2018 Spring Institute | Resilience Summit

April 26, 2018

RESOURCES

**Natural Resources – Resilience Planning Data and Resources | Chris Hoving**

Northern Forests

<https://forestadaptation.org/northwoods>

Tree Species Winners and Losers: southern MIchigan

<https://forestadaptation.org/Northwoods_treehandouts>

Urban Forests

<https://forestadaptation.org/urban>

Vulnerable Wildlife

<https://www.michigan.gov/documents/dnr/3564_Climate_Vulnerability_Division_Report_4.24.13_418644_7.pdf>

Michigan’s Wildlife Action Plan

<http://www.michigan.gov/dnrwildlifeactionplan>

MNFI Rare Species Explorer

<https://mnfi.anr.msu.edu/explorer/search.cfm>

Michigan GIS Open Data

<http://gis-michigan.opendata.arcgis.com/>

Scenario Planning

<https://www.nps.gov/subjects/climatechange/upload/CCScenariosHandbookJuly2013.pdf>

**Coastal Planning Data Sources | Zach Rable**

[FEMA Flood Map Service Center](https://msc.fema.gov/portal/advanceSearch) (for FEMA's mapped Flood Insurance Rate Maps)

[USGS National Map Viewer's Elevation View](https://viewer.nationalmap.gov/basic/?basemap=b1&category=ned,nedsrc&title=Elevation%20View) (for Digital Elevation Maps)

[NOAA/GLERL Great Lakes Water Level Dashboard](https://www.glerl.noaa.gov/data/dashboard/GLWLD.html) (for low, average, and high water level data)

[Michigan Tech Total Storm Surge Estimates](http://resilientgreatlakescoast.org/wp-content/uploads/2016/07/Identifying-High-Risk-Coastal-Areas.pdf?189db0) (pg. 10 of 24; for storm wave elevations)

[State of Michigan GIS Porta](https://gis-michigan.opendata.arcgis.com/)l (for political boundaries and natural features)

Local Master Plan and Zoning Code Language (necessary to project potential future build-out estimates)

**Missy Stults and Larissa Larsen**

Tackling Uncertainty in US Local Climate Adaption Planning (report, free)

Contact Larissa [larissal@umich.edu](mailto:larissal@umich.edu) and she will send you a pdf of the report

**Data Based Resilience | Mike Sobocinski**

1. The following sites provide examples of FEMA-approved local hazard mitigation plans in different geographic areas of Michigan:
   1. Marquette County:

<http://www.co.marquette.mi.us/departments/planning/hazard_mitigation_plan.php#.WuCFMIjwZjU>

* 1. Benzie County:

<http://www.benzieco.net/document_center/EmergencyManagement/Hazard%20Mitigation%20Plan%20BENZIE%20Finalv2.pdf>

* 1. Regional Grand Rapids (Kent and Ottawa Counties)

<https://www.accesskent.com/Sheriff/pdfs/GGRHazMitPlan_2017.pdf>

* 1. Macomb County (northern suburbs of Metropolitan Detroit)

<https://m-oemc.macombgov.org/OEMC-PlanningDocuments-HazardMitigationPlanning>

1. The following web site provides access to the Michigan Hazard Mitigation Plan, Michigan Hazard Analysis, Local Hazard Mitigation Planning Workbook, and other emergency management guidance documents produced by the Emergency Management and Homeland Security Division of the Michigan State Police:

<https://www.michigan.gov/msp/0,4643,7-123-72297_60152_69727_69730_69740-14743--,00.html>

1. FEMA guidance documents for hazard mitigation planning
   1. Local Hazard Mitigation Planning Handbook

<https://www.fema.gov/media-library/assets/documents/31598>

* 1. Local Hazard Mitigation Plan Review Guide

<https://www.fema.gov/th/media-library/assets/documents/23194>

* 1. Tribal Hazard Mitigation Plan Review Guide

<https://www.fema.gov/media-library/assets/documents/18355>

* 1. General “How To” series

<https://www.fema.gov/media-library/collections/6>

1. NOAA/NCEI Storm Events Database of natural hazards (searchable by state and county)

<https://www.ncdc.noaa.gov/stormevents/>

1. GLISA Great Lakes Integrated Sciences + Assessments—Michigan Climate Information

<http://glisa.umich.edu/>