

**CEGIS Research Meeting**  
**June 13-14, 2017, Rolla Federal Center, Rolla, Missouri**  
**Conference Phone Number: 1-866-687-7995 Passcode: 3591681#**  
**WebEx at <https://usgs.webex.com>**

**All Times Central Daylight Time**

<b>Tuesday</b>			
<b>6/13/2017</b>		<b>Room 501-502-503</b>	<b>Presenter/Facilitator</b>
<b>Start</b>	<b>Stop</b>		
8:00 AM	8:15 AM	Welcome and Introductions	<b>E. Lynn Usery</b>
		Meeting Goals and Objectives	
8:15 AM	8:45 AM	Remarks from the NGP Director	<b>Michael Tischler</b>
8:45 AM	11:45 AM	NGP Vision, Research Needs, Annual Planning	<b>Phyllis Altheide, Lead</b>
8:45 AM	9:30 AM	Hydro Program Plans and new NHDPlus HR product	Steve Aichele
9:30 AM	10:00 AM	NGP Future Vision - Roadmap for National Terrain Model Vision	Vicki Lukas
10:00 AM	10:15 AM	Break	
10:15 AM	10:45 AM	NGP Future Vision - Cartographic Data Services Maps & Delivery	?Bob Davis
10:45 AM	11:30 AM	3DEP/Elevation operational use case for High Performance Computing	Drew Lane
11:30 AM	12:00 PM	FY18 Planning process working session	Phyllis Altheide
12:00 PM	1:00 PM	Lunch	
1:00 PM	2:00 PM	Integration of NGP Data with Fluid Dynamic Applications	<b>Emitt Witt, Lead</b>
2:00 PM	2:15 PM	Optimizing 2D Hydraulic Model parameterization using 3DEP Source elevation data and its Derived Products	Emitt Witt, PI
		Final questions/comments	
2:15 PM	5:15 PM	National Terrain Mapping	<b>Samantha Arundel, Lead</b>
2:15 PM	2:25 PM	Introduction to National Terrain Mapping: background, team and goals	Samantha Arundel
2:25 PM	2:50 PM	Object-based approaches to landform mapping	Jarlath O'Neil-Dunne, U Vermont
2:50 PM	3:05 PM	Validating Continental United States terrain elements automatically-derived from the U.S. Geological Survey 1/3 arc-second seamless layer with Geographic Names Information System terrain types: three test regions	Samantha Arundel
3:05 PM	3:20 PM	Break	
3:20 PM	3:30 PM	GNIS summit snapping for eminence delineation: An opportunity for operational implementation	Robert Basden
3:30 PM	3:55 PM	Ontology based methods for delineating and characterizing landforms	Gaurav Sinha, Ohio University
3:55 PM	4:20 PM	Empirical analysis of terrain feature probabilities across variable terrain considering scale, classification, and the potential of multiple methods	Bo Romero, UC Santa Barbara
4:20 PM	4:45 PM	A spatio-contextual probabilistic model for extracting linear terrain feature from LiDAR data	Xiran Zhou, Arizona State
4:45 PM	5:10 PM	An integrated cyberinfrastructure to support intelligent terrain analysis	Wenwen Li, Arizona State
5:10 PM	5:15 PM	Final questions/comments	Samantha Arundel
5:15 PM		Adjourn for the Day	

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<b>Wednesday</b>			
<b>6/14/2017</b>		<b>Room 501-502-503</b>	
<b>Start</b>	<b>Stop</b>		
8:00 AM	10:00 AM	MultiScale Representation	<b>Larry Stanislawski, Lead</b>
8:00 AM	8:10 AM	Multiscale Representation/Generalization Progress Overview	Larry Stanislawski
8:10 AM	8:25 AM	Validation of drainage density estimates for the conterminous United States determined from a weighted flow accumulation model.	Larry Stanislawski
8:25 AM	8:40 AM	Open source method for line-density rasterization to support computations of line similarity	Ting Li
8:40 AM	9:00 AM	High Performance Processing to Enhance the National Hydrography Dataset with Lidar-Derived Drainage Lines	Larry Stanislawski
9:00 AM	9:20 AM	Preserving Line Sinuosity in Hydrographic Feature Simplification	Larry Stanislawski
9:20 AM	9:40 AM	Cross-scale analysis of surface-adjusted elevation and distance measurements.	Barbara Buttenfield
9:40 AM	10:00 AM	NGTOC 100K Product-on-Demand (POD), and 100K prototype maps	Bill Marken, Brittany Roche
10:00 AM	10:15 AM	Break	
10:15 AM	12:15 PM	High Performance Computing	Jeff Wendel, Lead
10:15 AM	10:35 AM	CyberGIS update	Shaowen Wang
10:35 AM	10:55 AM	Parallel LiDAR data processing (p_points2grid)	Jeff Wendel and Nathan Casler
10:55 AM	11:15 AM	Preliminary scalability study of LiDAR data delivery services	Nathan Casler, Li Xu, and Ting Li
11:15 AM	11:35 AM	High-performance 3DEP and NHD data analytics: case study in continental-scale inundation mapping	Yan Liu and Dandong Yin
11:35 AM	11:55 AM	TopoLens project update	Hao Hu
11:55 AM	12:15 PM	A CUDA-Based Parallel Processing Library for 3DEP	Jing Li
12:15 PM	1:00 PM	Lunch Delivered	
1:00 PM	3:00 PM	Geospatial Semantics and Ontology	<b>Dalia Varanka, Lead</b>
1:00 PM	1:45 PM	Introduction: Map as a Knowledge Base	Dalia Varanka
1:45 PM	2:15 PM	Linked Data for The National Map	Krzysztof Janowicz
2:15 PM	2:45 PM	Demonstration of Semantic Web Technologies As Applied to Surface Water Feature Classification	Michelle Cheatham
2:45 PM	3:00 PM	Summary - questions	Dalia Varanka
3:00 PM	3:15 PM	Break	
3:15 PM	5:15 PM	Data Integration	<b>Tom Shoberg, Lead</b>
3:15 PM	3:45 PM	Data Integration at CEGIS: Introduction	Tom Shoberg
3:45 PM	3:55 PM	Supply Chain Resiliency: Project Overview	Dr. Suzanna K. Long
3:55 PM	4:15 PM	Supply Chain Resiliency: Environmental Impact Modeling of Maritime Systems	Dr. Lizette Pérez Lespier
4:15 PM	4:30 PM	Supply Chain Resiliency: Systems Dynamics Modeling of Supply Chain Disruptions	Akhilesh Ojha
4:30 PM	5:00 PM	Supply Chain Resiliency: Community Resource Calculator Demonstration	Dr. Steven Corns
5:00 PM	5:15 PM	Supply Chain Resiliency: Summary Work	Dr. Suzanna K. Long
5:15 PM		Meeting Adjourn	