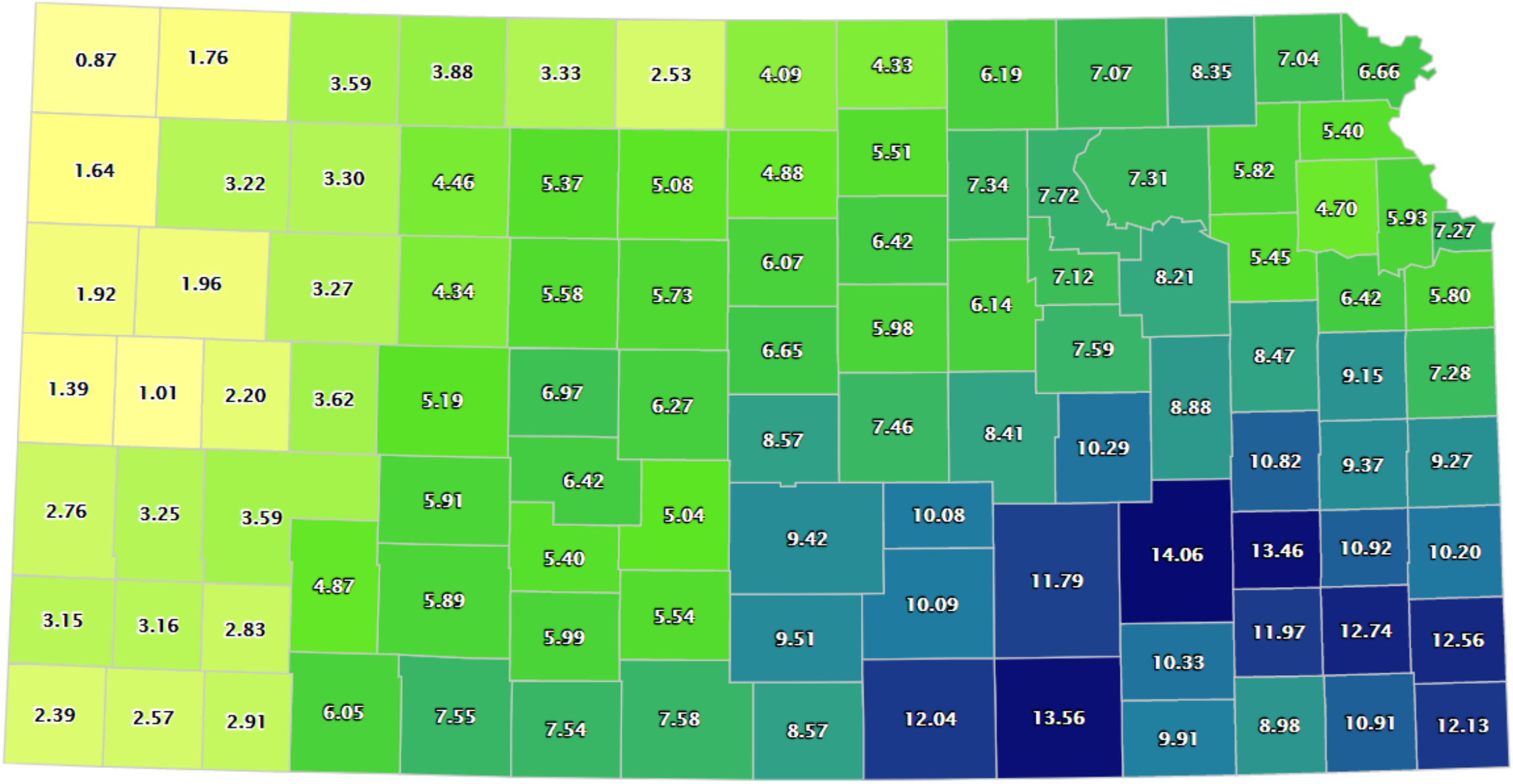
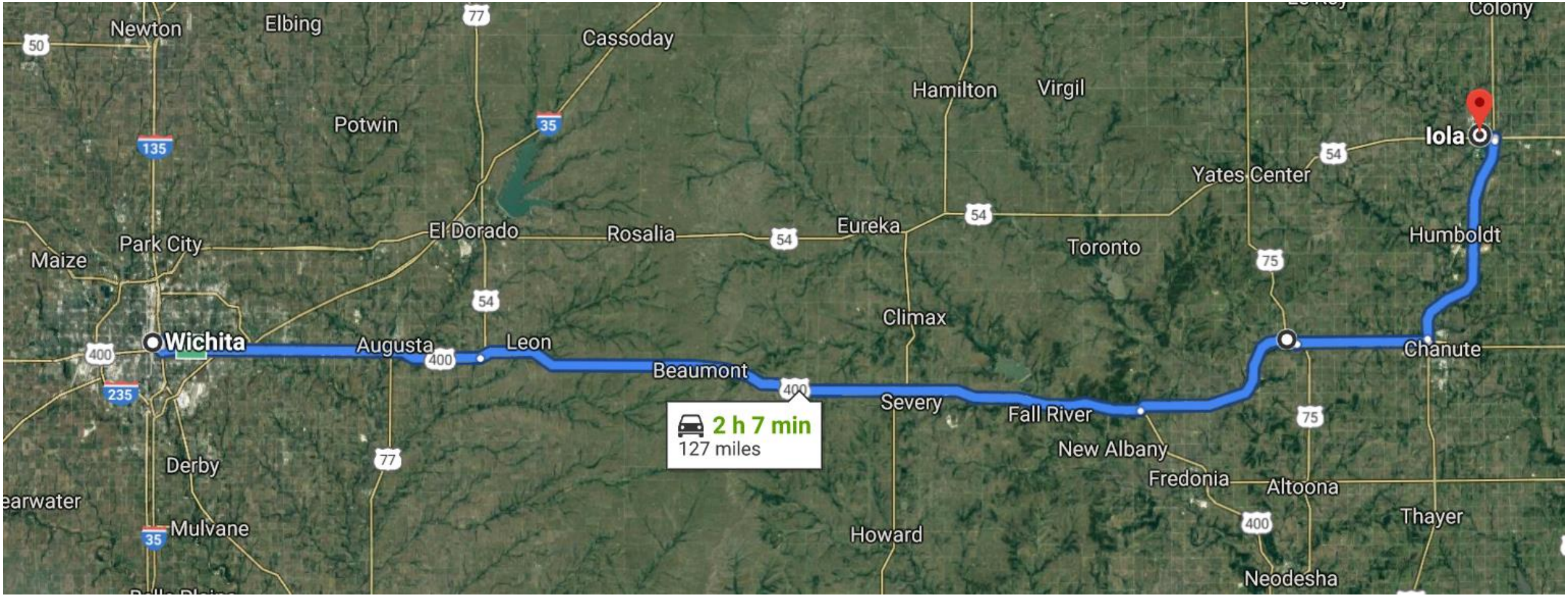
2019 FLOODING AND THE IMPACT ON WATER AND WASTEWATER FACILITIES (A BOOTS ON THE GROUND PERSPECTIVE)

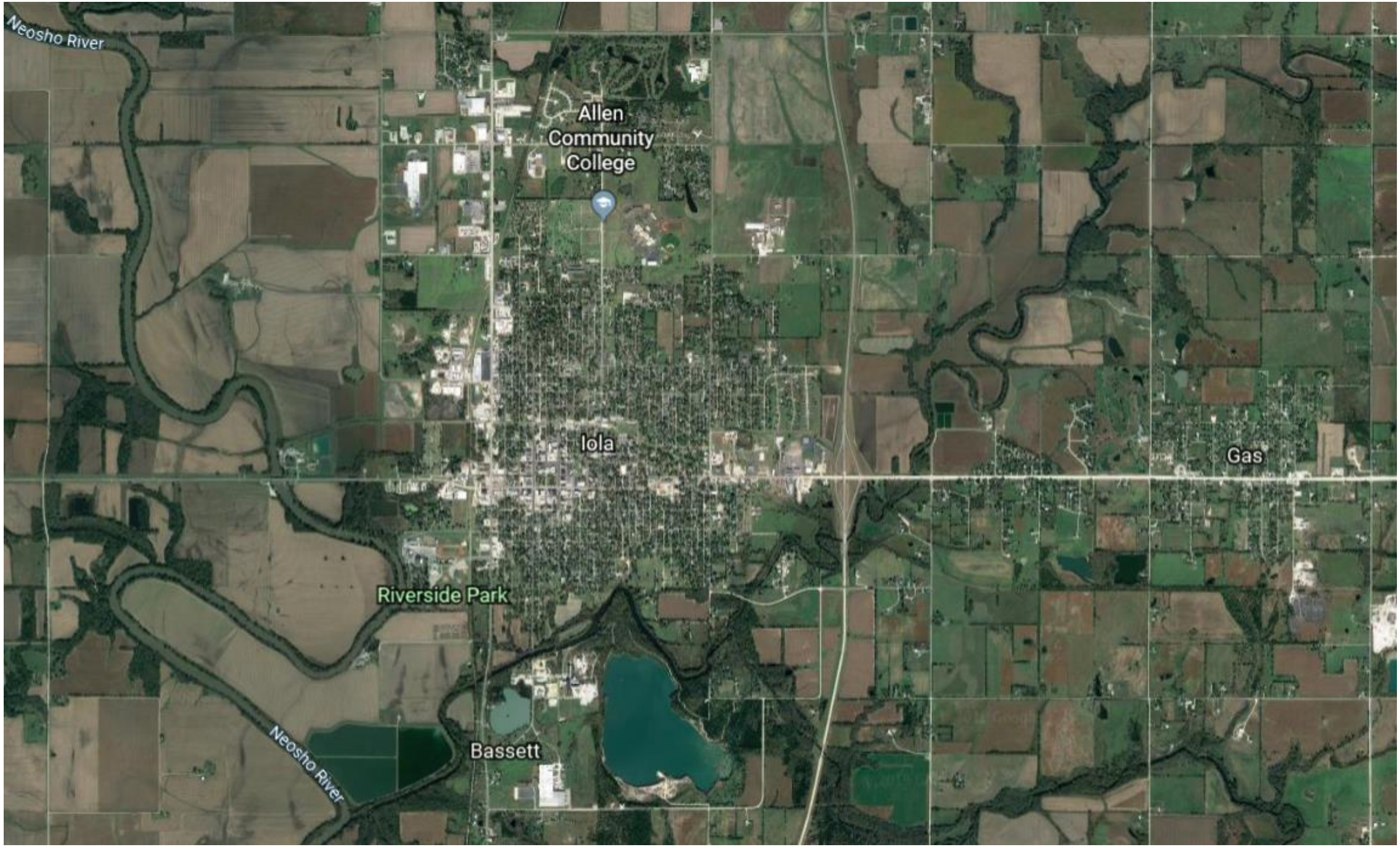
Jason Solomon & Daryn Martin
Kansas Rural Water Association

Departure from Normal for May 2019

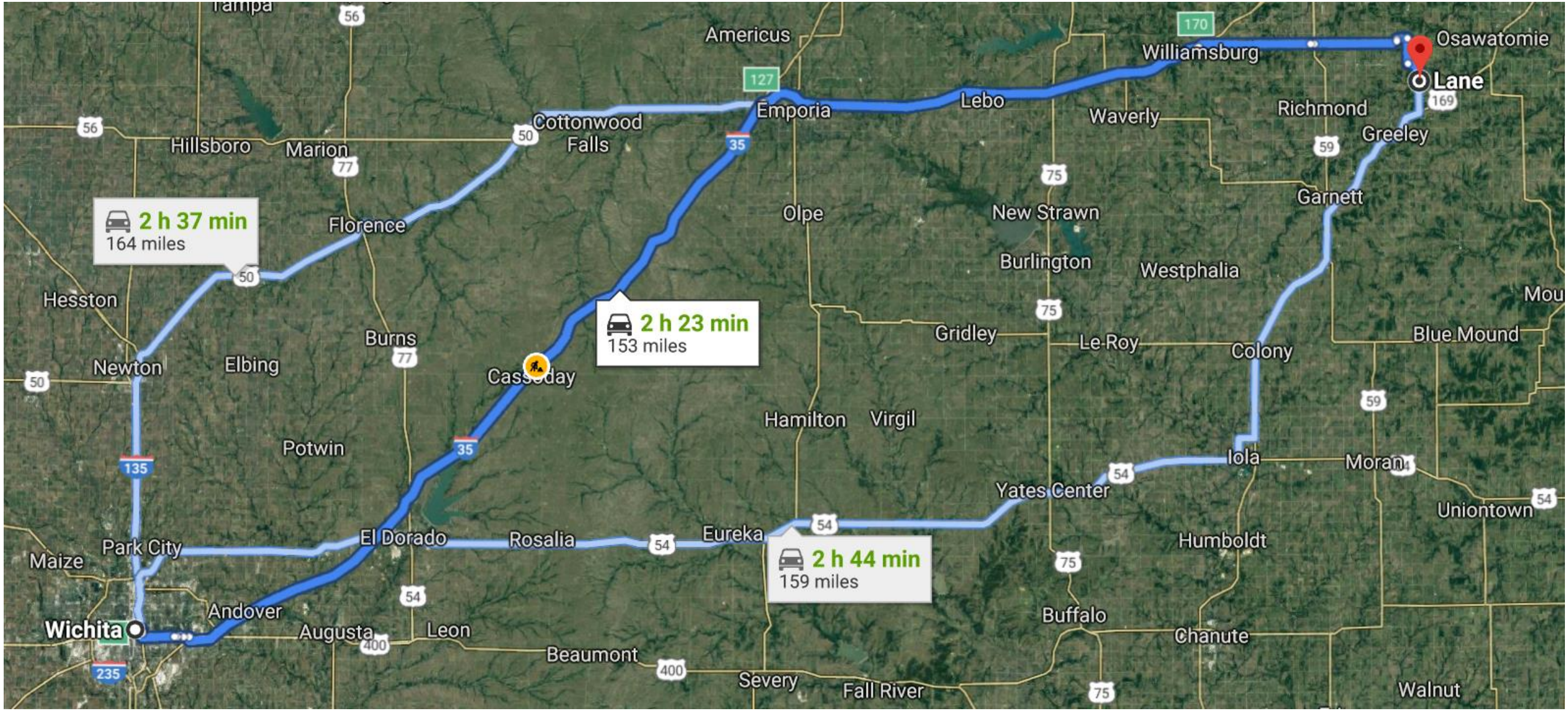


NOAA Reginal Climate Centers. (2019). Monthly Precipitation [Data Set].
Kansas State Weather Data Library. (2019). Monthly Precipitation [Data Set].

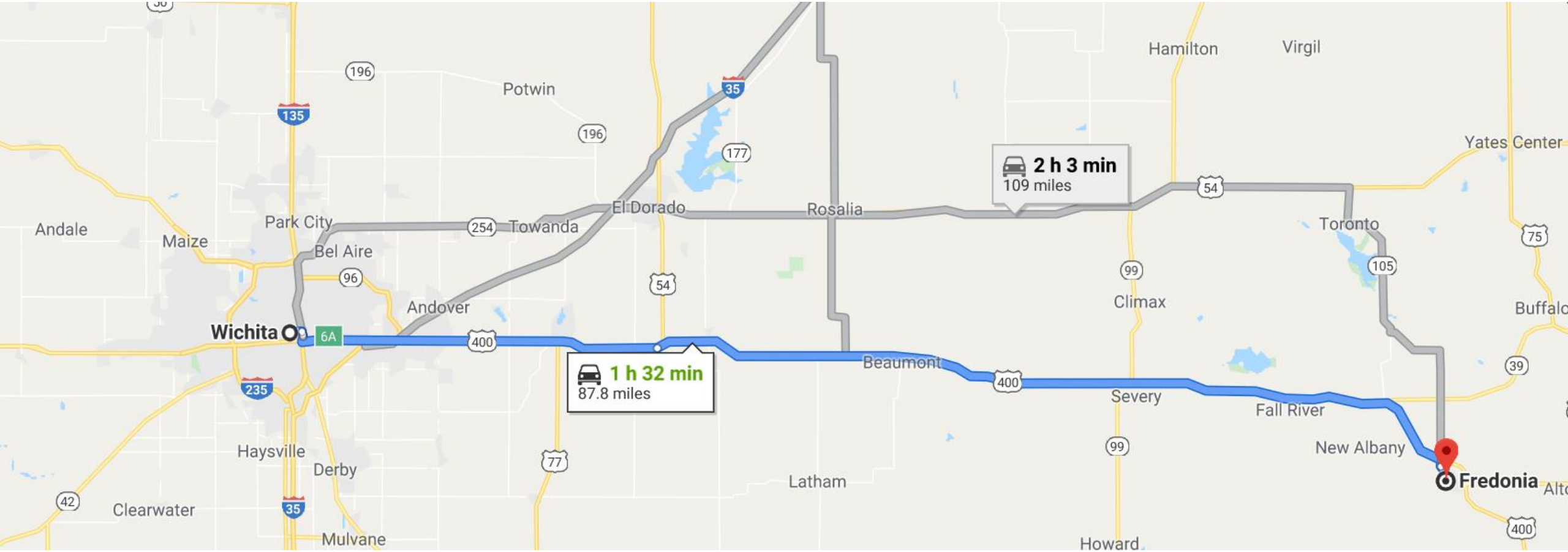

Newton
Elbing
Cassoday
Colony
Hamilton
Virgil
Potwin
Iola
Yates Center
Park City
El Dorado
Rosalia
Eureka
Toronto
Humboldt
Maize
Climax
Wichita
Augusta
Leon
Chanute
Beaumont
Severy
Fall River
2 h 7 min
127 miles
New Albany
Derby
Fredonia
Altoona
Thayer
Mulvane
Howard
Neodesha

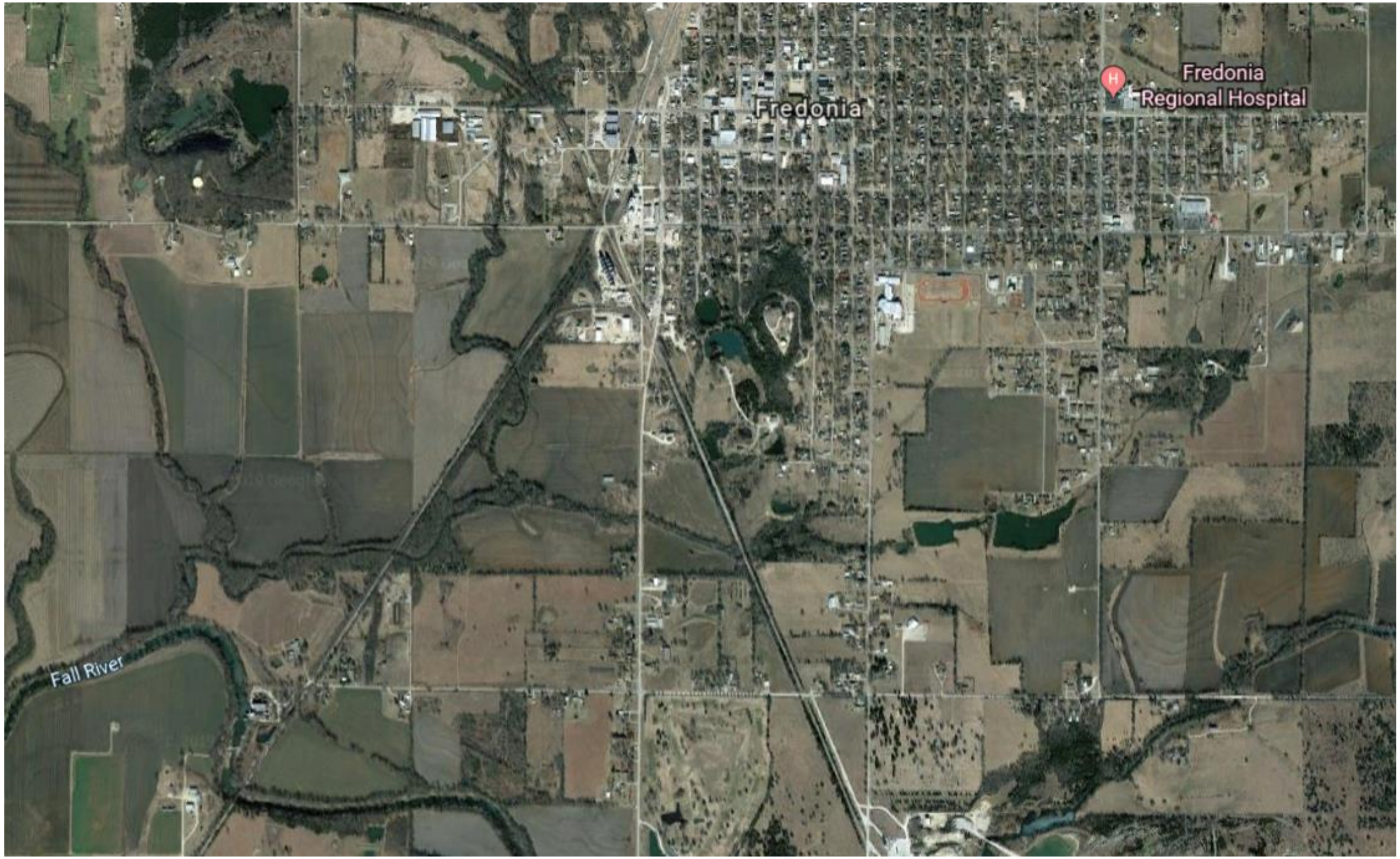

Neosho River
Allen Community College
Iola
Gas
Riverside Park
Neosho River
Bassett

Rock Creek


2 h 37 min
164 miles
2 h 23 min
153 miles
2 h 44 min
159 miles
Wichita
Lane
Osawatomie
Williamsburg
Lebo
Emporia
Americus
Cottonwood Falls
Hillsboro
Marion
Florence
Hesston
Newton
Elbing
Burns
Cassoday
Potwin
Park City
Maize
El Dorado
Andover
Augusta
Leon
Rosalia
Eureka
Beaumont
Severy
Fall River
Yates Center
Hamilton
Virgil
Olpe
New Strawn
Burlington
Gridley
Le Roy
Waverly
Westphalia
Colony
Iola
Humboldt
Buffalo
Chanute
Richmond
Greeley
Garnett
Moran
Uniontown
Blue Mound
Walnut

Lane

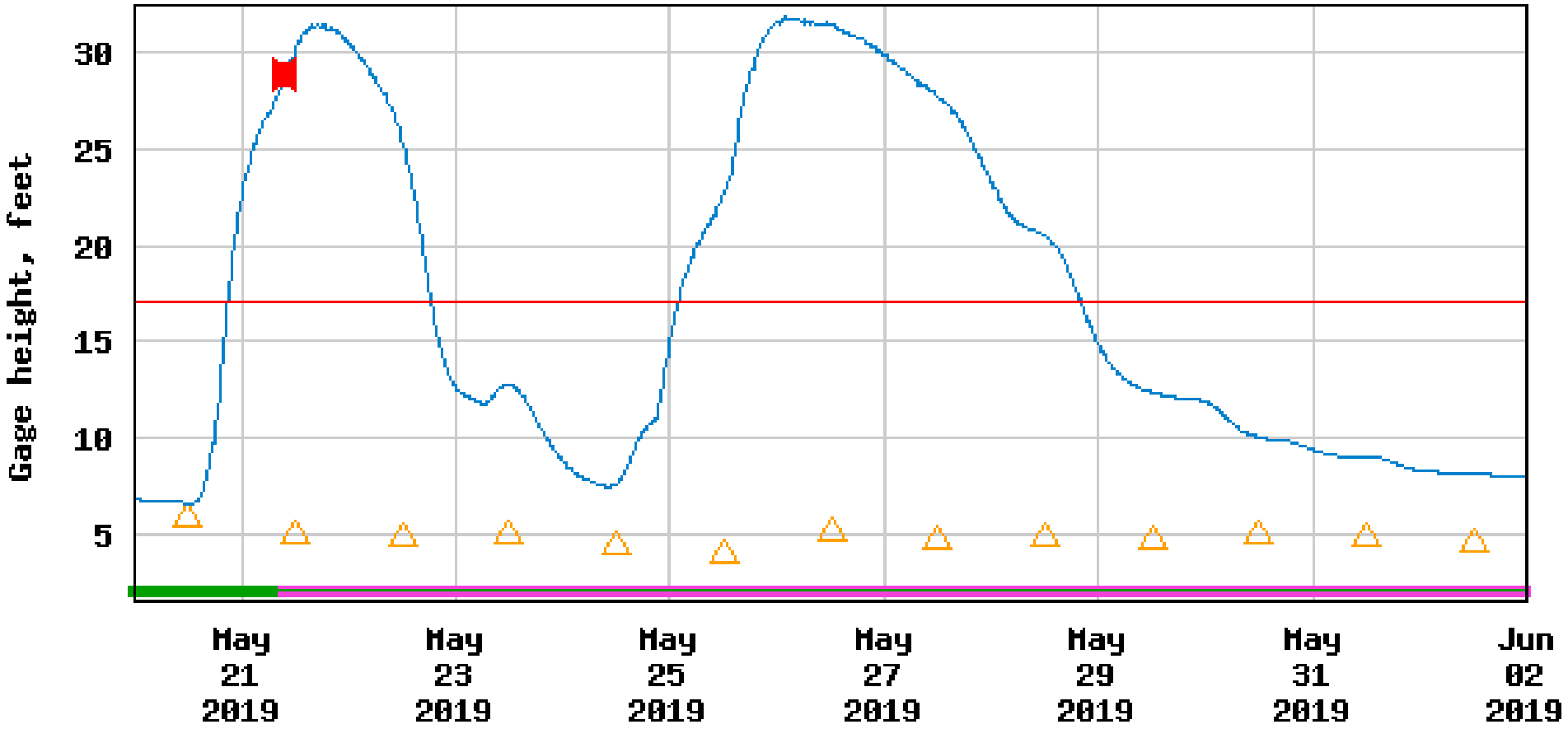

Wichita
Fredonia
2 h 3 min
109 miles
1 h 32 min
87.8 miles
Andale
Maize
Park City
Bel Aire
Andover
Potwin
Towanda
El Dorado
Rosalia
Hamilton
Virgil
Yates Center
Toronto
Climax
Beaumont
Severy
Fall River
New Albany
Latham
Howard
Haysville
Derby
Clearwater
Mulvane
Buffalo
135
35
235
196
177
254
96
54
400
6A
77
99
105
75
39
42


Fredonia
Fredonia
Regional Hospital
Fall River

Fall River
Fall River
Fall River

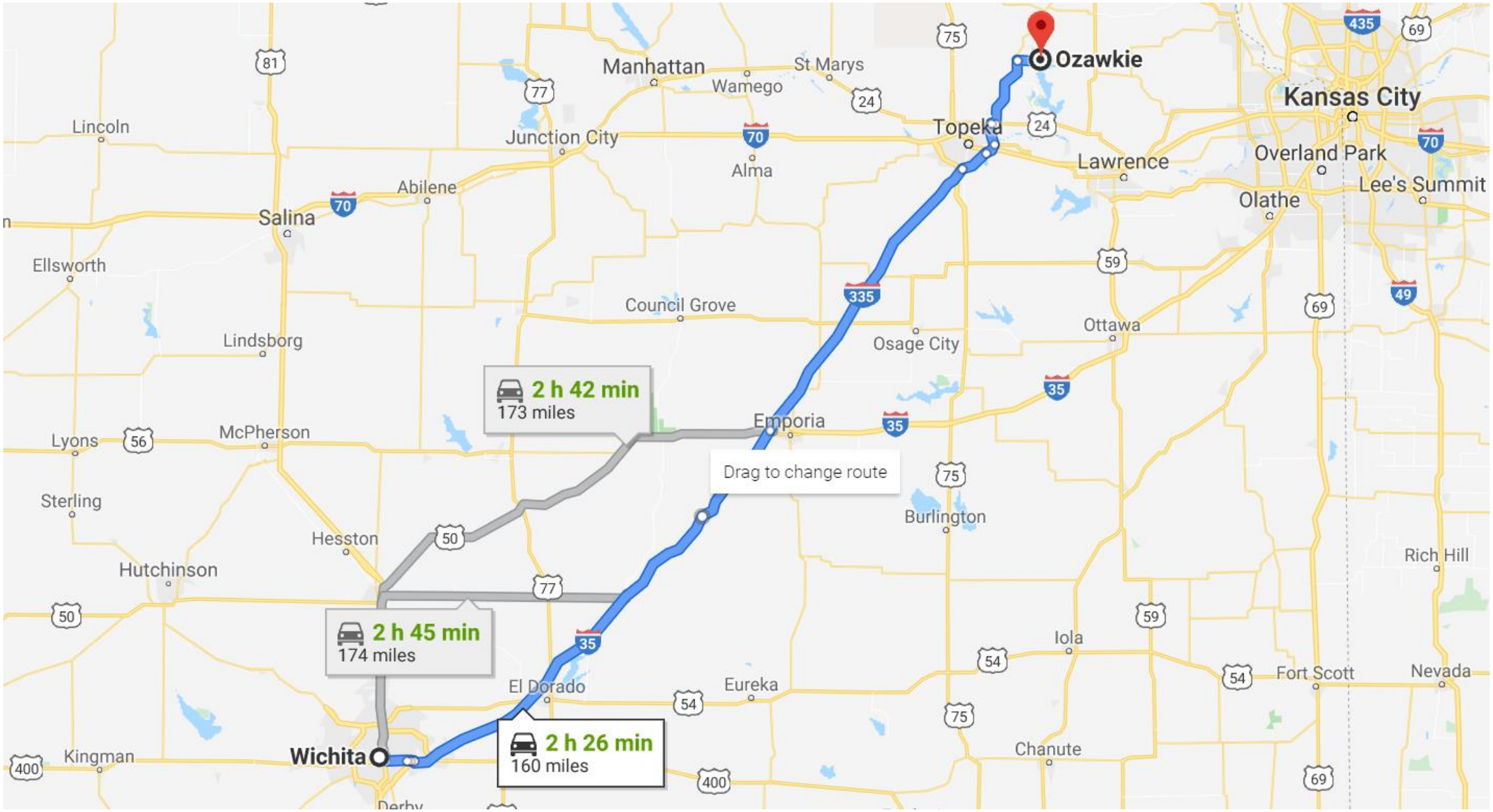
USGS

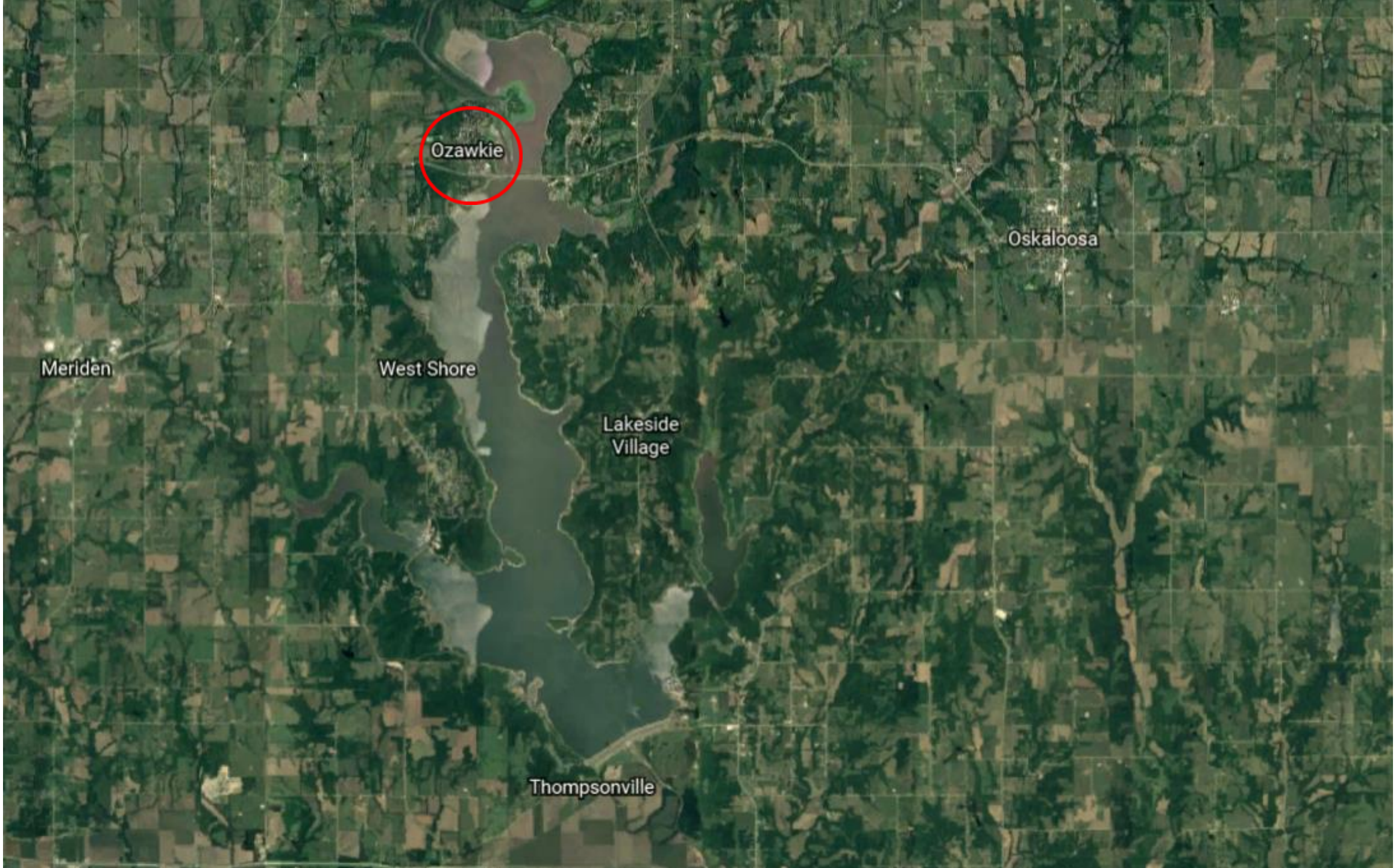
USGS 07169500 FALL R AT FREDONIA, KS



Median daily statistic (30 years)
Measured gage height
Gage height
Flood Stage
Period of approved data
Operational limit (minimum)
Period of provisional data

FLEXZILLA

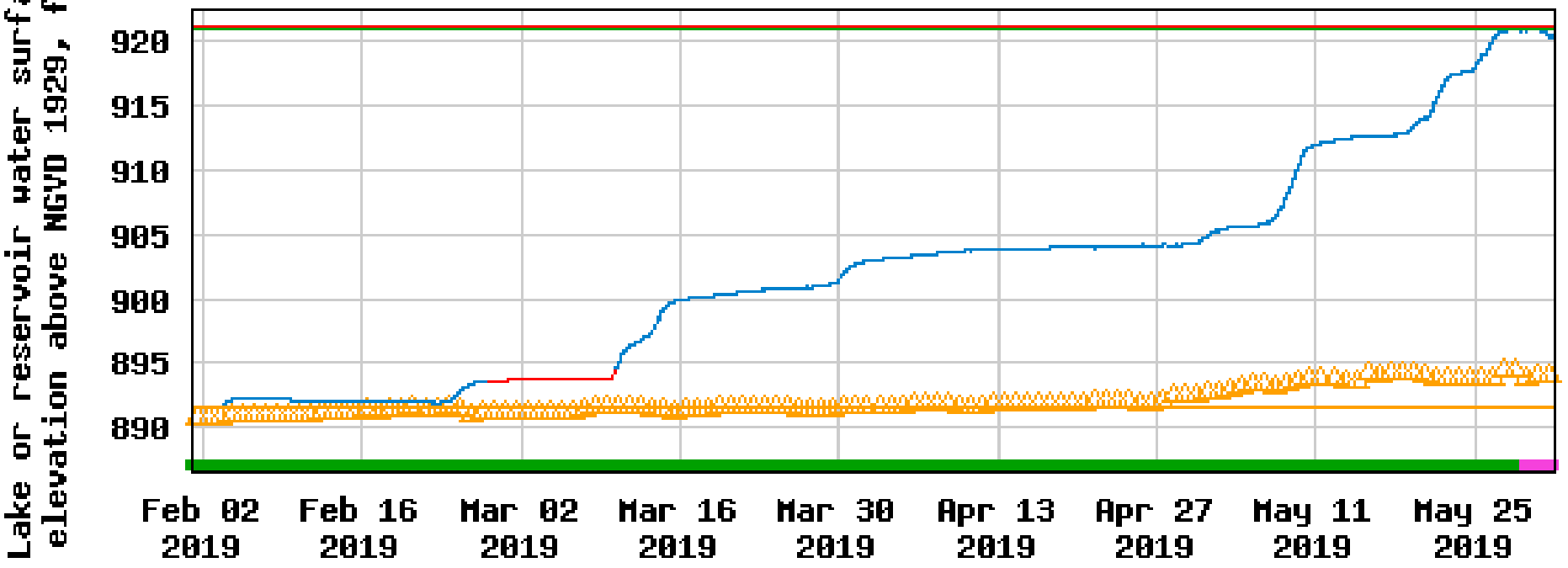

Ozawkie
Kansas City
Topeka
Lawrence
Overland Park
Olathe
Lee's Summit
Manhattan
Wamego
St Marys
Junction City
Alma
Abilene
Salina
Lincoln
Ellsworth
Lindsborg
Council Grove
Osage City
Ottawa
Emporia
Burlington
Lyons
McPherson
Sterling
Hesston
Hutchinson
Rich Hill
Iola
Fort Scott
Nevada
El Dorado
Eureka
Chanute
Kingman
Wichita
Derby
2 h 42 min
173 miles
2 h 45 min
174 miles
2 h 26 min
160 miles
Drag to change route


Ozawkie
Oskaloosa
Meriden
West Shore
Lakeside
Village
Thompsonville

Ozawkie City Hall
Ozawkie
Keystone
Learning Services
Cottonwood Tree Park

USGS

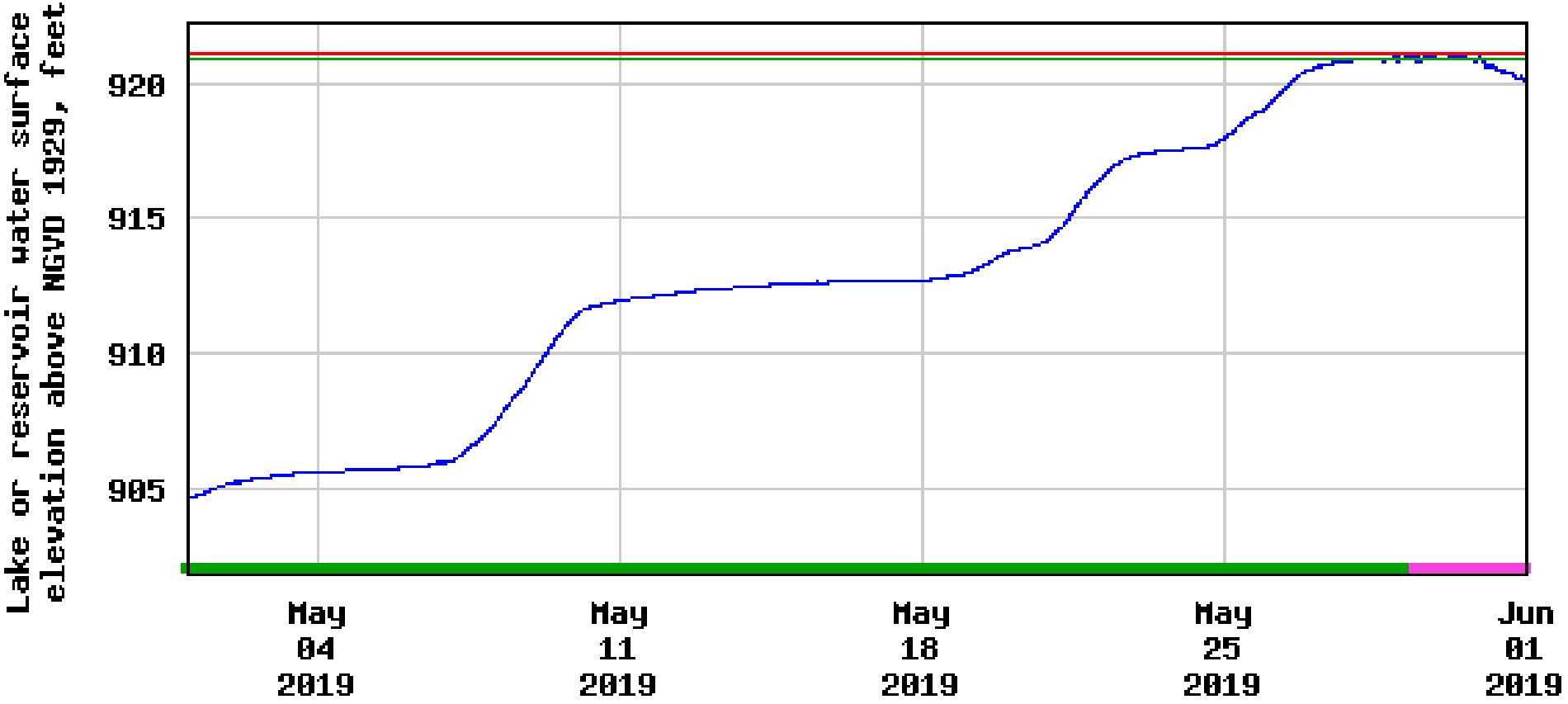
USGS 06890898 PERRY LK NR PERRY, KS



- Median daily statistic (20 years)
- Lake or reservoir water surface elevation above ngvd 1929
- Estimated lake or reservoir water surface elevation above ngvd 1929
- Period of approved data
- Period of provisional data
- Peak of record elevation 921.15 on May 29, 2019
- Peak of 1993 920.94
- Top of conservation pool elevation

USGS

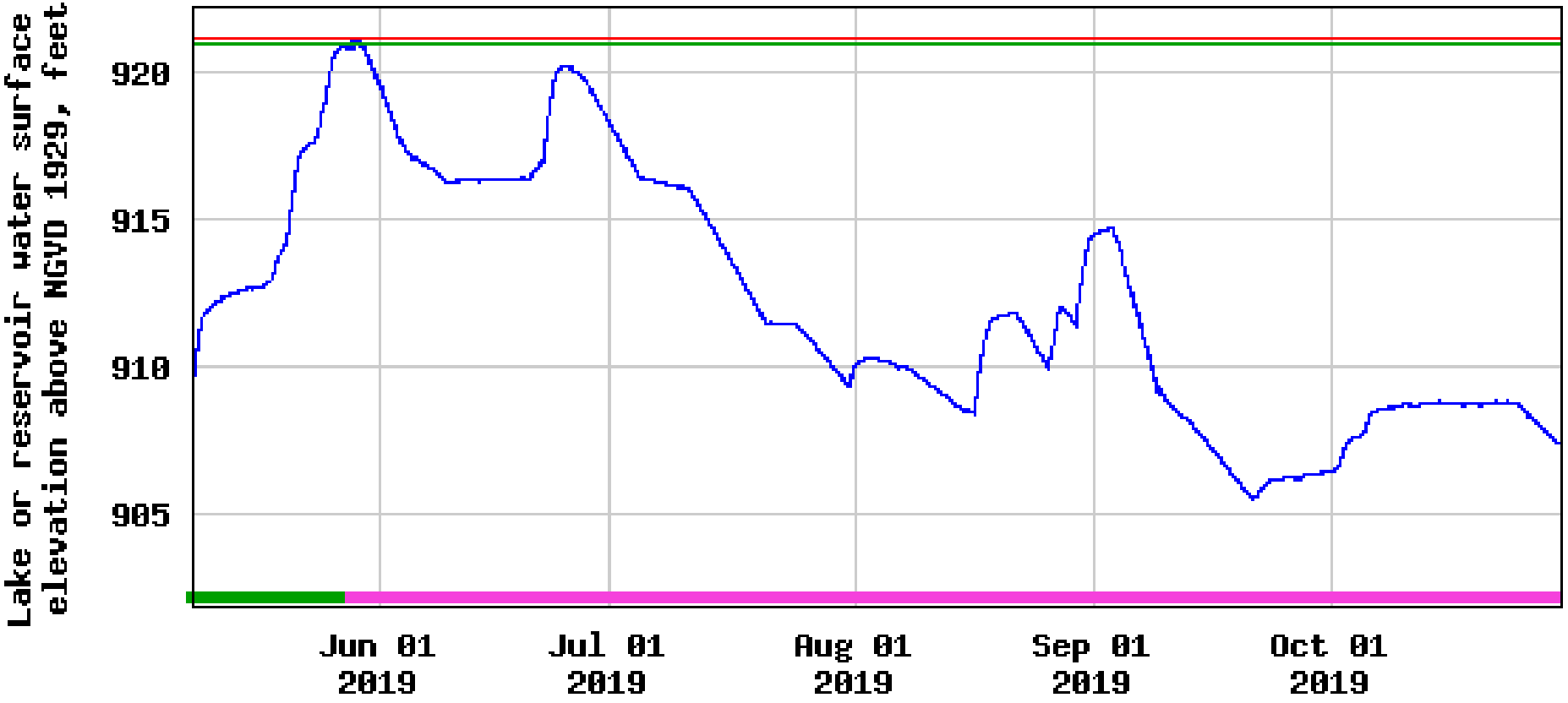
USGS 06890898 PERRY LK NR PERRY, KS



Lake or reservoir water surface elevation above ngvd 1929
Period of approved data
Period of provisional data
Peak of record elevation 921.15 on May 29, 2019
Peak of 1993 920.94

USGS

USGS 06890898 PERRY LK NR PERRY, KS



Lake or reservoir water surface elevation above ngvd 1929
Period of approved data
Period of provisional data
Peak of record elevation 921.15 on May 29, 2019
Peak of 1993 920.94

CAUTION

FEMA DISASTER DECLARATION

Local government responds

State government responds

Joint Preliminary Damage Assessment team (local, state and feds)

Major Disaster Declaration requested by Governor

FEMA evaluates and sends recommendation to POTUS

POTUS considers request, informs Governor if it's approved or denied

FEMA DR-4449

Kansas Severe Storms, Straight-line Winds, Tornadoes, Flooding, landslides, and Mudslides (DR-4449)

Major Disaster Declaration declared on June 20, 2019

Damage estimate updated 10/31/19 is $10.3 M

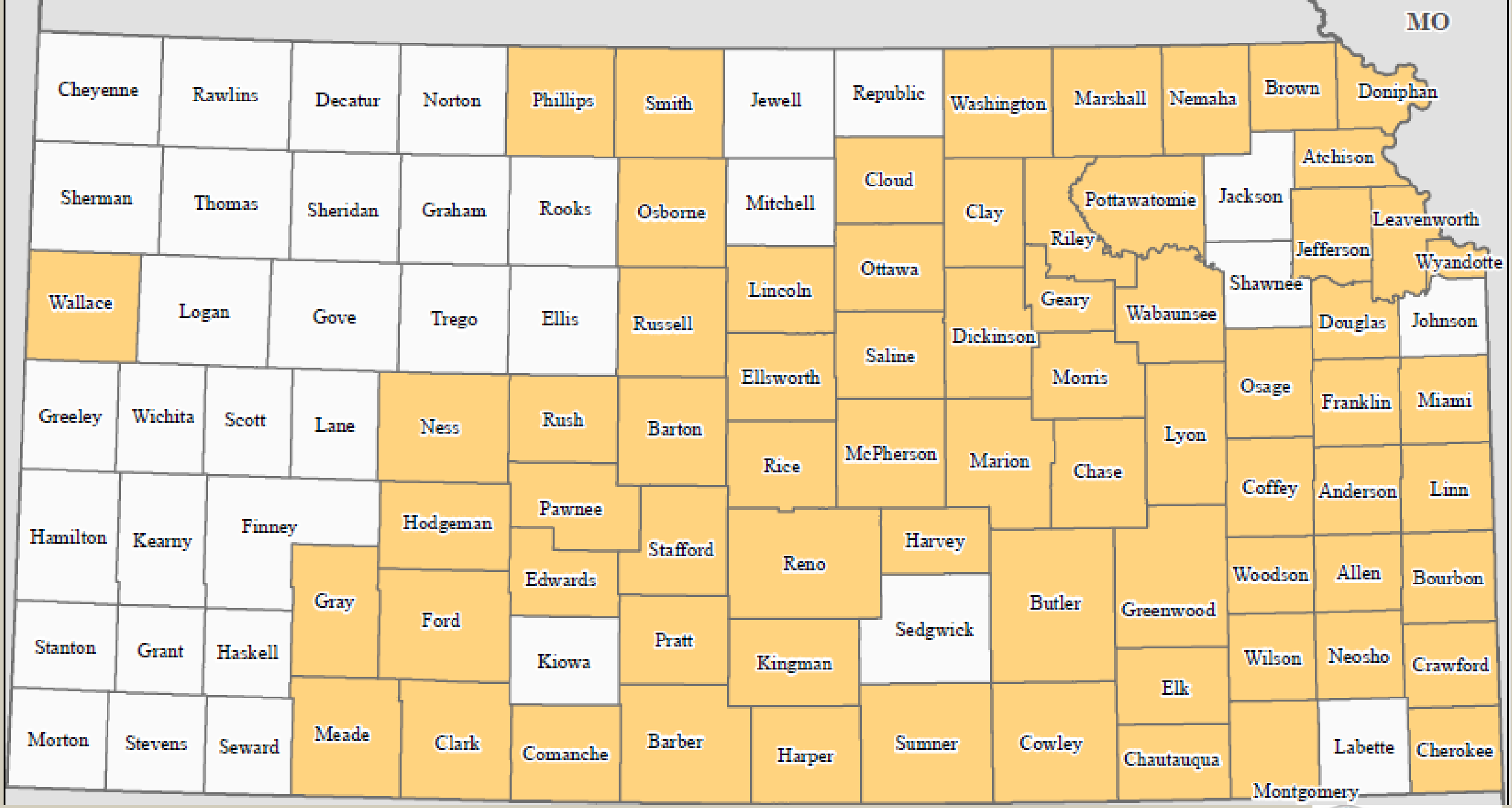
Public Assistance - Dollars Approved as of 7/25/19

Total Public Assistance Grants (PA) - $593,356.34 Obligated

- Public Assistance (PA): Disaster grant assistance available for communities to quickly respond to and recover from major disasters or emergencies declared by the President

Emergency Work (Categories A-B) - $293,778.95 Obligated

- Emergency Work (Categories A-B): Work that must be performed to reduce or eliminate an immediate threat to life, protect public health and safety, and to protect improved property that is significantly threatened due to disasters or emergencies declared by the President



FEMA-4449-DR, Kansas Disaster Declaration as of 08/14/2019

FEMA

FEMA REIMBURSEMENT

Reimbursement eligibility requirements include:

- Must be required as result of the disaster
- Must be located within the disaster area
- Must be the legal responsibility of applicant
- Must be requested by the impacted jurisdiction

All reimbursement is based on the supporting documentation

Details are found the FEMA Public Assistance and Policy Guide

- FP-104-009-2, April 2018
- 217 pages worth of guidelines

THANK YOU!

Jason Solomon

Wastewater Tech

Kansas Rural Water Association

620.203.9302

jason@krwa.net

Daryn Martin

Technical Assistant

Kansas Rural Water Association

316.621.0314

dmartin@krwa.net