MEGUG Agenda for MMA Tech Conference
March 1, 2012

Track 1

10:00-10:45- GIS 101: Basic Concepts and Uses for Local Government
John Cassidy, ESRI

John Cassidy has always been interested in maps and geography even as a boy when he used his trusty Rand McNally road atlas to help his dad navigate the family VW van to New Hampshire from California. He studied Geography at the University of New Hampshire and State University of New York earning a Bachelor's degree in 1985. His work career of over 25 years has spanned four companies: Geographic Data Technology, Tele Atlas, TomTom, and now Esri, where he works with state agencies in Northern New England.

This session will present an overview of what is GIS, some basic concepts, and a high level summary of its uses in local government operations. Users should expect to come away with a broad understanding of this important technology. The concepts presented will serve as a basis for the second morning session covering specific examples of GIS usage for assessors, planners, and other local government personnel, to be presented immediately after this session.

11:00-11:45- ESRI Intro session part 2
Mark Scott, ESRI

Mark Scott received a B.S. degree in Surveying Engineering from The University of Maine in 1984. He has over 7 years of practical surveying and engineering experience, and nearly 20 years' experience in the technical sales, marketing, and support of GIS, CAD, and engineering software. Joining ESRI in 1997, Mark is a member of the Solutions Engineering team, supporting customers of ESRI software.

This session will present specific examples of uses of GIS in local government. Demonstrations will cover topics such as GIS usage in land records management; planning; public works; and other examples. This session will be of interest to assessors, planners, public works employees, and other municipal employees. Users should expect to come away with an understanding of some of the specific uses of GIS in local government. The demonstrations presented will build on the concepts presented in the preceding session entitled "GIS 101: Basic Concepts and Uses for Local Government", and those attending should ensure they have attended the first session.

1:45-2:30- Maine GeoLibrary Adopts Land Use Codes
Using Stakeholders to Develop a Watershed-Scale Land Use Suitability Model
Dan Walters - US Geological Survey
Spencer Meyer – U of Maine, Center for Research on Sustainable Forests

Dan Walters works for the National Geospatial Program (NGP) of the U.S. Geological Survey. NGP manages The National Map and partners with private, local, state and federal organizations to produce and maintain a vast array of high-quality geospatial data. A significant objective of the NGP, through the Partnership Network, is to leverage these assets through mutually beneficial partnerships that ensure the ongoing availability of current data consistent with National Spatial Data Infrastructure principles.

The GeoLibrary has awarded grants to towns for projects that digitize or improve town's parcels maps for GIS. A land use code is part of the attribute table for each parcel. Unfortunately, Maine does not have a widely accepted standard for land use codes. The Board set up a committee to study the problem

and recommend a solution. The presentation will describe the process leading to the new land use codes and provide an overview of the codes and how they can be applied.

Spencer Meyer is the Associate Scientist for forest Stewardship at the Center for Research on Sustainable Forests at the University of Maine. He is a forester and conservation scientist who has worked with forest landowners, conservation organizations, and state agencies to better understand the role forests and forest management play in landscape conservation. His current work focuses on understanding how strategic land use decisions can stimulate the conservation of healthy working landscapes. He holds a B.A. in Environmental Studies from Dartmouth College and an M.S. in Forestry from the University of Maine, where he is currently working towards his Ph.D.

The Lower Penobscot River Watershed (LPRW) is home to a significant regional interface between small, connected communities and the vast, undeveloped expanses of the forested Maine landscape. Parts of the LPRW have been identified as nationally significant areas that will likely experience further forest fragmentation in the coming years (White and Mazza 2008). Since 2000, 77% of Maine's population growth has occurred outside of traditional town centers (Brookings 2006). The intrinsic land suitability for the often-competing land uses of development, forestry, conservation and agriculture is not well understood. This project used stakeholder-derived models for land suitability to assess areas of conflict between land uses and areas of opportunity for conservation collaborations (McCloskey et al. 2011). In this presentation we examine the development of stakeholder-driven land use models to integrate stakeholder values with empirical spatial data. Our findings include: 1) land use suitability models focused on forestry, conservation, agriculture, and development; 2) identification of areas of conflict or complementary attributes; and 3) lessons learned from co-development of the models. This project places an emphasis on developing a flexible modeling tool that: 1) may be used by scientists and planners for community and regional visioning; and 2) may be applied to other regions nationally and globally, using local expert knowledge and publicly available data.

2:45-3:30- NextGen 9-1-1 for Maine
> Bob White - State of Maine, Office of Information Technology, MEGIS 9-1-1

Bob White has worked in GIS and 9-1-1 for the past 19 years. He has been involved with projects in counties from Maine to Wisconsin and as far south as the Carolinas and Kentucky. Bob serves on several GIS and NG9-1-1 committees at the National level for NENA.

This session will provide an overview of the NG9-1-1 system that Maine will be deploying in 2013. This new technology uses GIS data to locate, route and identify appropriate responders when requests are made for emergency services. Current GIS layers will need to be reviewed, enhanced, and upgraded. The need for several new data layers have also been identified and will need to be created. MEGIS 9-1-1 staff is currently revamping the current maintenance system and new tools and processes will be deployed this winter.

10:00-10:45 - Maine's Strategic Broadband Plan: An Overview
        James H. Page, PhD, CEO of James W. Sewall Company

Jim Page is the CEO of James W. Sewall Company out of Old Town. His roots began in Caribou and he still holds Northern Maine very dear to him. He received his doctorate in philosophical foundations of mathematics from MIT. Returning to his home state, he was hired by James W. Sewall in 1997 and has been with them since. Sewall Company works in high-tech niche markets, including forest economics, geospatial application development, and renewable energy such as wind power and biomass.

In 2011, the ConnectME Authority, working with the James W. Sewall Company, completed the first comprehensive statewide broadband needs assessment and the first statewide strategic plan to increase broadband availability, reduce barriers to adoption, and increase broadband uptake. In this presentation, an overview will be given of the needs assessment's main results and the strategic plan's key recommendations.

11:00-11:45 – Maine Statewide Orthoimagery 5-year Program
        Bradley Fugate, Woolpert Inc.

Bradley Fugate is an ASPRS-Certified Photogrammetrist and Project Director, Mr. Fugate has more than 30 years of experience at Woolpert managing all phases of photogrammetry. Having supervised projects from conventional and GPS surveys to the development of LiDAR surface modeling and GIS applications, he is responsible for project development, and is especially adept at developing long-term project plans and project management. He works closely with the Group's remote sensing technical staff incorporating the latest mapping technologies in an effort to best serve the Firm's clientele.

The need for improved planning, assessment, and response has been a heightened subject of concern for federal, state, and local agencies nationwide. As conditions in the economy increasingly impact resources, more cost-effective and efficient means of managing and maintaining your assets are essential. Statewide Orthoimagery provides one current, accurate, seamless base map to produce an interoperable mapping system used by all agencies, eliminating duplication of maintenance and collection efforts while providing improved communication between organizations. This presentation offers a brief description of the Maine Statewide Orthoimagery 5-year Program covering the scope of services, accuracy and products produced.

1:45-2:30 - Flood Inundation Mapping in Fort Kent, ME and Flood Plain
        Pam Lombard, USGS Maine Water Science Center
        Joseph Young, Maine State Planning Office

Pam Lombard has a Master's degree in hydrology from Oregon State University. She works at the USGS in Maine since 1998.

Flood inundation maps developed for Fort Kent, Maine depict estimates of the areal extent and depth of flooding corresponding to selected water levels (gage heights) at two USGS stream gages in Fort Kent. Forecasted peak-gage-height information, available from the National Weather Service at these gages may be used in conjunction with these maps to show predicted areas of flood inundation. Flood inundation maps give Emergency Workers the ability to forecast the extent and timing of flood waters in the mapped area, and a Google map interface makes these maps readily available to the public during floods.

Joseph Young has a BA in Geography from the University of Maine, Farmington. He works for Maine State Planning Office in Augusta.

This session will focus on the availability of digital floodplain maps in Maine and FEMA's plans to upgrade current paper maps to digital products. It will cover using the free software such as Google Earth to view digital maps and the use of FEMA Digital data to use in association with commercial Geographic Information Systems software. It will provide an overview of FEMA mapping service center and free data access. The discussion will provide the user with a basic understanding of where to access and acquire FEMA floodplain data including web link information. At the end of the session the user should be able to determine what sources of data are best for them, what they need to access the data, how to use it and limitations of the data.

2:45-3:30 – Virtual Maine, an Emergency Situational Awareness System
            Christopher Kroot, Maine Office of GIS

Christopher Kroot has a Masters in Managing Information Systems, MBA, BA in Computers. He is an Enterprise GIS Analyst for the Maine Office of GIS.

The Maine Emergency Management Agency has developed a situational awareness system called "Virtual Maine". Virtual Maine provides emergency personnel access to a wide variety of data, locations of reported events from a bridge washout, car accident, a plane crash, descriptions, personnel involved, issues that need attention, status, photographs, etc. It provides access to a variety of weather feeds. The 511 system is accessible providing information on roads and traffic. Near real time power outage data is displayed. The system will be available to county and local governments who collaborate with MEMA during emergencies.

The focus of this presentation is how the system may be used. The main software components that are used will be identified; however this is not a technical presentation on how it was built.

Virtual Maine is built on two primary software products, Google Earth Enterprise and WebEOC.

KEYNOTE Speaker:
Dave Hobbins – University of Maine, Fort Kent

Dave Hobbins is professor of forestry and environmental studies at the University of Maine at Fort Kent where he has been teaching since 1986. Teaching is his passion and he is responsible for the areas of GIS, forest inventory and mapping, and forest protection. He also teaches an on-line GIS course for the public safety program. Dave is a graduate of the University of Idaho Forestry Program with an MS in Forest Pathology (WVU). He has graduate training in GIS, remote sensing and forest protection from University of Maine and Michigan State.

Dave will examine community mapping projects conducted at the University of Maine at Fort Kent and other member schools of the Maine Geospatial Education Consortium. This will be followed by a discussion of ways budget-strapped communities can complete mapping needs and begin to implement GIS.

Agenda:
8:00-8:45: Registration and continental breakfast
8:45-9:45: Morning keynote speaker (provided by MMA)
9:45-10:00: Break
10:00-10:45: Concurrent sessions
10:45-11:00: Break
11:00-11:45 Concurrent sessions
12:00-1:30 Luncheon & keynote speaker (Dave Hobbins)
1:45-2:30: Concurrent sessions
2:30-2:45: Break
2:45-3:30: Concurrent sessions
3:30-3:45: Break
3:45-4:00: MEGUG Scholarship/Grant Recipient Presentations
4:00-4:15: MEGUG Business Meeting

SAVE THE DATE! March 1, 2012
Municipal Technology Conference — Education & Innovation
Holiday Inn By The Bay, Portland
Sponsored by: Maine Municipal Association & Maine GIS User Group
In Cooperation with: ConnectME Authority