MEGUG Summer School and Annual Meeting

York Harbor Inn, June 26, 2015

8:00 – 8:30 Registration

8:50 – 9:00 MEGUG Chair Address

9:00 – 10:15 – Morning Workshops

      Track 1 – QGIS Part 1 (Part 1 and 2 = .25 CEU's)

      Track 2 – GIS and Police Vehicles (.125 CEU's)

10:15 – 10:30 – Morning Break – Sponsored by Blue Marble and CAI

10:30 – 11:45 – Morning Workshops Continued

      Track 1 – QGIS Part 2

      Track 2 – Engineering Stream Passages using GIS (.125 CEU's)

11:45 – 12:00– Visit with Vendors

12:00 – 1:00 - Lunch

      12:30 – 1:00 – NOAA Speaker

1:00 – 1:30 – MEGUG Business Meeting and Board Election Announcements

1:30 – 2:45 – Afternoon Workshops

      Track 1 – Google Earth Pro (.125 CEU's)

      Track 2 – Story Maps Workflow Part 1 (Part 1 and 2 = .25 CEU's)

2:45 – 3:00 – Afternoon Break – Sponsored by Kleinschmidt and Wright-Pierce

3:00 – 4:00 – Afternoon Workshops Continued

      Track 1 – Google Fusion and Crowd Sourcing

      Track 2 – Story Maps Workflow Part 2

Abstracts and BIO's Below

Introduction to QGIS

Hope Rowan, Western Mountain Mapping

QGIS is a free, open-source GIS software, compatible with both Windows and Mac operating systems (as well as Linux, BSD, and Android.) It includes QGIS Desktop, Browser, Server, Web Client, and Android (Beta!); this workshop will focus on the QGIS Desktop software, which allows the user to create, edit, analyze, visualize, and publish geospatial information.

The advantages and disadvantages of the software will be discussed, as well as a comparison to ArcView, and a review of some of the extensions available. The second half of the workshop will consist of a hands-on exploration of the capabilities of, and practice with, the QGIS software. It is recommended you bring your own laptop onto which you can download the software for this portion of the workshop.

Hope Rowan of Western Mountain Mapping provides cartography, spatial analysis, and GIS training services for governmental and community organizations, as well as for businesses and individuals. The focus of her work revolves around land use planning, conservation, marine spatial planning, environmental science, and sense of place. She additionally teaches GIS courses as Adjunct Faculty at the University of Maine, Machias, and has extensive experience teaching GIS to both students and teachers at the K-12 level. Hope holds a B.A. in Music from Colby College in Waterville, ME; and a Masters of Philosophy in Human Ecology from the College of the Atlantic in Bar Harbor, ME. She resides on Mount Desert Island and spends much of her spare time exploring the trails of Acadia.

GIS in Police Vehicles

Brett Horr

The Town of York, Maine has employed the Data Driven Approach to Crime and Traffic Safety (DDACTS) law enforcement operational model to encourage the creation of hot spots by mapping specific crime and traffic crash data to determine the most effective methods for deploying law enforcement and other resources. Drawing on the deterrent value of highly visible traffic enforcement and the knowledge that crimes often involve motor vehicles, the goal of DDACTS is to reduce crime, crashes, and traffic violations. This presentation will introduce how and why the York Police Department has employed the DDACTS model, what the data revealed after it was mapped, and how GIS and Automatic Vehicle Location (AVL) services are used to compliment law enforcement patrol activities. In addition, a discussion how the changes in patrolling have been received both within the York Police Department and the community in general.

Brett Horr, GISP is the GIS Manager for the Town of York, Maine, who has worked in the GIS field for nearly 2 decades. His duties include GIS analysis, web and mobile mapping projects, enterprise database management, IT support, and any and all GIS needs. In addition to his GIS Manager duties, Brett is a Maine State Certified Reserve Police Officer, serving as a Reserve Patrolman with the York Police Department, while providing assistance with investigations and patrol activities, as well as crime mapping and analysis. Brett was a member of the Board of Directors for the New England Chapter of URISA from 2012 - 2014, was the Secretary for the NEARC Board of Directors from 2012 - 2014, is currently the President of the NEARC Board of Directors, and has been an adjunct instructor for the Criminal Justice program at York County Community College.

Abstract

<u>Desktop Analysis of Stream-Road Crossing Structures</u>

This session will cover desktop analysis for the conceptual design of stream-road crossing structures. Stream-road crossings have emerged as important ecologically-minded structures that support passage of aquatic organisms underneath roadways. Traditional road crossing culverts create barriers to fish passage because water velocities increase through constricted openings leaving the culvert outlets suspended above the scoured stream channel. A properly designed stream-road crossing structure helps maintain connectivity and mitigates fragmentation between upstream and downstream ecosystems.

The session will utilize publicly available GIS mapping programs for a watershed scale review of site risk factors. The site risk factors will be evaluated which help form the conceptual design and prioritize follow-up field assessment measures. Case studies will be presented and discussed during the session.

Bio

Adam Bliss, P.E. works as a water resources engineer for Kleinschmidt Associates in Falmouth, Maine. He earned an MSCE, specializing in GIS, from the University of Colorado, Denver. He uses GIS for watershed planning, stormwater management, and hydrologic and hydraulic modeling. His project experience includes design and permitting of fish passage structures, recreational facilities, ecological restoration projects, and dam rehabilitations. He works with a variety of clients including municipalities, non-government organizations, and commercial and industrial facilities.

NOAA Lunch Talk:

This will be a discussion of recent activities of the National Geodetic Survey that I believe will be of interest to the audience. The topics will include the new Regional Advisor Program, the availability of new transformation tools, that the planned replacement of NAD 83 and NAVD 88. There will be time for questions both on and off these topics.

Dan Martin works for the National Geodetic Survey and has been the Northeast Regional Geodetic Advisor since May of 2015. As the Regional Advisor, he instructs local surveyors, state and municipal agencies, and the geospatial community at large, on how to use and preserve the National Spatial Reference System, and provides liaison between the National Geodetic Survey and the States of ME, NH, VT, MA, CT, RI, NY, and NJ, as well as other federal agencies.   He worked in the Route Survey and Geodetic Survey sections of the Vermont Agency of Transportation from 1988 through 2003, and held the position of Geodetic Program Supervisor for the Agency from 1999 through 2003. In 2003 Dan began his career with the National Geodetic Survey as the Vermont State Geodetic Advisor. Dan is a Past President of the American Association for Geodetic Surveying (AAGS), and is a Fellow Member of the American Congress on Surveying and Mapping. He is also a member of the Vermont Society of Land Surveyors and the New Hampshire Land Surveyors Association.

Google Earth Pro

Christine Manderson

Google Earth Pro is an entry-level GIS program that everyone can use, and it is now available at no cost. This session will cover Google Earth Pro extensively, starting with downloading and installing Google Earth. We will cover the details of how to navigate with the program. We will discuss what a kmz is, how to import and export data, and how to symbolize data. Also covered will be creating your own point and line data with labels. Then we will discuss basic map creation and creating a pdf file and how to e-mail your data. Finally, we'll take a look at a few advanced features.

Bio

Chris Manderson has worked as a GIS Analyst in Maine for over 10 years. She currently works at Wright-Pierce, where she has applied her GIS skills to a variety of water, wastewater and civil projects. She was previously employed at Spatial Alternatives, where she learned GIS from the ground up, while working on numerous municipal GIS applications.

Mapping Maine Stories – Sam Berg

Story Maps combine maps, photos, text, and other media in a single interactive application. Their engaging, fun-to-use format makes story maps ideal for public outreach, stakeholder engagement, and GIS project presentations.

In this workshop, Chris and Sam from Esri will demonstrate the steps for making web applications highlighting some Maine stories using templates that require no coding.

Workshop attendees are encouraged to bring their own laptops as time will be given for working on their own versions of these projects. Access to the ArcGIS Online environment will be provided.

Sam Berg

As a veteran of many diverse projects within Esri for more than 18 years, Sam has maintained a focus on developing and articulating creative software solutions for a wide variety of GIS mapping and data management problems.

In his role supporting solutions for government agencies across the region, he provides technical guidance to analysts and developers throughout the GIS community. "

Google Maps Promoting Community Recreational Assets
Jim Fisher

Public health and economic development benefit when communities harness GIS technology to inventory and promote outdoor and indoor recreational assets. The Hancock County Planning Commission and Healthy Acadia have adapted the Rural Active Living Assessment process to provide online, interactive inventories of a wide range of recreational assets including playgrounds, trails, boat launches and gymnasiums.

Persons attending this session will see a hands-on demonstration of the process of identifying assets, creating a geo-located record in Google "Fusion" tables and turning that information into web-based, online maps. All of the tools are currently provided at no charge by Google, but can be adapted to other GIS platforms. The process is easy to learn, easy to adapt to local needs, and provides a useful system for a range of municipal needs including prioritizing asset investments and promoting use of recreation facilities. Technical support for recreational asset mapping is widely available in Maine through the Healthy Maine Partnership Program and regional planning organizations.

Presenter:

Jim Fisher is the Senior Planner at the Hancock County Planning Commission. He holds a BA from Bowdoin College, a Masters of Regional Planning and Ph.D. from the University of North Carolina. His work reflects a life-long interest in the relationship between health and habitat. His courtship with GIS began in 1982 using mainframe computers and line printers, and much of his subsequent effort has been devoted to finding simple, affordable geographic information systems for small town and rural needs. His work is available on myriad websites including hcpcme.org, schoodicbyway.org, blackwoodsbyway.org, sunrisetrail.org and healthyhancock.org.