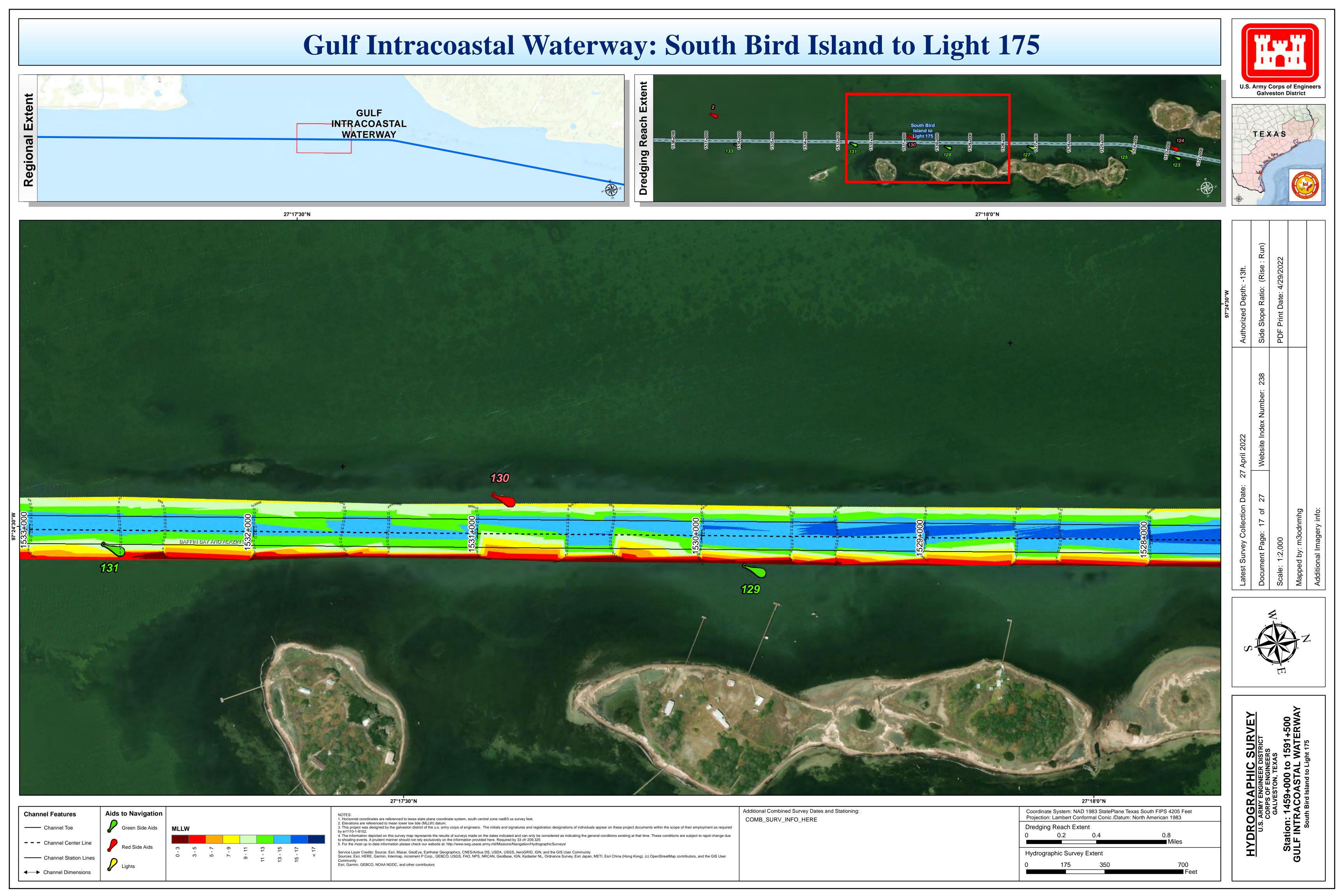


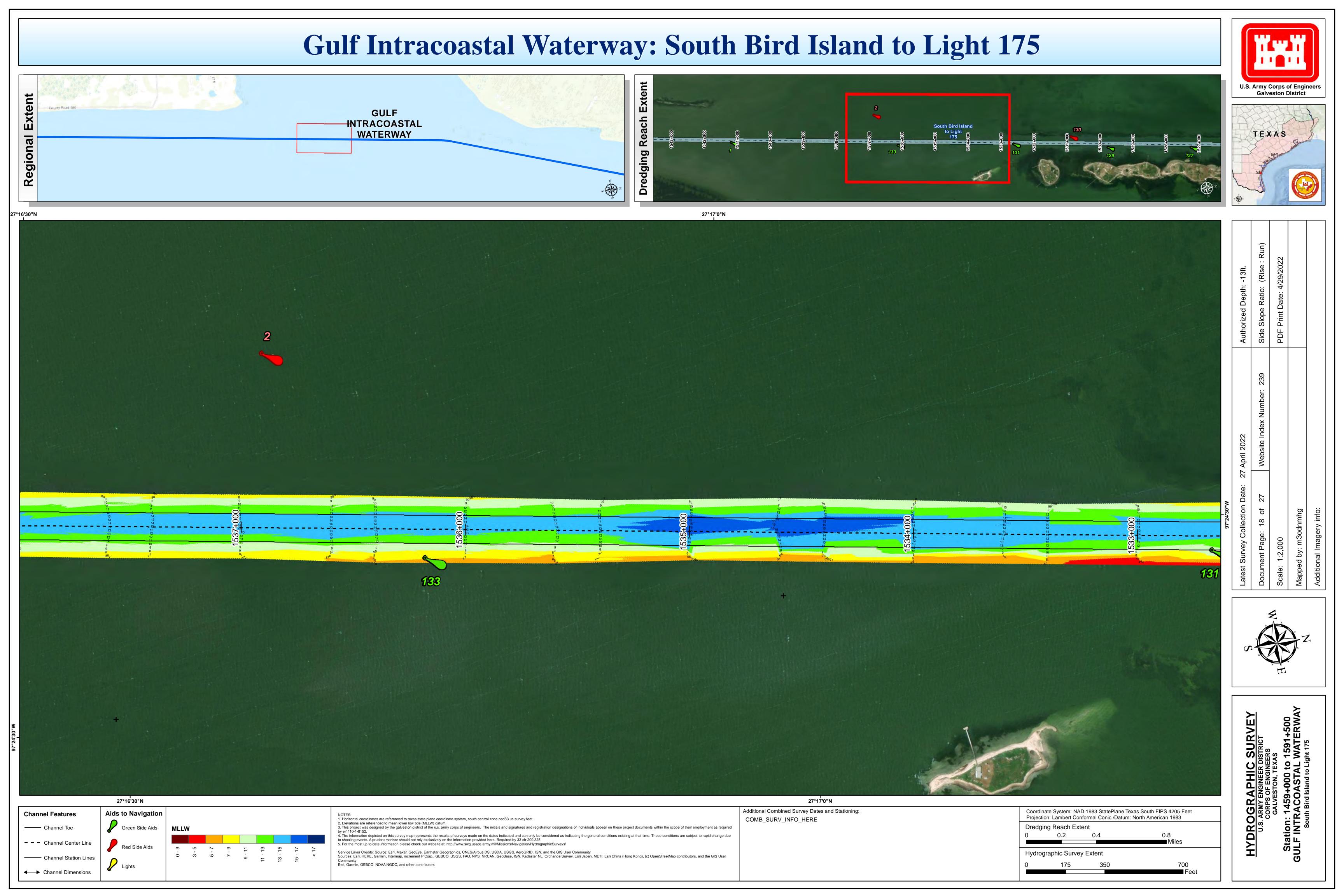


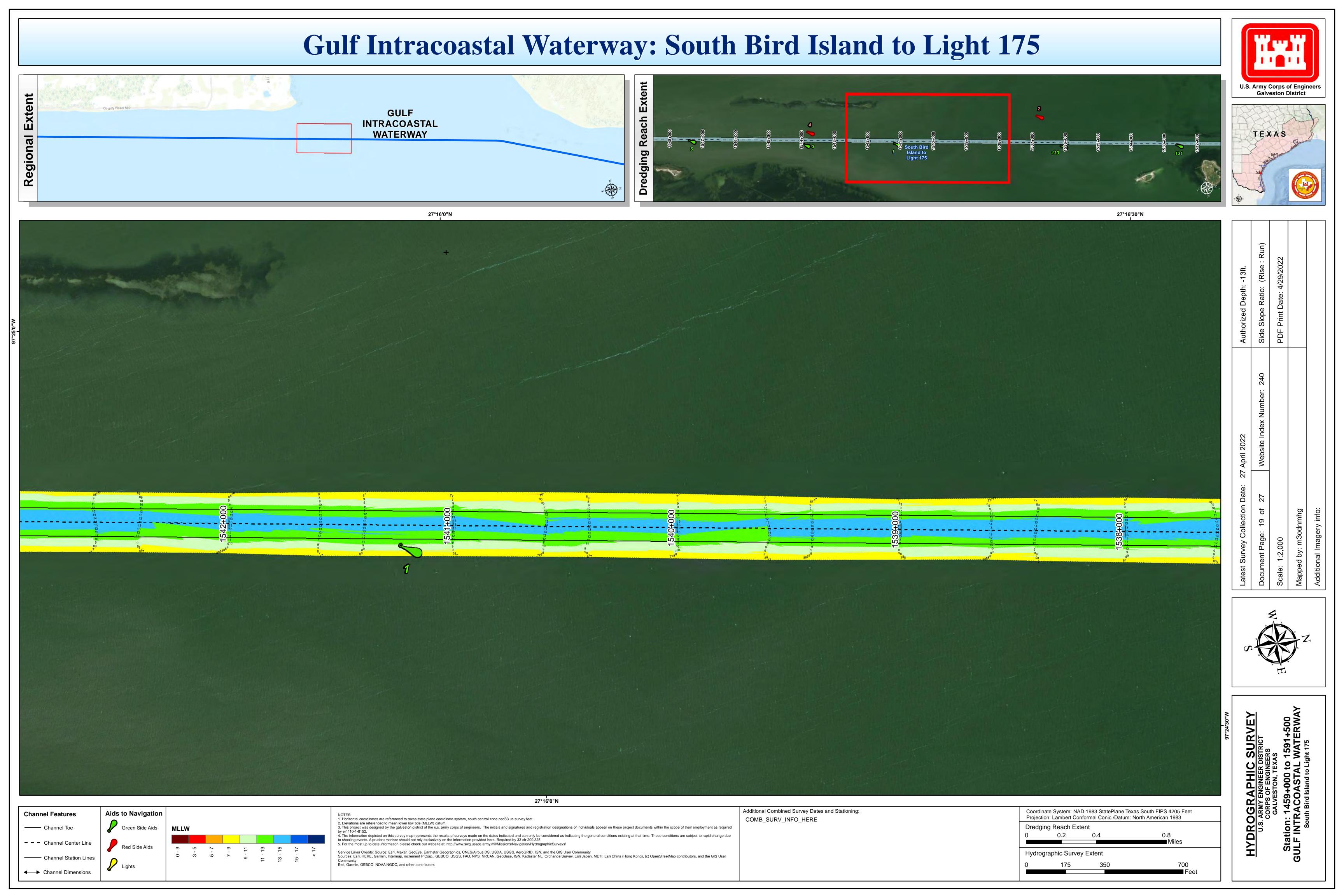
Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY TEXAS 97°24'0"W HYDROGRAPHIC SURVEY U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS GALVESTON, TEXAS 97°23[']30"W 27°20'0"N Additional Combined Survey Dates and Stationing: Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet **Aids to Navigation Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 COMB_SURV_INFO_HERE 1. Horizontal coordinates are referenced to texas state plane coordinate system, south central zone nad83 us survey feet. Dredging Reach Extent —— Channel Toe 4. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ – – Channel Center Line Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent ——— Channel Station Lines ← Channel Dimensions

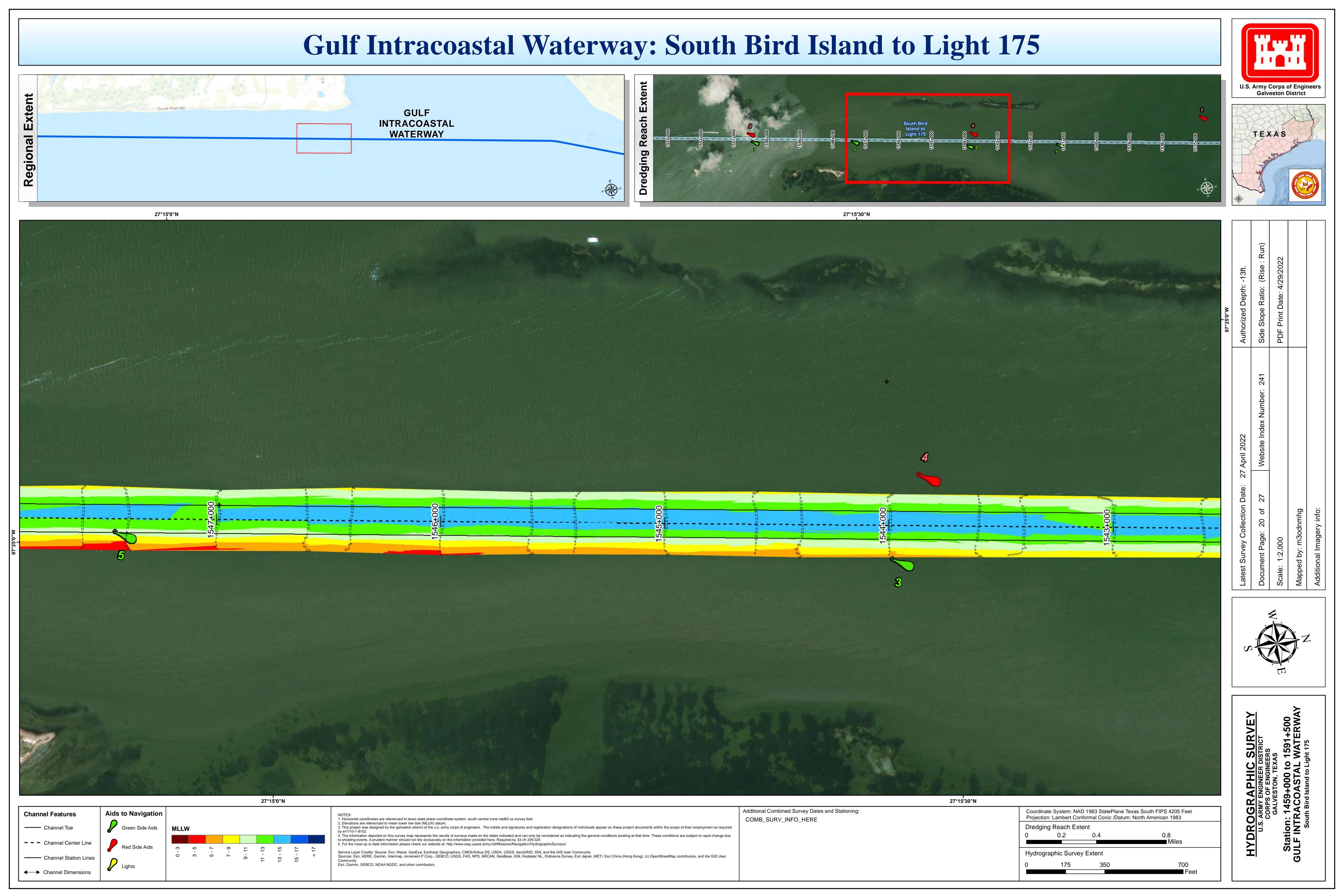
Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY TEXA 124 122 120 HYDROGRAPHIC SURVEY U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS GALVESTON, TEXAS 27°19'0"N 27°19'30"N Additional Combined Survey Dates and Stationing: Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet **Aids to Navigation Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 COMB_SURV_INFO_HERE 1. Horizontal coordinates are referenced to texas state plane coordinate system, south central zone nad83 us survey feet. 2. Elevations are referenced to mean lower low tide (MLLW) datum. Dredging Reach Extent 3. This project was designed by the galveston district of the u.s. army corps of engineers. The initials and signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by er1110-1-8152. Channel Toe Fig. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due o shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 – – Channel Center Line 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Hydrographic Survey Extent ——— Channel Station Lines Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors 700 **←** Channel Dimensions

Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY TEXAS HYDROGRAPHIC U.S. ARMY ENGINEER D 27°18'30"N Additional Combined Survey Dates and Stationing: Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Aids to Navigation **Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 COMB_SURV_INFO_HERE 1. Horizontal coordinates are referenced to texas state plane coordinate system, south central zone nad83 us survey feet. 2. Elevations are referenced to mean lower low tide (MLLW) datum. Dredging Reach Extent 3. This project was designed by the galveston district of the u.s. army corps of engineers. The initials and signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by er1110-1-8152. — Channel Toe 4. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ – – Channel Center Line Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Hydrographic Survey Extent ——— Channel Station Lines Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors ← Channel Dimensions

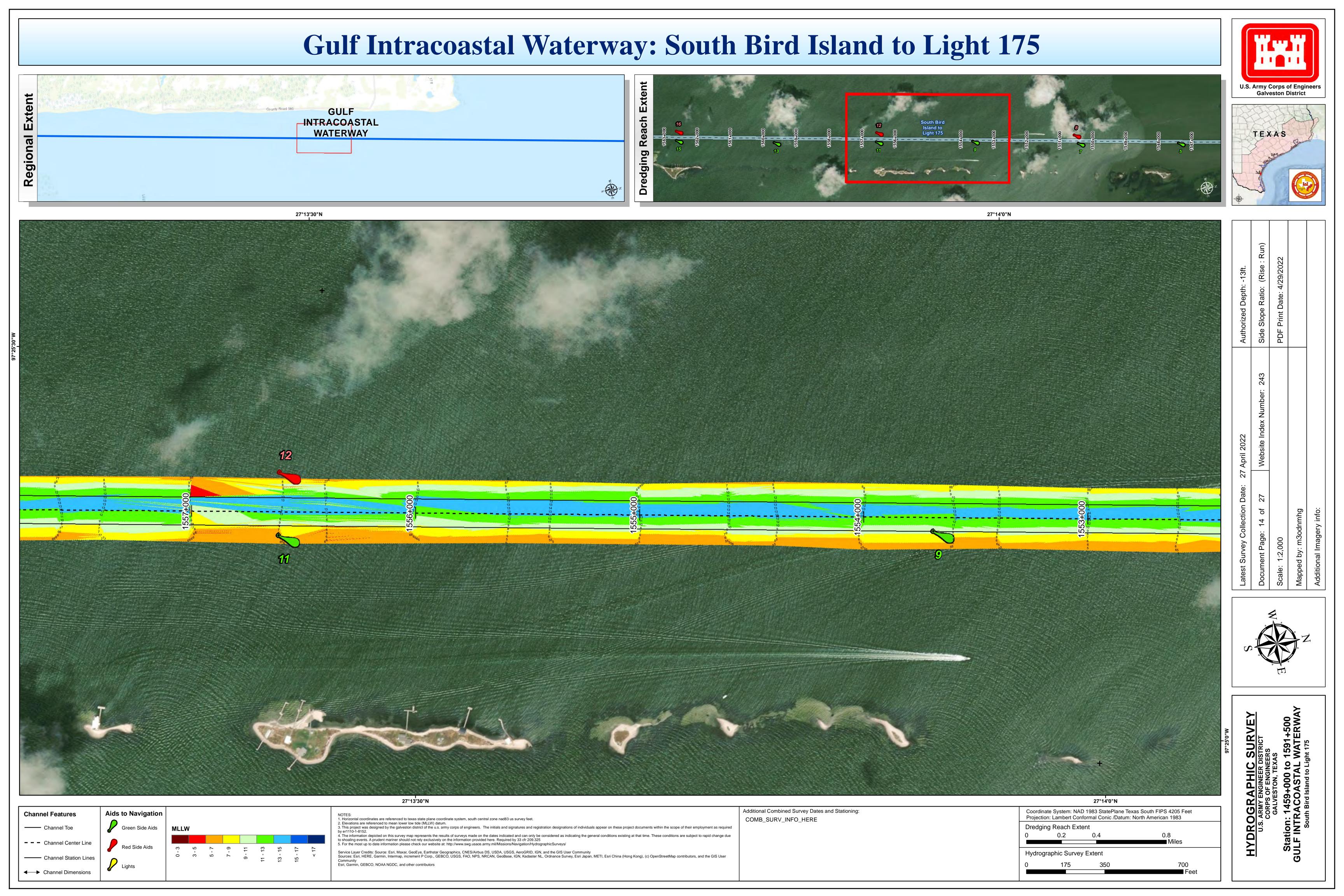


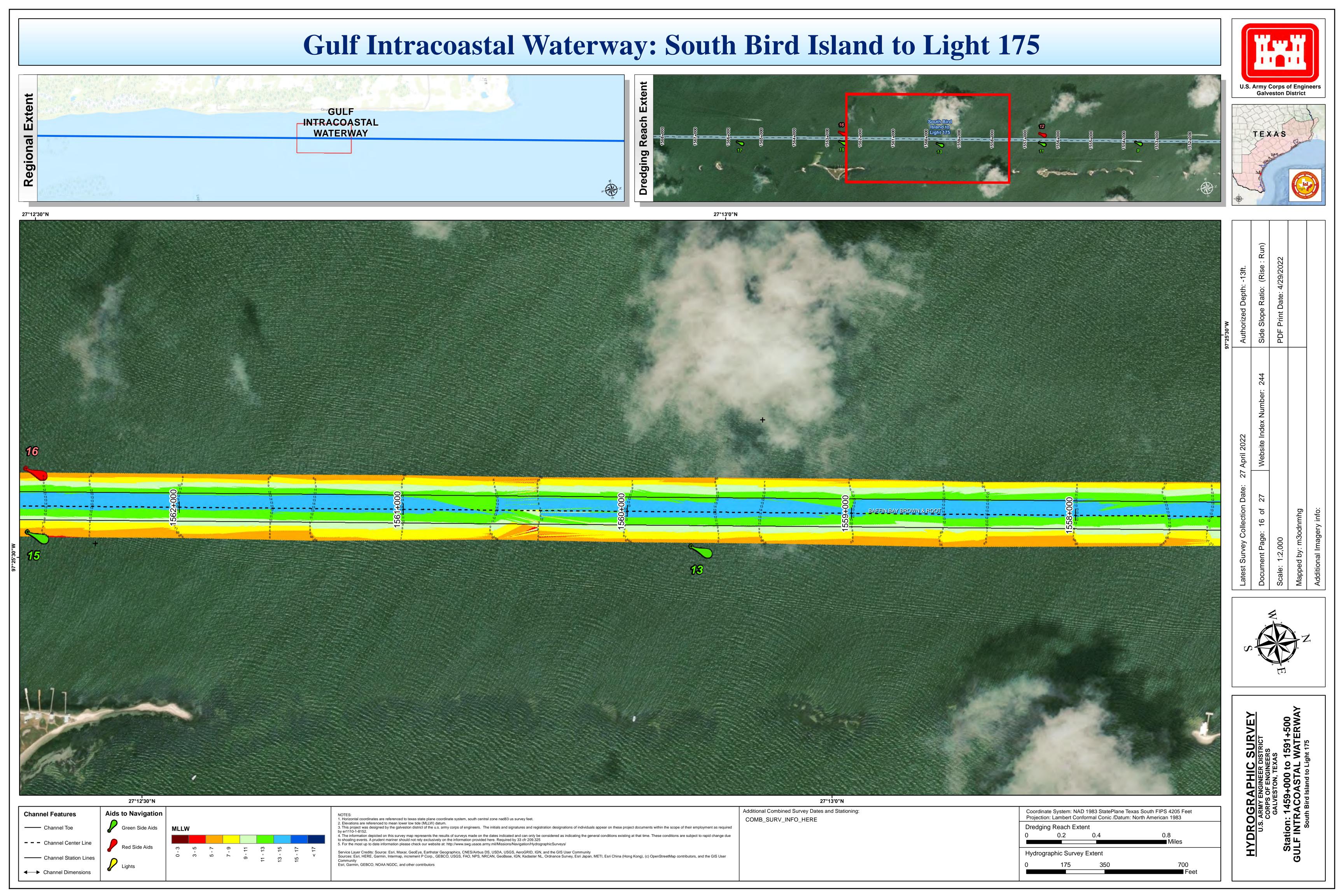


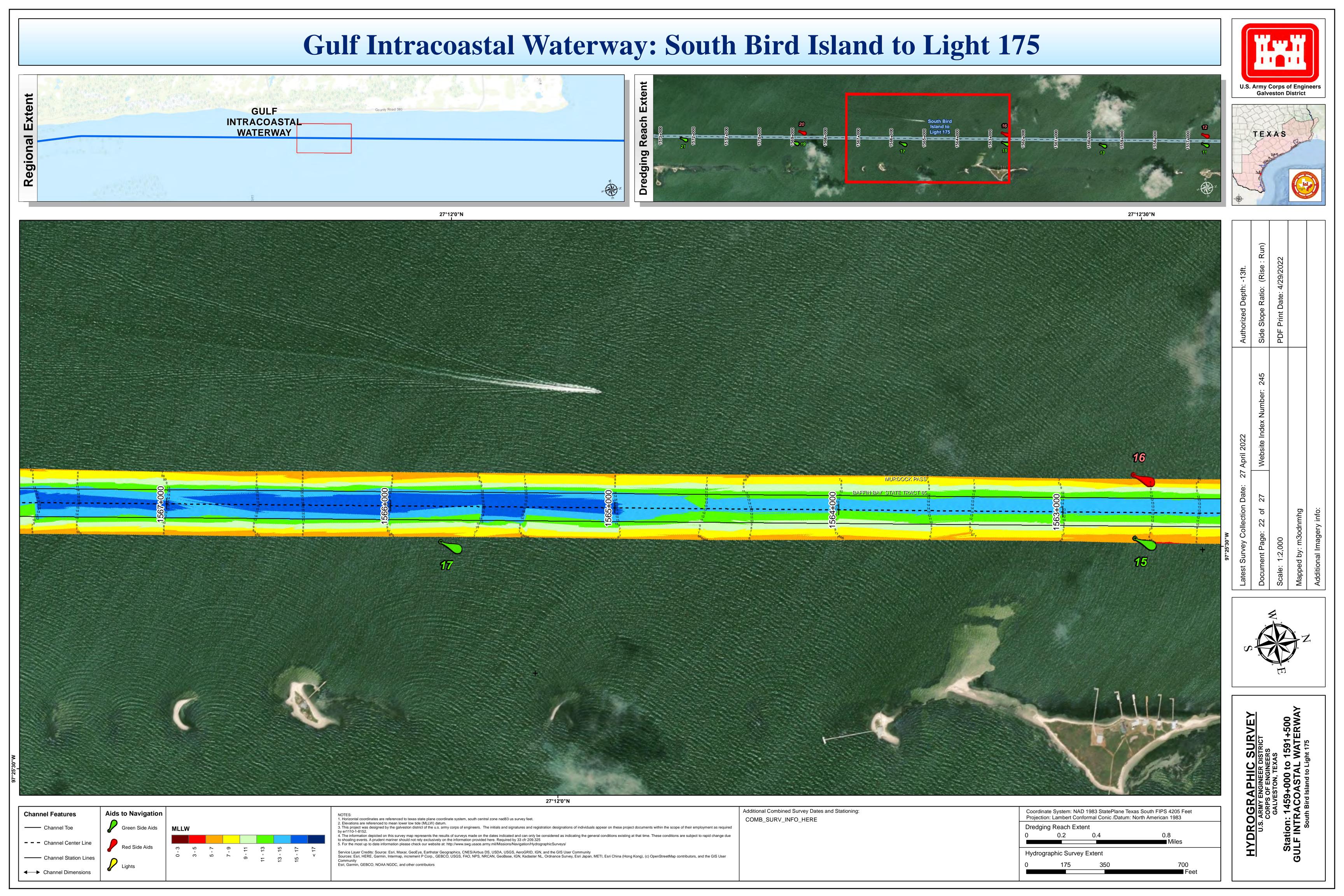


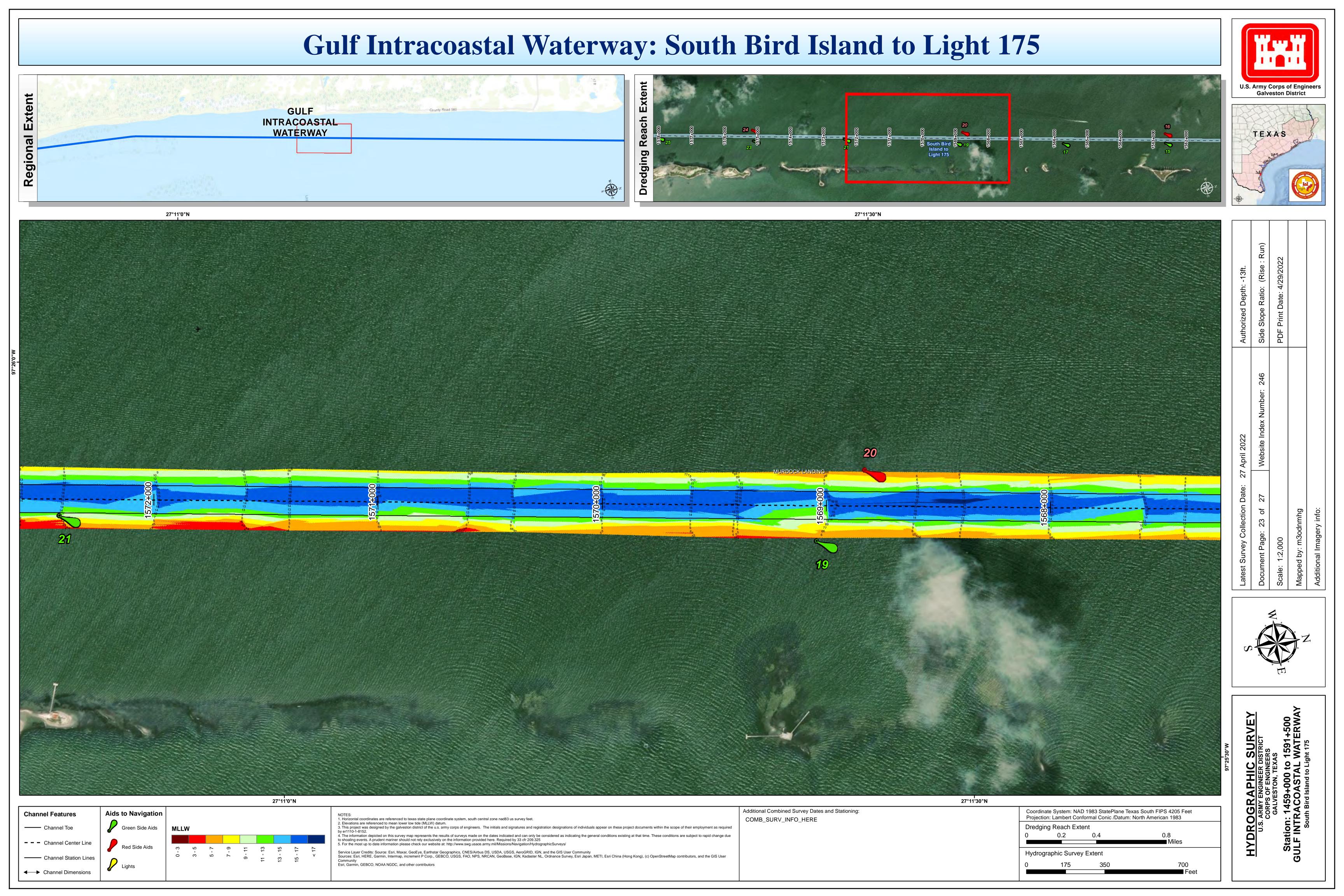


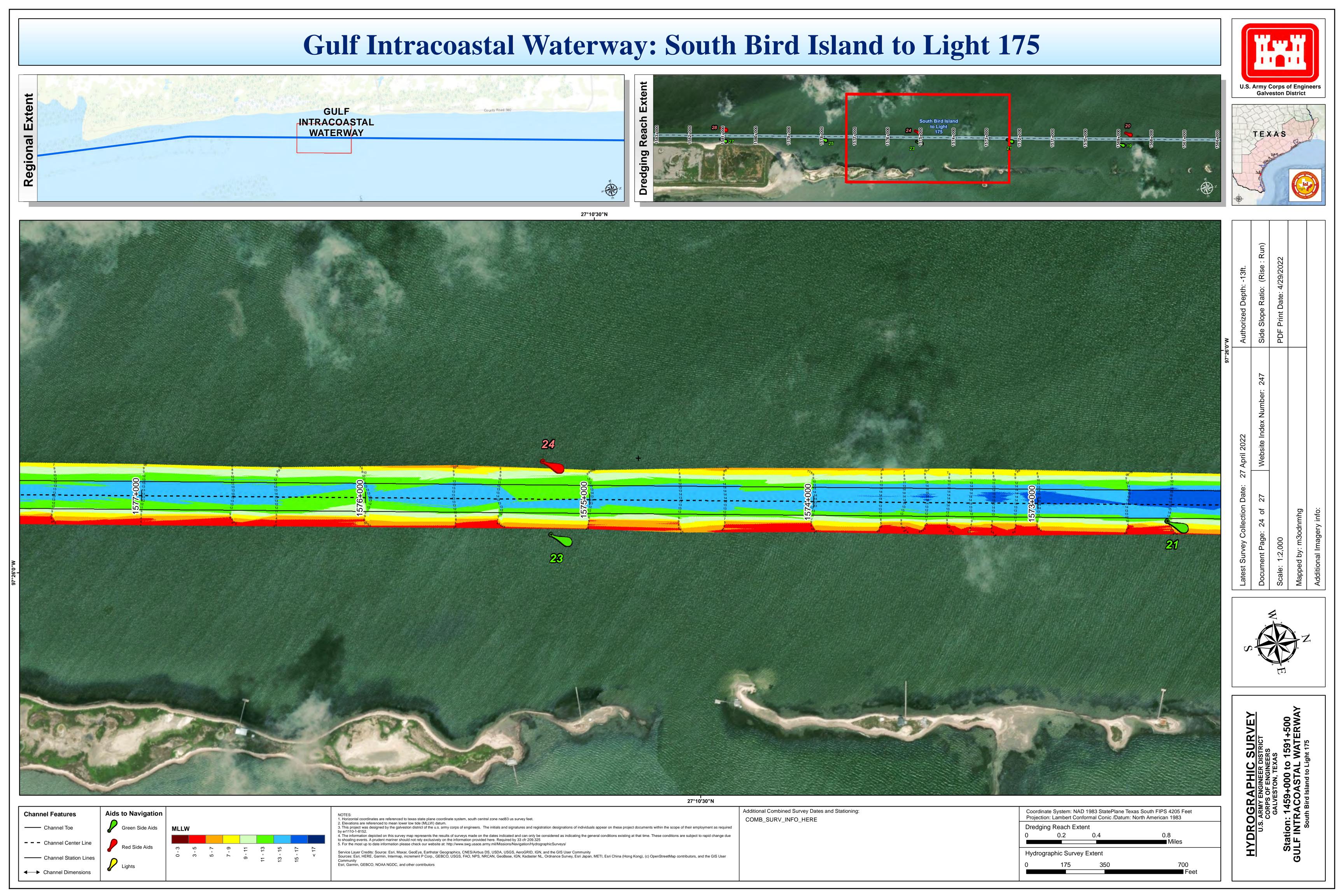
Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY TEXAS HYDROGRAPHIC SURVEY U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS GALVESTON, TEXAS 27°14'30"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Additional Combined Survey Dates and Stationing: **Aids to Navigation Channel Features** COMB_SURV_INFO_HERE 1. Horizontal coordinates are referenced to texas state plane coordinate system, south central zone nad83 us survey feet. **Dredging Reach Extent** 3. This project was designed by the galveston district of the u.s. army corps of engineers. The initials and signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by er1110-1-8152. — Channel Toe 4. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ – – Channel Center Line Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent ——— Channel Station Lines ← Channel Dimensions

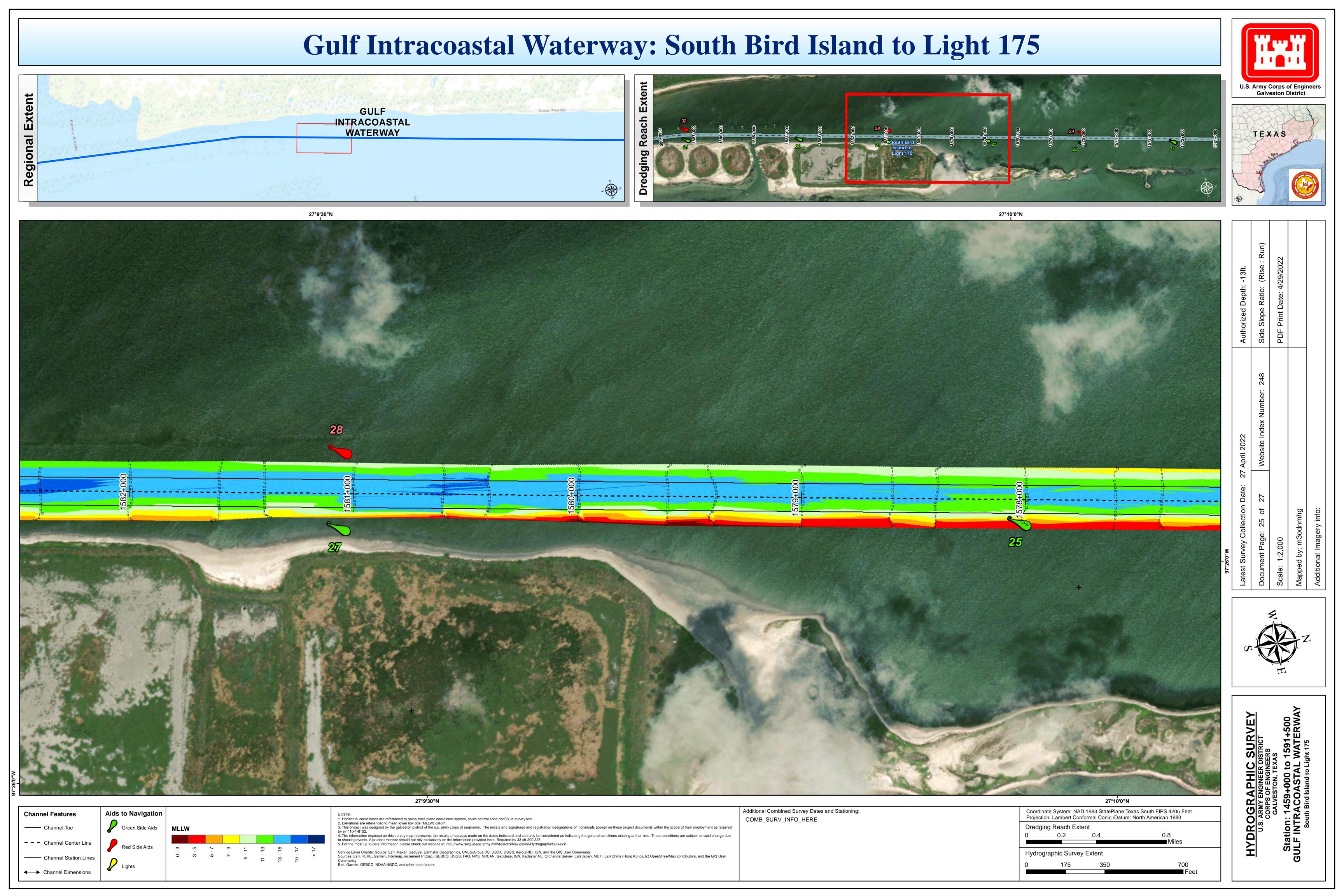












Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY 27°8'30"N HYDROGRAP U.S. ARMY ENGIN 27°8'30"N 27°9'0"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Additional Combined Survey Dates and Stationing: Aids to Navigation **Channel Features** COMB_SURV_INFO_HERE 1. Horizontal coordinates are referenced to texas state plane coordinate system, south central zone nad83 us survey feet. 2. Elevations are referenced to mean lower low tide (MLLW) datum. Dredging Reach Extent 3. This project was designed by the galveston district of the u.s. army corps of engineers. The initials and signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by er1110-1-8152. — Channel Toe due to Front Process. 4. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ – – Channel Center Line Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Hydrographic Survey Extent Channel Station Lines Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors ← Channel Dimensions

Gulf Intracoastal Waterway: South Bird Island to Light 175 GULF INTRACOASTAL WATERWAY TEXAS HYDROGRAPHIC U.S. ARMY ENGINEER D 27°8'0"N 27°8'30"N Coordinate System: NAD 1983 StatePlane Texas South FIPS 4205 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Additional Combined Survey Dates and Stationing: Aids to Navigation **Channel Features** COMB_SURV_INFO_HERE Dredging Reach Extent 3. This project was designed by the galveston district of the u.s. army corps of engineers. The initials and signatures and registration designations of individuals appear on these project documents within the scope of their employment as required by er1110-1-8152. — Channel Toe due to Front Process. 4. The information depicted on this survey map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time. These conditions are subject to rapid change due to shoaling events. A prudent mariner should not rely exclusively on the information provided here. Required by 33 cfr 209.325 5. For the most up to date information please check our website at: http://www.swg.usace.army.mil/Missions/Navigation/HydrographicSurveys/ – – Channel Center Line Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Hydrographic Survey Extent ——— Channel Station Lines Community Esri, Garmin, GEBCO, NOAA NGDC, and other contributors ← Channel Dimensions