



# Risk Assessment

## Description of Technology

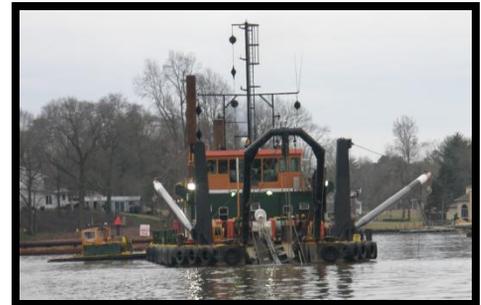
Environmental risk assessment tools developed at the Waterways Experiment Station, U.S. Army Engineer Research and Development Center (ERDC) include guidance for evaluating the risk posed by contaminants in environmental media, unique laboratory experimental designs, and models for evaluating the likelihood for toxicity following contaminant exposure.

## Benefits

The environmental risk assessment tools developed at ERDC provide the means to characterize and describe the risk posed by contaminant and non-contaminant stressors to human health and the environment. These tools enhance our ability to quantify the potential for adverse impacts caused by exposure to a wide variety of environmental stressors. The guidance, databases, laboratory studies, and models developed as tools for risk assessment reduce our dependence on uncertainty factors and increase our ability to make objective determinations about the environmental risks posed by contaminants.

## Significant Accomplishments

An extensive database of tissue contaminant residue data and associated measures of toxicity has been developed to provide needed interpretive guidance for bioaccumulation data commonly collected in ecological risk assessments. Population models for aquatic organisms have been developed and used to project the ecological impacts caused by exposure to contaminated media. Unique laboratory experiments provide project data. The data and models have been successfully applied at multiple sites for assessing both contaminant and non-contaminant risks to the environment.



## Points of Contact

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