

Generalization for *The National Map*

To meet the goals of *The National Map* the USGS must accept high-resolution data from local, State, and other sources and merge these data into a consistent framework at an appropriate resolution. To the extent possible, this process should be automated, transparent to users, and occur in real-time as part of *The National Map Viewer* or the data delivery system. Part of this process will require spatial data generalization.

Publications and Reports			
Title	Size	Citation	Year
Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset	18k pdf file	Stanislawski, L.V., Bittenfield, B.P., Finn, M.P., and Roth, K., (2009). Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset. (Abstract) Presented at the 24th International Cartographic Conference. 16-21 November 2009, Santiago, Chile	2009
Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset	117k pdf file	Stanislawski, L.V., Bittenfield, B.P., Finn, M.P., and Roth, K., (2009). Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset. Presented at the 24th International Cartographic Conference. 16-21 November 2009, Santiago, Chile	2009
Evaluating Generalizations of Hydrography in Differing Terrains for The National Map of the United States	2.2mb pdf file	Brewer, C.A., Bittenfield, B.P., and Usery, E.L., (2009). Evaluating Generalizations of Hydrography in Differing Terrains for The National Map of the United States. Presented at the 24th International Cartographic Conference. 16-21 November 2009, Santiago, Chile.	2009
Feature Pruning by Upstream Drainage Area to Support Automated Generalization of the	3.3mb pdf file	Stanislawski, L.V., (2009). Feature Pruning by Upstream Drainage Area to Support Automated Generalization of the United States National Hydrography	2009

United States National Hydrography Dataset		Dataset. <i>Computers, Environment and Urban Systems</i> (33) 325-333	
An Automated Approach to Compare Generalized Hydrographic Network Features to a Benchmark Dataset	10k pdf file	Stanislowski, L.V., (2009). An automated approach to compare generalized Hydrographic Network Features to a Benchmark Dataset. (Abstract). Presented at the Dagstuhl Seminar on Generalization of Spatial Information, 13-17 April 2009, Wadern, Germany.	2009
Intelligent Pruning of the United States National Hydrography Dataset	3.5mb pdf file	Stanislowski, L.V., (2009). Intelligent pruning of the United States National Hydrography Dataset. <i>Computers, Environment and Urban Systems</i> .	2009
Multi-resolution Multi-scale Topographic Map Design: Toward a New Look for The National Map	1.3mb pdf file	Brewer, C.A., and Akella, M.K., (2008). Multi-resolution multi-scale topographic map design: Toward a new look for The National Map. Presented at AutoCarto 2008, the 17th International research Symposium on Computer-based Cartography. 8-11 September 2008, Shepherdstown, West Virginia.	2008
Development of a Knowledge-Based Network Pruning Strategy for Automated Generalisation of the United States National Hydrography Dataset	4.1mb pdf file	Stanislowski, L.V., (2008). Development of a knowledge-based network pruning strategy for automated generalisation of the United States National Hydrography Dataset. Presented at the 11th ICA Workshop on Generalisation and Multiple Representation. 20-21 June 2008, Montpellier, Vermont.	2008
Assessment of a Rapid Approach for Estimating Catchment Areas for Surface Drainage Lines	348k pdf file	Stanislowski, L.V., Finn, M.P., Barnes, M., and Usery, E.L., (2007). Assessment of a Rapid Approach for Estimating Catchment Areas for Surface Drainage Lines. American Congress on Surveying and Mapping Annual Conference. 9-12 March 2007, St. Louis, Missouri.	2007
Estimation of Accumulated Upstream Drainage Values in Braided Streams Using	204k pdf file	Stanislowski, L.V., Finn, M.P., Starbuck, M.J., Usery, E.L., and Turley, P., (2006). Estimation of accumulated upstream	2006

Augmented Directed Graphs		drainage values in Braided Streams Using Augmented Directed Graphs. Autocarto 2006, A Cartography and Geographic Information Society Research Symposium. 25-28 June 2006, Vancouver, Washington.	
Generalization for The National Map with emphasis on the NHD	10k pdf file	Stanislawski, L.V., Starbuck, M., Finn, M.P., and Userly, E.L., (2005). Generalization for The National Map with emphasis on the NHD. Abstract presented at the 25th ESRI International User Conference. 25-29 July 2005	2005
Generalization for The National Map with emphasis on the National Hydrography Dataset	651k pdf file	Stanislawski, L.V., Starbuck, M., Finn, M.P., and Userly, E.L., (2005). Generalization for The National Map with emphasis on the National Hydrography Dataset.	2005

Presentations			
Title	Size	Citation	Year
Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset	21mb ppt file	Stanislawski, L.V., Battenfield, B.P., Finn, M.P., and Roth, K., (2009). Stratified Database Pruning to Support Local Density Variations in Automated Generalization of the United States National Hydrography Dataset. Presented at the 24th International Cartographic Conference. 16-21 November 2009, Santiago, Chile	2009
Evaluating Generalizations of Hydrography in Differing Terrains for The National Map of the United States	10.2mb pdf file	Brewer, C.A., Battenfield, B.P., and Userly, E.L., (2009). Evaluating Generalizations of Hydrography in Differing Terrains for The National Map of the United States. Presented at the 24th International Cartographic Conference. 16-21 November 2009, Santiago	2009
Place Still Matters: Generalizing the NHD by Local Terrain and Climate	2.5mb pdf file	Battenfield, B., Brewer, C., and Userly, E.L., (2009). Place Still Matters: Generalizing the NHD by Local Terrain and Climate. Presented at the NACIS 2009 Conference. 7-9 October 2009, Sacramento, California	2009

<p>Designing the National Map by USGS for Multiscale Online Use</p>	<p>22.3mb pdf file</p>	<p>Brewer, C.A., Battenfield, B.P., and Usery, E.L., (2009). Designing the National Map by USGS for multiscale online use. Presented at the NACIS 2009 Conference 7-9 October 2009, Sacramento, California</p>	<p>2009</p>
<p>An Automated Approach to Compare Generalized Hydrographic Network Features to a Benchmark Dataset</p>	<p>21mb ppt file</p>	<p>Stanislowski, L.V., (2009). An automated approach to compare generalized Hydrographic Network Features to a Benchmark Dataset. (Abstract). Presented at the Dagstuhl Seminar on Generalization of Spatial Information, 13-17 April 2009, Wadern, Germany.</p>	<p>2009</p>
<p>Development of a Knowledge-Based Network Pruning Strategy for Automated Generalisation of the United States National Hydrography Dataset</p>	<p>14.5mb ppt file</p>	<p>Stanislowski, L.V., (2008). Development of a knowledge-based network pruning strategy for automated generalisation of the United States National Hydrography Dataset. Presented at the 11th ICA Workshop on Generalisation and Multiple Representation. 20-21 June 2008, Montpelier, Vermont.</p>	<p>2008</p>
<p>Assessment of a Rapid Approach for Estimating Catchment Areas for Surface Drainage Lines</p>	<p>5.1mb ppt file</p>	<p>Stanislowski, L.V., Finn, M.P., Usery, E.L., and Barnes, M., (2007). Assessment of a Rapid Approach for Estimating Catchment Areas for Surface Drainage Lines. Presented at the American Congress on Surveying and Mapping Annual Conference. 9-12 March 2007, St. Louis, Missouri.</p>	<p>2007</p>
<p>Estimation of Accumulated Upstream Drainage Values in Braided Streams Using Augmented Directed Graphs</p>	<p>3.5mb ppt file</p>	<p>Stanislowski, L.V., Finn, M.P., Starbuck, M.J., Usery, E.L., and Turley, P., (2006). Estimation of accumulated upstream drainage values in Braided Streams Using Augmented Directed Graphs. Autocarto 2006, A Cartography and Geographic Information Society Research Symposium. 25-28 June 2006, Vancouver, Washington.</p>	<p>2006</p>
<p>Generalization for The National Map with emphasis on the National Hydrography Dataset</p>	<p>4mb ppt file</p>	<p>Stanislowski, L.V., Starbuck, M., Finn, M.P., Usery, E.L., Turley, P., and Wilkerson, J., (2005). Generalization for The National Map with emphasis on the NHD. Abstract presented at the 25th ESRI International User Conference. 25-29 July 2005</p>	<p>2005</p>