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Matthew T. Messenger
Staff Entomologist
B.S. Entomology
M.S. Entomology
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Background: Staff Entomologist and Program Manager of the Cattle Fever Tick Eradication Program. Five years of service with APHIS; previously employed by The Dow Chemical Company as a Field Research Scientist, developing and evaluating urban pest management monitoring and control methods.

EIS Responsibility: Veterinary Services CFTEP contact – co-authored executive summary and reviewed and contributed to sections in chapters 1, 2, 3, and 4 and appendices of draft EIS.

Michelle L. Gray
Environmental Protection Specialist
B.S. Biology
M.S. Zoology

Background: Environmental protection specialist with expertise in wildlife biology and toxicology. Ten years of service in APHIS. Experienced in preparing environmental documents for APHIS programs. Experienced in environmental compliance especially as it relates to the Migratory Bird Treaty Act and the Endangered Species Act.

EIS Responsibility: EIS team leader – wrote part of chapters 1, 2, 3, and 4. Reviewed chapters and appendices. Responsible for leading the preparation of chapters 3 and 4 of the draft EIS.

Allan N. Auclair
Systems Ecologist
B.S. General Science
Ph.D. Plant and Systems Ecology

Background: Risk scientist with expertise on pest risk assessment, pest outbreak dynamics, and the role of climate drives and climate change on pest incidence. Eight years of service in APHIS. Experienced in risk analysis especially as it relates to risk assessment of exotic pests entering on commodities under import permit application; climate as a drive on the outbreak of high-threat pests; and compliance to climate change and invasive pest legislation including Executive Orders 13122 and13514 and Departmental Regulation 1070-001.

EIS Responsibility: EIS analyst – assessed the influence of climate and climate change impacts of fencing to control the spread of cattle fever ticks along the U.S.-Mexican border.

Samantha B. Floyd
Biological Scientist
B.S. Biology
M.S. Environmental Science and Policy

Background: Biological scientist with expertise in pesticide research and regulatory policy. More than ten years of service with APHIS. Prepares and provides assistance on environmental documents for APHIS programs. Experienced in managing environmental compliance as it relates to the Federal Insecticide, Fungicide, and Rodenticide Act.

EIS Responsibility: EIS analyst – prepared the chapter 4 section of the draft EIS regarding the Farmland Protection Policy Act and reviewed other sections of Chapter 4.

Vicki L. Gutierrez
Environmental Protection Specialist

Background: Paralegal studies. More than 20 years of experience working on NEPA documents as a writer/editor and team leader. More than 36 years of experience working in APHIS, including as a compliance assistant for Animal Welfare Act and Horse Protection Act alleged

violation cases and as a management analyst in planning and information resources management.

EIS Responsibility: EIS team leader – responsible for leading the preparation of EIS public scoping meetings and the development of chapters 1 and 2 of the draft EIS.

Vivian A. Miller
Environmental Protection Specialist
B.S. Biology
M.Ed. Secondary Education, Biology

Background: Environmental protection specialist with more than three years of experience in preparing and reviewing NEPA compliance documents for APHIS.

EIS Responsibility: EIS analyst – wrote sections of chapters 3 and 4 of the draft EIS.

Ann M. Nasr
Writer/Editor
B.A. English-Latin

Background: More than 20 years of clerical, administrative, and editorial service with APHIS. Previously employed in private industry as an editor and publications coordinator.

EIS Responsibility: EIS Editor – desktop publishing of the draft EIS (including editing, format, and document security); supportive coordination and planning.

Amy W. Shalom
Environmental Protection Specialist
B.A. Literature

Background: Environmental protection specialist, preparing and reviewing NEPA compliance documents. Nine years of experience with APHIS.

EIS Responsibility: EIS analyst – wrote portions of chapters 3 and 4 of the draft EIS.

Daniel L. Smith
Environmental Protection Specialist
B.A. Chemistry
B.S. Biology
M.S. Environmental Science

Background: Environmental protection specialist with expertise in GIS, environmental and systemic toxicology, and chemical and pesticide fate. More than seven years of experience with APHIS. Experienced in GIS mapping for endangered species and natural resources and in preparing NEPA compliance documents. Previously employed by The Army Corps of Engineers in Anchorage, Alaska as a regulatory specialist, enforcing and permitting Clean Water Act Section 404 fill activities.

EIS Responsibility: EIS analyst – wrote portions of chapters 3 and 4; prepared maps using GIS technology.

Rhonda R. Solomon
Environmental Protection Specialist
B.S. Biology
J.D. Law

Background: Environmental protection specialist with more than 8 years of experience in the National Environmental Policy Act. Six years of environmental compliance with APHIS.

EIS responsibility: EIS analyst – assisted in preparations for the EIS public scoping meetings and for issues regarding colonias and Environmental Justice (EO 12898).

Eileen M. Sutker
Environmental Protection Specialist
B.S. Botany
M.S. Plant Pathology
Ph.D. Plant Pathology
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Background: Environmental protection specialist with expertise in risk analysis, permitting, and regulatory policy. More than 11 years of service with APHIS. Expertise in environmental compliance as it relates to commodity imports and interstate movement of plant pests under the Plant Protection Act. Experienced in preparing environmental documents used by APHIS programs.

EIS Responsibility: EIS Analyst – prepared information for the climate change and human health and safety sections of chapters 3 and 4.

Fan Wang-Cahill
Environmental Health Specialist
B.S. Biology
M.S. Hydrobiology
Ph.D. Ultrastructure/Cell Biology

Background: Eighteen years of experience in human health risk assessment for environmental contaminants at Superfund, Resource Conservation and Recovery Act (RCRA) and state-regulated contaminated facilities. Joined APHIS in November 2012 to lead human health risk assessment portions of NEPA documents and to assist in Environmental Justice compliance efforts (EO 12898).

EIS Responsibility: EIS analyst – wrote the livestock health and human health and safety sections of chapter 4 of the draft EIS.

Jim E. Warren
Ecologist
B.S. Forest Ecology
M.S. Entomology
Ph.D. Environmental Toxicology

Background: More than six years of experience working for APHIS preparing ecological risk assessments and providing assistance on environmental compliance. Prior experience before joining APHIS includes other government and private sector work regarding ecological risk assessments related to various environmental regulations.

EIS Responsibility: EIS analyst – Prepared the cumulative effects section of chapter 4 and served as a reviewer for other sections of the draft EIS.

Phillip E. Washington
Environmental Engineer
B.S Chemical Engineering
M.S. Environmental Engineering

Background: Environmental protection specialist with expertise in the National Historic Preservation Act, Environmental Justice (EO 12898), Native American issues, and organizational development. Eight years of service with APHIS. Twelve years of prior experience in private industry (E.I. DuPont de Nemours & Company Inc.) and the Federal government (U.S. Air Force Headquarters Air Mobility Command) as an environmental engineer.

EIS Responsibility: EIS analyst – Wrote chapter 4 sections on Environmental Justice (EO 12898), Native American Sacred Sites (EO 13007) and the Native American Graves Protection and Repatriation Act (Public Law 101-601).

Tracy A. Willard
Ecologist
B.S. Biology
M.S. Entomology
Ph.D. Entomology

Background: Ecologist with expertise in entomology and integrated pest management. Twelve years of service with APHIS. Experience in environmental compliance, especially associated with the Endangered Species Act in the context of biological control and pest management. Prepares and provides assistance on environmental documents for APHIS programs.

EIS Responsibility: EIS Analyst—wrote public scoping section for chapter 1, the threatened and endangered species section of chapter 3, and the Endangered Species Act, Migratory Bird Treaty Act, and Bald and Golden Eagle Protection Act sections of chapter 4.

Appendix B. Review and Consultation

The following individuals have reviewed draft sections of this Environmental Impact Statement (EIS) or were consulted on critical issues that have been addressed in this EIS. The expertise and concerns of these individuals were considered during the development of this EIS; the content of this EIS does not necessarily reflect their individual views and opinions.

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Appendix C. Summary of and Responses to Comments on Draft EIS

(Reserved for final CFTEP EIS.)

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Appendix E. References

Aiken, R.A. 2005. Determination of habitat preferences of pronghorn (*Antilocapra americana*) on the rolling plains of Texas using GIS and remote sensing. M.S. Thesis (Environmental Science), University N. TX, Denton, TX, UNT Digital Library 120pp. http://digital.library.unt.edu/ark:/67531/metadc4796 *last accessed* Mar. 11, 2013.

Anderson, D.P., Hagerman, A.D., Teel, P.D., Wagner, G.G., Outlaw, J.L. and Herbst, B.K. 2010. Economic impact of expanded fever tick range. Agricultural and Food Policy Center, TAMU, College Station, TX Research Report 10-2 http://www.afpc.tamu.edu 28pp.

Andreotti, R., Pérez de León, A. A., Dowd, S. E., Guerrero, F. D., Bendele, K. G. and Scoles, G. A. 2011. Assessment of bacterial diversity in the cattle tick *Rhipicephalus* (*Boophilus*) *microplus* through tag-encoded pyrosequencing. BMC Microbiol. 11pp.

Angus, B.M. 1996. The history of the cattle tick *Boophilus microplus* in Australia and achievements in its control. International Journal Parasitology 26(12):1341-1355.

Anon. 1965. Minimum double fencing requirements for release of tick quarantine. USDA APHIS Internal document 2p.

Anon. 2011. 2010 Texas Integrated Report - Texas 303(d) List (Category 5). State of Texas 116pp.

Anon. 2013 a. “Colonias FAQs” Office of the Texas Secretary of State. http://www.sos.state.tx.us/border/colonias/faqs.shtml *last accessed* Mar. 12, 2013.

Anon. 2013 b. Historical Perspective. TX Parks and Wildlife Department http://www.tpwd.state.tx.us/landwater/land/habitats/southtx_plain/ *last accessed* Feb. 12, 2013.

APHIS (Animal and Plant Health Inspection Service). 2010. Controlling cattle fever ticks. USDA APHIS Veterinary Services Factsheet http://www.aphis.usda.gov/publications/animal_health/content/printable_version/cattle_fever_ticks.pdf *last accessed* July 19, 2011.

Armstrong, W.E. and D.E. Harmel. 1981. Exotic mammals competing with the natives. TX Parks and Wildlife Department.

Arredondo, J.A., Hernández, F., Bryant, F.C., Bingham, R.L. and Howard, R. 2007. Habitat-suitability bounds for nesting cover of northern bobwhite on semiarid rangelands. Journal Wildlife Management 71:2592-2599.

Aubry, P. and Geale, D.W. 2011. A review of Bovine Anaplasmosis. Transboundary Emerging Diseases 58(1): 1-30.

Barros, C. and Fighera, R. 2008. “Babesiosis” *In:* Borown, C. and Torres, A. (eds). Foreign Animal Diseases, 7th ed. U.S. Animal Health Association and Boca Publications Group, Inc., Boca Raton, FL 472pp.

Bailey, R.G. (ed). 2009. “Ecoregions of the United States” pp93-114 *In*: Ecosystem Geography, 2nd ed. Springer Science+Business Media, LLC, New York, NY.

Baines, D. and Summers, R.W. 1997. Assessment of bird collisions with deer fences in Scottish Forests. Journal Applied Ecology 34(4):941–948.

Barré N., Bianchi, M. and Chardonnet, L. 2001. Role of Rusa deer, *Cervus timorensis russa*, in the cycle of the cattle tick *Boophilus microplus* in New Caledonia. Experimental and Applied Acarology 25(1):79-96.

Baum, B.R. 1978. The genus *Tamarix*. Israel Academy Science Humanities, Jerusalem 209pp.

Bell, G.P. 1997. “Ecology and management of *Arundo donax*, and approaches to riparian habitat restoration in Southern California” pp103-113 *In*: Brock, J.H., Wade, M., Pysek, P. and Green, D. (eds). Plant Invasions: Studies from North America and Europe. Blackhuys Publishers. Leiden, The Netherlands.

Boland, J.M. 2006. The importance of layering in the rapid spread of *Arundo donax* (giant reed). Madrono 53(4):303-312.

Bomar, G.W. 2008. “Texas Climate” Ch. 2 *In*: Texas Renewable Energy Resource Assessment. TX State Energy Conservation Office, Austin, TX. http://www.seco.cpa.state.tx.us/publications/renewenergy/pdf/renewenergyreport.pdf *last accessed* Apr. 19, 2013.

Boone, R.B. and Hobbs, N.T. 2004. Lines around fragments: effects of fencing on large herbivores. African Journal Range Forage Science 21(3):147-158.

Bradley, L. (ed). 1997. “Nilgai” *In:* The Mammals of Texas – Online Edition. TX Technical University http://www.nsrl.ttu.edu/tmot1/bosetrag.htm *last accessed* Mar. 25, 2013.

Bradley, M.J. and Associates. 2007. Comparison of energy use and CO_2 emissions from different transportation modes. Report for American Bus Association http://www.buses.org/files/ComparativeEnergy.pdf *last accessed* Mar. 18, 2013.

Bram, R.A., George, J.E., Reichard, R.E. and Tabachnick, W.J. 2002. Threat of foreign arthropod-borne pathogens to livestock in the United States. Journal Medical Entomology 39(3):405-416.

Breshears, D.D., Nyhan, J.W., Heil, C.E. and Wilcox, B.P. 1998. Effects of woody plants on microclimate in a semiarid woodland: soil temperature and evaporation in canopy and intercanopy patches. International Journal Plant Sciences 159(6):1010-1017.

Burger, L.D., Burger, L.W. and Faaborg, J. 1994. Effects of prairie fragmentation on artificial nests. Journal Wildlife Management 58:249-254.

Butcher, P.N., Howard, J.M., Regetz, J.S., Semmens, B.X. and Vincent, M.A. undated. Evaluating the carbon sequestration potential of tropical forests. Donald Bren School of Environmental Science Management 139pp. http://www2.bren.ucsb.edu/~keller/courses/GP_reports/CQuest%20Final.pdf *last accessed* Mar. 18, 2013.

Cain, A. 2012. Letter from Cain, Alan, White-tailed Deer Program Leader, TX Parks Wildlife Dept., State of Texas, to Michelle Gray, Environmental Protection Specialist, Policy and Program Development, APHIS (Jan. 11, 2012) (on file with the USDA APHIS).

Cançado, P.H.D., Zucco, C.A., Piranda, E.M., Faccini, J.L.H. and Mourão, G.M. 2009. *Rhipicephalus* (*Boophilus*) *microplus* (Acari: Ixodidae) as a parasite of pampas deer (*Ozoctoceros bezoarticus*) and cattle in Brazil's Central Pantanal. Revista Brasileria de Parasitologia Veterinaria 18(1):42-46.

Cantu-C., A., Ortega-S., J.A., Garcia-Vazquez, Z., Mosqueda, J., Henke, S. and George, J.E. 2009. Epizootiology of *Babesia bovis* and *Babesia begemina* in free-ranging white-tailed deer in Northeastern Mexico. Journal Parasitology 95(3):536-542.

Cardenas-Canales, E.M., Ortega-Santos, J.A., Campbell, T.A., Garca-Vazquez, Z., Cantu-Covarrubias, A., Figueroa-Millan, J.V., DeYoung, R.W., Hewitt, D.G. and Bryan, F.C. 2011. Nilgai antelope in Northern Mexico as a possible carrier for cattle fever ticks and *Babesia bovis* and *Babesia bigemina*. Journal Wildlife Diseases 47(3):777-779.

Census. 2010-2011. American Community Survey "Maverick County, Texas," "Starr County, Texas," "Webb County, Texas," "Zapata County, Texas". U.S. Department of Commerce, Census Bureau. http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml *last accessed* Apr. 19, 2013.

CEQ (Council on Environmental Quality). 2010. "Draft NEPA guidance on consideration of the effects of climate change and greenhouse gas emissions" pp1-12 *In*: Sutley, N.H. (ed). Memorandum for Heads of Federal Departments and Agencies. Council Environmental Quality http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf *last accessed* Mar. 18, 2013.

CFSPH (Center for Food Security and Public Health). 2008. *Bovine babesiosis*. Center for Food Security and Public Health, Iowa State University, Ames, IA 6pp.

Coburn, J.M. 2010. Meteorological factors regulating the population expansion and contraction of *Amblyomma maculatum* (Acari: Ixodidae) in Texas. TAMU, College Station, TX http://hdl.handle.net/1969.1/ETD-TAMU-2009-08-1830 *last accessed* Apr. 25, 2013.

Cooley, R.A. 1946. The genera *Boophilus*, *Rhipicephalus*, and *Haemaphysalis* (Ixodidae) of the new world. National Institutes Health Bulletin No. 187, 54pp.

Combs, S. 2008. Texas in focus: South Texas. TX Comptroller of Public Accounts 106pp. http://www.window.state.tx.us/specialrpt/tif/southtexas/pdf/SouthTexasFullReport.pdf *last accessed* May 10, 2012.

Corson, M.S., Teel, P.D. and Grant, W.E. 2001. Influence of acaricide resistance on cattle-fever tick (*Boophilus* spp.) infestations in semi-arid thornshrublands: a simulation approach. Experimental and Appl. Acarology 25:171-184.

Corson, M.S., Teel, P.D. and Grant, W.E. 2004. Microclimate influence in a physiological model of cattle-fever tick (*Boophilus* spp.) population dynamics. Ecological Modelling 180(4):487-514.

Council, N. R. 1994. Rangeland Health: New Methods to Classify, Inventory, and Monitor Rangelands, National Academy Press, Washington, DC 180pp.

Davey, R.B., Cooksey, L.M. and Despins, J.L. 1991. Survival of larvae of *Boophilus annulatus*, *Boophilus microplus*, and *Boophilus* hybrids (Acari: Ixodidae) in different temperature and humidity regimes in the laboratory. Veterinary Parasitology 40:305-313.

Davis, E. 1990. Deer Management in the South Texas Plains. TX Parks and Wildlife Department Bulletin No. 27 P-R Project W-125-R, Austin, TX 36pp.

Duhaime, R. 2009. Surveillance requirements of cattle fever tick outbreak. USDA National Animal Health Surveillance System *Outlook* http://nsu.aphis.usda.gov/outlook 7pp.

Duhaime, R. 2011. Cattle fever tick eradication program – FY 2011 – Infestation update. USDA APHIS internal document 1p.

eBird. 2012. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, NY http://www.ebird.org *last accessed* Mar. 25, 2013.

Edney, E.B. 1982. The truth about saturation deficiency—an historical perspective. Journal Experimental Zoology 222(3):205-214.

Ellenberger, W.P. and Chapin, R.M. 1940. Cattle-fever ticks and methods of eradication. USDA Farmers' Bulletin No. 1057, Washington, DC 28pp.

EPA (U.S. Environmental Protection Agency). 2012. Air and Radiation. http://www.epa.gov/air/criteria.html *last accessed* Apr. 22, 2013.

EPA (U.S. Environmental Protection Agency). 2013. National Emissions Inventory (NEI). http://www.epa.gov/otaq/toxics-emissions.htm *last accessed* Apr. 29, 2013.

Estrada-Pena, A. 2001. Forecasting habitat suitability for ticks and prevention of tick-borne diseases. Veterinary Parasitology 98:111-132.

Estrada-Pena, A., Corson, M.S., Venzal, J.M., Mangold, A.J. and Guglielmone, A. 2006. Changes in climate and habitat suitability for the cattle tick *Boophilus microplus* in its southern Neotropical distribution range. Journal Vector Ecology 31(1):158-167.

Estrada-Pena, A. and Venzal, J.M. 2006. High-resolution predictive mapping for *Boophilus annulatus* and *B. microplus* (Acari: ixodidae) in Mexico and Southern Texas. Veterinary Parasitology 142:350-358.

Falk, N.W., Graves, H.B. and Bellis, E.D. 1978. Highway right-of-way fences as deer deterrents. Journal Wildlife Management 42:646-650.

FHWA (U.S. Federal Highway Administration). 2007. Environmental Assessment US 83 from FM 3169 to Loma Blanca Road in Zapata and Starr Counties, Texas. FHWA and TX Department of Transportation.

Flanders, A.A., Kuvlesky, W.P., Ruthven, D.C., Zaiglin, R.E., Bingham, R.L., Fulbright, T.E., Hernández, F., Brennan, L.A. and Vega Rivera, J.H. 2006. Effects of invasive exotic grasses on South Texas rangeland breeding birds. The Auk 123:171-182.

Fulbright, T.E. and Ortega-S., J.A. 2006. White-tailed deer habitat: Ecology and management on rangelands. TAMU Press.

FWS (U.S. Fish and Wildlife Service). 1990. Recovery Plan for the interior population of the least tern (*Sterna antillarum*). FWS, Twin Cities, MN 90pp.

FWS (U.S. Fish and Wildlife Service). 2000. Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Plant Lesquerella thamnophila (Zapata Bladderpod). Federal Register 65:81182-81212 December 22, 2000.

FWS (U.S. Fish and Wildlife Service). 2003. Recovery Plan for Star Cactus (*Astrophytum asterias*). FWS, Albuquerque, NM i-vii+ 38pp., A1-19, B1-8.

FWS (U.S. Fish and Wildlife Service). 2006. Strategic Plan: Partners for Fish and Wildlife Program, Southwest Region (R2). US FWS http://www.fws.gov/partners/Strategic_Plans/Regions/Southwest_Region_Strategic_Plan_FINAL.pdf *last accessed* Apr. 22, 2013.

FWS (U.S. Fish and Wildlife Service). 2007. National Bald Eagle Management Guidelines, 23 pp. http://www.fws.gov/southdakotafieldoffice/NationalBaldEagleManagementGuidelines.pdf *last accessed* Mar. 12, 2013.

FWS (U.S. Fish and Wildlife Service). 2010. Draft Ocelot (Leopardus pardalis) Recovery Plan, First Revision, FWS Southwest Region, Albuquerque, NM.

FWS (U.S. Fish and Wildlife Service). 2012 a. Draft Gulf Coast jaguarundi (*Puma yagouaroundi cacomitli*) Recovery Plan, First Revision, FWS Southwest Region, Albuquerque, NM.

FWS (U.S. Fish and Wildlife Service). 2012 b. U.S. Fish and Wildlife Service Species Assessment and Listing Priority Assignment Form. http://ecos.fws.gov/docs/candidate/assessments/2013/r2/F02M_I01.pdf

FWS (U.S. Fish and Wildlife Service). 2012 c. Lower Rio Grande Valley: Creating a Wildlife Corridor http://www.fws.gov/refuge/Lower_Rio_Grande_Valley/resource_management/wildlife_corridor.html *last accessed* May 8, 2013.

FWS (U.S. Fish and Wildlife Service). 2013. Environmental Conservation Online System http://ecos.fws.gov/tess_public/ *last accessed* Mar. 26, 2013.

Gabriel, W. 2011. Letter from Gabriel, Wayne for USDA NRCS, to Samantha Floyd, Biological Scientist, Policy and Program Development, APHIS (Oct. 24, 2011) (on file with the USDA APHIS).

Gadd, M.E. 2010. "Barriers, the beef industry and unnatural selection: a review of the impacts of veterinary fencing on mammals in southern Africa" Ch. 9 *In*: Somers, M.J. Hayward, M. (eds). Fencing for Conservation. Springer-Verlag http://frameweb.org/adl/en-US/6301/file/866/Gadd%202010%20Fencing%20Chapter%2020100221.pdf *last accessed* Mar. 18, 2013.

Garza, A.A. undated. Starr County, Handbook of Texas Online. http://www.tshaonline.org/handbook/online/articles/hcs13 *last accessed* Apr. 17, 2012.

Garza, A.A. and Long, C. undated. Zapata County, Handbook of Texas Online. http://www.tshaonline.org/handbook/online/articles/hcz01 *last accessed* Apr. 17, 2012.

George, P.G., Mace, R.E. and Petrossian, R. 2011. Aquifers of Texas. TX Water Development Board Report No. 380 172pp. http://www.twdb.state.tx.us/publications/reports/numbered_reports *last accessed* Mar. 9, 2013.

Ghosh, S., Bansal, G.C., Gupta, S.C., Ray, D., Khan, M.Q., Irshad, H., Shahiduzzaman, M., Seitzer, U. and Ahmed, J.S. 2007. Status of tick distribution in Bangladesh, India, and Pakistan. Parasitology Research 101(Supp. 2):207-216.

Gibeau, M.L. and Heuer, K. 1996. Effects of transportation corridors on large carnivores in the Bow River Valley, Alberta. *In*: Evink, G.L., Garrett, P.A., Zeigler, D. and Berry, J. (eds). Proceedings of the International Conference on Wildlife Ecology and Transportation. June, Tallahassee, FL.

Gonzalez-V, E.A., Hewitt, D.G., Ortega-Santos, J.A., DeYoung, R.W., Campbell, T.A. and Bryant, F.C. 2010. Ganaderia y fauna silvestre del noreste de Mexico y sur de Texas e implicaciones de la garrapata Boophilus: Opcion de los Ganaderos. Proceedings of the XII Seminario Internacional Sobre Venado Cola Blanca Union Ganadera Regional de Nuevo Leon, Guadalupe, N.L. 23pp.

Graham, O.H. and Hourrigan, J.L. 1977. Eradication programs for the arthropod parasites of livestock. Journal Medical Entomology 13(6):629-658.

Grover, H.D. and Musick, H.B. 1990. Shrubland encroachment in southern New Mexico, USA: an analysis of desertification processes in the American Southwest. Climatic Change 17(2-3):305-330.

Haines, A.M., Tewes, M.E., Laack, L.L., Grant W.E. and Young, J. 2005. Evaluating recovery strategies for an ocelot population in southern Texas. Biological Conservation 126:512-522.

Hanselka, C. W. 1988. Buffelgrass: South Texas wonder grass. Rangelands 10(6):279-281.

Harrington, J.L. and Conover, M.R. 2006. Characteristics of ungulate behavior and mortality associated with wire fences. Wildlife Society Bulletin 34(5):1295-1305.

Herrera, A.M. and Dudley, T.L. 2003. Reduction of riparian arthropod abundance and diversity as a consequence of giant reed (*Arundo donax*) invasion. Biological Invasions 5(3):167-177.

Hoyt, C., Halvorson, B. and Guertin, P. 2006. Exotics and invasives in the Chihuahuan Desert Region. Chihuahan Desert Discovery, Chihuahuan Desert Region Institute 52(1):15-20.

IBWC (U.S. Department of State, International Boundary and Water Commission, United States Section). 2013. IBWC, El Paso, TX. http://www.ibwc.gov/About_Us/About_Us.html last accessed May 22, 2013.

Iverson, M.E. 1994. “The impact of *Arundo donax* on water resources” pp19-25 *In*: Jackson, N.E., Frandsen, S. and Douthit, S. (eds). Arundo donax workshop proceedings November 1993, Ontario, Canada.

Jahrsdoerfer, S.E. and Leslie, D.M. 1988. Tamaulipan brushland of the Lower Rio Grande Valley of South Texas: description, human impacts, and management options. FWS, Biological Report 88(36) 73pp. http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA322826 *last accessed* May 13, 2013.

Jonsson, N.N. 2006. The productivity effects of cattle tick (*Boophilus microplus*) infestation on cattle, with particular reference to Bos indicus cattle and their crosses. Veterinary Parasitology 137(1-2):1–10.

Karl, T.R., Melillo, J.M. and Peterson, T.C. (eds). 2009. Global climate change impacts in the United States. U.S. Global Change Research Program, Cambridge University Press 196pp. http://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf *last accessed* Apr. 22, 2013.

Karl, T.R. and Knight, R.W. 1998. Secular trends of precipitation amount, frequency, and intensity in the United States. Bulletin American Meteorological Society 79(2):231-241.

Karr, J.R. and Roth, R.R. 1971. Vegetation structure and avian diversity in several New World areas. American Naturalist 105(945):423-435.

Kolowski, J.M. and Alonso, A. 2010. Density and activity patterns of ocelots (*Leopardus pardalis*) in northern Peru and the impact of oil exploration activities. Biological Conservation 143:917-925.

Kozicky, E.L. and Fulbright, T.E. 1991. An annotated bibliography on the interaction of range management (livestock grazing, brush management, and prescribed burning) or nonmanagement with wildlife habitat and wildlife. TX Parks and Wildlife Department, Austin, TX 293pp.

Kundak, M., Lazic, L. and Crnko, J. 2009. CO_2 emissions in the steel industry. Metalurgia 48(3):193-197.

Leffler, J. and Long, C. 2013. "Webb County" *In:* Handbook of Texas Online, TX State Historical Association http://www.tshaonline.org/handbook/online/articles/hcw05 *last accessed* Apr. 15, 2013.

Lew-Tabor, A.E. 2011. Blood Parasites – Anaplasmosis. Merck Veterinary Manual. http://www.merckmanuals.com/vet/circulatory_system/blood_parasites/anaplasmosis.html *last accessed* May 13, 2013.

Li, A.Y., Davey, R.B., Miller, R.J. and George, J.E. 2003. Resistance to coumaphos and diazinon in *Boophilus microplus* (Acari: Ixodidae) and evidence for the involvement of an oxidative detoxification mechanism. Journal Medical Entomology 40:482-490.

Li, A.Y., Davey, R.B., Miller, R.J. and George, J.E. 2004. Detection and characterization of amitraz resistance in the southern cattle tick, *Boophilus microplus* (Acari: Ixodidae). Journal Medical Entomology 41:193-200.

Lindsey, P.A., Masterson, C.L., Beck, A.L. and Romañach, S. 2012. "Ecological, social and financial issues related to fencing as a conservation tool in Africa" Ch. 12 *In*: Somers, M.J. and Hayward, M. (eds). Fencing for Conservation http://link.springer.com/chapter/10.1007%2F978-1-4614-0902-1_12#page-1 *last accesse*d May 8, 2013.

Lockwood, M.W. and Freeman, B. (eds). 2004. The TOS Handbook of Texas Birds. TAMU University Press, College Station, TX 261pp.

Lohmeyer, K.H., Pound, J.M., May, M.A., Kammlah, D.M. and Davey, R.B. 2011. Distribution of *Rhipicephalus* (*Boophilus*) *microplus* and *Rhipicephalus* (*Boophilus*) *annulatus* (Acari: Ixodidae) infestations detected in the United States along the Texas/Mexico border. Journal Medical Entomology 48(4):770-774.

Loreau, M., Naeem, S. and Inchausti, P. 2002. Biodiversity and ecosystem functioning: synthesis and perspectives. Oxford University Press, Oxford, United Kingdom 312pp.

MacArthur, R. H. and MacArthur, J.W. 1961. On bird species diversity. Ecology 42(3):594-598.

Maestre, F.T., Quero, J.L., Gotelli, N.J., Escudero, A., T., F., Ochoa, V., Delgado-Basquerizo, M., García-Gómez, M., Bowker, M.A., Soliveres, S., Escolar, C., García-Palacios, P., Berdugo, M., Valencia, E., Gozalo, B., Gallardo, A., Aguilera, L., Arredondo, T., Blones, J., Coeken, B., Bran, D., Conceição, A.A., Cabrera, O., Chaieb, M., Derak, M., Eldridge, D.J., Espinosa, C.I., Florentino, A., Gaitán, J., Gatica, M.G., Ghiloufi, W., Gómez-González, S., Gutiérrez, J.R., Hernández, R.M., Huang, X., Huber-Sannwald, E., Jankju, M., Miriti, M., Monerris, J., Mau, R.L., Morici, E., Naseri, K., Ospina, A., Polo, V., Prina, A., Pucheta, E., Ramírez-Collantes, D.A., Romão, R., Tighe, M., Torres-Díaz, C., Val, J., Veiga, J.P., Wang, D. and Zaady, E. 2012. Plant species richness and ecosystem multifunctionality in global drylands. Science 335(6065):214-218.

Martin, W. 2009. Letter from Martin, William for Mark Wolfe, State Historic Preservation Officer, *Texas Historical Commission*, to Matthew (sic) Messenger, Cattle Fever Tick Eradication Program Manager, Veterinary Services, APHIS (Oct. 2, 2009) (on file with the USDA APHIS).

Maywald, P.D. and Doan-Crider, D. 2008. Restoration manual for native habitats of South Texas. Caesar Kleberg Wildlife Research Insitute, Kingsville, TX 167pp.

Mbaiwa, J.E. and Mbaiwa, O.I. 2006. The effects of veterinary fences on wildlife populations in Okavango Delta, Botswana. International Journal Wilderness 12(3):17-23, 41.

McAtee, W.L. 1939. The electric fence in wildlife management. Journal Wildlife Management 3(1):1-13.

McDonald, J.S., Miller, K.V. and Meares, J. 2004. A history of white-tailed deer restocking in the United States, 1878 to 2004. The Deer Management Assoication, Bogart, GA 115pp.

McMahan, C.A., Frye, R.G. and Brown, K.L. 1984. The vegetation types of Texas including cropland, Part 4. TX Parks Wildlife Department, PWD Bulletin No. 7000-120, Austin, TX.

McNab, W.H. and Avers, P.E. (eds). 1994. “Southwest Plateau and Plains Dry Steppe and Shrub” Ch. 37 *In:* Ecological Subregions of the United States. USDA Forest Service WO-WSA-5 http://www.fs.fed.us/land/pubs/ecoregions/ch37.html#315E *last accessed* Apr. 19, 2013.

MDNR (Michigan Department of Natural Resources). 2001-2013. Bovine tuberculosis. State of Michigan. http://www.michigan.gov/dnr/0,1607,7-153-10319-99064--,00.html *last accessed* May 13, 2013.

Messenger, M.T. 2009. Letter from Matthew T. Messenger, Cattle Fever Tick Eradication Program Manager, Veterinary Services, APHIS to Don L. Patterson, NAGPRA Coordinator, Tonkawa Tribe of Indians of Oklahoma, OK (Aug. 14, 2009) (on file with the USDA APHIS).

Messenger, M.T. 2013. Letter from Matthew T. Messenger, Cattle Fever Tick Eradication Program Manager, Veterinary Services, APHIS to Donald L. Patterson, NAGPRA Coordinator, Tonkawa Tribe of Indians of Oklahoma, OK (Mar. 21, 2013) (on file with the USDA APHIS).

Miller, R.J., Davey, R.B. and George, J.E. 2005. First report of organophosphate-resistant *Boophilus microplus* (Acari: Ixodidae) within the United States. Journal Medical Entomology 42(5):912-917.

Miller, R.S., Farnsworth, M.L. and Malmberg, J.L. 2013. Diseases at the livestock-wildlife interface: Status, challenges, and opportunities in the United States. Preventive Veterinary Medicine 110(2):119-132.

Moczygemba, J.D., Hewitt, D.G., Campbell, T.A., Ortega-S, A., Field, J. and Hellickson, M.W. 2012. Home ranges of the Nilgai antelope (*Boselaphus tragocamelus*) in Texas. Southwestern Naturalist 57(1):26-30.

Molina, R. and Guerra, R.D. 2011. Soil survey of Zapata County, Texas. USDA NRCS and TX AgriLife Research 333pp. http://soils.usda.gov/survey/online_surveys/texas/TX505/Zapata.pdf *last accessed* Apr. 29, 2013.

Mullin, B.H., Anderson, L.W.J., DiTomaso, J.M., Eplee, R.E. and Getsinger, K.D. 2000. Invasive plant species. Council for Agricultural Science and Technology Issue Paper, No. 13. 18pp.

Myer, M. 2013. Letter from Myer, Miranda for Tonkawa Tribe of Oklahoma, to Matthew Messenger, Cattle Fever Tick Eradication Program Manager, Veterinary Services, APHIS (Apr. 8, 2013) (on file with the USDA-APHIS).

NABCI (North American Bird Conservation Initiative). undated & supp. 2000. Bird Conservation Regions Map (#36: Tamaulipan Brushlands). U.S. North American Bird Conservation Initiative, FWS http://www.nabci-us.org/bcr36.html and http://www.nabci-us.org/aboutnabci/bcrdescrip.pdf *last accessed* Apr. 25, 2013.

NAS (National Audubon Society, Inc.). 2013. Central Flyway. http://conservation.audubon.org/central-flyway *last accessed* Mar. 12, 2013.

NASS (U.S. National Agricultural Statistics Service). 2007. “Maverick County,” “Starr County,” “Webb County,” “Zapata County” *In*: Census of Agriculture, USDA NASS

http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Texas *last accessed* Mar. 19, 2013.

Nielsen-Gammon, J.W. 2011. OSC Report: The 2011 Texas Drought: A briefing packet for the Texas Legislature. TAMU Office of the State Climatologist, College of Geosciences, College Station, TX 43pp.

Novy, J.E. 1991. "Screwworm control and eradication in the southern United States of America" *In:* Branckaert, R.D.S. (ed). New World screwworm response to an emergency. World Animal Review, Special Issue. FAO AgriculturalConsumer Protection. http://www.fao.org/docrep/U4220T/u4220T0a.htm *last accessed* Dec. 16, 2011.

NPS (U.S. National Park Service). 2013. National NAGPRA Online Databases. http://www.nps.gov/nagpra/onlinedb/index.htm *last accessed* Apr. 17, 2013.

NRCS (Natural Resources Conservation Service). 1999. Soil Taxonomy, 2nd ed. USDA NRCS, Handbook No. 436.

Ochoa, R.E. 2013. "Maverick County" Handbook of Texas Online, TX State Historical Association. http://www.tshaonline.org/handbook/online/articles/hcm06 *last accessed* Apr. 17, 2012.

OIE (World Organization for Animal Health). 2010. Terrestrial Animal Health Code. OIE, Paris, France. http://web.oie.int/eng/normes/mcode/en_glossaire.pdf *last accessed* Apr. 15, 2013.

Pelzel, A.M. 2005. Cattle fever tick surveillance in Texas. NAHSS Outlook www.aphis.usda.gov/vs/ceah/ncahs/nsu/outlook *last accessed* Mar. 11, 2013.

Pérez de León, A.A., Strickman, D.A., Knowles, D.P., Fish, D., Thacker, E., de la Fuente, J., Krause, P.J., Wikel, S.K., Miller, R.S., Wagner, G.G., Almazán, C., Hillman, R., Messenger, M.T., Ugstad, P.O., Duhaime, R.A., Teel, P.D., Ortega-Santos, A., Hewitt, D.G., Bowers, E.J., Bent, S.J., Cochran, M.H., McElwain, T.F., Scoles, G.A., Suarez, C.E., Davey, R.B., Howell Freeman, J.M., Lohmeyer, K., Li, A.Y., Guerrero, F.D., Kammlah, D.M., Phillips, P. and Pound, J.M. 2010. One Health approach to identify research needs in bovine and human babesioses: workshop report. Parasites & Vectors 3:36.

Pérez de León, A.A., Teel, P.D., Auclair, A.N., Messenger, M.T., Guerrero, F.D., Schuster, G. and Miller, R.J. 2012. Integrated strategy for sustainable cattle fever tick eradication in USA is required to mitigate the impact of global change. Frontiers Physiology 3:1-17.

Perry, L. undated. Effective Deer Fences. Department of Plant and Soil Science, University of Vermont Extension http://pss.uvm.edu/ppp/articles/deerfences.html *last accessed* May 14, 2013.

Pound, J.M., George, J.E., Kammlah, D.M., Lohmeyer, K.H. and Davey, R.B. 2010. Evidence for role of white-tailed deer (Artiodactyla: Cervidae) in epizootiology of cattle ticks and southern

cattle ticks (Acari: Ixodidae) in reinfestations along the Texas/Mexico border in South Texas: A review and update. Journal Economic Entomology 103(2):211-218.

Purvis, J. 2012. Big Game Harvest Survey Results 2000-01 through 2011-12. TX Parks and Wildlife Department PWD RP W7000 0718b. http://www.tpwd.state.tx.us/publications/pwdpubs/media/pwd_rp_w7000_0718b.pdf *last accessed* Apr. 19, 2013.

Racelis, A.E., Davey, R.B., Goolsby, J.A., Perez de Leon, A.A., Varner, K. and Duhaime, R. 2012. Facilitative ecological interactions between invasive species: *Arundo donax* stands as favorable habitat for cattle ticks (Acari: Ixodidae) along the U.S.-Mexico Border. Journal Medical Entomology 49(2):410-417.

Radunz, B. 2008. The life cycles of tick fever parasites, Agnote No. K31. Serial No. 696, Agdex No. 420/663. Department Regional Development, Primary Industry, Fisheries and Resources. N. Territory Government, Australia 3pp.

Roth, R.R. 1976. Spatial heterogeneity and bird species diversity. Ecology 57(4):773-782.

Sanders, R.R. and Gabriel, W.J. 1985. Soil Survey of Webb County, Texas. USDA Soil Conservation Service and TX Agricultural Experiment Station 124pp. http://soildatamart.nrcs.usda.gov/Manuscripts/TX479/0/Webb.pdf *last accessed* Apr. 29, 2013.

Sands, J.P., Brennan, L.A., Hernandez, F., Kuvlesky, W.P., Gallagher, J.F., Ruthven, D.C. and Pittman, J.E. 2009. Impacts of buffelgrass (*Pennisetum ciliare*) on a forb community in south Texas. Invasive Plant Science Management 2(2):130-140.

Schoenian, S. 2011. Sheep 201: A beginner's guide to raising sheep. http://www.sheep101.info/201/behavior.html *last accessed* May 16, 2013.

Schulze, E.D. and Mooney, H.A. (eds). 1994. Biodiversity and ecosystem function. Ecological Studies v. 99, Springer-Verlag, Berlin, Germany 525pp.

Sheffield, W.J. 2013. "Exotics" *In:* Handbook of Texas Online. TX State Historical Association http://www.tshaonline.org/handbook/online/articles/tme01 *last accessed* Mar. 25, 2013.

Sheffield, W.J., Fall, B.A. and Bennet, A.B. 1983. The Nilgai Antelope in Texas. Texas Agricultural Experiment Station, Pub. No. 2M-10-83, TAMU, College Station, TX 100pp.

Sheley, R., Manoukian, M. and Marks, G. 1996. Preventing noxious weed invasion. Rangelands 18(3):100-101.

Smyrl, V.E. 2013. "Texas Game and Fish Commission" *In:* Handbook of Texas Online. TX State Historical Association http://www.tshaonline.org/handbook/online/articles/mdttk *last accessed* Feb. 19, 2013.

Stevens, J.W. and Arriaga, D. 1977. Soil survey of Maverick County, Texas. USDA Soil Conservation Service and TX Agricultural Experiment Station 76pp. http://soildatamart.nrcs.usda.gov/Manuscripts/TX323/0/Maverick.pdf *last accessed* Apr. 29, 2013.

Strickland, R.K., Gerrish, R.R. and Smith, J.S. 1981. "Arthropods" pp363-389 *In:* Davidson, W.R. (ed). Diseases and parasites of white-tailed deer. Tall Timbers Research Station, Tallahassee, FL Misc. Publication No. 7.

Stromberg, M.R. 1990. Habitat, movements, and roost characteristics of Montezuma quail in Southeastern Arizona. Condor 92:229-236.

Suhonen, J., Norrdahl, K. and Korpimäki, E. 1994. Avian predation risk modifies breeding bird community in a farmland area. Ecology 75(6):1626-1634.

TAHC (Texas Animal Health Commission). 2010. News release: Texas Animal Health Commission modifies temporary preventative quarantine area in Maverick and Dimmit Counties. http://www.tahc.state.tx.us/news/pr/2010/2010Nov_ModifiedFeverTickQuarantine.pdf *last accessed* June 7, 2013.

TAHC (Texas Animal Health Commission). 2012. News release: Stray Mexican cattle captured in Texas. http://www.tahc.state.tx.us/news/pr/2012/2012-07-05_StrayMexicanCattle.pdf *last accessed* May 13, 2013.

TAHC (Texas Animal Health Commission). 2013. Cattle Tuberculosis. http://www.tahc.state.tx.us/animal_health/cattle_tb/cattle_tb.html *last accessed* Jun. 10, 2013.

TAMU (Texas Agricultural and Mechanical University). 2011. "Cattle tick" *In:* The TickApp for Texas and the Southern Region. TAMU System. http://tickapp.tamu.edu/ticks/cattletick.php *last accessed* Nov. 1, 2011.

TAMU (Texas Agricultural and Mechanical University). 2013. Home. Texas AgriLife Extension Service, Maverick County, TX http://maverick.agrilife.org/ *last accessed* Apr. 19, 2013.

Taylor, R. 2003. The feral hog in Texas. TX Parks and Wildlife Department, PWD BK W7000-195 (9/03), Austin, TX.

Taylor, R.D. and Martin, R.B. 1987. Effects of veterinary fences on wildlife conservation in Zimbabwe. Environmental Management 11(3):327-334.

Taylor, R.B., Rutledge, J. and Herrera, J.G. 1997. A field guide to common south Texas shrubs. TX Parks Wildlife Press and University TX Press, Austin, TX.

TCEQ (Texas Commission on Environmental Quality). 2007. Emissions from oil and gas production facilities, TCEQ Contract 582-7-84003. TX Council Environmental Quality 90pp.

TCEQ (Texas Commission on Environmental Quality). 2011. 2010 Texas Integrated Report for Clean Act Sections 305(b) and 303(d). TX Council Environmental Quality http://www.tceq.texas.gov/assets/public/compliance/monops/water/10twqi/2010_303d.pdf *last accessed* Apr. 18, 2013.

TCEQ (Texas Commission on Environmental Quality). 2013. Stormwater Permits. TX Commission Environmental Quality. http://www.tceq.texas.gov/permitting/stormwater/sw_permits.html *last accessed* Jun. 9, 2013.

TCPS (Texas Center for Policy Studies). 1995. "Air Quality" Ch. 6 *In*: Texas Environmental Almanac. TX Center Policy Studies, TX Environmental Center http://www.texascenter.org/almanac/Air/AIRCH6P1.HTML *last accessed* Apr. 19, 2013.

TEA (Texas Education Agency). 2010. Texas, Our Texas. TEA http://ohenryscience6.weebly.com/uploads/5/6/4/8/5648587/ecoregion_information_cards.pdf *last accessed* Mar. 25, 2013.

Teel, P.D. 1984. Effect of saturation deficit on eggs of *Boophilus annulatus* and *B. microplus* (Acari: Ixodidae). Annals Entomological Society America 77(1):65-68.

Teel, P.D., Marin, S.L. and Grant, W.E. 1996. Simulation of host-parasite-landscape interactions: influence of season and habitat on cattle fever tick (*Boophilus* sp.) population dynamics. Ecological Modelling 84:19-30.

Thompson, C.M., Sanders, R.R. and Williams, D. 1972. Soil survey of Starr County, Texas. USDA Soil Conservation Service and TX Agricultural Experiment Station 87pp. http://soildatamart.nrcs.usda.gov/Manuscripts/TX427/0/Starr.pdf *last accessed* Apr. 29, 2013.

Tinker, S.W., Jackson, J.A. and Jackson, K.G. 2008. General Soil Map of Texas. University TX Bureau Economic Geology, Austin, TX http://www.lib.utexas.edu/geo/pics/gensoiltxpg1clean.pdf *last accessed* Apr. 22, 2013.

TIPPC (Texas Invasive Plant and Pest Council). 2011. Invasives Database. Texasinvasives.org. http://www.texasinvasives.org/plant_database/index.php *last accessed* Mar. 28, 2012.

Tonkawa Tribe Business Committee and NAGPRA Representative. 2009. Letter from Tonkawa Tribe Business Committee and NAGPRA Representative, *Tonkawa Tribe of Oklahoma*, OK to Matthew T. Messenger, Cattle Fever Tick Eradication Program Manager, *Veterinary Services*, APHIS (Aug. 20, 2009) (on file with the USDA-APHIS).

TPWD (Texas Parks and Wildlife Department). 2012. Rare, Threatened, and Endangered Species of Texas. TPWD, Austin, TX. http://www.tpwd.state.tx.us/gis/ris/es/ *last accessed* Apr. 19, 2013.

TPWD (Texas Parks and Wildlife Department). 2013 a. "About South Texas," "South Texas Wildlife," "South Texas History" *In*: Big Kids: Outdoor Learning. TPWD, Austin, TX.

http://www.tpwd.state.tx.us/kids/about_texas/regions/south_texas/big_kids *last accessed* Apr. 17, 2013.

TPWD (Texas Parks and Wildlife Department). 2013 b. South Texas Wildlife Management Historical Perspective. TPWD, Austin, TX. http://www.tpwd.state.tx.us/landwater/land/habitats/southtx_plain *last accessed* Feb. 12, 2013.

TPWD (Texas Parks and Wildlife Department). undated a. "Mule Deer," "White-tailed Deer," "Javelina". TPWD, Austin, TX. http://www.tpwd.state.tx.us/landwater/land/habitats/trans_pecos/big_game/muledeer/ *last accessed* Apr. 23, 2013.

TPWD (Texas Parks and Wildlife Department). Undated b. Ashy Dogweed (*Thymophylla tephroleuca*). http://www.tpwd.state.tx.us/huntwild/wild/species/ashy/

TPWD (Texas Parks and Wildlife Department). Undated c. Johnston's Frankenia (*Frankenia johnstonii*). http://www.tpwd.state.tx.us/huntwild/wild/species/johnston/

TPWD (Texas Parks and Wildlife Department). Undated d. Walker's manioc (*Manihot walkerae*). http://www.tpwd.state.tx.us/huntwild/wild/species/wmanioc/

TPWD (Texas Parks and Wildlife Department). undated e. Wildlife Fact Sheets "Bald Eagle (*Haliaeetus leucocephalus*)". http://www.tpwd.state.tx.us/huntwild/wild/species *last accessed* May. 15, 2013.

Traweek, M. and Welch, R. 1992. Exotics in Texas. TPWD, Austin, TX Reproduced from PWD-BK-W7000-206 5/92.

Trees, A.J. 1978. The transmission of *Borrelia theileri* by *Boophilus annulatus* (Say, 1821). Tropical Animal Health Production 10:93-94.

TSHA (Texas State Historical Association). 2013. "Maverick County", "Starr County", Webb County", and "Zapata County" *In:* Texas Almanac. TX State Historical Association http://www.texasalmanac.com/topics/government/ *last accessed* Apr. 15, 2013.

TSSWCB (Texas State Soil and Water Conservation Board). 2013. TSSWCB Programs. http://www.tsswcb.texas.gov/en/programs *last accessed* Apr. 25, 2013.

Tweit, R.C. 2007. Golden Eagle. The Texas Breeding Bird Atlas, TAMU Agrilife Extension. http://txtbba.tamu.edu/species-accounts/golden-eagle *last accessed* Mar. 12, 2013.

TXDOT (Texas Department of Transportation). 2013. Current TXDOT Projects. http://www.txdot.gov/apps-cq/project_tracker/projectquery.htm *last accessed* Apr. 18, 2013.

TXRC (Texas Railroad Commission). 2013. Texas Drilling, TXRC. http://www.texas-drilling.com/ *last accessed* Apr. 25, 2013.

Ueti, M.W., Palmer, G.H., Kappmeyer, L.S., Statdfield, M., Scoles, G.A. and Knowles, D.P. 2005. Ability of the vector tick *Boophilus microplus* to acquire and transmit *Babesia equi* following feeding on chronically infected horses with low-level parasitemia. Journal Clinical Microbiology 43:3755-3759.

Urness, P.J. 1976. “Mule deer habitat changes resulting from livestock practices” pp21-35 *In*: Workman, G.W. and Low, J.B. (technical coordinators), Mule Deer Decline in the West: a symposium, Utah Agricultural Experiment Station, Logan, UT.

VerCauteren, K.C., Lavelle, M.J. and Hygnstrom, S. 2006. Fences and deer-damage management: a review of designs and efficacy. Wildlife Society Bulletin 34(1):191-200.

Webb, S.L., Hewitt, D.G. and Hellickson, M.W. 2007. Effects of permanent water on home ranges and movements of adult male white-tailed deer in southern Texas. TX Journal Science. http://www.thefreelibrary.com/Effects+of+permanent+water+on+home+ranges+and+movements+of+adult+male...-a0177860078 *last accessed* Jan. 9, 2012.

White, N., Sutherst, R.W., Hall, N. and Whish-Wilson, P. 2003. The vulnerability of the Australian beef industry to impacts of the cattle tick (*Boophilus microplus*) under climate change. Climatic Change 61:157-190.

Wikipedia. 2013. "Football (ball)", "Shuttlecock", "Tennis ball", "Golf ball". Wikimedia Foundation http://en.wikipedia.org/wiki *last accessed* Apr. 16, 2013.

WikiAnswers. 2013. "Baseball size", "Basketball size", "Soccer ball size". Wikimedia Foundation http://en.wiki.answers.com *last accessed* Apr. 16, 2013.

Willson, M.F. 1974. Avian community organization and habitat structure. Ecology 55(5):1017-1029.

Yang, C., Everitt, J.H. and Goolsby, J.A. 2011. Mapping giant reed (*Arundo donax*) infestations along the Texas-Mexico portion of the Rio Grande with aerial photography. Invasive Plant Science Management 4(4):402-410.

Zavaleta, E. 2000. The economic value of controlling an invasive shrub. Ambio 29(8):462-467.

Appendix F. Glossary

A

Acaricide A pesticide that is used to kill ticks.

Adjacent Premises Property bordering an infested premises.

B

Biodiversity Describes the variety of plant, animal, and microbial life found within an ecosystem.

Bovine Babesiosis Caused by parasites that are carried by cattle fever ticks and can cause illness or death in cattle.

C

Colonia A term used in the southwestern States to describe a subdivision where developers divide the land into small lots and offer affordable housing to low-income families.

E

Endemic Prevalent in a specific area.

Exotic Species A species that was introduced to a habitat where it is not native.

G

Greenhouse Gas Emitted from natural processes and human activities and consist of water vapor, carbon dioxide, methane, nitrogen oxide, ozone, hydrocarbons, and chlorofluorocarbons.

H

Hand-scratch inspection An inspection of livestock that allows the inspector to touch and see all parts of the livestock. (4 TAC § 41.1(20)).

I

Infested Premises

Property with confirmed *Rhipicephalus annulatus* or *R. microplus* populations. The presence of even a single cattle fever tick will cause premises to be placed under quarantine as an infested premises.

Invasive Species

A species that is not native to an ecosystem and whose introduction is likely to cause harm to humans or the environment.

L

Land Characteristics

Physical features and soil resources.

Livestock

USDA defines “livestock” in the Animal Health Protection Act as all farm-raised animals (7 U.S.C. §§ 8302(10)). In Texas, cattle are the primary tick-susceptible livestock in the proposed fence areas. Other tick-susceptible livestock include horses, sheep, angora goats, and swine.

N

Noxious Weeds

Plants that are (or have the potential to be) harmful to human or animal health and the environment.

P

Permanent Tick Quarantine Line

Defines the boundary between the Permanent Tick Quarantine Zone and the tick-free area.

Permanent Tick Quarantine Zone

An approximately 580-mile-long stretch of land from Del Rio to Brownsville, Texas, ranging in width from almost 125 yards (0.07 miles) to approximately 8 miles.

Primary Pollutant

Fine particulate matter emitted from sources such as diesel engines, power plants, and refineries.

S

Secondary Pollutant Caused by a chemical reaction between two primary pollutants forming nitrate and sulfate compounds.

T

Temporary Preventative Quarantine Area Large area containing infested, adjacent, exposed, vacated, and checked premises.

U

Ungulates Hoofed animals.

V

Vacated Premises Property with a tick quarantine issued, and all livestock have been removed, inspected, and treated. The property must remain vacant for a minimum of six months during the summer or nine months if the quarantine is issued in the fall.

Vector An insect or other organism capable of transmitting a pathogenic virus, bacteria, or fungus.

W

Watershed An area of land that contributes water to a river or stream.

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Appendix G. Index

(Reserved for final CFTEP EIS.)

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Appendix H. Maps of Proposed Fence Segments

The estimated measurement of locations where there is a need for game fencing to control the spread of cattle fever ticks is 5.25 miles for Maverick County, 12.46 miles for Starr County, 7.8 miles for Webb County, and 45.82 miles for Zapata County, for a total of approximately 71 miles overall. The total amount of game fencing installed would depend upon landowners' consent for game fencing on their properties and cost-share agreements with APHIS.

The approximate location of the fence segments is displayed on the maps in this appendix, and the information pertaining to each map is summarized below:

- Overview Map – All fence segments proposed in Maverick, Starr, Webb, and Zapata counties.
- Map A – Northernmost short stretch of game fence along Mines Road (north of El Indio) in Maverick County. The fence would be located on the south (river side) of Mines Road. The length of the game fencing segment is approximately 1.57 miles.
- Map B – The fence would be located on the north side of Mines Road just north of town center El Indio in Maverick County. The length of the game fencing segment is approximately 1.0 mile.
- Map C – The fence would be located on the north side of Mines Road in Maverick County. The length of the game fencing segment is approximately 2.4 miles.
- Map D – The fence would be located on the south side of U.S. Highway 83 in Webb County. The length of the game fencing segment is approximately 7.8 miles.
- Map E to K – Approximately 56.44 miles of game fence is proposed in Zapata and Starr counties in place of existing highway right-of-way fence on the south side of U.S. Highway 83. The fence would start just south of the Webb County/Zapata County line at mile marker 752 in rural locations only and skipping roads and water resources and extending to Roma, Texas, ending north of Roma High School in Starr County, to mile marker 766. One, two-mile portion of the proposed fencing between the towns of San Ygnacio and Zapata would be installed on the north side of U.S. Highway 83 between the southwest corner of the high-fenced Las Avispas pasture (approximately 9.57 miles southeast of San Ygnacio) and the northwest corner of the high-fenced Alexander pasture (approximately 3.17 miles northwest of Zapata).

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Proposed Tick Control Barriers along the Tick Eradication Quarantine Line, Texas

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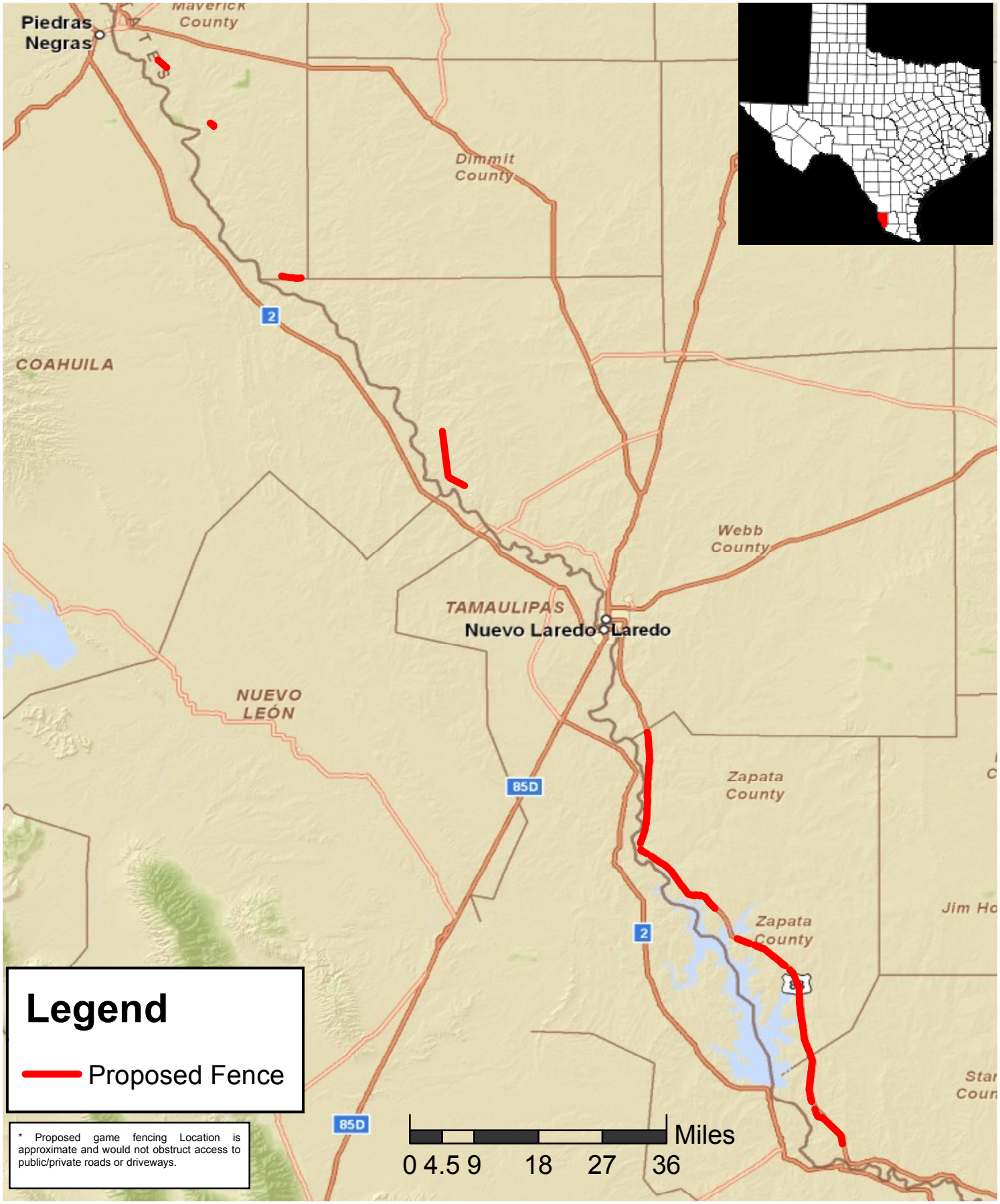

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A - Proposed Tick Control Barrier. Maverick County, Texas

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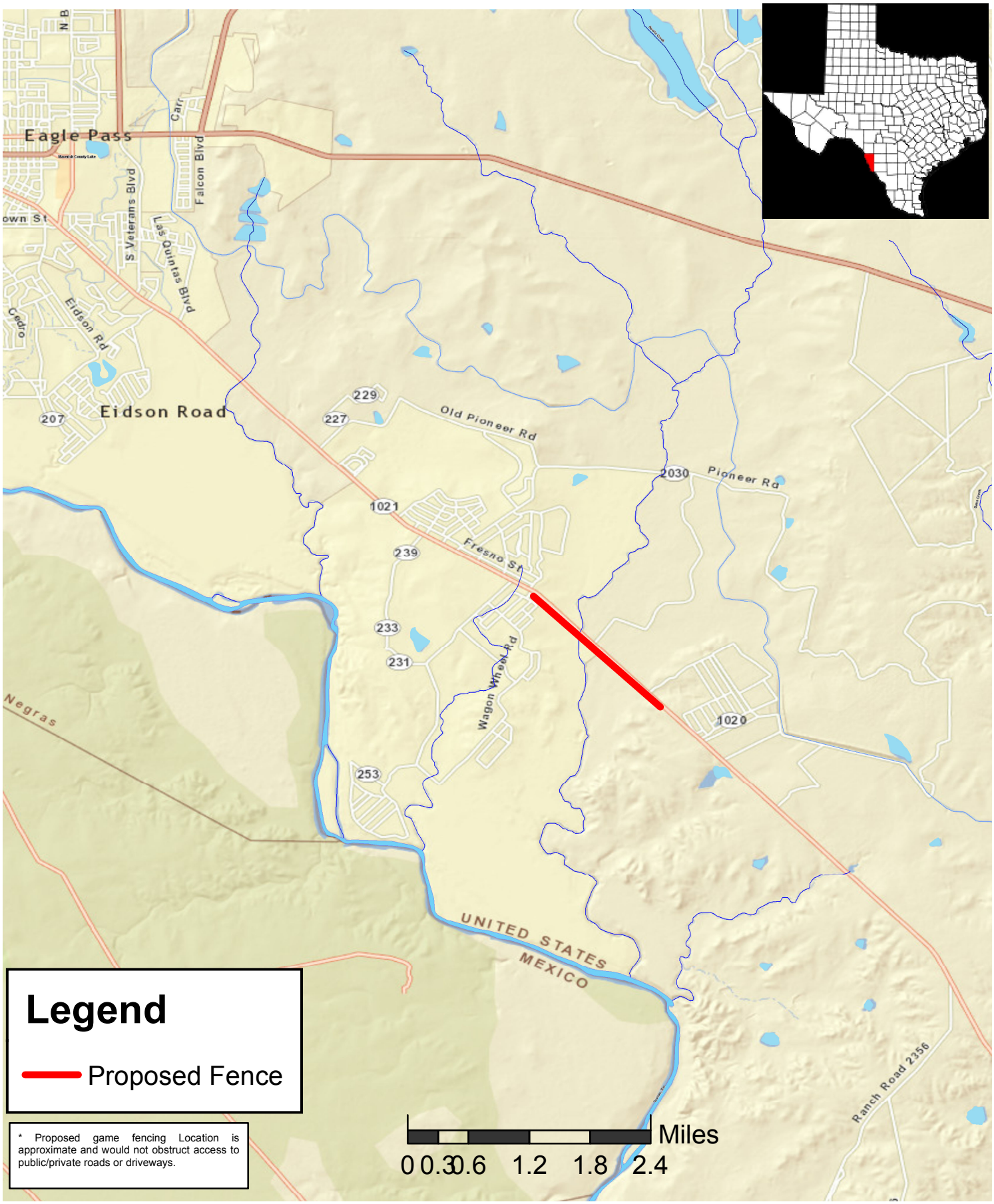

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B - Proposed Tick Control Barrier. Maverick County, Texas

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C - Proposed Tick Control Barrier. Maverick County, Texas

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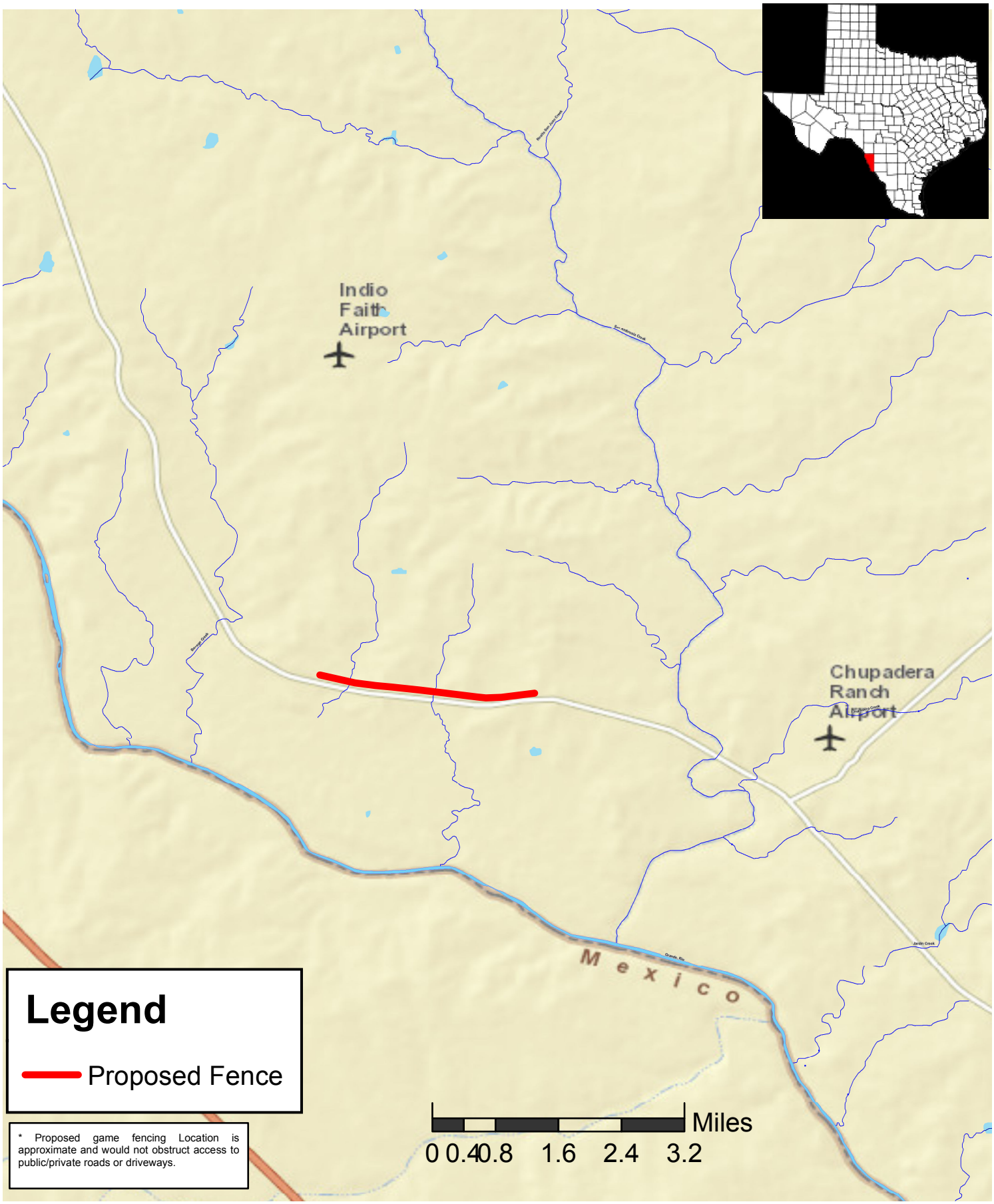

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D - Proposed Tick Control Barrier. Webb County, Texas

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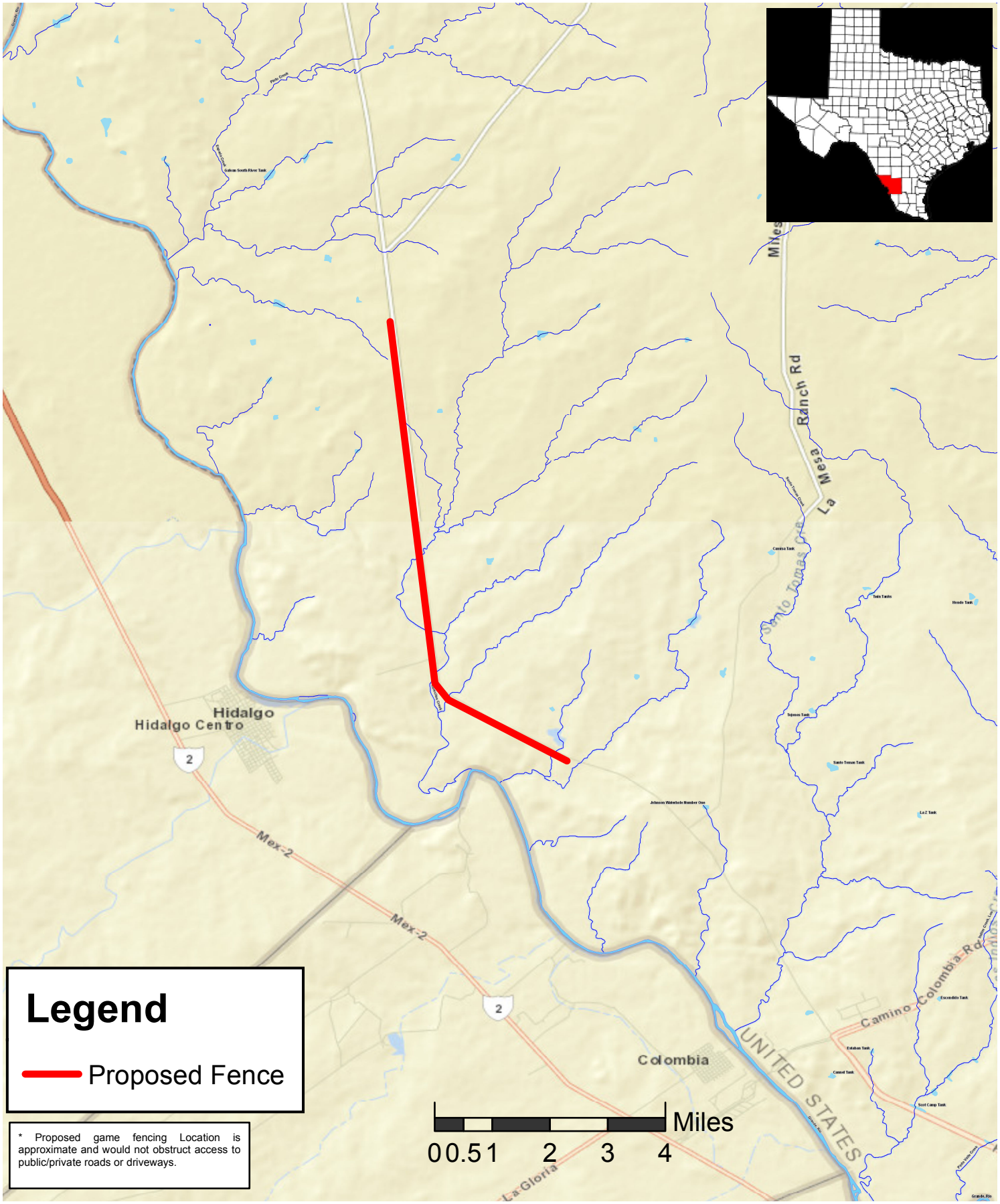

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E - Proposed Tick Control Barrier. Zapata County, Texas

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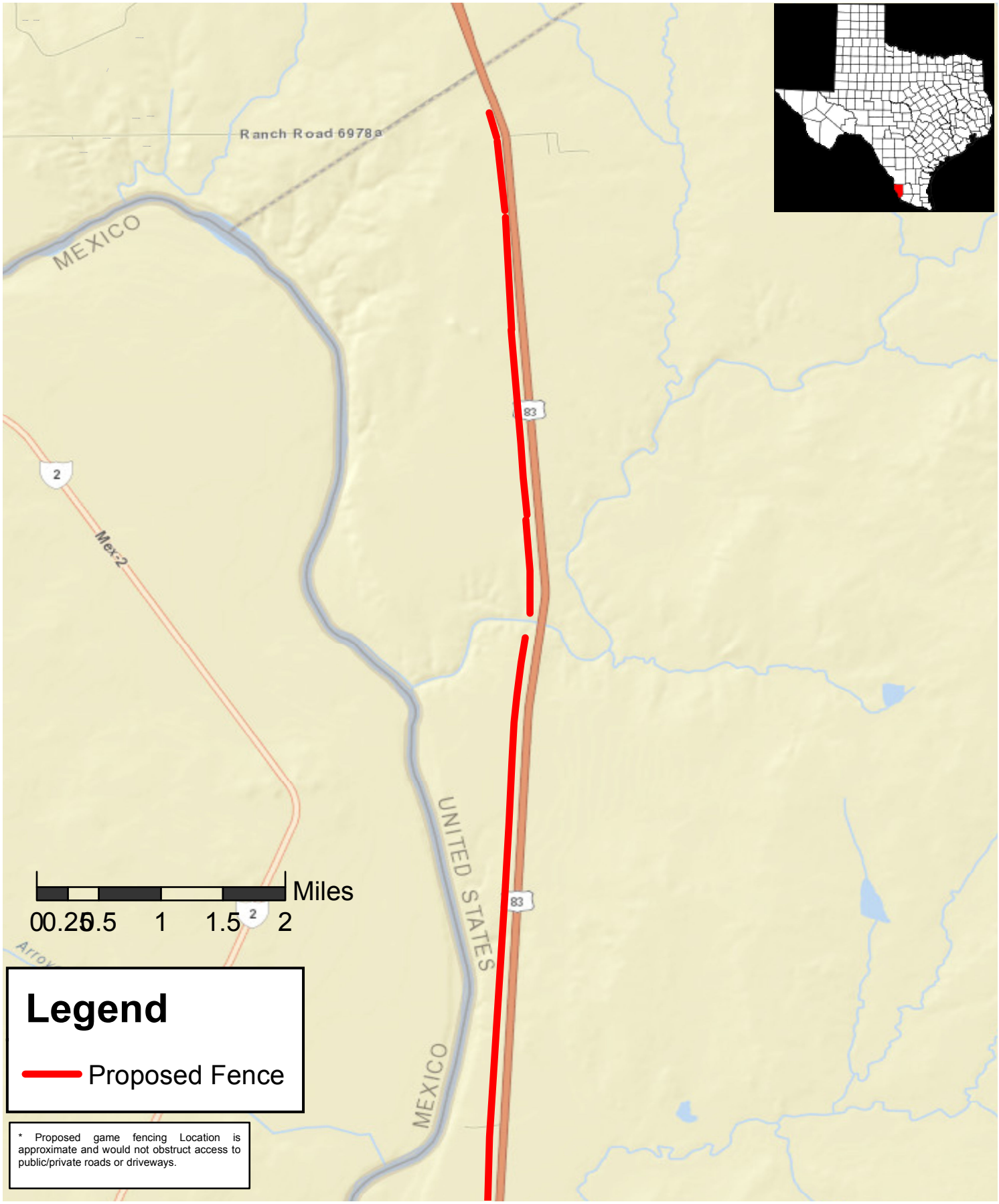

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F- Proposed Tick Control Barrier. Zapata County, Texas

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G- Proposed Tick Control Barrier. Zapata County, Texas

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H- Proposed Tick Control Barrier. Zapata County, Texas

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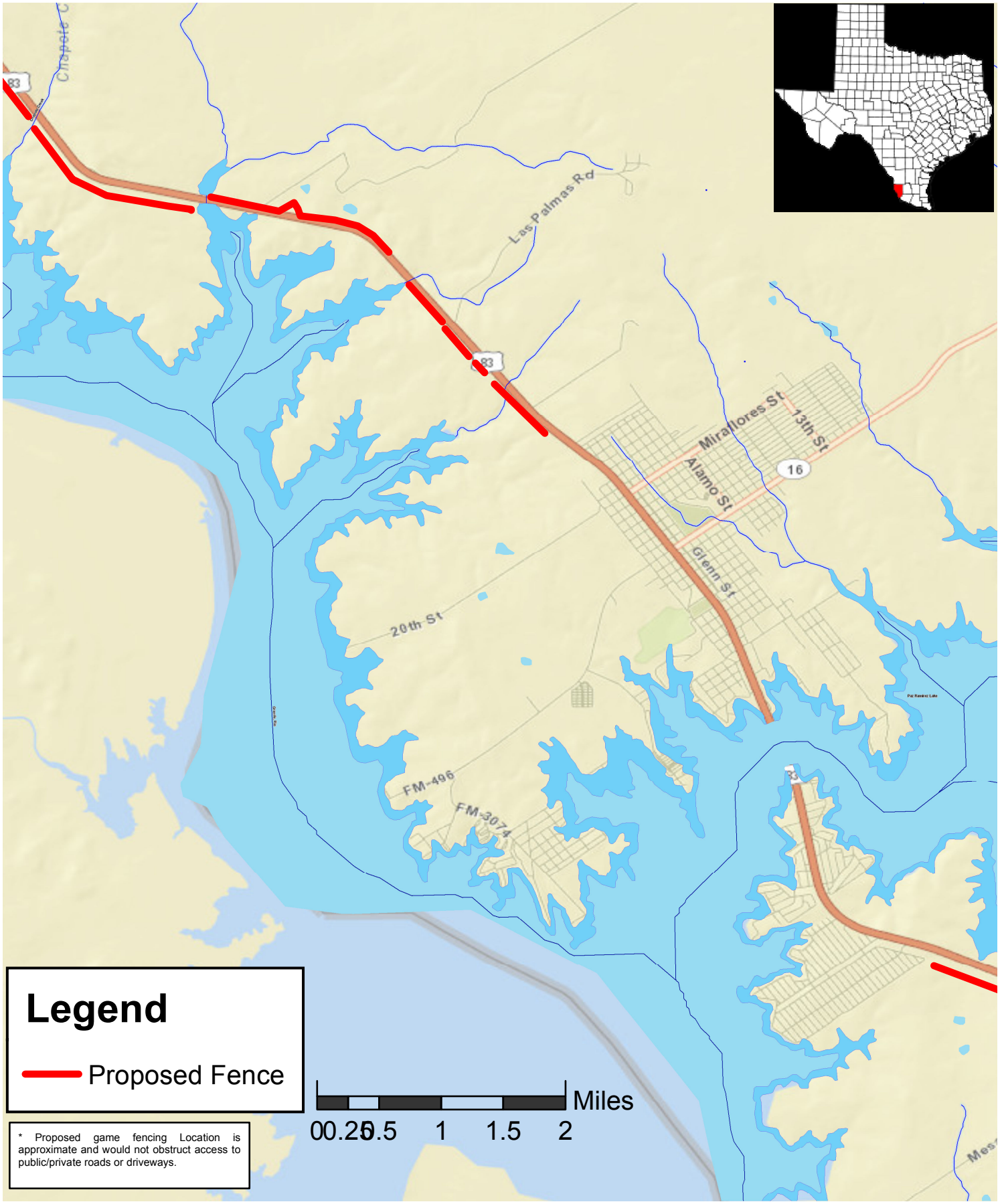

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I - Proposed Tick Control Barrier. Zapata County, Texas

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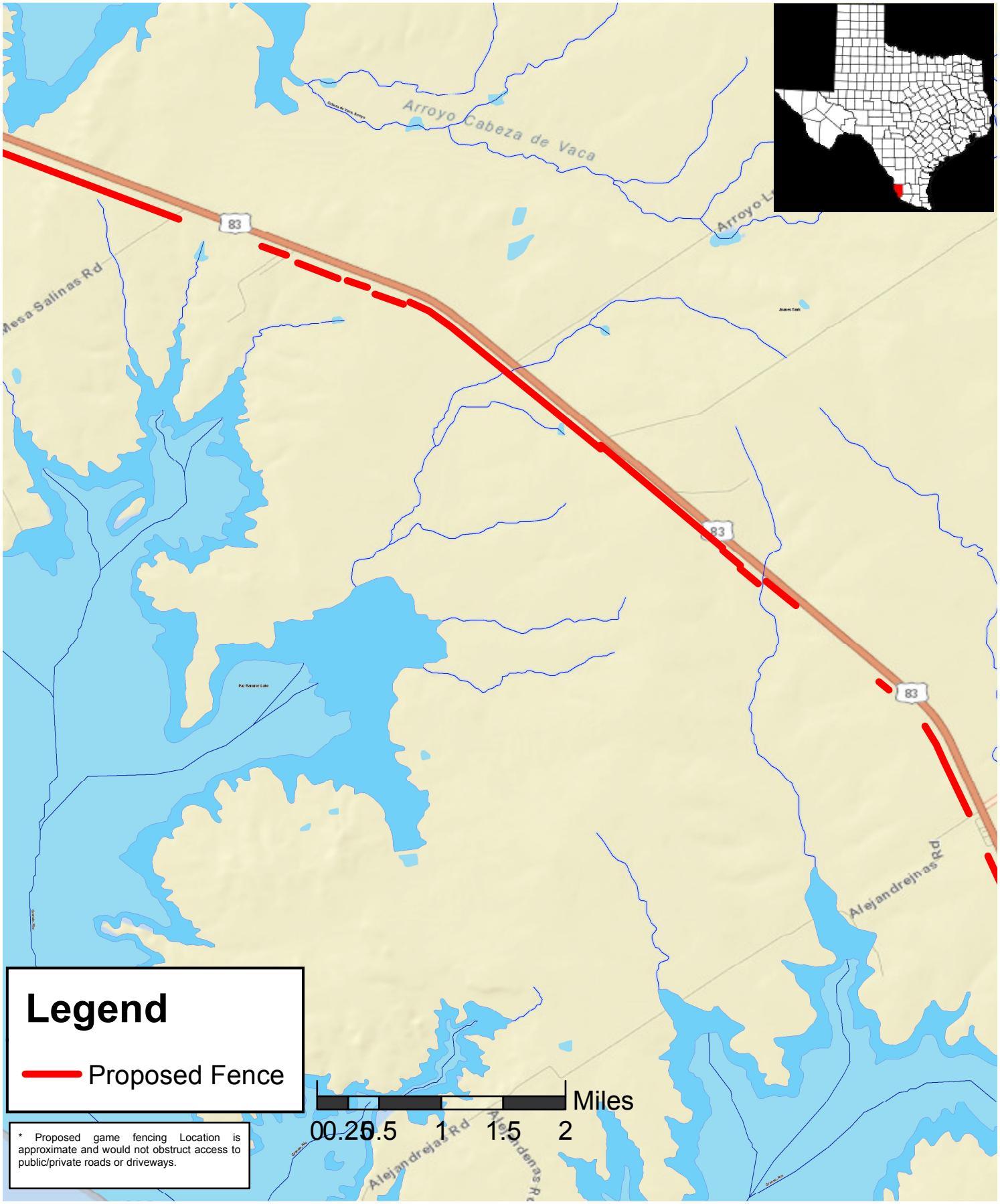

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J - Proposed Tick Control Barrier. Zapata County, Texas

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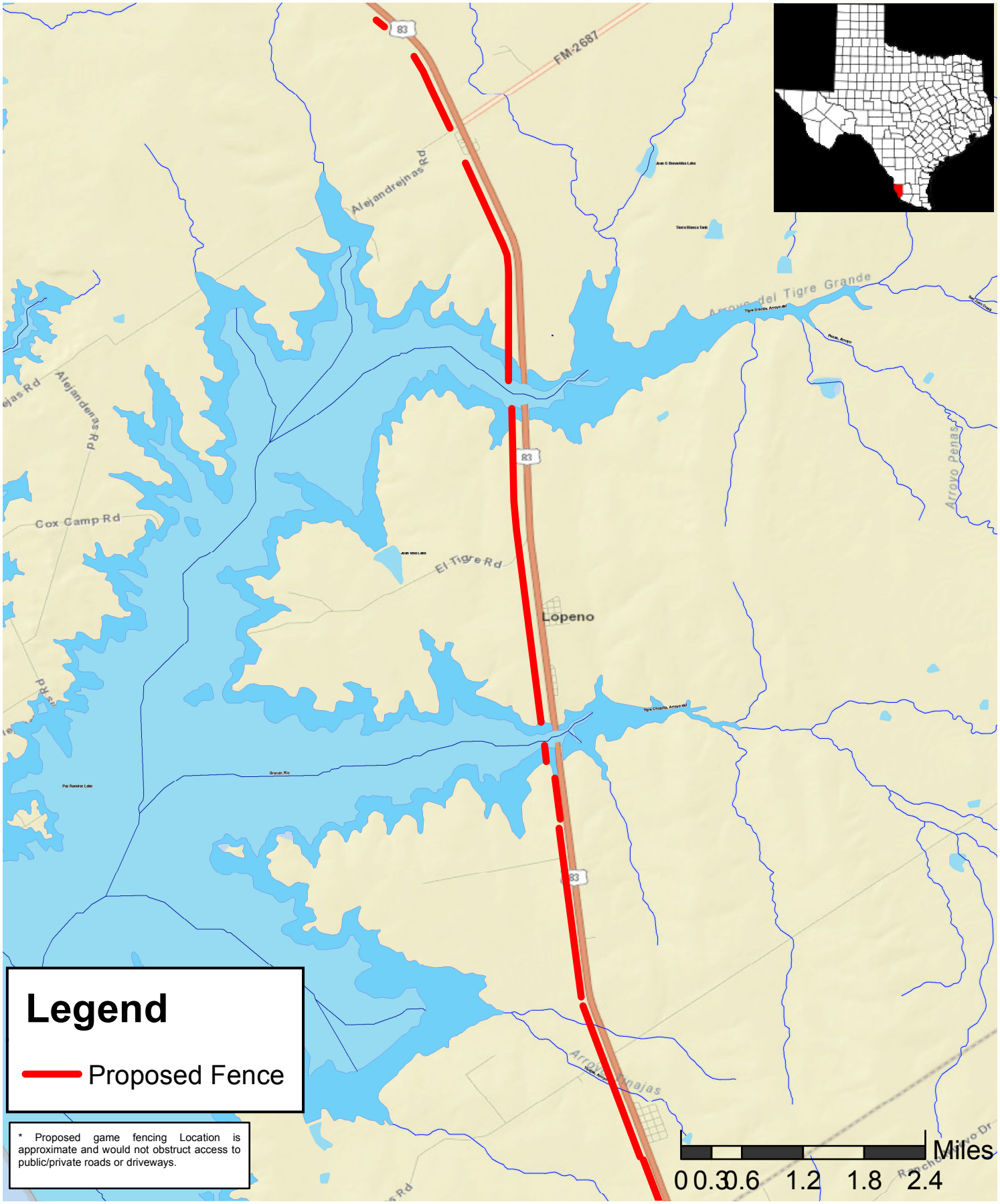

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K - Proposed Tick Control Barrier. Starr County, Texas

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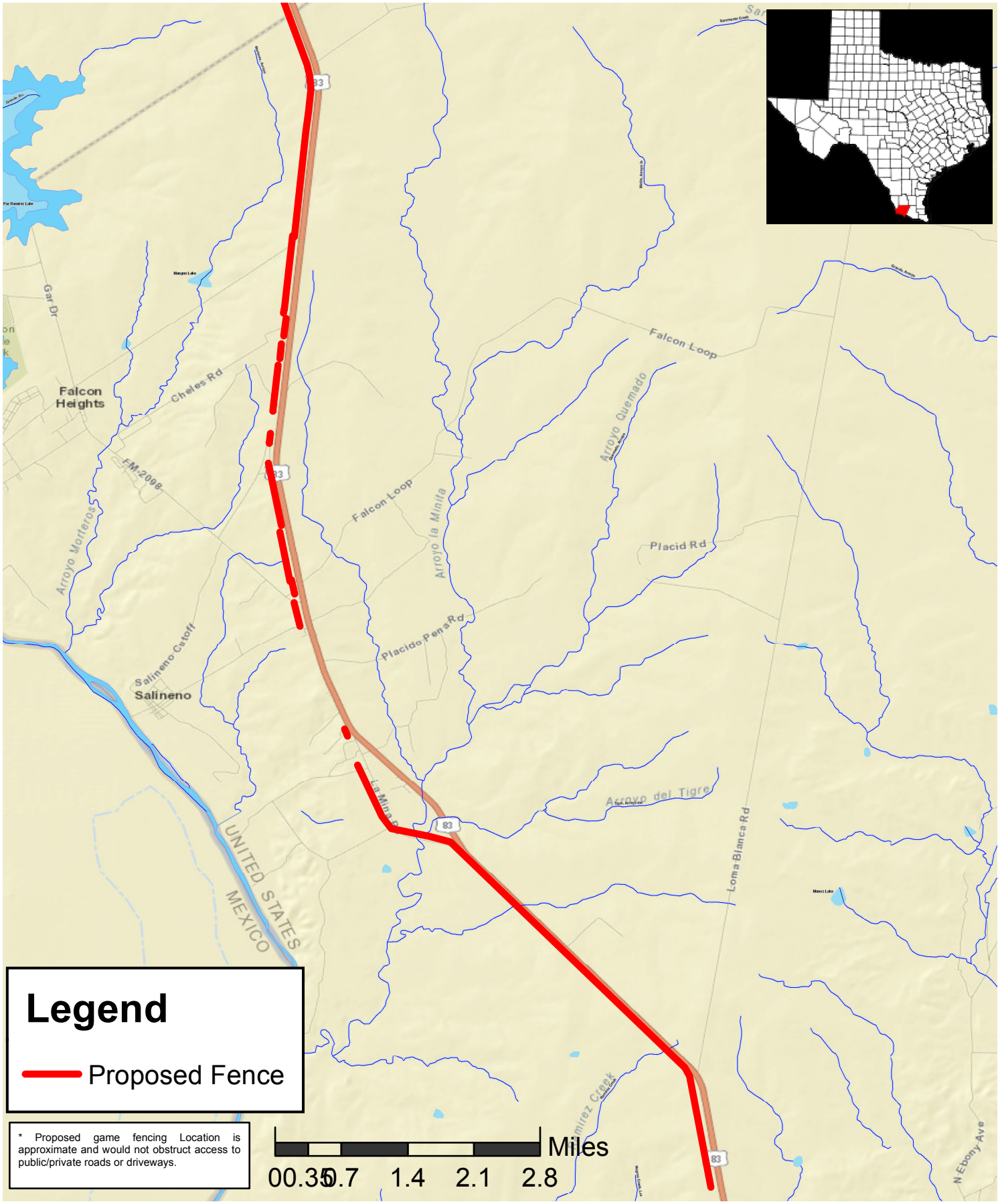

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Appendix I. Water Bodies and Floodplains

The proposed fencing area includes a total of 27 reservoirs, streams, rivers, ephemeral (short-lived), intermittent, and perennial drainage features that are considered jurisdictional waters of the United States and are subject to CWA regulations (40 CFR 136, 230-233). The major water bodies in this area include the Rio Grande bordering the west or southwest of all four counties, the Main Canal in Maverick County, Falcon Dam on the west border of Zapata and Starr counties, and Falcon Reservoir and its three arms that extend into Zapata County (Arroyo Burro, Arroyo del Tigre Grande, and Arroyo del Tigre Chiquito). Minor water bodies include streams and arroyos. The proposed fencing would cross 100-year floodplains in 12 locations in three counties (Starr, Webb, and Zapata).

The water bodies and floodplains in relationship to the proposed fencing are displayed on maps in this appendix with information pertaining to each map summarized below:

- Map A – Rosita Creek and an unnamed creek in Maverick County.
- Map B – Cuevas Creek and an unnamed creek in Maverick County.
- Map C – Two unnamed streams in Maverick County.
- Map D – Carricitos Creek and five unnamed creeks in Webb County.
- Map E – Dolores Creek in Zapata County.
- Map F – Arroyo Salado, Arroyo San Francisco, and El Grullo Creek in Zapata County.
- Map G – Falcon Reservoir, Marcial Creek, Chapote Creek, and Arroyo Zacataso in Zapata County.
- Map H – Arroyo Zacataso, Arroyo Molletes, Arroyo Ranchito, Arroyo San Bartolo, and Chapote Creek in Zapata County.
- Map I – Arroyo Clareno, Arroyo Del Tigre Grande, and three unnamed streams in Zapata County.
- Map J – Arroyo Del Tigre Chiquita, Arroyo Los Guajes, and Arroyo Tinijas in Zapata County.
- Map K – Arroyo Morteros, Arroyo Minita, Arroyo Del Tigre, Arroyo de Los Mudos, Ramirez Creek, and two unnamed creeks in Starr County.
- 100-Year Flood Zones, Maverick County – one segment of fencing could be located in or near the floodplain along the southern edge of the county.
- 100-Year Flood Zones, Webb County – Fencing could cross several floodplains in this county.
- 100-Year Flood Zones, Zapata County – Fencing could cross several floodplains in the southwestern portion of this county.

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A - Maverick County, Texas

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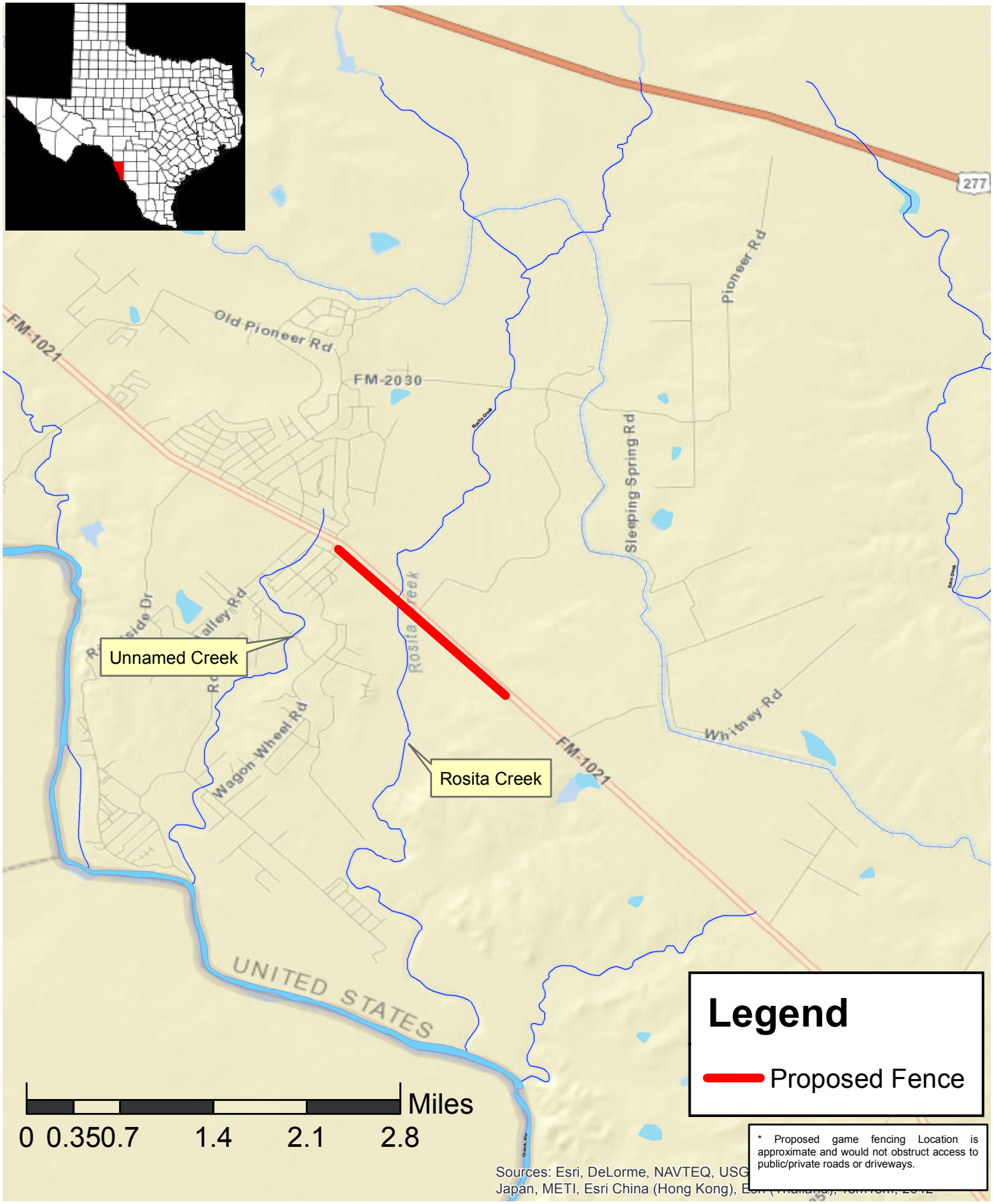

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B - Maverick County, Texas

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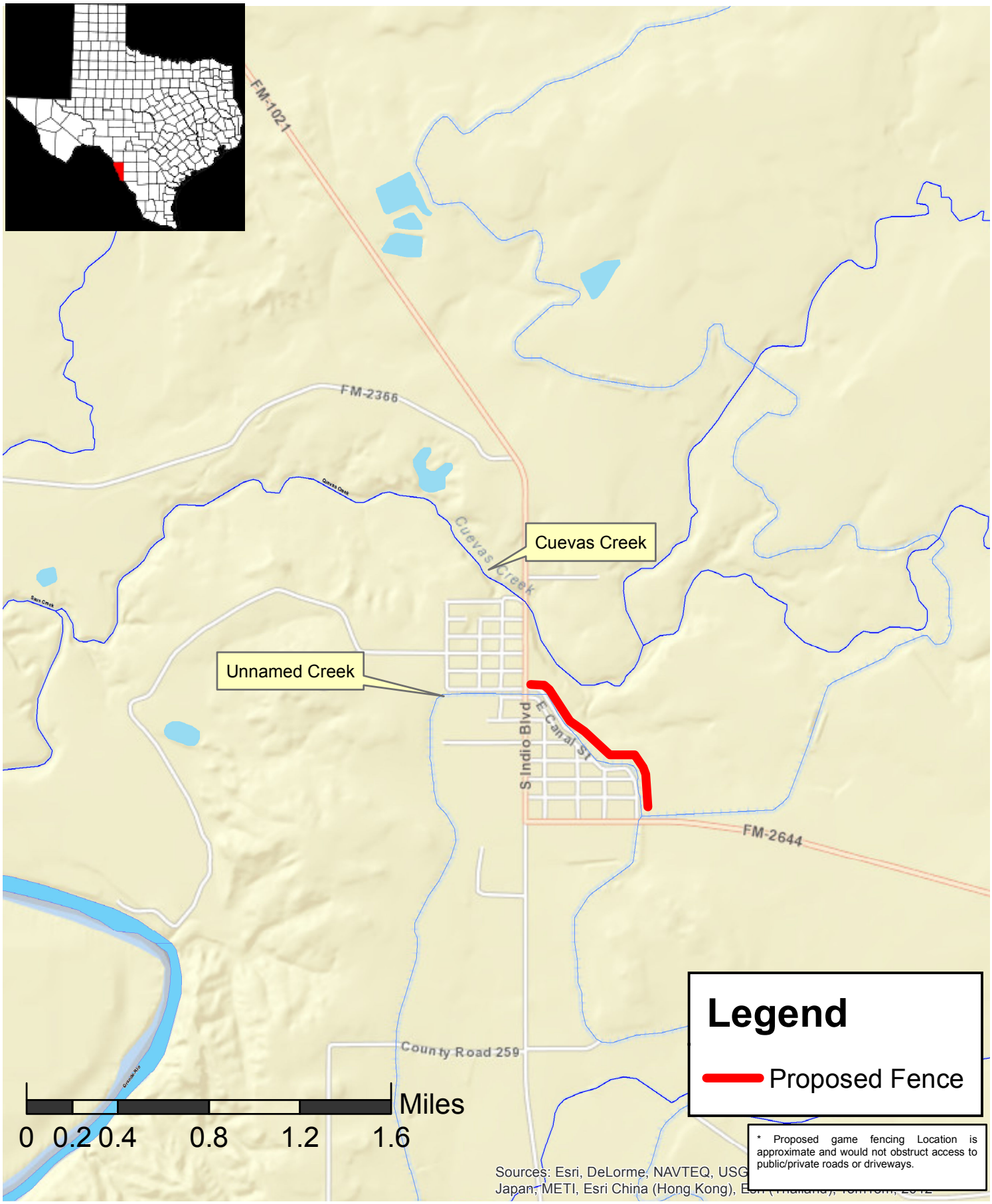

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Sources: Esri, DeLorme, NAVTEQ, USG
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C - Maverick County, Texas

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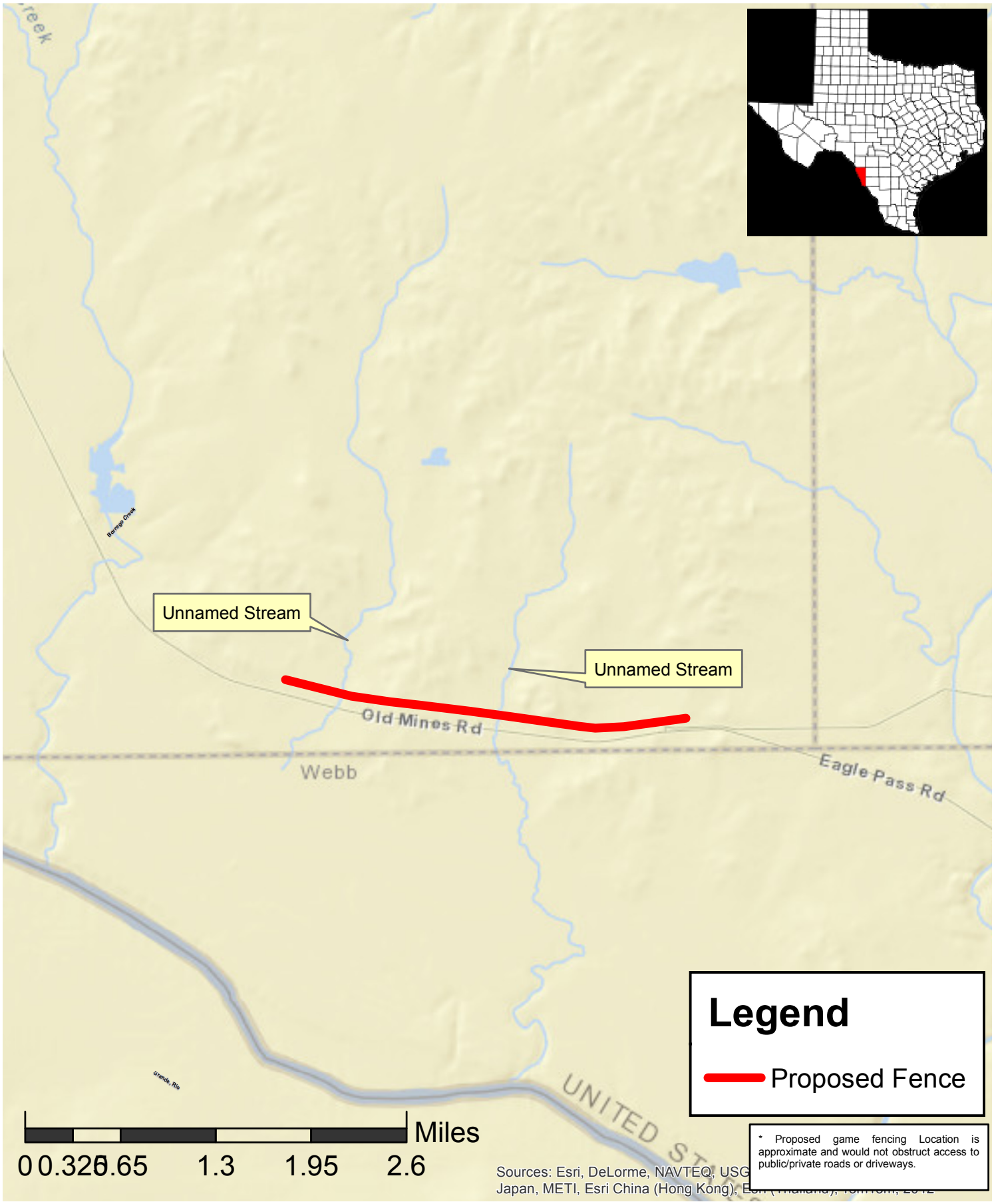

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D - Webb County, Texas

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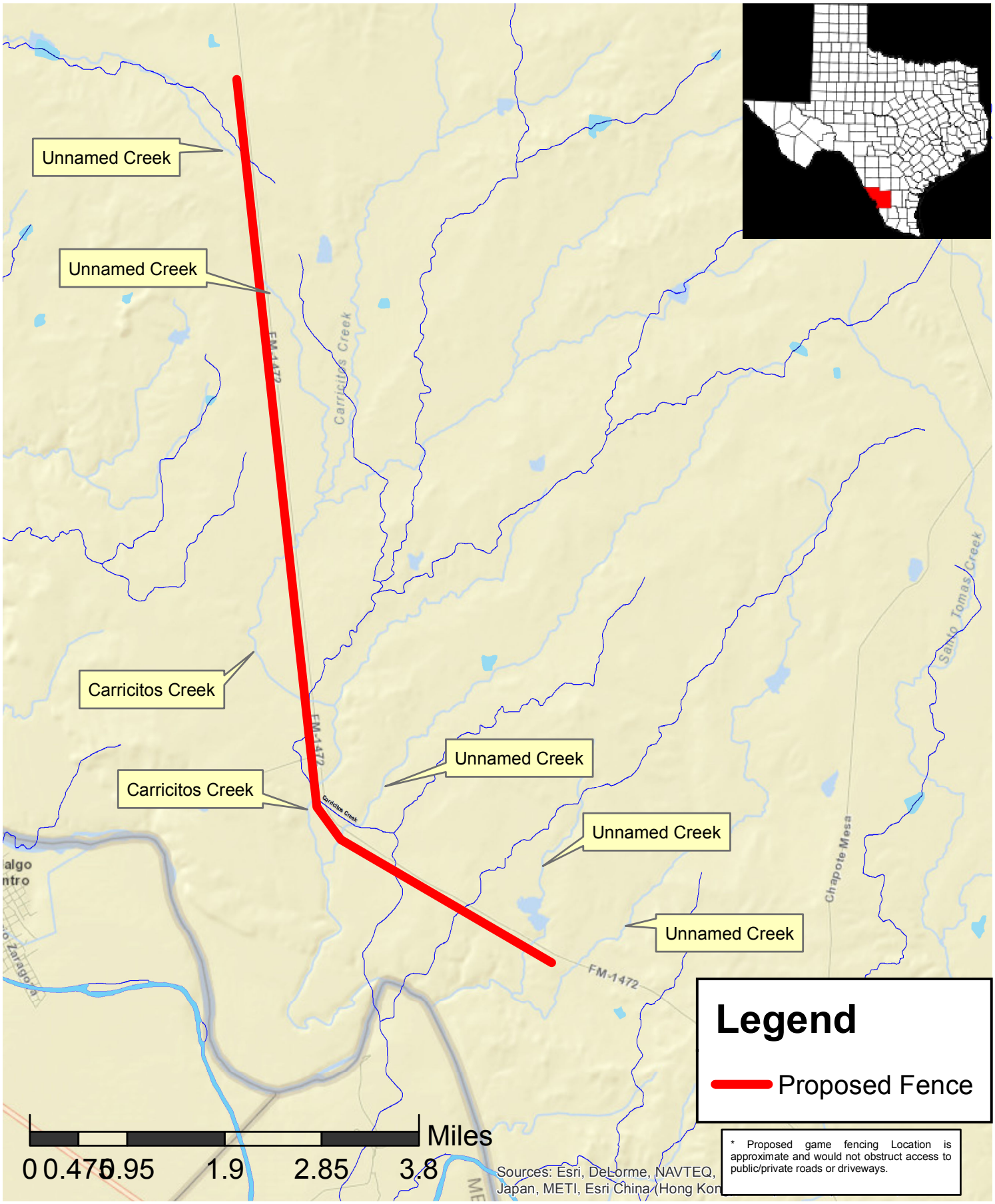

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E - Zapata County, Texas

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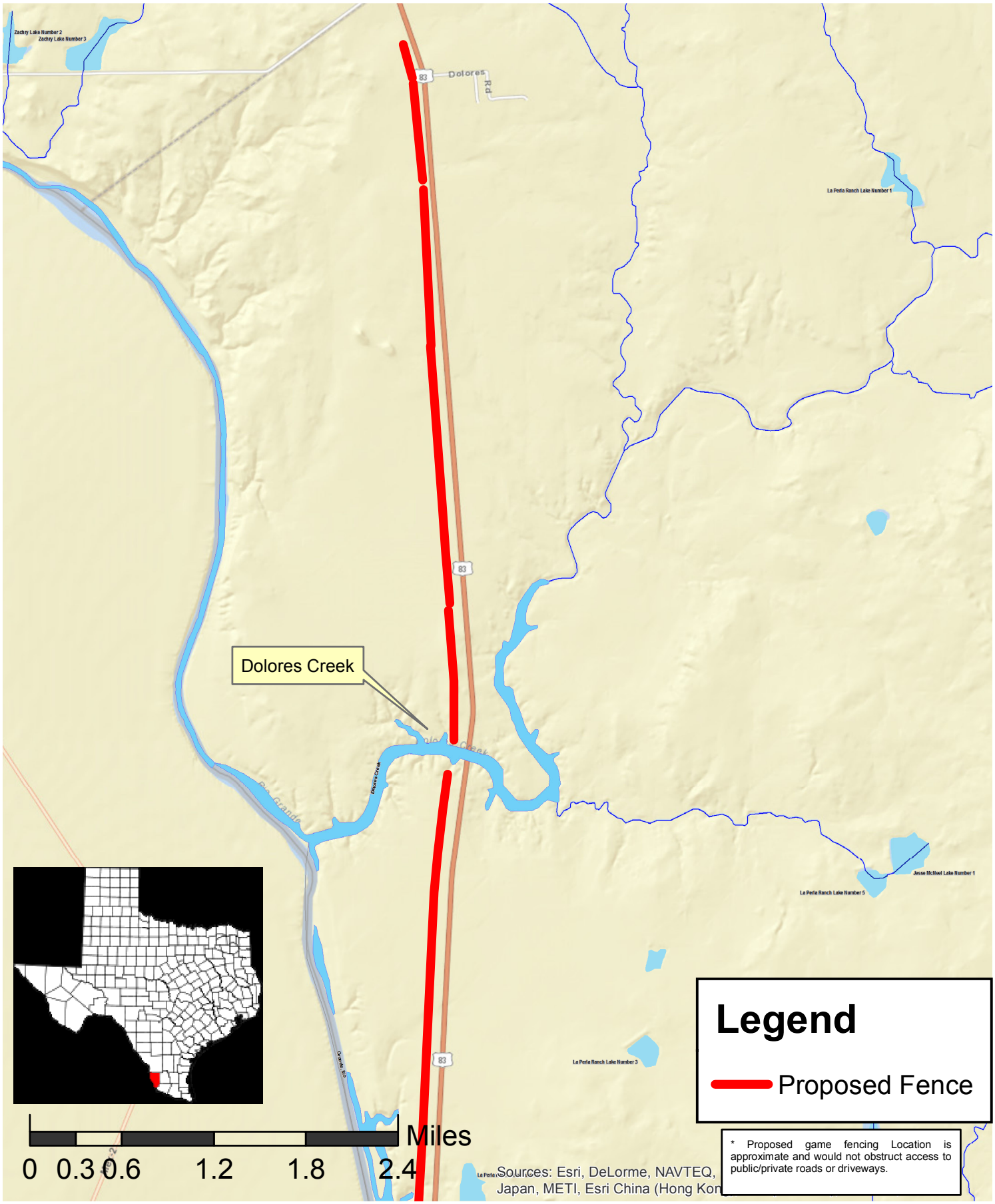

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F - Zapata County, Texas

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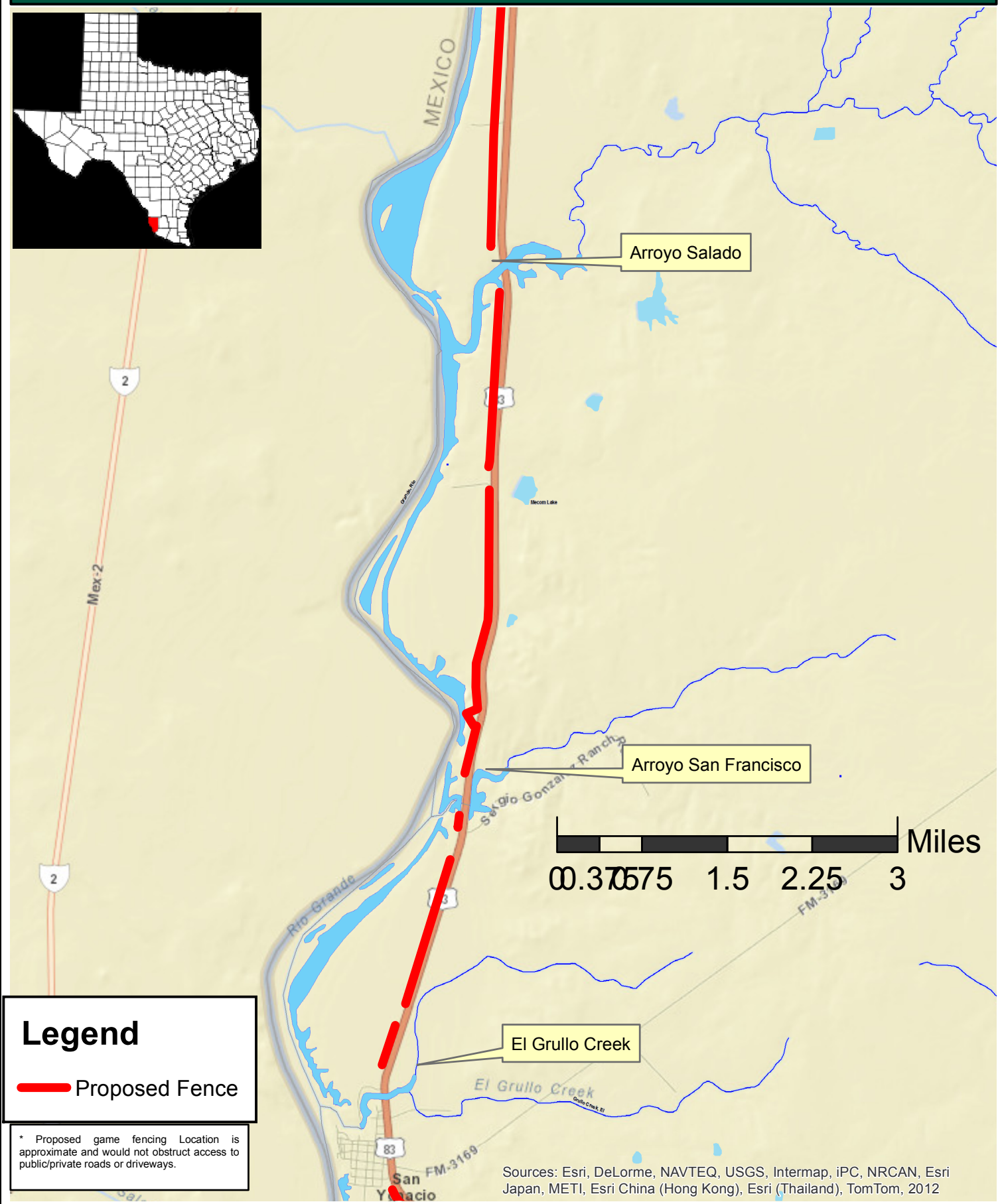

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G - Zapata County, Texas

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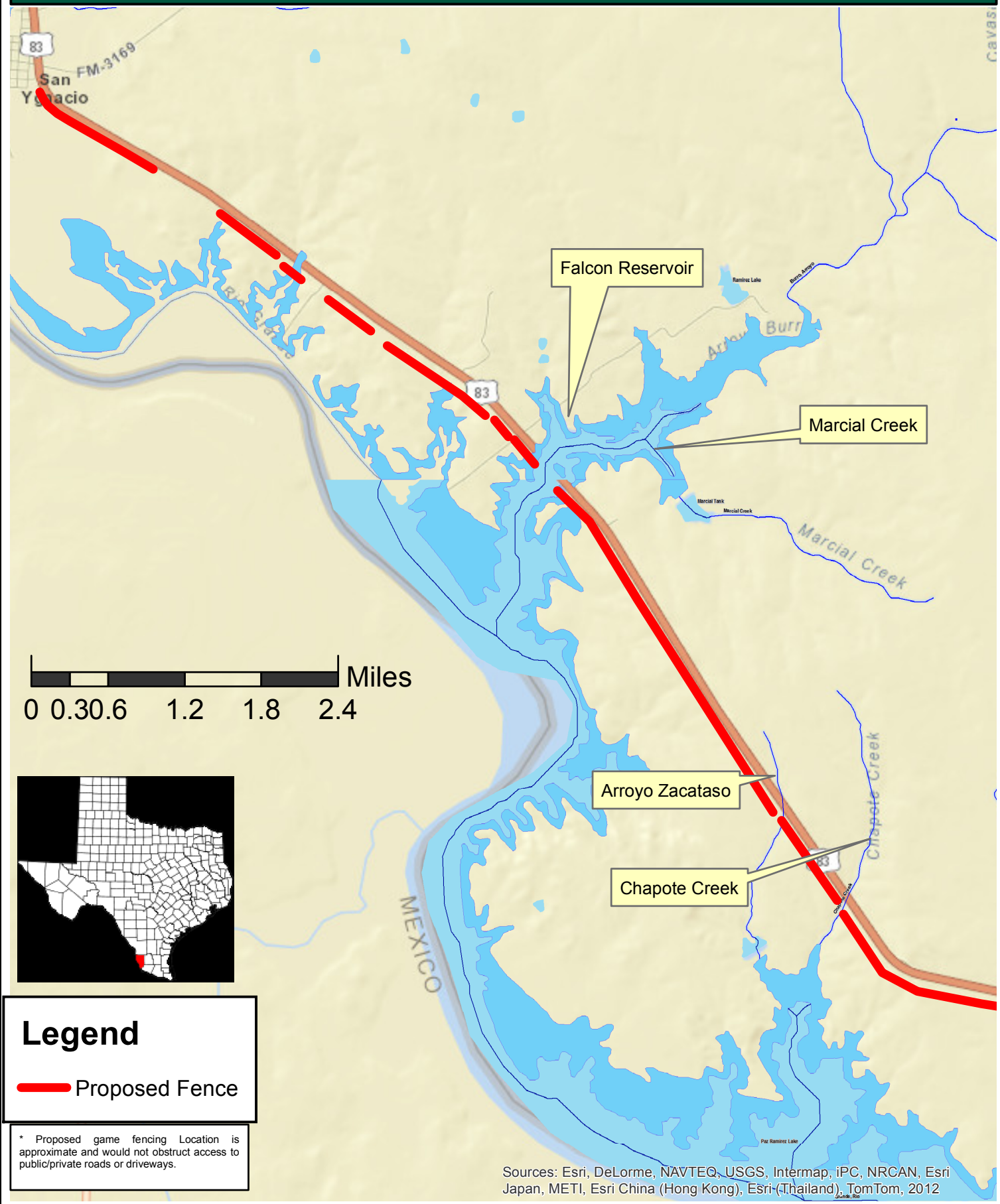

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H - Zapata County, Texas

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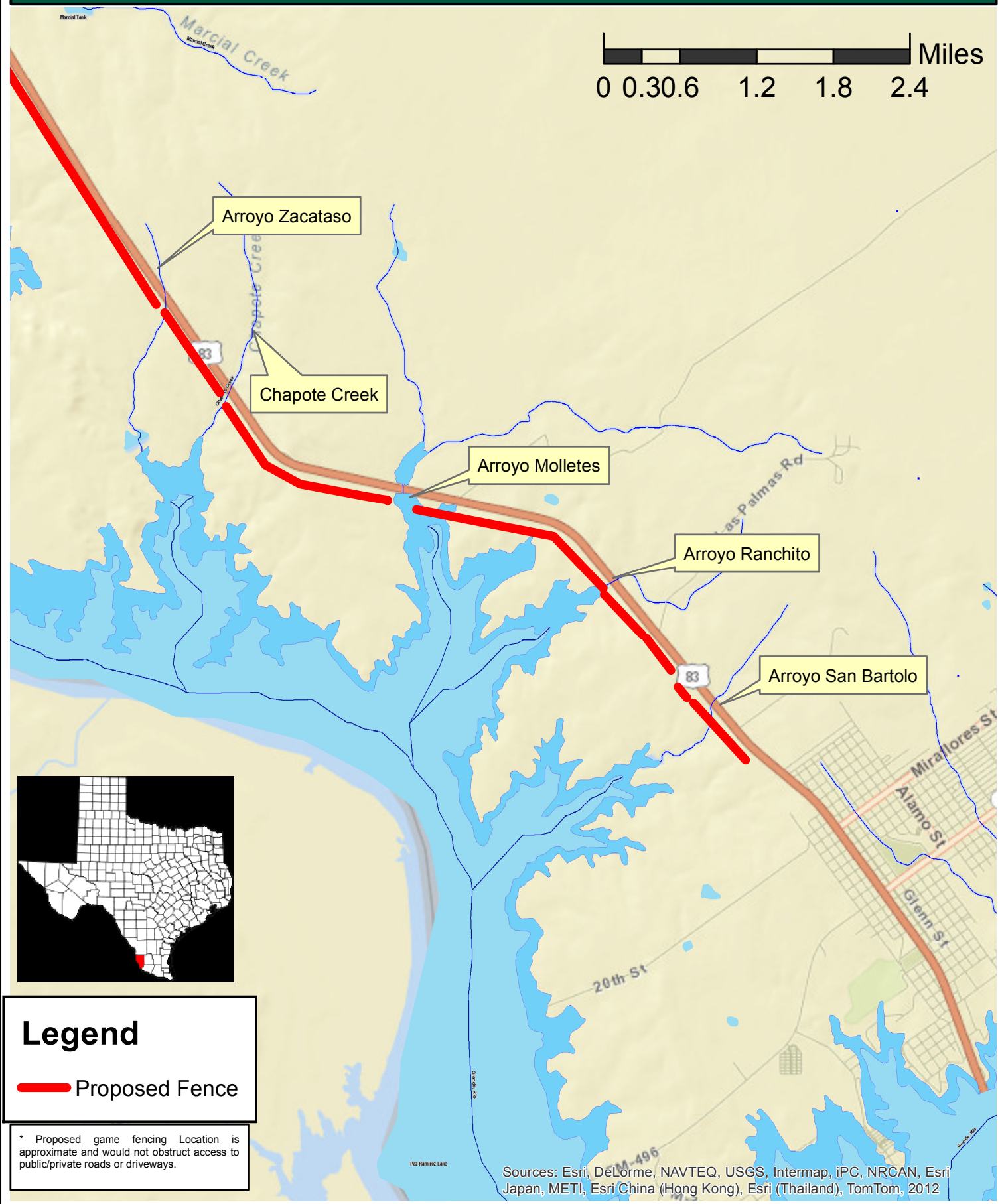

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I - Zapata County, Texas

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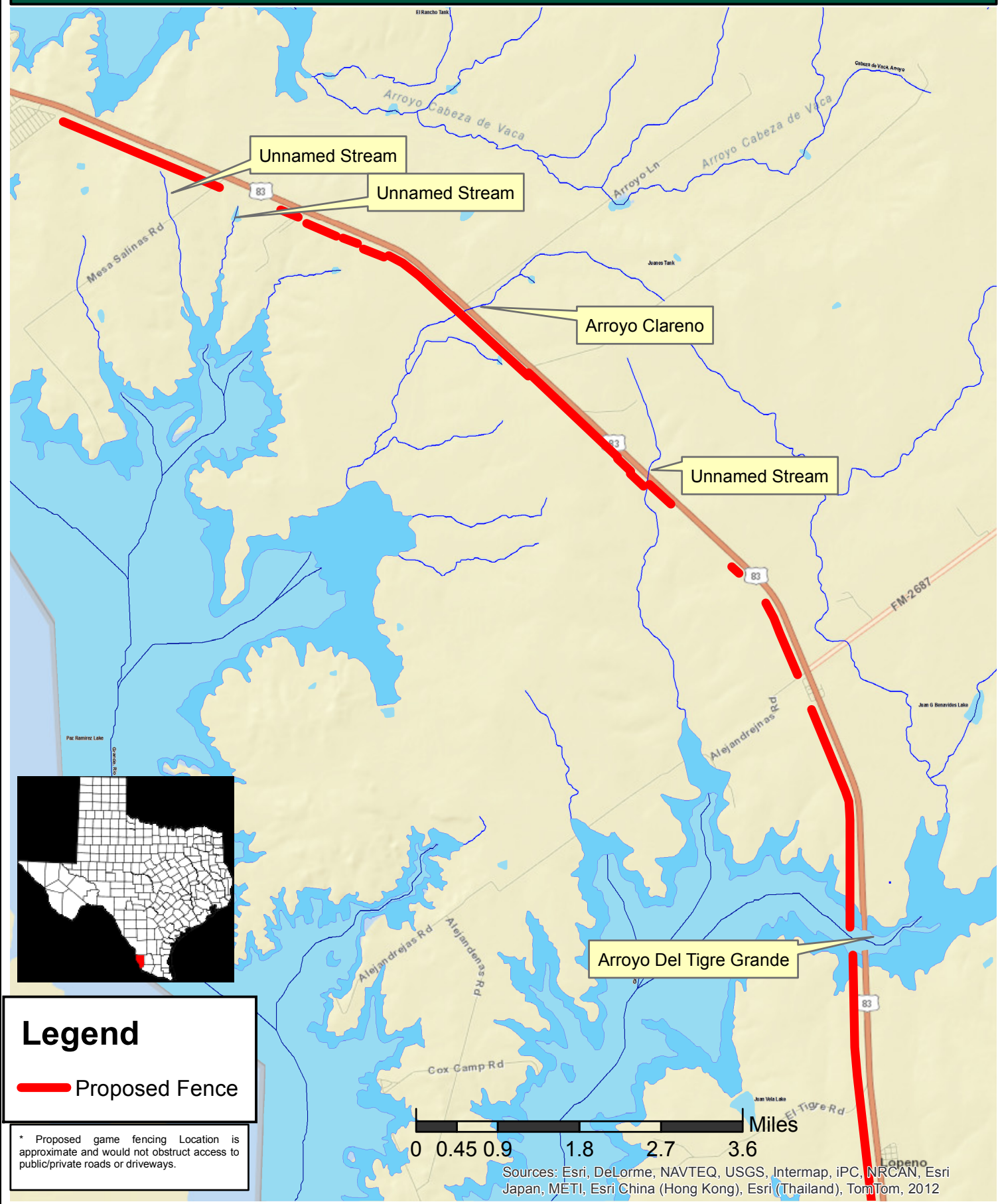

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J - Zapata County, Texas

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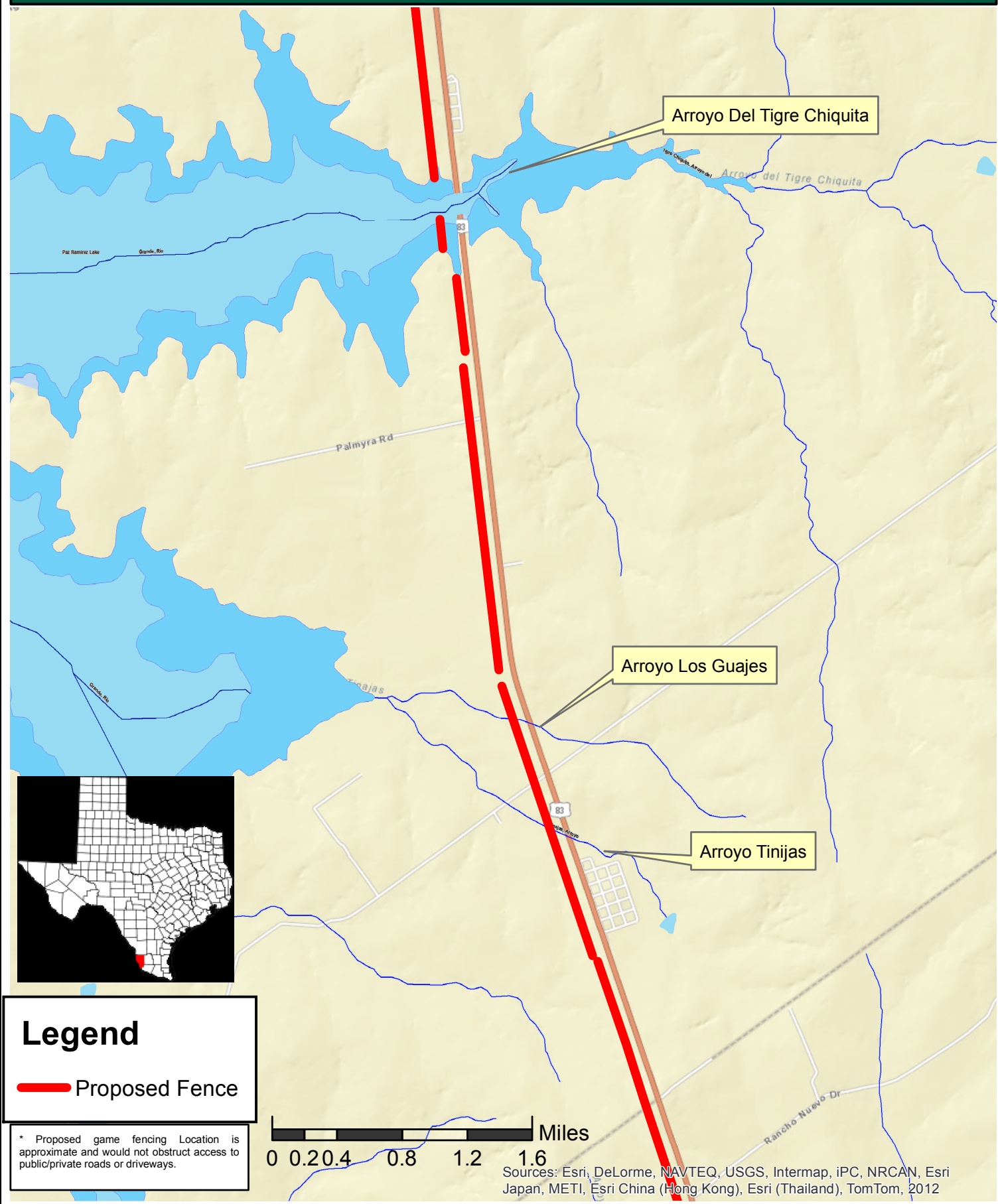

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K - Starr County, Texas

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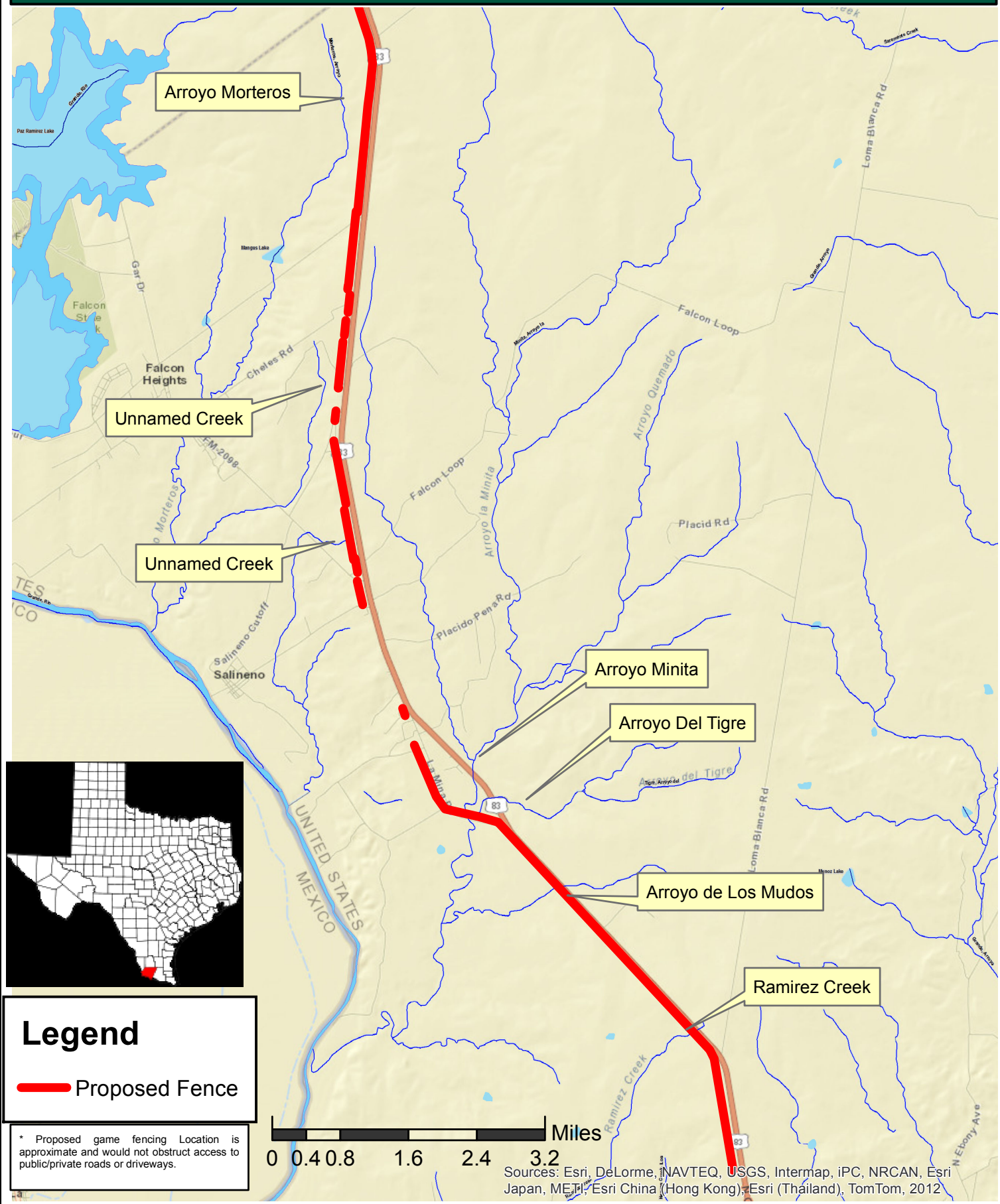

* Proposed game fencing Location is approximate and would not obstruct access to public/private roads or driveways.

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Coordinate System:
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Data Source:
TeleAtlas - roads
NAIP - imagery

N

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100-Year Flood Zones, Maverick County, Texas

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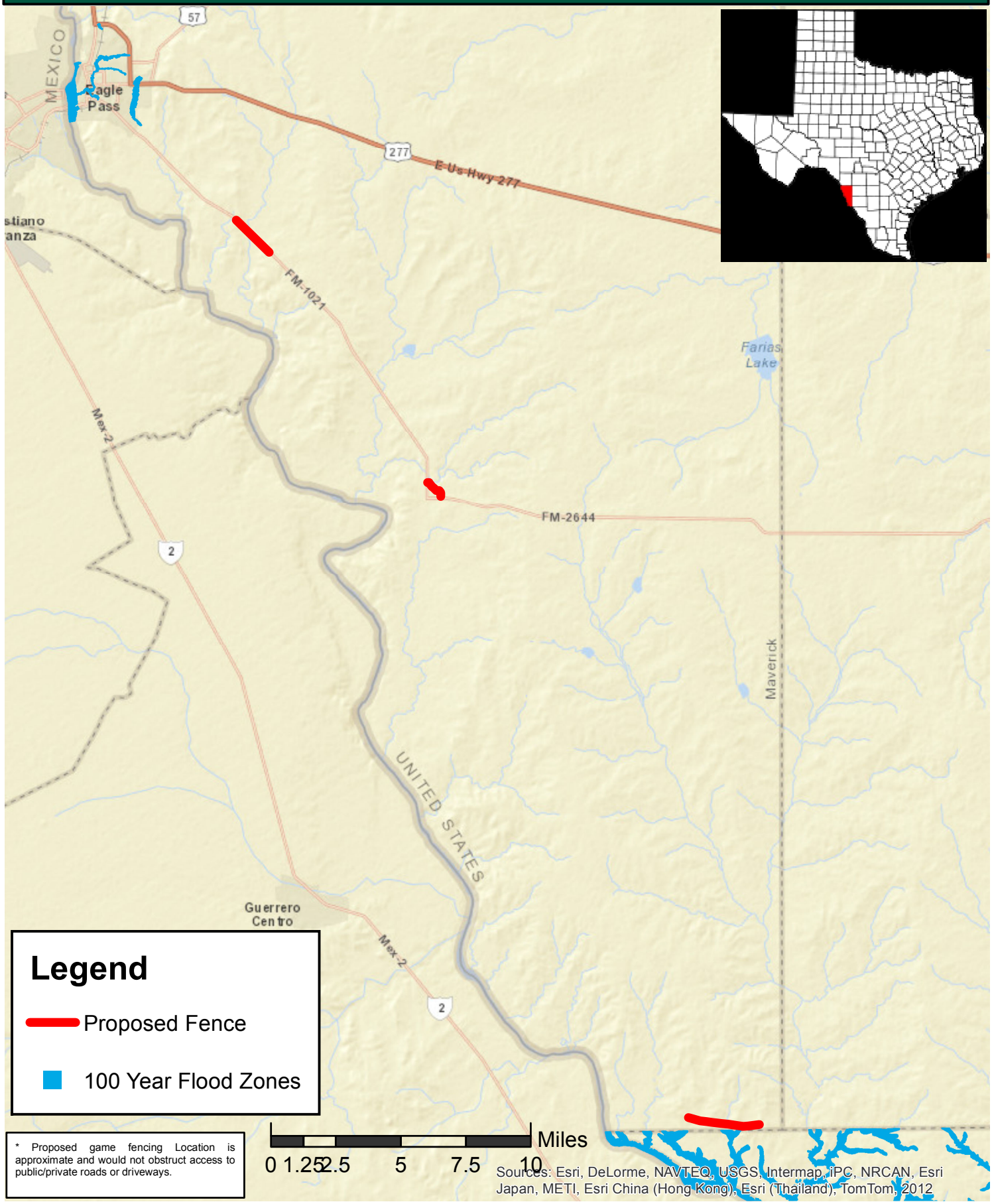

* Proposed game fencing Location is approximate and would not obstruct access to public/private roads or driveways.

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

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100-Year Flood Zones, Webb County, Texas

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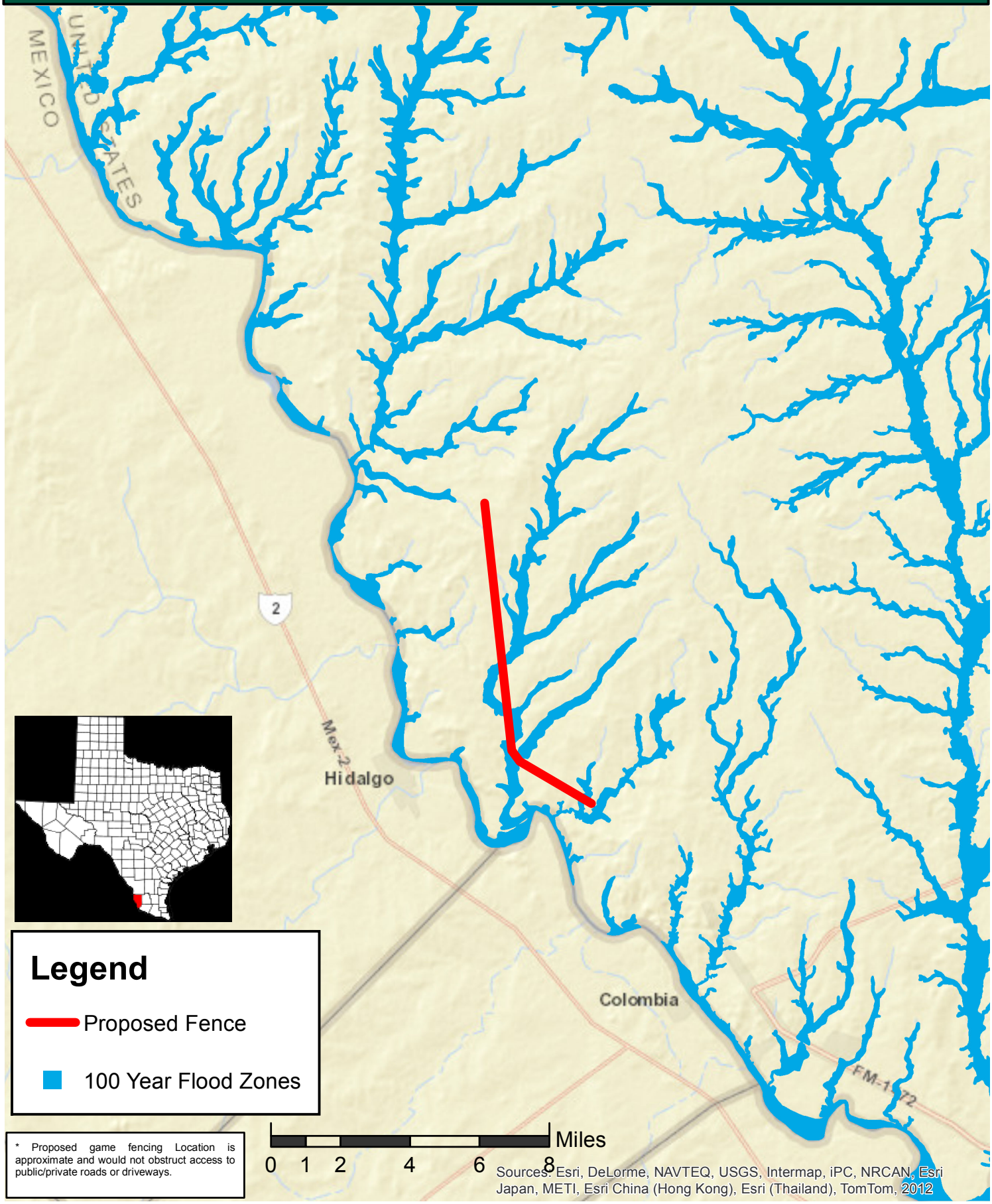

* Proposed game fencing Location is approximate and would not obstruct access to public/private roads or driveways.

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

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100-Year Flood Zones, Zapata County, Texas

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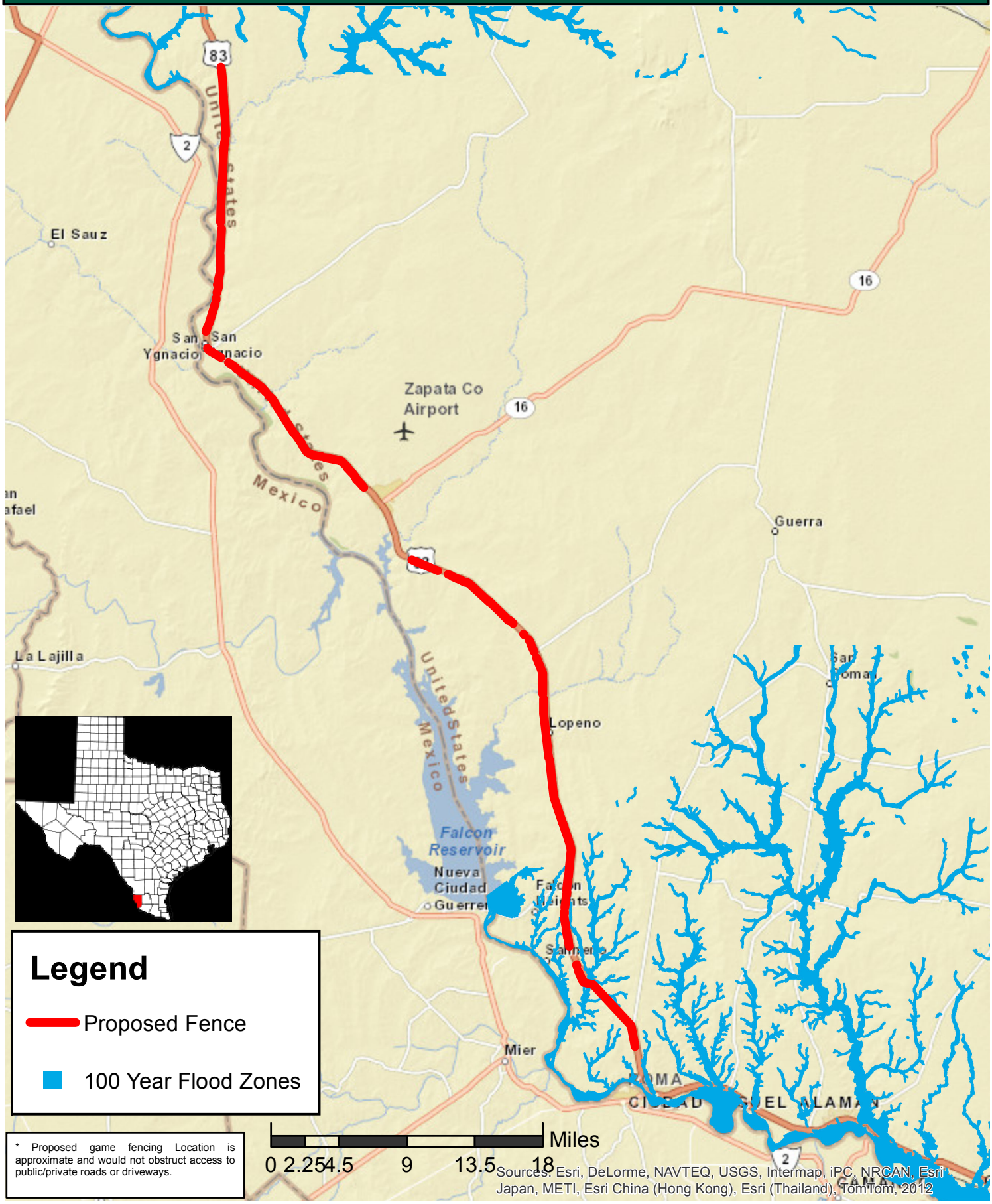

* Proposed game fencing Location is approximate and would not obstruct access to public/private roads or driveways.

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2012

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Appendix J. Socioeconomics

Appendix J1 - Colonias and Schools

The Geographic Names Information System (GNIS) Gazetteer WMS from the National Map (http://services.nationalmap.gov/ArcGIS/rest/services/geonames/MapServer) was used to search for colonias and schools located in the surrounding areas of the proposed fence segments. The first map in this appendix shows all of the proposed fence segments. The indices A through K on this map represent each individual fence segment.

The colonias and/or school information identified on each map is summarized below:

- Map index A – Proposed Tick Control Barrier, Maverick County, Texas – Loma Linda #1 and Chula Vista 1-5 are the closest colonias located near the northern tip of the proposed fence segment; and no school is identified on this map.

- Map index B – Proposed Tick Control Barrier, Maverick County, Texas – El Indio Townsite colonias are located around the proposed fence segement; no school is identified on this map.

- Map index E – Proposed Tick Control Barrier, Zapata County, Texas – Dolores is the closest colonia located adjacent to the northern portion of the proposed fence segment; no school is identified on this map.

- Map index F – Proposed Tick Control Barrier, Zapata County, Texas – San Ygnacio and Valle Verde are the closest colonias located in between two proposed fence segments. Benavides Elementary School is located approximately 0.3 mile from the closest proposed fence segment.

- Map index G – Proposed Tick Control Barrier, Zapata County, Texas – In addition to San Ygnacio and Valle Verde colonias and Benavides Elementary School show on Map index F, San Ignacio Viejo Unit 2 and Ramireno colonias are adjacent to the proposed fence segments to the south. No additional school is identified on this map.

- Map index H – Proposed Tick Control Barrier, Zapata County, Texas – Ranchito San Jose is the closest colonia located approximately 0.2 miles north of the proposed fence segment. Five schools (Zapata Junior High School, Zapata Middle School, Zapata High School, Zapata North Elementary School, and Zapata South Elementary School) are identified on this map. Zapata Junior High School is the closest (approximately 1.5 miles) school south of the proposed fence segment.

- Map index J – Proposed Tick Control Barrier, Zapata County, Texas – Morales / Sanchez, Lopeno, and New Falcon colonias are adjacent to the proposed fence segments; no school is identified on this map.

- Map index K – Proposed Tick Control Barrier, Starr County, Texas – Lago Vista, Indio #1 and #2, Salineno North, Los Arrieros, and La Minita colonias are located adjacent to the proposed fence segments.

Appendix J2 - Socioeconomic Information

Socioeconomic information for Maverick, Starr, Webb, and Zapata Counties (table J2.1) was obtained from an online search of the U. S. Census Bureau database (USCB, 2007-2011). The American Community Survey at the county level was based on 5-year estimates, from 2007 through 2011.

Table J2.1 Socioeconomic Information for Maverick, Starr, Webb, and Zapata Counties

Socioeconomic Criteria	Maverick County	Starr County	Webb County	Zapata County
Median family income (dollars)	$32,548	$28,779	$39,335	$27,600
Percentage of families and people whose income in the past 12 months is below the poverty level (all families)	28.80%	34.80%	25.90%	33.80%
Residents in labor force (percentage)	58.90%	54.70%	62.50%	53.60%
Residents in agriculture, forestry, fishing and hunting, and mining (percentage)	4.20%	6.30%	2.40%	16.00%
Foreign born (number of people)	18,612	18,244	72,839	3,172
Median age (years)	30.2	28.9	27.6	29.2
Speak a language other than English (citizens 18 years and over) (percentage)	93.40%	95.10%	91.80%	84.20%
Speak English "very well" (percentage)	56.00%	62.30%	54.20%	72.70%

The socioeconomic information (table J2.2) is based on the residential populations living within a 0.25 mile radius along the proposed fence segments. The residential population information is presented in two areas (Rosita and El Indio) for Maverick County because two separate fence segments are proposed in this county. This information was obtained from USEPA EJView Census 2010 Summary Report (http://www.epa.gov/EJView). The 0.25 mile distance was selected to represent an estimated impacted area within the routinely traveled walking distance of the fence. Webb County is not included in table J2.2 because the database search did not identify any residential housing within the 0.25 mile distance.

Table J2.2 Socioeconomic Information for Populations near the Proposed Game Fence Areas[1]

Population and Housing Units	Maverick County Number (percentage)		Starr County Number percentage)	Zapata County Number (percentage)
	Rosita Area	El Indio Area		
Total Population	335	101	501	3,391
Hispanic Population	298 (89%)	85 (84%)	479 (96%)	3,163 (93%)
Non-Hispanic Population	37 (11%)	16 (16%)	22 (4%)	228 (7%)
Housing Units	116	36	169	1,582

[1]USCB (U.S. Census Bureau). 2007-2011. American Community Survey 5-Year Estimates. U.S. Department of Commerce website (http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml) *last accessed* Apr. 25, 2013.

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Proposed Tick Control Barriers along the Tick Eradication Quarantine Line, Texas

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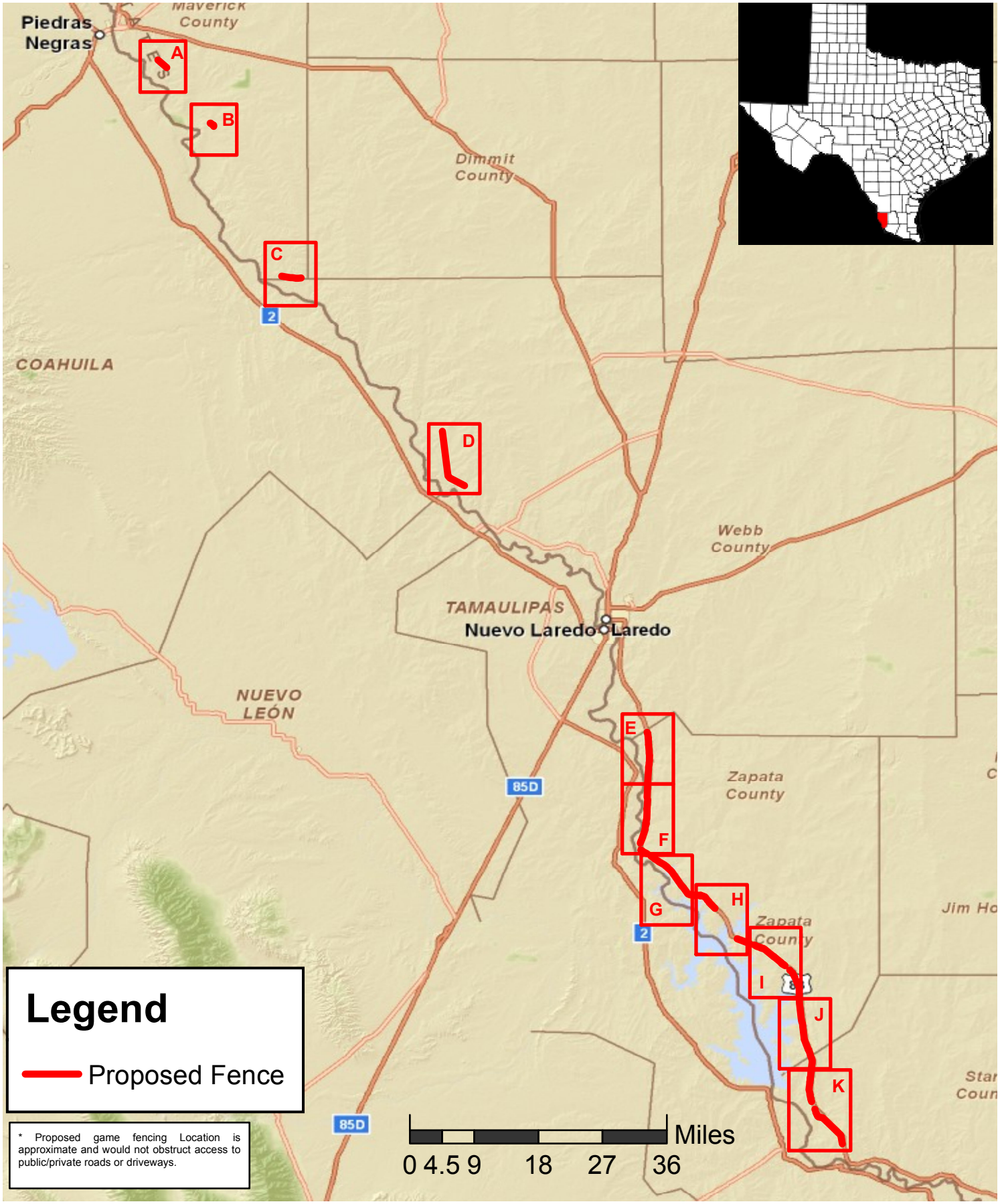

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A - Proposed Tick Control Barrier. Maverick County, Texas

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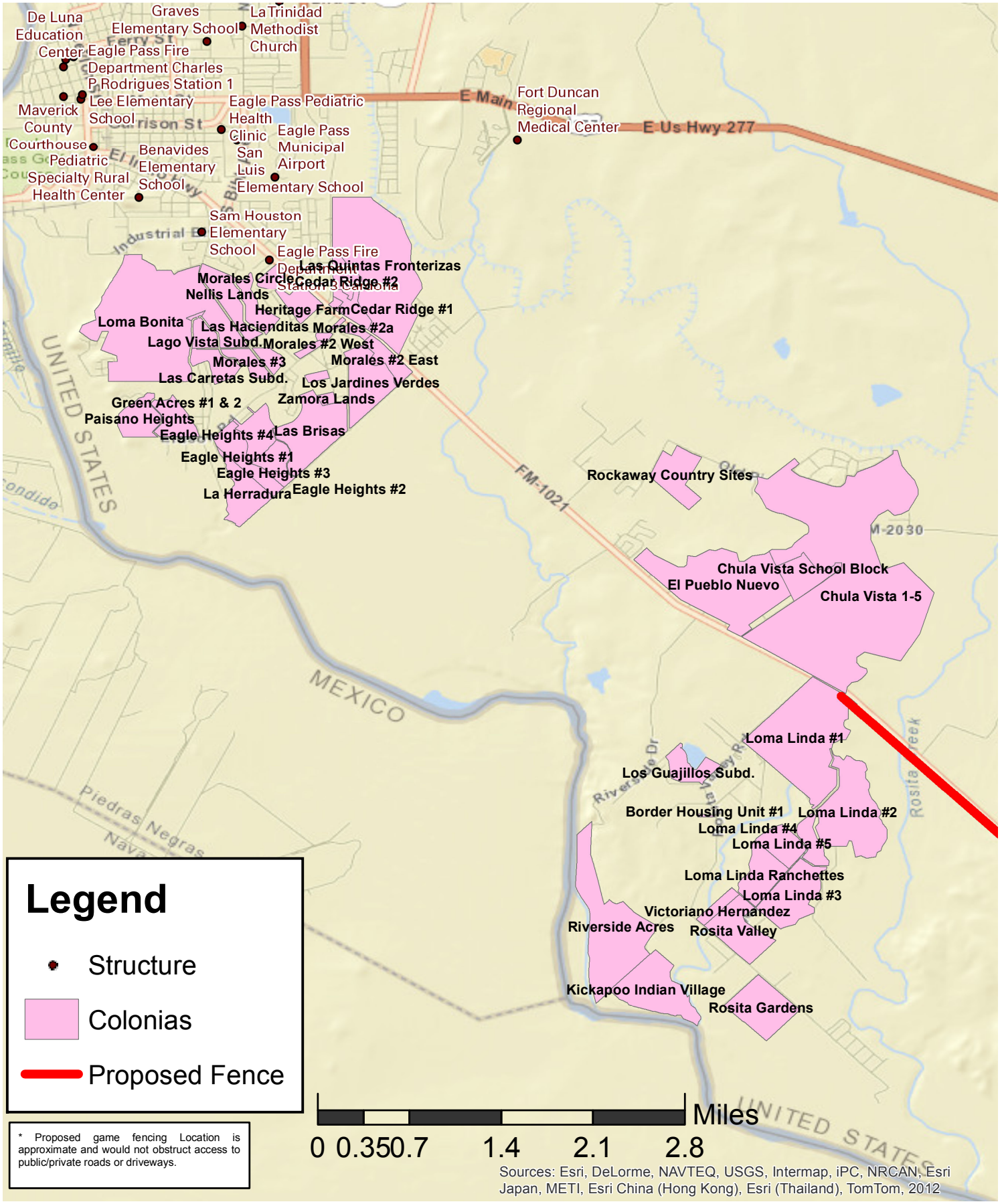

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B - Proposed Tick Control Barrier. Maverick County, Texas

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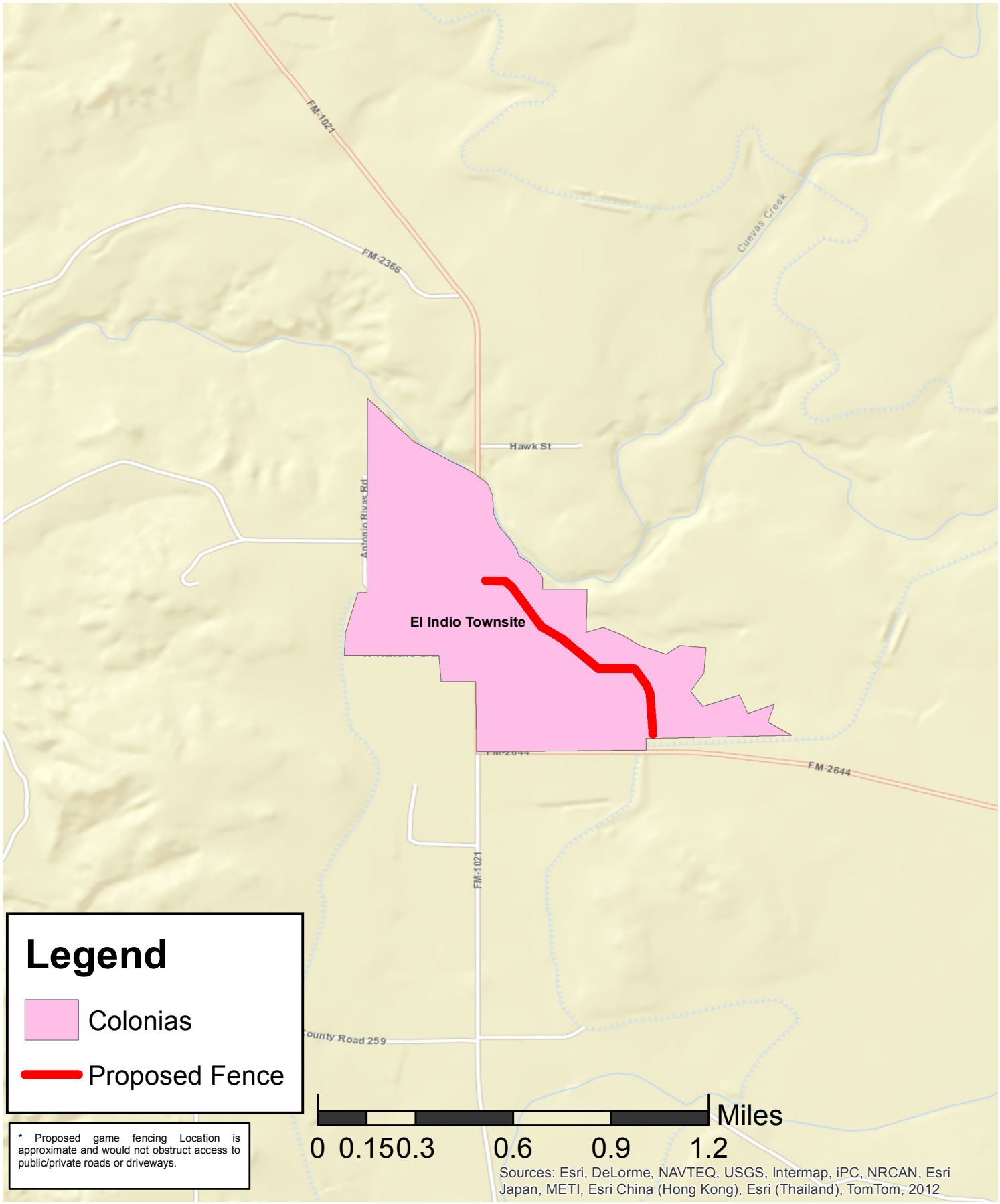

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E- Proposed Tick Control Barrier. Zapata County, Texas

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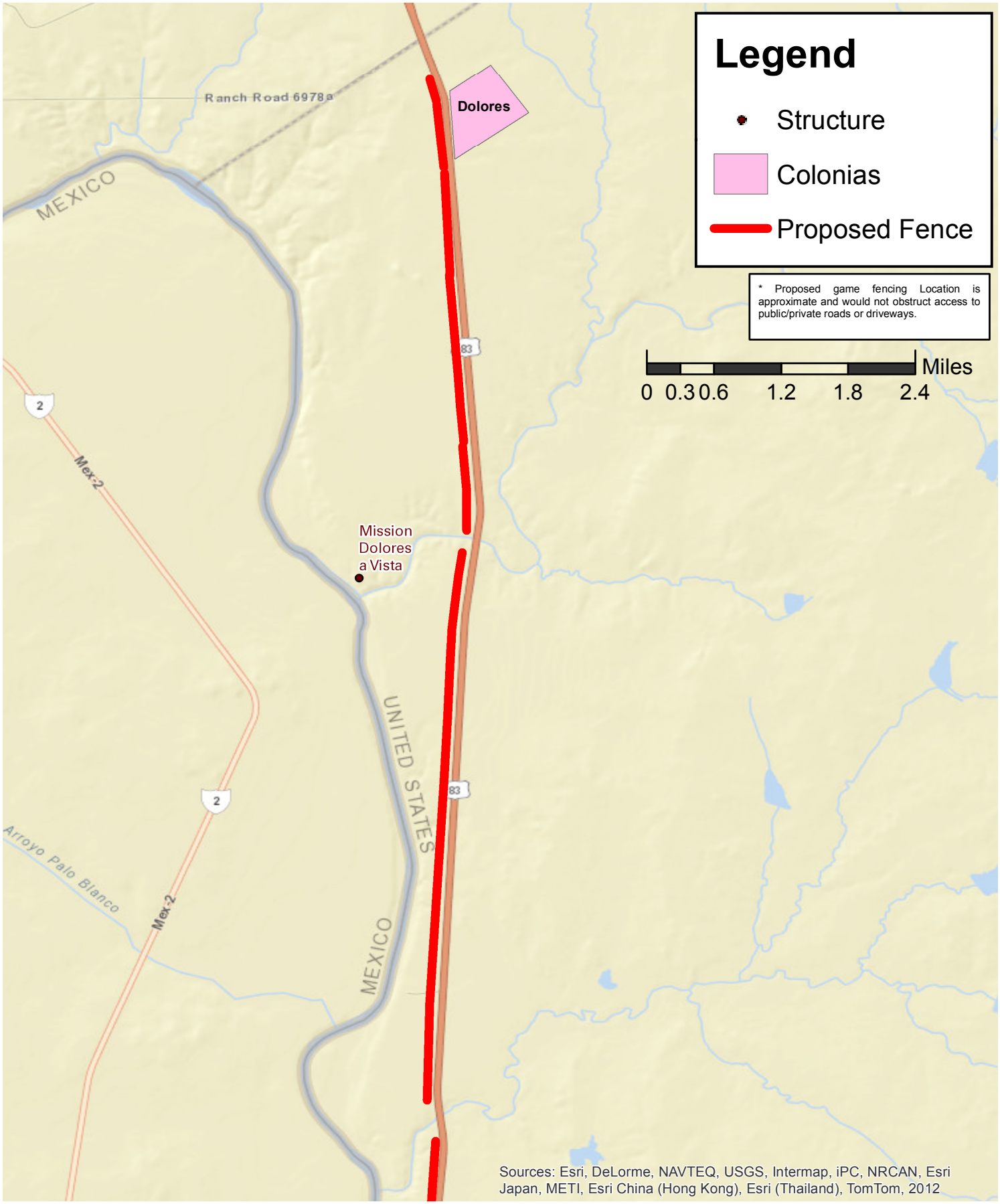

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F- Proposed Tick Control Barrier. Zapata County, Texas

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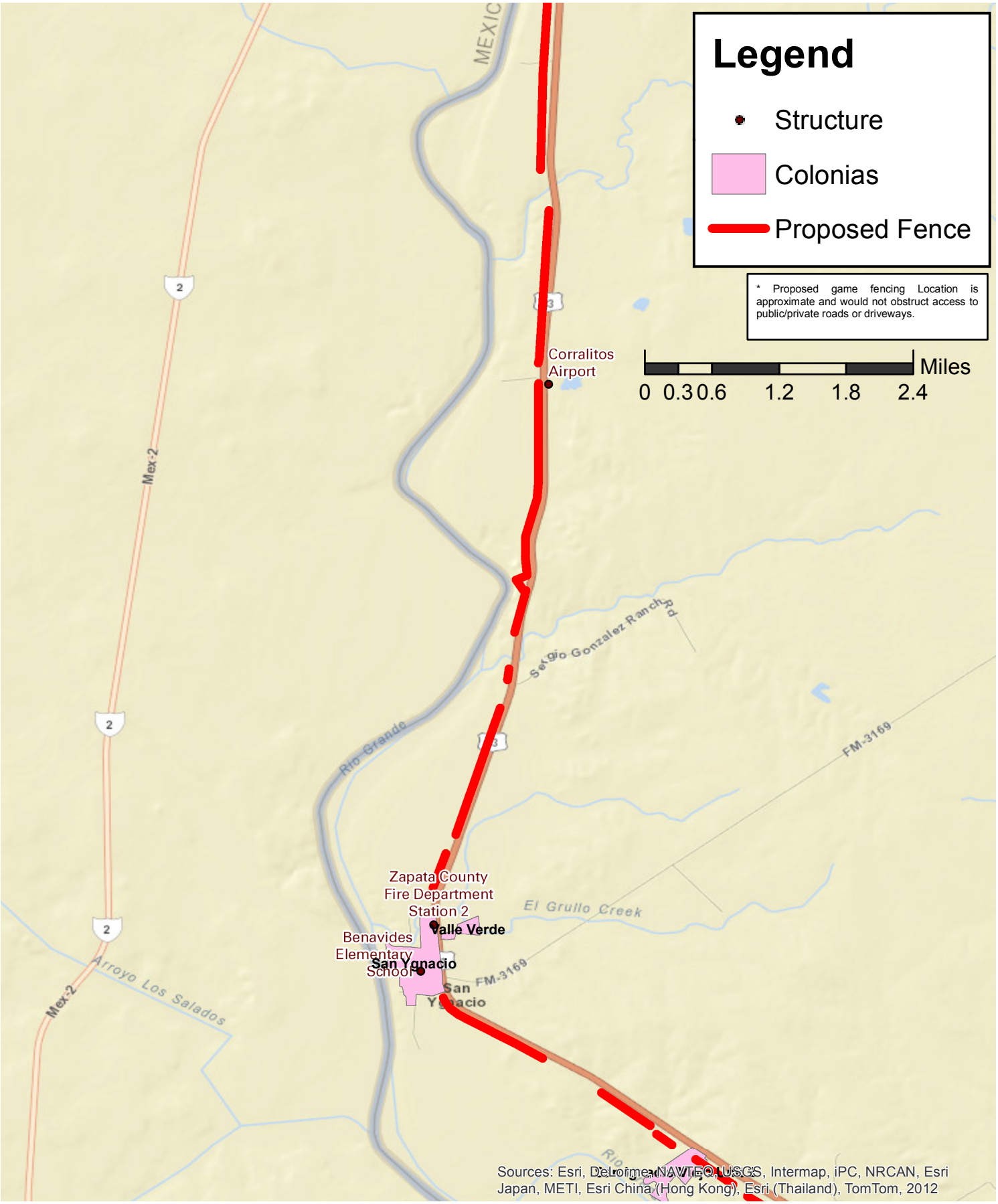

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G- Proposed Tick Control Barrier. Zapata County, Texas

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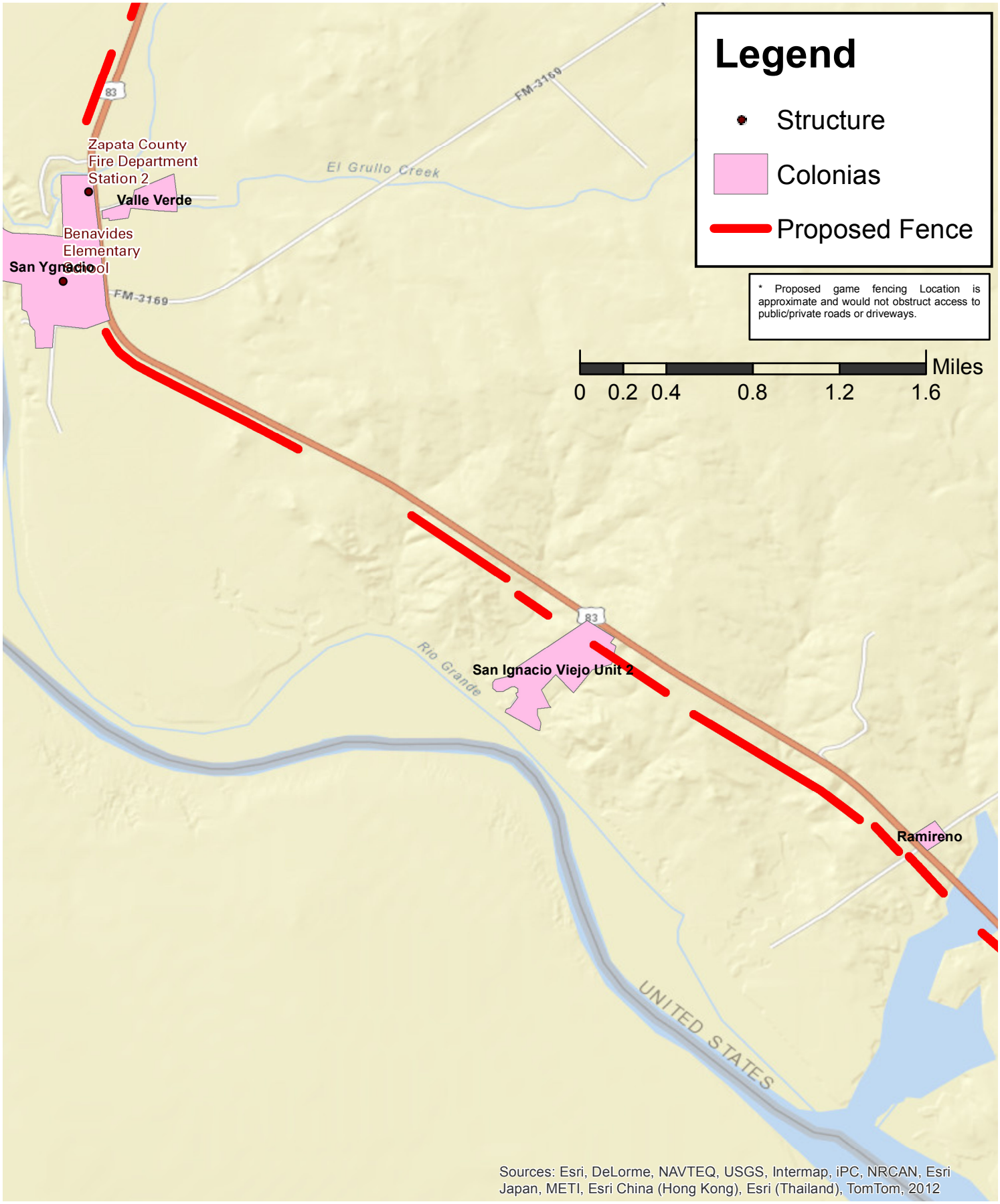

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H - Proposed Tick Control Barrier. Zapata County, Texas

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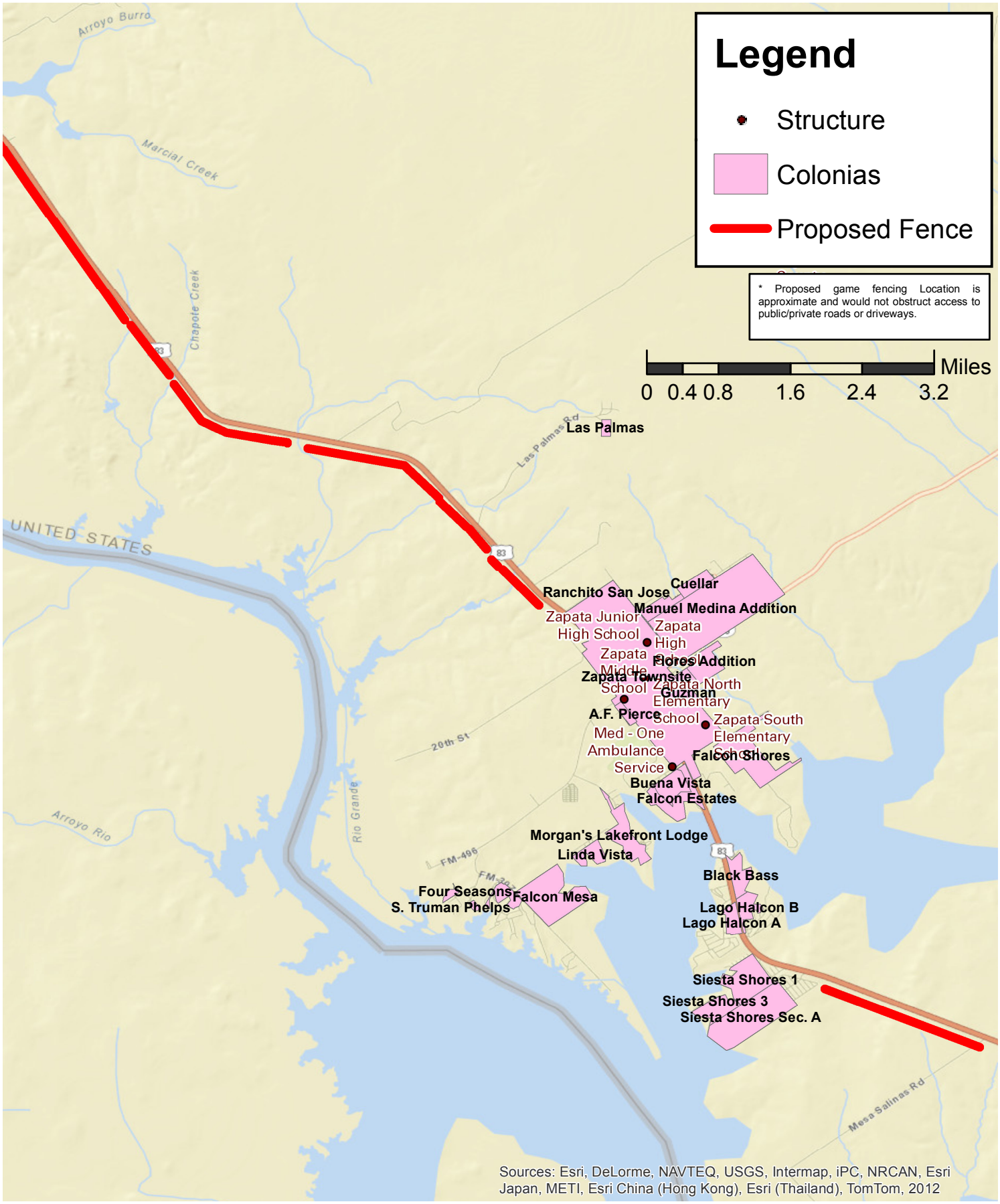

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J- Proposed Tick Control Barrier. Zapata County, Texas

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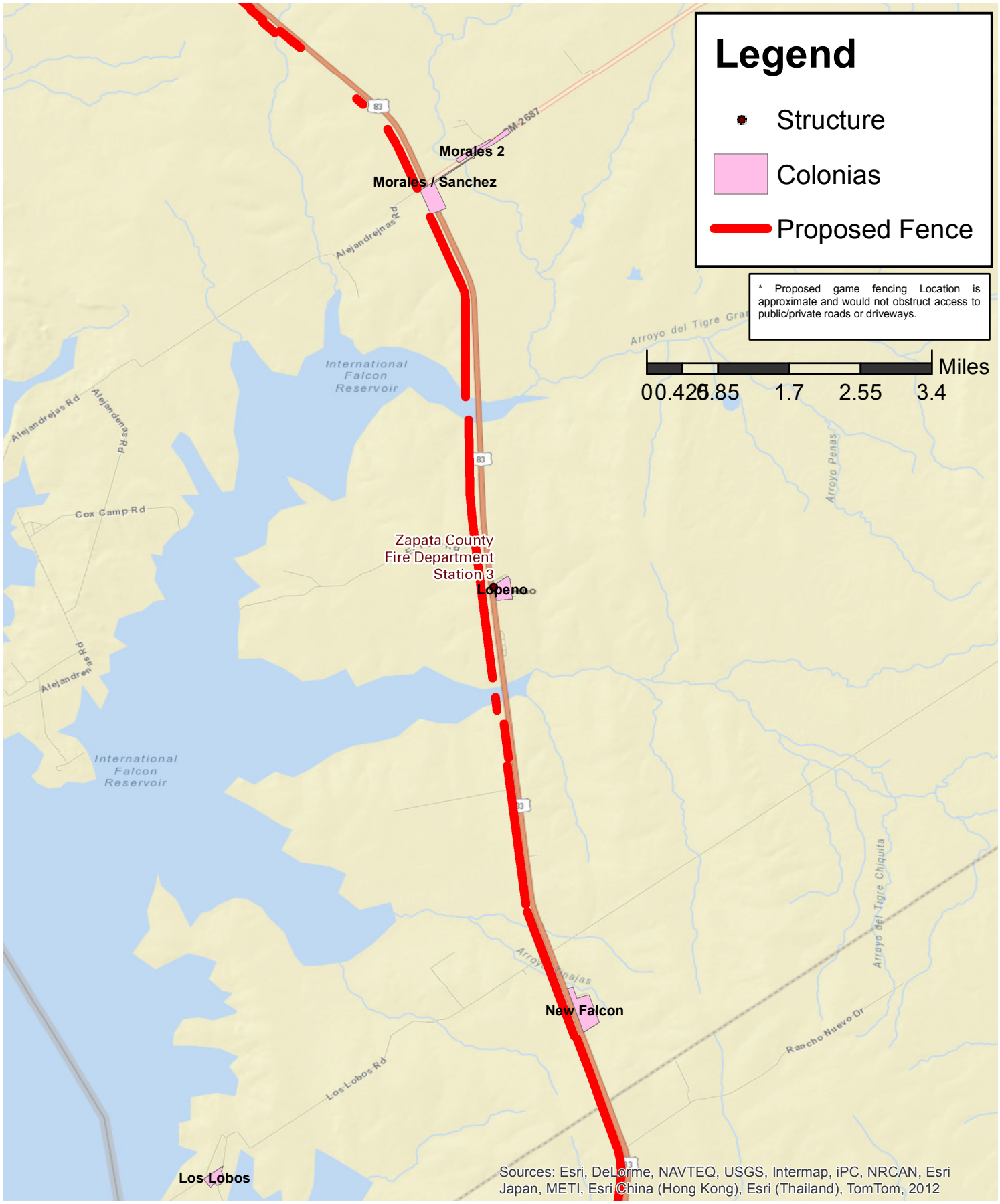

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K- Proposed Tick Control Barrier. Starr County, Texas

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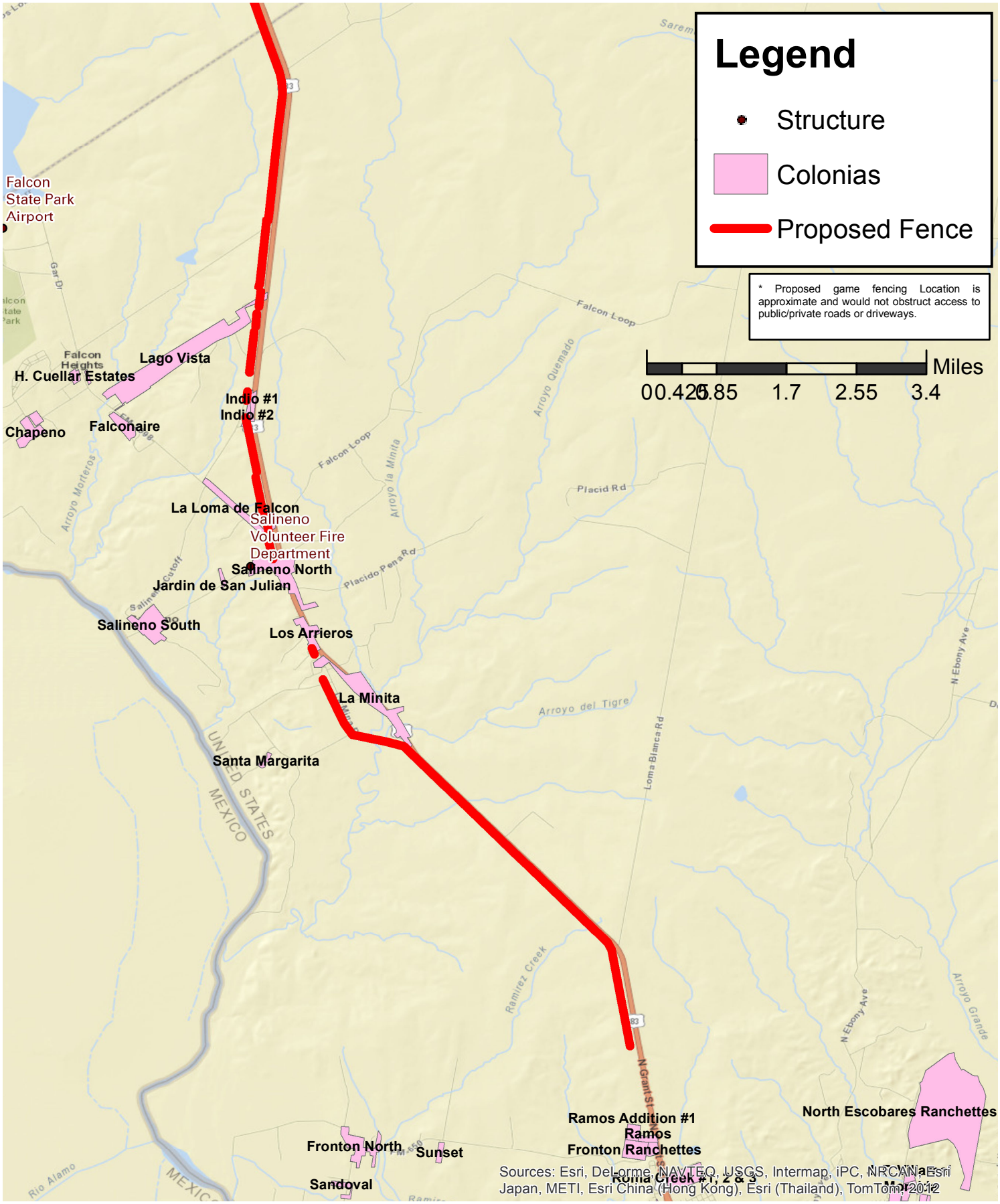

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Appendix K. Additional Historic/ Cultural Information

I. County Historical Commission Chairs contacted in 2009

Maverick County
John Sullivan, Acting Chair
830-773-3824
jsullivan@maverickcounty.org

Starr County
Sam Ramos
146 Old Sauz Road, Rio Grande, Texas 78582
956-500-0224
Samramos66@hotmail.com

Zapata County
Guadalupe Pacheco
P.O. Box 10599, Zapata, Texas 78076
956-765-3062

II. County Historical Commission Chairs contacted in 2013

Webb County
Elisa Gutierrez
210 West Oak Circle, Laredo, Texas 78041
Gutierrez0265g@yahoo.com

Zapata County
Diana Brandon, P.O. Box 56, Zapata, 78076
956-500-6088
dbrandon227@yahoo.com

III. Summary of Historic Sites

Table K-1. Historic Sites Identified In Or Near The Area Of Potential Effects In Each County Where Cattle-Fever Tick Fencing Is Proposed To Be Installed[1]

County	Name of site	Relative location	Summarized uses
Maverick	Fort Duncan	Bounded by Monroe and Garrison Sts,. city limits on the S, and the Rio Grande on the W, Eagle Pass	1825-1849 Military Fortification; currently Museum/ Park; Landscape, Recreation and Culture
Maverick	Maverick County Courthouse	Public Square, Eagle Pass	1875-1899 and currently Correctional Facility, Courthouse

Table K-1: (cont'd)

County	Name of site	Relative location	Summarized uses
Starr	Fort Ringgold Historic District	Rio Grande City School grounds, 1/4 mi. SE of jct. of US 83 and TX 755, Rio Grande City	1825-1949 Defense, Domestic, Landscape; currently plaza and school
Starr	Guerra, Fred and Nell Kain House	800 Blk. W Main, Rio Grande City	1925-1949 Mission/Spanish revival Architecture; currently not in use
Starr	LaBorde House, Store and Hotel	601 E Main St., Rio Grande City	1875-1924 Greek Revival / Late Victorian Architecture, Commerce, Trade, Domestic; currently hotel
Starr	Mifflin Kenedy Warehouse and Old Starr County Courthouse	200 Blk. W Water St., Rio Grande	1850-1899 Commerce, Politics, Government; currently Government
Starr	Rio Grande City Downtown Historic District	Roughly bounded by N Corpus, E Wimpy, N Avasolo and E Mirasoles, Rio Grande	1825-1949 Late Victorian Architecture, Commerce, Trade, Domestic; currently not in use
Starr	Roma Historic District	Properties along Estrella and Hidalgo Sts. between Garfield St. and Bravo Alley, Roma	1825-1924 Classical Revival Architecture; currently Commerce, Trade, Domestic, Government, Landscape, Religion, Transportation
Starr	Roma-San Pedro International Bridge	SW of Hidalgo St. and Bravo Alley, Roma-Los Saenz	1925-1949 Engineering, Commerce, Transportation; currently Road-Related
Starr	Yzaquirre--Longoria House	107 W Water St., Rio Grande	1850-1974 Architecture, Engineering, Domestic Dwelling; currently not in use
Starr	de la Pena, Silverio, Drugstore and Post Office	423 E Main St., Rio Grande City	1875-1924 Architecture, Engineering, Commerce, Trade, Government; currently Commerce, Trade, Domestic
Webb	All historic sites are more than 20 miles from the areas proposed for game fencing. The list of these sites is in the Administrative Record.		
Zapata	Dolores Nuevo	Address restricted	1850-1874 Hispano-Mexican Exploration / Settlement; currently Agriculture, Subsistence
Zapata	Dolores Viejo	Address restricted	1750-1799 Spanish Exploration / Settlement, Architecture; currently Landscape
Zapata	San Francisco Ranch	1 mi. N of San Ygnacio, San Ygnacio	1875-1899 Agriculture / Subsistence, Domestic; currently Agricultural Fields
Zapata	Corralitos Ranch (within CFTPZ but not near the fence?)	2 mi. N of San Ygnacio off U.S. 83, San Ygnacio	1950-1899 Hispano-Mexican Agriculture / Subsistence, Domestic; currently in other uses
Zapata	San Ygnacio Historic District	Town of San Ygnacio	1825-1900 Architecture / Engineering Domestic Dwelling; currently Domestic Dwelling
Zapata	Trevino--Uribe Rancho	Jct. of Uribe and Trevino Sts., San Ygnacio	1825-1949 Domestic Dwelling; currently not in use

[1] Information derived by combining search results from the National Register of Historic Places (http://www.nps.gov) and the Atlas database on the Texas Historical Commission website (http://www.thc.state.tx.us/) with ARC GIS mapping of the proposed fence locations.

IV. Tribes Contacted in 2009 and 2013

Tonkawa Tribe of Indians of Oklahoma
Don L. Patterson, President
1 Rush Buffalo Road
Tonkawa, Oklahoma 74653
580-628-2561