San Joaquin Delta



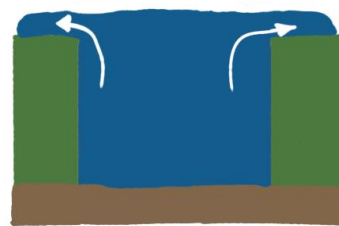
Bacteria in flooded soils convert Hg (metal) to bioavailable methylmercury while metabolizing organic carbon.

Input 1

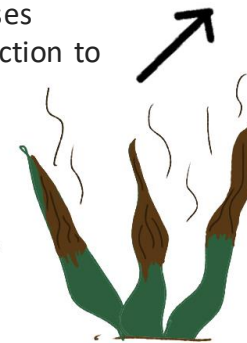


These are both sources of methylmercury into the water column. Methylmercury magnifies as it moves up the food chain, with neurotoxic effects for fish and people.

When the Yolo bypass is flooded, the largest inundated land use is pasture devoted to cattle grazing.



Decomposing vegetation on the flooded pastures causes methylmercury production to increase.



Input 2