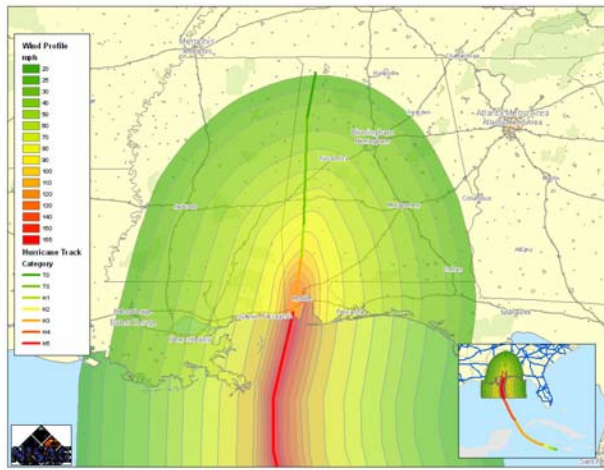




Office of Infrastructure Protection Mobile Area Hurricane Analysis Summary



Scenario Storm Characteristics

- Category 5 hurricane at landfall
- Maximum sustained winds > 155 mph
- Estimated storm surge of 26 feet
- Landfall in east of Mobile, AL
- Major cities most impacted: Mobile, AL; Gulf Port, MS; Pensacola, FL

		Population	
Population within Potential Surge Zones (population within each flood depth range)	16+ feet	85,500	
	11-15 feet	72,000	
	9-10 feet	58,700	
	6-8 feet	58,300	
	1-5 feet	84,500	
Population Impacted by Potential Power Outages (widespread power outages expected in coastal Mississippi, Alabama, and Panhandle of Florida, localized outages expected in remaining areas) Times to restoration are after damage assessment	Affected	~ 3,200,000	
	7-8 days	75% restored	
	10+ days	Fully restored	
Estimated Economic Impacts			
Direct costs for business interruptions		\$1-2 billion	
Total costs for business interruptions		\$4-7 billion	
Facilities of Interest			
Major Seaports	<ul style="list-style-type: none"> • Port of Mobile, AL 		
Major Transportation Routes	<ul style="list-style-type: none"> • I-10 		
Expected Major Airport Closures	<ul style="list-style-type: none"> • New Orleans Louis Armstrong; • Birmingham Intl 		
Water Distribution Treatment Plants (impacted by potential storm surge)	<ul style="list-style-type: none"> • H.E. Myers Water Treatment Plant • E.M. Stickney Water Treatment Plant 		
Major Wastewater Treatment Facilities (large plants impacted by storm surge)	<ul style="list-style-type: none"> • Clifton C. Williams Wastewater Treatment Plant • Bill Ziebach Wastewater Treatment Plant • Wright Smith, Jr. Wastewater Treatment Plant 		

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Impacts by Infrastructure Sector

Infrastructure	Level	Impacts	-Low	-Medium	-High
Agriculture		<ul style="list-style-type: none"> • Could impact fuels costs for food production 			
Banks & Finance		<ul style="list-style-type: none"> • No long-term impacts expected due to backup systems but electronic transfers could be affected due to loss of electric power and telecommunications services 			
Chemical: Plants		<ul style="list-style-type: none"> • Primary chemicals produced include acetone, phenol, acetal resins, and hydrogen peroxide • 181 chemical plants in the affected area 			
Commercial Facilities		<ul style="list-style-type: none"> • Impacts not major, loss of business due to electric power outages 			
Dams		<ul style="list-style-type: none"> • Not analyzed 			
Defense Industrial Base		<ul style="list-style-type: none"> • Not analyzed 			
Emergency Services		<ul style="list-style-type: none"> • Emergency response delays expected due to transportation, electrical power, and telecommunications disruptions 			
Energy: Electric Power		<ul style="list-style-type: none"> • Widespread power outages expected in Mississippi, Alabama, and Panhandle of Florida • Localized outages expected in the rest of the study area • 75% restoration expected within 8 days following damage assessment • Full restoration may take over 10 days following damage assessment 			
Energy: Natural Gas		<ul style="list-style-type: none"> • 98 compressor stations and 21 processing plants in affected area • Over 11,000 miles of pipelines 			
Energy: Petroleum		<ul style="list-style-type: none"> • 14 refineries in the area • Some oil and natural gas wells in the Gulf of Mexico could be shut down for an extended time 			
Government Facilities		<ul style="list-style-type: none"> • Impacts may be locally or regionally significant 			
Information Technology		<ul style="list-style-type: none"> • Impacts may be locally or regionally significant 			
National Monuments		<ul style="list-style-type: none"> • Impacts may be locally or regionally significant 			
Nuclear Facilities		<ul style="list-style-type: none"> • Waterford (1,310 MW) nuclear power plant is within the study area 			
Postal & Shipping		<ul style="list-style-type: none"> • Expect delays due to transportation impacts 			
Hospitals & Nursing Homes		<ul style="list-style-type: none"> • Evacuations and potential closure of some facilities in impacted area will increase demand on neighboring regional facilities 			
Telecomm: Wireline		<ul style="list-style-type: none"> • Expect damage to telecommunications infrastructure (poles and overhead lines) especially in coastal areas of Alabama and Mississippi • Restoration of full service may take weeks 			
Telecomm: Wireless		<ul style="list-style-type: none"> • Not analyzed 			
Transport: Road/Rail		<ul style="list-style-type: none"> • Ground transportation impacts due to flooding and debris and I-10 could be impacted due to flooding and storm debris 			
Transport: Airports		<ul style="list-style-type: none"> • Potential airport closures in New Orleans and Birmingham 			
Transport: Seaports		<ul style="list-style-type: none"> • Port of Mobile expected to be impacted 			
Water: Drinking Water		<ul style="list-style-type: none"> • Water is delivered from the 3,600 acre J.B. Converse Reservoir and pumping station via two 60-inch diameter pipes to storage reservoirs which supply the H.E. Myers and E.M. Stickney Water Treatment Plants 			
Water: Wastewater		<ul style="list-style-type: none"> • The three wastewater treatment plants in Mobile have a total design flow of 42.8 million gallons per day • 3 large wastewater treatment plants are in potential storm surge zones 			

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