

Supplementary Information

The Tsunami Threat to Sydney Harbour, Australia: Modelling potential and historic events.

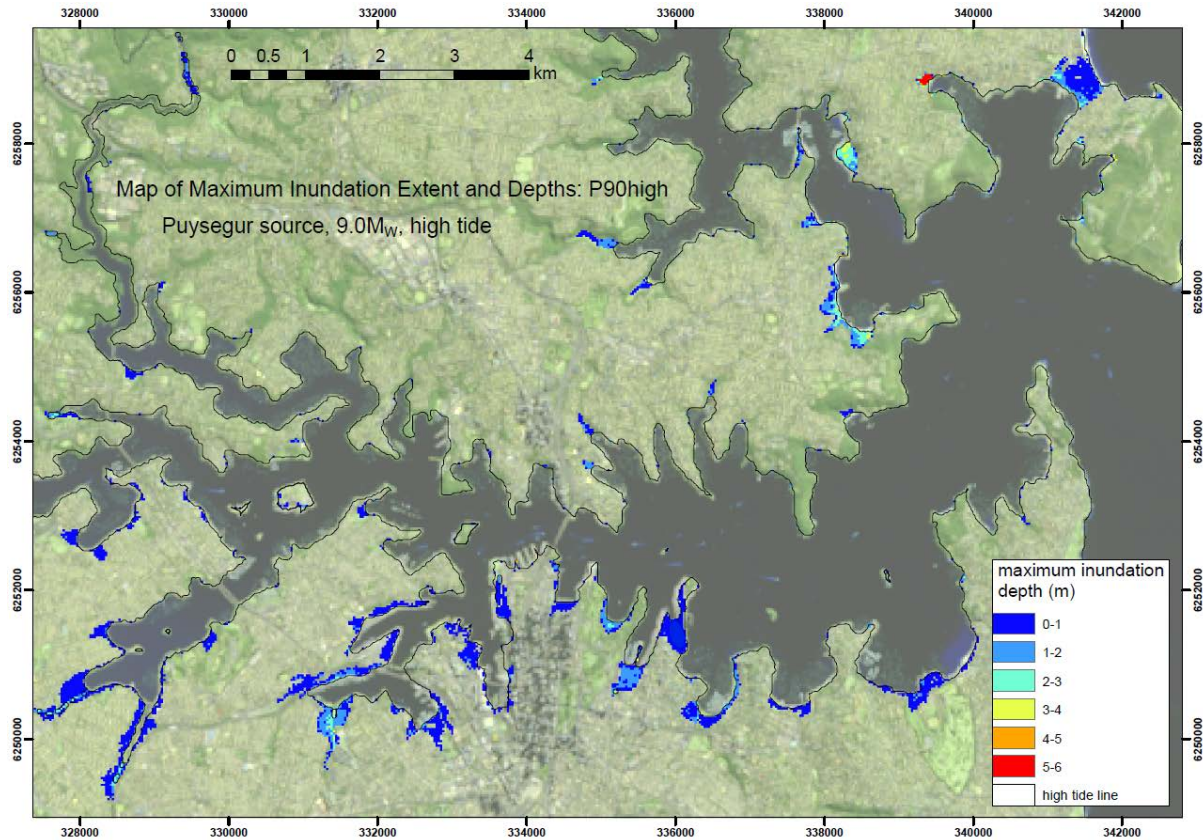
Kaya M. Wilson^{1*}, Stewart C. R. Allen², and Hannah E. Power¹

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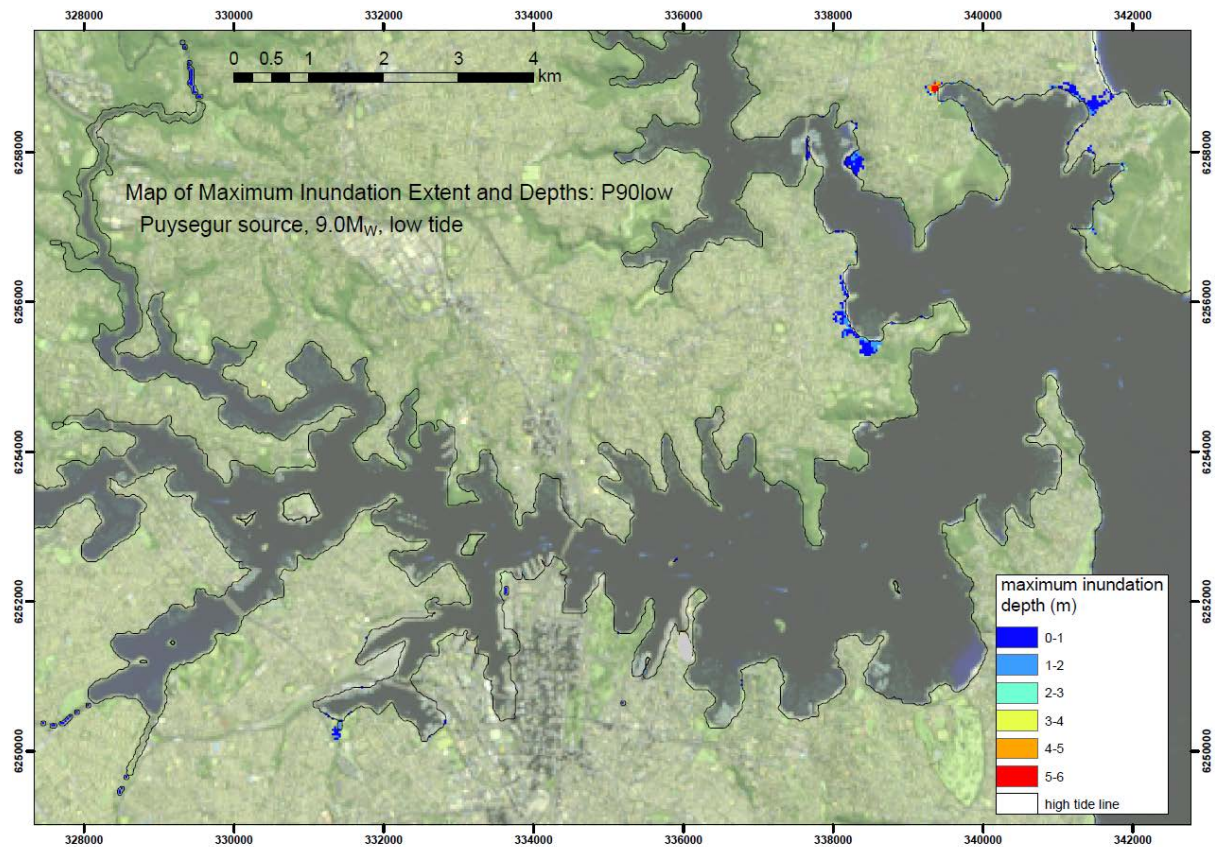
²Bureau of Meteorology, Melbourne, Australia.

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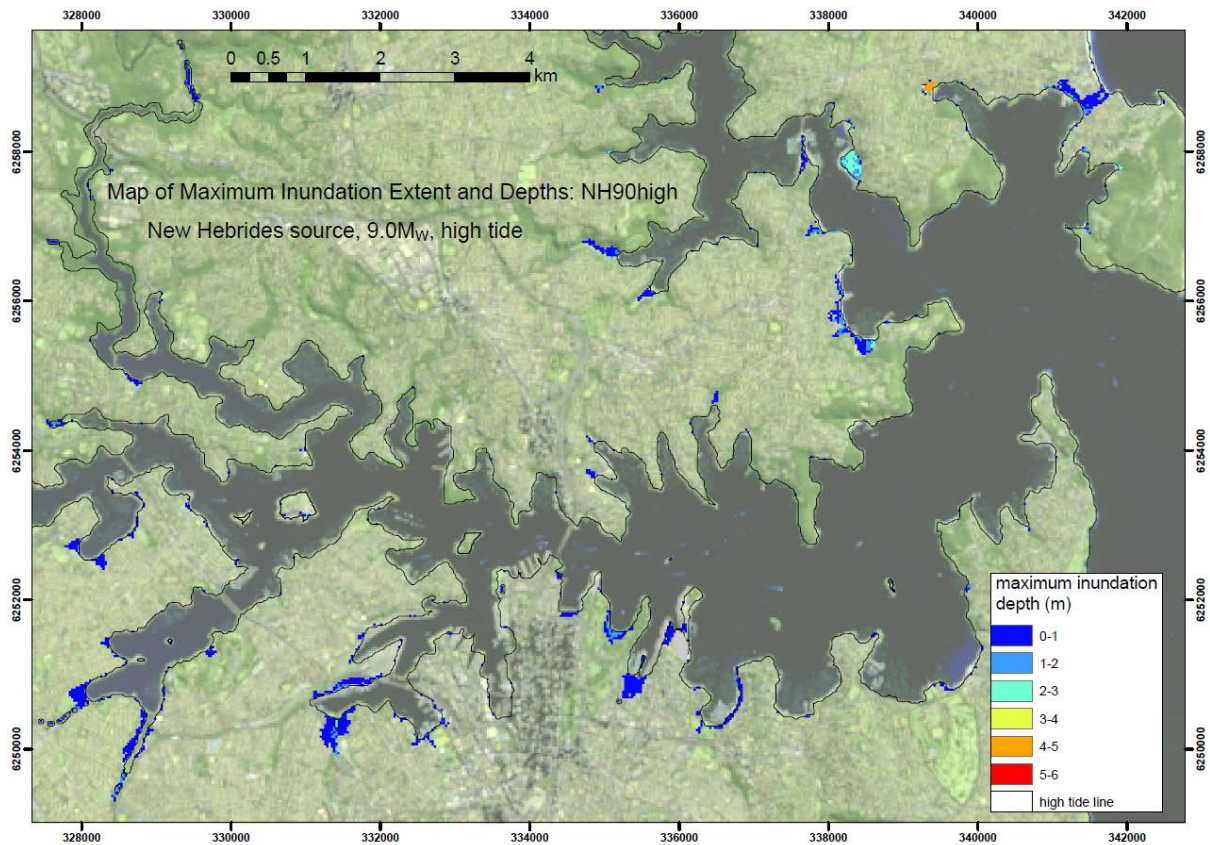
Supplementary Figure S1: Map of maximum inundation for event P90high. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



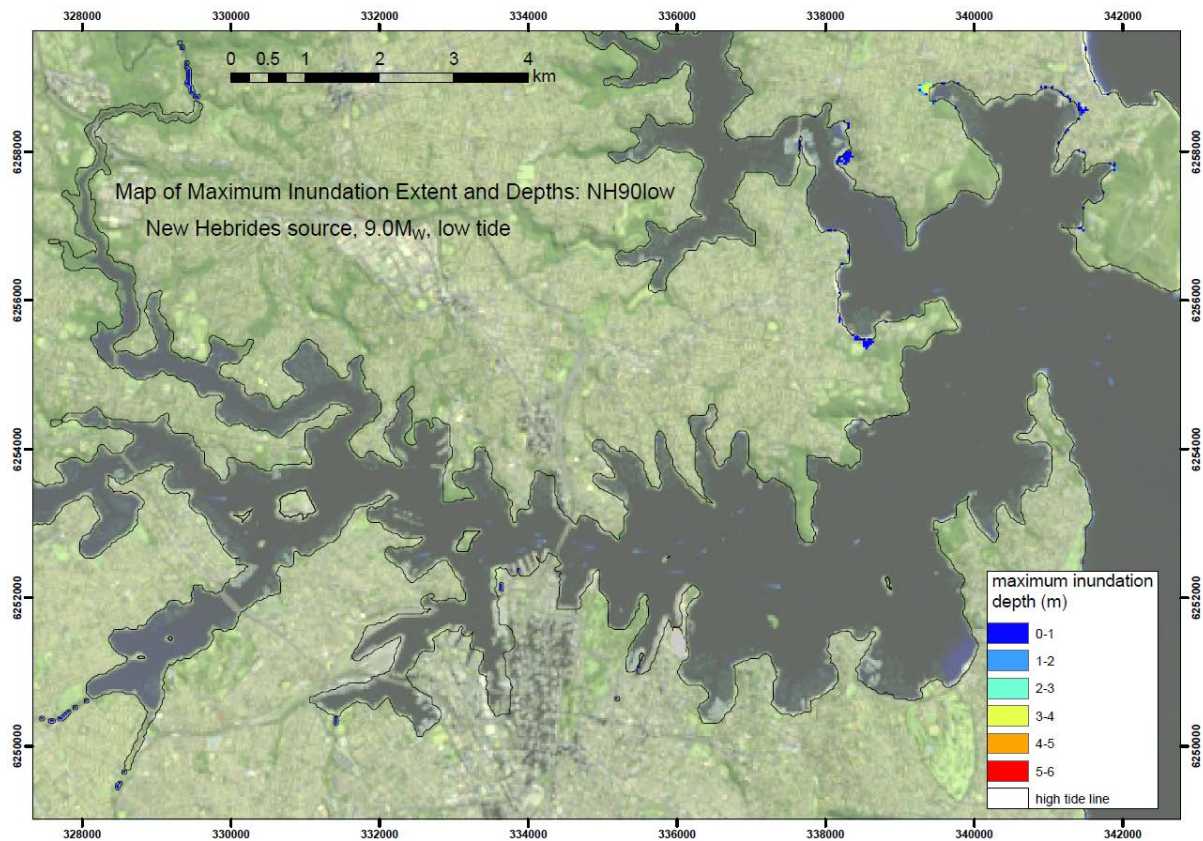
Supplementary Figure S2: Map of maximum inundation for event P90low. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



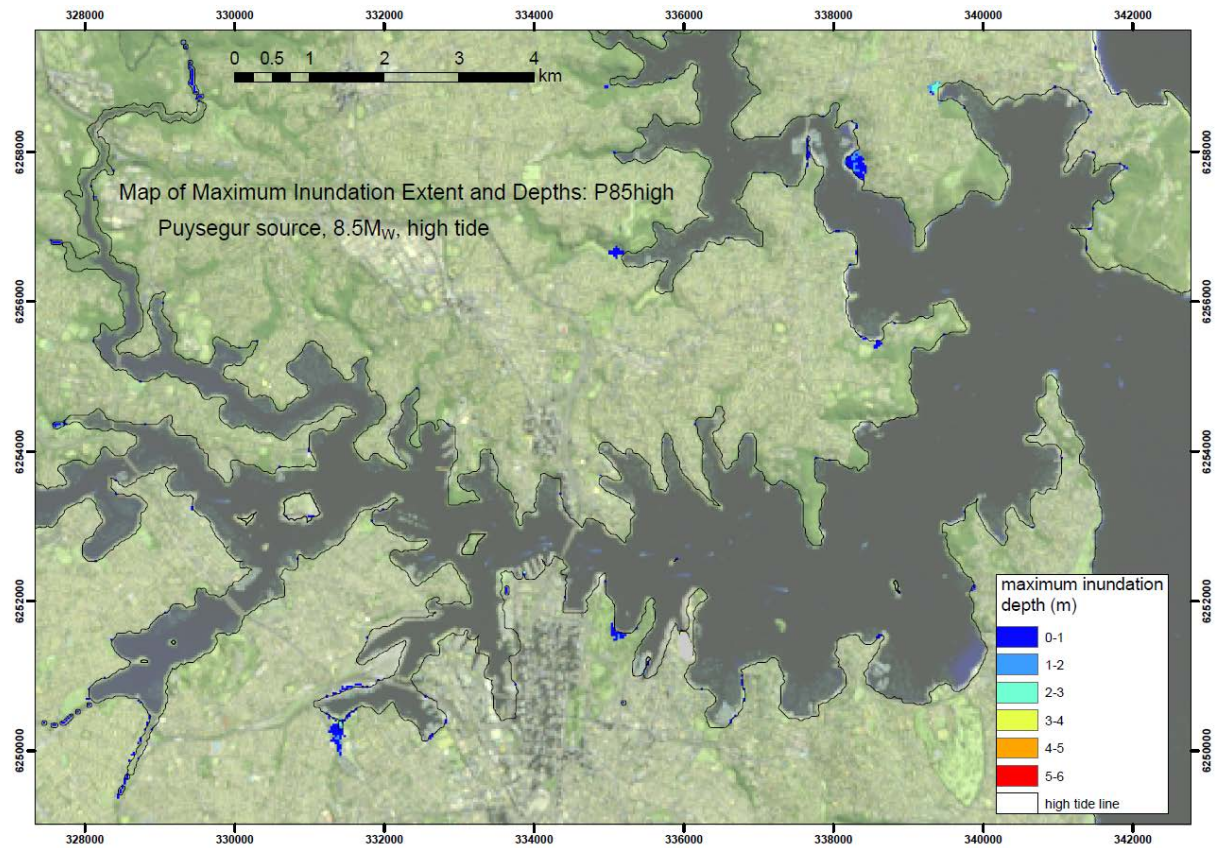
Supplementary Figure S3: Map of maximum inundation for event NH90high. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



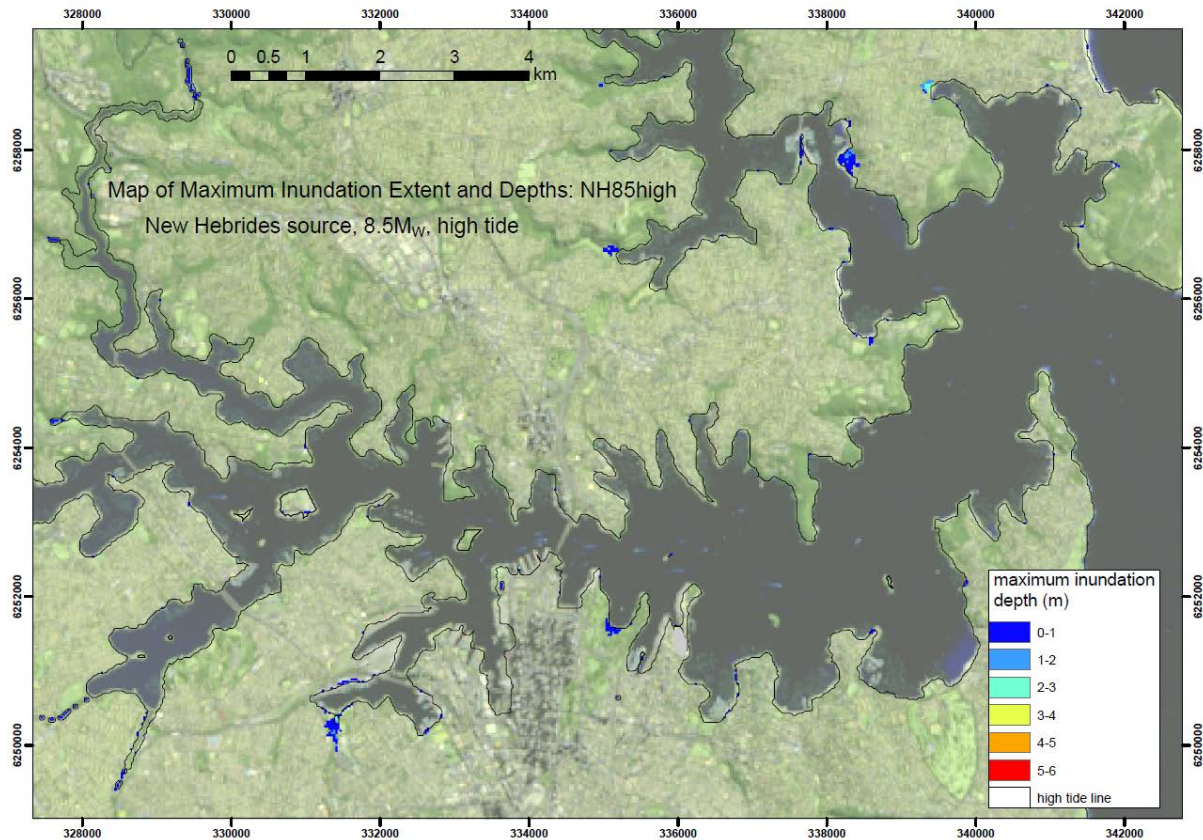
Supplementary Figure S4: Map of maximum inundation for event NH90low. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



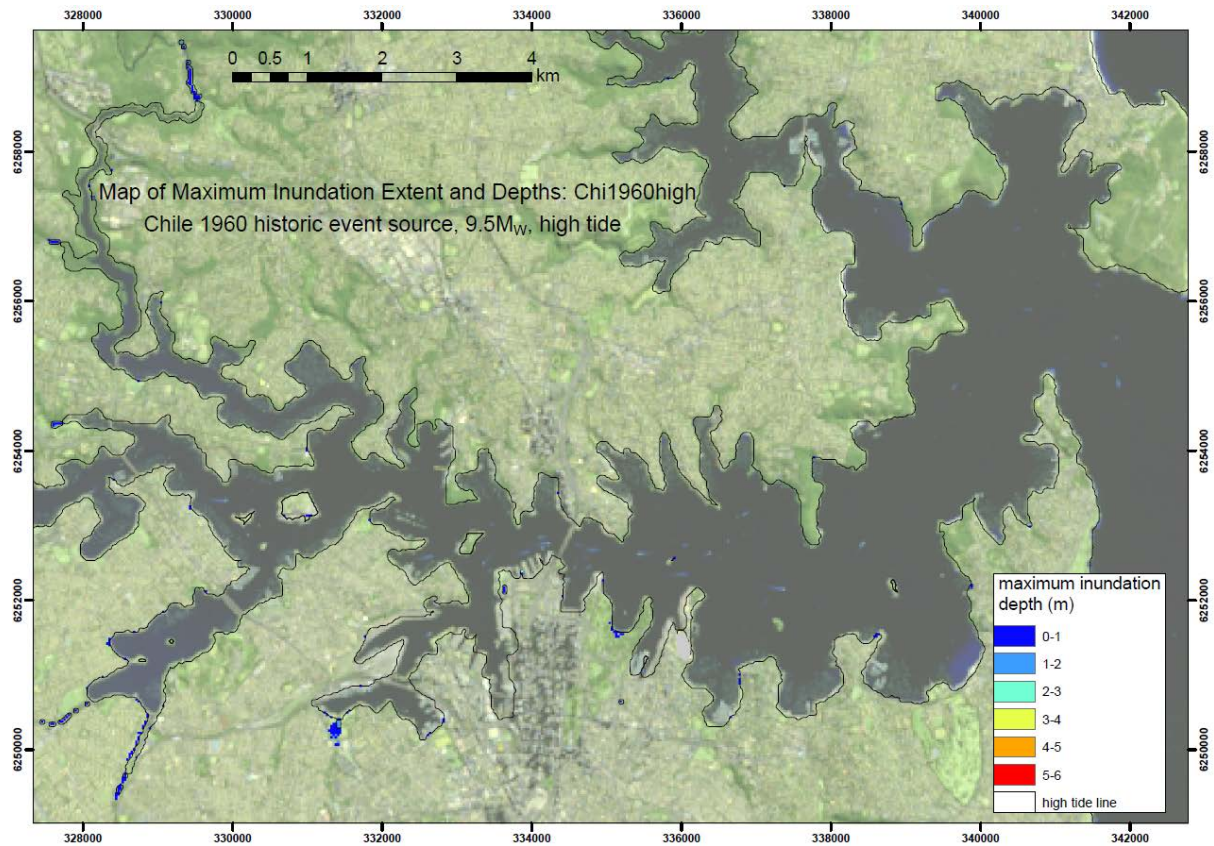
Supplementary Figure S5: Map of maximum inundation for event P85high. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



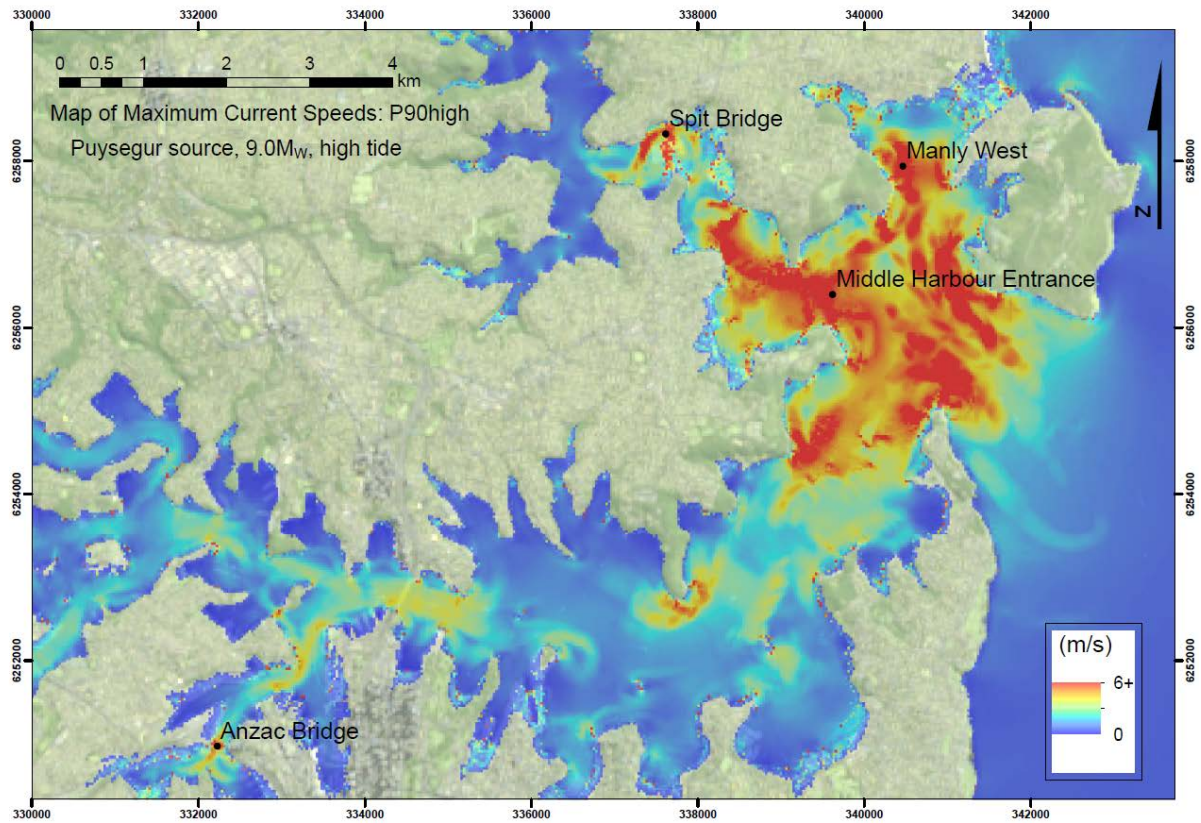
Supplementary Figure S6: Map of maximum inundation for event NH85high. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



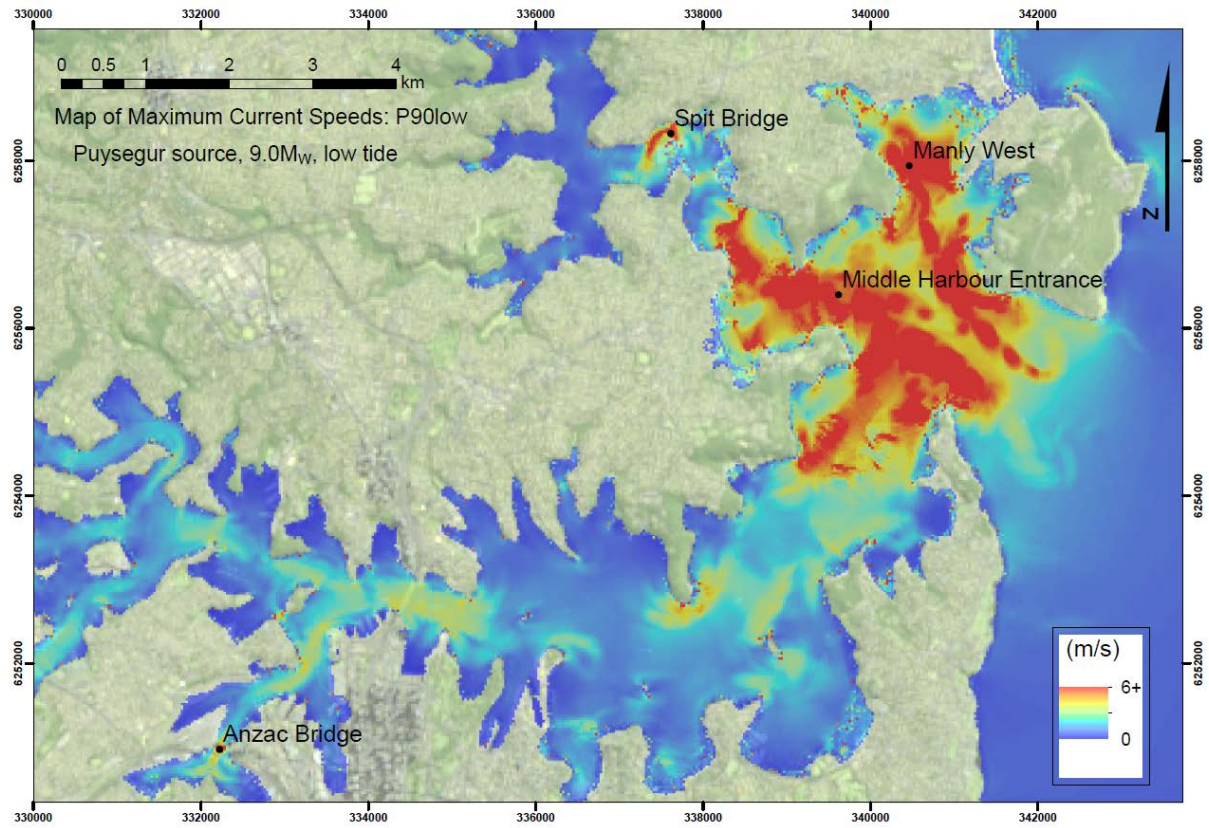
Supplementary Figure S7: Map of maximum inundation for event Chi1960high. Inundation is shown above the spring high tide line, which is derived from the tide only model. See Methods: Tide Data for information on the tide data used. This image was created by KMW using ESRI ArcMap 10.3.1 (<http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



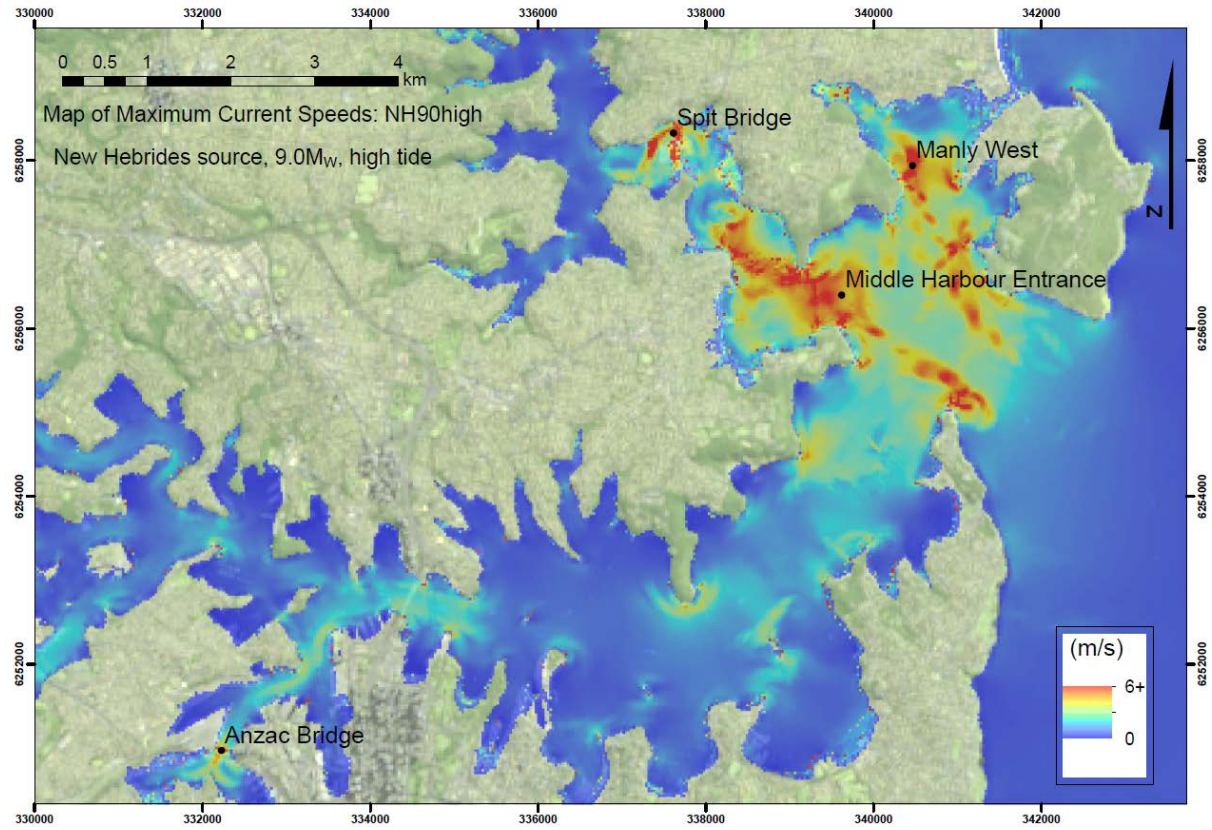
Supplementary Figure S8: Map of maximum current speeds for event P90high. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



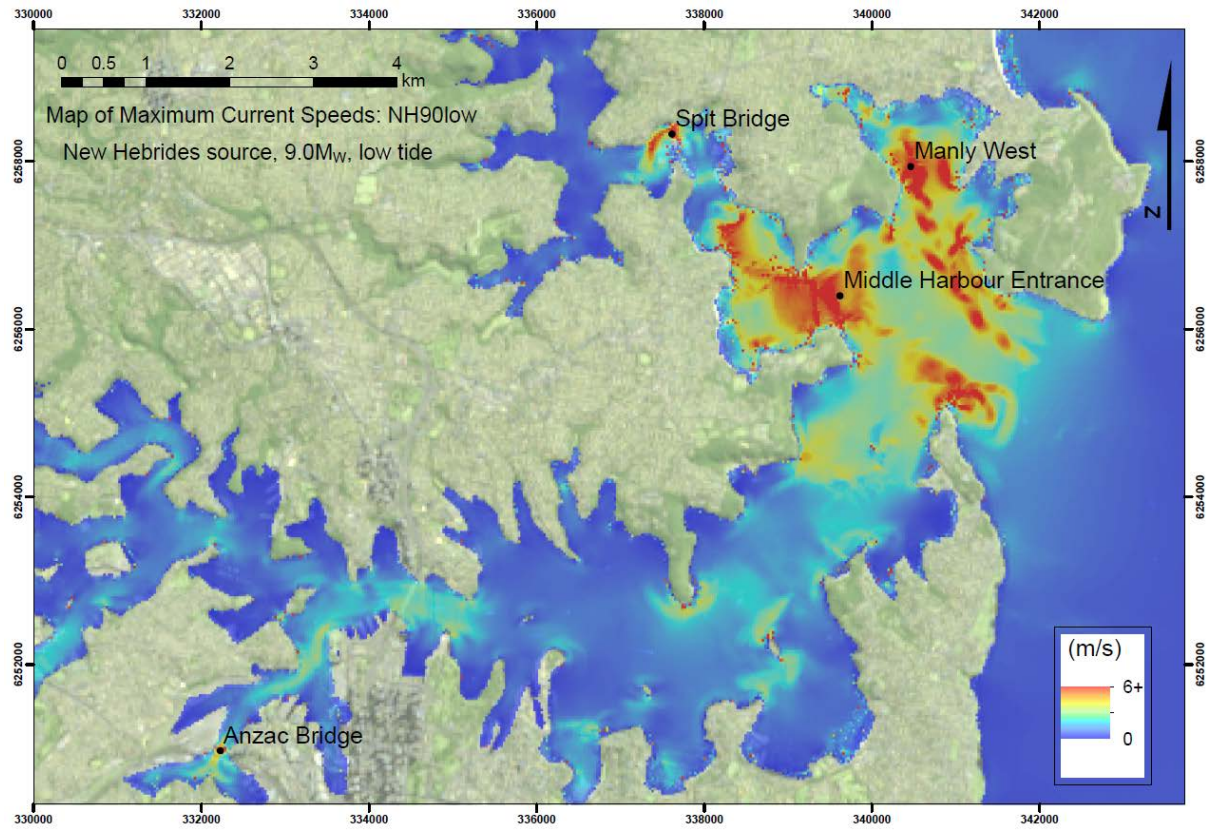
Supplementary Figure S9: Map of maximum current speeds for event P90low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



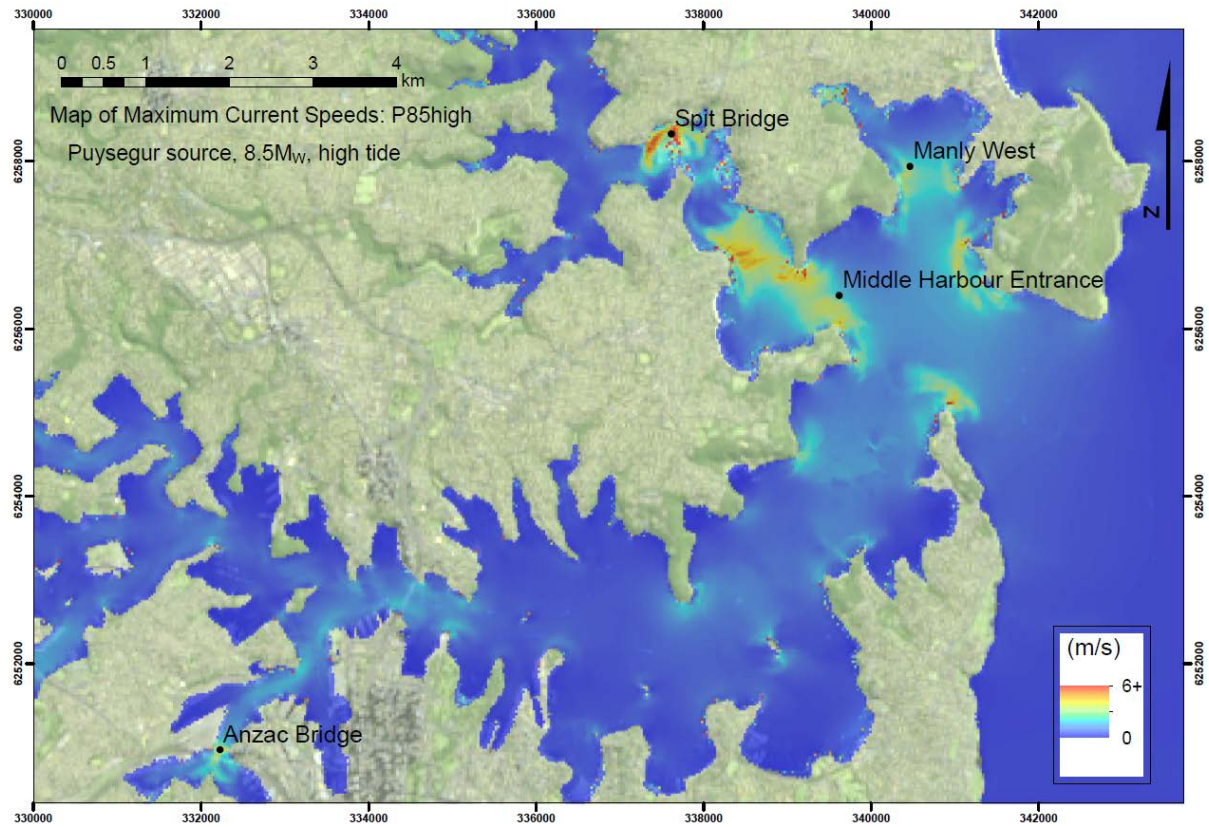
Supplementary Figure S10: Map of maximum current speeds for event NH90high. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



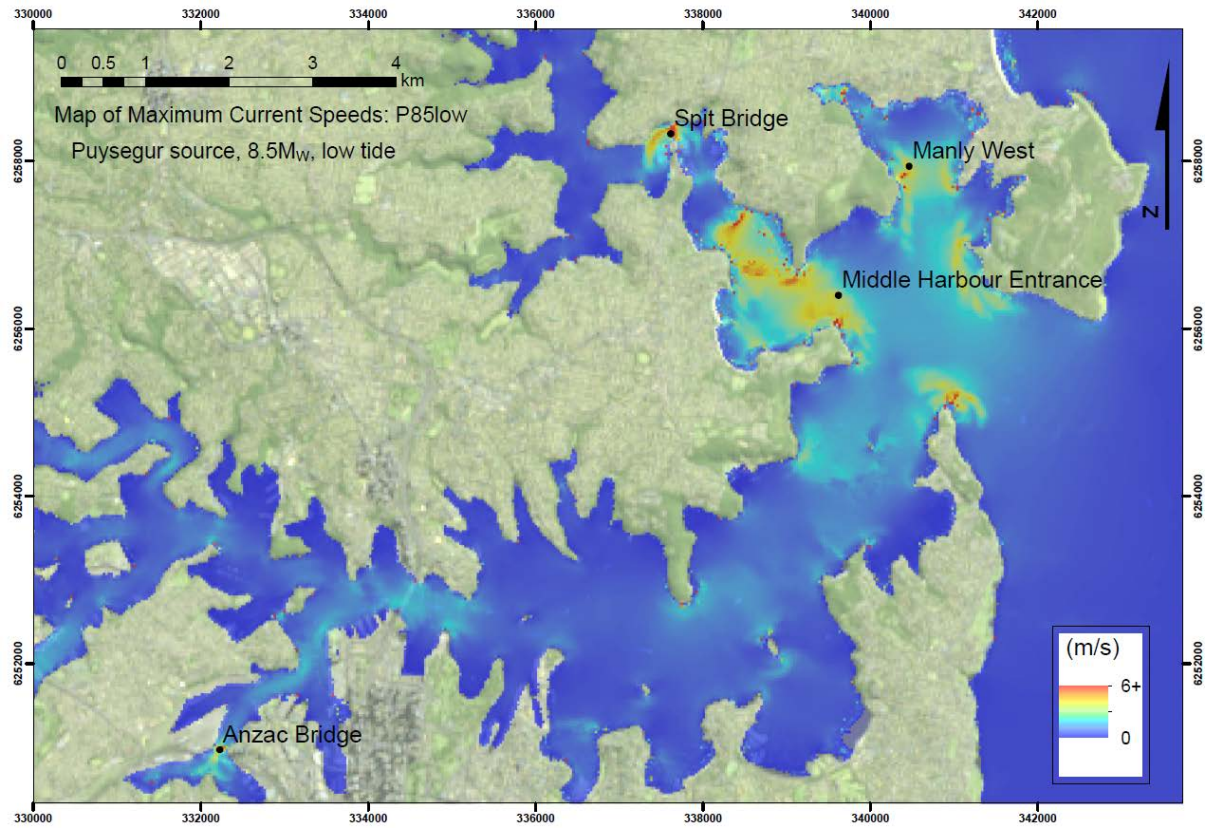
Supplementary Figure S11: Map of maximum current speeds for event NH90low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



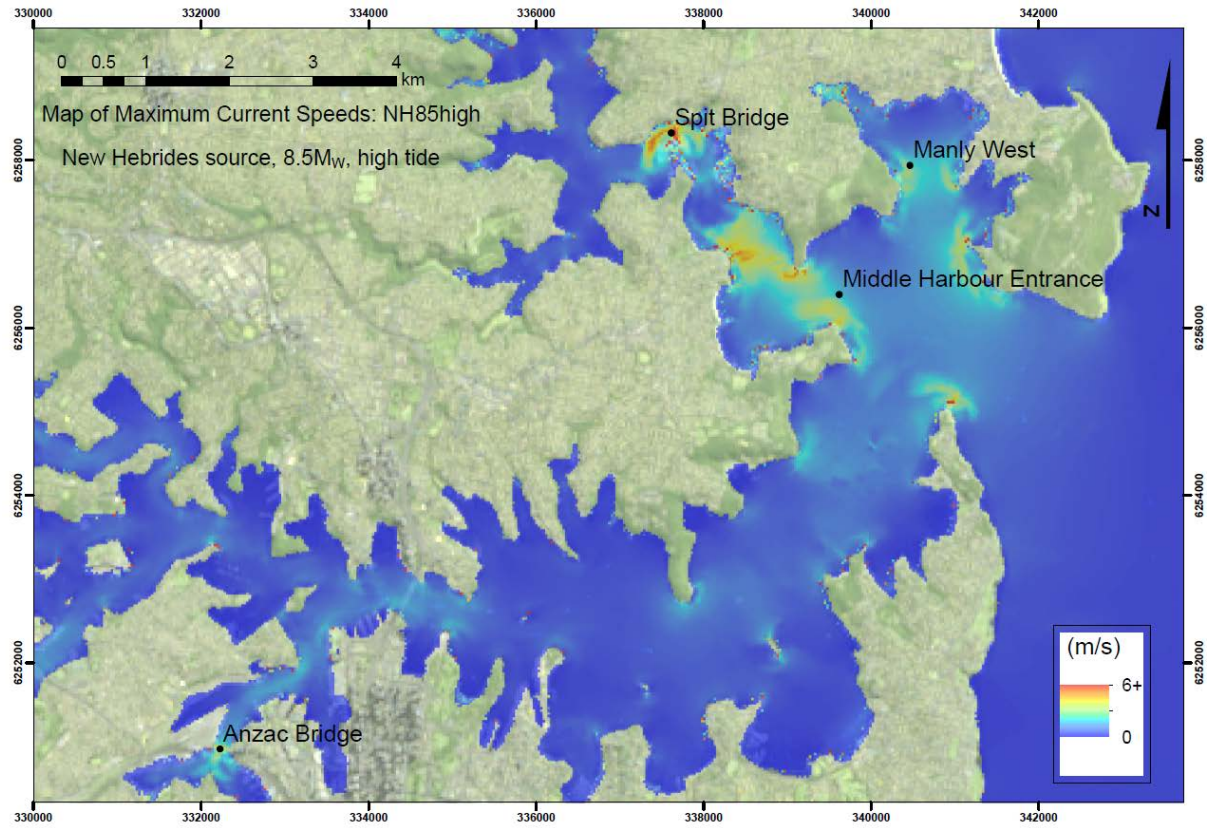
Supplementary Figure S12: Map of maximum current speeds for event P85high. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



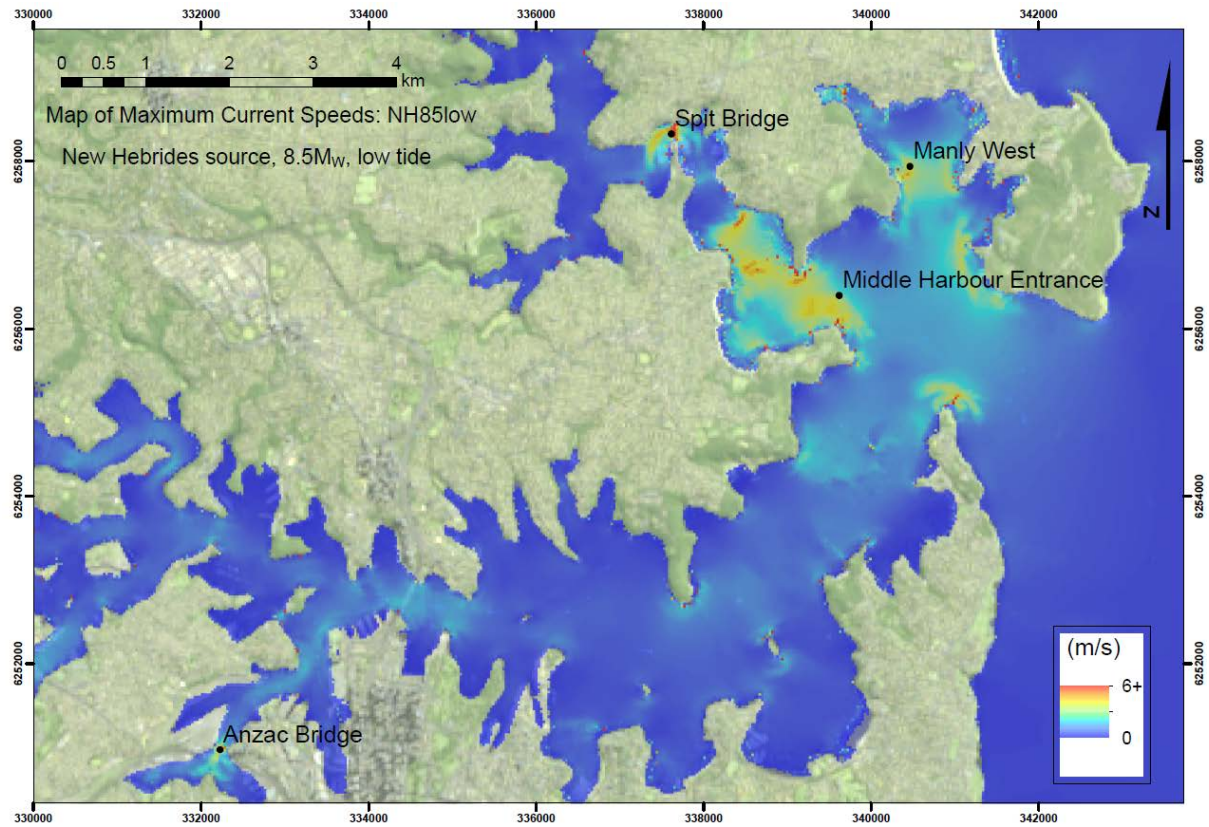
Supplementary Figure S13: Map of maximum current speeds for event P85low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



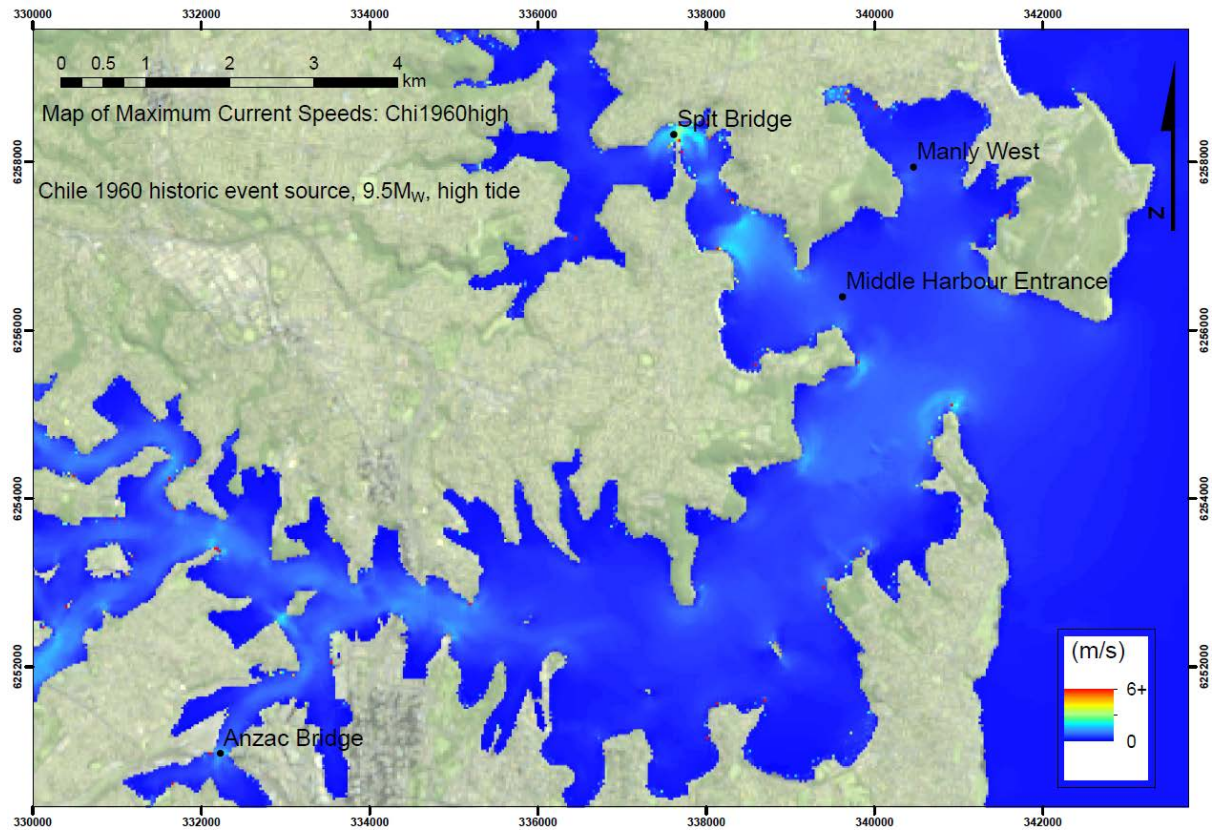
Supplementary Figure S14: Map of maximum current speeds for event NH85high. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



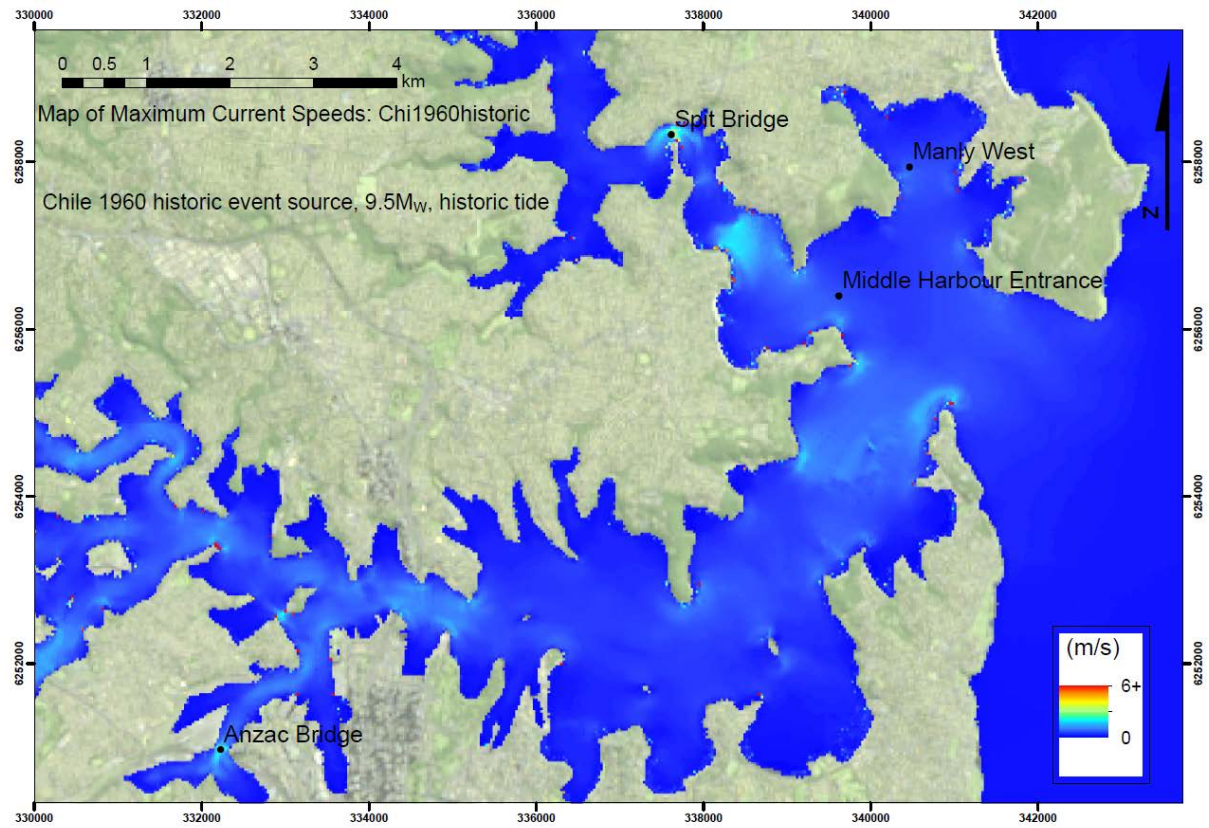
Supplementary Figure S15: Map of maximum current speeds for event NH85low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.qa.gov.au/qeonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



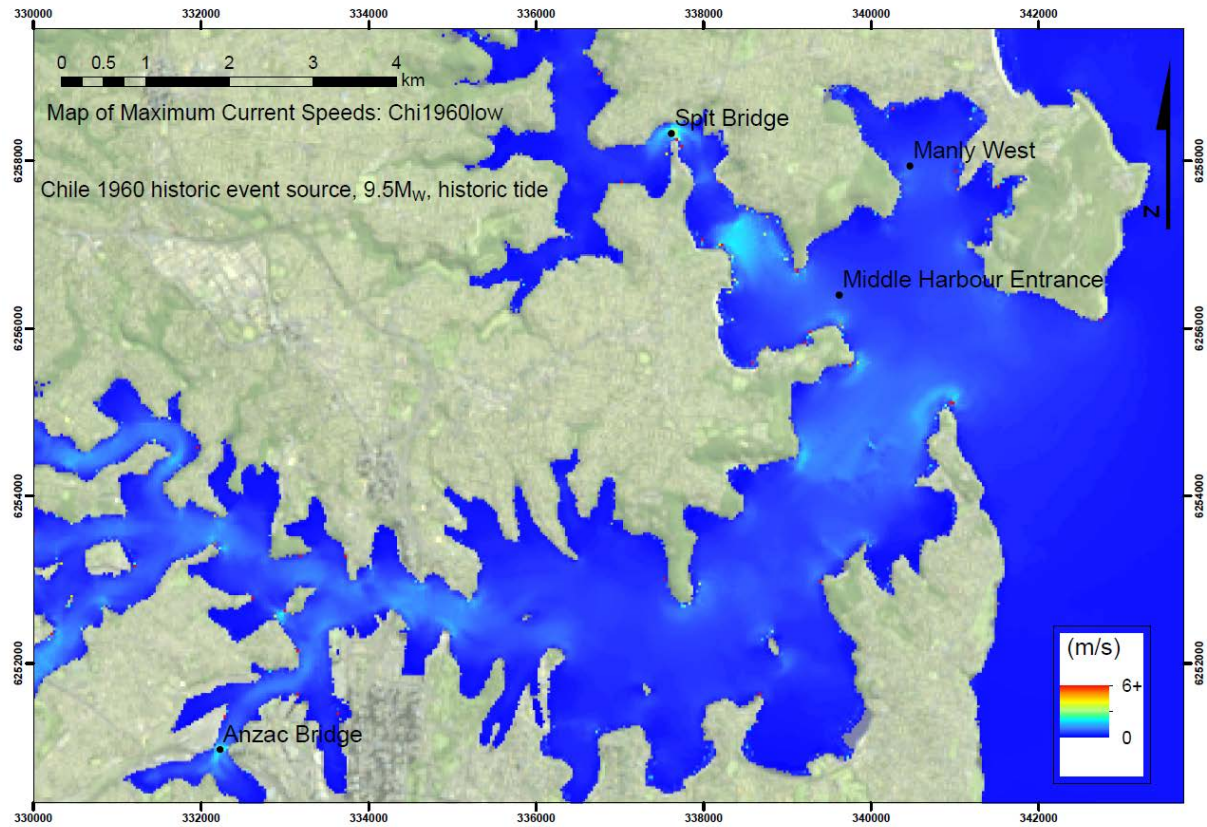
Supplementary Figure S16: Map of maximum current speeds for event Chi1960high. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



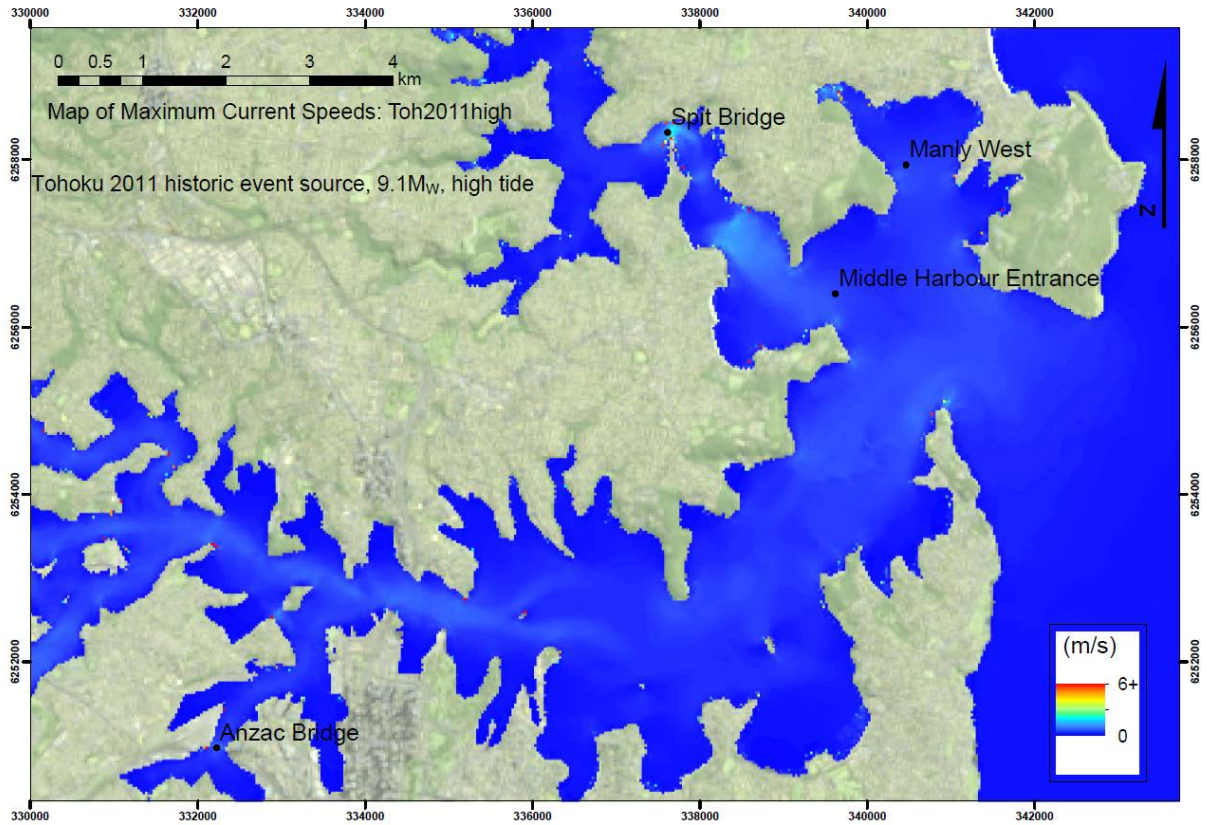
Supplementary Figure S17: Map of maximum current speeds for event Chi1960historic. *This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).*



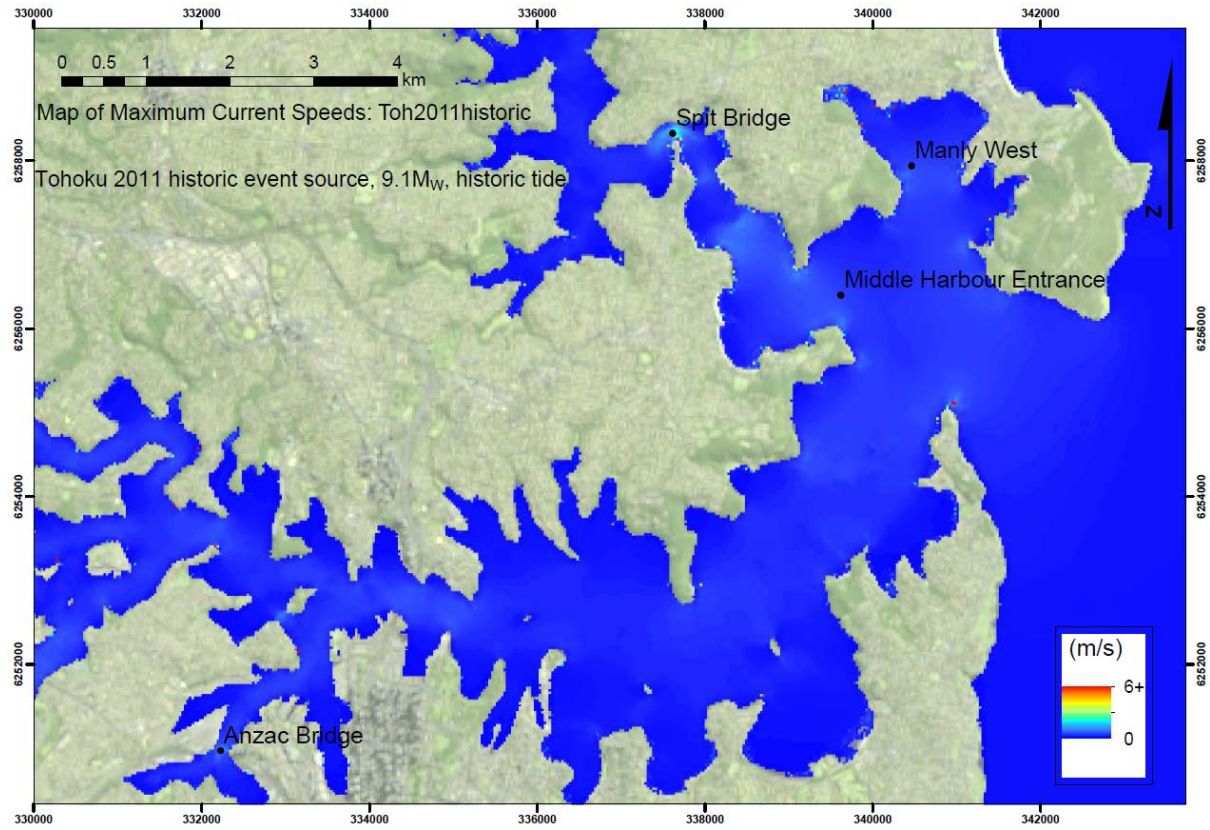
Supplementary Figure S18: Map of maximum current speeds for event Chi1960low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).



Supplementary Figure S19: Map of maximum current speeds for event Toh2011high. *This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).*



Supplementary Figure S20: Map of maximum current speeds for event Toh2011historic. *This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).*



Supplementary Figure S21: Map of maximum current speeds for event Toh2011low. This image was created by KMW using ESRI ArcMap 10.3.1 <http://www.esri.com/arcgis/about-arcgis>, coastline data (<https://ecat.ga.gov.au/geonetwork/srv/eng/search#!a05f7892-eae3-7506-e044-00144fdd4fa6>) from © Commonwealth of Australia (Geoscience Australia) 2017 and satellite imagery Landsat 8 courtesy of the U.S. Geological Survey (<https://earthexplorer.usgs.gov/>).

