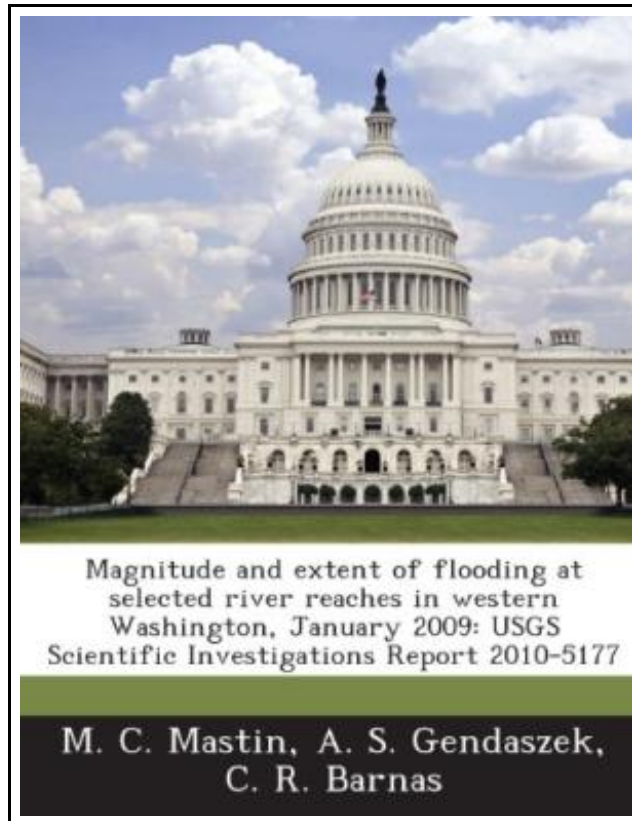


## Magnitude and Extent of Flooding at Selected River Reaches in Western Washington, January 2009: USgs Scientific Investigations Report 2010-5177



Filesize: 9.6 MB

### ***Reviews***

*A must buy book if you need to adding benefit. Better then never, though i am quite late in start reading this one. I am very happy to inform you that this is basically the very best book we have study during my own life and could be he finest ebook for possibly.*

*(Rodger Hane)*

## **MAGNITUDE AND EXTENT OF FLOODING AT SELECTED RIVER REACHES IN WESTERN WASHINGTON, JANUARY 2009: USGS SCIENTIFIC INVESTIGATIONS REPORT 2010-5177**



Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.A narrow plume of warm, moist tropical air produced prolonged precipitation and melted snow in low-to-mid elevations throughout western Washington in January 2009. As a result, peak-of-record discharges occurred at many long-term streamflow-gaging stations in the region. A disaster was declared by the President for eight counties in Washington State and by May 2009, aid payments by the Federal Emergency Management Agency (FEMA) had exceeded \$17 million. In an effort to document the flood and to obtain flood information that could be compared with simulated flood extents that are commonly prepared in conjunction with flood insurance studies by FEMA, eight stream reaches totaling 32.6 miles were selected by FEMA for inundation mapping. The U.S. Geological Survey's Washington Water Science Center used a survey-grade global positioning system (GPS) the following summer to survey high-water marks (HWMs) left by the January 2009 flood at these reaches. A Google Maps (copyright) application was developed to display all HWM data on an interactive mapping tool on the project's web site soon after the data were collected. Water-surface profiles and maps that display the area and depth of inundation were produced through a geographic information system (GIS) analysis that combined surveyed HWM elevations with Light Detection and Ranging (LiDAR)-derived digital elevation models of the study reaches and surrounding terrain. In several of the reaches, floods were well confined in their flood plains and were relatively straightforward to map. More common, however, were reaches with more complicated hydraulic geometries where widespread flooding resulted in flows that separated from the main channel. These proved to be more difficult to map, required subjective hydrologic judgment, and relied on supplementary information, such as aerial photographs...



**[Read Magnitude and Extent of Flooding at Selected River Reaches in Western Washington, January 2009: Usgs Scientific Investigations Report 2010-5177 Online](#)**



**[Download PDF Magnitude and Extent of Flooding at Selected River Reaches in Western Washington, January 2009: Usgs Scientific Investigations Report 2010-5177](#)**

## Relevant eBooks



### **Index to the Classified Subject Catalogue of the Buffalo Library; The Whole System Being Adopted from the Classification and Subject Index of Mr. Melvil Dewey, with Some Modifications .**

Rarebooksclub.com, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can usually...

[Read Book »](#)



### **Kindergarten Culture in the Family and Kindergarten; A Complete Sketch of Froebel s System of Early Education, Adapted to American Institutions. for the Use of Mothers and Teachers**

Rarebooksclub.com, United States, 2012. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.This historic book may have numerous typos and missing text. Purchasers can download...

[Read Book »](#)



### **Variations on an Original Theme Enigma , Op. 36: Study Score**

Petrucchi Library Press, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Dedicated to my friends pictured within, Elgar s orchestral showpiece started...

[Read Book »](#)



### **Symphony No.2 Little Russian (1880 Version), Op.17: Study Score**

Petrucchi Library Press, United States, 2015. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Composed in 1872 and first performed in Moscow at the Russian...

[Read Book »](#)



### **Ohio Court Rules 2014, Government of Bench Bar**

Createspace, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.Ohio Court Rules 2014, Government of Bench Bar, contains all of the rules...

[Read Book »](#)