





#### WHAT IS NRDA?

HOW CAN NRDA HELP YOU?

**METHODS AND TOOLS** 

PROJECT EXPERIENCE

**PERSONNEL** 

Natural Resource Damage Assessment (NRDA) is the process of identifying, quantifying, and valuating the impacts of incidents, including oil spills, hazardous materials releases, infrastructure failures, and noise/dust/odor impacts.

NRDA process identifies the impacted resources, communities, and ecosystem components and helps to select appropriate compensatory restoration projects.

NewFields utilizes available site-specific data, as well as information from the ever-growing environmental literature to provide clients with a better understanding of impacts and required compensatory projects. Any event that causes degradation of the environment can be assessed using NRDA. NewFields approach incorporates the latest advances in valuation of natural resources developed through global initiative such as The Economics of Ecosystems and Biodiversity (TEEB) and the Natural Capital Coalition. Our aim is to equip our clients with the latest NRDA advances leading to productive compensatory negotiations.





# How Can NRDA Help You?

- Having a data-supported assessment of cost liabilities provides a strong and justifiable starting point for negotiations with stakeholders and authorities.
- A damage assessment can help parties more quickly reach a settlement.
- Compensatory restoration projects or donations can be designed to ensure a like-for-like value exchange.





**HOW CAN NRDA HELP YOU?** 

**METHODS AND TOOLS** 

PROJECT EXPERIENCE

**PERSONNEL** 

## **Methods and Tools**

## ■ Rapid Data Compilation/Geographic **Information Sytems**

NewFields assembles all relevant data. We utilize interactive mapping to characterize the extent of impact and identify restoration options.

### Comparative Damage Evaluation

NewFields conducts thorough literature surveys to compile information produced during negotiations and studies at comparable sites worldwide. This process often produces reliable and timely information necessary for compensatory negotiations.

## Human Health and Ecological Risk **Assessment**

NewFields conducts advanced risk assessments to evaluate the likelihood and extent of adverse effects to human health or the environment.



## Source Identification/Forensic Chemistry

When necessary, NewFields can employ sophisticated forensic chemistry to assess the source and extent of contamination and allocate liability. In areas with a long industrial history and a complex mix of contamination, this can help limit a client's liability.

## Habitat Equivalency Analysis/Resource **Equivalency Analysis**

The loss of habitat or the loss of a specific injured resource can be quantified and valuated. The results are intended to ensure that compensatory restoration projects are properly scaled to offset natural resource damages occurring between the incident and restoration.

### Stochastic Simulation

NewFields uses statistical simulation techniques to identify the range of computed natural resource damages. The output is a range of values that provides a reliable basis for productive compensatory negotiation.

WHAT IS NRDA?

HOW CAN NRDA HELP YOU?

**METHODS AND TOOLS** 

PROJECT EXPERIENCE

**PERSONNEL** 





WHAT IS NRDA?

HOW CAN NRDA HELP YOU?

**METHODS AND TOOLS** 

#### PROJECT EXPERIENCE

**PERSONNEL** 

## Project Experience

NewFields NRDA experience ranges from achieving quick settlements for minor releases to extensive data analysis in the wake of major natural disasters. Examples of our projects include:

- Performed a leading role in forensic chemistry and sampling design and analysis of comprehensive environmental data collected as part of the Deepwater Horizon NRDA.
- Assisted the United National Compensation Commission activities in the wake of environmental damages caused during the invasion and occupation of Kuwait in 1990-91.
- Reviewed and analyzed NRDA related data collected and compiled at the Bunker Hill Mining and Metallurgical Superfund Site (Coeur d'Alene Basin), situated in Idaho, United States.
- Currently providing statistical and forensic chemistry support for the damage assessment at Hudson River PCBs Superfund Site in New York, United States.
- Currently assisting a confidential client by performing a comprehensive NRDA and quantitative damage valuations related to one of the largest environmental incidents in Latin America.

## **Personnel**

If you would like to know more about Natural Resource Damage Assessment or any of NewFields services, please contact your local NewFields representative below.

## **North America**



**Dr. Shahrokh Rouhani, Ph.D.**NRDA Practice Leader
srouhani@newfields.com

## **Europe**



Alfio Mianzan

Europe NRDA Representative
amianzan@newfields.com

## **South America**



**Tiago Moura**Brasil NRDA Representative tmoura@newfields.com

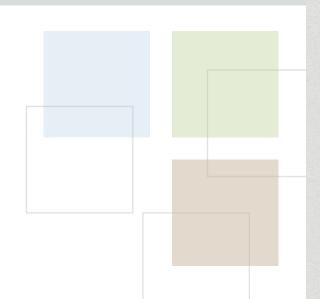
WHAT IS NRDA?

HOW CAN NRDA HELP YOU?

**METHODS AND TOOLS** 

PROJECT EXPERIENCE

**PERSONNEL** 





WHAT IS NRDA?

HOW CAN NRDA HELP YOU?

**METHODS AND TOOLS** 

PROJECT EXPERIENCE

PERSONNEL

## **ABOUT NEWFIELDS**

NewFields is an environmental, engineering, and construction management consulting firm. We provide access to a global network of recognized experts and professionals who work together to resolve our clients' complex business needs. Our talented staff is a diverse group of accomplished individuals, most of whom are senior level engineers, scientists, and specialists, who offer our client base both practical and strategic solutions. We look forward to helping you achieve success and sustainability in a rapidly changing, interconnected world.



#### **Corporate Headquarters**

Two Midtown Plaza 1349 Peachtree Street, Suite 1950 Atlanta, GA 30309 (404) 347-9050 www.newfields.com

