#### Colorado River: Mile 8 to Mile 13.5 COLORADO RIVER MOUTH OF THE COLORADO TEXA 45000 45 $\frac{991113_{13}^{12}12121}{10131213131312121212}$ $\frac{482+00}{201112}$ 483+00 485+00 485+00 486+00 487+00 HYDROGRAPI U.S. ARMY ENGIN 96°0<sup>'</sup>0"W 95°59<sup>'</sup>30"W 28°47'0"N 28°46'30"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Aids to Navigation 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS **Channel Features** Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community . HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS – – Channel Center Line User Community CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN —— Channel Station Lines SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, NOAA Bathymetry (DREDGING REACH EXTENT) ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY **←** Channel Dimensions 0 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 50 AND TYPE OF INSTRUMENTATION.

# Colorado River: Mile 8 to Mile 13.5 COLORADO RIVER MOUTH OF THE COLORADO TEXA HYDROGRAPHIC U.S. ARMY ENGINEER D CORPS OF ENGINE 28°47'30"N 28°47'0"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Aids to Navigation 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS **Channel Features** Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community Projection: Lambert Conformal Conic /Datum: North American 1983 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 Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Dredging Reach Extent Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS - - Channel Center Line Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN Channel Station Lines THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. Lights NOAA Bathymetry (DREDGING REACH EXTENT) ← Channel Dimensions

### Colorado River: Mile 8 to Mile 13.5 COLORADO RIVER MOUTH OF THE COLORADO TEXAS HYDROGRAPHIC U.S. ARMY ENGINEER D 28°48'30"N 28°48'0"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community **Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE 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), swisstopo, © OpenStreetMap contributors, and the GIS SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 Dredging Reach Extent Channel Toe 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: – – Channel Center Line CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. NOAA Bathymetry (DREDGING REACH EXTENT) ← Channel Dimensions

#### Colorado River: Mile 8 to Mile 13.5 COLORADO RIVER MOUTH OF THE COLORADO TEXA HYDROGR/ U.S. ARMY E 96°0'30"W 28°49'0"N 28°48'30"N Aids to Navigation | MLLW Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community **Channel Features** Projection: Lambert Conformal Conic /Datum: North American 1983 MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE SYSTEM, SOUTH CENTRAL ZONE NAD83 US SURVEY FEET. Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, Channel Toe Dredging Reach Extent DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS INFORMATION PROVIDED HERE. REQUIRED BY 33 CFR 209.325 2. ELEVATIONS ARE REFERENCED TO MEAN LOWER LOW TIDE (MLLW) DATUM. – – Channel Center Line 5. FOR THE MOST UP TO DATE INFORMATION PLEASE CHECK OUR WEBSITE AT: B. THIS PROJECT WAS DESIGNED BY THE GALVESTON DISTRICT OF THE U.S. ARMY HTTP://WWW.SWG.USACE.ARMY.MIL/MISSIONS/NAVIGATION/HYDROGRAPHICSURVEYS/ CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN 6. NOAA BATHYMETRY CONTOURS PRODUCED FROM HISTORIC BATHYMETRIC (HYDROGRAPHIC) Channel Station Lines THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. NOAA Bathymetry (DREDGING REACH EXTENT) ← Channel Dimensions

## Colorado River: Mile 8 to Mile 13.5 COLORADO RIVER MOUTH OF THE COLORADO TEXA HYDROGRAPI U.S. ARMY ENGIN 28°50'0"N 96°1<sup>'</sup>0"W 28°49'30"N Coordinate System: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet Projection: Lambert Conformal Conic /Datum: North American 1983 Aids to Navigation 4. THE INFORMATION DEPICTED ON THIS SURVEY MAP REPRESENTS THE RESULTS OF SURVEYS **Channel Features** Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL I. HORIZONTAL COORDINATES ARE REFERENCED TO TEXAS STATE PLANE COORDINATE CONDITIONS EXISTING AT THAT TIME. THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE 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), swisstopo, © OpenStreetMap contributors, and the GIS Channel Toe DUE TO SHOALING EVENTS. A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE Dredging Reach Extent – – Channel Center Line CORPS OF ENGINEERS. THE INITIALS AND SIGNATURES AND REGISTRATION Esri, Garmin, GEBCO, NOAA NGDC, and other contributors Hydrographic Survey Extent DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN Channel Station Lines SURVEYS CONDUCTED BY THE NOAA NATIONAL OCEAN SERVICE/COAST SURVEY, AVAILABLE FROM THE NATIONAL GEOPHYSICAL DATA CENTER. SURVEYS VARY AS TO SOUNDING DENSITY, ACCURACY OF DEPTH, ACCURACY OF NAVIGATION, ZERO DATUM, DATE OF SURVEY AND TYPE OF INSTRUMENTATION. THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER1110-1-8152. NOAA Bathymetry (DREDGING REACH EXTENT) **←** Channel Dimensions