AMERICAN WATER RESOURCES ASSOCIATION

COMMUNITY, CONVERSATION, CONNECTIONS

AWRA Spring Specialty Conference
GIS and Water Resources X:
Spatial Analysis of Watersheds: Ecological, Hydrological, and Societal Responses
April 22 – 25, 2018
Rosen Centre Hotel, Orlando Florida

GIS has come a long way! It has been 25 years since the first AWRA GIS & Water Resources Conference and the very term "GIS" doesn't mean the same thing as it did back then. Data, tools, models and good cartography are still incredibly important. Many of us still perform much of our geospatial work on desktops. But ---- we've moved well beyond desktops to the cloud, to decision making and water-based applications that are integral to ecology and society --- far beyond floodplain mapping!

As GIS has changed, our biennial GIS and Water Resources conference is changing too! **If you haven't attended this conference before**: This is the 10th in a series of conferences designed around geospatial solutions to water resources related problems. Innovative water resources scientists, engineers, modelers, software designers from the public/government agencies, academic and private sectors convene to exchange ideas, compare challenges and solutions. If your aquatic research, management, and conservation involves process models, geo-referenced field data, remote sensing, or geo-statistical models then this is the venue to show that work. We've taken a slightly different tack for 2018 by having two Technical Program Co-Chairs. Dr. Dan Ames of Brigham Young University (BYU) is well-known to regulars of this conference and brings his expertise and interests in GIS-based water resources modelling, open source GIS, and web apps. Dr. Mike McManus of EPA, Office of Research and Development is a fairly new member of our tribe. He organized two very successful topical sessions with an ecological focus for the 2016 AWRA GIS & Water Resources conference that was held in Sacramento, solidifying a place in our community for geospatial water-based analyses involving ecology. Our Topical Sessions Chair, Dr. Norm Jones, of BYU, has a long history of GIS-based hydrologic modelling and helped co-author the Arc Hydro Groundwater tools. He is actively fielding topical session ideas ranging from remote sensing application to water resources, Ele-Hydro, drones, watershed conservation, and the National Water Model. Rest assured, the National Hydrography Dataset and NHDPlus, climate change, flood modeling and all the regular topics will be well represented!

Keep your eye on the AWRA conference webpage for more exciting announcements!
A list of suggested topics and subtopics is on the reverse side.

Conference General Chair: Sandra Fox, St Johns River Water Management District,
sfox@sjrwmd.com

Call for Abstracts

The ONLINE Call for Abstracts will be available on the AWRA homepage in late August of 2017!

Below is a list of Topics and Sub-topics. It is provided as possible conference topics to encourage potential participants to submit an abstract; it is by no means all-inclusive. If you don't find your water-related topic listed – it just means that we didn't think of it ----- so, please still plan to join us to share your cutting-edge work.

The abstract presentation can be in oral or poster format. Both GIS and computer technology as well as water resources domain focused abstracts are encouraged. The final conference program will be determined by the content of submitted and accepted abstracts and Topical Sessions. The **deadline** for submitting an abstract is **January 9, 2018.** **Website: www.awra.org**

Data Acquisition and Management

Innovative Data Acquisition

Mobile Data Collection

Efficient Data Processing

Secure Data Sharing

Handling Data Uncertainty

Authoritative Data Portals

Web Services

Data Curation

Processing Big Data

Ontologies and Semantics

Advances in Remote Sensing

New Data Models and Structures

Process Modeling

Managing Workflows

Geoprocessing

Modeling with Uncertainties

Integrated Hydrologic/Hydraulic Modeling

Integrated Groundwater/Surface Water Modeling

Citizen Science

Community Communication

Sea Level Rise Adaptation and Climate Change

Spatial Algorithms

Decision Modeling

Geospatial Visualization

Cloud Computing

High Performance Computing

Parallel Computing

Open Source Tools and Libraries

Scientific Computing

Implementation

Water Supply Optimization

Land Cover/Land Use Change

Weather Forecasting

Snowmelt Estimation

Effective Decision System

Drought Risk, Planning and Management

Ecosystem Modeling and Monitoring

Integrated Watershed Management

Water and Energy Decisions

Stormwater Management Innovations

International Approaches and Collaboration

Balancing Costs and Environmental Policies

River Hydraulics

Urban Watershed Management

Managing Water Resources Under Extreme Weather Cycles

Regional and National Systems

Groundwater Management

Flood Risk Mitigation Planning

Water Quality Improvements

Hazard modeling (e.g. Landslides, Floods, Fires, Erosion)

Emergency Management: Operations and Planning

Coastal Processes

Sediment Management

Water Distribution and Drought Resilience

Ocean Modeling

Hydrologic Modeling

Watershed Conservation and Restoration

Important dates:

Proposals for Topical Sessions to njones@byu.edu due:
No later than **December 1, 2017**
Notification of Topical Sessions acceptance: **December 15, 2017**

Abstracts due (online submittal system):   **January 9, 2018**
Notification of Abstract acceptance: Late January, 2018