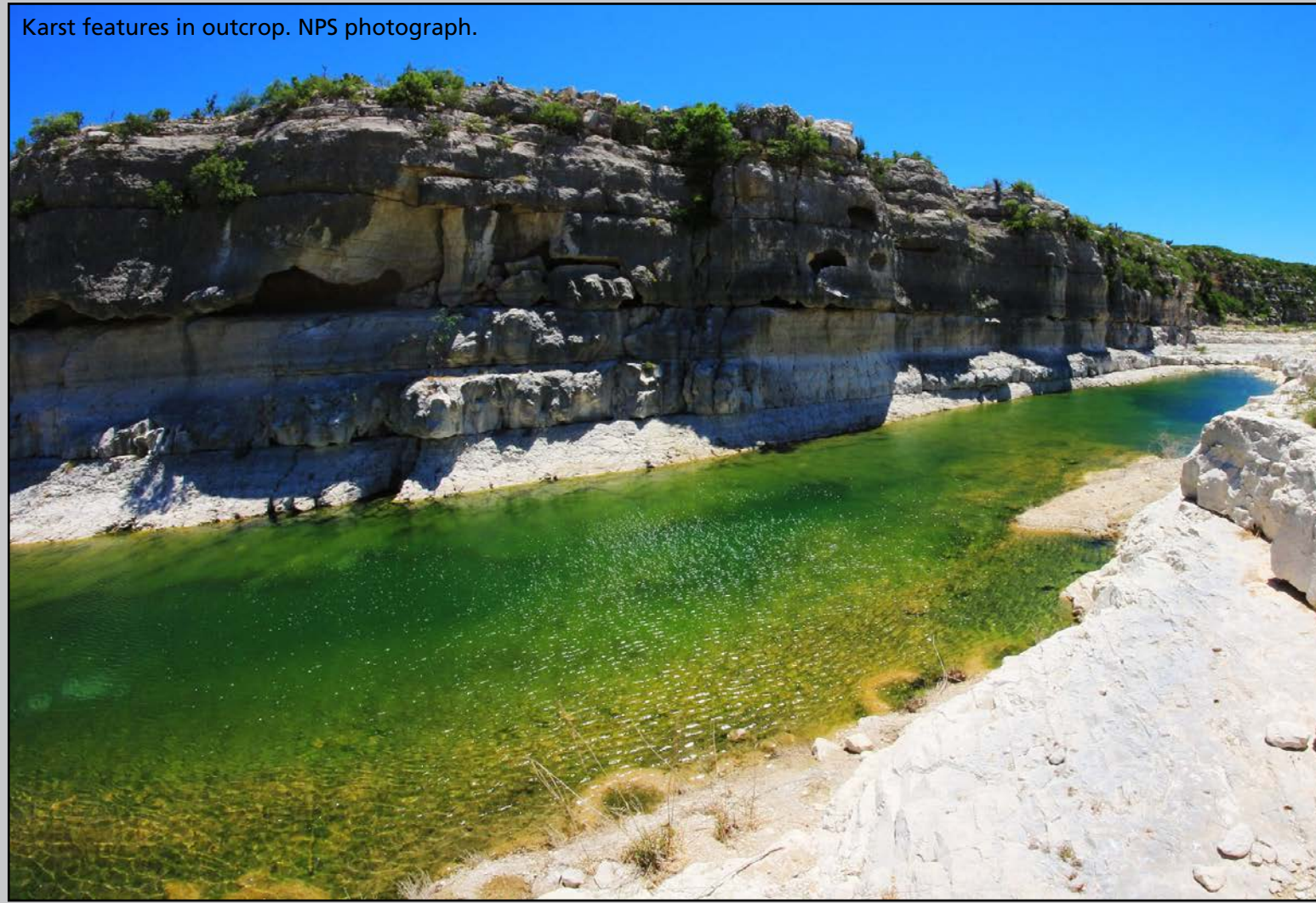
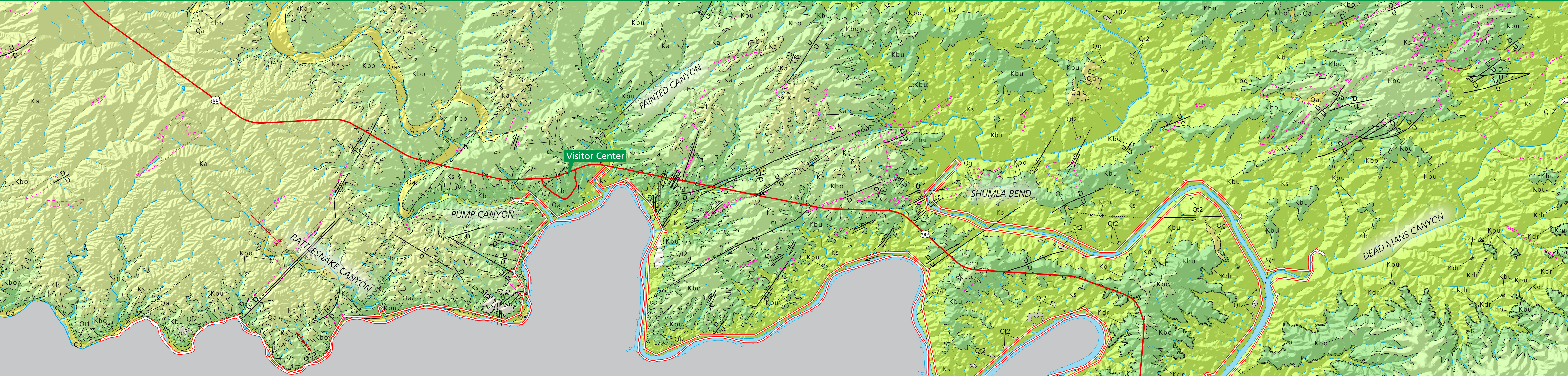


Geologic Map of Amistad National Recreation Area

Texas

Western Portion



Karst features in outcrop. NPS photograph.

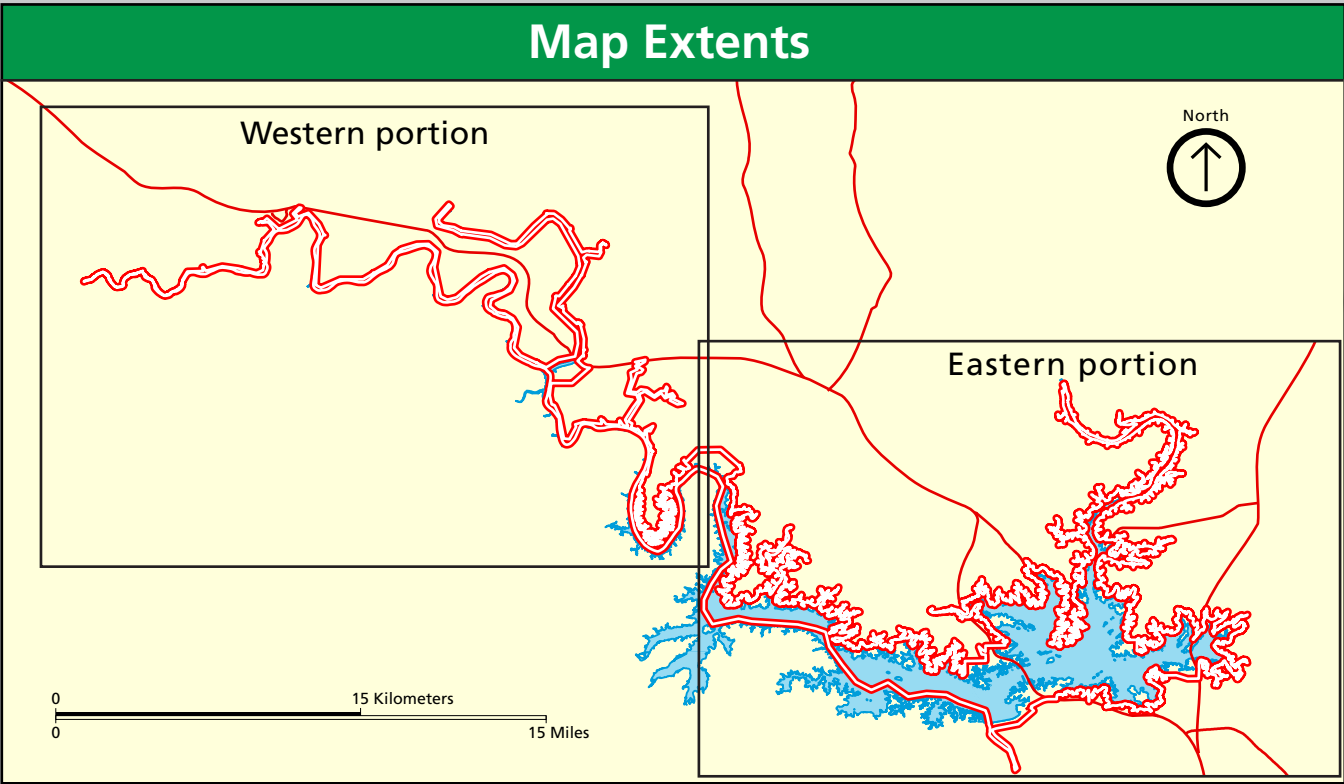
These maps display geologic map data compiled by the National Park Service Geologic Resources Inventory. It is not a substitute for site-specific investigations. All GRI products are available at <https://go.nps.gov/gripubs>.

Source Maps:
Freeman, V. L. 1965. Geologic map of the Bakers Crossing Quadrangle, Val Verde County, Texas (scale 1:62,500). Miscellaneous Geologic Investigations Map I-434. US Geological Survey, Reston, Virginia.
Webster, R. E. 1982. Geology of the Carta Valley fault zone area: Edwards, Kinney, and Val Verde Counties, Texas (scale 1:96,000). Geologic Quadrangle Map GQ-0053. University of Texas, Bureau of Economic Geology, Austin, Texas.
Freeman, V. L. 1964. Geologic map of the Langtry Quadrangle, Val Verde County, Texas (scale 1:62,500). Miscellaneous Geologic Investigations Map I-422. US Geological Survey, Reston, Virginia.
Sharps, J. A. 1963. Geologic map of the Malvado Quadrangle, Terrell and Val Verde Counties, Texas (scale 1:62,500). Miscellaneous Geologic Investigations Map I-382. US Geological Survey, Reston, Virginia.
Sharps, J. A., and V. L. Freeman. 1965. Geologic map of the Mouth of Pecos and Feely Quadrangles, Val Verde County, Texas (scale 1:62,500). Miscellaneous Geologic Investigations Map I-440. US Geological Survey, Reston, Virginia.
Freeman, V. L. 1964. Geologic map of the Shumla Quadrangle, Val Verde County, Texas (scale 1:62,500). Miscellaneous Geologic Investigations Map I-424. US Geological Survey, Reston, Virginia.
R. M. P., N. G. J., and W. B. T. 1963. Karst features near Amistad Dam (scale 1:12,000). IBWC Karst Map. International Boundary & Water Commission, El Paso, Texas.
R. B. H., G. A. K., and L. H. H. 1951. Areal geologic map San Francisco Creek to Indian Creek Reach, area 6 (scale 1:50,000). IBWC Map A-245. International Boundary & Water Commission, El Paso, Texas.
C. G. E., G. A. K., and L. H. H. 1951. Areal geologic map Indian Creek to Del Rio Reach, area 7 (scale 1:50,000). IBWC Map A-223. International Boundary & Water Commission, El Paso, Texas.
C. G. E., G. A. K., and L. H. H. 1950. Areal geologic map Indian Creek to Del Rio Reach, area 8 (scale 1:50,000). IBWC Map A-221. International Boundary & Water Commission, El Paso, Texas.
C. G. E., G. A. K., and L. H. H. 1950. Areal geologic map Indian Creek to Del Rio Reach, area 9 (scale 1:50,000). IBWC Map A-221. International Boundary & Water Commission, El Paso, Texas.
Page, W. R., M. E. Berry, D. P. VanSistine, and S. R. Snyder. 2009. Preliminary geologic map of the Laredo, Crystal City-Eagle Pass, San Antonio, and Del Rio 1° x 2° Quadrangles, Texas, and the Nuevo Laredo, Ciudad Acuna, Piedras Negras, and Nueva Rosita 1° x 2° Quadrangles, Mexico (scale 1:250,000). Open-File Report 2009-1015. US Geological Survey, Reston, Virginia.

Source Scales: 1:250,000, 1:96,000, 1:62,500, 1:50,000, and 1:12,000. According to US National Map Accuracy Standards, features are within 127 m (417 ft), 49 m (161 ft), 32 m (104 ft), 25 m (84 ft), and 6 m (20 ft) respectively, of their true location.

Poster Layout: Trista L. Thornberry-Ehrlich and Thom Curdts (Colorado State University)

Poster Date: January 2025



-  NPS boundary
-  Road
-  Water
-  Point of interest

Folds
solid where known or certain, dashed where approximate, short-dashed where concealed, dotted where concealed and queried, fine-dashed where inferred, arrows pointing indicate fold type, with arrowhead indicating fold plunge

-  monocline
-  anticline
-  syncline

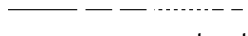
Faults
solid where known or certain, dashed where approximate, short-dashed where concealed, dotted where concealed and queried, fine-dashed where inferred, with direction indicators, bar and ball indicates fault downside

-  normal fault
-  right-lateral fault
-  left-lateral fault

Sinkholes
solid pink line where known or certain, dashed where approximate, concealed, and/or inferred. Teeth pointing into the depression

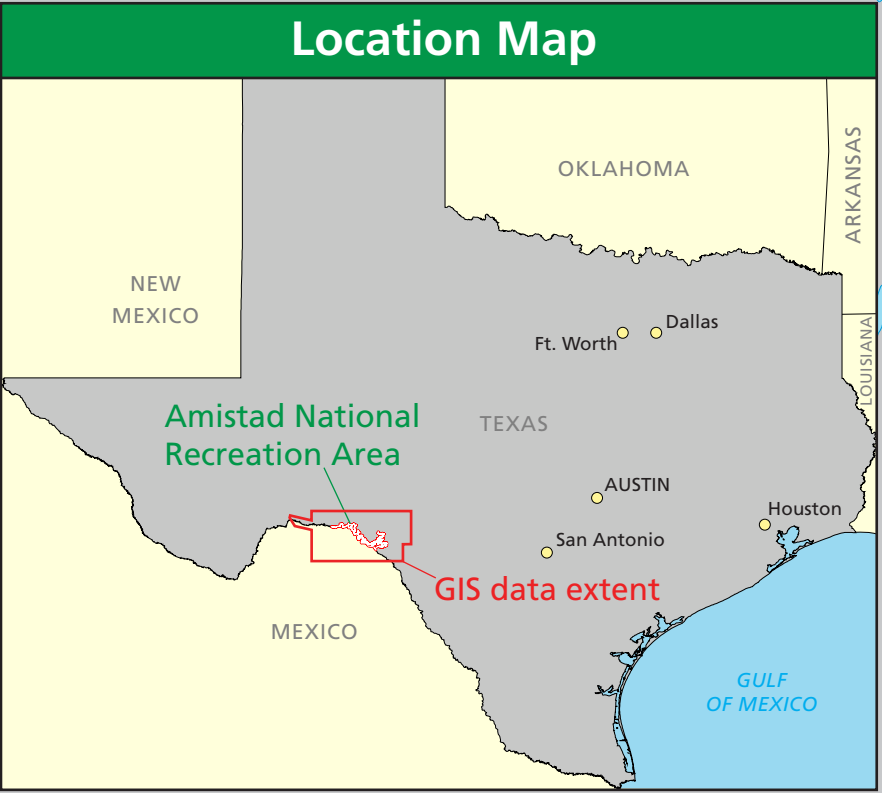
-  sinkhole boundary

Geologic Contacts
solid where known or certain, dashed where approximate, dotted where concealed and queried, short-dashed where inferred, blue where a water boundary, dashed blue where subaqueous (inferred)

-  contact
-  map boundary

- Geologic Units**
-  Qa Alluvium (Quaternary)
 -  Qta Terrace Alluvium (Quaternary)
 -  Qtg Terrace Gravel (Pleistocene)
 -  Qt1 Younger Terrace Gravel (Pleistocene)
 -  Qt2 Older Terrace Gravel (Pleistocene)
 -  Qt3 Oldest Terrace Gravel (Pleistocene)
 -  Qg Older Gravel (Quaternary)
 -  Qgh Older Gravel (higher elevation) (Pleistocene)
 -  Qa+Kdr Alluvium + Del Rio Formation (Quaternary and Cretaceous)
 -  QTu Uvalde Gravel (Pliocene to Pleistocene)*
 -  QTu+Kdr Uvalde Gravel + Del Rio Formation (Quaternary to Cretaceous)*
 -  QTu+Ks Uvalde Gravel + Salmon Peak Formation (Quaternary to Cretaceous)*
 -  Ka Austin Group (Cretaceous)
 -  Kbo Boquillas Formation (Upper Cretaceous)*
 -  Kbu Buda Formation (Cretaceous)
 -  Kdr Del Rio Formation (Cretaceous)
 -  Ks Salmon Peak Limestone (Lower Cretaceous)*

*Several geologic units depicted on this layout differ from those in the GRI GIS data. Older Alluvium unit (Qta) was reassigned as Uvalde Gravel (QTU), the Eagle Ford Group (Kef) was changed to Boquillas Formation (Kbo), and the Georgetown Limestone (Kge) is equivalent to the Salmon Peak Limestone (Ks). These changes reflect current geologic interpretations by Page et al. (2009).



Confluence of the Pecos River and Rio Grande. NPS photograph.

