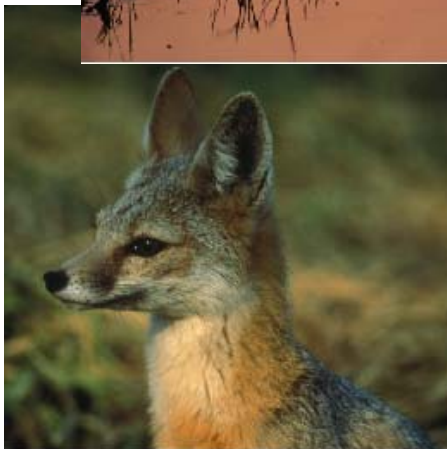


The purpose of this short course is to provide hands-on training on how to use spatially-explicit exposure models incorporating case studies to aid users in their applications. This course is open to all potentially involved in conducting, reviewing, or refining ecological risk assessments at military installations and elsewhere



Photos: US Fish and Wildlife Service

**Course Director:**

Dr. Mark S. Johnson DABT

**Registration / Course Coordinator:**

Ms. Kathy Lanier, MPH

703-610-1948

Kathy.Lanier@noblis.org

3150 Fairview Park Drive South

Falls Church, VA 22042

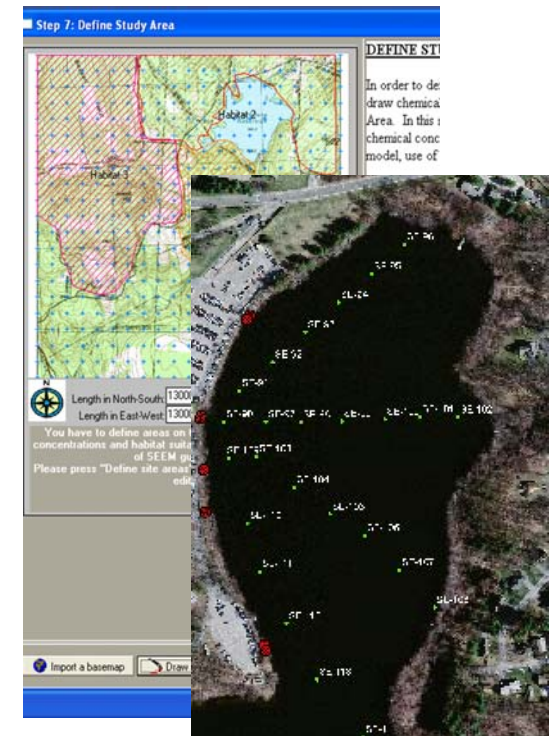
Attendees are encouraged to bring their own laptop (Windows 7 or XP) to run the models during the course. Software will be provided prior to the course. A limited number of laptops will be available for this training and may be reserved on a first-come first-serve basis.



US Army Corps of Engineers



# Exploring Spatially Explicit Exposure Models: New Refinements, Regulatory Perspectives, and Case Studies



**Short Course  
April 3-4, 2012**

Falls Church, VA

**Sponsored / Funded by:**  
DoD Environmental Security Technology Certification Program (ESTCP)

The US Army Institute of Public Health, in conjunction with the DoD Environmental Security Technology Certification Program, is excited to offer a hands-on training session that will enhance your ability to recognize and use spatial characteristics to improve risk assessments.

Historic research and development initiatives through the Army Environmental Quality Technology Program have resulted in the development of two spatially explicit exposure models (SEEM for terrestrial wildlife assessment and FishRand-Migration (FR) for fish). SEEM models terrestrial wildlife exposure and increases the realism of wildlife exposure assessment through application of foraging strategies guided by habitat suitability. FR uses a Gobas bioaccumulation model in a spatial context to estimate body burdens of organic compounds in fish, taking into account localized fish movement (e.g., foraging strategies) and larger movements (e.g., migratory behaviors of anadromous species).

Space is limited for this **FREE** training .

Reserve your spot today.

[Kathy Lanier](mailto:Kathy.Lanier@army.mil) 703-610-1948

## AGENDA

### Tuesday, April 3, 2012

0830 – Welcome/Logistics – Drew Rak, Noblis

0900 – Introduction/Overview, Mark Johnson, USAPHC-AIPH

1000 – EPA/Regulatory Perspective, Marc Greenberg, USEPA

1130 – Lunch

1300 – SEEM, Ted Wickwire, Exponent Inc.

1700 – Close

1800 – Networking Session

### Wednesday, April 4, 2012

0830 – Welcome/Logistics – Drew Rak, Noblis

0900 – FishRand, Trina von Stackelberg, ERisk Sciences

1130 – Lunch

1300 – Case Studies, Anita Meyer, USACE

1400 – Software Tools and Applications, Igor Linkov, USACE

1600 – Hands on training/demonstration

1700 – Close

### Location:

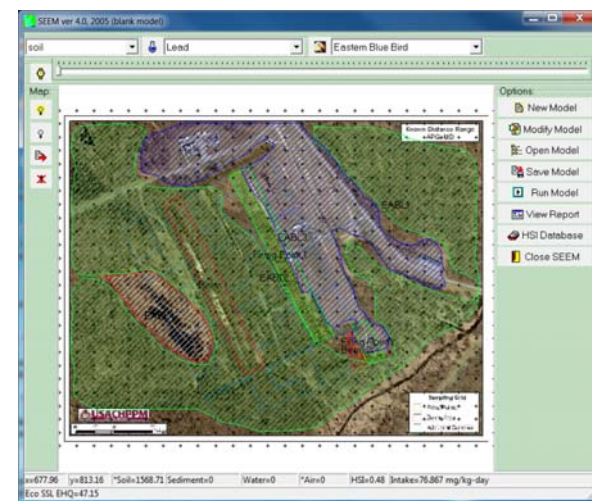
Noblis, 3150 Fairview Park Dr. South  
Falls Church, VA 22042-4519

[www.noblis.org](http://www.noblis.org)

... both models provide outputs in a population context consistent with current USEPA guidance and applications.



**FishRand Probabilistic  
Bioaccumulation Model**



**Spatially Explicit Exposure Model  
(SEEM)**