

## OUTREACH EVENT REPORT AND RECOMMENDATIONS

Attendee's Name: Joseph Kerski Title: Cartographer, PM  
Location: Colorado Convention Center, Denver CO

### Other Attendees:

Mary Wadding, USGS - RMMC - IS  
Laurie Jasso, USGS - RMMC - IS  
Gary Nebeker, USGS - RMMC - IS  
Karen Eberhardt, USGS - RMMC - IS  
Peter Modreski - USGS - CR GD  
Diane Stephens - USGS - RMMC  
Heidi Koehler - USGS CR  
Stephen Vandas - USGS - CR WRD  
John Keith - USGS - HQ - GD  
Martha Kiger - USGS - HQ - GD  
+ numerous other USGS staffpersons from CR and HQ

Meeting Date(s): 22-27 October 1999

Purpose of Event: 1999 Geological Society of America (GSA) conference

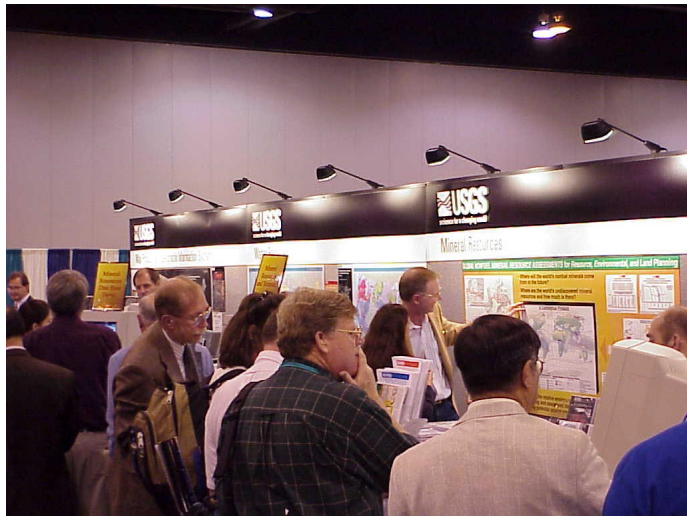
### Summary:

This was one of the most successful outreach events that the USGS has participated in, in terms of the number of activities in which we were involved, and in terms of the variety of USGS staffpersons who supported this event. Activities included:

- 1) Educational workshop conducted by Joseph Kerski and Pete Modreski, Saturday.
- 2) Tour for GSA educators of USGS, Friday.
- 3) Tours for GSA attendees of USGS mapping center, ice core lab, core research center, and water quality lab, Tuesday and Wednesday, conducted by Joseph and Pete.
- 4) Participation in "Share A Thon" for teachers, Monday evening, conducted by Joseph and Steve.
- 5) Media coverage included newspaper and television, thanks to the efforts of Heidi and Diane.
- 6) Six USGS exhibits in a row (see photographs below) with 2 across the aisle from the earthquake and landslide information centers. This was incredibly effective in conveying the seamless nature of the USGS and my admiration extends to Martha Kiger and the other HQ folks who were instrumental in setting this up and creating all the graphics. It was a pleasure to work with the USGS staff from the Central Region and from HQ. It is notable that although our exhibit was at the rear of the convention hall, it was consistently busy, one of the busiest non-educational conferences I have worked, from Sunday through closing time on Wednesday evening.



The USGS “boulevard” – excellent, seamless row of exhibits, looking north.



USGS exhibit, looking south.



Earthquake exhibit across from the other USGS exhibits, which even featured a webcam!



Satisfied customers browse Landsat 7 images of Denver at the USGS exhibit.

### **Recommendations:**

- 1) This conference showed once again the value of multiple divisions of the USGS working together to conduct a successful conference. GSA is a conference where the bulk of the attendees know about us, but as a traditional core customer, they can be a powerful ally for the USGS. Chip Groat and Gordon Eaton both stopped by our exhibit and had positive comments. A substantial number of GSA members and attendees have an interest in geochemistry and biological sciences. For that reason, I recommend that we obtain some materials and demonstrations prepared by BRD for future conferences of this type.
- 2) The RMMC C&R and outreach programs should invest in at least 2 sets of speakers that can be wired to a laptop to display sound. Many USGS presentations now include sound, which is not loud enough or of sufficient quality for illustrating with the built-in speakers that come with the

laptop computers. These speakers are fairly inexpensive and would enhance the quality of our presentations enormously.

3) The addition of several new USGS professional papers, circulars, and bulletins pertaining to the geographic area and to the attendees greatly enhances our exhibit presentation, and should always be included in a list of items displayed at conferences. It would be ideal if the outreach staffpersons were made aware of these excellent resources by some other means than seeing them for the first time at a conference. Perhaps someone could scan the “new pubs” list and notify the outreach staffers of the most pertinent ones to display and highlight.

### Reasons for attending:

1) As the nation's largest scientific organization, the USGS can and has provided great input to the geoscience community, in terms of research, digital data and other products and services, technical support, and education.

2) The value-added in our involvement with the lifelong learning aspect of educational outreach is that we work with educators to demonstrate how our products can be used in conjunction with national science standards. It is not enough simply to tell which products are available. Teachers already know how to find resources and they have a great deal of material. When we get involved with teachers--getting their input and working with them--we can understand how to best meet their needs.

Outreach plan follows. Materials may not reflect final documents brought to conference.

### Outreach Plan for 1999 Geological Society of America Conference

#### Location: Colorado Convention Center



Type of Event: National science conference.

RMMC attendees: Joseph Kerski, Mary Wadding, Gary Nebeker, Karen Eberhardt, Laurie Jasso

Other NMD attendees:

Other CR attendees: Pete Modreski (GD)

Outreach focus areas covered by this event:

- (1) Intergovernmental Relations (30%)
- (2) Nongovernment/Industry Relations (50%)
- (3) Education (20%)

Audience:

Core customers: geologists, planners, engineers, and other scientists in wastewater treatment, geochemistry, environmental science, hydrology, mining, GIS, satellite imaging, land use.

Non-core customers: Educators, businesspeople; private geology, mapping, GIS, and remote sensing companies.

Personnel required: Experience working with the public, and knowledgeable about:

- (1) Digital data availability, types, and applications.
- (2) Use of USGS digital data with GIS and remote sensing software.
- (3) USGS products and services with emphasis on geologic data, hydrologic data, satellite images, digital imagery, photography, digital cartographic data.

USGS activities at conference:

- (1) Conduct K-12 workshop for teachers (Joseph Kerski & Pete Modreski)
- (2) Operate USGS exhibits.
- (3) Conduct 2 Tours of Building 810

Schedule for 1999 GSA Conference						
			Gray Shade	= Exhibit Hall Open		
Time	Saturday 23 Oct 1999	Sunday 24 Oct 1999	Monday 25 Oct 1999	Tuesday 26 Oct 1999	Wednesday 27 Oct 1999	
8 – 9	<i>Workshop:</i> Kerski	<i>Set up</i>				
9 –10	<i>Workshop:</i> Kerski	<i>Set up:</i> <i>Bldg 810</i>	Eberhardt Kerski	Jasso Kerski	Eberhardt Kerski	

		Jasso Kerski Wadding	Wadding	Wadding	Wadding
10 -11	<i>Workshop:</i> Kerski	<i>Set up:</i> <i>Conv</i> <i>Center</i> Jasso Kerski Wadding	Eberhardt Kerski Wadding	Jasso Kerski Wadding	Eberhardt Kerski Wadding
11-12	<i>Workshop:</i> Kerski	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Kerski Wadding	Jasso Kerski Nebeker Wadding	Eberhardt Kerski Nebeker Wadding
12 –1	<i>Workshop:</i> Kerski	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Kerski Wadding	Jasso Nebeker Wadding <i>USGS Tour:</i> Kerski	Eberhardt Nebeker Wadding <i>USGS Tour:</i> Kerski
1 –2	<i>set up</i>	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Kerski Wadding	Jasso Nebeker Wadding <i>USGS Tour:</i> Kerski	Eberhardt Nebeker Wadding <i>USGS Tour:</i> Kerski
2 – 3	<i>Set up</i>	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Kerski Wadding	Jasso Nebeker Wadding <i>USGS Tour:</i> Kerski	Eberhardt Nebeker Wadding <i>USGS Tour:</i> Kerski
3 – 4	<i>set up</i>	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Nebeker Wadding	Jasso Nebeker Wadding <i>USGS Tour:</i> Kerski	Eberhardt Nebeker Wadding <i>USGS Tour:</i> Kerski
4 – 5	<i>set up</i>	<i>Set up</i> Jasso Kerski Wadding	Eberhardt Wadding <i>ShareAthon</i> Kerski	Jasso Nebeker Wadding <i>USGS Tour:</i> Kerski	<i>Tear-Down</i> Eberhardt Nebeker Wadding <i>USGS Tour:</i> Kerski
5 – 6		<i>Exhibit:</i> Jasso	<i>ShareAthon</i> Kerski		<i>Tear-Down</i> Eberhardt

		Kerski Wadding			Kerski Nebeker Wadding
6 – 7		<i>Exhibit:</i> Jasso Kerski Wadding			<i>Tear-Down</i> Eberhardt Kerski Nebeker Wadding
7 - 8		<i>Exhibit:</i> Jasso Kerski Wadding [close at 7:30]			

**Set Up:**

Set up times are Sat, 8 - 5 and Sun., 8 - 2. Martha Kiger and another HQ staffperson will arrive in Denver Sat. am to assemble the pop-up structures Sat. afternoon. They request us on Sunday to place our display graphics and materials on the panels and counters. **Do not permit the convention center union staff to assist with carrying in the items to our booth – we will be heavily charged for this!**

**Booth Numbers:**

NMD sales, research, and GIS -- 561  
WRD -- 559  
Energy -- 555  
Minerals -- 557  
Great Lakes -- 551  
Hazards -- 558 & 560  
GD general -- 553

**Action Items:**

All: Recommend materials  
All: Stage materials  
All: Take materials to Convention Center  
Joseph: Secure laptop  
Bill: Plot posters  
All: Arrange materials for backdrop  
Joseph: Plot materials  
Mary: Order materials

Joseph: Process data for ArcView and DDS demos  
 Joseph: Arrange PowerPoint demos  
 David/Lisa: Plot status graphics; posters and page size  
 Mary: Arrange for sales.

Display items that USGS will take:

Laptop computer 1

1 for Joseph's workshop and for exhibit booth  
 with ArcView applications of USGS data  
 Colorado and Utah: Sugar House digital data layers  
 CDs: DOQ, DRG, 1:2M DLG, presentations disk  
 PowerPoint slide shows  
 WWW: WebGLIS, Greenwood, availability  
 Powder River Basin WY 3D data set  
 Great Basin Geoscience Data Base set

For Backdrop:

Mt St Helens DEM  
 Front Range Infrastructure Decision Support System  
 ??

Materials To Sell [ideas]:

Colorado Geologic Map (Tweto)	50
Digital Landforms of USA	50
Historical Trails of Denver	50
Lake Tahoe 3D	25
Geology of USA	40
This Dynamic Earth book	50
This Dynamic Planet map	50
Earthquakes of CA and NV	25
Principal Aquifers – National Atlas	150
Hydrologic Units – National Atlas	150
The Quality of Our Nations Waters	150

**Materials to Order**

Bulletins

B2056 Geologic Studies in the Colorado Plateau	1
B-1864 Geology of the Mount Aetna volcanic center, CO	1
B-2127 Mineral resource potential & geology of the San Juan Nat. Forest, CO	1
B-2162 Colorado Yule Marble-building stone of the Lincoln Memorial	1

Professional Papers



P1311AC Manti Landslide	1
Nature to Be Commanded	1

Circulars

C 913 Water-Level Changes in the Great Salt Lake	1	
Water Quality in the South Platte	4	
C1225 The Quality of Our Nation's Water--Nutrients and Pesticides		100
Circ 1200 Estimated Use of Water in the United States in 1995	50	
Circ 1139 Ground Water and Surface Water--A Single Resource	50	

Teacher's Packets:

Exploring Maps		100
Exploring Caves		75
Global Change	100	
Land and People		75
Map Adventures	75	
Volcanoes		200
What Do Maps Show?	100	

Water Posters:

Ground Water – Middle School	75
Ground Water – Grade School	75

Fact Sheets / OFRs:

Abandoned Mine Lands	100
CD-ROM list	50
Central Region Sources of Information [Joseph has]	400
Colorado USGS Publications [Joseph has]	350
Digital Elevation Models	200
Digital Line Graphs	200
Digital Orthophotoquads	300
Digital Raster Graphics	300
Educational Materials from the USGS	300
USGS Information Sources	300
Fact Sheet List	100
Flat Order Form #67-0032 -- for ordering Stream Corridor Restoration: Principles, Processes, and Practices -----	500
FS-125-95 U. S. Geological Survey Information Sources	250
FS-082-97 National Atlas Fact Sheet	250
FS-100-96 Selected Fact Sheets of the USGS	250
FS-068-99 Education Material of the USGS	250
FS-215-95 Water level changes in High Plains Aquifer	50
FS-244-95 Pesticides in Ground Water	50
FS-058-95 USGS Ground-water studies	50
FS-191-96 The Upper Colorado River NAWQA Program	50
FS-106-95 USGS Ground Water studies	50
OFR-93-91 Ground Water Atlas of United States and Fact sheet	50

FS-116-99 The quality of Our Nations Waters		50
Front Range Infrastructure		100
GIP list	100	
GLIS		300
GNIS		50
How to Obtain Aerial Photographs		50
Map Dealer List for Colorado		100
Middle Rio Grande		75
US GeoData Available through the Internet	300	
USGS GeoData Products Order Form & prices		100
USGS Maps and Books order form		50
USGS activities in Colorado		250
CO Catalog of Topographic and Other Published Maps		250
CO Map List		250
WWW Information Sheet FS 077-99	250+	250
5 map indexes for each of the following states: AZ CA ID MT NM NV UT WY		
USGS GeoCenter	[Joseph has]	50

GIPs:

Aerial Photographs and Satellite Images	200		
Dinosaurs: Facts and Fiction		50	
Earthquakes		200	
Earth Science Field Corps		40	
Earthquakes 94-0050	200		
Finding Your Way With Map and Compass	50		
Fossils, Rocks, and Time 94-0054		200+	50
Fossils Through Time		50	
Geographic Information Systems	OOS	200	
Gold		100	
Landsat historical comparisons	Joseph has	20	
Map Projections - folded		100	
Mountains and Plains: Denver's Geologic Setting 93-272	200+	300	
Our Changing Continent		50	
River Basins of the United States: The Colorado		40	
Topographic Map Symbols Sheets		100	
USGS: Unbiased science - Joseph has		10	
USGS Making A Difference – Joseph has		10	
USGS Maps	250		
Volcanoes 94-0195		200+	100
Volcanoes of the United States		100	
OFR 99-153 Research in Death Valley		1	

Maps:

UT-1582 Great Salt Lake & Vicinity satellite image map		1
Ground Water Atlas of the US - HA-730-C for AZ,CO,NM, UT.		10

Digital Data - on CD:

Denver East and West DRG [already have]		1
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Other

USGS bags	400
Landsat bookmarks [Joseph has]	100
AK DEM Map postcard [Joseph has]	200

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## Outline for K-12 Workshop: Saturday 23 Oct 1999

Facilitators: Joseph Kerski and Pete Modreski

Goals: ♦ To inform teachers about the use of USGS products and services in standards-based K-12 education, particularly geography and geology, including educational technology. The participating teachers will receive large numbers of maps, posters, and other materials.

- I. What is the US Geological Survey (USGS)? 5 min
  - 4-fold mission: ♦ earth science ♦ biology ♦ water resources ♦ mapping
  - facilities in Denver: Earthquake Center, Mapping Center, Water Resources offices, biologic and geologic offices
- II. What is the Educational Outreach Program of the USGS? 5 min
  - displays at outreach events
  - development of lesson modules and resources
  - geographic information systems implementation
  - educational publications
  - regular publications and products that can be used for K-12 education
- III. Teaching Standards-Based Geography and Geology with USGS Resources 30 min
  - earth science mysteries
  - topographic maps
  - thematic maps
  - posters
  - bulletins
  - professional papers
  - circulars
  - general interest publications
  - fact sheets
  - other
- IV. Sample lessons with USGS resources 2 hours
  - Map Mysteries (Joseph)
  - Pete - activities
- V. Educational Technology 45 min
  - Global Positioning Systems
  - Internet
  - Geographic Information Systems

Materials to Distribute at Workshop:

### Digital Data

- DDS-CDs (display only)
- DRG CD-ROMs
- Topographic Map Field Trip CD-ROMs

## Fact Sheets

- Digital Elevation Models
- Digital Line Graphs
- Digital Orthophotoquads
- Digital Products Online
- Digital Raster Graphics
- US GeoData Available Over the Internet
- USGS WWW Sites

## GIPs

- Aerial Photographs and Satellite Images
- GIS
- USGS Maps
- Map Projections - folded
- Topo Map Symbols Sheets

## Information Sheets

- Best of USGS Education Resources
- Fact Sheet List
- GIP List
- CD-ROM list
- Product Information Sheet
- Video Lists (3)
- Map Mysteries Questions

## Maps

- Mt St Helens
- Misc Thematic Maps
- Misc Topographic Maps

## Miscellaneous

- USGS bags
- Natural Hazards Posters

## Teachers Packets

- Global Change
- Map Adventures
- What Do Maps Show?
- Volcanoes

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## Monday, October 25

- Kerski, Modreski
- Earth Science Share-a-Thon,
- Educators and PEP Members Social Hour, and
- Rock Raffle

Monday, October 25, 4–5:30 p.m. Simultaneously.

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An opportunity to connect with fellow educators outside of technical sessions, share resources and maybe take home a rock or two. To make this event a success, we invite you to bring your classroom resources and ideas to contribute to the Share-a-thon.

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**TOUR OF THE U.S. GEOLOGICAL SURVEY MAPPING AND GEOLOGIC FACILITIES,  
DENVER FEDERAL CENTER**

*FIELD TRIP #15a*  
October 26, 1999

**COST: \$15.00**  
**MAX # OF PARTICIPANTS 24**  
**MIN # OF PARTICIPANTS -**

**LEADER:** *Pete Modreski, U.S. Geological Survey, MS 915, Box 25046 Federal Center, Denver CO 80225, phone 303-236-5639, home 303-425-9549, fax 303-236-5348, email pmodresk@usgs.gov*

**CO-LEADER:** Joseph Kerski, USGS, MS 507, Box 25046 Federal Center, Denver CO 80225, phone 303-202-4315, fax 303-202-4137, email jokerski@usgs.gov

**DEPARTURE:** *Tuesday, October 26, 12:30 p.m., Colorado Convention Center, Lobby B, GSA Field Trip Check-in Desk. Please check-in at 12:00 noon so we can depart promptly at 12:30.*

**ITINERARY:** *12:30-1:00 Bus trip to Denver Federal Center, located in Lakewood CO, 6th Ave. and Kipling St. (approx. 8 mi. west of Denver). Participants will be divided into three groups each of which will tour in turn:*  
**1:00-2:00** USGS Core Research Center and National Ice Core Laboratory (Bldg. 810)  
**2:00-3:00** USGS Rocky Mountain Mapping Center (Bldg. 810)  
**3:00-4:00** USGS National Water Quality Laboratory (Bldg. 95)  
**4:30-5:00** Return trip to Colorado Convention Center

**COST INCLUDES:** *Bus transportation and assorted free brochures. No lunch or refreshments will be provided.*

**SPECIAL INSTRUCTIONS:** If participants wish to tour the cold room (-36° C) at the Ice Core Laboratory they must wear solid-toe shoes (no sandals) and bring a jacket or coat. There will be limited time to purchase a few maps & publications at USGS Map Sales (cash, check, or credit card accepted; closes at 4:00 p.m.; complicated orders should be placed later by phone, fax, or mail order).

**CANCELLATION:** Must be made in writing and received by the Registration Coordinator, GSA Headquarters, P.O. Box 9140, Boulder CO 80301-9140, (303) 447-2020, by September 24, 1999 to qualify

for a refund. NO refunds for cancellation notices received after this date. Refunds will be processed as soon as possible after the meeting.

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**TOUR OF THE U.S. GEOLOGICAL SURVEY MAPPING AND GEOLOGIC FACILITIES,  
DENVER FEDERAL CENTER**

*FIELD TRIP #15b*  
October 27, 1999

**COST: \$15.00**

**MAX # OF PARTICIPANTS 24**

**MIN # OF PARTICIPANTS -**

**LEADER:** *Pete Modreski, U.S. Geological Survey, MS 915, Box 25046 Federal Center, Denver CO 80225, phone 303-236-5639, home 303-425-9549, fax 303-236-5348, email pmodresk@usgs.gov*

**CO-LEADER:** Joseph Kerski, USGS, MS 507, Box 25046 Federal Center, Denver CO 80225, phone 303-202-4315, fax 303-202-4137, email jokerski@usgs.gov

**DEPARTURE:** *Wednesday, October 27, 12:30 p.m., Colorado Convention Center, Lobby B, GSA Field Trip Check-in Desk. Please check-in at 12:00 noon so we can depart promptly at 12:30.*

**ITINERARY:** *12:30-1:00 Bus trip to Denver Federal Center, located in Lakewood CO, 6th Ave. and Kipling St. (approx. 8 mi. west of Denver). Participants will be divided into three groups each of which will tour in turn:*  
**1:00-2:00** USGS Core Research Center and National Ice Core Laboratory (Bldg. 810)  
**2:00-3:00** USGS Rocky Mountain Mapping Center (Bldg. 810)  
**3:00-4:00** USGS National Water Quality Laboratory (Bldg. 95)  
**4:30-5:00** Return trip to Colorado Convention Center

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\*\*\*end\*\*\*

\*\*end of report\*\*