



GISCorps May Newsletter

May 2008

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URISA

GISCorps Partner Agencies

EWB

GSDI

MMEX

UNDP

UNHCR

UNJLC

UNOSAT

VVAF

Volunteers for Prosperity

Relief Agency Links

Relief Web

global hub for time-critical humanitarian information on Complex Emergencies and Natural Disasters

A Message from the Core Committee

Volunteers and Friends of the GISCorps

Once again, disasters of immense proportion have struck areas of our planet, and once again GISCorps has been approached for volunteers to respond to an emergency. A few days after the Cyclone Nargis hit various areas of Myanmar (Burma), GISCorps received a request for 20 volunteers. Based on the request, a job description was developed and on Friday May 9th, 2008, a call for volunteers was sent out to various groups and list serves. Shortly after the notice went out, emails from volunteers started pouring in and in less than 48 hours (over a weekend) 20 selected volunteers were ready to work on the project. Core Committee member Ingrid Bruce was instrumental in coordinating the response to the call for volunteers, and in the selection of the candidates for this mission. This kind of response has been typical of our volunteers when others are in need. It reflects the caring that URISA membership and the industry want to show in these situations, and it is indeed indicative of the heart and soul of GISCorps – and why so many of us are volunteers not only with GISCorps, but with other GIS-related initiatives. We on the Core Committee extend our thanks and gratitude to all of you willing to sacrifice your time to help during an emergency – it is an honour to be associated with you all.

GISCorps Core Committee,
Mark Salling, Shoreh Elhami, Dianne Haley, Ingrid Bruce, Kevin Sato

P.S. Please email info@giscorps.org if you want to be removed from this list.

Deployment and Partnership News

Completed Missions:

- **GISCorps Volunteer Assists in the Aftermath of the Missouri Flood:** In March 2008, GISCorps volunteer Heather Milton of URS Corp in St Louis provided GIS technical assistance to St Louis County Emergency Operations Center (EOC). Read more about the project in [here](#).

Missions in Progress:

- **Mission in Myanmar (Burma):** A few days after the Cyclone Nargis hit various areas of Myanmar (Burma), representatives

Data/Information Links

Earthwatch Institute

Earthwatch Institute is an international non-profit organization that brings science to life for people concerned about the Earth's future.

Service at Sea

Service at Sea is a ship-based technology assistance program that will begin a circumnavigation of the earth in August, 2007, with a goal to assist conservation organizations who are using GIS technology to meet goals of their communities.

Society for Conservation GIS

A non-profit organization supporting individuals using GIS and science for the conservation of natural resources and cultural heritage

GISCorps Core Committee

Mark Salling, Chair
Shoreh Elhami, Co-founder
Dianne Haley, Vice Chair
Ingrid Bruce
Kevin Sato

Contact Us

<http://www.giscorps.org>

Email: info@giscorps.org

from [UNOSAT](#), the UN Institute for Training and Research (UNITAR) Operational Satellite Applications Programme, contacted GISCorps and shortly after that, submitted a request for 20 volunteers. Those volunteers were recruited and started to work in less than 48 hours. Read more about the project in [here](#).

- **Mission with iMMAP – Iraq:** In late February 2008, GISCorps received a request for volunteers from Information Management & Mine Action Programs ([iMMAP](#)). Four GISCorps volunteers; Shane Bergman from Colorado, Clio Andris from South Carolina, Chris Van Nice from Texas, and Matthew Redmond from England were recruited for this mission and have been helping iMMAP extract geo-referenced event information from Iraq security reports and narrative reports dating from June 2003. iMMAP has funding to provide a free security information mapping and analysis service to aid agencies working in Iraq. iMMAP, formerly part of the Vietnam Veterans of America Foundation, became an independent NGO in June 2007. They are the leading information management service provider in the humanitarian aid community. Previously GISCorps partnered with iMMAP to send five volunteers to Post Tsunami efforts in Indonesia.
- **Mission with the Peace Corps:** GISCorps has been in contact with the Peace Corps in the last couple of months and as a result, they requested one volunteer to provide GIS training and advisement to their staff. Tom Conry, the GIS Manager of Fairfax County, was recruited for this project and has been working with Peace Corps team members for the past few weeks.
- **Healthcare Volunteers:** GISCorps volunteer Tara Athan, from Alternatives to Invasive Species Inc. in California, has been working on this project since mid November 2007. Read more about the project in [here](#).

New Missions:

- **Mission in Myanmar (Burma) – Second Phase:** UNOSAT has requested another 20 volunteers to collect additional building information from pre-disaster imagery. Recruitment is now in progress.
- **Mission with Engineers Without Borders (EWB) – Afghanistan:** EWB has requested an instructor to teach two GIS courses (introductory and advanced) to the faculty of Kabul Polytechnic University. An email broadcast went out earlier this month and 11 volunteers expressed interest in the mission. Carl Kinkade of BearingPoint of Atlanta, GA was selected for the project and will be heading to Kabul at the end of June.
- **Mission with iMMAP – North Korea:** In November 2007, iMMAP in partnership with the World Food Program (WFP), Bureau for Asia sent a request for volunteers to compile features such as settlement points, transportation, rivers and lakes (complete with attributes) from 405 map sheets in North Korea. Following their request, GISCorps posted the information on its website and was then contacted by Karen Payne of University of Georgia who expressed interest in assisting with the project. As

the first step, she conducted tests to determine the best options for rectification of scanned maps and forwarded the results to WFP. She then continued the test by investigating various methods for extracting features from those scanned maps. Upon completion of the test and receiving WFP's feedback, the number of GISCorps volunteers to compile all the features will be determined and recruitment will begin shortly after.

Read more about completed projects [here](#).

Read more about projects in progress in [here](#).

URISA Announcements

Upcoming Conferences

- **URISA Leadership Academy - Program Now Available**
June 16-20, 2008 - Chicago, IL
- **URISA's 4th Caribbean GIS Conference**
August 25-29, 2008 - Grand Cayman
- **URISA's 46th Annual Conference**
October 7-10, 2008 - New Orleans, LA

What's New

- [Registration Opens for URISA's 4th Caribbean GIS Conference](#)
 - [URISA's GISCorps Working on Myanmar \(Burma\) Cyclone Recovery Efforts](#)
 - [2008 Exemplary Systems in Government \(ESIG\) Award Submission - Deadline Extended](#)
 - [California Endorses GISCI Certification](#)
 - [URISA GIS Salary Survey](#)
 - [2nd Annual Student Paper Competition](#)
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Shop for GISCorps Stuff!!

Do you find yourself in need of a new T-shirt, coffee mug, ball cap or tote bag? Do you want to advertise GISCorps and your association with the organization? Well, you are in luck! You can now find various GISCorps items at our online shop at:

<http://www.cafepress.com/giscorps>

ESRI's 28th User Conference

As in the past several years, GISCorps will be present at ESRI's 28th User Conference (San Diego, August 4-8, 2008) and involved in a number of activities there.

- This year GISCorps' booth will be located in the Map Gallery. Please come and join us on Monday August 4th during Map Gallery hours from 4:30 to 8:30 pm to meet the Core committee members and other GISCorps volunteers.
- This year several volunteers will be speaking about their

experiences. All presentations are held in one session and on Wednesday August 6th from 5:30 to 7:00 pm in room 28-A:

- Tom Ponte and other volunteers will speak to their experiences working on the Myanmar mission. Tom will talk about his experience in managing the work of 20 GISCorps volunteers who were deployed shortly after the cyclone hit Myanmar (Burma).
- Fernando Sedano will talk about his trip and mission in Mozambique.
- David Allen will share his teaching experience in Biloxi, Mississippi.
- Peggy Wu and Brian Mladenich will share their experience on a remote project (with AAAS) in Sudan and East Chad.
- Leeanne Pacatte will talk about the two K-12 projects (in Florida and Iowa) that she managed in 2007-2008.
- Core committee members Dianne Haley, Ingrid Bruce, and Shoreh Elhami will give an overview of GISCorps' missions and activities in 2007-2008.
- On Wednesday following the presentation, there will be a no-host gathering at:

Moose McGillicuddy's Pub
(619) 702-5595
535 5th Ave
San Diego, CA 92101

Join us (anytime after 7:30 pm) and meet the other GISCorps volunteers and Core Committee members.

Featured Projects

St Louis County Missouri's Flood

GISCorps Experience - St Louis Floods, March 2008

By Heather Milton, GIS Specialist at URS Corp, St Louis, MO

Missouri was one of several Midwest states hit by severe storms this spring, causing flooding in parts of the state. One particular storm dumped up to 4 inches in 24 hours in some areas, and the ground was already saturated from previous rains. This caused the Meramec River, which drains from the Ozarks in South-central Missouri to rise far above flood stage. Several communities on the southern edge of St Louis County were affected by the flood, and the County activated its Emergency Operations Center (EOC) to coordinate rescue and emergency services for the event.

Brett Lord-Castillo, the GIS Programmer for the County Emergency Operations Center, requested some GISCorps volunteers to help with GIS and mapping needs. My boss at URS, Jim Hummert, was happy to send me over to help out.



Figure 1: Flooding of Highway 141 at the Interstate 44 underpass

Brett was well-prepared and was displaying a predictive model of the flood on a Smart Screen at the front of the room. He used data from several USGS gauges along the Meramec to estimate the extent of the flood as the flood crest passed through each area. EOC staff from the County police, firefighters, and other crews were constantly checking with him to find out the timing and depth of the flooding in particular areas.

I worked alongside other St Louis County GIS staff from the Planning Department to provide other kinds of maps for the crews as needed. One set of maps showed the predictive flood stage and aerial photos draped on a hillshaded DEM, which enabled the workers to understand what structures were in the flooded areas. Another set of maps was in preparation for emergency evacuation of the city of Valley Park, in case their levee failed. The firefighters tasked with the evacuation asked for a set of maps of the city broken into zones to effectively task emergency crews with blanketing the town and evacuating all the residents. Thankfully the levee held and no evacuation was necessary.



Figure 2: Crest waters on the parking lot at Eureka Senior High

St Louis County has a strong history with GIS use, and it was evident

advantages offered by using GIS to predict the flooding and prepare for appropriate actions. Mapping road closings, locating shelters, planning search and rescue operations, and providing information to the public were all facilitated by Brett, his GIS capabilities, and the County staff and volunteers including Mike Duncan, Melissa McLean, Mary Coffindaffer, Greg Wayne, Solana Rice, Debi Salberg, and Andrew Meyerkordand who assisted.



Figure 3: Damage to Yarnell Rd after the flood waters receded