

## BRIEFING SHEET

### **Collaborative Coeur d'Alene Soil Amendment/ Bioavailability Studies**

(March 2001)

This fact sheet describes a collaborative evaluation of the effectiveness of soil amendments to reduce lead bioavailability to waterfowl in the Lower Coeur d'Alene River Basin.

**Brief History:** Metal contaminated sediments have negatively impacted waterfowl in the Lower Coeur d'Alene River. Different treatment technologies, including soil amendments, have been proposed but need to be evaluated for effectiveness in reducing lead bioavailability. Soil amendments are being looked at as an alternative to large-scale removals. Amendments have also been identified by the Coeur d'Alene Basin Consensus Group as a candidate treatment technique.

**Goals & Objectives:** The focus of the studies is to assess the effectiveness of phosphate-based soil amendments at reducing bioavailability of lead to waterfowl, and thereby decrease the risk of waterfowl mortality.

**Project Synopsis:** Field and laboratory studies will be conducted by IDEQ and USFWS in the Lateral Lakes area to investigate the effectiveness of soil amendments to reduce lead bioavailability, solubility and leachability by formation of low-solubility lead compounds. Phosphate amendments were chosen from an extensive list because they appear to be the most promising. The field sites are owned by the State of Idaho and managed by Idaho Department of Fish and Game. Field and laboratory studies began March 2001.

**Collaboration:** Study planning involved many Coeur d'Alene Basin stakeholders, including IDEQ, USFWS, WA Department of Ecology, EPA, the Coeur d'Alene Tribe, Spokane Tribe, USGS, and others. Representatives of In-Place Inactivation and Natural Ecological Restoration Technologies (IINERT) Soil-Metals Action Team provided technical input. Numerous other parties received e-mails providing them with information on the deliberations regarding soil amendments and inviting their participation in the discussions. The studies are jointly funded by the Coeur d'Alene Basin Commission and EPA.

**Expected Outcomes:** Results from the soil amendment and waterfowl feeding studies will provide information regarding the effectiveness of soil amendments to reduce lead bioavailability to waterfowl and will be used to evaluate remedial

alternatives in the Lower Coeur d'Alene River Basin. Initial study results will be available in early 2002.

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