

# Table of Contents

**1**

**Welcome Letter &  
Announcements**

**2**

**Agenda**

**3**

**Abstracts**

**4**

**Registrant  
Information**

**5**

**Addenda &  
Conference Notes**



Notes \_\_\_\_\_



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**WASHINGTON, D.C. 20460**

**OFFICE OF  
ENVIRONMENTAL INFORMATION**

Welcome to the 14<sup>th</sup> Conference on Environmental Statistics and Information

It is our pleasure to welcome you on behalf of EPA's Office of Environmental Information to the 14<sup>th</sup> Conference on Environmental Statistics and Information. As the first conference in the new century, you will notice that our presentations and displays reflect the latest in information technology. Even our registration process has been streamlined, with most of you registering on-line at our Intranet conference site. We also have a record turnout. More than 180 of you registered for the conference. In contrast, the first conference in 1985 was attended by fewer than 80 EPA staff.

This year's theme "The Role of Statistics and Information in Protecting Public Health and the Environment" is supported by the many presentations, training sessions and distinguished guest speakers. You will find a wide range of relevant topics covered by presenters during the conference. In addition, our distinguished guest speakers include highly regarded and visible members of the scientific community and Government.

We have planned the conference, so that you have a unique opportunity to meet and chat with your colleagues and invited guests in an informal setting away from the pressures of the office, e-mail and the telephone.

We encourage you to take advantage of our well-situated location in downtown Philadelphia during this beautiful time of the year. There are many wonderful restaurants within walking distance of the conference venue and much to see and do in Philadelphia including art and science museums, the waterfront and the Liberty Bell.

We would like to thank everyone who helped plan and organize the conference including members of the planning committee and our contractor - Temple University's Institute for Survey Research.

We look forward to greeting each of you personally at the conference.

**N. Phillip Ross & Margaret G. Conomos**  
**2001 Conference Co-Chairs**

**Conference Planning Committee Members:**

Annett Nold  
Barnes Johnson  
Barry Nussbaum  
Becki Clark  
Bimal Sinha  
Bruce Madariaga  
Candace Brassard  
Constance Downs  
David Mintz

Deana Crumbling  
Ed Brandt  
Elizabeth Margosches  
Henry Kahn  
Jim Lee  
John Warren  
Odelia Funke  
Pepi Lacayo  
Reggie Cheatham

Ruth Allen  
Sarah Taich  
Stephen Goranson  
Steve Young  
Tony Olsen



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**WASHINGTON, D.C. 20460**

**OFFICE OF  
ENVIRONMENTAL INFORMATION**

Welcome to the 14<sup>th</sup> Conference on Environmental Statistics and Information

It is our pleasure to welcome you on behalf of EPA's Office of Environmental Information to the 14<sup>th</sup> Conference on Environmental Statistics and Information. As the first conference in the new century, you will notice that our presentations and displays reflect the latest in information technology. Even our registration process has been streamlined, with most of you registering on-line at our Intranet conference site. We also have a record turnout. More than 180 of you registered for the conference. In contrast, the first conference in 1985 was attended by fewer than 80 EPA staff.

This year's theme "The Role of Statistics and Information in Protecting Public Health and the Environment" is supported by the many presentations, training sessions and distinguished guest speakers. You will find a wide range of relevant topics covered by presenters during the conference. In addition, our distinguished guest speakers include highly regarded and visible members of the scientific community and Government.

We have planned the conference, so that you have a unique opportunity to meet and chat with your colleagues and invited guests in an informal setting away from the pressures of the office, e-mail and the telephone.

We encourage you to take advantage of our well-situated location in downtown Philadelphia during this beautiful time of the year. There are many wonderful restaurants within walking distance of the conference venue and much to see and do in Philadelphia including art and science museums, the waterfront and the Liberty Bell.

We would like to thank everyone who helped plan and organize the conference including members of the planning committee and our contractor - Temple University's Institute for Survey Research.

We look forward to greeting each of you personally at the conference.

N. Phillip Ross & Margaret G. Conomos  
2001 Conference Co-Chairs

**Conference Planning Committee Members:**

Annett Nold  
Barnes Johnson  
Barry Nussbaum  
Becki Clark  
Bimal Sinha  
Bruce Madariaga  
Candace Brassard  
Constance Downs  
David Mintz

Deana Crumbling  
Ed Brandt  
Elizabeth Margosches  
Henry Kahn  
Jim Lee  
John Warren  
Odelia Funke  
Pepi Lacayo  
Reggie Cheatham

Ruth Allen  
Sarah Taich  
Stephen Goranson  
Steve Young  
Tony Olsen



## **EPA's 14<sup>th</sup> Conference on Statistics and Information May 14-17, 2001**

The conference will be held at the Doubletree Hotel, in downtown Philadelphia,  
PA

EPA's mission to protect public health and the environment is much more than a matter of statistics—but, without statistics, EPA couldn't do its job of monitoring the environment, writing regulations, and ensuring compliance. In large measure, these activities and many others rely on the development, interpretation and presentation of quality data and expert analyses. That's why the theme for the 2001 conference is:

### **The Role of Statistics and Information in Protecting Public Health and the Environment**

This conference is designed to meet *your* needs. The meeting is exclusively for you and your EPA colleagues. There will be no open registration to the public, and **no registration fee for you!** *Statistics 2001* will bring together individuals from throughout the Agency — regional offices as well as headquarters and national laboratories — who collect and use data.

There will be plenary sessions, presentation sessions, poster/computer sessions, and panel discussions. Attendees will have the opportunity to receive training, to learn the latest techniques, and to exchange ideas with colleagues, conference speakers, and distinguished guests.

### ***Program Headliners***

Renowned experts in the fields of mathematics, statistics and survey research will be part of the conference program. Featured speakers will include:

**Edward J. Sondik**, Director for the National Center for Health Statistics (NCHS) will be the featured Keynote Speaker. He also serves as Senior Advisor to the Secretary of Health and Human Services, providing technical and policy advice on statistical and health information issues. Prior to his appointment as NCHS Director in 1996, he served in the National Cancer Institute (NCI), National Institutes of Health (NIH), in a number of positions including Acting Director, Deputy Director of the Division of Cancer Prevention and Control, and Associate Director of the Surveillance Program at NCI. He has also served at the National Heart, Lung, and Blood Institute of NIH, and on the faculty of the Department of Engineering-Economic Systems at Stanford University.

**John Allen Paulos**, Professor of Mathematics at Temple University, best-selling author, and public speaker, whose mix of humor and erudition has delighted radio and television audiences, as well as students in the classroom. His books include *Innumeracy* (which has been translated into 11 foreign languages), *A Mathematician Reads the Newspaper*, and *Once Upon a Number*. As a public speaker he has appeared before audiences at the Smithsonian, Harvard's Nieman Journalism Fellows, the National Academy of Sciences, NASA, colleges and universities, and business and financial forums.

**Graham Kalton**, Senior Statistician and Senior Vice President of the social science research firm, Westat, and a Research Professor in the Joint Program in Survey Methodology at the University of Maryland. Dr. Kalton has extensive experience in research on survey methodology, and has published widely on several aspects of the subject, including sample design, nonresponse and imputation, panel surveys, question wording, and coding. He is an author of several books including *Introduction to Survey Sampling*, *Survey Methods in Social Investigation* (with Sir. Claus Moser), and *Compensating for Missing Survey Data*.

**Douglas L. Weed**, Chief, Office of Preventive Oncology and Dean of Education and Training in the Division of Cancer Prevention at the National Cancer Institute. Dr. Weed is trained in engineering, medicine, public health and epidemiology. He directs the Cancer Prevention Fellowship Program and writes about methods of causal inference, evidence-based decision making and topics in the ethics and philosophy of public health. He is on the faculty of Johns Hopkins University, Uniformed Services University of Health Sciences, and Georgetown University, where he is Senior Research Fellow at the Kennedy Institute of Ethics.

## ***YOU Can Be Part of the Program, Too***

The conference program is still a work in progress, but the wide-ranging array of session topics will include chemometrics, information access on the Internet, aggregate and cumulative methods of risk development, epidemiological projects, data mining, water quality monitoring, data visualization, and many more.

We hope you will plan to attend the conference, and we encourage you to take an active role in the meeting. The overall success of the conference depends on the personal participation of you and your colleagues.


To register and sign up to make a presentation, we ask that you submit the Registration and Abstract Forms (click on this text) to let us know your topic and presentation medium (platform or poster) so your proposal can be considered as part of our overall planning. Please submit your completed form and abstract **AS SOON AS POSSIBLE**.

To register to attend, simply fill out the appropriate section of the Registration Form and submit **AS SOON AS POSSIBLE**.

***REMEMBER, SPACE IS LIMITED... THE SOONER WE HEAR FROM YOU, THE BETTER THE CHANCE YOU'LL BE GUARANTEED A PLACE AT...***

***EPA's 14th Conference on Statistics and Information***

## ***A Word About Accommodations...***

The DoubleTree Hotel  has reserved a block of rooms at a rate within the FY 2000 federal allowance for Philadelphia, but that special rate has been extended *until May 4, 2001*. Reservations received after that date will be accepted only on a space and rate availability basis. Please contact DoubleTree Hotel's Reservation Department at 215-893-1600, and ask for the EPA Conference / Temple University rate **AS SOON AS POSSIBLE**.

DoubleTree Hotel  
Broad Street at Locust  
Philadelphia, PA 19107-5686  
Tele: (215) 893-1600; Fax: (215) 893-1664

<http://www.hilton.com/doubletree/hotels/PHLBLDT/index.html>

Greyhound bus service will be provided from Waterside Mall to Philadelphia and back, at **no cost to you or your office**. The bus will be leaving Waterside Mall on Monday, May 14 at approximately 12:00 noon, and will depart Philadelphia at approximately 1:00pm.

**Mark your calendar now and return your form as soon as possible!**

**We look forward to seeing you in Philadelphia, May 14-17, 2001!!**

*If you have any questions, please get in touch with EPA's conference coordinator:*

Ms. Jonel Peckyno-Haley  
Temple University / Institute for Survey Research  
202-537-6700 or Peckyno.Jonel@epamail.epa.gov



Notes \_\_\_\_\_

2

**Agenda for the 2001 EPA Conference on  
Environmental Statistics and Information**

**Monday**

**Tuesday**

**Wednesday**

**Thursday**

---

**Monday, May 14, 2001**

<b>3:00 - 6:30</b>	<b>REGISTRATION AND CHECK-IN</b>	<b>3<sup>rd</sup> Floor Atrium</b>
<b>4:30 - 6:30</b>	<b>TRAINING SESSION</b>	
	<b><u>Session A:</u> An Introduction to Statistical Data Mining* Ranjan Maltra</b>	<b>Aria A</b>
	<b><u>Session B:</u> Environmental Visualization: Graphical Designs and Software Tools</b>	<b>Aria B</b>
<b>6:30 - 7:30</b>	<b>Informal Discussion to meet Participants</b>	<b>Orchestra Room</b>

**\* Note: Data Mining Training Session will be repeated Thursday, 8:30 - 10:30 am**

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

**Tuesday**

Wednesday

Thursday

### Tuesday, May 15, 2001

7:30 - 8:30	Pre-Session Coffee and Light Snacks		Overture Room
8:30 - 9:00	Welcoming Remarks and Introduction of Speakers		Symphony Room
	<i>Welcome</i>	<i>Phil Ross</i>	
	<i>Welcome to Philadelphia</i>	<i>John A. Armstead</i>	
9:00 - 10:00	Keynote Address		Symphony Room
	<i>Monitoring Our Environmental Health: Issues, Challenges and Opportunities</i>	<i>Edward J. Sondik</i>	
10:00 - 10:15	Break		
10:15 - 10:30	Plenary Opening	<i>Margaret N. Schneider</i>	Symphony Room
10:30 - 12:00	Plenary Panel Session		Symphony Room
	Perspectives on the Use of Environmental Data in the Production of Secondary Information Products	<i>Elaine Stanley</i>	
		<i>Tom Curran</i>	
		<i>Al McGartland</i>	
12:00 - 1:15	Lunch		

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

**Tuesday**

Wednesday

Thursday

**Tuesday, May 15, 2001**

**1:15 - 2:30 CONCURRENT PRESENTATIONS**

**Session A: Toxic Releases and Exposure**

**Ruth Allen**

**Aria A**

TRI (Toxics Release Inventory) Explorer      Rashmi Lal  
Environmental Exposure Measures From the National      Susan Shoher  
Health and Nutrition Examination Survey

**Session B: State & Regional Perspective on  
Secondary Data Use**

**John A.  
Armstead**

**Aria B**

ENVIROSNAX- Integrating Secondary Data to Enhance      Richard Paiste  
the Effectiveness of Environmental Programs  
The National Environmental Information Exchange      Steve Hufford  
Network: State/Regional Issues  
Delaware's Integrated Environmental Information      N. V. Raman  
System

**Session C: Estimation Methods**

**David Miller**

**Concerto A**

USDA's Continuing Survey of Food Intake by      David Miller  
Individuals (CSFII): its use by EPA's Office of Pesticide  
Programs  
Estimation of Odor Detection Thresholds for MTBE in Andrew Schulman  
Drinking Water  
Uncertainty and Variability Analysis in National Risk      Zubir Saleem  
Assessment

**Session D: Framework for Information Quality**

**Jerome Sacks**

**Concerto B**

Emerging Issues of Data Quality      Jerome Sacks &  
Alan Karr

**2:30 - 2:45 Break**

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

**Tuesday**

Wednesday

Thursday

**Tuesday, May 15, 2001**

**2:45 - 4:00 CONCURRENT PRESENTATIONS**

**Session A: Measuring and Managing for Results: A Discussion of Regional Environmental Progress Reporting Tools**      **Steve Goranson**      **Aria A**

Road Densities Contribution to Declining Region 5      Lawrence  
Ecosystem Health      Lehrman & Arthur  
Lubin

The Trends Navigation Tool - a Pilot Project - Weaving      Cynthia Curtis  
a Web of Information, Goals and the Environment

The FIELDs System - Sediments Removal Process      John Bing-Canar

**Session B: Human Health: Data Collection/Analyses**      **Ruth Allen**      **Aria B**

The Role of Human Health Data in Pesticide Decisions      Ruth Allen  
Spatial Modeling of Age, Period and Cohort Effects      Ted Holford

**Session C: Remote Sensing / Visualization**      **Steve Young**      **Concerto A**

The Wetlands Change Project: A New Way to Get      Cary Roberts  
Results

Window to My Environment: "A Window to      Joseph Kunz  
Community-Based Environmental Information"

Data Comes Alive Through GIS!      Olof Hansen

**Session D: Information Collections at the EPA**      **Doreen Sterling**      **Concerto B**

The Legislative Climate for EPA's Collections      Rick Westlund

EPA's Collections: An Overview      Constance Downs

EPA Data Standards      Sara Hisel-McCoy

Government Paperwork Elimination Act      Shivani Desai

**4:00 - 4:15 Break**

**4:15 - 5:15 PLENARY SESSION**

***The Importance of Sample Design in Environmental Studies***      **Graham Kalton**      **Symphony Room**



## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

**Tuesday**

Wednesday

Thursday

---

### Tuesday, May 15, 2001

5:15 - 7:00 POSTER SESSIONS \*

Margaret  
Conomos

Overture Room

Poster A: Office of Environmental Information

Joanne Oxley

Poster B: EPA's Collections: An Overview

Constance Downs

Poster C: Environmetrics Web Site and The Trade  
Environment Database

Jim Lee

Poster D: Window to My Environment: "A Window  
to Community-Based Environmental Information"

Joseph Kunz

Poster E: TRI (Toxics Release Inventory) Explorer

Rashmi Lal

Poster F: National Center for Health Statistics as a  
Public Resource for Health Information

Mary Burgess

Poster G: Data From EPA's Ultraviolet Monitoring  
Network

Jack Shreffler

Poster H: The Trends Navigation Tool - a Pilot  
Project

Cynthia Curtis

Poster I: How to Present Environmental Data to the  
Public

Kyle Zieba

Poster J: Partial Least Square Analyses for  
Association of Landscape Metrics with Water,  
Biological and Chemical Properties in the Savannah  
River Basin

Maliha Nash

\* Note: Poster will be displayed through Wednesday evening

6:00 - 7:30 Speaker Reception

Overture Room

Hosted by William Tash, Vice Provost for Research,  
Temple University - with Graham Kalton & John Paulos

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

Tuesday

**Wednesday**

Thursday

**Wednesday, May 16, 2001**

<b>7:30 - 8:30</b>	<b>Pre-Session Coffee and Light Snacks</b>		<b>3<sup>rd</sup> Floor Atrium</b>
<b>8:30 - 9:45</b>	<b>CONCURRENT PRESENTATIONS</b>		
	<b><u>Session A: Data Analysis</u></b>	<b><i>Rashmi Lal</i></b>	<b>Aria A</b>
	Trend Analysis of TRI On-Site and Off-Site Releases	Rashmi Lal	
	Data Mining TRI - Some Results	William P. Smith	
	Regional Trends in Rural Sulfur Dioxide Concentrations Over the Eastern United States	Dave Holland	
	<b><u>Session B: University of Washington, Seattle Activities</u></b>	<b><i>Larry Cox</i></b>	<b>Aria B</b>
	Developments in the Modeling of the Nonstationary Spatial Covariance Structure of Environmental Processes	Paul Sampson	
	Ecological Bias in Environmental Epidemiology	Jon Wakefield	
	<b><u>Session C: EPA Public Databases</u></b>	<b><i>Barnes Johnson</i></b>	<b>Concerto A</b>
	U.S. EPA Office of Policy Local Governments Database	Susan Brunenmeister	
	The National Environmental Information Exchange Network: Public Data Issues	Steve Hufford	
	Data Envelope Analysis on TRI Data	Jerzy Filar	
	<b><u>Session D: Data Quality Indicators</u></b>	<b><i>Dan Michael</i></b>	<b>Concerto B</b>
	Exploring Data Representativeness	Dan Michael & Kelly Black	
<b>9:45 - 10:00</b>	<b>Break</b>		

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

Tuesday

**Wednesday**

Thursday

### Wednesday, May 16, 2001

#### 10:00 - 11:15 CONCURRENT PRESENTATIONS

##### Session A: Air Issues

**David Mintz**

Aria A

The AIRNow Ozone Mapping System - Communicating  
Time-Relevant Data to the Public

John E. White

National Air Quality and Emission Trends Report, 1999

Joe Elkins

Minimum Detection Limits - A Heretical Viewpoint

Terence  
FitzSimons

##### Session B: Water Issues

**Henry Kahn**

Aria B

Arsenic Occurrence in Public Drinking Water Supplies

Andrew  
Schulman

Probabilistic Benefits/Cost Analysis for the LT-2  
Enhanced Surface Water Treatment Rule

Mike Messner

Comparison of Measurement Methods

Henry Kahn

##### Session C: Ecological Health

**Candace  
Brassard**

Concerto A

Use of the Contaminant Exposure and Effects -  
Terrestrial Vertebrates Database to Rank  
Ecotoxicological Data Gaps Along the Atlantic Coast

Barnett Rattner

The Collection and Use of Data Gathered by Citizen  
Scientists

Sally Conyne

Mid-Atlantic Integrated Assessment - Lessons Learned

Tom DeMoss

##### Session D: Public Dissemination and Data Issues

**Odella Funke**

Concerto B

Collections Issues

Doreen Sterling

National Air Toxics Assessment (NATA)

Fred Dimmick

Fish Advisories

Jim Pendergast

Futures Research

Pasky Pascual

11:15 - 11:30 Break

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

Tuesday

**Wednesday**

Thursday

**Wednesday, May 16, 2001**

**11:30 - 12:45 PLENARY SESSION**

Symphony room

*A Mathematician Reads The Newspaper*

*John Paulos*

**12:45 - 2:00 Informal Lunch**

**John Paulos  
and Graham  
Kalton**

Acadmey Cafe

**2:00 - 3:15 CONCURRENT PRESENTATIONS**

Aria A

**Session A: Estimation Methodologies**

**John Fox**

Whole Effluent Toxicity

**John Fox**

Case Study: Using a Dynamic Work Plan and Deana Crumbling  
Immunoassay Field Analytical Methods to Guide  
Cost-Effective Statistically Defensible Site Cleanup

**Session B: Environmental Data Analysis**

**David Holland**

Aria B

The Redesign of a Toxicity Assay Based on Statistical  
Considerations

**Elizabeth  
Margosches**

Use of the Pesticide Data Program in Acute Dietary  
Assessment

**Hans Allender**

Bivariate Environmental Data

**Jade  
Lee-Freeman**

**Session C: Benefits of Agricultural Biotechnology**

**Keith Sargent**

Concerto A

Benefits of Agricultural Biotechnology

**Ed Brandt**

Outcomes of Insect Resistance Management for Bt  
Crops

**Sharlene Matten**

**3:15 - 3:30 Break**

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

Tuesday

**Wednesday**

Thursday

**Wednesday, May 16, 2001**

**3:30 - 4:45 CONCURRENT PRESENTATIONS**

<u><b>Session A: Quality Decisions Come From Quality Data</b></u> <b>Pepi Lacayo</b>		<b>Aria A</b>
Best Practices Series for Information Product Development	Evangeline Tsibris	
Information Quality Systems	Jeff Worthington	
Web Based Access to Real Time Compliance Information	David Tetta	
<u><b>Session B: Multiscale Advanced Raster Map Analysis</b></u> <b>Bimal Sinha</b>		<b>Aria B</b>
Multiscale Landscape Pattern Analysis for Assessing Ecosystem Health and Watershed Comparison Using Conditional Entropy Profiles	G.P. Patil	
Classified Raster Map Simulation, Accuracy Assessment, and Change Detection Using Hierarchical Transition Matrix Models	Charles Taillie	
Pennsylvania Habitat Explorer for Environmental Conservation and Protection Using Echelon Analysis	Wayne Myers	
Nationwide indicators and Their Integration, Evaluation, and Visualization Worldwide - A UNEP Initiative	G.P. Patil	
<u><b>Session C: Predicting Outcomes, Measuring Results</b></u> <b>Ed Brandt</b>		<b>Concerto A</b>
Methodologies for Valuing Effects	Keith Sargent	
A Summary of Research for Valuing Ecosystems: Part of Measuring Outcomes and Results	Matthew Clark	
Chemical and Pesticides Results Measures	Pamela Wilkes	

**4:45 - 5:00 Break**

**5:00 - 6:15 CONCURRENT SESSIONS**

<u><b>Session A: Training Environmental Statisticians Using Real Data</b></u> <b>Bill Hunt</b>		<b>Aria A</b>
<u><b>Session B: Cancer Mortality Maps &amp; Graphs on the Web - More Than Just an Online Atlas</b></u> <b>Dan Grauman</b>		<b>Aria B</b>

## Agenda for the 2001 EPA Conference on Environmental Statistics and Information

Monday

Tuesday

Wednesday

**Thursday**

### Thursday, May 17, 2001

7:30 - 8:30      Pre-Session Coffee and Light Snacks      Overture Room

8:30 - 10:30    TRAINING SESSION

Session A: *Meta Analysis*

*Bimal Sinha*

Aria A

Session B: *An Introduction to Statistical Data Mining \**    *Ranjan Maitra*

Aria B

10:30 - 10:45    Break

10:45 - 11:30    PLENARY SESSION

*Beyond Meta-Analysis: The Challenge of the  
Precautionary Principle*

*Douglas Weed*

Symphony Room

11:30 - 12:00    WRAP-UP SESSION

*Door Prize and Closing Remarks*

*Barry  
Nussbaum*

Symphony Room

\* Note: Data Mining Training Session is repeated from the Monday, 4:30 - 6:30 pm Session



[illegible]

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting:  
Presentation Date.  
Presentation Time  
Status                      **New**

Date Submitted:            04/29/2001

Abstract Title.            **Use of the Pesticide Data Program (PDP) in Acute Dietary Assessment**

Type of Session            ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's            **Allender**        First Name, Middle Initial **Hans D.**  
Last Name.

Organization                Office of Pesticide Programs / HED

Daytime Phone              703-305-7883

Fax Number                 703-305-0871

E-Mail Address              allender.hans@epamail.epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The following article describes a concentrated effort from the Office of Pesticides Programs (OPP) to find a reliable statistical methodology able to extend the abundant information existing in the Pesticide Data Program (PDP), to acute dietary assessment work. In OPP the process to assess acute dietary risk consists of a Monte Carlo process that multiplies food consumption distributions by distributions of concentration of chemical residues on food, producing this way a distribution of chemical exposure to the US population. This exposure distribution is the base to evaluate risk that in terms is the main indicator on how the EPA regulates a particular pesticide.

The principal provider of residue data in the USA is the PDP annual survey sponsored by the US Department of Agriculture. On one hand, PDP collects residue data not on individual units of food, e.g., on a single apple, but on five pounds of composite samples. This means that after smashing to puree five pounds of apples, PDP proceeds to measure the residue content in that five pound mass. On the other hand, the acute dietary risk assessment needs the values of residues on units or servings of the commodity. In order to bridge this gap, extrapolation from composite samples to single units need to be devised. That is the objective of this paper. It develops a statistical methodology to estimate the parameters of the distributions that describe the residues of chemical on single serving of fruits and vegetables departing from information given in composite samples.



## The 2001 EPA Conference Abstract

Meeting.  
Presentation Date:  
Presentation Time:  
Status                      New

Date Submitted.            05/06/2001

Abstract Title:            **The Role of Human Health Data in Pesticide Decisions**

Type of Session            ☒ Presentation            ☐ Computer Session   ☐ Poster Session       ☐ Panel Discussion

[<br>]

Primary Author's            Allen       First Name, Middle Initial   Ruth  
Last Name:

Organization:              Health Effects Division

Daytime Phone              703-620-4593

Fax Number:                703-305-0871

E-Mail Address:            allen.ruth@epa.gov

Additional Author	Organization:
Additional Author:	Organization.
Additional Author:	Organization.
Additional Author:	Organization.
Additional Author:	Organization.

### **Abstract Outline:**

In an era of increased public concern over the health of children and elimination of health disparities, pesticide epidemiology studies provide valuable new science for weight of evidence based decisions. They also raise unique statistical and methodological issues. The objective of this presentation is to present selected results from several recent pesticide epidemiology, biomarker, and exposure questionnaire studies, and to recommend improvements, especially in future study designs and statistical methods. The studies include human exposure data and pesticide results from: (1) Several national Health and Nutrition Examination Surveys (NHANES), (2) the Long Island Breast Cancer Study Project (LIBCSP), and (3) Agricultural Health Study (AHS), (4) pesticides in schools surveys, and (5) published studies on genetic susceptibility and inflammatory breast cancer. These multiple human health studies, geographic information analyses of disease patterns, and national surveys represent a new era in epidemiology, called ecogenetic epidemiology. They also provide a baseline against which to measure the progress of regulatory decisions designed to reduce human exposure to pesticides and any related health effects.



## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status                      New

Date Submitted            05/06/2001

Abstract Title:            **The FIELDS System**

Type of Session            ☒ Presentation            ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's            **Bing-Canar**        First Name, Middle Initial **John**  
Last Name:

Organization:                **Region 5 Superfund**

Daytime Phone              312-886-6182

Fax Number:                312-353-8426

E-Mail Address:              bing-canar.john@epa.gov

Additional Author  
Additional Author  
Additional Author  
Additional Author:  
Additional Author:

Organization:  
Organization:  
Organization.  
Organization  
Organization.

### **Abstract Outline:**

The Fully Integrated Environmental Location Decision Support (FIELDS) Team's mission is to identify, assess, analyze, and communicate priority environmental problems that may pose a threat to human health and the environment. To achieve our mission, we have developed and applied innovative and effective technology tools (the FIELDS System) guided by sound environmental principles and programs. FIELDS began as an effort to more effectively solve contaminated sediment problems in and around the Great Lakes. The FIELDS Team has applied their technology tools to more than 35 sediment, soil, and groundwater sites in U.S. EPA Regions 3, 5, 6, and 9.

The FIELDS System is based in the ArcView Geographic Information Systems (GIS) integrated with Global Positioning System (GPS) technology. The FIELDS System includes modules for Sample Design, Database Query, Modeling, and Analysis. These modules allow a user to design a statistically-based sample design and upload the design to a GPS unit in order to navigate to sample locations. Once the samples are analyzed, the FIELDS System allows the user to query a database and perform interpolations (modeling using Inverse Distance Weighting or Natural Neighbor). The resulting interpolated values are used to calculate contaminate mass and volume. Finally, the System has the ability to identify remediation areas required to meet cleanup goals. In addition, the FIELDS Team recently developed a stand-alone 3D Viewer with Modeling and Analysis modules.

On-going development includes the incorporation of the SADA software's human health risk assessment module and the SADA-FIELDS developed ecological risk assessment module. Other module incorporation includes Secondary sampling and Geostatistical modeling (variography and kriging).

The FIELDS System has been nationally recognized by the Agency for its ability to increase the efficiency and effectiveness of environmental cleanup efforts

The FIELDS homepage is available from  
<http://www.epa.gov/r5water/fields/dynamic/pages/index.htm>

The FIELDS extensions for ArcView (Spatial Analyst is required) are available from  
<http://www.sis.utk.edu/fields/>

The FIELDS 3D Viewer is available from:  
<http://cyze.com/download/>

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **Benefits of Agricultural Biotechnology**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's Last Name        **Brandt**        First Name, Middle Initial    **Ed**

Organization            **Biopesticides and Pollution Prevention Division, Office of Pesticides**

Daytime Phone           703-308-8699

Fax Number              703-308-7026

E-Mail Address           brandt.edward@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The Scientific Advisory Panel reviewed the risks and benefits of existing agricultural biotechnology products registered with the EPA on cotton and field corn. A key SAP recommendation is that EPA continue to expand the assessment of the human and environmental benefits associated with these products. These seeds contain a gene that directs cells to produce a protein toxic to specific insects. Growers use these products to improve yields and reduce costs, mainly by replacing conventional pesticides. The benefit analysis used current GPRA outcome measures to characterize the type and magnitude of benefits. This analysis indicated that the conventional pesticides are ranked high with respect to mortality to non target wildlife. An additional benefit not currently characterized by GPRA outcome measures is the sustainability of biotechnology. Unlike other registered pesticides, these new products are required to implement a refuge strategy to delay the onset of insect resistance. Additional presentations in this session discuss methodologies to improve outcome measures. EPA is exploring the feasibility of a benefit workshop. This conference will help us to better understand the current state of the art on benefit assessment.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date.  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **U.S. EPA Office of Policy Local Governments Database**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Brunenmeister**        First Name, Middle Initial **Susan**  
Last Name

Organization            **Office of Policy**

Daytime Phone          (508) 984-5418

Fax Number              (508) 984-1558

E-Mail Address          rothsb@earthlink.net

Additional Author        Shirley Howard                      Organization    Office of Policy

Additional Author        Tom McCully                        Organization    Office of Policy

Additional Author           Organization

Additional Author           Organization

Additional Author           Organization

### **Abstract Outline:**

The Office of Policy has developed the Local Governments Database, a pc-usable database containing information on general purpose and special purpose governments in the U.S. The information on general purpose governments (counties, municipalities and townships) refers to governments and their population and housing characteristics. Governmental information includes addresses, political organization and services (e.g. water supply, sewerage), finances, employment, environmental programs and regulated activities, and types and amounts of federal monies received. Population information includes size, diversity, poverty levels, education, employment, occupations; housing information includes age of structures, costs, heating fuels, water sources and sewerage disposal. Information on special purpose governments includes addresses, areas served, employment and finances. A User's Guide, and Technical Specifications Guide provides detailed information about the content and organization of the database as well as file types and sizes, and media. A Users Guide to the Local Governments Database Information provides an overview of the Database, how the data can be used to support Agency initiatives and mandates, and provides examples of information analysis and retrieval.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **National Center for Health Statistics as a Public Resource for Health Information**

Type of Session: ☐ Presentation ☐ Computer Session ☒ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Burgess** First Name, Middle Initial **Mary**

Organization **National Center for Health Statistics**

Daytime Phone **301-458-4377**

Fax Number **301-458-4027**

E-Mail Address **Mburgess@cdc.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

CDC's National Center for health Statistics is a unique public resource for health information, As the nation's principal health statistics agency, NCHS provides statistical information to guide actions and policies to improve the health of the American people. The exhibit will highlight NCHS products and services, and will feature a demonstration of the NCHS website.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 05/08/2001

Abstract Title **Environmental Visualization: Graphical Designs and Software Tools**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Carr** First Name, Middle Initial **Daniel B.**

Organization **George Mason University**

Daytime Phone **703-993-1671**

Fax Number **703-993-1700**

E-Mail Address **dcarr@galaxy.gmu.edu**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

This training session presents a variety of templates and interactive methods that are useful for environmental visualization. The first part of the session focuses on static graphics. The two templates emphasized, linked micromap (LM) plots and conditioned choropleth maps (CC) have been used for numerous tasks such as characterizing Omernik Ecoregions and generating hypotheses in environmental epidemiology. The second part of the session shifts attention to interactive methods in CrystalVision. The methods include variable selection, clipping and cropping, rescaling, brushing, and grand tour. The last part of the session shows interactive methods based on a Java component library (nViZn) developed for interaction over web. The session describes the different levels of software availability. For example the demo version of CrystalVision is available for free over the web.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **A Summary of Research for Valuing Ecosystems: Part of Measuring Outcomes and Results**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Clark** First Name, Middle Initial **Matthew**

Organization **ORD/NCER**

Daytime Phone **202-564-6842**

Fax Number **202-565-2447**

E-Mail Address **clark.matthew@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

EPA's National Center for Environmental Research (NCER) sponsors research in economics, behavioral and social sciences to provide a sound scientific basis for addressing issues where behavioral factors affect EPA's mission. NCER has specific RFAs to address 4 important social science areas, Corporate environmental performance and effectiveness of government interventions, market mechanisms and incentives, valuation of health and environmental benefits (for cost benefit analysis of regulations) and socio-economic causes and consequences of future environmental problems. We have sponsored approximately 90 grants since 1995 in these areas with the majority of grants addressing methodological or empirical issues related to economic valuation of environmental and health changes. This presentation summarizes results of a subset of these valuation grants, focusing on several studies investigating the appropriate values of wetlands, habitat, clean air and other environmental amenities. This research has pushed the envelope on development of valuation methodologies, and given policymakers a better handle on how people would actually make choices to protect environmental values.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date.  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **The Collection and Use of Data Gathered by Citizen Scientists**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Conyne**        First Name, Middle Initial **Sally**  
Last Name

Organization            **National Audubon Society**

Daytime Phone        215-297-9040

Fax Number            215-297-9554

E-Mail Address        sconyne@audubon.org

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

For 100 years, birdwatchers have been surveying bird populations for Audubon's Christmas Bird Count. More recent citizen science projects like FeederWatch have also relied on amateurs to follow a standardized protocol as they collect data for use by conservationists and biologists. Engaging a small army of participants, these projects were hampered by inefficiency, data entry cost and inaccuracy, and a significant lag time.

The Internet has changed this. The BirdSource website and database <http://birdsource.org> is now home to a variety of old and new citizen science projects. Direct data entry has resulted in accurate data available in real-time. We are learning to craft our questions and restrict data entry in ways that maintain the quality of these data. We have also discovered that these projects provide engaging platforms for educational materials. An overview of some of these programs, including Christmas Bird Count, BirdCast, and the Great Backyard Bird Count, will be presented.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **Case Study: Using a Dynamic Work Plan and Immunoassay Field Analytical Methods to Guide Cost-Effective Statistically Defensible Site Cleanup**

Type of Session        ☐ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Crumbling**        First Name, Middle Initial **Deana**  
Last Name

Organization            USEPA Technology Innovation Office

Daytime Phone         703-603-0643

Fax Number             703-603-9135

E-Mail Address         crumbling.deana@epa.gov

Additional Author       Kira Lynch

Organization            USACE Seattle District

Additional Author       Greg Gervais

Organization            USACE Seattle District

Additional Author

Organization

Additional Author

Organization

Additional Author

Organization

### **Abstract Outline:**

The test plot area of the Wenatchee Tree Fruit Research and Extension Center (WTFREC) contained soils contaminated with organochlorine, organophosphate, and other pesticides due to agriculture-related research activities conducted from 1966 until the mid-1980s. In 1997, USEPA requested that the US Army Corps of Engineers (USACE) Seattle Hazardous, Toxic, and Radioactive Waste Design District conduct cleanup of the site.

The USACE used a dynamic work plan guided by field analyses to seamlessly integrate the site characterization and cleanup portions of the project. Characterization, excavation, and segregation of contaminated soil was based on the results of immunoassay (IA) test kits for DDT and cyclodiene pesticides. An initial pilot study and on-going evaluation of data comparability between the IA methods and fixed laboratory results allowed the USACE team to develop site-specific IA kit action levels that guided on-site decision-making to ensure that cleanup goals

would be met.

Characterization, cleanup, and closure was accomplished within a single 4-month field mobilization, and the entire project cost (at \$589K) was about half the cost (\$1.2 million) projected according to a more traditional site characterization and remediation scenario relying on two rounds of field mobilization. The "surgical" removal of contaminated materials (possible because of the field analyses) made all investigation and removal activities [sample collection and analysis, soil removal, segregation, and disposal (56 tons incinerated and 334 tons landfilled)] highly efficient and effective.

Compliance with the Washington State Model Toxics Control Act (MTCA) Cleanup Regulation was demonstrated for all target compounds (33 pesticides) by statistical analysis of fixed laboratory data generated from closure confirmation samples. Expensive fixed laboratory analysis to generate this data was performed only after IA testing had determined that excavation had removed all non-compliant soils.

Compliance with MTCA regulations required that the closure confirmation data set pass 3 conditions in order to achieve site closure:

- 1) On an analyte by analyte basis, the analyte concentration for no more than 10% of the closure samples can exceed the cleanup standard for that analyte;
- 2) No single sample concentration can be greater than 2X the cleanup standard for any particular analyte;
- 3) The 95% UCL for each analyte must be statistically shown to be less than the cleanup standard for that analyte. The UCL is determined as the mean of a lognormal distribution if appropriate, or is determined by another statistical measure as instructed by MTCA guidance. If a statistical 95% UCL is not calculable, the maximum value is used as the UCL value.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted. 05/07/2001

Abstract Title **The Trends Navigation Tool - a Pilot Project - Weaving a Web of Information, Goals and the Environment**

Type of Session. ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Curtis** First Name, Middle Initial **Cynthia**

Organization **Region 5, ARD**

Daytime Phone **312-353-6959**

Fax Number **312-353-5374**

E-Mail Address. **curtis.cynthia@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

In Region 5 there was a drive to answer some basic questions. What are the environmental issues we are facing here in our region?, What data do we have?, Who is involved? What tools do we have?, and ultimately, What is our tactic and goal regarding this issue? To answer these question in a way that could be dynamic, regularly updated and approachable from many perspectives; a website was born.

In using the power of a web design, a three-dimensional approach can be used to look at an issue from many angles at once. This project is in it's infancy. A pilot design called the Trends Navigation Tool ( TNT) was launched on March 23, 2001. Issues were selected for this pilot launch based on a series of focus groups held w/ technical experts and Region 5 management, and availability of experts to assist in researching the issue. Recommendations will be tracked in a separate accountability database connected w/ the GPRA goals. The issues in the pilot version include Acid Rain, Air Toxics, Childhood Lead Poisoning, Contaminated Sediments,

Genetically Modified Organisms, Mercury in Fish, Natural Ecosystem Loss, Nutrient Over enrichment, and Urban Sprawl.

To clarify how the TNT actually “works” - It is not a decision making tool that magically produces an answer. The process of answering the questions and filling in the blanks provides a forum for making those decisions. The ultimate product seen in the TNT is a reflection of that work. The key in generating a successful trends and decision making tool therefore is relatively simple: The skill of asking the right questions.

The challenge in the development of this tool is 2 fold:

- 1) to continue to hone the information in the site to what is most useful in order to plan our actions, hold accountability to these proposed steps, and link our activities to environmental trends.
- 2) develop the software /database capability to maximize the efficiency, minimize recreation of what is already out there.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **Mid-Atlantic Integrated Assessment - Lessons Learned**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **DeMoss** First Name, Middle Initial **Thomas B.**

Organization **EDS/MAIA**

Daytime Phone **410-305-2739**

Fax Number **410-305-3095**

E-Mail Address **demoss.tom@epa.gov**

Additional Author **Stanley Laskowski**

Organization **Region 3**

Additional Author. **Kent W. Thornton**

Organization **FTN Associates, LTD**

Additional Author **Eric S. Walback**

Organization **Mid-Atlantic Integrated Assessment  
Environmental Science Center**

Additional Author

Organization

Additional Author

Organization:

### **Abstract Outline:**

The U S EPA Office of Research and Development has partnered with EPA's Region 3 since the early 1990's to test, evaluate and demonstrate the applicability of sound science to Agency programs and policies. This partnership is designated as the Mid-Atlantic Integrated Assessment (MAIA) and covers all Region 3 states: Pennsylvania, Virginia, West Virginia, Maryland, Delaware and the District of Columbia, plus the parts of New York, New Jersey, and North Carolina in the respective Chesapeake Bay, Delaware Estuary, and Albermarle-Pamlico Sound watersheds.

The MAIA mission is to provide integrated scientific knowledge to support environmental decision-making in the Mid-Atlantic region to EPA's Region 3, and the states, counties, local municipalities, and the non-governmental organizations (NGO's) in the Region as well.

The goals to reach the mission were:

- Develop acceptable and valid environmental indicators for natural resource and human protection,
- Merge biological data with physical and chemical data into dynamic and useful assessments,
- Integrate socio-economic data into the environmental assessments;
- Make Region 3 the "best characterized" area for environmental conditions to date
- Use assessments to make management decisions and influence public perception and opinion.

- Foster integrated environmental management based upon relative risks

The overall assessment questions to be addressed were:

- What is current condition?
- Is it changing? What are trends?
- What is causing problems, if there are any?
- What can we do about it?
- Are we making a difference?

Some of the major reports either completed (\*), or soon to be completed, are

- Regional Land Use/Land Cover \*
- *An Ecological Assessment of the United States Mid-Atlantic Region, A Landscape Atlas \**
- *Condition of Mid-Atlantic Estuaries \**
- *Pesticides in Ground Water of the Mid-Atlantic Region \**
- *From the Mountains to the Sea, The State of Maryland's Freshwater Streams \**
- State of the Highlands' (Pennsylvania/ West Virginia/Virginia) Streams
- State of the Forests

Based upon this work to date, the Region 3/ORD partnership has found seven (7) key lessons and several strategic policy implications. The overall good news is that the environment is showing progress in physical and chemical parameters, but as EPA's goal is a safe and sustainable environment for humans and other living organism, we are not reaching it yet. In specific, MAIA found

- 1 Living organisms (Benthic, Fish, Trees, and Birds) are stressed and impaired, throughout the Region,
- 2 Biological condition, ecological condition and land use/land cover are all linked,
- 3 Biological indicators do integrate effects of chemistry, habitat, pathogens and other stressors,
- 4 Chemistry alone does not provide a complete picture of environmental condition,
- 5 Habitat loss and degradation is a major environmental stressor in the Region,
- 6 Forest fragmentation is wide-spread throughout the Region,
- 7 Non-indigenous invasive species are a major problem in the Mid-Atlantic

The MAIA program also felt that three (3) management insights flowed out of the work. The use of biological indicators as endpoints of interest highlighted that a media (air, water, pesticides, etc ) by media approach alone is not sufficient to protect and sustain living organisms, humans and other animals, and their habitats. A more integrated environmental management approach is needed to assess all stressors to the living organisms and develop a relative ranking of their importance. Second, a more coherent and efficient ecological engineering approach should be applied to a watershed to protect living organisms. Lastly, a better biological monitoring scheme needs to be used to report the progress of the ecological engineering efforts.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001  
Abstract Title            **Government Paperwork Elimination Act**

Type of Session        ☐ Presentation        ☐ Computer Session    ☐ Poster Session        ☒ Panel Discussion

[<br>]

Primary Author's        **Desai**        First Name, Middle Initial    **Shivani**  
Last Name

Organization            OIC/ISB

Daytime Phone        202-260-6122

Fax Number            202-260-8550

E-Mail Address        desai.shivani@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The Government Paperwork Elimination Act (GPEA) seeks to "preclude agencies or courts from systematically treating electronic documents and signatures less favorably than their paper counterparts," so that citizens can interact with the Federal government electronically. Therefore, GPEA requires all federal agencies to have an electronic means of reporting to government as an alternative to reporting on paper. The EPA had to submit its implementation plan to OMB by October 31, 2000 so that GPEA could take effect by October 2003.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            **04/29/2001**  
Abstract Title             **EPA's Collections: An Overview**

Type of Session:    ☐ Presentation    ☐ Computer Session    ☒ Poster Session    ☐ Panel Discussion

[<br>]

Primary Author's        **Downs**    First Name, Middle Initial   **Constance**  
Last Name  
Organization            **OEI/OIC/ISB**  
Daytime Phone          **(202) 260-2875**  
Fax Number              **(202) 401-1490**  
E-Mail Address          **downs.constance@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

As a regulatory Agency, EPA's mission entails the collection of information from the public, particularly regulated entities. The time, effort and cost to the public to respond to these requests for information has come under increased scrutiny in recent years. Driving this trend have been the passage of the Paperwork Reduction Act Amendments of 1995 and a heightened interest in reducing the impacts of these collections on the public, notably the business community. The first step in responding to this scrutiny has been to develop a better understanding the Agency's collections -- specifically, what drives our collections, what we collect, and from whom. Using Information Collection Request (ICR) data for active collections in FY 2000, the Agency's collections were analyzed to better understand the drivers which result in the bulk of our collections, the specific kinds of information collected, and from whom they are collected -- all from the standpoint of the time it takes the public provide this information. The resulting data provides a robust overview of EPA's collections from numerous perspectives.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **National Air Quality and Emission Trends Report, 1999**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Elkins** First Name, Middle Initial **Joe**

Organization **U.S. EPA's Office of Air Quality Planning and Standards**

Daytime Phone **919-541-5653**

Fax Number **919-541-3613**

E-Mail Address **elkins.joe@epa.gov**

Additional Author	James Hemby	Organization	U.S.EPA
Additional Author	Tesh Rao	Organization	U.S. EPA
Additional Author	David Mintz	Organization	U.S.EPA
Additional Author	Dr. Terence Fitz-Simons	Organization	U.S. EPA
Additional Author	Neil Frank, Alan Rush, Jim Szkman, Rhonda Thompson, Lee Tooley, Doug Solomon, Phil Lorang, Dr. Connie Oldham	Organization	U.S. EPA

### **Abstract Outline:**

The National Air Quality and Trends Emissions Report, 1999 is the twenty-seventh annual report documenting air pollution trends in the United States. This document highlights the Environmental Protection Agency's most recent assessment of the nation's air quality, focusing on the ten year period from 1990 to 1999. It features comprehensive information for the criteria pollutants. Discussions throughout the report are based on the principle that many of the programs designed to reduce ambient concentrations of the criteria pollutants also aid in reducing pollution that contributes to air toxics, visibility impairment, and acid rain. Likewise, requirements under the various air toxics, visibility, and acid rain programs can also help reduce emissions that contribute to ambient concentrations of the criteria pollutants.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Minimum Detection Limits - a Heretical Viewpoint**

Type of Session. ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name. **FitzSimons** First Name, Middle Initial **Terence**

Organization **OAQPS**

Daytime Phone (919) 541-0889

Fax Number (919) 541 - 3613

E-Mail Address **fitz-simons.terence@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

**Minimum Detection Limits - A heretical Viewpoint**

Measurement error is discussed in relationship to the definition of the Minimum Detection Limit (MDL). How the MDL is used and misused is presented along with how the MDL should be used. Arguments are given as to how data reported below the MDL should be handled. Maybe it's not what you think.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Bivariate Environmental Data**

Type of Session. ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Freeman** First Name, Middle Initial **Jade L.**

Organization' **Office of Science and Technology**

Daytime Phone' **202-260-1996**

Fax Number **202-260-7185**

E-Mail Address **lee-freeman.jade@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

Please provide comments or suggestions regarding the conference agenda or any special requirements:

Bivariate environmental data where marginal distributions are right-skewed with censoring on the left ( with detection limit ) are modeled. The mean vector and covariance matrix using small bivariate samples  $(x_i, y_i)$ ,  $i=1, 2, \dots, n$  are estimated where  $x_i$ ,  $y_i$ , or both may be missing after applying Box-Cox transformations. The choice of transformation can be based on the bivariate form of Kullback -Leibler information number. The missing values are estimated using EM algorithm under normality assumption. Random sample from bivariate normal copular with non-normal marginals are generated.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            **04/29/2001**

Abstract Title            **Cancer Mortality Maps & Graphs on the Web - More Than Just an Online Atlas**

Type of Session:        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Grauman**        First Name, Middle Initial **Dan J.**  
Last Name

Organization            **National Cancer Institute**

Daytime Phone          **301-496-8105**

Fax Number              **301-402-0081**

E-Mail Address          **dan\_grauman@nih.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

A Web site (<http://www.nci.nih.gov/atlasplus>) has been created to further extend the utility of the "Atlas of Cancer Mortality in the United States, 1950-94", published in December 1999. The Web site is not only an interactive version of the book, but also a resource that enables the user to create customizable maps by controlling certain parameters. The site is a popular source of information for researchers, public health officials, teachers, students, and private citizens. The Web site enables users to create multiple maps showing geographic patterns and time trends, as well as dynamic charts and graphs displaying cancer mortality rates. Text describing any given chart is simultaneously generated dynamically, thereby enabling the contents of the chart or graph to be "seen" by visually-challenged users. Links to a variety of national and international related Web sites are also provided.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time:  
Status.                      **New**

Date Submitted:            05/06/2001

Abstract Title:            **Data Comes Alive Through GIS!**

Type of Session:        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Hansen**        First Name, Middle Initial **Olof C.J.**  
Last Name:

Organization:            **Region 9**

Daytime Phone.        **415-744-2044**

Fax Number.            **415-744-1044**

E-Mail Address:        **hansen.olof@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author:	Organization.
Additional Author	Organization'
Additional Author	Organization

### **Abstract Outline:**

"GIS Targeting of Regulated Facilities in EJ Neighborhoods of Los Angeles County"

- innovative (using creative GIS neighborhood analysis technology as well as new approach of combining EJ with kid's health emphasis)
- cost/time efficient (saving \$ by combining fed/state/county/and local efforts and using data to improve enforcement targets)
- produced environmental results (more than doubled success rate of finding industries not complying with environmental regs)

This project tells a story of how data analysis tools (in particular, GIS analysis) can support our agency's mission to protect the environment and human health. The initiative focuses on the central part of Los Angeles. The neighborhoods of this part of L.A. are predominantly hispanic, and also high in numbers of people living below the poverty limit. The approach is also to focus on kid's health by locating industries close to schools.

The actual process is to locate waste handlers, look at their waste activities, investigate the toxicity of the waste, search for schools close by, add more factors, and target sites for inspections.

The initiative started with all of L.A. county, and only looked at the big potential polluting sites: Large Quantity Generators (LQGs: above 1 000 kg of hazardous waste per month) and Treatment Storage and Disposal facilities (TSDs: permitted waste managers). However, then we narrowed the area down to only the central part of L.A. with population as defined by the Regional Environmental Justice team and GIS census analysis (minority and economic data). We then performed a neighborhood analysis of locating sites close to schools, first at half a mile, then a quarter mile buffers.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001  
Abstract Title **EPA Data Standards**

Type of Session ☐ Presentation ☐ Computer Session ☐ Poster Session ☒ Panel Discussion

[<br>]

Primary Author's Last Name. **Hisel McCoy** First Name, Middle Initial **Sara**

Organization **OEI/OIC**

Daytime Phone **202/260-7937**

Fax Number

E-Mail Address **hisel-mccoy.sara@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

EPA's Data Standards effort is part of the Agency's overall information management strategy to improve the integration, reliability, longevity, and usefulness of the environmental data the Agency relies on to help direct its regulatory and policy decisions. The Agency has recently approved the last of an original group of six data standards and now must implement these standards in its various data systems. EPA's Data Standards Branch, within the Office of Information Collection, is tasked with providing assistance to EPA's program offices in understanding and conforming with the requirements of each standard.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **Spatial Modeling of Age, Period and Cohort Effects**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's Last Name    **Holford**     First Name, Middle Initial **Theodore T.**

Organization            Yale University

Daytime Phone          301-594-6572

Fax Number             301-480-2046

E-Mail Address          holfordt@mail.nih.gov

Additional Author	Organization
Additional Author	Organization
Additional Author.	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The standardized morbidity/mortality ratio (SMR) is often the summary outcome used in construction disease maps, and in analyzing temporal-spatial disease trends. This provides valid estimates of effect under fairly restrictive model assumptions, including the log-linear model for the effects of age and year of diagnosis (period). However, for many chronic diseases such as cancer, generational or birth cohort effects have been found to be more important than period when interpreting temporal trends. A conditional autoregressive (CAR) model that provides smoothed estimates of spatial effects for age, period and cohort will be presented. Estimable functions of the parameter estimates from this model can be obtained through the use of Markov Chain Monte Carlo (MCMC) methods. These can be displayed in a variety of ways to better understand the underlying processes that give rise to temporal-spatial trends in disease. This method will be illustrated by considering lung cancer mortality trends among white women in the U.S.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            **04/29/2001**

Abstract Title            **Regional Trends in Rural Sulfur Dioxide Concentrations over the Eastern United States**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's Last Name        **Holland**        First Name, Middle Initial **David**

Organization            **Office of Research and Development**

Daytime Phone        **919-541-3126**

Fax Number            **919-541-1138**

E-Mail Address        **holland.david@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

Emission reductions were mandated in the Clean Air Act Amendments of 1990 with the expectation that they would result in corresponding reductions in air pollution. The 1990 amendments include new requirements that appreciably reduced sulfur dioxide (SO<sub>2</sub>) emissions in two phases occurring around 1995 and 2000. The estimation of emission-related trends in SO<sub>2</sub> concentrations has been the subject of many investigations since the implementation of national monitoring networks in the late 1970's. Most of these studies focused on developing models either for site-specific trends or for trend in a summary statistic that represents a network-typical value. In recent years, the focus of environmental policy has shifted toward regional-scale strategies that require regional estimates of trend for both their development and subsequent evaluation. In an effort to provide meaningful regional trend information, we propose a two-stage modeling approach to estimate emission-related trends in rural airborne concentrations of SO<sub>2</sub> for 1990-1998. The first stage uses a linear additive model to estimate site-specific trend, and the second stage uses an extension of classical Kriging methodology to estimate regional trends and standard errors. Finally, Bayesian techniques are used to estimate standard errors to quantify the effect of ignoring the uncertainty of the spatial covariance parameters.



## The 2001 EPA Conference Abstract

Meeting  
Presentation Date.  
Presentation Time.  
Status.

New

Date Submitted. 05/06/2001

Abstract Title: **The National Environmental Information Exchange Network: State/Regional Issues**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Hufford** First Name, Middle Initial **Steve**

Organization: EPA Information Integration Team

Daytime Phone 202-260-9732

Fax Number 202-401-3642

E-Mail Address hufford.steve@epa.gov

Additional Author	Organization:
Additional Author	Organization:
Additional Author	Organization:
Additional Author	Organization:
Additional Author	Organization:

### **Abstract Outline:**

This presentation introduces the Exchange Network, describes current State and EPA efforts, and explains how the Network promotes sharing of well-documented information and data. The presentation focuses on EPA's yet-to-be-built system of access, which will complement EPA's Central Data Exchange. Finally, the presentation discusses how the Network concept would enable varied organizations to share statistics and their supporting datasets.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting.  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            **04/29/2001**

Abstract Title            **Training Environmental Statisticians Using Real Data**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Hunt**        First Name, Middle Initial **William F., Jr.**  
Last Name

Organization:            **North Carolina State University**

Daytime Phone          **919-515-1947**

Fax Number              **919-515-7591**

E-Mail Address          **whunt@stat.ncsu.edu**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

How could a win-win strategy be used to train young people in environmental statistics and at the same time analyze environmental data for Federal, State and local agencies, that have not been analyzed until now? This presentation will discuss two courses that I have developed to train undergraduate students in environmental statistics and the impact the courses have had. The courses are entitled, Environmental Statistics Practicum and Special Topics in Environmental Statistics. This training comes in support of a National Science Foundation VIGRE Grant, which is designed to train graduate and undergraduate students in four interdisciplinary areas: biomedical statistics, environmental statistics, industrial and technology statistics, and statistical genetics and bioinformatics. The objectives of my environmental statistics courses are: (1) to provide a consulting opportunity for the students with Federal, State or local agencies; (2) focus on the application of the student's technical skills to a real problem; (3) have the students gain consulting experience; and (4) develop their oral and written communication skills. The students learn how to prepare a final report, brief clients at the client's office, present poster papers at technical conferences and write papers for publication. Students have done work for six clients: (1) the Southern Oxidant Study at NCSU, (2) the U. S. Environmental Protection Agency's (USEPA) National Exposure Research Laboratory, (3) the USEPA's Office of Air Quality Planning and Standards, (4) the North Carolina Department of Environment and Natural Resources (NCDENR), (5) the Forsyth County Environmental Affairs Department, and (6) the U. S. Department of State. In addition to briefing their clients and providing the

client's with final reports they have presented papers at three professional meetings and two university sponsored undergraduate research symposia. The meetings they participated in are

- (1) the Southern Oxidant Study Data Analysis Workshop, Research Triangle Park, NC, March 9, 2000.
- (2) NCSU Undergraduate Research Symposium, McKimmon Center, Raleigh, NC, April 27, 2000,
- (3) EPA Technical Workshop on PM<sub>2.5</sub> Monitoring, Quality Assurance, and Data Analysis, Cary, NC, May 22-25, 2000;
- (4) Future Directions in Air Quality Research, Ecological, Atmospheric, Regulatory/Policy and Educational Issues, Research Triangle Park, NC February 12, 2001, and
- (5) NCSU Undergraduate Research Symposium, McKimmon Center, Raleigh, NC, April 19, 2001

After two years, four students have applied to graduate schools in statistics, one student is employed at the Research Triangle Institute as an environmental statistician and five students are currently employed part time at the USEPA as statisticians. In summary, these classes have created a win-win situation for the students, the clients and the university and provide an alternative way to complete environmental data analysis

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Comparison of Measurement Methods**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Kahn** First Name, Middle Initial **Henry D.**

Organization **Office of Water, Office of Science and Technology, Engineering and Analysis Division**

Daytime Phone **202-260-5408**

Fax Number **202-260-7185**

E-Mail Address **kahn.henry@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

This presentation will consider some basic concepts in the statistical analysis of measurement methods intended to measure the same thing. There are many situations in which the comparison of measurements is important. These include the development of new methods which are less expensive or more accurate or more precise or require less time and effort to implement. Analysis to demonstrate the effective equivalency of the methods will be discussed and an example using paired measurements on wastewater ph levels will be presented.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time:  
Status **New**

Date Submitted 04/29/2001

Abstract Title. **The Importance of Sample Design in Environmental Studies**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Kalton** First Name, Middle Initial **Graham**

Organization Westat

Daytime Phone 301-251-1500

Fax Number 301-294-2034

E-Mail Address **kaltong1@westat.com**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

Chlorophenoxy herbicides are widely used both in agriculture (cereal grain) and in non- agricultural settings like home lawns and parks. Studies on carcinogenicity of chlorophenoxy herbicides have been inconclusive. This ecological study investigates associations between cancer mortality in rural counties and wheat acreage, a surrogate for exposure to chlorophenoxy herbicides.

Most spring and durum wheat produced in the United States is grown in Minnesota, North Dakota, South Dakota, and Montana with over 90% of the acreage treated with chlorophenoxy herbicides. Age-standardized cancer mortality rates for 1980-89 were calculated by gender for agricultural counties with a mostly rural population.

Analyses showed an increase in mortality from cancer with increasing wheat acreage per county. Increased risk was observed for the following cancer sites among men: esophagus, stomach, rectum, pancreas, larynx, prostate, thyroid, bone, all cancers, and among women: oral cavity and tongue, esophagus, stomach, liver and gall bladder and bile ducts, pancreas, cervix, ovary, bladder and other urinary organs, all cancers. Increased mortality for rare cancers was observed for cancer of the nose and nasal cavities and eye in both men and women, and brain and leukemia in both boys and girls. These results suggest an association between cancer mortality and wheat acreage in agricultural, rural counties of these four states.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time:  
Status. **New**

Date Submitted 05/06/2001

Abstract Title **Window to My Environment: "A Window to Community-Based Environmental Informaion"**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Kunz** First Name, Middle Initial **Joseph**

Organization: **Region III Office of Environmental Data**

Daytime Phone: **215-814-2116**

Fax Number **215-814-5251**

E-Mail Address: **kunz.joseph@epa.gov**

Additional Author	Debra Villaria	Organization	Information Access Division, Office of Information Access, OEI
-------------------	----------------	--------------	--

Additional Author	Dave Wolf	Organization.	Information Access Division, Office of Information Access, OEI
-------------------	-----------	---------------	--

Additional Author:	Karen Klima	Organization	Assessment and Watershed Protection Division, Office of Wetlands, Oceans and Watersheds, OW
--------------------	-------------	--------------	---

Additional Author.		Organization:	
Additional Author:		Organization.	

### Abstract Outline:

Widow to My Environment is a prototype application that provides the public a portal for accessing the wealth of environmental information available over the Internet. The portal helps answer popular questions about a community's air, land and water resources as well as what is being done to protect the local environment. Window to My Environment uses state-of-the-art interactive maps to integrate local environmental information from a variety of Federal, State and local sources. The initial prototype focuses specifically on data and information for the Mid-Atlantic States (DE, DC, MD, PA, VA and WV).

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Trend Analysis of TRI On-site and Off-site Releases**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name Lal First Name, Middle Initial Rashmi

Organization OEI/OIAA/EAD

Daytime Phone 202-260-3007

Fax Number 202-401-1617

E-Mail Address Lal.Rashmi@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

Every year the Agency has published an annual TRI data release and conducted various trend analyses. At a basic level of analysis, the trend data shows a decline in the reported total on- and off-site releases during 1988-1998. We have conducted a detailed analysis of the TRI data to determine whether the declines are similar from year-to-year, and whether the different sectors show similar trends. We find that releases reached a plateau in 1994, and that releases exhibit important differences among manufacturing sectors.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001  
Abstract Title            **TRI (Toxics Release Inventory) Explorer**

Type of Session:        ☐ Presentation        ☒ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Lal**     First Name, Middle Initial **Rashmi**  
Last Name

Organization            **OEI/OIAA/EAD**

Daytime Phone          **202-260-3007**

Fax Number              **202-401-1617**

E-Mail Address         **lal.rashmi@epa.gov**

Additional Author        **Will Smith**

Organization            **OEI/OIAA/EAD**

Additional Author:

Organization

Additional Author:

Organization

Additional Author:

Organization

Additional Author:

Organization

### **Abstract Outline:**

Toxics Release Inventory (TRI) Explorer is a web based tool that enables TRI data users to compile their own reports on-line. Under the Emergency Planning and the Community Right-to-Know Act, EPA is committed to making TRI data easy to access. TRI Explorer was developed to support this goal. TRI Explorer allows users to generate their own reports on specific chemicals, and on chemical releases by industry sectors, by environmental media, by geographic area, and by individual facilities. With the help of the TRI Explorer, users can easily determine what toxic chemicals are present in their neighborhood, how the releases are changing over time, and how their own situation compares to other communities around the country. TRI Explorer provides data for all reporting years (since 1988) and the data are synchronized with the published Public Data Release documents.

The presentation will include a demonstration of TRI Explorer.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **Road densities contribution to declining Region 5 ecosystem health**

Type of Session        ☐ Presentation        ☐ Computer Session    ☒ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Lehrman**        First Name, Middle Initial **Lawrence**  
Last Name

Organization            Epa Region 5

Daytime Phone          (312) 886-0836

Fax Number             (312) 353-4342

E-Mail Address          lehrman.lawrence@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author.	Organization

### **Abstract Outline:**

The Region 5 Critical Ecosystem Team is developing a criteria approach to ecosystem protection that includes habitat and stressor data bases and information management tools. The stressor data base is to address cumulative impacts in order to achieve strategic habitat protection. Road density serves as a good index of human contact. Roads impact the connectivity of ecosystems and ecosystems fragmentation. This influences the dispersal of plants and animals. There is also a highly significant correlation between low road densities and healthy watersheds. The team is developing a coarse-scale indicator of relative road density. This indicator is being calculated for the extent of Region 5 using 100 kilometer grid squares using sums of road lengths by classification and road class multipliers.



## The 2001 EPA Conference Abstract

Meeting.  
Presentation Date  
Presentation Time  
Status                      New

Date Submitted.        05/06/2001

Abstract Title:

Type of Session:    ☐ Presentation    ☐ Computer Session    ☒ Poster Session    ☐ Panel Discussion

[<br>]

Primary Author's        Lee    First Name, Middle Initial James  
Last Name:

Organization:        OEI

Daytime Phone        202-885-1691

Fax Number:        202-885-2494

E-Mail Address.        jlee@american.edu

Additional Author.	Organization
Additional Author	Organization
Additional Author.	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

The poster session will give a tour of two web sites related to environmental issues.

#### 1        Environmetrics Web Site

This web site is currently posted on EPA's intranet system. The site is a collection of materials related to understanding and using statistics with respect to solving environmental issues or problems. The site includes lots of relevant articles that are broken down by types of media, geography and statistical technique. It also contains an events calendar concerning workshops or conference dealing with the subject.

#### 2        TED Web Site

The Trade Environment Database or TED is a collection of over 600 case studies that deal with trade and environment issues and other related topics. The site has a search engine that is coded from the case study. There are also related projects on the site that deal with environment and conflict and with distance learning through a project called the Global Classroom.

<http://www.american.edu/TED/ted.htm>

## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time:  
Status                      New

Date Submitted:            05/06/2001

Abstract Title.            **An Introduction to Statistical Data Mining**

Type of Session:        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's  
Last Name:                **Maitra**        First Name, Middle Initial **Ranjan**

Organization:            **University of Maryland**

Daytime Phone            **410-455-2436**

Fax Number:              **410-455-1066**

E-Mail Address:          **maitra@math.umbc.edu**

Additional Author	Organization.
Additional Author	Organization:
Additional Author	Organization:
Additional Author.	Organization
Additional Author.	Organization:

### **Abstract Outline:**

The topics of Data Mining and Knowledge Discovery in Databases has gained a lot of prominence with automated methods of data-collection in this information age. Broadly speaking, data mining is the extraction of useful information from large amounts of data, often collected without any pre-defined purpose in mind. Most of the present-day applications are commercial even though other areas exist. Some examples including discerning customer preferences based on transactions data for better store layout as well as targeted advertising, clustering software metrics databases to develop automated techniques for determining procedures that need to be upgraded together, deciding of related interest to a person who has entered the query "car" in a search engine as well as scheduling classes to minimize commuting students' discomfort. Algorithms used in data mining are both data- as well as computer-intensive. Because the underlying database is observational in nature, statistical techniques play a natural role. We will focus on basic needs of data mining, available statistical methodology as well as areas requiring further attention. Applications will be highlighted throughout.

The basic outline is as follows:

Why data mining, automated collection of data, data warehousing, examples and applications.

Market-Basket Analysis, Link Analysis and Graphical Representations.

Classification and Clustering Artificial Neural Networks, Information Retrieval, Online Automated Processing

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted **04/29/2001**

Abstract Title **Outcomes of Insect Resistance Management for Bt Crops**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Matten** First Name, Middle Initial **Sharlene R.**

Organization **Office of oPesticide Programs, Biopesticides and Pollution Prevention Division**

Daytime Phone **703-605-0514**

Fax Number **703-308-7026**

E-Mail Address **matten.sharlene@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

This presentation will provide an overview of how the U.S. Environmental Protection Agency (EPA) regulates insect resistance management (IRM) for *Bacillus thuringiensis* (Bt) plant-pesticides produced in transgenic corn, cotton, and potatoes. This is done by mandating specific requirements on the registration of these pesticidal substances: research data, refuge requirements, resistance monitoring, remedial action plan, grower education, annual sales reporting. Resistance models assist the Agency in its decision-making regarding the validity and effectiveness of various insect resistance management options. Annual resistance monitoring provides the Agency with some mechanism of determining whether IRM plans are working.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **Probabilistic Benefit/Cost Analysis for the Long-Term Enhanced Surface Water Treatment Rule**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Messner** First Name, Middle Initial **Michael J.**

Organization **EPA OGWDW**

Daytime Phone **202-260-8107**

Fax Number **202-401-6135**

E-Mail Address **messner.michael@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The "LT2" Rule's costs and benefits depend on microbial occurrence, infectivity, treatment effectiveness, source water monitoring, technology selection, and other factors. About each factor, we have limited data. In this presentation, we show how limited data generate uncertain information that is combined to produce national estimates of Cryptosporidiosis risk and its variability (location to location). Uncertainty and variability are managed and monitored separately. Uncertain factors are ranked in order of their contribution to the uncertainty in national net benefit, suggesting future research priorities. Finally, we estimate the probability of a positive national net benefit.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001  
Abstract Title **Exploring Data Representativeness**

Type of Session: ☐ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Michael** First Name, Middle Initial **Daniel**  
Organization **Neptune & Company**  
Daytime Phone **505-662-0730**  
Fax Number **505-662-0500**  
E-Mail Address **dmichael@neptuneandco.com**

Additional Author	Kelly Black	Organization
Additional Author		Organization
Additional Author		Organization
Additional Author		Organization
Additional Author		Organization

### **Abstract Outline:**

**THIS REPLACES ALL PREVIOUS ABSTRACTS FOR JOHN WARREN**

It is, perhaps, axiomatic that quality decisions come from quality data, but ensuring quality data is quite difficult. Key to a well-planned data collection is the concept of representativeness. This presentation discusses the term as used in the Agency's Quality System and makes a link to a probabilistic statistical approach and a physical model hypothesis testing approach. Representativeness will be discussed at the micro (within sampling unit) scale, where we consider issues raised by Gy's theory of sampling, and at the macro (between sampling units) scale where traditional statistical design tools are used.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **USDA's Continuing Survey of Food Intake by Individuals(CSFI): its use by EPA's Office of Pesticide Programs**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name' **Miller** First Name, Middle Initial **David J.**

Organization **OPPTS/CPP**

Daytime Phone **703-305-5352**

Fax Number **703-305-5147**

E-Mail Address **miller.davidj@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

EPA's Office of Pesticide Programs makes extensive use of USDA's Continuing Survey of Food Intake by Individuals (CSFII) in conducting its dietary exposure and risk assessments. This is a survey in which food intake by individuals residing in households is surveyed by USDA using 2- or 3-day recall and/or in-person interview techniques. The most recent survey information (CSFII 1994-96/98) increases considerably the number of dietary intakes available for children compared to the CSFII 1989-91 data which OPP is currently using. For example, the newest CSFII survey increases by 5-fold (to almost 3000) the number of reported intakes for infants and 4- fold (to almost 13,000) the number of intakes for children 1-5. In addition, previously-proprietary recipe translations which convert foods from an "as-eaten" or "as-reported" basis to a commodity basis (on which OPP regulatory and USDA/FDA monitoring programs are based) have been developed through a cooperative effort between USDA and EPA and are now publically available on CD-ROM. OPP intends on incorporating both the new CSFII data and the new recipe translations in its dietary risk assessments by the first quarter of Fiscal Year 2002. Prior to incorporating this information into its routine dietary assessment procedures, an extensive review and evaluation of the reported intake data (statistical and otherwise) will take place to ensure compatibility and consistency with the results of its previous dietary assessments as well as with OPP's "Threshold of Regulatory Concern" (aka 99.9 Percentile) policy. This presentation will provide some background behind these analyses and the preliminary findings which have been generated.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **Partial Least Square Analyses for Association of Landscape Metrics with Water Biological and Chemical Properties in the Savannah River Basin**

Type of Session: ☐ Presentation ☐ Computer Session ☒ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Nash** First Name, Middle Initial **Maliha S.**

Organization. US EPA, ORD, NERL, ESD, LEB

Daytime Phone (702)798-2201

Fax Number (702)798-2692

E-Mail Address nash.maliha@epa.gov

Additional Author Deborah J Chaloud

Additional Author

Additional Author

Additional Author

Additional Author

Organization: US EPA, ORD, NERL, ESD, LEB

Organization

Organization

Organization

Organization

### **Abstract Outline:**

Surface water quality is related to conditions in the surrounding geophysical environment, including soils, landcover, and anthropogenic activities. A number of statistical methods may be used to analyze and explore relationships among variables. Single-, multiple- and multivariate regression analyses have been used to relate water nutrient concentrations to selected landscape metrics. Partial Least Square (PLS) is a multivariate analysis used to explore relations between two data sets and predict variability for each data set. PLS is a predictive model that can be used for prediction of dependent variables in new locations when the independent variables are measured and especially if they are highly correlated.

In this study, three distinct data sets were used: water chemistry (Chem) from point sites, water biology (Bio) from stream reaches centered around the point sites, and landscape metrics (LS) generated for the drainage areas to the point sites. The landscape-biota model indicated three major contributing variables: the LS variable Slope greater than 3 percent (Slope3), the Bio

variable EPT (an indicator of three microinvertebrate genera), and the Bio variable Mi\_richness (an index of microinvertebrate species richness). Within this model, the LS variable percent of erodible soil was the second highest LS contributor, with a negative relationship to the Bio variables.

The analysis indicated increased slope (indicating complex topography, generally occurring in the mountainous areas of the Savannah River Basin) is associated with increased microinvertebrate quality, while the percentage of watershed with highly erodible soils is associated with declines in aquatic biota quality.

Key Word: PLS, Landscape metrics, water quality, microinvertebrate, Savannah River Basin.

Notice: The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), prepared this abstract for a proposed oral presentation. It does not necessarily reflect the views of the EPA or ORD.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status: **New**

Date Submitted 04/29/2001

Abstract Title **ENVIROSNAX - Integrating Secondary Data to Enhance the Effectiveness of Environmental Programs**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Paiste** First Name, Middle Initial **Richard**

Organization **EPA Region III Office of Environmental Data**

Daytime Phone **215 814-5739**

Fax Number **215 814-5718**

E-Mail Address **paiste.richard@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

This presentation will highlight the use of secondary data in the EPA Region III Office of Environmental Data (OED) to develop "EnviroSnax": brief, informational graphics (1 to 3 pages) which integrate data across environmental programs and media. The goal of EnviroSnax is to provide a clear, concise message concerning a significant environmental issue which will lead to greater awareness of the nature of the issue and, potentially, to targeted changes in environmental program activities. This expanded awareness includes greater clarity concerning the magnitude of impacts, effects of multi-media factors, geographic locations of problems/sites/facilities and location and impact of program activities. Data sources include EPA's Toxics Release Inventory (TRI), 305(b) Water Quality Assessments, Permit Compliance System (PCS), Safe Drinking Water Information System (SDWIS), and data from other federal agencies such as the U.S. Geological Survey and the U.S. Census Bureau. Most integration applications are based on a Geographic Information System (GIS) map as the geographic center for integration.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time.  
Status **New**

Date Submitted **05/08/2001**  
Abstract Title **Futures Research**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's **Pascual** First Name, Middle Initial **Pasky**  
Last Name

Organization **OSP/ORD**

Daytime Phone **202-564-2259**

Fax Number

E-Mail Address **pascual.pasky@epamail.epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

As articulated in EPA's Strategic Plan, one of EPA's goals is to provide quality environmental information to inform decision making. A key element of this goal is to provide access to data about chemical releases, environmental conditions and trends, and assorted health conditions. What information is necessary to improve decision making about environmental issues that we may face 10-20 years hence? What steps do we take to better anticipate what Ecologist C.S. Holling refers to as "environmental surprise"? The Office of Research and Development is establishing a program to improve EPA's ability to anticipate surprise. The program design calls for the participation of the public and outside experts in the collection, discussion, and dissemination of information that may bear on the long-term future of environmental protection.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Multiscale Advanced Raster Map Analysis for Sustainable Environment and Development**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Patil** First Name, Middle Initial **G. P.**

Organization **Pennsylvania State University**

Daytime Phone **814-865-9442**

Fax Number **814-864-1278**

E-Mail Address **gpp@stat.psu.edu**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The President's Committee on Environmental and Natural Resources (CENR, 1997) has indicated that geospatial and remote sensing information has been a vastly under-utilized technological resource. Information technology for space imaging and mapping is now a challenge and opportunity for sustainable environment and development. Geospatial information technology is increasingly becoming the driving force for decision making across the local to regional to global continuum.

Consider an imminent 21st Century scenario: What message does a remote sensing-derived landcover landuse map have about the large landscape it represents? And at what scale and at what level of detail?...Does the spatial pattern of the map reveal any societal, ecological, environmental condition of the landscape? And therefore can it be an indicator of change?...How do you automate the assessment of the spatial structure and behavior of change to

discover critical areas, hot spots, and their corridors?...Is the map accurate? How accurate is it? How do you assess the accuracy of the map? Of the change map over time for change detection? What are the implications of the kind and amount of change and accuracy on what matters, whether climate change, carbon emission, water resources, urban sprawl, biodiversity, indicator species, or early warning? And with what confidence, even with a single map/change-map?...The proposed presentation will discuss available answers to these questions that involve multicategorical raster maps based on remote sensing and other geospatial data, with applications to sustainable environment and development at watershed-based landscape scales.

Landscape pattern has become a topic of growing scientific attention, but most of the work to date has been of a descriptive character. The proposed presentation will provide a model-based inferential capability for landscape pattern comparison and analysis. It will provide information technology based decision science support for informed choices on geospatial resource issues. The proposed presentation will provide a welcome innovation to model, simulate, compare, and analyze categorical raster data, particularly since variogram-based geostatistics falls short because of the qualitative nature of the thematic raster map, and since Gibbs random fields-based MCMC-type methods fall short because of the multimillion pixel size of landscape data. The presentation will provide the much needed initial methodological toolbox, computational toolkit, and visualization facility to automate the analysis of thematic raster maps of large size with objectivity and statistical inferential capability.

The concepts, issues, methods, techniques, tools, and softwares involved will be presented and discussed. Now they carry names, such as multiscale landscape fragmentation profiles, conditional entropy profiles, echelon analysis for critical areas and corridors, pattern-based compression and segmentation, map and change map accuracy assessment and detection, etc.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **A Mathematician Reads the Newspaper**

Type of Session        ☒ Presentation      ☐ Computer Session   ☐ Poster Session    ☐ Panel Discussion

[<br>]

Primary Author's        **Paulos**      First Name, Middle Initial **John**  
Last Name

Organization            Temple University

Daytime Phone          215-204-5003

Fax Number

E-Mail Address          paulos@euclid.math.temple.edu

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The talk will be based on my book *A Mathematician Reads the Newspaper* and, to an extent, on my monthly *Who's Counting* column for ABCNews.com.

The book - and the talk based on it - is structured like the morning paper. Investigating the mathematical angles of stories in the news from the front section through to the sports pages, it offers novel perspectives, questions, and ideas for coffee-drinkers, strap-hangers, policy-makers, gossip-mongers, bargain-hunters, trend-setters, and others who can't get along without their daily paper. Often the issues involved may not seem on the surface to involve mathematics at all, but such "number stories" complement, deepen, and sometimes undermine "people stories."

The notions of probability and randomness can enhance articles on crime, health risks, or other societal obsessions. Logic and self-reference may help to clarify the hazards of

celebrity, spin-doctoring, and media coverage of itself. Business finance, the multiplication principle, and even simple arithmetic point up consumer fallacies, electoral tricks, and sports myths. Chaos and non-linear dynamics suggest how difficult and frequently worthless economic and environmental prediction is. And mathematically pertinent notions from philosophy and psychology provide perspective on a variety of public issues.

The approach provides a revealing, albeit oblique slant on the traditional Who, What, Where, When, Why, and How of the journalist's craft.



## The 2001 EPA Conference Abstract

Meeting

Presentation Date

Presentation Time

Status

New

Date Submitted: 05/06/2001

Abstract Title: Fish Advisories

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: Pendergast First Name, Middle Initial James

Organization: Office of Water, Standards and Health Protection Division

Daytime Phone 202-260-3212

Fax Number 202-260-9830

E-Mail Address: pendergast.jim@epa.gov

Additional Author: Organization

Additional Author: Organization.

Additional Author: Organization.

Additional Author: Organization

Additional Author: Organization

### Abstract Outline:

States, territories, and Native American tribes have the primary responsibility for protecting residents from the health risks of eating contaminated fish and wildlife. If high concentrations of chemicals, such as mercury or PCBs, are found in local fish and wildlife, then a state, territory, or tribe may issue a consumption advisory or either the general population, or for a sensitive subpopulation. EPA participates in this process in three ways: by facilitating and encouraging the collection of fish tissue information that serves as the basis for issuing an advisory, by encouraging the use of a risk-based approach for determining whether an advisory is necessary, and by collecting and disseminating the information on a Web site at [www.epa.gov/waterscience/fish](http://www.epa.gov/waterscience/fish).

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 05/07/2001

Abstract Title **Delaware's Integrated Environmental Information System**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Raman** First Name, Middle Initial **N.V.**

Organization **Delaware Department of Natural Resources**

Daytime Phone **302-739-2060**

Fax Number **302-739-6242**

E-Mail Address **nraman@state.de.us**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization.
Additional Author	Organization

### Abstract Outline:

Delaware's Environmental Information System (EIS) is a database on environmental conditions in Delaware. It brings all the environmental data within DNREC into one place where it is easily accessible for everyone. Anyone with access to the Internet can view the system from any computer in the world.

The system allows users to easily answer questions such as

- What environmental permits are held by an industrial facility?
- Has DNREC conducted any microorganism surveys on my favorite stream?
- Are there any environmental concerns with a piece of property being considered for acquisition for a park expansion?
- Where are the potential sources of contamination in my watershed?
- Have there been any violations of any permits at a facility?
- Where are surface water monitoring points on a stream? What are the results of that monitoring?
- Where has DNREC collected sediment samples that have been analyzed for PCBs?

The EIS will provide information on a form or on a map. Once the desired information is found, the user will have the option to view standard reports and maps, create their own custom reports or maps, or download the information for use with their own software.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **Use of the Contaminant Exposure and Effects -- Terrestrial Vertebrates Database to Rank Ecotoxicological Data Gaps along the Atlantic Coast**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name' **Rattner** First Name, Middle Initial **Barnett A.**

Organization Patuxent Wildlife Research Center, U.S. Geological Survey

Daytime Phone 301-497-5671

Fax Number 301-497-5675

E-Mail Address Barnett\_Rattner@USGS.gov

Additional Author.	Johathan B. Cohen	Organization	Patuxent Wildlife Research Center, U.S. Geological Survey
--------------------	-------------------	--------------	--

Additional Author	Nancy H. Golden	Organization	Department of Animal and Avian Sciences, University of Maryland, College Park
-------------------	-----------------	--------------	---

Additional Author	Elise A. Larsen	Organization'	Patuxent Wildlife Research Center, U.S. Geological Survey
-------------------	-----------------	---------------	--

Additional Author		Organization	
Additional Author		Organization'	

### **Abstract Outline:**

In order to examine the condition of biota in coastal estuaries, a "Contaminant Exposure and Effects--Terrestrial Vertebrates" database (CEE-TV) has been compiled through computerized search of published literature, review of existing databases, and solicitation of unpublished reports. Summary information has been entered into the database, including species, collection date, site coordinates, estuary name, hydrologic unit catalogue code, sample matrix, contaminant concentrations, biomarker and bioindicator responses, and reference source, utilizing a 100-field character and numeric format. Currently, the CEE-TV database contains over 6000

data records for free-ranging amphibians, reptiles, birds, and mammals residing in marine and estuarine habitat and drainages along the Atlantic and Gulf Coasts. Over 250 vertebrate species and >150,000 individuals are represented in the database, with information on birds making up the vast majority (83%) of records, and only a modicum of data on amphibians (<0.1%). Of the >75,000 chemical compounds in commerce, only 150 commonly measured environmental contaminants were quantified in tissues of terrestrial vertebrates. The CEE-TV database, containing information on the Atlantic and Gulf Coasts, may be accessed at [www.pwrc.usgs.gov/ceetv/](http://www.pwrc.usgs.gov/ceetv/), with work currently underway to expand to the Pacific Coast. We recently developed an algorithm to rank the relative data needs of watersheds, incorporating the quantity of CEE-TV data within watersheds, information on water quality and vulnerability to pollution, and data on federal trust properties, Superfund sites, and endangered species. Critical data gaps were identified for 48 of 278 watersheds, 23 of 90 National Wildlife Refuges, and 15 of 74 National Parks along the Atlantic coast. Concentrations of DDE and PCBs in bird eggs were found to increase with decreasing water quality, indicating that organochlorine residues in eggs are potentially useful for evaluating habitat quality. In addition, the CEE-TV database has a number of other applications including reducing uncertainty about contaminant risk, identifying areas for mitigation, restoration or special management, and ranking ecological conditions of estuaries.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 04/29/2001

Abstract Title **The Wetlands Change Project: A New Way to Get Results**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Roberts** First Name, Middle Initial **Cary**

Organization **OEI/OIAA/EAD**

Daytime Phone **202-260-2751**

Fax Number **202-401-1617**

E-Mail Address **roberts.cary@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

With the emergence of high quality satellite imagery, we are now able to view a staggering amount of data at precise levels of detail. We can see landscape changes using aerial photography whereas before we could only conjecture. Currently, we are examining satellite data for indications of changes in wetlands. Between 1986 and 1997, a net of 644,000 acres of wetlands was lost in the conterminous 48 United States with an estimated annual wetland loss rate of 58,500 acres. We may now use satellite images to help us understand patterns in wetland losses and help spot illegal conversions of wetlands.

The Wetlands Change Project is a pilot project to evaluate and refine a faster, less expensive technique for accurately identifying changes in wetlands. Changes in wetlands such as loss, conversion, and fragmentation are very important indicators of wetland status and functional health. Because of the difficulties in creating and maintaining large-scale wetlands inventories, we have sought an alternative way to assess wetlands changes using NWI (National Wetlands Inventory) data in combination with commercially available satellite imagery. The technique is called cross correlation, whereby computerized data and large-scale maps from two time periods are correlated and statistically analyzed to identify changes in landcover. Wetlands change detection maps may aid in community planning, enforcement, regulatory action, education and information on program performance results.



## The 2001 EPA Conference Abstract

Meeting

Presentation Date:

Presentation Time:

Status: New

Date Submitted 05/06/2001

Abstract Title: Emerging Issues of Data Quality

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: Sacks First Name, Middle Initial Jerome

Organization: NISS

Daytime Phone 919-685-9300

Fax Number 919-685-9310

E-Mail Address sacks@niss.org

Additional Author: Alan Karr

Organization: NISS

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

### Abstract Outline:

: The increasing size and complexity of environmental and other databases are challenges for statistics, computer science and information technology to provide methods and strategies that improve and assure the quality of vital data sets. We will focus on key components of the overall problem:

- (1) Data quality as analogous to product quality; Total Data Quality Management
- (2) Anomaly detection in complex high-dimensional data
- (3) Impact of quality on uses of the data

The TRI database will be used for examples.



## The 2001 EPA Conference Abstract

Meeting.

Presentation Date:

Presentation Time.

Status: **New**

Date Submitted: 05/09/2001

Abstract Title: **Delaware's Integrated Environmental Information System**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Saleem** First Name, Middle Initial **Zubair A.**

Organization: **Office of Solid Waste**

Daytime Phone: **703-308-0467**

Fax Number:

E-Mail Address: **saleem.zubair@epa.gov**

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

### Abstract Outline:

Delaware's Environmental Information System (EIS) is a database on environmental conditions in Delaware. It brings all the environmental data within DNREC into one place where it is easily accessible for everyone. Anyone with access to the Internet can view the system from any computer in the world.

The system allows users to easily answer questions such as:

- What environmental permits are held by an industrial facility?
- Has DNREC conducted any microorganism surveys on my favorite stream?
- Are there any environmental concerns with property being considered for acquisition for park expansion?
- Where are the potential sources of contamination in my watershed?
- Have there been any violations of any permits at a facility?
- Where are surface water monitoring points on a stream? What are the results of that monitoring?
- Where has DNREC collected sediment samples that have been analyzed for PCBs?

The EIS will provide information on a form or on a map. Once the desired information is found, the user will have the option to view standard reports and maps, create their own custom reports or maps, or download the information for use with their own software



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date  
Presentation Time:  
Status **New**

Date Submitted 05/06/2001

Abstract Title: **Developments in the Modeling of the Nonstationary Spatial Covariance Structure of Environmental Processes**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Sampson** First Name, Middle Initial **Paul**

Organization: **NRCSE and Statistics, University of Washington**

Daytime Phone.

Fax Number

E-Mail Address **pds@stat.washington.edu**

Additional Author:	Peter Guttorp	Organization	NRCSE and Statistics, University of Washington
--------------------	---------------	--------------	--

Additional Author	Doris Damian	Organization	NRCSE and Statistics, University of Washington
-------------------	--------------	--------------	--

Additional Author		Organization	
Additional Author.		Organization	
Additional Author.		Organization	

### **Abstract Outline:**

The fundamental nonstationarity of the spatial covariance structure of spatio-temporal environmental processes was largely ignored prior to the decade of the 1990's, presumably because of the lack of statistical models and methodologies. In the late 1980's and early 1990's this problem began to receive attention with the introduction of the spatial deformation modeling approach of Sampson and Guttorp. During the 1990's a number of other researchers began to study this approach and also EOF and "moving window" methodologies. The new millennium is seeing a wave of publications introducing new methods, including process-convolution modeling with basis functions, classes of dynamic space-time models, new moving window approaches for spatially varying locally isotropic correlation structure, multi-resolution models, specific parametric models associated with point influences, and new developments in the spatial deformation modeling approach including simulated annealing and Bayesian modeling and estimation approaches. We will review the developments in this field of research and comment on the relationships and differences among the various methodologies from the perspective of our own recent work on Bayesian estimation of the spatial deformation model.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date.  
Presentation Time  
Status

**New**

Date Submitted. 04/29/2001

Abstract Title **Methodologies for Valuing Effects**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Sargent** First Name, Middle Initial **Keith**

Organization **OPEI-NCEE**

Daytime Phone 202-260-2231

Fax Number 202-260-2685

E-Mail Address **sargent.keith@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

This paper presents a meta-analysis of various methods used for valuing ecological effects and environmental goods. Starting with EPA's new tiered process for conducting ecological risk assessments for pesticides, this study first examines how different ways of reporting risk, mortality, and environmental damage affect the estimates of the value of changes in species, biodiversity, and environmental quality. Differences in how results are reported in the scientific literature, communicated to the public, and used in policy making are also addressed. Results from the environmental economics literature are used, including both hypothetical and indirect methods such as Contingent Valuation and Travel Cost Models. The limitations of these current valuation models when used for valuing flora, fauna, and biodiversity are then explored with significant differences among species valuation noted. Cost, reliability, validity, and sensitivity of the models are also compared.



## The 2001 EPA Conference Abstract

Meeting  
Presentation Date.  
Presentation Time.  
Status.                      New

Date Submitted            05/06/2001

Abstract Title:            **Environmental Exposure measures from the national Health and Nutrition Examination Survey**

Type of Session:        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Schober**        First Name, Middle Initial **Susan**  
Last Name:

Organization            **National Center for Health Statistics**

Daytime Phone          **301-458-4484**

Fax Number             **301-458-4028**

E-Mail Address         **SSchober@cdc.gov**

Additional Author.	Organization:
Additional Author:	Organization:
Additional Author:	Organization:
Additional Author:	Organization:
Additional Author:	Organization:

### **Abstract Outline:**

The National Health and Nutrition Examination Surveys (NHANES) provide a mechanism for describing the prevalence and magnitude of environmental exposures in the U.S. population through measurements of toxicants in biological specimens and other measures. Environmental toxicant measures from past NHANES have provided key data for environmental policy development and exposure research. For example, data on blood lead levels from the second NHANES (1976-1980) were instrumental in eliminating lead from gasoline and solder in food and soft drink cans.

Measures of environmental exposures have been greatly expanded in the current survey. Blood and urine specimens that are routinely collected from survey participants offer a rich resource for measurement of toxicants and/or metabolites. These specimens are being utilized to measure lead, cotinine, persistent pesticides, dioxins, furans, PCBs, non-persistent pesticides, polycyclic aromatic hydrocarbons, phthalates, and heavy metals. In addition, the survey includes the following environmental exposure components: 1) a comprehensive assessment of exposure to volatile organic compounds through use of personal exposure badges and measures in blood and home tap water samples; 2)

measure of mercury levels in hair samples, as well as in blood and urine specimens; and 3) an assessment of lead in dust samples obtained from homes with young children

Measures of exposure from the 1999 NHANES have been published in the National Report on Human Exposure to Environmental Chemicals, a new report from the Centers for Disease Control and Prevention that will provide an ongoing assessment of the U.S. population's environmental exposure. These results will be discussed in the presentation.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status:

**New**

Date Submitted 04/29/2001

Abstract Title **Arsenic Occurrence in Public Drinking Water Supplies**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Schulman** First Name, Middle Initial **Andrew**

Organization **EPA**

Daytime Phone **202 260 4197**

Fax Number

E-Mail Address **schulman.andrew@epa.gov**

Additional Author **Jennifer Wu** Organization

Additional Author **Ben Smith** Organization

Additional Author Organization

Additional Author Organization

Additional Author Organization

### **Abstract Outline:**

- **Arsenic Occurrence in Public Drinking Water Supplies.** Using data from 25 States, EPA has estimated the distribution of arsenic in drinking water supplies in the U.S. Major issues in forming the estimate included estimation of system means from censored data; identification and resolution of data quality problems; stratification by system size, system type, and region; and estimating a national distribution from only half of the States.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title.            **Estimation of Odor Detection Thresholds for MTBE in Drinking Water**

Type of Session          ☒ Presentation          ☐ Computer Session   ☐ Poster Session      ☐ Panel Discussion

[<br>]

Primary Author's        **Schulman**      First Name, Middle Initial **Andrew**  
Last Name

Organization            EPA

Daytime Phone          202 260 4197

Fax Number

E-Mail Address          schulman.andrew@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

- Estimation of Odor Detection Thresholds for MTBE in Drinking Water. Several previous studies have tried to estimate odor thresholds for MTBE in drinking water, but all of these studies suffered from methodological problems, including small or biased panels and incorrect statistical analysis. There is also widespread confusion in the literature over the definition of an odor threshold. EPA has proposed a precise definition of an odor threshold; evaluated several different estimators of the thresholds; and applied the results to the largest and best of the existing MTBE odor data sets, in order to estimate odor detection thresholds for MTBE in drinking water.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date  
Presentation Time.  
Status: **New**

Date Submitted: 05/06/2001  
Abstract Title: **Data From EPA's Ultraviolet (UV) Monitoring Network**

Type of Session: ☐ Presentation ☐ Computer Session ☒ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Shreffler** First Name, Middle Initial **Jack**

Organization: **National Exposure Research Lab, MD-84**

Daytime Phone: **919-541-2194**

Fax Number: **919-541-4787**

E-Mail Address: **shreffler.jack@epa.gov**

Additional Author:	Organization:
Additional Author:	Organization:
Additional Author:	Organization:
Additional Author:	Organization:
Additional Author:	Organization:

### Abstract Outline:

The U.S. Environmental Protection Agency, in cooperation with the National Park Service, has deployed 21 Brewer spectrophotometers in a national network for monitoring UV radiation from the sun. Seven of the Brewers are in urban areas, and fourteen are in National Parks. The Brewer measures UV spectral irradiance (direct and indirect) from about 298 nm to 363 nm in 0.5 nm steps. Working on a fixed schedule based primarily on solar zenith angle, the Brewer completes a UV scan in about 6 minutes and takes about 30 scans on a typical summer day. Data are recorded, downloaded daily by the network contractor, the National UV Monitoring Center (NUVMC) at the University of Georgia, and forwarded to the EPA web site ([www.epa.gov/uvnet](http://www.epa.gov/uvnet)) where files are accessible to the public. Calibrated data are available from the beginning of 1996.

Rather simple filtering procedures can be used to eliminate questionable data. Correction of the response function for temporal drift results in data in good agreement with output of a simple

model (TUV). This paper illustrates the data adjustment and some results from the sites at RTP and Albuquerque, the latter having summer Diffey-weighted UV maxima at least 20% higher than those at RTP due to differences in altitude, ozone column, and aerosols.

Periodic calibration of the Brewers for UV is extremely important. The NUVMC targets on-site calibrations once per year using a portable device based on a design by NIST. The calibration is accomplished by use of 1000W lamps traceable to NIST standards and provides a wavelength-dependent relationship (response function) between irradiance and the Brewer output signal. Currently, archived data are being further corrected and refined for Brewer temperature dependency and cosine response.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001  
Abstract Title             **Meta Analysis**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Sinha**     First Name, Middle Initial **Bimal**  
Last Name

Organization            **OEI/OIAA/EAD**

Daytime Phone         **202-260-5714**

Fax Number

E-Mail Address         **sinha@umbc.edu**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

Meta-Analysis deals with applying statistical procedures in order to combine data or information from different independent sources all of which are targeted at a common goal. Plenty of applications of Meta-Analysis in various disciplines abound. In this training session, I will provide some basic results of Meta-analysis. The following topics will be covered:

- Effect size: its estimation and inference
- Combining tests based on P-values
- Combining estimates of effect sizes
- Vote-counting procedures
- Publication bias
- Combination of polls

Primary references: Statistical Methods for Meta-Analysis by  
Hedges/Olkin, 1985

The Handbook of Research Synthesis, edited by  
Cooper/Hedges, 1994

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001  
Abstract Title            **Data Mining TRI Data -- Some Results**

Type of Session:        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Smith**        First Name, Middle Initial **William P.**  
Last Name

Organization            EPA

Daytime Phone          202-260-2697

Fax Number             202-401-2728

E-Mail Address          smith.will@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

**Data Mining TRI Data -- Some Results**

Data Mining, often called KDD for Knowledge Discovery in Databases, is applied to the TRI database. A Market Basket Analysis of TRI Chemicals is done to investigate chemical reporting patterns for facilities. A discussion is presented for finding the "best," "optimal," or "most interesting" rule(s) according to a variety of metrics including confidence, support, chi-squared value, and dependency. This analysis uses an efficient algorithm for Associative Rules to mine all rules that are best according to any of these criteria. The rules generated can be used to develop Facility reporting profiles that may be useful for data quality and enforcement. Plans for future Data Mining of TRI data using Decision Trees, Classification methods, and Clustering are discussed.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time:  
Status: **New**

Date Submitted: 05/09/2001

Abstract Title: **Monitoring Our Environmental Health: Issues, Challenges and Opportunities**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Sondik** First Name, Middle Initial **Edward J**

Organization: **National Center for Health Statistics**

Daytime Phone: **301-458-4500**

Fax Number:

E-Mail Address: **elf2@cdc.gov**

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

Additional Author:

Organization:

### **Abstract Outline:**

Opportunities to monitor important indicators of environmental health exist in many of the current national and state health data systems. Data from surveys, registration and reporting systems are used to determine the impact of the environment on health and the relationship between environmental factors and a wide array of health outcomes. Yet there remains a number of conceptual and methodological issues which demand better understanding and require more research to maximize the analytical capacity of environmental data for policy and programmatic applications.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status: **New**

Date Submitted **05/08/2001**

Abstract Title **Collections Issues**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Sterling** First Name, Middle Initial **Doreen**

Organization **OEI/OIC/CStD**

Daytime Phone **202-260-2766**

Fax Number **202-260-8550**

E-Mail Address **sterling.doreen@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

The Office of Information Collection (OIC) develops and implements innovative data collection policies and services. The Office promotes the efficient and effective collection and use of data and develops processes to ensure that environmental data and information meet established standards of quality.

This presentation will first summarize OIC's mission and key responsibilities. Then it will characterize several information challenges, including those associated with data, technology, and EPA's organizational structure and statutory mandates. In conclusion, it will provide a brief overview of major OIC projects (e.g. Central Data Exchange, FOIA, Records Management, data acquisition, geospatial baseline).

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted 05/08/2001

Abstract Title **Web Based Access to Real Time Compliance Information**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Tetta** First Name, Middle Initial **David**

Organization **Region 10**

Daytime Phone **206-553-1327**

Fax Number **206-553-7176**

E-Mail Address **tetta.david@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

EC-On-Line, a pilot program developed by EPA and environmental agencies in the Northwest, integrates and provides public access to extensive environmental compliance information in one location. EC-On-Line profiles approximately 20,000 individual facilities in the states of Alaska, Oregon, Idaho and Washington. The site provides compliance and environmental data about each facility, such as the number of inspections, compliance with federal and state regulations, enforcement actions taken, as well as information on the population of the surrounding area.

EC-On-Line provides information on each regulated facility's location, surrounding population, permits held under major environmental programs, the number of inspections received, and its record of compliance with federal regulations. Reports containing these types of information are also available through other mainframe systems for viewing and downloading. However, these raw data are often so detailed and complex as to make it difficult for a user to use them efficiently. So, in addition to gathering all this information into one location, EC-On-Line structures and aggregates the data so a user can easily view, compare and analyze information.

EC-On-Line includes compliance and enforcement information submitted to and developed by state and federal regulators by facilities regulated under the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the Emergency Planning and Community Right-to-Know Act. Statistics about the population around facilities were taken from census reports. To link all these data, EC-On-Line relies on an interactive, high-speed data retrieval and integration system developed by EPA, called the Integrated Data for Enforcement Analysis (IDEA) system.

In providing this data, Region 10 is working closely with the Alaska Department of Environmental Conservation, the Idaho Department of Environmental Quality, the Oregon Department of Environmental Quality, and the Washington Department of Ecology. A workgroup was established in late 1998 to look at a number of issues relating to developing this site, such as

- what data elements should be displayed, and in what format
- how far back data coverage should go
- how errors in the data base should be corrected

A key feature of EC-On-Line is a system for efficiently making changes to the underlying data. A "comment page" link in the facility report allows users to instantly submit comments on any aspect of the project, including concerns with regard to the data. Facilities commenting on their own data are directed through a series of interactive screens to help them specify precisely what data elements need to be changed, these comments are then automatically routed on-line to the appropriate data manager at either the state or EPA level for resolution.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Best practices Series for Information Product Development**

Type of Session. ☐ Presentation ☐ Computer Session ☒ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Tsibris** First Name, Middle Initial **Evangeline**

Organization **OEI/OIAA/EAD**

Daytime Phone **202-260-1655**

Fax Number **202-401-1617**

E-Mail Address **tsibris.evangeline@epa.gov**

Additional Author

Organization

Additional Author

Organization

Additional Author

Organization

Additional Author

Organization.

Additional Author.

Organization

### **Abstract Outline:**

Currently the Agency is faced with a variety of criticisms regarding the way EPA presents and utilizes data in Agency information products. These data-rich products often go through extensive development and EPA developers are often faced with the same obstacles and issues year after year. For this reason and as it relates to our mission, OEI is leading the effort to develop a Best Practices Series (BPS) for information product development.

The Agency has a wealth of information product experience that is not being adequately communicated to information product developers who could learn from it. However beyond information sharing and tech transfer, a gap exists for guidance on sound analytical approaches to the reoccurring data concerns during information product development. Hence, the BPS will stem from current Agency efforts in addition to other helpful methods that have previously not been utilized by EPA. This Series will address those concerns by providing hard-copy guides and a website that provides active links to relevant materials, guidance, examples and case studies for a variety of topic areas, such as: Product Planning, Stakeholder Involvement, Product

Design, Data Suitability/Quality, Using Models, Using Indicators, Metadata Development, User Feedback and Error Correction. This is a collaborative Agency effort that strives to bring together key experts on these topics for guidance development.

I would like the opportunity to discuss the BPS as it relates to EPA statistics at this conference in order to not only gain feedback on the concept and involve other parties from around the Agency in this effort, but to foster an Agency-wide discussion of these key information product issues in a best practices context.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time  
Status.                      New

Date Submitted              05/06/2001

Abstract Title:              **Ecological Bias in Environmental Epidemiology**

Type of Session:            ☒ Presentation            ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's              Wakefield              First Name, Middle Initial Jon  
Last Name

Organization:                NRCSE and Biostatistics, University of Washington

Daytime Phone

Fax Number

E-Mail Address

Additional Author

Organization:

Additional Author

Organization

Additional Author

Organization

Additional Author

Organization

Additional Author

Organization

### **Abstract Outline:**

It is appealing to utilize routinely-available health, population and exposure data in studies of the effects of environmental exposure, since they are relatively inexpensive, and large exposure contrasts may be observed. The health and population data in this context are generally available as aggregated counts - in the epidemiology literature such data are known as 'ecological'.

Inference in this context requires great care since they are subject to a number of biases (leading to the so-called ecological fallacy), in addition to those that may occur in observational studies at the level of the individual. In this talk I will describe these biases and outline a number of ways in which the extent of the bias may be quantified. The talk will be motivated with an ecological study of the association between magnesium in the residential water supply and heart disease, in the northwest of England in the period 1990-1992.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date.  
Presentation Time  
Status                      **New**

Date Submitted:            04/29/2001

Abstract Title              **Beyond Meta-Analysis: The Challenge of the Precautionary Principle**

Type of Session            ☒ Presentation      ☐ Computer Session    ☐ Poster Session      ☐ Panel Discussion

[<br>]

Primary Author's            **Weed**      First Name, Middle Initial **Douglas L.**  
Last Name

Organization                **National Cancer Institute**

Daytime Phone              301-496-8640

Fax Number                 301-402-4863

E-Mail Address              dw102i@nih.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

The Precautionary Principle has been proposed as a general guide to public health (preventive) decision-making. This paper begins with a brief description of the origin of precaution in the debates on environmental policy, how the principle is defined, and its relationship to bioethical principles, uncertainty, and the concept of proof in science. The immediate challenge for statisticians and other public health professionals is how to link the evidentiary conditions and ethical maxims found in the Precautionary Principle to the qualitative and quantitative methods currently used to summarize and interpret scientific evidence in risk assessment. Of particular interest are the criteria-based methods of causal inference and meta-analysis. The Precautionary Principle is an example of specifying the more general bioethical principle of beneficence, constraining its application to cases involving health threats and providing limited guidance regarding the levels and kinds of scientific evidence needed to justify preventive action. For example, the Precautionary Principle states only that "proof" or "100% certainty" should not be

required prior to taking preventive action. Bringing the Precautionary Principle closer to the practice of causal risk assessment will require further specification. A minimum level of evidence approach is proposed. A key question of this approach is: what is the least amount of evidence needed to warrant preventive action? How “least amount” has been interpreted in published accounts of applying the Precautionary Principle and how it could be translated in terms of the criteria-based methods of causal inference and meta-analysis (given that meta-analysis provides an improvement on current assessments of the criterion of evidentiary consistency, but only marginal improvements in terms of the precision of other criteria, such as strength of association and dose-response) are discussed. Also discussed are the increased opportunity for public health action a minimum level of evidence precautionary approach permits, its dynamic and relativistic nature, as well as the need for careful evaluation of precautionary public health decisions.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted            04/29/2001

Abstract Title            **The Legislative Climate for EPA's Collections**

Type of Session        ☒ Presentation        ☐ Computer Session    ☐ Poster Session        ☐ Panel Discussion

[<br>]

Primary Author's        **Westlund**        First Name, Middle Initial Rick  
Last Name

Organization            US EPA, Office of Environmental Information

Daytime Phone          (202) 260-2745

Fax Number              (202) 260-8550

E-Mail Address          westlund.rick@epa.gov

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

According to the Paperwork Reduction Act (PRA), all collections of information whether one-time surveys or record keeping and reporting requirements in Agency regulations must be approved by the Office of Management and Budget (OMB). The vehicle for obtaining OMB approval is an Information Collection Request (ICR). The ICR provides an overview of the collection, including what information will be collected, why it is needed, who will need to respond, and gives an estimate of the burden placed on the public. Without this approval, enforcement of the collection may be at risk, and results of the collection are unauthorized and invalid for future use.

The PRA was last reauthorized in 1995, and is up for reauthorization in the next few years. It is very likely that the next PRA will be more aggressive and require even more scrutiny of Agency collections especially when they impact small businesses. In addition, several bills are pending in Congress that are aimed at streamlining paperwork requirements on small businesses.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title: **The AirNow Ozone Mapping System - Communicating Time-Relevant Data to the Public**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **White** First Name, Middle Initial **John E.**

Organization **OAQPS/ITPID/ITG**

Daytime Phone **919-541-2306**

Fax Number **919-541-0242**

E-Mail Address **white.johne@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

AirNow is a cooperative effort between EPA, State and local Air Agencies, health institutions, and the media. AirNow provides important air quality information to the public, including air quality forecasts and ozone maps, which furnish time-relevant ozone information. Statistics have played a vital role in converting ozone monitoring data to an Air Quality Index (AQI) value, which is widely used by mainstream media to provide clear and consistent information about air quality and the associated health risks.

### **Draft outline**

- I Background of the AirNow project
- II AirNow Products
- III Use of Statistics in AQI Determination
- IV Summary and Future Direction

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted: 04/29/2001

Abstract Title **Chemical and Pesticides Results Measures**

Type of Session ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Wilkes** First Name, Middle Initial **Pamela**

Organization **OPPTS/IO/SBO**

Daytime Phone **(202)260-2921**

Fax Number **(202)260-1577**

E-Mail Address **wilkes.pamela@epa.gov**

Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization
Additional Author	Organization

### **Abstract Outline:**

This presentation will describe the Chemical and Pesticides Results Measures tool that was developed through a cooperative agreement between EPA and Florida State University. This tool was developed to assist states, tribes, local governments, nongovernmental organizations and the private sector in ensuring that their measurement systems reflect public input by conducting a stakeholder process, with appropriate EPA participation, to identify, research, document and publish a set of pesticide, toxics, and prevention-based environmental health indicators that measure results associated with the major environmental programs and issues of concern to the public.



## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status                      **New**

Date Submitted                      05/07/2001

Abstract Title                      **Information Quality Systems**

Type of Session.                      ☒ Presentation                      ☐ Computer Session                      ☐ Poster Session                      ☐ Panel Discussion

[<br>]

Primary Author's  
Last Name'                      **Worthington**                      First Name, Middle Initial **Jeffrey**

Organization                      OEI

Daytime Phone                      202-564-5174

Fax Number                      202-501-1718

E-Mail Address                      Worthington.Jeffrey@epa.gov

Additional Author	Organization:
Additional Author	Organization:
Additional Author	Organization:
Additional Author	Organization
Additional Author	Organization

### Abstract Outline:

Management systems that ensure product quality may need to address quality of information as either a product or in support of product development. Statisticians play a vital role in identifying valid information quality characteristics, useful measures for information quality, and acceptance criteria for those measures. Information quality measurement can form the basis for improvement of both data and information quality.

**You're invited  
...to attend and  
...to participate!**



## **The 2001 EPA Conference Abstract**

Meeting  
Presentation Date  
Presentation Time  
Status

**New**

Date Submitted 04/29/2001

Abstract Title **Advances in Remote Sensing and Visualization**

Type of Session. ☐ Presentation ☐ Computer Session ☐ Poster Session ☒ Panel Discussion

[<br>]

Primary Author's Last Name **Young** First Name, Middle Initial **Steve**

Organization **US EPA Office of Environmental Information, Environmental Analysis Division**

Daytime Phone **202-260-3110**

Fax Number **202-401-2728**

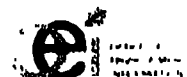
E-Mail Address. **young.steve@epa.gov**

Additional Author  
Additional Author  
Additional Author  
Additional Author  
Additional Author

Organization  
Organization  
Organization  
Organization  
Organization

### **Abstract Outline:**

Remote sensing and visualization technologies are opening up marvelous new opportunities for monitoring and understanding environmental conditions. And this is all the more timely due to the mandate of the Government Performance and Results Act that EPA develop and track outcome-oriented measures of environmental protection performance. Remote sensing will play a crucial role in monitoring key environmental indicators such as changes in landcover and ecosystem condition. Geospatial and other visualization technologies will help users, from novices to experts, understand and interpret data so that they can extract intelligence that will support informed decision-making. "Eyes in the skies" can see and measure parameters that are more difficult and expensive to track from the ground, and good maps can be worth more than many thousands of words. This session will discuss the significance of recent advances in remote sensing and visualization and illustrate some examples of how these technologies can support EPA's mission to protect the environment and human health.



## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date:  
Presentation Time:  
Status: New

Date Submitted: 05/14/2001

Abstract Title: The Redesign of a Toxicity Assay Based on Statistical Considerations

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author: Margosches, Elizabeth First Name, Middle Initial Farrar, David

Last Name:

Organization: OPP/OPPTS/USEPA, OPPT/OPPTS/USEPA, resp.

Daytime Phone: (202)260-1511 (latter)

Fax Number: (202)260-1279

E-Mail Address: margosches.elizabeth@epamail.epa.gov

Additional Author: Michael Greene

Organization: US Consumer Product Safety Commission

Additional Author: Greg Carr

Organization: Procter and Gamble Co.

Additional Author: Kailash Gupta

Organization: US Consumer Product Safety Commission

Additional Author: Deborah McCall

Organization: OPP/OPPTS/USEPA

Additional Author: Amy Rispin, and Kathy A. Stitzel

Organization: OPP/OPPTS/USEPA, Procter and Gamble Co., resp.

### Abstract Outline:

The Redesign of a Toxicity Assay Based on Statistical Considerations

David Farrar<sup>1</sup>, Elizabeth Margosches<sup>2</sup>, Michael Greene<sup>3</sup>, Greg Carr<sup>4</sup>, Kailash Gupta<sup>5</sup>, Deborah McCall<sup>1</sup>, Amy Rispin<sup>1</sup>, Kathy A. Stitzel<sup>1</sup>

We live in a culture that uses chemicals. Our agency and others here and abroad (e.g., DOT, CPSC, FDA, OECD) rely on testing for certain characteristics of those chemicals to help avoid harmful effects on people and the environment. Test guidelines are issued to assist in ensuring standardization of these data for review. One of the most basic concerns about a new chemical is whether it will cause death at doses to which people or animals are exposed. For many years the LD50 (the dose with 50% mortality) has been estimated, under the assumption of an S-shaped cumulative distribution that can be described by two parameters, typically transformed by a probit. The historically used assay had 3-4 fixed dose levels with equal numbers of animals per dose. Finney has shown that this design is equivalent to what he called a

staircase design. Dixon developed staircase designs under the terminology " Up-and-Down Procedure " (UDP). These designs are executed sequentially with one or more animals per step and doses visited and revisited based on mortality experience. The OECD has adopted a guideline for international use in which single animals are tested by a UDP until the fourth animal after the first reversal in outcome. In dose spacing and estimation, this guideline requires an assumption about the population variance that, while correct for most chemicals, may not be correct for some, resulting in poor LD50 estimation. Estimation properties of this guideline prompted a design revisit. Statisticians were key to this effort. Now in draft and close to adoption is an assay that additionally utilizes information inherent on the data's spread, to signal study end and to provide a profile likelihood-based interval estimate in addition to the traditional MLE of LD50.

<sup>1</sup> OPP/OPPTS/USEPA

<sup>2</sup> OPPT/OPPTS/USEPA

<sup>3</sup> US Consumer Product Safety Commission

<sup>4</sup> Procter and Gamble Co.



[illegible]

Dr. Ruth Allen  
Office of Pesticides Programs  
Health Effects Division  
Mail Code: 7509C  
1200 PA Avenue, NW  
Washington, DC 20004  
allen.ruth@epa.gov  
703-305-7191

Ms. Melissa Anley  
OEI/OTOP/EMPACT  
Mail Code: 2831R  
1200 Pennsylvania Ave  
Washington, DC 20004  
anley.melissa@epa.gov  
202.564.5179

Mrs. Lara P. Autry  
OAQPS  
Mail Code: 14  
79 TW Alexander Bldg 4201  
RTP, NC 27711  
autry.lara@epa.gov  
919 541 5544

Mr. Phillip Barnett  
US EPA, Region 4, Environmental Accountability Division  
Mail Code: 4-EAD-AMB  
Sam Nunn Atlanta Federal Center  
61 Forsyth Street  
Atlanta, GA 30303  
barnett.phillip@epa.gov  
404-562-9616

Mr. John Bing-Canar  
Region 5 Superfund  
Mail Code: SRF-5J  
77 W. Jackson Blvd.  
Chicago, IL 60604  
bing-canar.john@epa.gov  
312.886.6182

Mr. Edward B Brandt  
Office of Pesticide Programs  
Mail Code: 7511C  
EPA  
Washington, DC 20460  
brandt.edward@epa.gov  
703-308-8699

Mr. Robert E Braster  
EPA, Region 3, HSCD  
Mail Code: 3HS42  
1650 Arch Street  
Philadelphia, PA 19103-2029  
Braster.Bob@epa.gov  
215-814-3148

Dr. Hans D Allender  
Office of Pesticide Programs/ HED  
Mail Code: 7509C  
401 M St S.W, Washington DC 20460.  
13117 Old Fletchertown Rd.  
Bowie, MD 20720  
allender.hans@epamail.epa.gov  
703 305 7883

Ms. Cheryl Atkinson  
U.S. EPA  
Mail Code: 3RA00  
1650 Arch Street  
Philadelphia, PA 19103  
atkinson.cheryl@epa.gov  
215-814-3392

Mr. Mark A Barath  
OEAM  
Mail Code: 3ES10  
1650 Arch Street  
Philadelphia, PA 19103  
barath.mark@epa.gov  
215 814-2759

Dr. Steven P Bayard  
Occupational Safety and Health Administration  
Mail Code: N3716  
200 Constitution Ave, NW  
Washington, DC 20210  
steven.bayard@osha.gov  
202-693-2275

Ms. Kelly J. Black  
Neptune & Co., Inc.  
2031 Kerr Gulch Road  
Evergreen, CO 80439  
kblack@neptuneandco.com  
720-746-1803

Mrs. Candy A Brassard  
OEI  
Mail Code: 2842  
1200 Pennsylvania Avenue  
Washington, DC 20460  
Brassard.Candace@epa.gov  
202-260-2484

Dr. Susan L Brunenmeister  
Office of Policy  
98 Madison Street  
New Bedford, MA 02740  
roths@earthlink.net  
(508) 984-5418

Mrs. Lori L. Brunzman  
OPPTS/OPP/HED  
Mail Code: 7509C  
Ariel Rios Bldg.  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
brunzman.lori@epamail.epa.gov  
(703) 308-2902

Dr. Daniel B. Carr  
Dept. of Applied and Engineering Statistics, George Mason  
University  
Mail Code: 4A7  
4400 University Ave.  
Fairfax, VA 22030  
dcarr@galaxy.gmu.edu  
703-993-1671

Ms. Xi Chen  
Temple University - Institute for Survey Research  
4646 40th St. NW  
Suite 320  
Washington, DC 20016  
xchen@ioip.com  
202-537-6700

Dr. Matthew Clark  
EPA/ORD/NCER  
Mail Code: 8722R  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
clark.matthew@epa.gov  
202-564-6842

Ms. Sally Conyne  
National Audubon Society  
P.O. Box 689  
Lahaska, PA 18931  
sconyne@audubon.org  
215-297-9040

Ms. Carry W. Croghan  
ERC Annex 246 D  
Mail Code: MD-77  
79 TW Alexander Dr  
Research Triangle Park, NC 27711  
carry.croghan@epa.gov  
919 541-3184

Dr. Tom Curran  
OAR/OAQPS  
Mail Code: MD-10  
No Street Address  
RTP, NC 27711  
curran.tom@epa.gov  
919-541-5559

Mrs. Mary L. Burgess  
National Center for Health Statistics  
Mail Code: Room 1064  
6525 Belcrest Road  
Hyattsville, MD 20637  
mburgess@cdc.gov  
301-458-4377

Mr. Gary Carroll  
Office of Environmental Justice  
Mail Code: 2201A  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004  
carroll.gary@epa.gov  
202-564-2404

Mr. Joseph Chung  
USEPA, Region 5  
Mail Code: AR-18J  
77 W. Jackson Blvd.  
Chicago, IL 60604  
chung.joseph@epa.gov  
312.353.6556

Ms. Margaret G. Conomos  
Environmental Information  
Mail Code: 2842  
1200 Pennsylvania Avenue, N.W.  
Ariel Rios Building  
Washington, DC 20460  
conomos.margaret@epa.gov  
202-260-3958

Dr. Lawrence H. Cox  
National Center for Health Statistics  
Mail Code: Associate Director  
Office of Research and Methodology  
6525 Belcrest Road, Room 915  
Hyattsville, MMD 20782  
LCox@cdc.gov  
301-458-4040

Ms. Deana M. Crumblin  
OSWER/Technology Innovation Office  
Mail Code: 5102G  
1200 Penna. Ave., NW  
Washington, DC 20460  
crumblin.deana@epa.gov  
703-603-0643

Ms. Cyd C. Curtis  
EPA (Office of Strat. Env. Analysis)  
Mail Code: B-19J  
77 West Jackson Blvd.  
Chicago, IL 60604  
curtis.cynthia@epa.gov  
312-353-6959

Ms. Kacee Deener  
ORD/NCER/ESRD  
Mail Code: 8723R  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
deener.kathleen@epa.gov  
202-564-8289

Ms. Patricia E Derkasch  
OCFO  
Mail Code: 2732A  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
derkasch.patricia@epa.gov  
202.564.3954

Ms. Francesca Di Cosmo  
Deputy Regional Administrator  
Mail Code: 3DA00  
1650 Arch Street  
Philadelphia, PA 19103  
dicosmo.francesca@epa.gov  
215-814-5549

Dr. Khoan T. Dinh  
OPPT  
Mail Code: 7403  
401 M St  
Washington, DC 20460  
dinh.khoan@epamail.epa.gov  
202 260-3891

Ms. Phyllis M Donahue  
OECA/ORE  
Mail Code: 2246-A  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
Donahue.Phyllis@epamail.epa.gov  
202-564-6947

Mr. Paul G. Dressel  
Region 3, Office of Enforcement, Compliance And Environmental  
Justice  
Mail Code: 3EC00  
1650 Arch Street  
Philadelphia, PA 19103-2029  
dressel.paul@epa.gov  
215-814-2154

Mr. Joseph (Joe) B. Elkins  
US EPA, OAQPS  
Mail Code: MD-14  
79 Alexander Drive, 4201 Building  
RTP, NC 27711  
Elkins.joe@epa.gov  
919-541-5653

Mr. Thomas DeMoss  
US EPA/ESD/MAIA  
Mail Code: 3ES01  
701 Mapes Road  
Ft. Meade, MD 20755-5350  
demoss.tom@epa.gov  
410-305-2739

Ms. Shivani N.n Desai  
Office of Information Collection  
Mail Code: 2822  
401 M Street, SW  
Washington, DC 20460  
desai.shivani@epa.gov  
202-260-6122

Mr. William F. Dimmick  
OAQPS  
Mail Code: MD-14  
79 TW ALEXANDER DRIVE  
BLDG 4201  
RTP, NC 27711  
dimmick.fred@epa.gov  
919-541-5537

Donald L. Doerfler  
NHEERL  
Mail Code: MD-92  
86 T. W. Alexander Drive  
RTP, NC 27709  
DOERFLER.DONALD@EPA.GOV  
919-541-7741

Ms. Constance Downs  
OEI  
Mail Code: 2882  
1200 Pennsylvania Ave., NW  
Washington, DC 20460-0001  
downs.constance@epa.gov  
202-260-2875

Mr. Richard G. Eilers  
National Risk Management Research Lab  
Mail Code: MLK-466  
26 W. MLK Drive  
Cincinnati, OH 45268  
EILERS.RICHARD@EPAMAIL.EPA.GOV  
513-569-7809

Mr. Gary F. Evans  
ORD  
Mail Code: MD-76  
79 Alexander Drive  
Research Triangle Park, NC 27711  
evans.gary@epa.gov  
919-541-3124

Ms. Liza C Finley  
US EPA R9 Laboratory  
Mail Code: PMD-2  
1337 South 46th St., Bldg. #201  
Richmond, CA 94804  
finley.liza@epamail.epa.gov  
(510) 412 - 2334

Dr. Debra L. Forman  
Waste and Chemicals Mgmt, Region 3  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19103  
forman.debra@epa.gov  
215-814-2073

Mr. Neil H Frank  
EPA/OAQPS  
Mail Code: 14  
Alexander Drive  
RTP, NC 27711  
frank.neil@epa.gov  
919 541 5560

Dr. Susan E. Franson  
ORD / NERL  
Mail Code: ORD / NERL / EERD / MERB - 642  
26 W. M. L. King Drive  
Cincinnati, OH 45268  
franson.susan@epa.gov  
513-569-7626

Dr. Clara Fuentes  
EPA Region 3, Pesticides/asbestos Programs & Enforcement  
Branch  
Mail Code: 3WC32  
1650 Arch Street  
Philadelphia, PA 19103  
fuentes.clara@epa.gov  
215-814/3453

Dr. Gauthami Gondy  
Institute for Survey Research  
Temple University  
4646 40th street, N.W., Suite 320  
Washington, DC 20016  
gauthami@ioip.com  
202-537-6700

Dr. Amy M Grady  
NCEA-RTP  
Mail Code: MD-52  
3210 Highway 54  
Catawba Building  
Research Triangle Park, NC 27711  
grady.amy@epa.gov

Dr. Terence R FitzSimons  
OAQPS  
Mail Code: MD-14  
79 T.W. Alexander Drive  
4201 Building  
Research Triangle Park, NC 27711  
fitz-simons.terence@epa.gov  
(919)541-0889

Dr. John F Fox  
Office of Water  
Mail Code: 4303  
1200 Pennsylvania Ave, NW  
Washington, DC 20460  
fox.john@epa.gov  
202-260-9889

Mary J. Frankenberry  
OPPTS/OPP/EFED  
Mail Code: 7507C  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
Frankenberry.mary@epa.gov  
703-305-5694

Ms. Jade L Freeman  
Office of Science and Technology  
Mail Code: 4303  
1200 Pennsylvania Ave., NW 215 EPA  
Washington, DC 20460  
lee-freeman.jade@epa.gov  
202-260-1996

Dr. Odelia c Funke  
OEI/OIAA/IAD/PPMB  
Mail Code: 2843  
1200 Pennsylvania Ave, NW  
Washington, DC 20460  
funke.odelia@epa.gov  
202-260-0244

Mr. Stephen K Goranson  
USEPA Region 5 Office of Information Services  
Mail Code: MG-9J  
77 West Jackson Boulevard  
Chicago, IL 60604-3507  
goranson.stephen@epa.gov  
312-886-3445

Mr. Dan J Grauman  
National Cancer Institute  
Mail Code: MSC 7244  
6120 Executive Boulevard  
Room EPS/8050  
Rockville, MD 20892  
dan\_grauman@nih.gov

Mr. John S Graves  
Office of Environmental Data  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19103-2029  
graves.john@epa.gov  
(215) 814-5710

Ms. Hyacinth Hall  
Water Protection Division  
Mail Code: 3WP00  
1650 Arch Street  
Philadelphia, pa 19102  
hall.hyacinth@epa.gov  
215-814-5678

Mr. Olof C.J. Hansen  
U.S. EPA Region 9  
Mail Code: WST-6  
75 Hawthorne Street  
San Francisco, CA 94105  
hansen.olof@epa.gov  
(415) 744-2044

Mr. James B Hemby  
OAQPS/OAR  
Mail Code: MD14  
79 T.W. Alexander Drive  
4201 Building  
Research Triangle Park, NC 27711  
hemby.james@epa.gov  
919.541.5459

Dr. Theodore R. Holford  
Statistical Research & Applications Branch  
Mail Code: Executive Plaza North, Suite 4103  
6130 Executive Blvd.  
Bethesda, MD 20892-7359  
holfordt@mail.nih.gov  
301-594-6572

Ms. Linda Holst  
Office of Strategic Env Analysis  
Mail Code: B-19J  
77 W. Jackson Blvd.  
Chicago, IL 60604  
holst.linda@epa.gov  
312.886.6758

Ms. Jennifer R Hubbard  
USEPA Region III  
Mail Code: 3HS41  
1650 Arch Street  
Philadelphia, PA 19103  
hubbard.jennifer@epa.gov  
215-814-3328

Mr. Stephen S Hale  
Office of Research and Development  
Mail Code: Atlantic Ecology Division  
27 Tarzwell Drive  
Narragansett, RI 02882  
hale.stephen@epa.gov  
401-782-3048

Dr. Bashar W. Hanna  
Temple University, Associate Dean, College of Scie  
Technology  
Mail Code: 009-00  
Philadelphia, PA 19122  
bwhanna@astro.temple.edu  
(215) 204-2890

Dr. Christine S Hartless  
OPPTS/OPP/EFED  
Mail Code: 7507C  
1200 Pennsylvania Avenue, N.W  
Washington, DC 20460  
hartless.christine@epa.gov  
703-305-5636

Ms. Sara E. Hisel McCoy  
Office of Information Collection  
Mail Code: 2822  
1200 Pennsylvania Avenue  
Washington, DC 20460  
hisel-mccoy.sar@epa.gov  
202/260-7937

Dr. David M Holland  
Office of Research and Development  
Mail Code: MD-56  
79 T.W. Alexander Dr.  
ERC Annex  
RTP, NCNC 27711  
holland.david@epa.gov  
919-541-3126

Ms. Janice C Huang  
USEPA Region 5  
Mail Code: WA-16J  
77 W. Jackson Blvd.  
Chicago, IL 60604  
huang.janice@epa.gov  
312.353.8228

Mr. Steve Hufford  
Information Integration Program  
Mail Code: 2810  
401 M Street, SW  
Washington, DC 20460  
hufford.steve@epa.gov  
202-260-9732

Ms. Maureen Hunt  
U.S.EPA Region 7  
Mail Code: PLMG/POIS  
901 N. 5th St.  
Kansas City, KS 66101  
hunt.maureen@epamail.epa.gov  
(913)551-7722

Ms. Donna M. Inman  
Office of Enforcement and Compliance Assurance  
Mail Code: 2222A  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004  
inman.donna@epa.gov  
202-564-2511

Ms. Nancy R Jafolla  
EPA  
Mail Code: 3HS41  
1650 Arch Street  
Phila, PA 19103  
rios-jafolla.nancy@epa.gov  
215-8144-3324

Mr. Barnes Johnson  
Office Of Solid Waste  
Mail Code: 5307W  
1800 Pennsylvania Ave NW  
Washington, DC 20460  
johnson.barnes@epa.gov  
703-308-8881

Dr. Henry D Kahn  
Office of Water, Engineering & Analysis Division  
Mail Code: 4303  
1200 Pennsylvania Ave, NW  
Washington, DC  
kahn.henry@epa.gov  
202-260-5408

Mr. Stuart Kerzner  
EPA, Region III, Office of Env. Data  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19103  
kerzner.stuart@epa.gov  
215.814.5709

Ms. Ruth E Knapp  
EPA Region III  
Mail Code: 3AP21  
1650 Arch Street  
Philadelphia, PA 19103  
knapp.ruth@epa.gov  
215-814-2191

Mr. William F Hunt  
North Carolina State University  
Campus Box 8203  
Raleigh, NC 27695  
whunt@stat.ncsu.edu  
919-515-1947

Ms. Beth Jackson  
OEI/OIAA/EAD/APB  
Mail Code: 2841  
1200 Pennsylvania Avenue  
Washington, DC 20460  
jackson.elizabeth@epamail.epa.gov  
202-260-9753

Ms. Patsy B. Jenkins  
Temple University  
4646 40th Street NW  
Suite 320  
Washington, DC 20016  
patsyjenkins@ioip.com  
202-537-6700

Mr. Eric W Johnson  
EPA, REGION III  
Mail Code: 3HS41  
1650 Arch St.  
Philadelphia, PA 19103  
JOHNSON.ERIC@EPA.GOV  
215-814-3313

Dr. Graham Kalton  
Westat  
1650 Research Blvd  
Rockville, MD 20850  
kaltong1@westat.com  
301-251-1500

Mr. Bhupi D Khona  
US RPA Region III  
Mail Code: 3HS22  
28 ashbrooke drive  
Voorhees, NJ 08043  
khona.bhupi@epa.gov  
215 814 3213

Mr. Tri M. Knoke  
Region 7 EPA Air, RCRA & Toxics Division  
Mail Code: ARTD / RALI  
901- N. 5th Street  
Kansas City, KS 66101  
knoke.tri@epa.gov  
913-551-7484

Mr. Mel Kollander  
Temple University  
4640 40th Street, NW  
Washington, DC 20016  
mellk@erols.com  
202-537-6700

Mr. Joseph W. Kunz  
Region III Office of Environmental Data  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19103  
kunz.joseph@epa.gov  
215-814-2116

Dr. Pepi Lacayo  
OEI  
Mail Code: 2841  
410 Main St. SW  
Washington, DC 20460  
lacayo.pepi@epamail.epa.gov  
202-260-2714

Mrs. Barbara L. Latsios  
USEPA, Region 3  
Mail Code: 3PM60  
1650 Arch Street  
Philadelphia, PA 19103-2029  
latsios.barbara@epamail.epa.gov  
215-814-5384

Mrs. Chiayin P Lee  
EPA/OSWER/OSW/HWMMD  
Mail Code: 5302W  
1200 Pennsylvania Ave, NW  
Washington, DC  
lee.cpan@epa.gov  
703-308-8478

Mr. Lawrence Lehrman  
U.S. EPA Region 5  
Mail Code: M-9J  
77 W. Jackson  
Chicago, IL 60604-3590  
lawrence.Lehrman@epa.gov  
(312) 886-0836

Dr. Timothy E Lewis  
NCEA/RTP  
Mail Code: MD-52  
Catawaba Building  
Route 54  
Research Triangle Park, NC 27711  
lewis.timothy@epa.gov

Mr. Angel J Kosfiszter  
Region 6 Water Quality Division  
Mail Code: 6WQ-CD  
1445 Rorr Ave.  
Dallas, TX 75202  
KOSFISZER.ANGEL@EPA.GOV  
214.665.2187

Mr. William B Labiosa  
OW/OGWDW  
Mail Code: 4607  
1200 Pennsylvania Ave NW  
Washington, VA 22207  
labiosa.william@epa.gov  
650-556-9727

Dr. Rashmi Lal  
Office of Environmental Information  
Mail Code: 2842  
1200 Pennsylvania Avenue, N.W.  
Washington D.C.  
Lal.rashmi@epa.gov  
202-260-3007

Mr. Robert D Lausch II  
EPA Region III  
Mail Code: 3HS34  
1650 Arch Street  
Philadelphia, PA 19103-2029  
lausch.robert@epa.gov  
215-815-3359

Mr. James R Lee  
OEI  
401 M ST., SW  
Washington DC, DC 20460  
jlee@american.edu  
202-885-1691

Mr. Dave Levy  
Office of Solid Waste  
Mail Code: 5302W  
1200 Pennsylvania Ave., NW  
AR BLDG. (5302W)  
Washington, DC  
Levy.Dave@epamail.epa.gov  
(703)308-8479

Mr. Cheng Ling  
OEI/OIAA/EAD/APB  
Mail Code: 2842  
719 6th St. S.W.  
Washington, DC 20024  
ling.cheng@epa.gov  
202-260-6242

Dr. Edwin H Liu  
American Indian Environmental Office  
Mail Code: 4104  
1200 Pennsylvania Av. NW  
Washington, DC 20460  
liu.ed@epa.gov  
202-260-9872

Dr. Arthur N. Lubin  
Office of Strategic Environmental Analysis  
Mail Code: B-19J  
77 West Jackson Boulevard  
Chicago, IL 60302  
lubin.arthur@epa.gov  
(312) 886-6226

Ms. Louvinia Madison-Glenn  
Region 3, Office of Environmental Data  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19139  
madison.louvinia@epa.gov  
215-814-5704

Mr. Ranjan Maitra  
University of Maryland  
Mail Code: Department of Mathematics and Statistics  
Baltimore, MD 21250  
maitra@math.umbc.edu  
410-455-2436

Dr. Elizabeth H. Margosches  
Pollution Prevention & Toxics  
Mail Code: 7403  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
margosches.elizabeth@epamail.epa.gov  
(202)260-1511

Dr. Sharlene R Matten  
OPPTS/OPP/BEAD  
Mail Code: 7511C  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
matten.sharlene@epa.gov  
703-605-0514

Dr. Michael J Messner  
Office of Ground Water and Drinking Water  
Mail Code: 4607  
1200 PENNA AVE, NW  
Washington, DC 20460  
messner.michael@epa.gov  
202-260-8107

Ms. Laura L. Lopez  
Office of Solid Waste  
Mail Code: 5302W  
1200 Pennsylvania Ave., NW  
AR BLDG. (5302W)  
Washington, DC  
lopez.laura@epamail.epa.gov  
(703)308-8482

Mr. Bruce Madariaga  
OIAA  
Mail Code: 2842  
1200 Pennsylvania Avenue, NW  
Washington, DC  
Madariaga.Bruce@EPA.gov  
202-260-3963

Dr. David T Mage  
Temple University  
1610 North Broad Street  
406 USB  
Philadelphia, PA 19122  
davidm@temss2.isr.temple.edu  
215 204 7578

Mr. Thomas D Maloney  
OEI/OIAA/IAD  
Mail Code: 2843  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
maloney.tom@epa.gov  
202-260-2234

Mr. Michael H. Markowski  
U.S. EPA Region III  
Mail Code: 3AP11  
1650 Arch St.  
Philadelphia, PA 19103-2029  
Markowski.Mike@epa.gov  
215-814-2063

Mr. Ethan McMahon  
OEI/Office of Information Collection  
Mail Code: 2822  
1200 Pennsylvania Ave., NW  
Washington, DC 20460-0001  
mcmahon.ethan@epa.gov  
202-260-8549

Mr. Daniel Michael  
Neptune and Company, Inc.  
1505 15th Street  
Suite B  
Los Alamos, NM 87544  
dmichael@neptuneandco.com  
505-662-2121

Greg Miller  
OPEI/NCEE  
Mail Code: 1809  
1200 Pennsylvania Ave, NW  
Washington, DC 20460  
miller.gregory@epa.gov  
202-260-6217

Mr. David Mintz  
OAQPS  
Mail Code: 14  
79 T.W. Alexander Drive  
4201 Building  
RTP, NC 27711  
mintz.david@epa.gov  
919-541-5224

Mr. Steve M Nako  
Office of Pesticide Programs  
Mail Code: 7509C  
401 M Street, SW  
Washington, DC 20460  
nako.steve@epamail.epa.gov  
(703) 308-8092

Dr. Barry D Nussbaum  
OEI  
Mail Code: 2842  
EPA, 1200 Pennsylvania Ave. NW  
Washington, DC 20460  
nussbaum.barry@epa.gov  
202-260-1493

Dr. Anthony R Olsen  
ORD NHEERL Western Ecology Division  
200 S.W. 35th Street  
Corvallis, OR 97330  
olsen.tony@epamail  
541-754-4790

Mr. Richard Paiste  
Region III Office of Environmental Data  
Mail Code: 3ED00  
1650 Arch Street  
Philadelphia, PA 19103  
paiste.richard@epa.gov  
215 814-5739

Mr. G. P. Patil  
The Pennsylvania State University  
Department of Statistics  
421 Thomas Building  
University Park, PA 16802  
gpp@stat.psu.edu  
814-865-8442

Mr. David J Miller  
OPPTS/CPP  
Mail Code: 7509C  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004  
miller.davidj@epa.gov  
703-305-5352

Mr. Ben Mykijewycz  
Superfund  
Mail Code: 3HS42  
1650 Arch Street  
Philadelphia, PA 19103  
mykijewycz.ben@epa.gov  
215-814-3351

Dr. Maliha S. Nash  
ORD, NERL, ESD, LEB  
PO Box 93478  
Las Vegas, NV 89193  
nash.maliha@epa.gov  
(702)798-2201

Dr. Michael O'Connell  
Waratah Corporation  
2520 Meridian parkway  
Suite 175  
Durham, NC 27713  
moc@waratah.com  
919-572-1600

Ms. Joanne M Oxley  
Outreach & Communications Staff, OEI  
Mail Code: 2812A  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460  
Oxley.Joanne@epa.gov  
202-564-4671

Mr. Pasky Pascual  
OSP/ORD  
1200 Pennsylvania Avenue  
Washington, DC 20460  
pascual.pasky@usepa.epa.gov  
202-564-2259

Dr. Robert M Patterson  
Associate Director, Center for Public Health, Temple  
University  
Mail Code: 084-53  
Philadelphia, PA 19122  
215-204-1665

Dr. John  
A Paulos  
Temple University  
Philadelphia, PA 19122

paulos@euclid.math.temple.edu  
215-204-5003

Mr. James F. Pendergast  
Office of Water, Standards and Health Protection Division  
Mail Code: 4305  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
pendergast.jim@epa.gov  
202-260-3212

Ms. Olga A. Quirin  
EPA Region One  
Mail Code: cwq  
One Congress St  
Boston, Ma 02203  
quirin.olga@epa.gov  
617-918-1542

Donna Randall  
OPP/EFED  
Mail Code: 7507C  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
randall.donna@epa.gov  
703-605-1298

Ms. Cary A Roberts  
EPA, Office of Environmental Information  
Mail Code: 2842  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
roberts.cary@epa.gov  
202-260-2751

Dr. Eduardo S. Rodela  
OARM  
Mail Code: 3615  
1200 Pennsylvania Ave. N.W.  
Washington, D.C.  
Rodela.Eduardo@EPA.Gov  
202-260-3320

Mr. Charles Roth  
USEPA, Region 5, Superfund  
Mail Code: SRF-5J  
77 W. Jackson  
Chicago, IL 60604  
roth.charles@epa.gov  
312.886.6182

Ms. Jonel J. Peckyno-Haley  
Temple University - Institute for Survey Research  
4646 40th Street NW  
Suite 320  
Washington, DC 20016  
Peckyno.Jonel@epamail.epa.gov  
202-537-6700

Mr. Joseph T Piotrowski  
Office of Watersheds  
Mail Code: 3WP10  
1650 Arch St  
PHila, PA 19103  
piotrowski.joe@epa.gov  
215 814 5715

Mr. Nandikkara V. Raman  
State of Delaware  
Mail Code: DNREC  
89 King's Highway  
Dovef, DE 19901  
NRaman@state.de.us  
302-739-2060

Dr. Barnett A. Rattner  
Patuxent Wildlife Research Center  
12011 Beech Forest Road  
Laurel, MD 20708-4041  
Barnett\_Rattner@USGS.gov  
301-497-5671

Ms. Mari Rodela  
Institute for Survey Research, Temple University  
Mail Code: 4646 40th Street NW, Suite 320  
40th Street  
Suite 320  
Washington, DC 20016  
mrodela@ioip.com  
202-537-6700

Dr. Phillip Ross  
OIAA  
Mail Code: 2842  
401 M Street SW  
Washington, DC 20460  
ross.np@epa.gov  
202 260-0250

Mr. Brian C Rourke  
OW/OGWDW  
Mail Code: 4607  
1200 Pennsylvania Ave NW  
Washington, DCDC 20460  
rourke.brian@epa.gov  
202-260-7785

Ms. Pamela L Russell  
OEI/OIAA  
Mail Code: 2841  
5902 Mt. Eagle Dr. #618  
Alexandria, VA 22303  
russell.pamela@epa.gov  
202-260-9786

Roseanne Sakamoto  
US EPA  
Mail Code: PMD-3  
75 Hawthorne Street  
San Francisco, CA 94105  
sakamoto.roseanne@epa.gov  
415-744-1535

Mr. Paul D. Sampson  
University of Washington  
Mail Code: NRCSE  
Box 354323  
Seattle, WA 98195-4322  
pds@stat.washington.edu  
206-385-6785

Mr. Stephen M Schmidt  
Monitoring & Quality Assurance Group  
Mail Code: MD-14  
79 T.W. Alexander Drive  
4201 Building, Research Commons  
Research Triangle Park, NC 27711  
schmidt.mark@epa.gov  
919/541-2416

Dr. Andrew E. Schulman  
Office of Water  
Mail Code: 4607  
1200 Pennsylvania Ave. NW  
Washington, DC 20460  
schulman.andrew@epa.gov  
202-260-4197

Dr. Ronald W Shafer  
OIAA/EAD/APB  
Mail Code: 2842  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
shafer.ronald@epa.gov  
202 260-6966

Ms. Robin L Shudak  
Energy Star Labeling Branch  
Mail Code: 6202J  
1200 Pennsylvania Ave. NW  
Washington, DC 20460  
shudak.robin@epa.gov  
202-564-9046

Mr. Jerome Sacks  
NISS  
P.O. Box 14006  
19 Alexander Drive  
Research Triangle Park, NC 27709  
sacks@niss.org  
919-685-9300

Dr. Zubair A. Saleem  
Office of Solid Waste  
Mail Code: 5307W  
1200 Pennsylvania Avenue, NW  
Washington, DC 20004  
saleem.zubair@epa.gov  
703 308 0467

Dr. Keith Sargent  
OPEI-NCEE  
Mail Code: 1809  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
sargent.keith@epa.gov  
202-260-2231

Dr. Susan Schober  
National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, MD 20782  
sus2@cdc.gov  
301-458-4484

Ms. Deborah Segal  
ORD/NCER  
Mail Code: 5725R  
1200 Pennsylvania Ave. NW  
Washington, DC 20460  
segal.deborah@epa.gov  
202-564-6899

Dr. Jack Shreffler  
National Exposure Research Lab, ORD  
Mail Code: MD-84  
Atmospheric Chemistry & Physics Branch  
RTP, NC 27711  
shreffler.jack@epa.gov  
919 541-2194

Dr. Bimal Sinha  
Mail Code: 2842  
401 M Street SW  
Washington, DC 20460  
sinha@umbc.edu  
410-455-2347

Dr. Manohari Sivaganesan  
EPA, Cincinnati  
Mail Code: 690  
26 W. Martin Luther King Dr.  
Cincinnati, OH 45268  
sivaganesan.mano@epa.gov  
513 569 7118

Dr. Elizabeth R. Smith  
National Exposure Research Laboratory  
Mail Drop 75  
Research Triangle Park, NC 27711  
smith.betsy@epamail.epa.gov  
919-541-0620

Dr. Edward J Sondik  
National Center for Health Statistics  
6525 Belcrest Road  
Hyattsville, MD 20782  
efs2@cdc.gov  
301-458-4500

Ms. CINDY G SOBUSIAK  
Region 3, Policy & Management  
Mail Code: 3PM60  
1650 Arch Street  
Philadelphia, PA 19103  
sobusiak.cindy@epamail.gov  
215-814-5170

Dr. Doreen M Sterling  
OEI/OIC/CSTD  
Mail Code: 2822  
1200 Pennsylvania Ave. NW (2822)  
Washington, DC 20460  
sterling.doreen@epa.gov  
202-260-2766

Ms. Sara A Taich  
OEI/OIAA/EAD  
Mail Code: 2842  
401 M St., SW  
Washington, DC 20460  
taich.sara@epa.gov  
202-260-0143

Dr. William R Tash  
Temple University, Vice Provost for Research  
Mail Code: 083-45  
1601 No. Broad Street  
Philadelphia, PA 19122  
wtash@nimbus.temple.edu  
(215) 204-7550

Dr. Woolcott Smith  
Temple University  
Philadelphia, PA 19122  
wksmith@unix.temple.edu  
215-204-6873

Dr. William P Smith  
Office of Environmental Information  
Mail Code: 2842  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460  
smith.will@epa.gov  
202-260-2697

Dr. John A Sorrentino  
Temple University  
Mail Code: 004-00  
Philadelphia, PA 19122-6099  
sorrento@temple.edu  
215-204-8164

Mrs. Elaine G. Stanley  
OEI/OIAA/IO  
Mail Code: 2841  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460  
Stanley.Elaine@epa.gov  
(202) 260-6670

Mr. Gene Stroup  
Office of Environmental Information  
Mail Code: 2812A  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
stroup.gene@epa.gov  
202-564-5716

Ms. SukYee D Tang  
Region 2, US EPA  
Mail Code: 1866  
26/F, 290 Broadway  
New York, NY 10007  
tang.suk-yee-d@epa.gov  
212-637-3592

Mr. David Tetta  
Region 10  
1200 6th Avenue  
Seattle, WA 98101  
tetta.david@epa.gov  
206-553-1327

Ms. Linda M Timander  
U.S. EPA Region 2  
Mail Code: OPM-PPEB  
290 Broadway  
New York, NY 10007  
timander.linda@epa.gov  
212-637-3596

Mr. Philip S Villanueva  
OPPTS/OPP/BEAD  
Mail Code: 7503  
1200 Pennsylvania Ave,NW  
Washington, DC 20460  
villanueva.philip@epa.gov  
703-308-8665

Dr. Douglas Weed  
National Cancer Institute  
Office of Preventive Oncology  
Mail Code: MSC 7105  
6120 Executive Blvd  
Rockville, MD 20892  
dw102i@nih.gov  
301-496-8640

Ms. Gretchen R West  
Office of Public Affairs  
Mail Code: OPA-3-2  
75 Hawthorne Street  
San Francisco, Ca 94105  
west.gr@epa.gov  
415-744-1505

Charles E White  
EPA/OW/OST/EAD/ESAB  
Mail Code: 4303  
401 M Street, Southwest  
Washington, DC 20460  
White.Charles-E@epa.gov  
(202) 260-5411

Mrs. Pamela S. Wilkes  
OPPTS  
Mail Code: 7101  
401 M St. SW  
Washington, DC 20460  
Wilkes.Pamela@epa.gov  
(202)260-2921

Mr. Larry J Wymer  
ORD/NERL  
Mail Code: 593  
26 W M.L. King Dr  
Cincinnati, OH 45268  
wymer.larry@epa.gov  
513-569-7252

Ms. Evangeline Tsibris  
OEI/OIAA/EAD  
Mail Code: 2842  
1200 Pennsylvania Ave, NW  
Washington, DC 20460  
tsibris.evangeline@epa.gov  
202-260-1655

Mr. Jon Wakefield  
University of Washington  
Mail Code: Departments of Biostatistics and Statis  
Box 357232  
Seattle, WA 98195-7232  
jonno@u.washington.edu  
206-543-3286

Ms. Manuela A. Weinberg  
EPA Washington D.C.  
401 M Street, SW,  
APB 8  
Washington, DC 20460  
Weinberg-Tenie.Manuela@epamail.epa.gov  
202 260 - 0517

Mr. Rick Westlund  
Office of Environmental Information  
Mail Code: 2822  
401 M Street, SW  
Washington, DC 20460  
Westlund.Rick@epa.gov  
(202) 260-2745

Mr. John E White  
OAQPS/ITPID/ITG  
Mail Code: MD-12  
411 Chapel Hill St - Mutual Bldg  
RTP, NC 27711  
white.johne@epa.gov  
919-541-2306

Mr. Jeffrey C. Worthington  
USEPA Office of Environmental Information  
Mail Code: 2812A  
1200 Pennsylvania Ave. NW  
Washington, DC 20460  
Worthington.Jeffrey@epa.gov  
202-564-5174

Mr. Steve Young  
OEI/OIAA/EAD  
Mail Code: 2842  
1200 Pennsylvania Ave NW  
Washington, DC 20460  
young.steve@epa.gov  
2022601286

Ms. Kyle J Zieba  
Chesapeake Bay Program Office  
Mail Code: 3CB00  
1650 Arch Street  
Philadelphia, PA 19147  
zieba.kyle@epa.gov  
215-814-5420



## Notes



## The 2001 EPA Conference Abstract

Meeting.  
Presentation Date  
Presentation Time.  
Status **New**

Date Submitted. 05/11/2001

Abstract Title. **Pennsylvania Habitat Explorer for Environmental Conservation and Protection Using Echelon Analysis**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name. **Myers** First Name, Middle Initial **Wayne**

Organization **The Pennsylvania State University**

Daytime Phone:

Fax Number.

E-Mail Address. **wlm@psu.edu**

Additional Author:	Organization
Additional Author:	Organization.
Additional Author:	Organization.
Additional Author:	Organization
Additional Author:	Organization.

### Abstract Outline:

GAP Analysis is concerned with determining areas that are regionally important as habitat in a collective sense considering multiple vertebrate species. Determination of habitat suitability for each species is first done individually by combining map layers of environmental habitat factors in a Geographic Information System (GIS) context. Multi-species mappings must then be obtained by compilation on geographic units at an appropriate scale. Simple additive compilation yields mappings of potential species richness. Such compilations of potential richness, however, do not recognize special nature of species contributions due either to uncommon environmental circumstances or constriction of geographic range. A Regional Habitat Importance Index (RHII) is obtained by weighted compilation considering regional habitat scarcity and conservation status of species. Regional context is thus incorporated in geographically specific mapping of habitat complexes. Regional structure in synoptic, geographically specific mappings of composite habitat indicators can be made objectively explicit by topological analysis in terms of *echelons*. Upper echelons of conservation opportunity thus emerge.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status.

New

Date Submitted 05/11/2001

Abstract Title: **Multiscale Landscape Pattern Analysis for Assessing Ecosystem Health and Watershed Comparison Using Conditional Entropy Profiles**

Type of Session. ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name **Patil** First Name, Middle Initial **G.P.**

Organization The Pennsylvania State University

Daytime Phone 814-865-8442

Fax Number 814-865-1278

E-Mail Address gpp@stat.

Additional Author.	Organization
Additional Author.	Organization
Additional Author.	Organization
Additional Author.	Organization.
Additional Author.	Organization

### Abstract Outline:

To demonstrate the feasibility and practicality of the assessments, we have chosen Pennsylvania as our key study area. Pennsylvania has been well mapped in terms of watersheds at different scales, ranging from 102 units for the State Water Plan to 9855 units for individual named streams. The synoptic geospatial and remote sensing data over this region is utilized to present novel methods for landscape pattern modeling and analysis for purposes of examining ecosystem conditions, ecological integrity patterns, environmental pollution conditions, water quality predictions, etc. in terms of landscape patterns consisting of marginal landcover-land use distributions, land cover-land use patch measurements, and landscape fragmentation profiles at multiple scales. It is encouraging to observe predictive capabilities in the remotely sensed data based landscape fragmentation profiles and patterns for assessment and comparison of environmental and ecological conditions at watershed scales.

## The 2001 EPA Conference Abstract

Meeting  
Presentation Date  
Presentation Time  
Status: **New**

Date Submitted 05/11/2001

Abstract Title: **Nationwide Indicators and Their Integration, Evaluation, and  
Visualization Worldwide--A UNEP Initiative**

Type of Session: ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's Last Name: **Patil** First Name, Middle Initial **G.P.**

Organization: **The Pennsylvania State University**

Daytime Phone **814-865-8442**

Fax Number: **814-865-1278**

E-Mail Address **gpp@stat.psu.edu**

Additional Author:	Organization
Additional Author:	Organization
Additional Author:	Organization
Additional Author:	Organization
Additional Author:	Organization:

### Abstract Outline:

The United Nations Environment Program (UNEP) is initiating the preparation of an Annual Report on the state of the environment, nationwide and worldwide. A basic concept and approach will be summarized together with major findings so far.

The law of human life, living, and human life cycle lies in supportive land, air, and water (LAW). Ancient scriptures express it very well.

"when the land is not livable,  
when the air is not breathable,  
when the water is not drinkable,  
man shall perish."

The worldwide human perception of the above comes through intuitive perspective of green land, blue sky, and clean water. Now that nationwide data have become available worldwide to help consider perceptive measures of greenness of land, blueness of sky, and cleanness of water, it is now possible to attempt to formulate and quantify a composite human environment index as a simple, elegant, and defensible societal instrument for national citizenry to discuss, debate and deal with human-environment interface in a public policy and planning arena. A most important purpose that such a human environment index is expected to serve is to help stimulate national and international

dialogue leading to in-depth policy discussion and debate essential for sustainable environment and development

A major purpose of this presentation is to explore, investigate, and evaluate the proposed human environment index in light of any alternatives based on the concepts, methods, and tools available

For human species and humanity, each of the environmental component land, air, and water is as important as another, and it is not possible to speak of one being more important than the other. This leads to the concept of equal importance of each component, and to the concept of equal weight to each component -a concept potentially useful in the construction of a composite indicator.

The three basic individual component indicators are essentially uncorrelated and orthogonal in light of their largely uncorrelated columns. Therefore, their unweighted sum/average has no danger of allotting inadvertent importance to one over the other

Each basic individual component indicator is a bonafide fractional proportion between zero and one. It is dimensionless, being a ratio of a part to the whole in the same units. The unweighted sum/average does not involve adding apples and oranges. And this approach can be satisfactory as long as the parts and the wholes represent satisfactory entities for which commensurate data are available, nationwide and worldwide

Beauty lies in the eyes of the beholder. And that makes the difference. Indicators choice and their composites therefore become crucial when we view the environment in terms of landview, skyview, and waterview involving air, water, food, and shelter for the life support system for the humanity as we have known.

## The 2001 EPA Conference Abstract

Meeting:  
Presentation Date  
Presentation Time  
Status **New**

Date Submitted: 05/11/2001

Abstract Title: **Classified Raster Map Simulation, Accuracy Assessment, and  
Change Detection Using Hierarchical Transition Matrix Models**

Type of Session. ☒ Presentation ☐ Computer Session ☐ Poster Session ☐ Panel Discussion

[<br>]

Primary Author's  
Last Name: **Taillie** First Name, Middle Initial **Charles**

Organization: **The Pennsylvania State University**

Daytime Phone

Fax Number:

E-Mail Address: **taillie@stat.psu.edu**

Additional Author.

Organization:

Additional Author

Organization:

Additional Author:

Organization.

Additional Author

Organization:

Additional Author.

Organization

### Abstract Outline:

The motivation for this presentation lies in the ability to make credibility statements for watershed scale characterizations and comparisons based on multicategorical raster maps. The presentation will display statistical methods for analyzing raster maps when the responses are categorical instead of numerical. Spatial pattern is extracted through auto-association matrices which express the joint occurrence of pairs of categories at varying distances across the map. The collection of auto-association matrices is a categorical analogue of the variogram employed in geospatial analysis of numerical responses. A parametric stochastic model employing Markov transition matrices is developed for simulating categorical raster maps. There is a separate transition matrix for each level in the scaling hierarchy and these transition matrices can be estimated from the auto-association matrices. Model parameters, in the form of the eigenvalues and eigenvectors of the transition matrices, are used to characterize and compare spatial pattern in categorical maps. Model simulation is quite rapid and allows for Monte Carlo determination of the variability and other statistical properties of various landscape metrics. Illustrations and examples will be drawn from Pennsylvania watersheds.

**You're invited  
...to attend and  
...to participate!**

**EPA's  
14th Conference  
on  
Statistics and  
Information**

**May 14–17, 2001 in  
Philadelphia, PA**



## **This One's for YOU**

EPA's 14<sup>th</sup> Conference on Statistics and Information is designed to meet *your* needs. There will be no open registration to the public, and no registration fee to you.

Conference sessions at the DoubleTree Hotel in downtown Philadelphia will bring together individuals from throughout the Agency—regional offices as well as headquarters and national laboratories—who collect analyze and use data.

### **Theme of the Conference...**

EPA's mission to protect public health and the environment obviously is much more than a matter of statistics—but without statistics EPA could not continue to do its job of monitoring the environment, writing regulations, and ensuring compliance. In large measure, these activities and many others rely on the development, interpretation and presentation of quality data and expert analyses. That is why the theme for the 2001 conference is:

### ***The Role of Statistics and Information in Protecting Public Health and the Environment***

There will be plenary sessions, presentation sessions, poster/computer sessions, and panel discussions. Attendees will have the opportunity to receive training in the latest techniques and to exchange ideas with colleagues, conference speakers, and distinguished guests.

## **Program Headliners**

Renowned speakers in the fields of mathematics, statistics and survey research will be part of the conference program. Featured speakers will include:

- **Edward J. Sondik**, Director for the National Center for Health Statistics (NCHS) will be the featured Keynote Speaker. He also serves as Senior Advisor to the Secretary of Health and Human Services, providing technical and policy advice on statistical and health information issues. He has also served in the National Cancer Institute as Acting NCI Director, Deputy Director of the Division of Cancer Prevention and Control, and Associate Director of the Surveillance Program.
- **John Allen Paulos**, Professor of Mathematics at Temple University and best-selling author and public speaker, whose mix of humor and erudition has delighted radio and television audiences as well as. As a public speaker, he has appeared before audiences at the Smithsonian, Harvard's Nieman Journalism Fellows, NASA, and business forums.
- **Graham Kalton**, Senior Statistician and Senior Vice president of the social science research firm, Westat, and a Research Professor in the Joint Program in Survey Methodology at the University of Maryland. He has extensive experience in research on survey methodology, and has published widely on several aspects of the subject.

## **YOU Can Be Part of the Program, Too**

Conference attendees will be offered a wide-ranging menu of topics, including chemometrics, information access on the Internet, aggregate and cumulative methods of risk development, epidemiological projects, data mining, water quality monitoring, data visualization, and more.

We hope you will plan to attend the conference, and beyond that, we encourage you to take an active role in the meeting. The overall success of the conference depends on the personal participation of you and your colleagues.

### **REGISTER NOW!!!**

To register to attend, please fill out the appropriate section of the Registration Form and return it as soon as possible.

We encourage you to present a topic. Please submit your Registration and Abstract Forms as soon as possible. We need to know your so your proposal can be considered as part of the overall program planning.

Forms are available at the Conference site:  
<http://ceisserv.was.epa.gov:9876/statinfo/statinfo.nsf>

### **SPACE IS LIMITED!**

**THE SOONER WE HEAR FROM  
YOU, THE BETTER THE CHANCE  
THAT WE WILL SEE YOU IN MAY!!**

***Space is limited...the sooner we hear from you, the better the chance you'll be guaranteed a place at the conference.***

**The DoubleTree Hotel has reserved a block of rooms for conference attendees at a rate within the federal allowance for Philadelphia. But the special rate holds only until April 16, 2001. Reservations received after that date will be accepted only on a space and rate availability basis.**

**Please contact the DoubleTree's Reservation Department at 215-893-1600 to book your room. Ask for the EPA Conference/Temple University rate.**

**Round Trip bus service will be provided between Waterside Mall and Philadelphia, and back, at no cost to your office.**

**Mark your calendar now!**

**We look forward to seeing you in Philadelphia May 14-17, 2001**

**Visit the conference Web site:**

**<http://ceisserv.was.epa.gov:9876/statinfo/statinfo.nsf>**

***If you have questions, please contact EPA's conference coordinator:***

**Ms. Jonel Peckyno-Haley  
Temple University  
202-537-6700 or  
[Peckyno.Jonel@epamail.epa.gov](mailto:Peckyno.Jonel@epamail.epa.gov)**

Downtown Philadelphia  
is the site for  
EPA's 14<sup>th</sup>

**Conference on  
Statistics and  
Information**

May 14–17, 2001

On the theme:

**The Role of Statistics  
and Information in  
Protecting Public  
Health and the  
Environment**