

# Oklahoma Maps

Upward Bound 2020

Earth Science

# Instructions

Select the best response for questions 1-20.

Select your responses on the Survey Monkey provided by Honeycutt.

**Map A**

- 1.
- 2.
- 3.
- 4.



Earthquakes

**Map B**

- 5.
- 6.
- 7.
- 8.



Base Map

**Map C**

- 9.
- 10.
- 11.
- 12.



Topographic

**Map D**

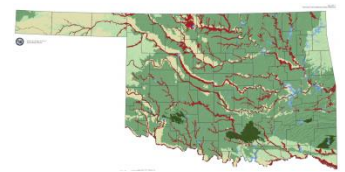
- 13.
- 14.
- 15.
- 16.



Rainfall

**Map E**

- 17.
- 18.
- 19.
- 20.

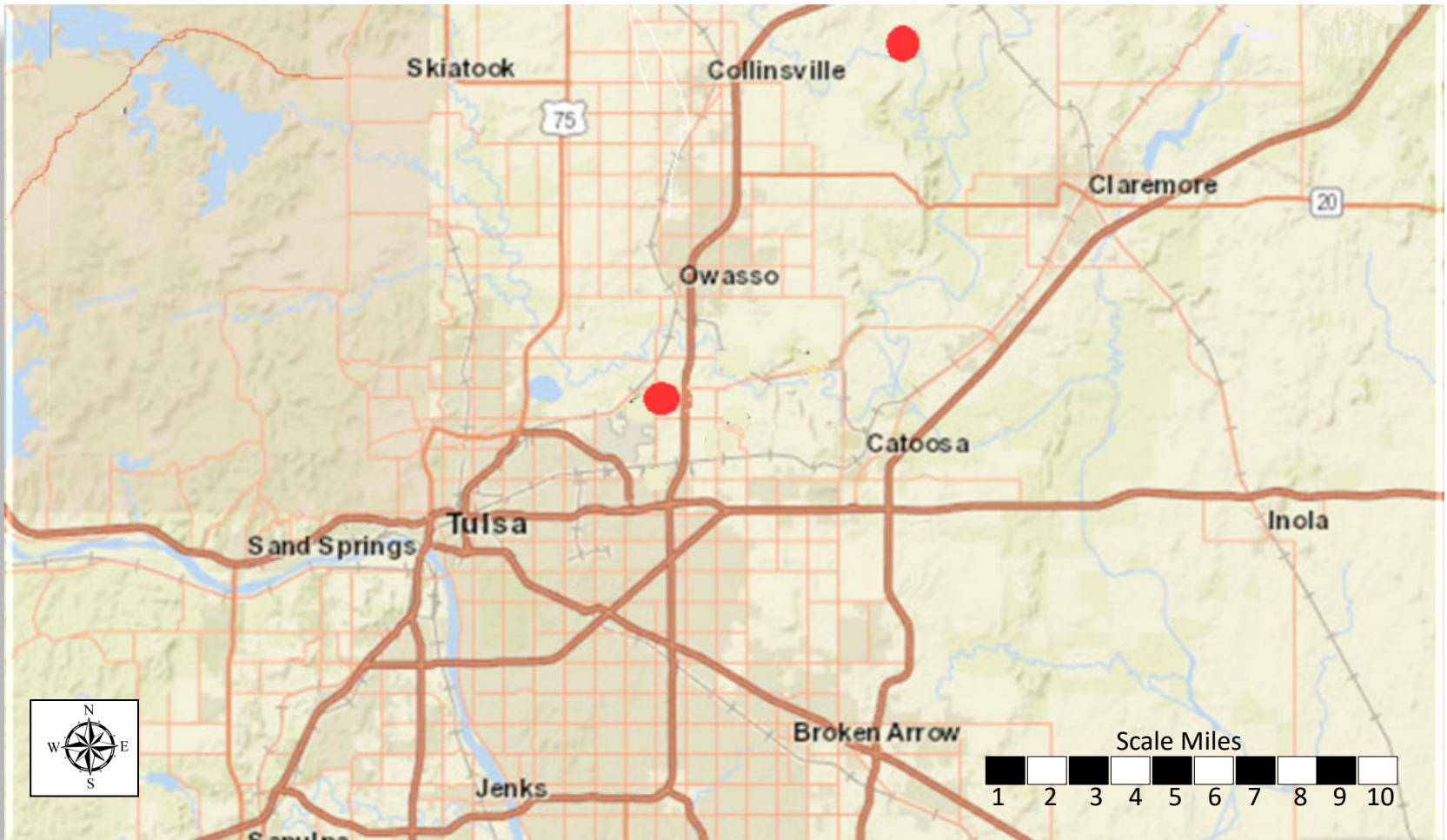


Geological

## Map A

This map identifies the epicenter (location) of two earthquakes.

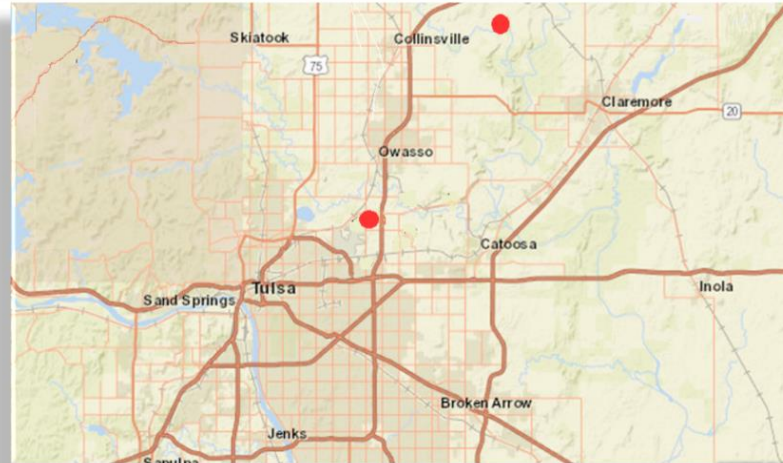
### Oklahoma Geological Survey Earthquake Viewer



# Map A

This page shows data associated with each earthquake.

## Oklahoma Geological Survey Earthquake Viewer



## Tulsa

**GMT Time:** Mon, 15 Jun 2020 16:00:25 GMT  
**Local Time:** 6/15/2020, 11:00:25 AM  
**Magnitude:** 1.6  
**Depth:** 0 km  
**Latitude:** 36.215  
**Longitude:** -95.86516667  
**County:** Tulsa  
**Status:** Reviewed

## Collinsville

**GMT Time:** Mon, 15 Jun 2020 17:33:27 GMT  
**Local Time:** 6/15/2020, 12:33:27 PM  
**Magnitude:** 1.4  
**Depth:** 0 km  
**Latitude:** 36.38283333  
**Longitude:** -95.72316667  
**County:** Rogers  
**Status:** Reviewed

Select the best response for each question.

**1. Which response best describes the sequence of the two earthquakes?**

- A They happened at the same time.
- B Tulsa earthquake happened first.
- C Collinsville earthquake happened first.
- D They happened on different days.

**2. Which response best describes the relationship of the epicenters of the two earthquakes?**

- A Skiatook was east of the Collinsville quake.
- B Broken Arrow was north of Collinsville quake.
- C Collinsville quake was northeast of Tulsa.
- D Inola was west of both quakes.

**3. Which response best describes distances represented by the map?**

- A Width of the map represents about 35 miles.
- B A highway runs from Catoosa to Claremore.
- C The earthquakes were about 35 miles apart.
- D Inola is more distant to Tulsa than Arkansas.

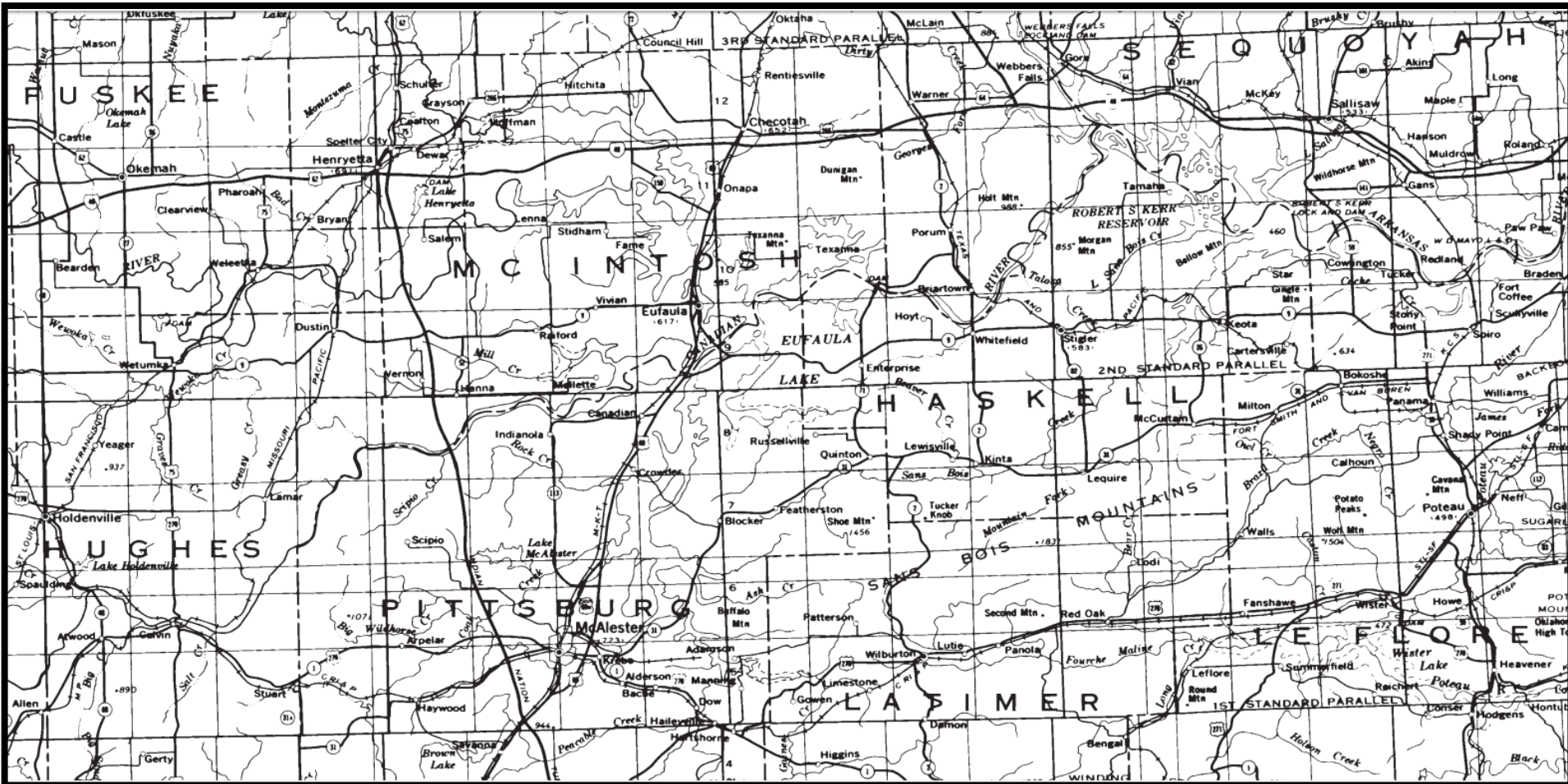
**4. Which response best describes the magnitude of the two earthquakes.**

- A Collinsville quake was northeast of Tulsa.
- B Collinsville magnitude happened first.
- C Magnitude is Catoosa-Claremore topographic.
- D The Tulsa quake had the largest magnitude.



# Map B

This map is a portion of the Oklahoma base map updated 1975.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## STATE OF OKLAHOMA

National geodetic vertical datum of 1929

Compiled, edited, and published by the Geological Survey, 1927 North American datum  
Lambert conformal conic projection based on standard parallels 33° and 45°

**LEGEND**  
 State capital  
 County seat  
 City, town, or village  
 Scheduled service airport  
 Built-up area shown for towns over 10,000 population

**SOURCE DATA**  
 U. S. Dept. of the Interior—Geological Survey topographic maps  
 U. S. Dept. of the Army—Corps of Engineers topographic maps

**POPULATION KEY**  
 OKLAHOMA CITY more than 100,000  
 LAWTON 50,000 to 100,000  
 Ponca City 10,000 to 50,000  
 Vinita 2,500 to 10,000  
 Buffalo less than 2,500  
 Population indicated by size of letters

### Scale (miles)

5 10 15 20 25 30 35 40 45 50

Adapted/extracted from:

[ogs.ou.edu/docs/maps/map-oklahoma\\_basemap\\_1975.pdf](https://ogs.ou.edu/docs/maps/map-oklahoma_basemap_1975.pdf)

## Map B

Select the best answer for each question posed.

5. Which statement is not supported by Map B?

IS NOT

- A Several counties are represented by the map.
- B Square miles of map B is greater than map A.
- C Haskell County is north of Latimer County.
- D Map B was first made in 1960.

7. Which statement best describes the type of this map?

- A This is a geological/lithology survey.
- B This is part of an Oklahoma base map.
- C Elevations of each county are emphasized.
- D Oklahoma was once part of Texas.

6. Which statement is supported by Map B?

IS

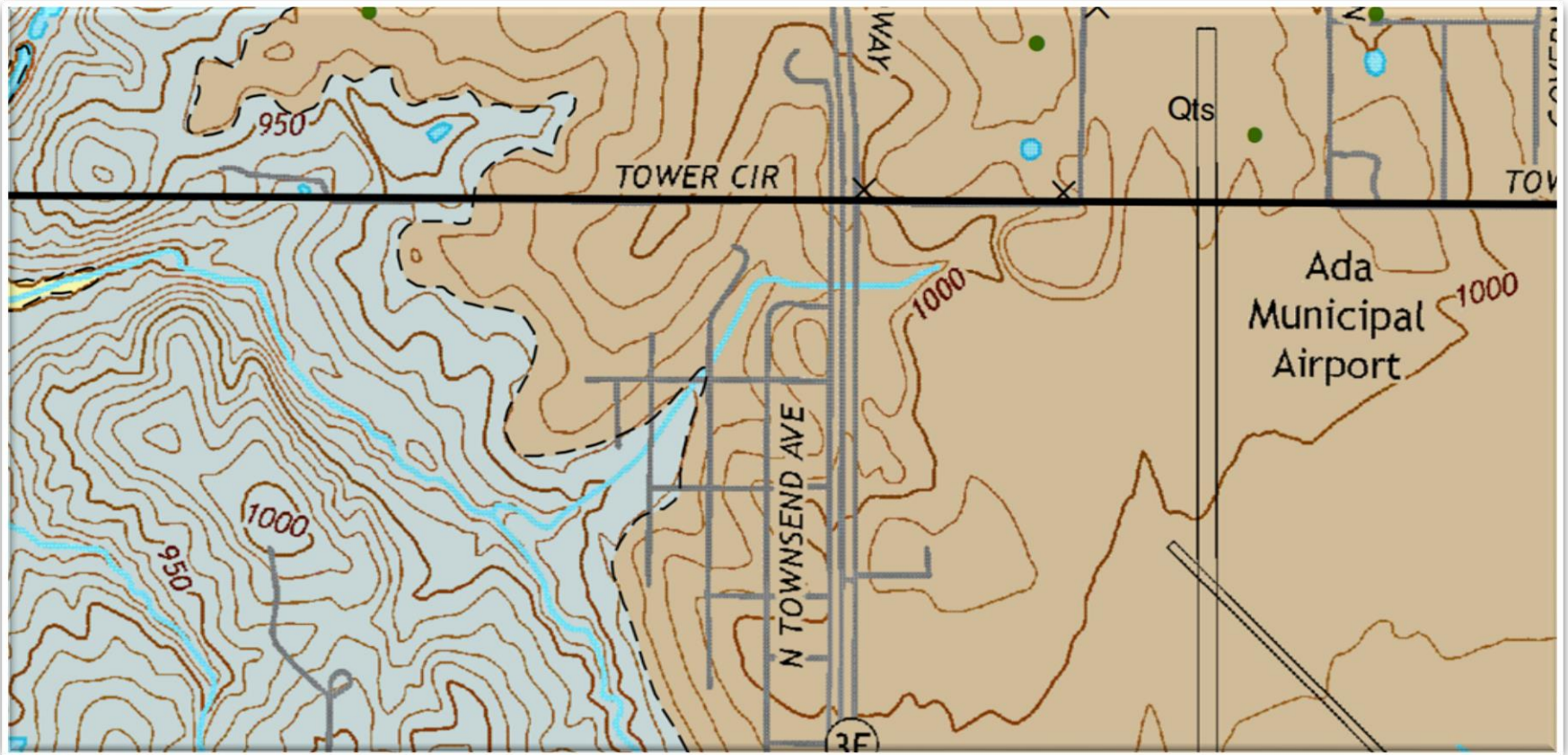
- A Sequoyah is northwest of Pittsburg County.
- B The scale is in 5 km increments.
- C The map shows roads, rivers and lakes.
- D The area shown on map B is less than map A.

8. Which idea can most easily be inferred by Map B?

- A Sans Bois Mountains are rich with wildlife.
- B Inola is closer to Tulsa than Sand Springs.
- C Oklahoma is more than 100 miles wide.
- D Eufaula Lake is a major fishing destination.

## Map C

This map is a topographic map near the Ada airport.



Adapted/extracted from:  
[ogs.ou.edu/docs/OGQ/OGQ-93-color.pdf](https://ogs.ou.edu/docs/OGQ/OGQ-93-color.pdf)



## Map C

Select the best answer for each question posed.

**9. Which statement is supported by Map C?**

- A N. Townsend Ave. runs north-south.
- B The airport is located near a museum.
- C The contour lines should be straight.
- D The scale shown describes map distances.

**10. Which statement is supported by Map C?**

- A Sequoyah is northwest of Pittsburg County.
- B The scale is in 5 mile increments.
- C The map shows elevations.
- D The museum features dinosaurs.

**11. Which statement best describes the type of this map (Map C)?**

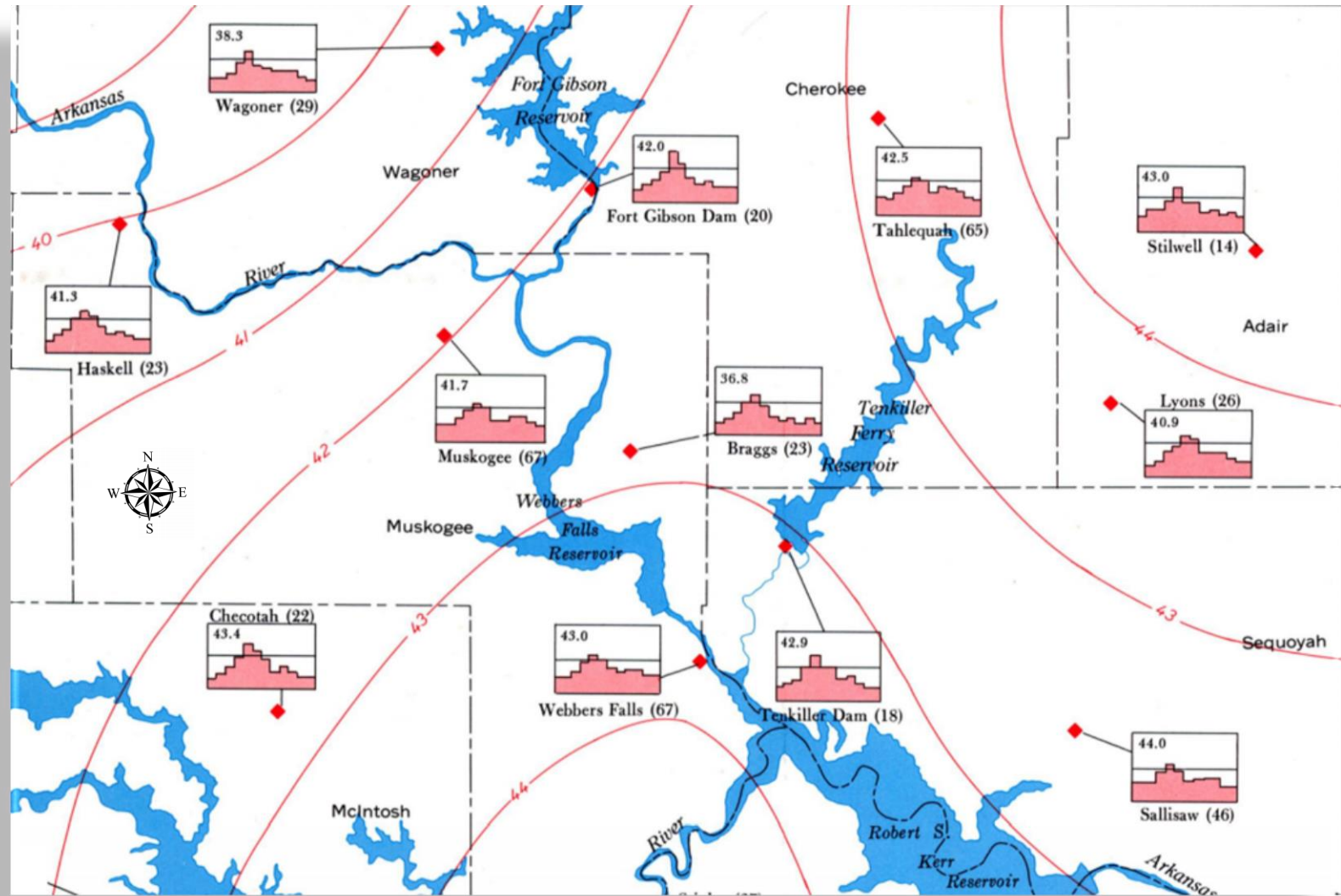
- A This is a geological/lithology survey.
- B This is part of an Oklahoma base map.
- C This is a contour map showing elevations.
- D This is a weather map shown tornado paths.

**12. Which idea can most easily be inferred or confirmed by Map C?**

- A Sans Bois Mountains are rich with wildlife.
- B The airport's elevation is similar to a nearby hill.
- C Rainfall at Ada airport is about 1,000 mm/year.
- D Rainfall at Ada airport is about 1,000 cm/year.

# Map D

This map shows monthly and annual rainfall for parts of Oklahoma.

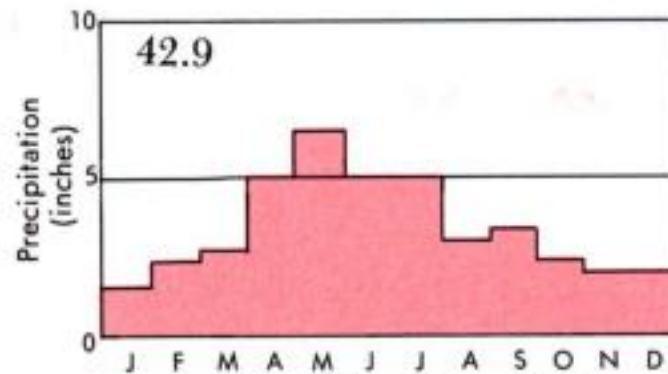


Adapted/extracted from:  
[ogs.ou.edu/docs/hydrologicatlases/HA1P4.pdf](https://ogs.ou.edu/docs/hydrologicatlases/HA1P4.pdf)

## EXPLANATION

39

Line connecting points of equal mean annual precipitation, based upon normal annual precipitation 1931-1960. Interval: 1 inch



Tenkiller Dam (18)

Graph of average monthly precipitation.

Figure in upper left of graph is average annual precipitation for the period of record; figure in parentheses after station name is years of record.



Select the best answer for each question posed.

**13. Which statement is supported by Map D?**

- A Robert Kerr Reservoir begins at Checotah.
- B The bar graphs display monthly rainfall.
- C The contour lines should be straight.
- D The scale shown describes map distances.

**15. Which statement best describes data supported by the bar graphs?**

- A Tenkiller gets more rain in May than August.
- B Tenkiller has the most visitors during winter.
- C Tenkiller has the most visitors during summer.
- D Tenkiller the most rain in Oklahoma.

**14. Of the station locations listed below, which location on Map D has the fewest number of “years of record” for rainfall?**

- A Stillwell
- B Tahlequah
- C Tenkiller Dam
- D Sallisaw

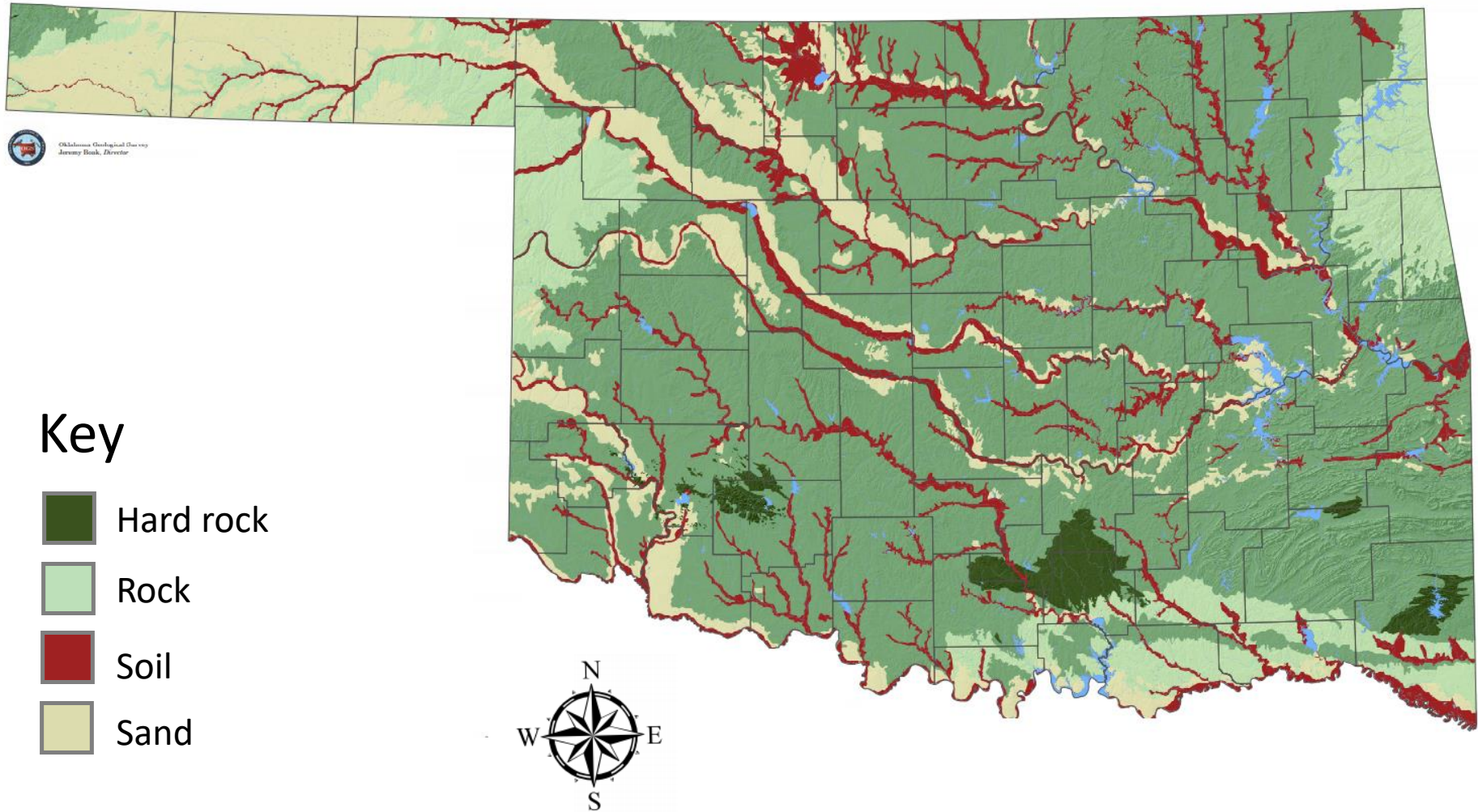
**16. Which idea can most easily be inferred about the area illustrated by Map D?**

- A Annual rainfall varies from 5 to 10 inches.
- B Rainfall peaks July & August in Oklahoma.
- C Annual rainfall varies from 2 to 6 inches.
- D Contour lines and bar charts convey data.



# Map E

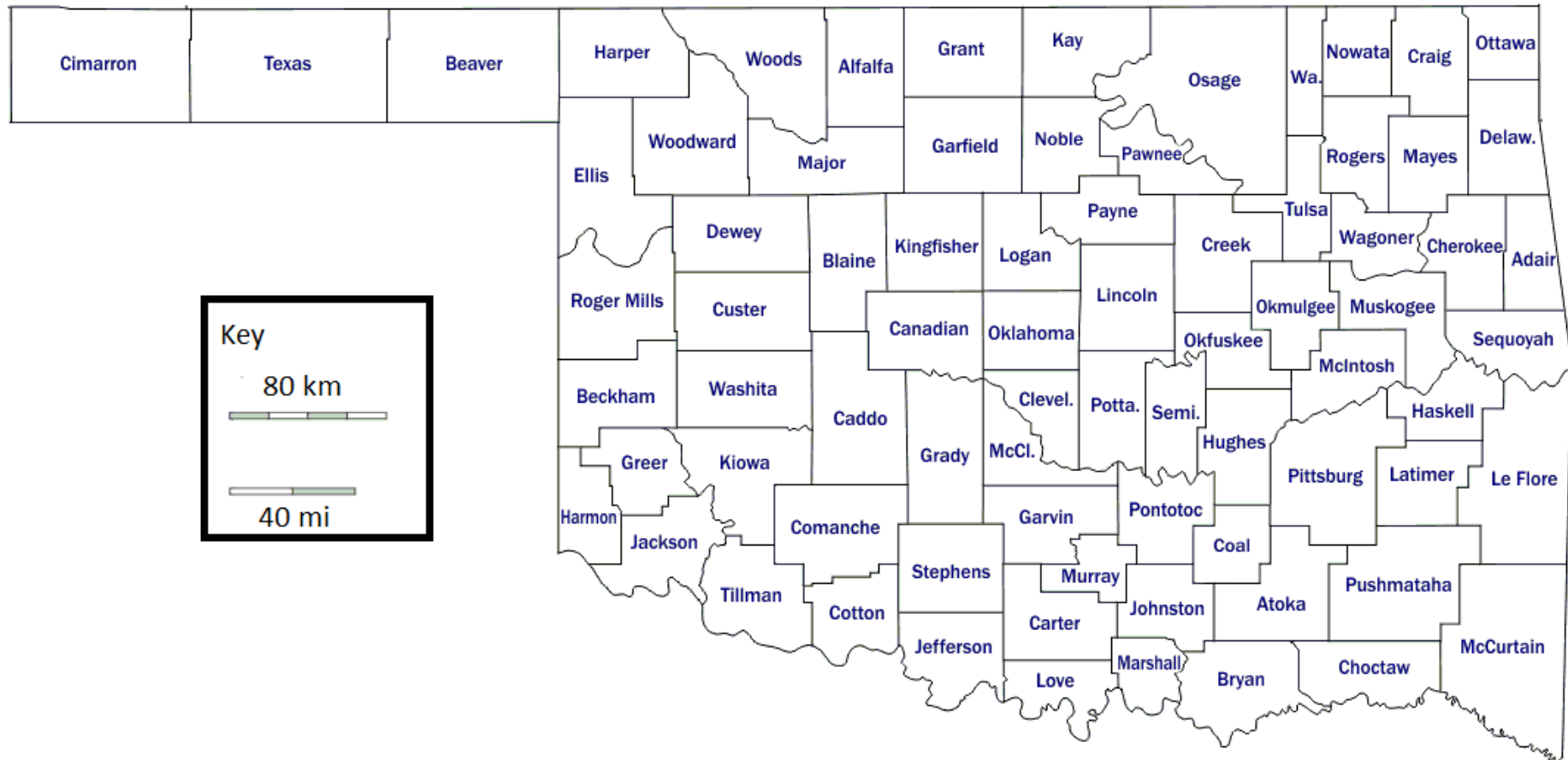
This map is a geological map of Oklahoma.



Adapted/extracted from:  
[ogs.ou.edu/docs/geologicmaps/GM41.pdf](https://ogs.ou.edu/docs/geologicmaps/GM41.pdf)

# Map E

This map of Oklahoma shows the counties.



## Map E

Select the best answer for each question posed.

**17. Which counties have the highest percentage of hard rock?**

- A Custer and Blaine
- B Cimarron and Texas
- C Cherokee and Adair
- D McCurtain and Johnston

**19. Which county is in the northeast corner of the state?**

- A Cimarron
- B McCurtain
- C Harmon
- D Ottawa

**18. Which county has the highest percentage of soil?**

- A Alfalfa
- B Stephens
- C Adair
- D Johnston

**20. According to the key, which is represents the farthest distance?**

- A 40 km
- B 40 miles
- C 4,000 meters
- D 4,000 or more