

# **A Synopsis of the Fiscal Year 2006 Coastal Services Center Training**



**NOAA Coastal Services Center**  
LINKING PEOPLE, INFORMATION, AND TECHNOLOGY



# Synopsis

## **Fiscal Year 2006 Training Provided by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center**

In keeping with the mission of the NOAA Coastal Services Center, training programs at the Center offered a number of courses designed to help coastal professionals acquire new information, skills, and tools to improve coastal zone management. Classroom trainings covered a wide range of topics, from process skills to coastal issues to geospatial technology. More than 1,000 coastal professionals from 43 different states attended Center trainings in Fiscal Year 2006. A review of post-course evaluations revealed exceptionally positive feedback: 93 percent reported that their time was well spent, and 94 percent reported achievement of the learning objectives. In order to maintain this level of excellence, this year 20 Center trainers were certified in Instructional Systems Design after successfully completing a training course brought to the Center for this purpose.

In addition, the Center offered a number of e-learning courses that logged thousands of user sessions.

### **I. Courses Offered**

#### Training Offered Through the Coastal Learning Services (CLS) Program:

- Project Design and Evaluation
- Public Issues and Conflict Management
- Managing Visitor Use (with the Human Dimensions Program)
- Negotiating for Coastal Resources
- Survival Skills for Coastal Resource Managers (Web)
- Web Content Design and Evaluation (Web)
- Needs Assessment Training (Web)
- Public Trust Doctrine (Web)

#### Geographic Information System (GIS) Training Offered Through the Integration and Development (I&D) Program:

- Introduction to ArcGIS 1
- Coastal Applications of ArcGIS
- Conservation Data Documentation

#### Training Offered Through the Coastal Remote Sensing (CRS) Program:

- Remote Sensing for Spatial Analysts

### **II. Course Locations**

In Fiscal Year 2006, courses were taught in 22 different states as well as in Washington D.C. (at Silver Spring) and at the Center. The geographic range of locations covered all the major coasts in the continental U.S., Hawaii, and Alaska. A total of 56 training classes were held, representing

a total of 159.5 training days. In addition, CLS performed 17.5 days of on-site technical assistance as follow-up to training (Table 1).

**Table 1.** Location of Center Trainings and Number of Training Days

Location	Program	# Courses	# Training Days	# Tech. Assist. Days
AK	CLS, I&D	3	12.5	
AL	CLS, I&D	3	7	
AZ	CLS	2	3	
CA	CLS, I&D	5	13.5	2
CO	CLS	2	3.5	0.5
DC (Silver Spring)	I&D, CRS	4	14	
DE	CLS	1	2	
FL	CLS, I&D	3	12	
GA	CLS	1	2.5	
IL	CLS	1	2.5	
IN	CLS	2	4	
MD	CLS	2	4	
ME	CLS, I&D	2	7.5	9
MS	CLS	1	2	
NC	CLS	6	13.5	2
NH	CLS	1	1	
NY	CLS	2	4	
PA	CLS, CRS	2	6	
RI	CLS	1	2	
SC	CLS	1	2	3
SC (Center)	I&D, CRS	7	23	
WA	CLS, I&D	1	5	1
WI	CLS	1	2	
WV	CLS	1	5	
Nha Trang, Vietnam	CLS	1	5	
<b>TOTALS:</b>		<b>56</b>	<b>159.5</b>	<b>17.5</b>

### III. Participant Demographics

Over 1,000 coastal professionals attended Center courses this fiscal year. They came from 43 different states and Puerto Rico and represented all major coastal regions around the country, including Alaska and Hawaii. We also had some participants from noncoastal states (28) and a small number from Canada (3) and Italy (1). One course, which took place in Southeast Asia, was taught to participants living in that region. We trained more than 100 individuals in each of the following states: California, Maryland, and North Carolina. Other states with large numbers of participants included Alaska, Alabama, Delaware, Florida, Georgia, Indiana, Maine, New York, Pennsylvania, Rhode Island, South Carolina, and Washington State (Table 2). A breakdown of participants by region is shown in Table 3 and Figure 1. We experienced ample representation from all major coastal regions, although participation from Puerto Rico and the U.S. Virgin Islands was notably low.

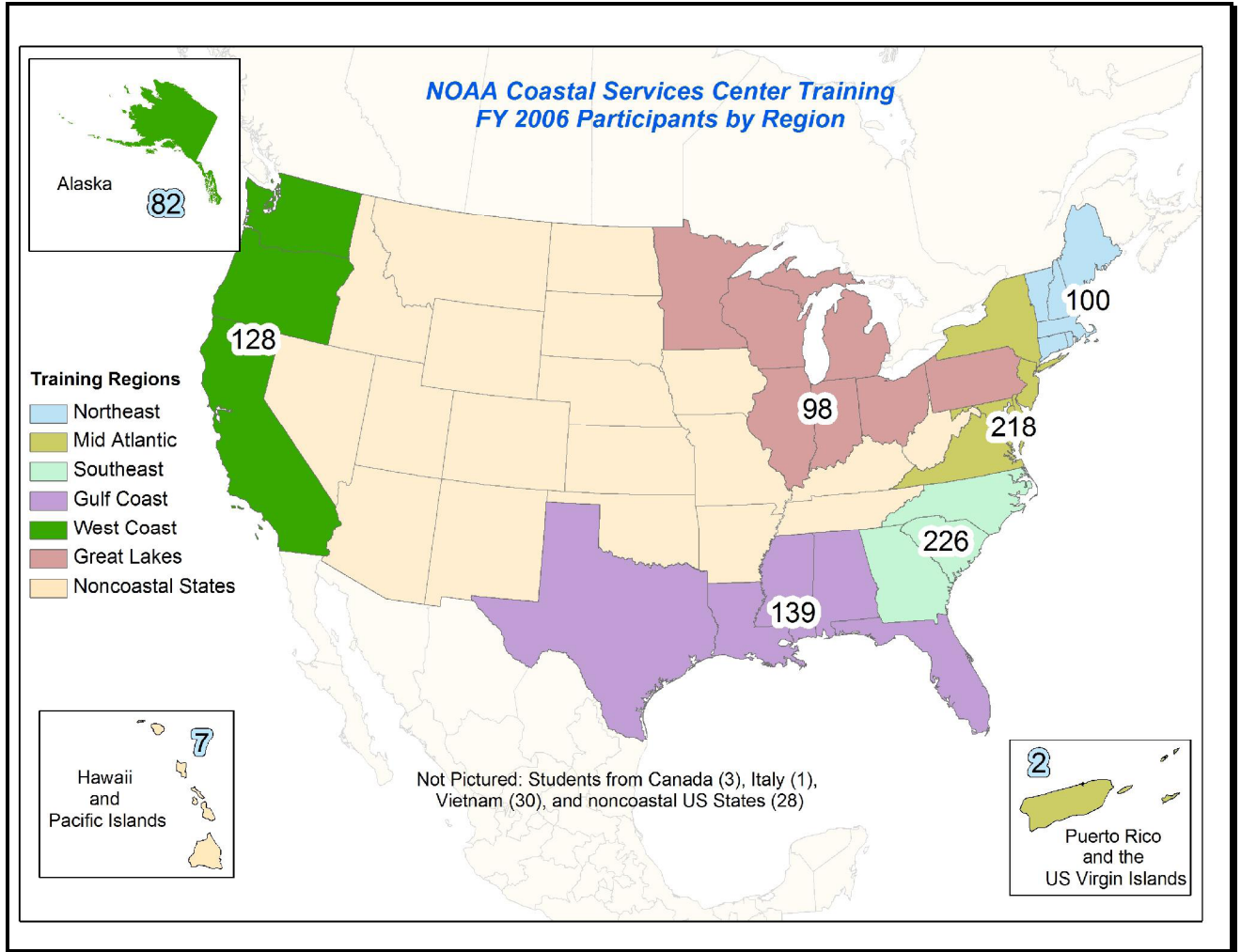
**Table 2.** Geographic Distribution of Participants by Home State or Location

	# Participants
AK	82
AL	69
AR	1
AZ	3
CA	102
CT	3
DC	7
DE	43
FL	54
GA	29
HI	7
IA	1
IL	12
IN	33
KS	1
LA	1
MA	2
MD	104
ME	43
MI	2
MO	5
MN	1
MS	12
NC	115
ND	3
NE	1
NH	17
NJ	4
NM	3
NV	1
NY	55
OH	2
OK	2
OR	2
PA	46
RI	33
SC	81
SD	1
TX	3
UT	1
VA	5
VT	1
WA	24
WI	2
WV	5
Puerto Rico	2
Canada	3
Italy	1
Vietnam	30
<b>TOTAL</b>	<b>1060</b>

**Table 3.** Regional Distribution of Participants

Region	#Participants	% of Total
Great Lakes	98	9%
Gulf of Mexico	139	13%
Mid-Atlantic	218	21%
Northeast	100	9%
Pacific Islands	7	<1%
Southeast	226	21%
West Coast	128	12%
Alaska	82	8%
Puerto Rico/USVI	2	<1%
Noncoastal US	28	3%
International	34	3%

**Figure 1. Participant Training by Geographic Region**

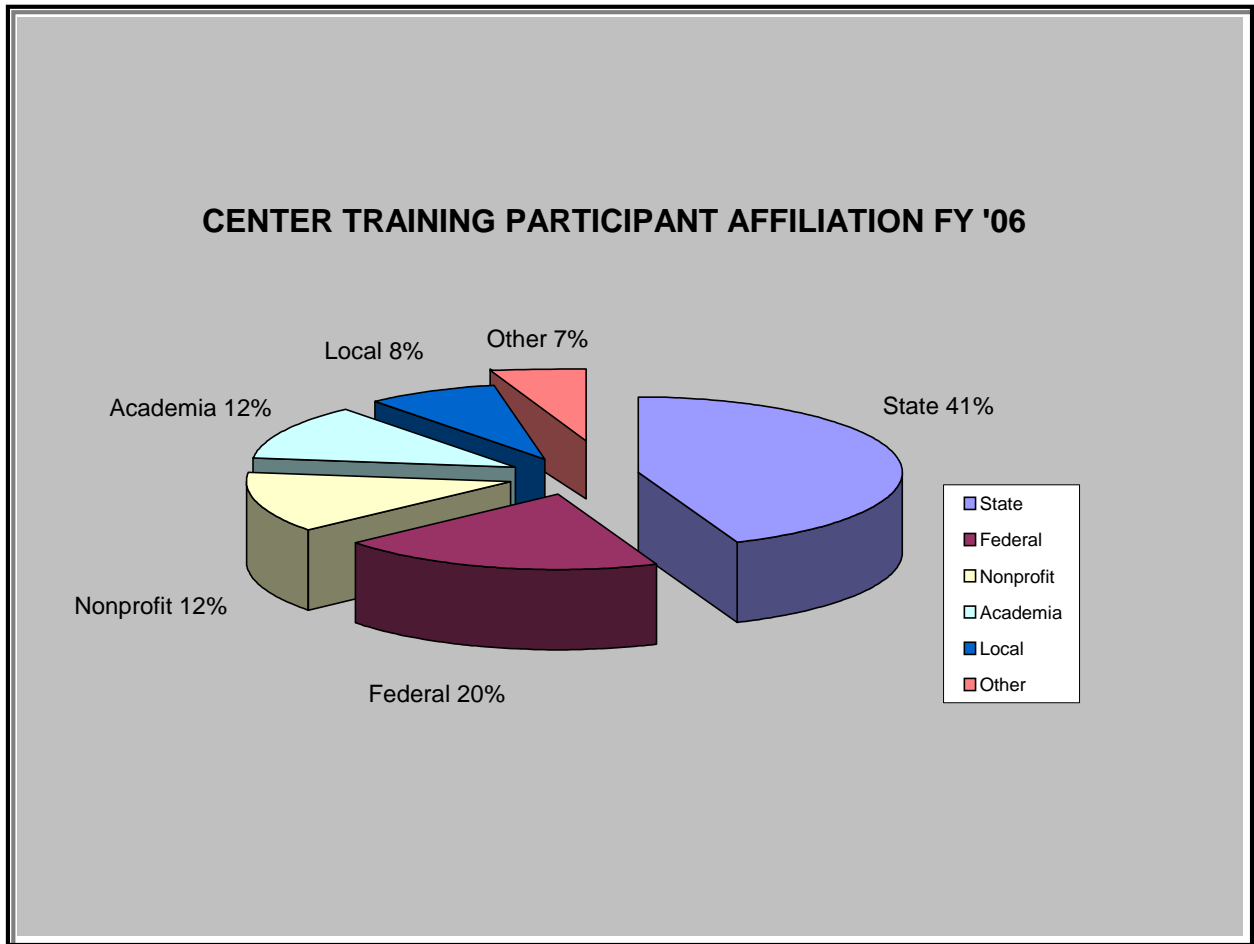


Participant affiliations were wide ranging and included state and federal government, academia, nonprofit organizations, and others. The majority of participants (41 percent) were from state governments (Table 3, Figure 2).

**Table 3.** FY 06 Center Training: Participant Affiliation by Program and Total Participation

Participant Affiliation	GIS	Remote Sensing	CLS	TOTAL	%OF TOTAL
State	170	23	244	437	41
Federal	122	18	74	214	20
Nonprofit	26	3	103	132	12
Academia	4	16	104	124	12
Local	25	0	58	83	8
Other	7	1	62	70	7
<b>Total</b>	<b>354</b>	<b>61</b>	<b>650</b>	<b>1060</b>	

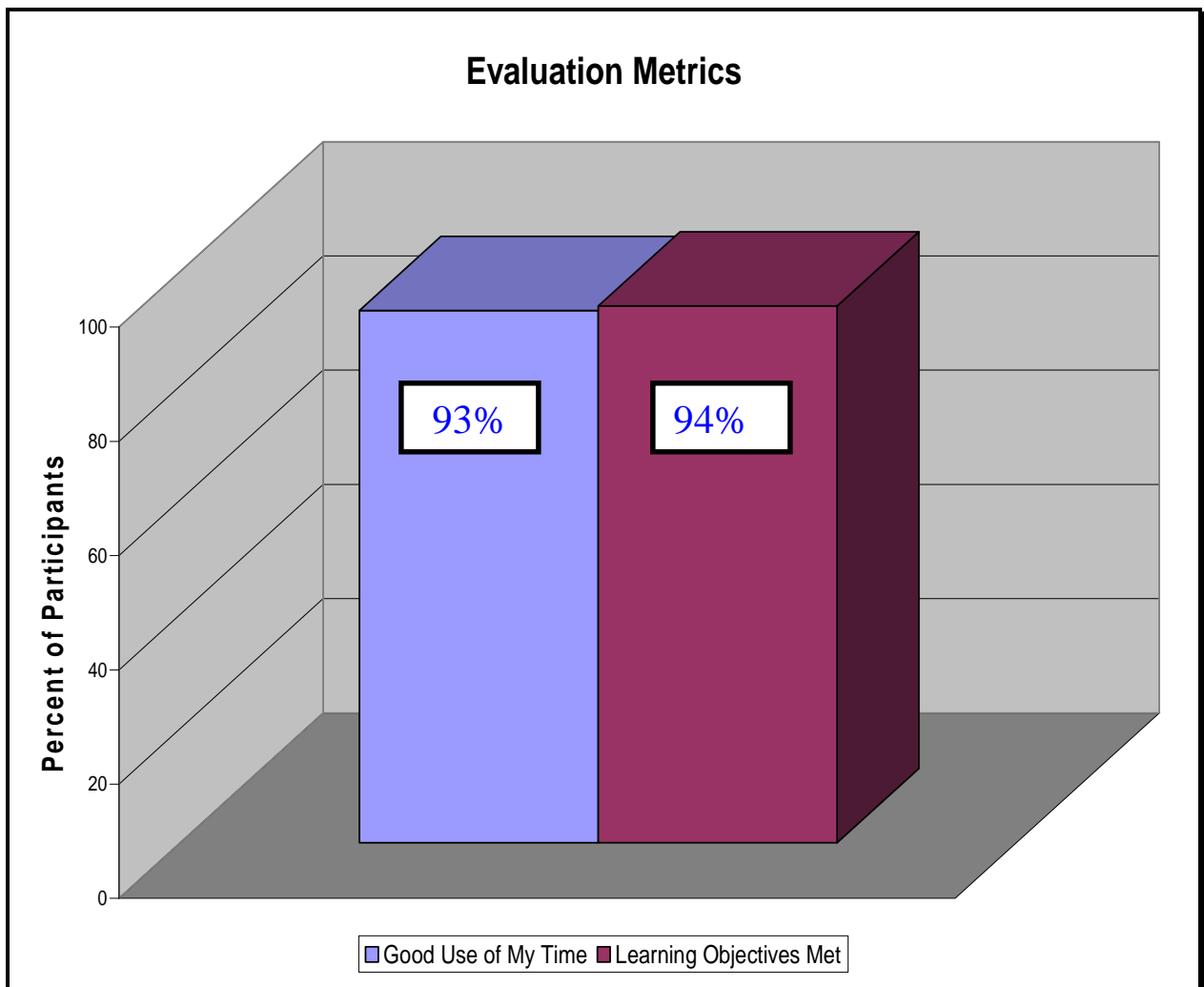
**Figure 2.** Center Training Participant Affiliations for FY 06



## IV. Course Evaluation

In approximately 52 courses taught by the Center this fiscal year, participants submitted standard evaluation forms. These forms were reviewed for two key measures: (1) whether the course was a good use of participants' time; and (2) whether the courses' learning objectives were met. A stratified random sample of approximately 25 percent of the forms— which included at least three forms from each course during different times of the year—yielded the following results.

On average, 93 percent of participants thought that attending the class was a good use of their time. Based on skills and knowledge questions keyed to class objectives, participants indicated that, on average, 94 percent had met the course objectives. These response metrics did not display great variability. The standard deviation for the “good use” metric was approximately 6.2 percent, while the learning objectives metric had a very small standard deviation of about 3.4 percent.



## V. Web-based Learning

CLS maintained and updated as necessary four distinct e-learning opportunities for Center customers this fiscal year. These included training on Survival Skills for Coastal Managers, Web Content Design and Evaluation, Needs Assessment, and the Public Trust Doctrine. The entire reference section of the survival skills course, which incorporates key coastal legislation and stakeholder information, was rewritten and updated this year.

Based on a very conservative counting technique, each course mentioned in the previous paragraph logged thousands of user sessions (unique visits), the highest being Survival Skills for Coastal Managers, with a count of more than 23,000. Repeat visits ranged from 844 to more than 5,000. A significant path, which indicated user viewing of four or more pages, ranged from an average of 85 to 380 per month, the higher figure for the Needs Assessment Training.

### 1. Survival Skills for Coastal Resource Managers

[www.csc.noaa.gov/cmfp](http://www.csc.noaa.gov/cmfp)

Unique Visits: 23,555

Repeat Visitors: 5174 = 21 percent

Significant Paths: 1848 = 168 per month

What can we learn from the figures cited above? On average, 470 visitors per month find something of value and return to this e-learning site. On average, 168 times per month a significant path is created by a visitor viewing four or more pages. These figures indicate that visitors are deriving benefits from the content.

Where an actual Internet Protocol (IP) address can be identified, server logs show the site accessed multiple times by visitors from EcoEarth, Cal State–East Bay, Valdosta State University, Stanford University, the University Corporation for Atmospheric Research, University of California–San Francisco, University of Phoenix, State of Wisconsin, State of Texas, United Kingdom Central Office of Information, Fullerton California School District, U.S. House of Representatives, Institute for Advanced Study (Princeton), U.S. Bureau of Land Management, and University of Hartford.

The reference section of this course receives by far the most visits, as it provides succinct overviews of the myriad laws and agencies involved in the coastal zone. For the main course sections, information on conflict resolution and the overview of academic and professional disciplines receive the most usage.

Organizations Web-linked to this course:

- Sloan Consortium
- Florida Ocean Alliance
- Jordan Cove Energy Project
- Washington State Department of Natural Resources
- Greenbelt Consulting



- University of North Carolina
- Penn State University

## **2. Web Content Design and Evaluation**

[www.csc.noaa.gov/wcde](http://www.csc.noaa.gov/wcde)

Unique Visits: 2966

Repeat Visitors: 961 = 32 percent

Significant Paths: 944 = 85 per month

What can we learn from the figures cited above? On average, 87 visitors per month find something of value and return to the site. On average, 85 times per month a significant path is created by a visitor viewing four or more pages. These figures indicate that visitors are deriving benefits from the content.

Where an actual IP address can be identified, server logs show the site accessed multiple times by visitors from Suffolk County Government (New York), Motley Rice Law Firm, The World Bank, the Bonneville Power Administration (U.S. Department of Energy), State of North Carolina, State of Texas, University of East London, and the U.S. Food and Drug Administration, Internal Revenue Service, and General Services Administration.

Statistics show that various sections of the course are accessed, with the most popular sections being those on determining target audience and developing personas.

Organization Web-linked to this course:

- Pacific Coast Joint Venture

## **3. Needs Assessment Training**

[www.csc.noaa.gov/needs](http://www.csc.noaa.gov/needs)

Unique Visits: 10,579

Repeat Visitors: 2632 = 25 percent

Significant Paths: 4180 = 380 per month

What can we learn from the figures cited above? On average, 239 visitors per month find something of value and return to the site. On average, 380 times per month a significant path is created by a visitor viewing four or more pages. This indicates that visitors are deriving benefits from the content.

Where an actual IP address can be identified, server logs show the site accessed multiple times by visitors from The World Bank, Dollar Tree Stores, and the State of Indiana.

Statistics indicate that the course is used as a “just-in-time” resource by viewers, who examine specific sections and then exit the course. This was the Center’s intent.

Organizations Web-linked to this course:

- Great Lakes Regional Commission
- Cooperative State Research, Education, and Extension Service, New England Water Quality Program
- Southeast's Continuing Education Program for Community Rehabilitation Providers
- Sloan Consortium

#### **4. Public Trust Doctrine**

[www.csc.noaa.gov/ptd](http://www.csc.noaa.gov/ptd)

Unique Visits: 2578

Repeat Visitors: 844 = 33 percent

Significant Paths: 1058 = 96 per month

What can we learn from the figures cited above? On average, 76 visitors per month find something of value and return to the site. On average, 96 times per month a significant path is created by a visitor viewing four or more pages. These figures indicate that visitors are deriving benefits from the content.

Where an actual IP address can be identified, server logs show the site accessed multiple times by visitors from Monmouth University, the State of Virginia, U.S. Army and General Services Administration, University of California–Santa Cruz, and Florida State University.

Users of this course appear to be examining significant portions in one viewing so that they may learn more about the Public Trust Doctrine.

Organization Web-linked to this course:

- Conserve Online

## **VI. Partnered Training**

1. The Center partnered with the National Ocean Service International Program Office and NOAA's National Marine Sanctuaries, as well as Conservation International, the Danish International Development Agency, World Wildlife Fund, SeaWeb, International Union for Conservation of Nature and Natural Resources–Vietnam, and Vietnam Ministry of Fisheries to develop a capacity building pilot project for South China Sea marine protected areas (MPAs). The training program's intended purpose is to provide a knowledge base for developing local and regional capacity and expertise in designation, implementation, and management of MPAs. The program provides developing nations with the opportunity to benefit from the experiences of other developing or developed nations, who may have a longer history of MPA management. The program also facilitates shared experiences that promote cooperation on designation and management of a global system of MPAs. The first training program for the South China Sea pilot project was held in Nha Trang, Vietnam, from December 1 to 17, 2005.

2. The Center partnered with the U.S. Fish and Wildlife Service (USFWS) National Conservation Training Center to update and present a week-long training for USFWS Ecological Services (ES) biologists. The training covered all aspects of ES operations, including understanding the Public Trust Doctrine, the Fish and Wildlife Coordination Act, National Environmental Policy Act, wetlands regulatory review, hydropower relicensing, contaminants, endangered species, the USFWS Partners and Coastal Programs, Mitigation Policy, and strategies for success.

3. In an ongoing effort, the Center partnered with The Conservation Fund and the National Conservation Training Center to develop a GIS-based course for green infrastructure. The course will provide coastal managers, land trusts, and local governments with valuable tools for long-term planning on landscape scales to ensure the conservation of valuable and integrated habitat.

4. In a “train-the-trainer” type partnership with the National Geospatial Technology Network, the Center provided metadata training to eleven university-based geospatial extension specialists (GES). Because each GES works with large numbers of individuals and organizations, there will be many ongoing opportunities to introduce data users and producers to metadata content standards and highlight the value of metadata to organizations and to the wider geospatial data-user community.