

Watershed Characteristics

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Goal

- ⦿ Present current land-use characteristics in the watershed
- ⦿ This information will be utilized identify pollution loadings, management measures, and prioritize critical areas as the WPP is developed

Cibolo Watershed

- 580 sq miles (371,200 acres)
- Counties: Wilson, Guadalupe, and Bexar, small portions of Karnes and Comal
- Live Oak, Selma, Universal City, Converse, Schertz, Cibolo, Marion, Saint Hedwig, La Vernia, Stockdale



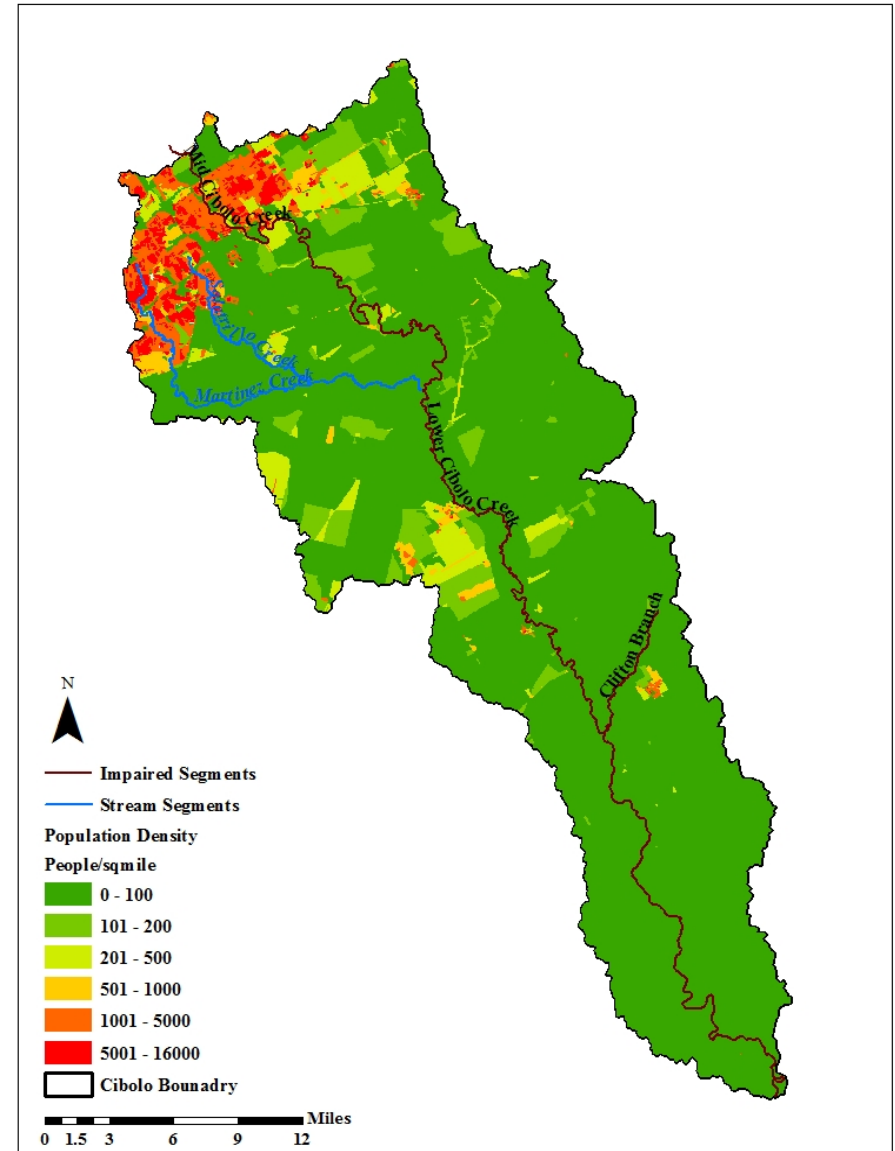
Cibolo Watershed

- Cibolo
- Converse,
- La Vernia
- Live Oak
- Marion
- Saint Hedwig
- San Antonio
- Schertz
- Selma
- Stockdale



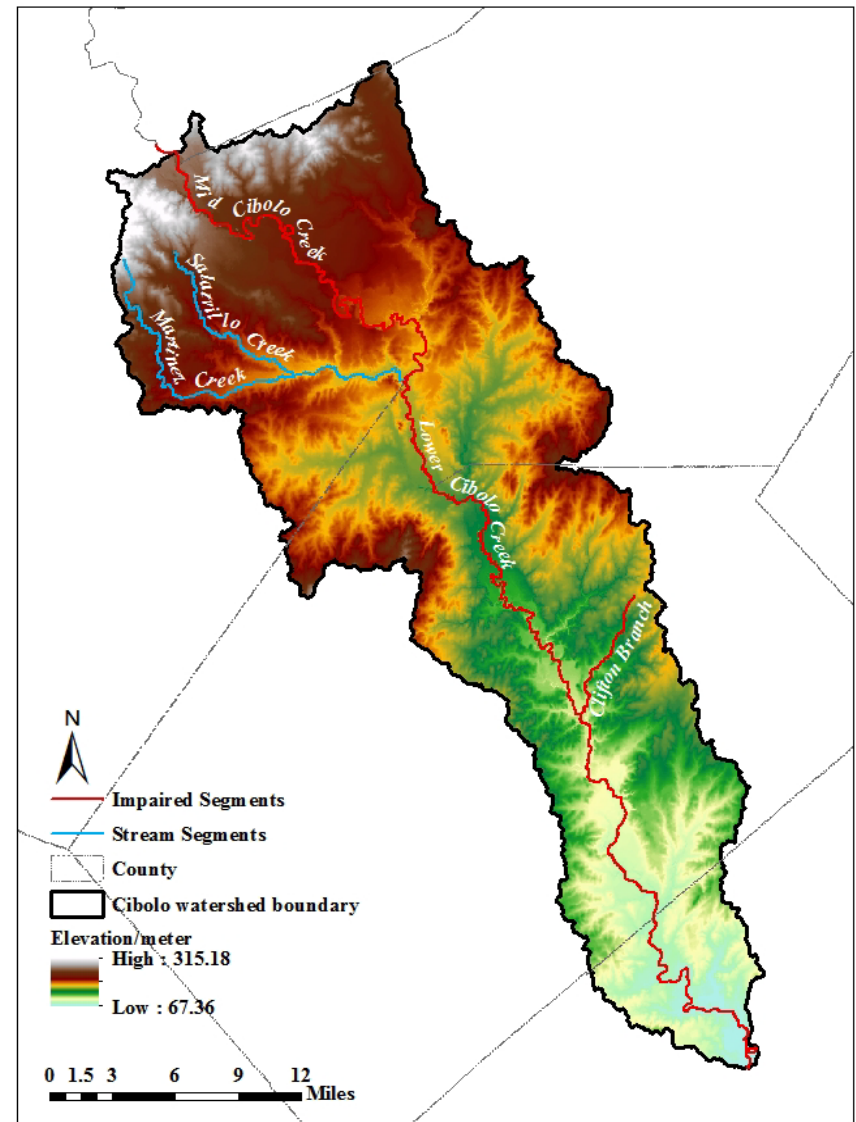
Population density

- Estimated 2010 population
- 186,154
- Based on 2010 US Census Block Data



Topography

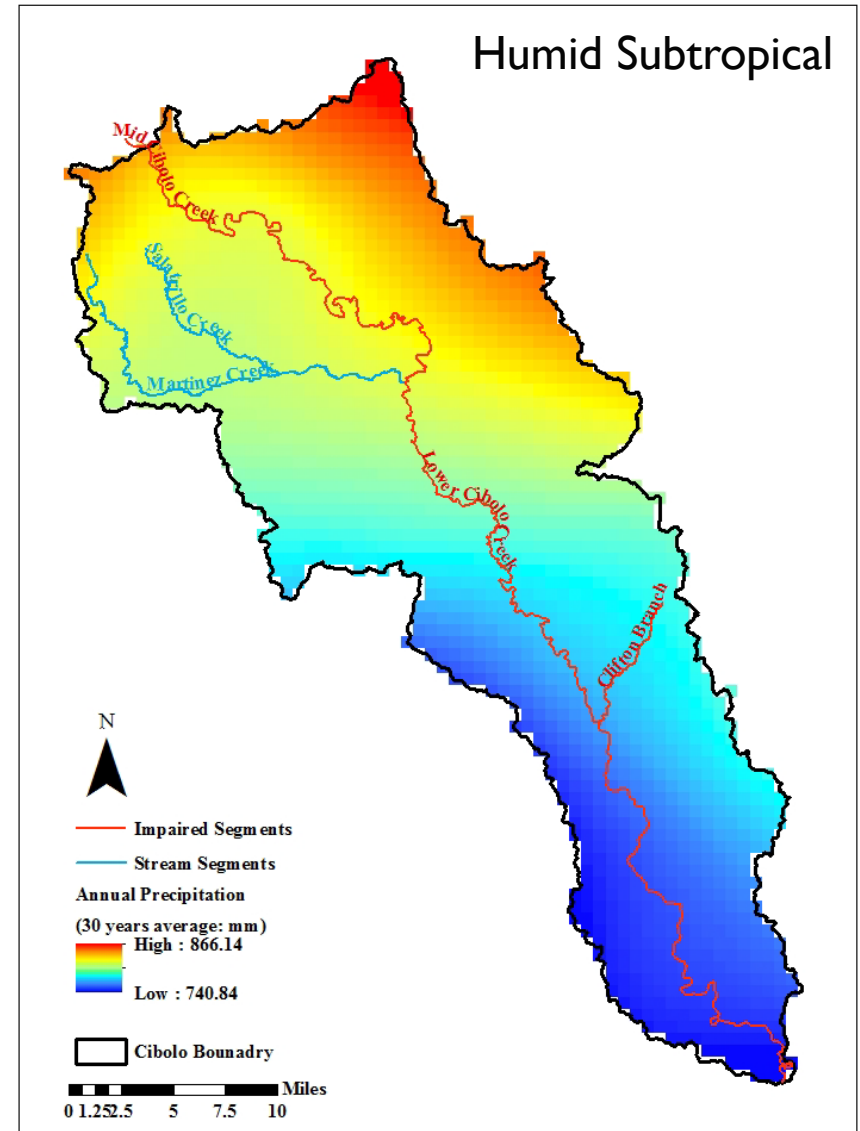
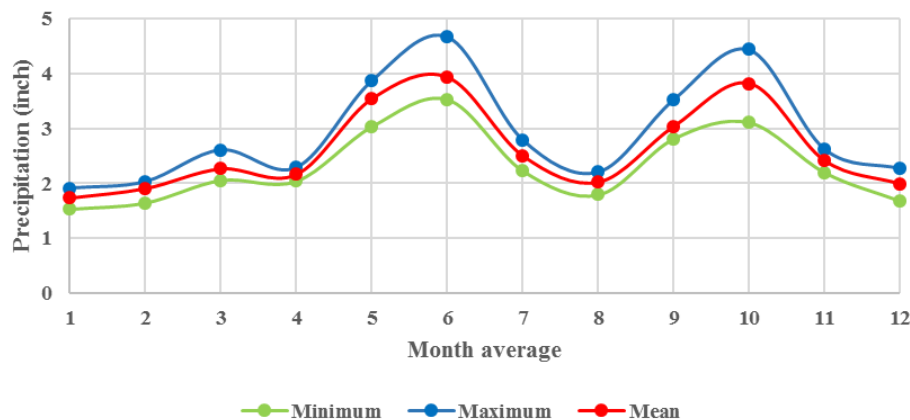
- ⦿ Elevation: 220 ft.-1033 ft.;
Average - 541 ft.



Climate

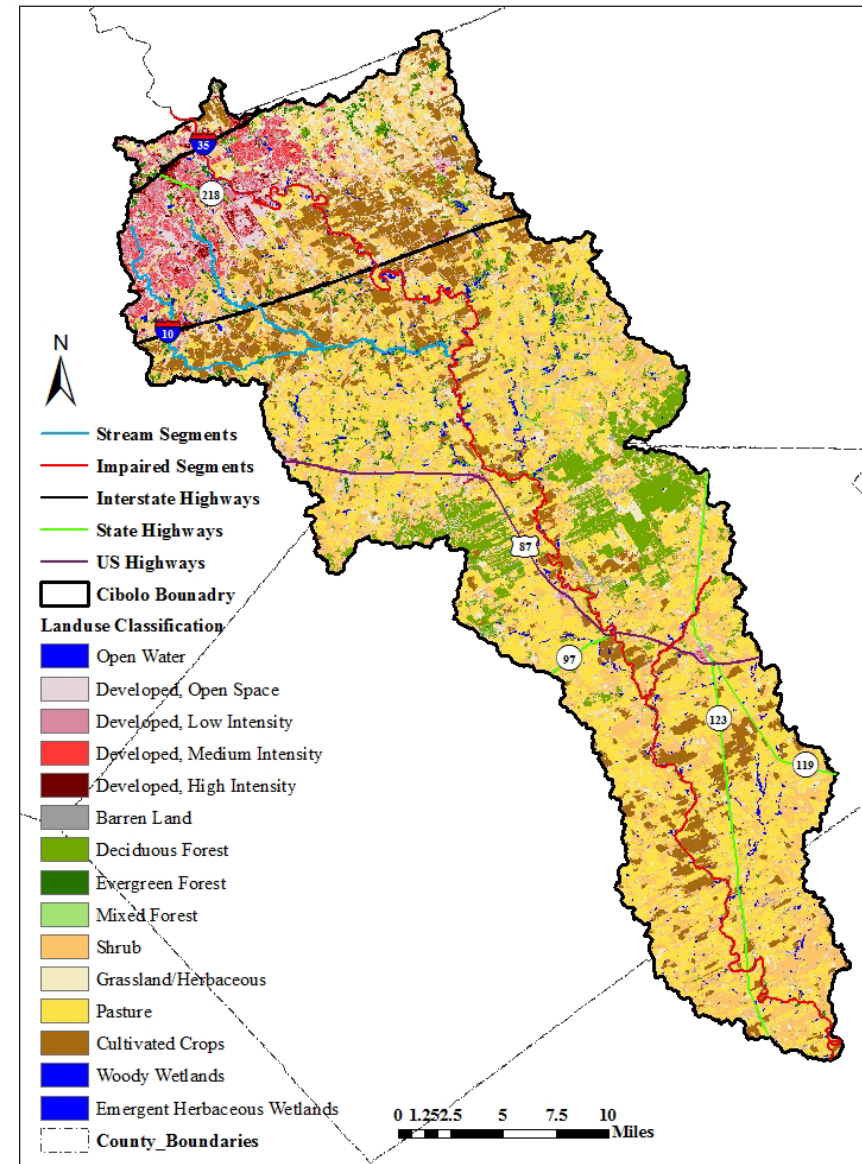
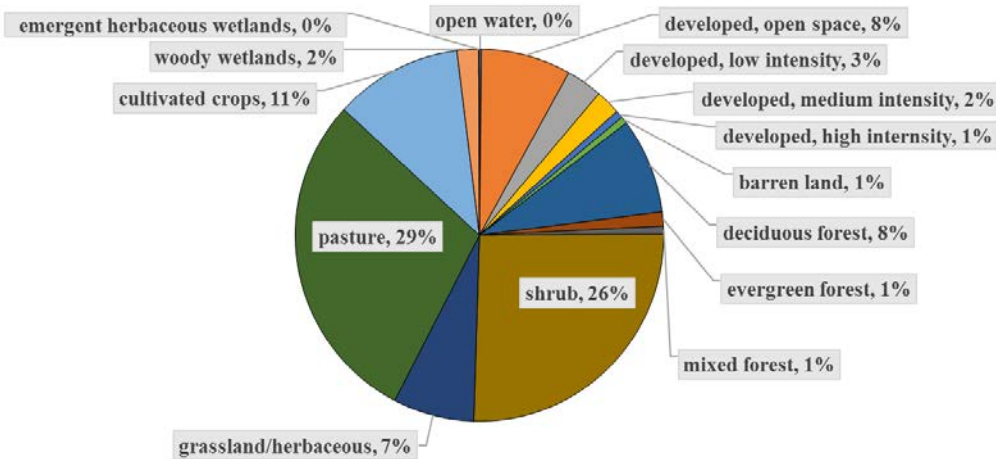
- Rainfall: annual average 29-34 inch
- Seasonal cycle: peak in June (3.93 inch) and October (3.82 inch)

Precipitation in Cibolo Watershed



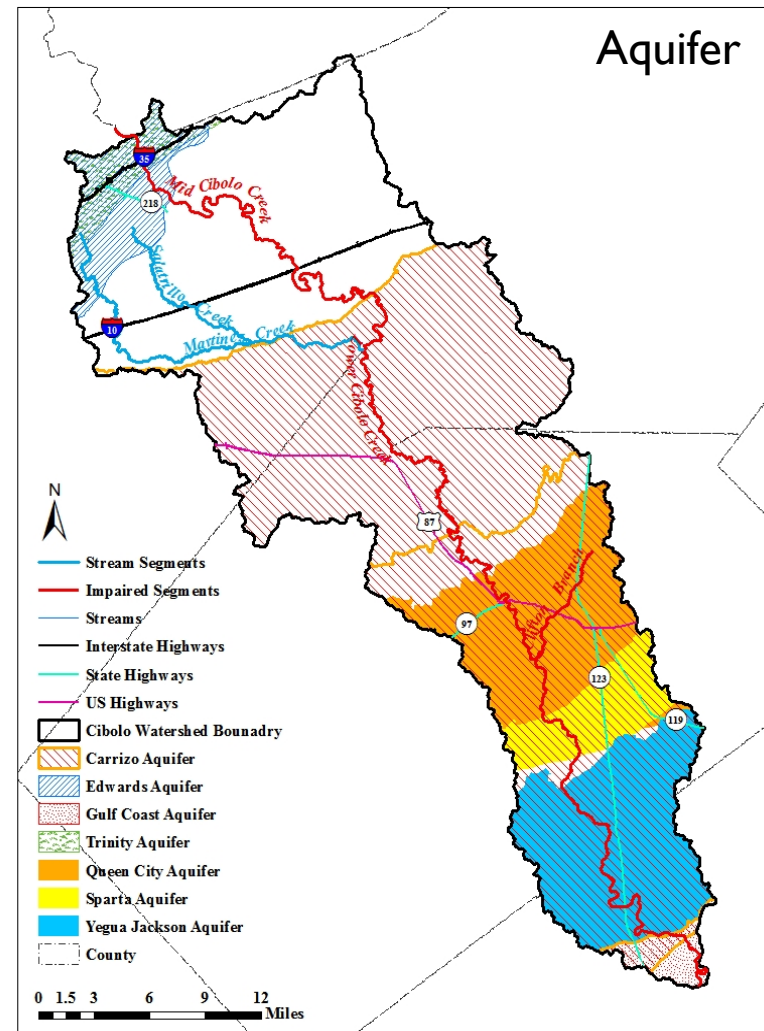
Land Cover

- 29% Pasture (107,014.4 acres)
- 26% Shrub (95,942.4 acres)
- 14% Developed (51,660.8 acres)



Groundwater Resources

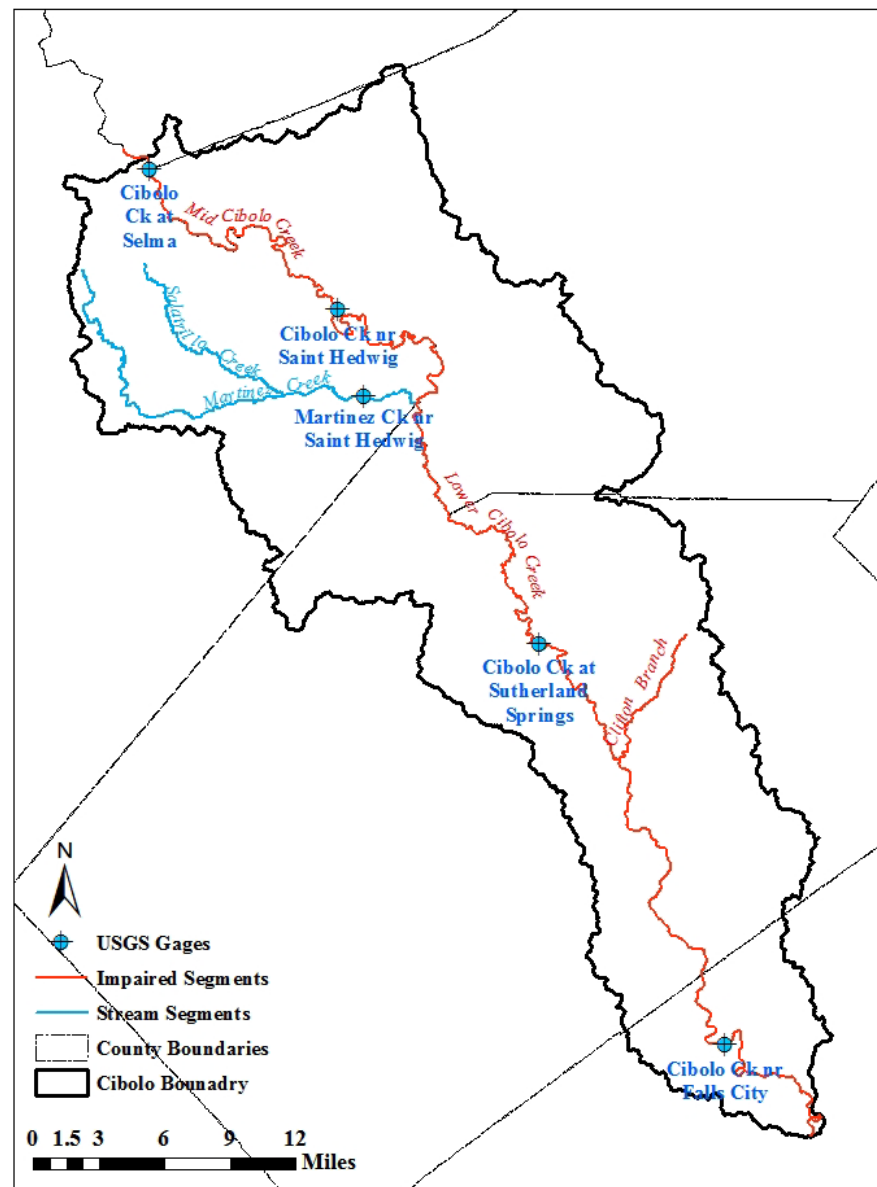
- Major Aquifers
 - Edwards and Trinity Aquifers
 - Carrizo Aquifer
- Minor Aquifers
 - Queen City
 - Sparta
 - Yegua-Jackson



River Discharge

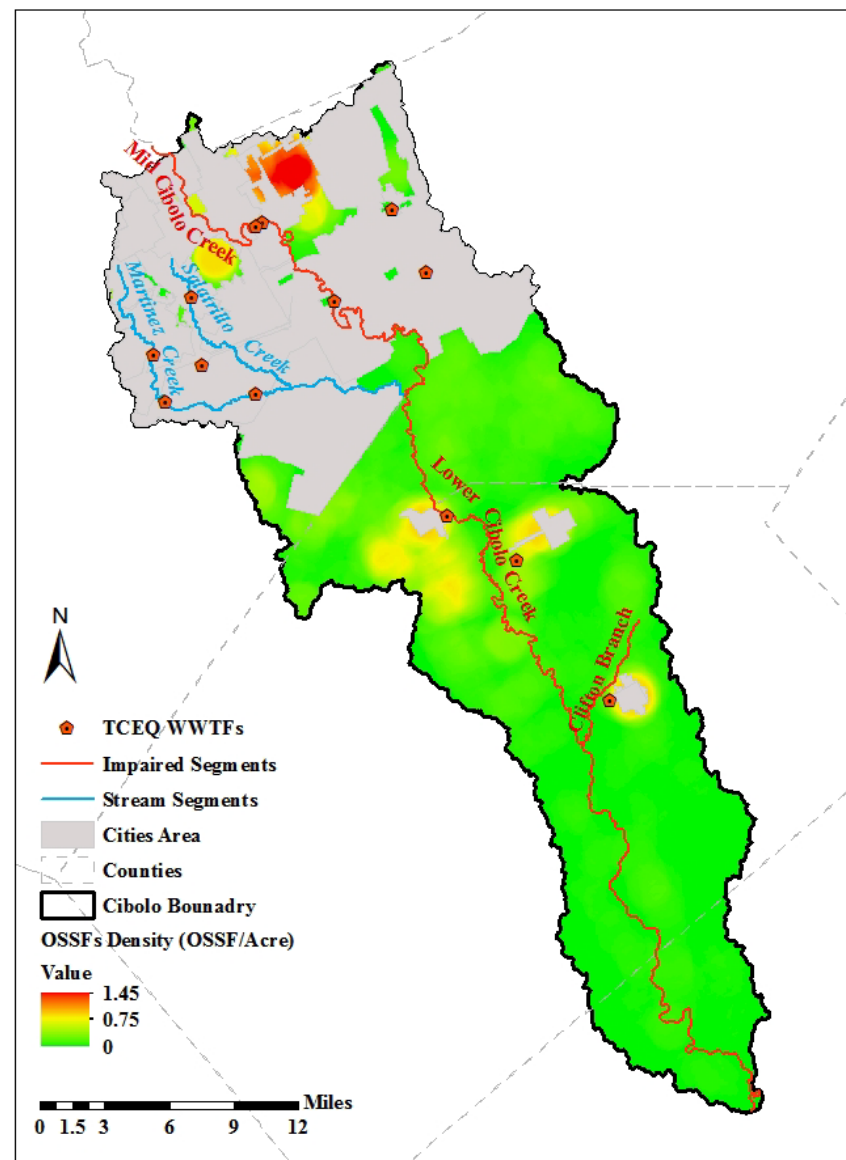
⊙ Average Annual Discharge

USGS Station	Discharge (ft ³ /s)
Cibolo Ck at Selma	35.74
Cibolo Ck nr Saint Hedwig	34.18
Martinez Ck nr Saint Hedwig	35.63
Cibolo Ck Sutherland Springs	110.06
Cibolo Ck nr Fall City	184.32



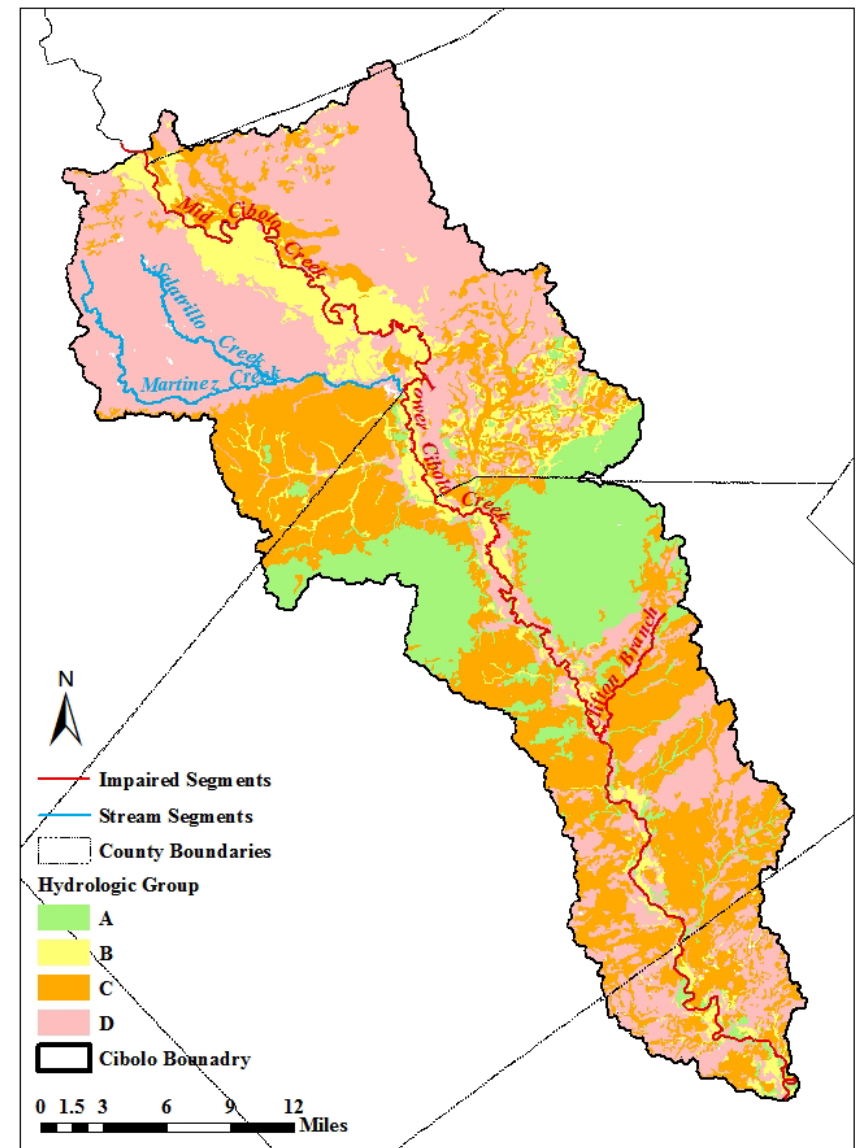
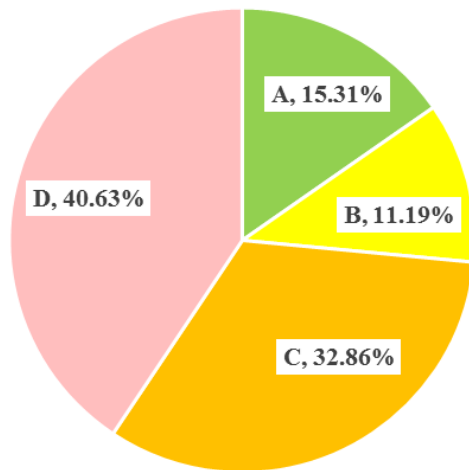
OSSF Estimate

⊙ ~16,231 OSSFs



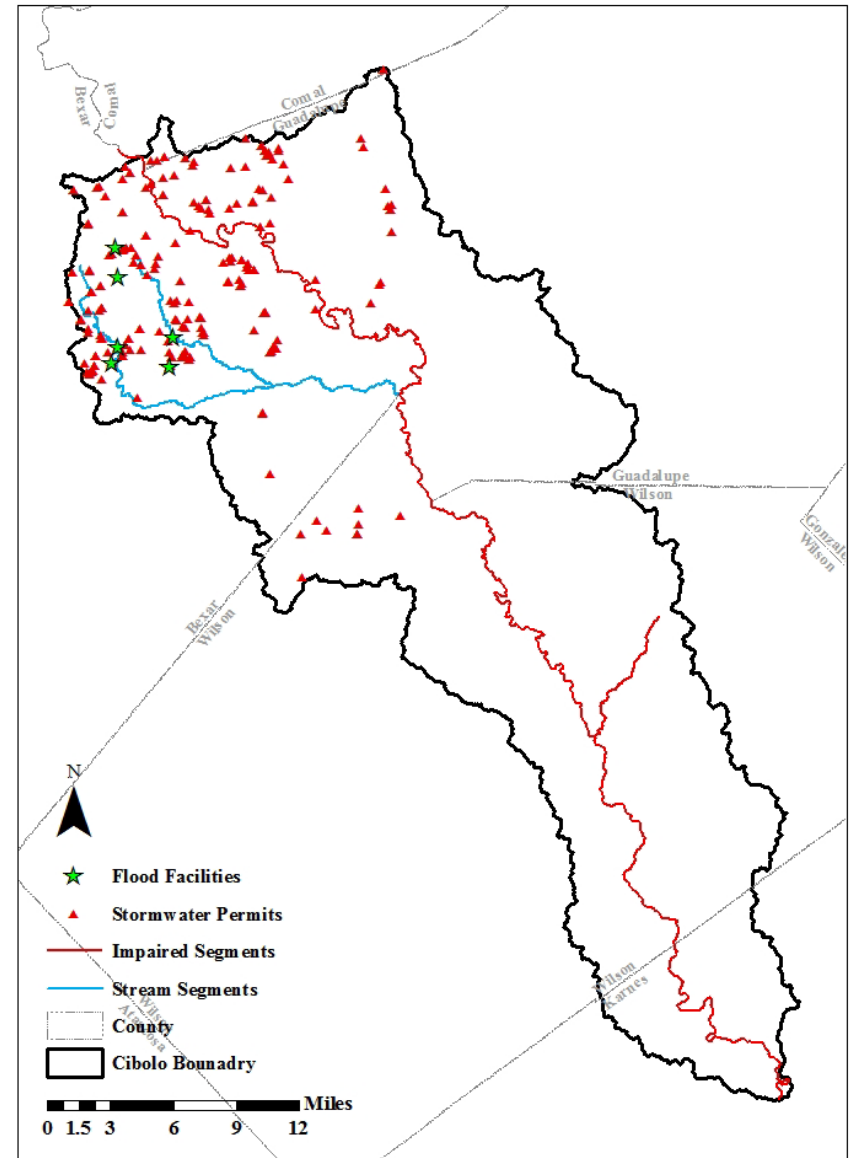
Soil

- Hydrologic Soil Groups- Describes runoff potential
- D (highest runoff potential and lowest infiltration) ~150,641 acres



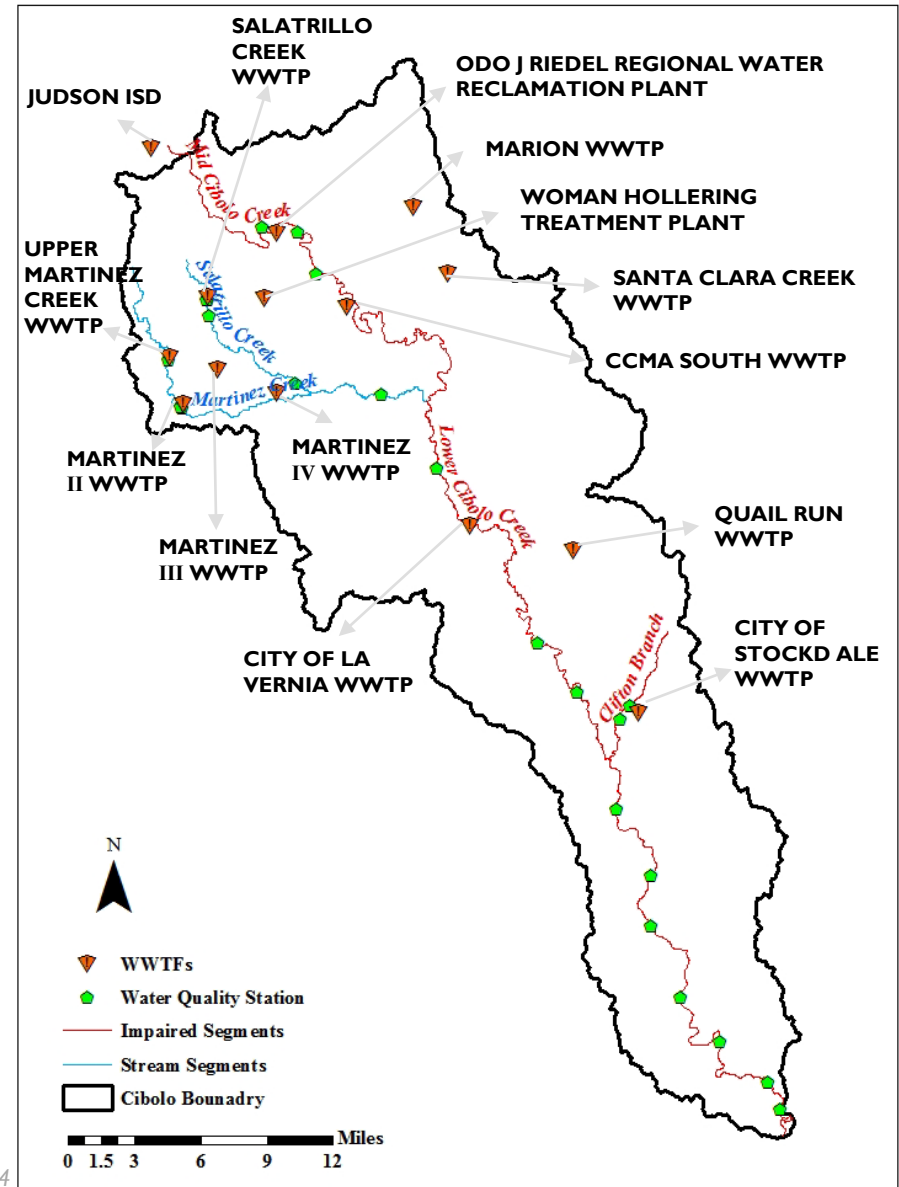
Stormwater permits

- 237 stormwater permits
 - Multi-sector general permit for industrial activities
 - Covers stormwater from manufacturing, processing, material storage, and waste disposal facilities
- MS4 Stormwater Permits
 - San Antonio (Phase I)
 - Universal City
 - Converse
 - Live Oak
 - Schertz
 - Cibolo
 - Marion
 - Selma
 - Bexar County
 - JBSA Randolph



Wastewater Treatment Facilities

14 Wastewater Treatment Facility Permits



WWTFs

Permit #	Permittee	Name	Received waterbody	Design Flow(MGD)	
WQ0015141001	Judson Independent School District	JUDSON ISD	Mid Cibolo Creek	0.03	
WQ0011269001	CCMA	ODO J RIEDEL REGIONAL WATER RECLAMATION PLANT	Mid Cibolo Creek	6.2	
WQ0015334001	CCMA	CCMA SOUTH WWTP	Mid Cibolo Creek	0.5	Permitted/Not Operational
WQ0010048001	City of Marion	MARION WWTP	Lower Cibolo Creek	0.2	
WQ0015360001	Green Valley Special Utility District	SANTA CLARA CREEK WWTP	Lower Cibolo Creek	5	Permitted/Not Operational
WQ0010292001	City of La Vernia	CITY OF LA VERNIA WWTP	Lower Cibolo Creek	0.25	
WQ0014672001	South Central Water Company	QUAIL RUN WWTP	Lower Cibolo Creek	0.075	
WQ0010292001	Stockdale	CITY OF STOCKDALE WWTP	Lower Cibolo Creek	0.3	
WQ0010749001	SARA	SALATRILLO CREEK WWTP	Salitrillo Ck	5.83	
WQ0015371001	City of Schertz	WOMAN HOLLERING TREATMENT PLANT	Womans Hollow Ck	0.046	
WQ0010749003	SARA	UPPER MARTINEZ CREEK WWTP	Martinez Ck	2.21	
WQ0014042001	SARA	MARTINEZ III WWTP	Escondido Ck	0.15	
WQ0010749004	SARA	MARTINEZ II WWTP	Martinez Ck	2	
WQ0010749007	SARA	MARTINEZ IV WWTP	Martinez Ck	2	Permitted/Not Operational

24.8 MGD

Wastewater Permitting

- ⦿ Permitting and enforcement overseen by TCEQ
- ⦿ Permitting –
 - ⦿ Administrative and Technical Review - TCEQ receives permit applications (new, amendments, or renewals)
 - ⦿ Develop models based on stream uses, standards criteria, other dischargers, and the proposed effluent quality and flow rate to evaluate impact on stream
 - ⦿ Must be consistent with TMDLs and the Water Quality Management Plan (Texas's waste treatment plan that includes effluent limits) (https://www.tceq.texas.gov/permitting/wqmp/WQmanagement_definition.html)

Wastewater Permitting

- ⦿ Permitting and enforcement overseen by TCEQ
- ⦿ Permitting (continued)—
 - ⦿ TCEQ receive public comment and if requested can hold a public meeting regarding the application and draft permit.
 - ⦿ TCEQ will advertise all public meetings and notices in the local newspaper, TCEQ's website, and direct mailing to landowners adjacent to the plant site, and one mile downstream of the discharge
 - ⦿ Anyone that requests to be added or makes comments on the permit will be included on the mailing list

Wastewater Permitting

- ⦿ Permitting and enforcement overseen by TCEQ
- ⦿ Enforcement –
 - ⦿ Handled by regional office (Region 13 office in San Antonio)
 - ⦿ Comprehensive Compliance Exams every 2-5 years
 - ⦿ TCEQ conducts monitoring at the comprehensive exam
 - ⦿ TCEQ can check compliance between Compliance Exams based on On-Demand Complaints
 - ⦿ Facilities conduct monitoring to ensure compliance with discharge permits, submission frequency depends on the permit

Wastewater Permitting

- ⦿ Questions about specific facilities or to report compliance concerns?
 - ⦿ Request the WQ Investigator at TCEQ Region 13 Office: (210) 490-3096
 - ⦿ All info on discharge permits is public record and can be requested from the TCEQ state office in Austin

Wastewater Permitting

⦿ Other Resources:

- ⦿ Calendar of Public Meetings and Hearings on Permitting Cases:
<https://www.tceq.texas.gov/agency/hearings/calendar.html>
- ⦿ Search for TCEQ Public Notices (can be used to be able to comment on Applications):
<http://www14.tceq.texas.gov/epic/eNotice/index.cfm?main.home>
- ⦿ Comment on Pending Application: Comments can be made online or mailed directly to office, but must be made within 30 days of initial public notice of application.
<http://www14.tceq.texas.gov/epic/eComment/>

Thank You!

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