

## ICNet Members' New England Research & Project Survey



<b>Research/Project Focus</b>	Historical Changes in Annual Peak Flows in Maine and Implications for Flood Frequency-Analysis.
<b>Research/Project Description</b>	Changes over time in annual instantaneous peak streamflows at 28 U.S. Geological Survey streamgages with long-term data (50 or more years) and relatively complete records were investigated by examining linear trends for each streamgage's period of record. Step changes between each streamgage's older record (start year to 1970) and newer record (1971 to 2006) also were computed.
<b>Primary Category*</b>	Hydrology
<b>Geographic Location</b>	Maine
<b>Funding</b>	MaineDOT & US Geological Survey
<b>Contact</b>	Charles Hebson, MaineDOT, Charles.Hebson@maine.gov
<b>Infrastructure sectors effected, subject area</b>	Bridges & highway culverts
<b>For modeled climate or sea level rise projections, AOGCM or other sources used</b>	N/A
<b>Other Information, data,</b>	USGS annual peak flow data base

<b>models, used</b>	
<b>Time periods analyzed</b>	Complete historical record
<b>Status /Date submitted to ICNet</b>	Complete. Submitted to ICNet Oct, 2013
<b>Brief key findings to date</b>	Results somewhat inconsistent. Increases of as much as 12%-18% in some design peak flows. “Collins 1970 change” confirmed in Maine data.
<b>Key publications/reports?</b>	Hodgkins, G. A., 2010. <i>SIR 2010-5094</i> , “Historical Changes in Annual Peak Flows in Maine and Implications for Flood Frequency-Analysis”, U.S. Geological Survey.
<b>Other information (e.g., web links to technical reports).</b>	<a href="http://pubs.usgs.gov/sir/2010/5094/">http://pubs.usgs.gov/sir/2010/5094/</a>

**\* Categories: Roads, bridges, and culverts; Pavement and/or soils; Hydrology (study of data/floods); Environmental/water resources (stormwater, drinking water); Transportation assets (network); Climate model output**