Trail Talk Tuesday:

Let's Get Started!

November 14, 2023

Sunflower Foundation ❤'s Trails!

What does it take to get to this???

Smoky Hill River Trail (Salina) – October 2023

Osage Cuestas Trail (Fredonia) – Nov 2023

A lot… but luckily, some work you can do in your pajamas!

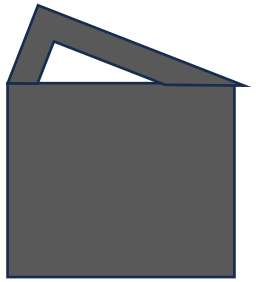
Determine which entities will take ownership of the trail project – all or parts.

* Local governmental entity (city, county, school, etc.)
* Local established nonprofit
* Local coalition without formal tax structure ("Friends of")
* Other *(Note: Rail-Trails are special, future webinar)*

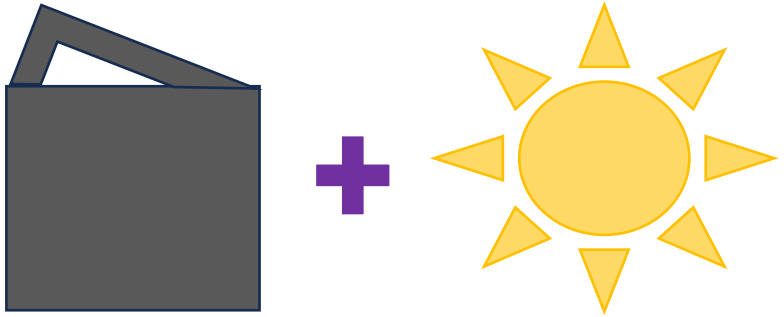
Need an established entity and process for the following:

* Obtain legal authority to "sign off" on building trail on public land and establish a plan for trail maintenance.
* Develop structure to facilitate the acceptance of any funds dedicated toward the trail.

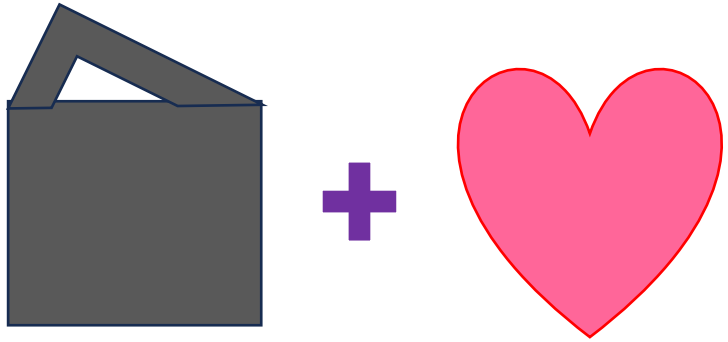
Most Common "Models" for Organizational Structure of Trail Projects



Local governmental entity (city, county, state, school, etc.)



Local governmental entity partnering with established nonprofit; size of nonprofit's role in project can vary depending on local politics, personalities, aptitudes and capacities.



Local governmental entity partnering with coalition of supporters with no established nonprofit formation (e.g., "Friends of ABC Trails" group)

WHO is actually building the trail on public land?

- If trail builders are volunteers or a nonprofit that taking on lead role:
  - Establish MOU (Memorandum of Understanding) between entity building the trail and entity that manages the land.
  - Spell out expectations: “We will do this…” / “You will do this…”
  - Include plan for maintenance.

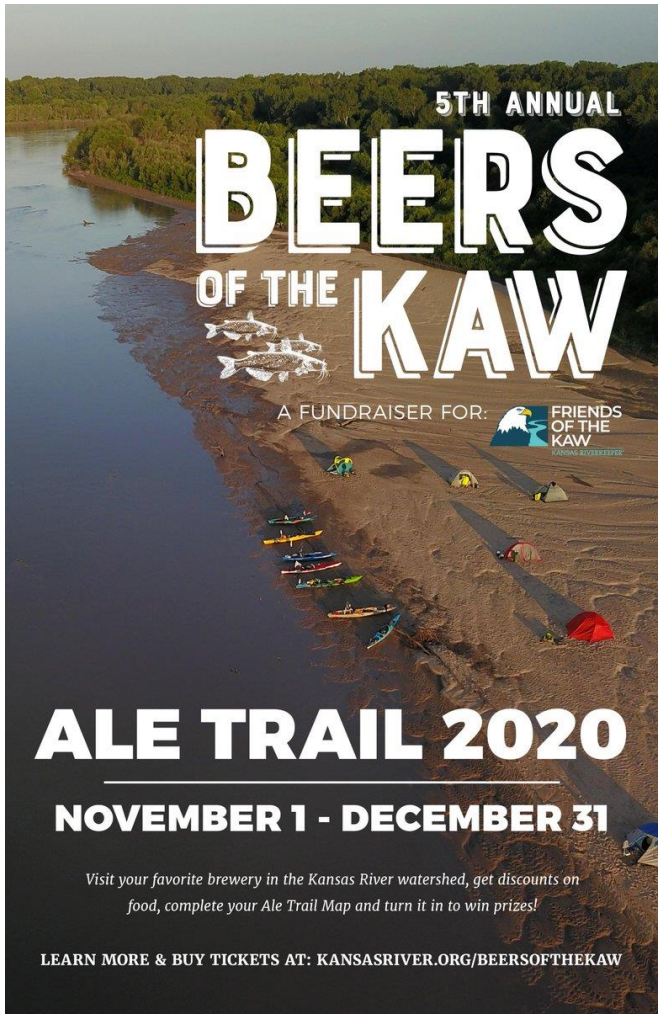
WHO is actually receiving the funds and paying for trail? *Part 1: Grants*

- Local circumstances will dictate which entity is best to 1) write, and 2) submit grants.
  - Local governments typically best for federal/state grants, though nonprofit assistance can be very helpful for critical support activities.
  - Nonprofits often better-suited to apply for philanthropic funding with less regulations.
  - If you are a "Friends" group writing grant, include Letter of Commitment/MOU with city and information on fiscal agent.

NOTE: It truly takes a village to write a successful grant – all talents needed!

WHO is actually receiving the funds and paying for trail? *Part 2: Fundraising*

- It's a lot easier for nonprofits or "Friends" group to raise money from the public than local government.
- If fundraising group is not 501c3, establish a fund for the trail at local community foundation. Emphasize tax deductions and encourage use of donor-advised funds.



NOTE: Discuss "flow of funds" ahead of time – i.e., what is process to pay vendor(s) to build the trail.

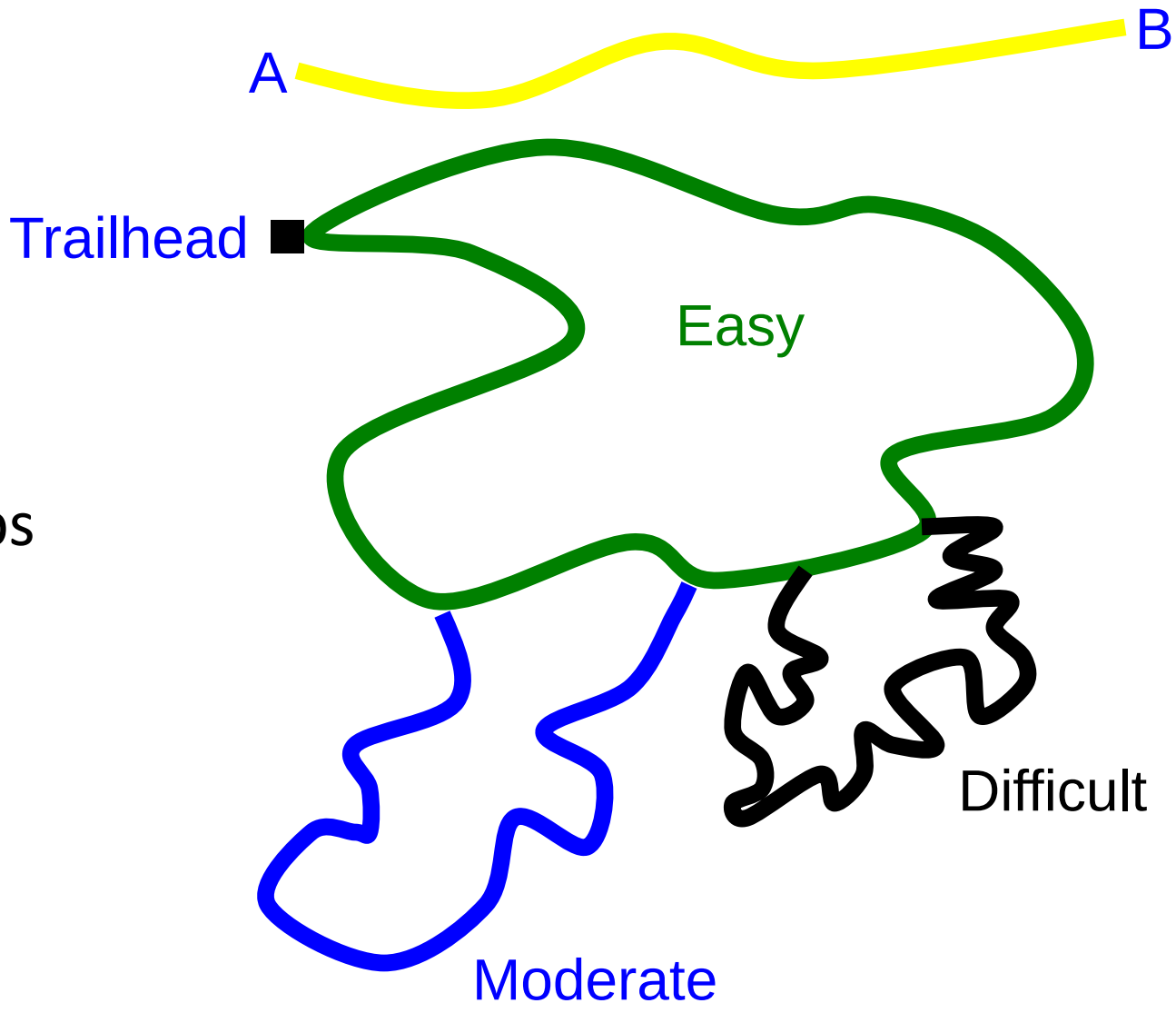
Thank you… Put questions in Chat Box!

Trail design & Engineering

Mike Goodwin

Trail Layout

- Linear
- Loop
- Stacked Loops

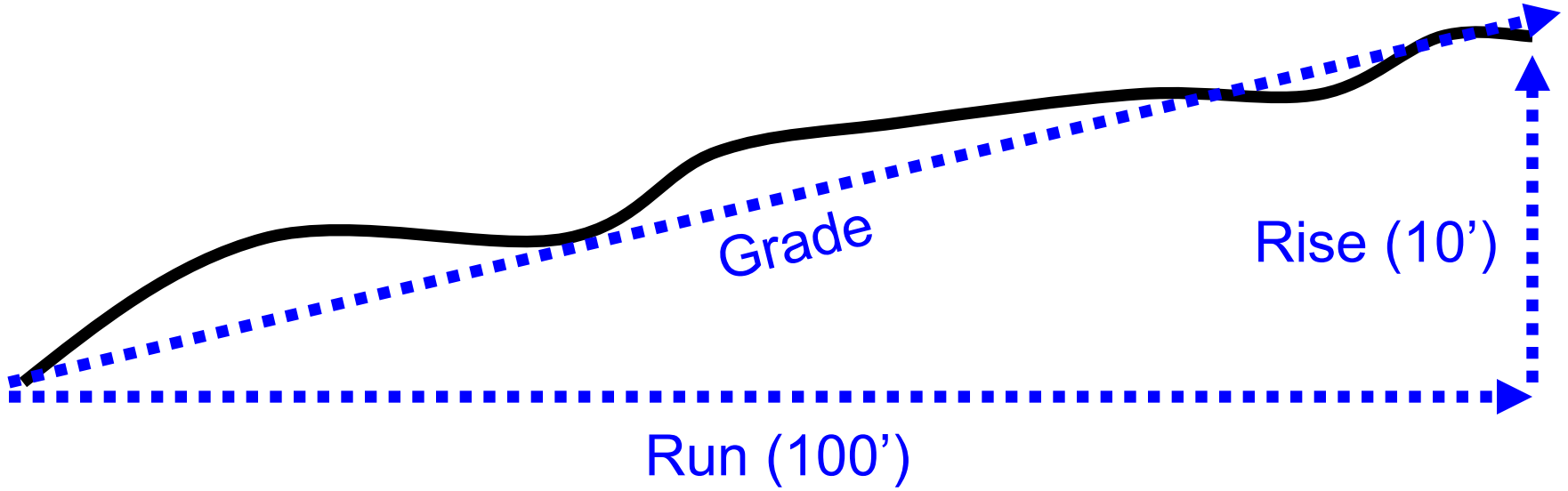


Positive Control Points View

Grade or Slope

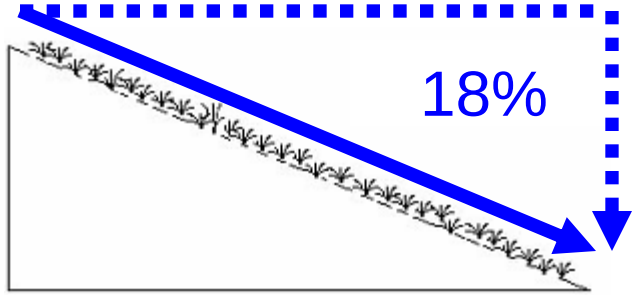
Change in elevation from one point to another

Rise over Run: 10’/100’ = 10%



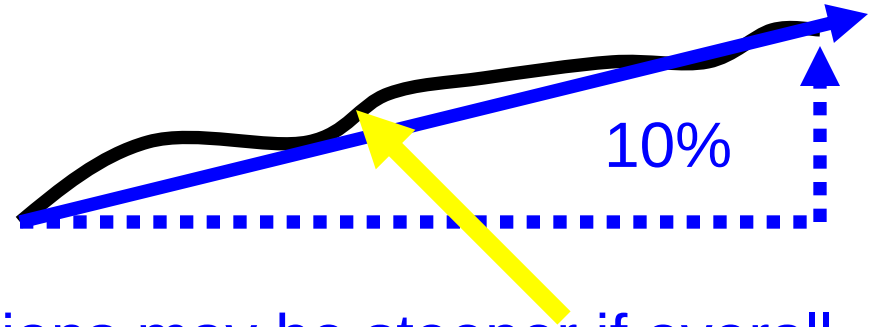
Two Simple Rules

- **One-half Rule**
  - Trail grade should be less than ½ of sideslope



18% Sideslope: Trail grade = 9% or less

- 10% Rule
  - Overall trail grade should be 10% or less



Short Sections may be steeper if overall grade is 10% or less

How do we find the grade?

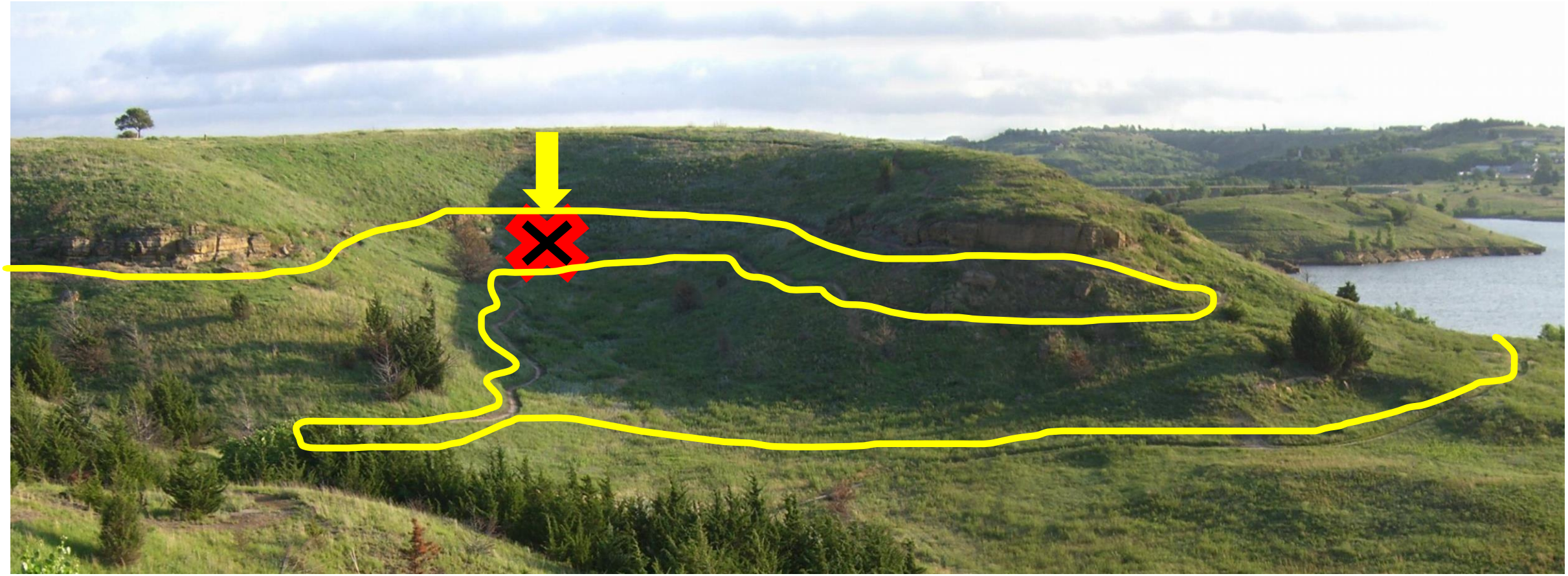
Using a Clinometer

Find a partner as tall or taller

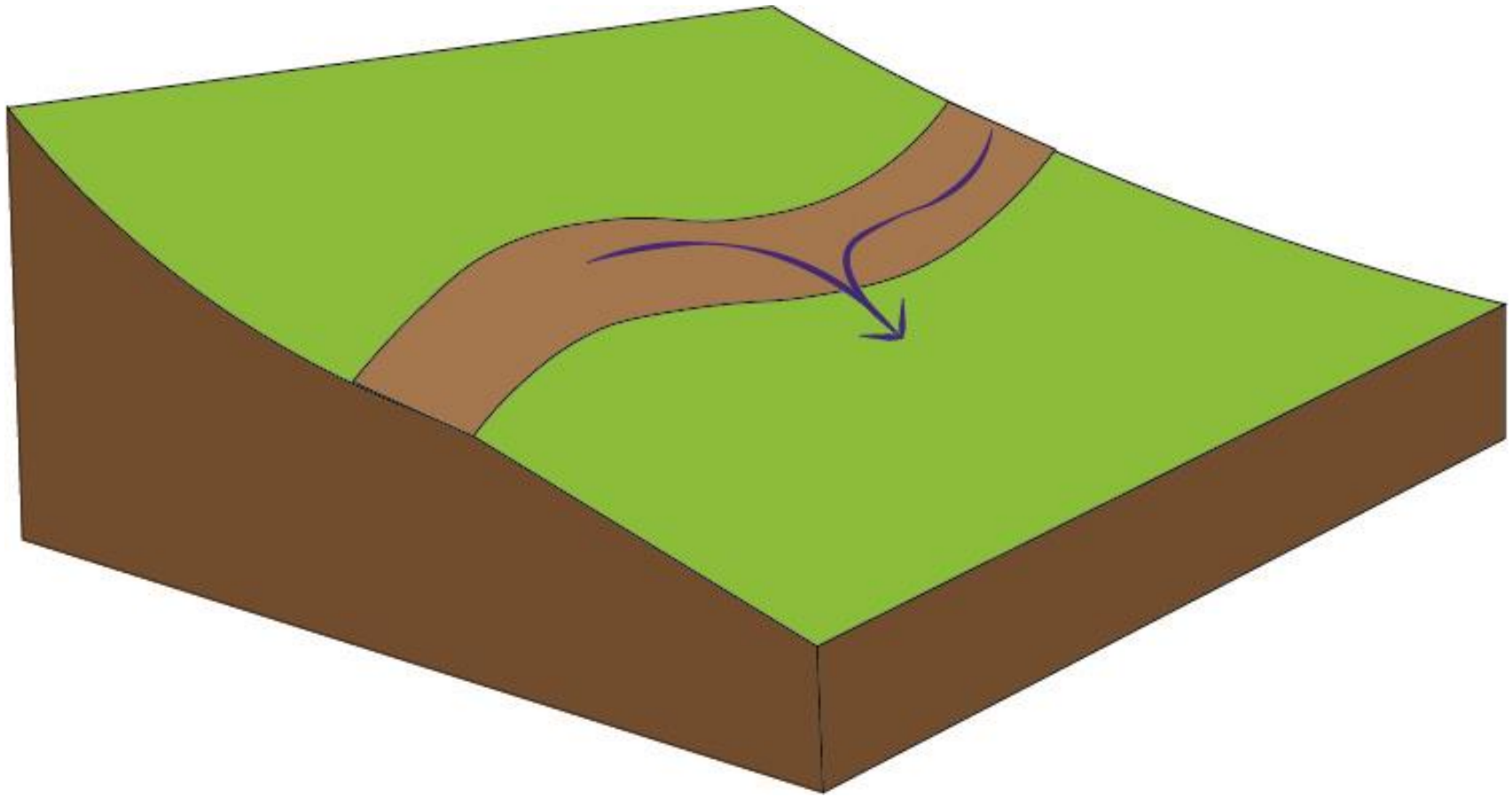
Calibrate on level ground

Read the grade on the trail

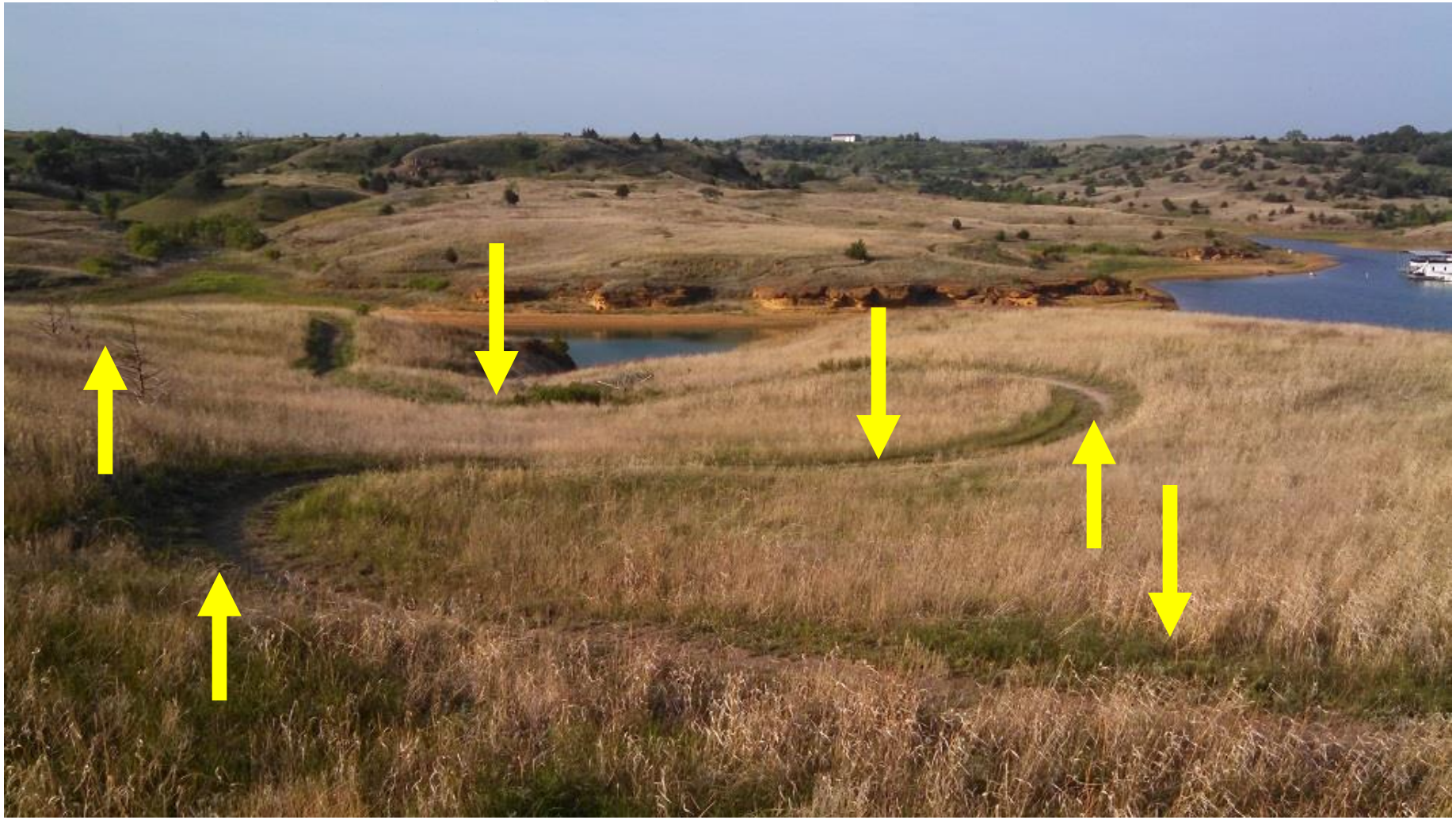
Fall line vs contour



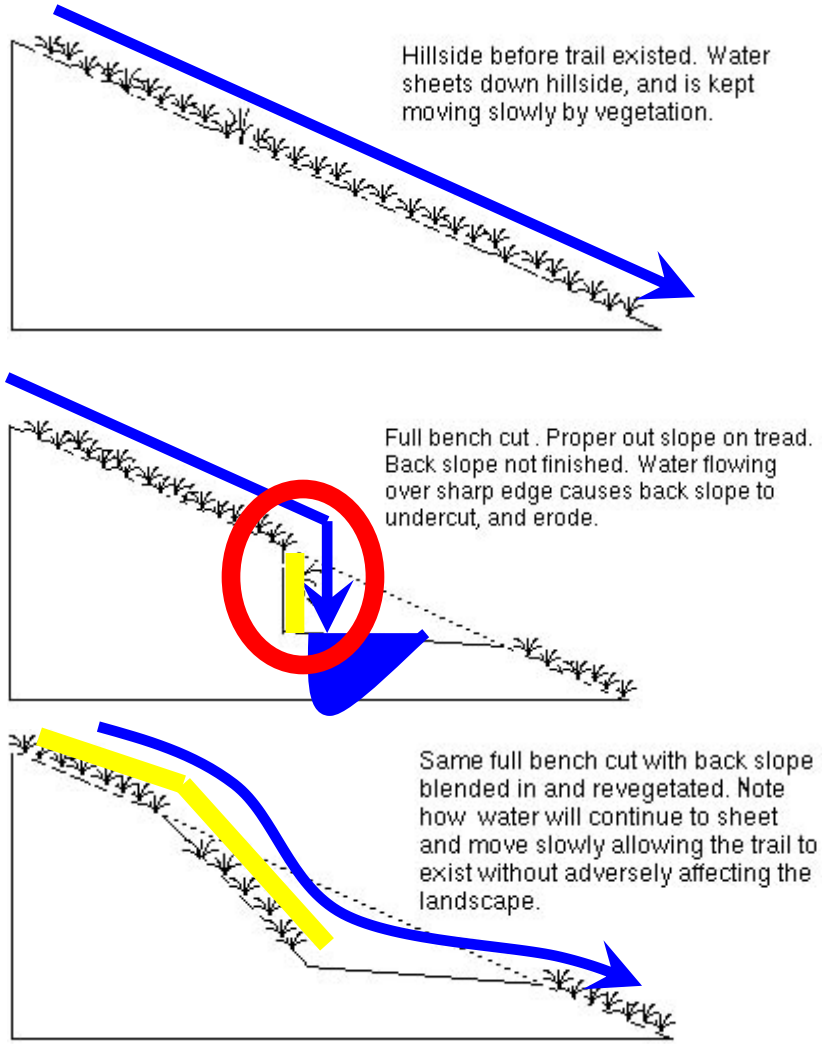
Grade Reversals



Grade Reversals



Benchcut

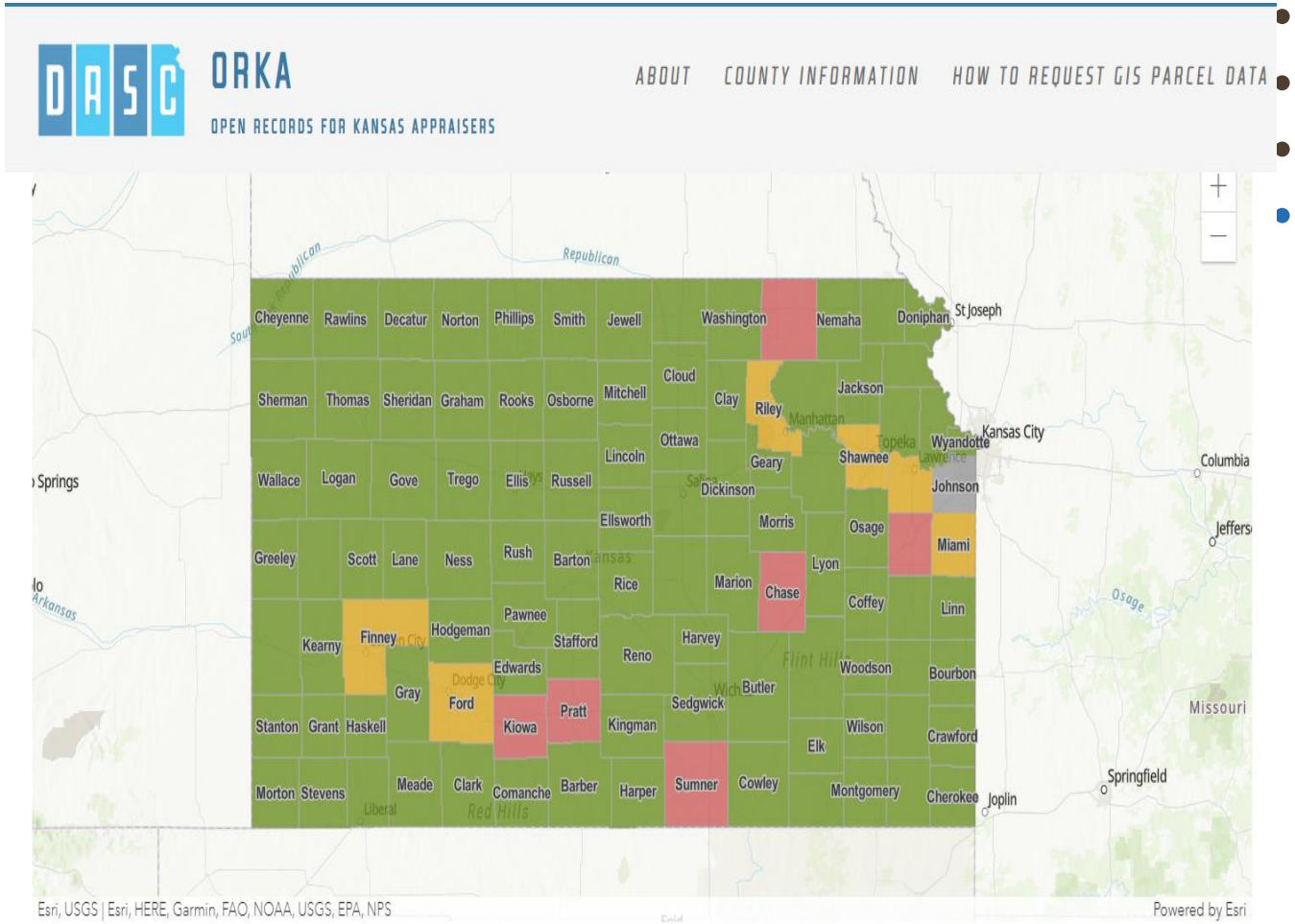

Hillside before trail existed. Water sheets down hillside, and is kept moving slowly by vegetation.
Full bench cut . Proper out slope on tread. Back slope not finished. Water flowing over sharp edge causes back slope to undercut, and erode.
Same full bench cut with back slope blended in and revegetated. Note how water will continue to sheet and move slowly allowing the trail to exist without adversely affecting the landscape.

Tech Tools

John Leahy

Tech Tools: GIS

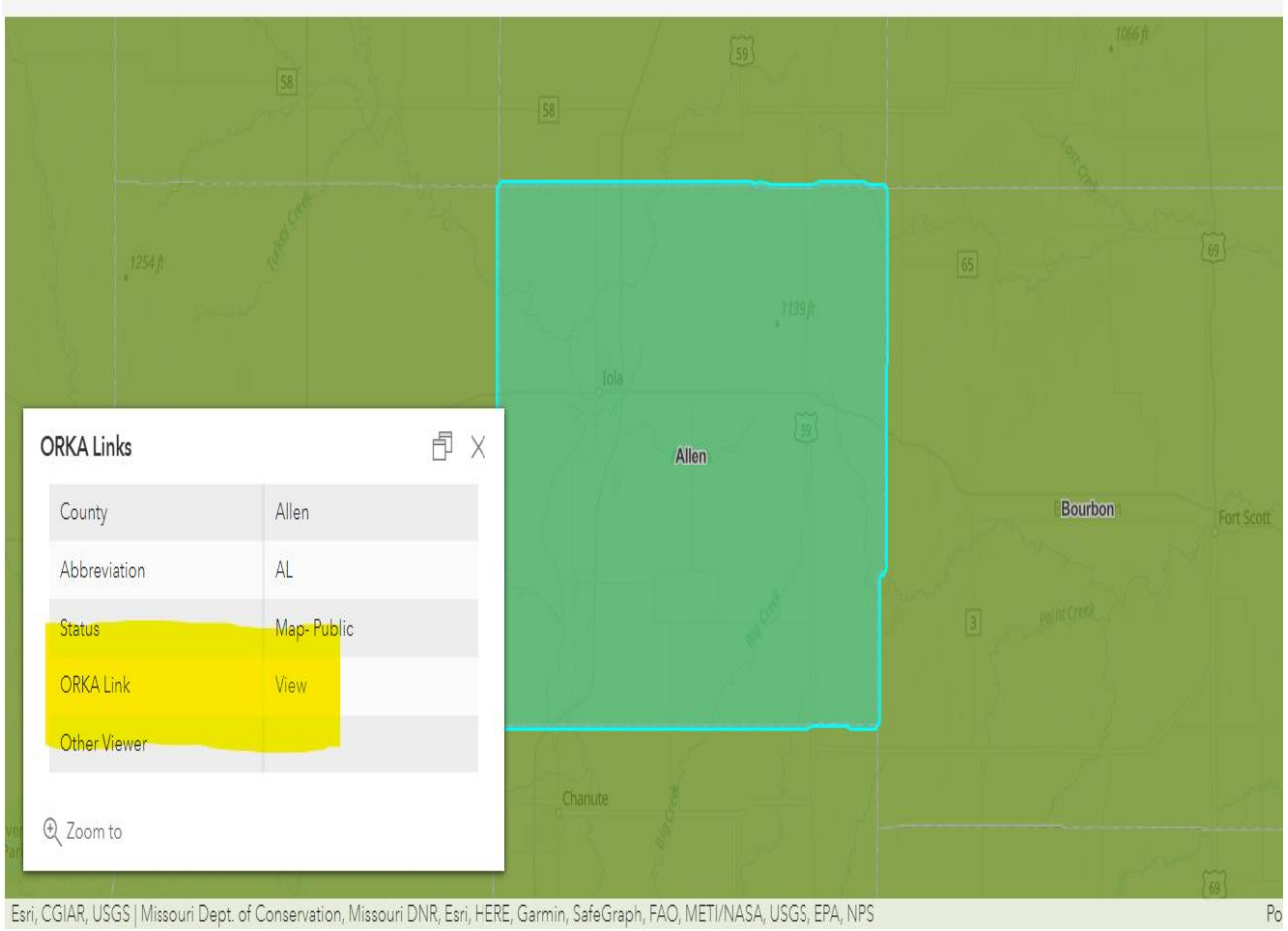
John Leahy



- Check property lines
- Right of Ways
- Public vs. Private property
- ORKA or County Appraiser

Tech Tools: GIS

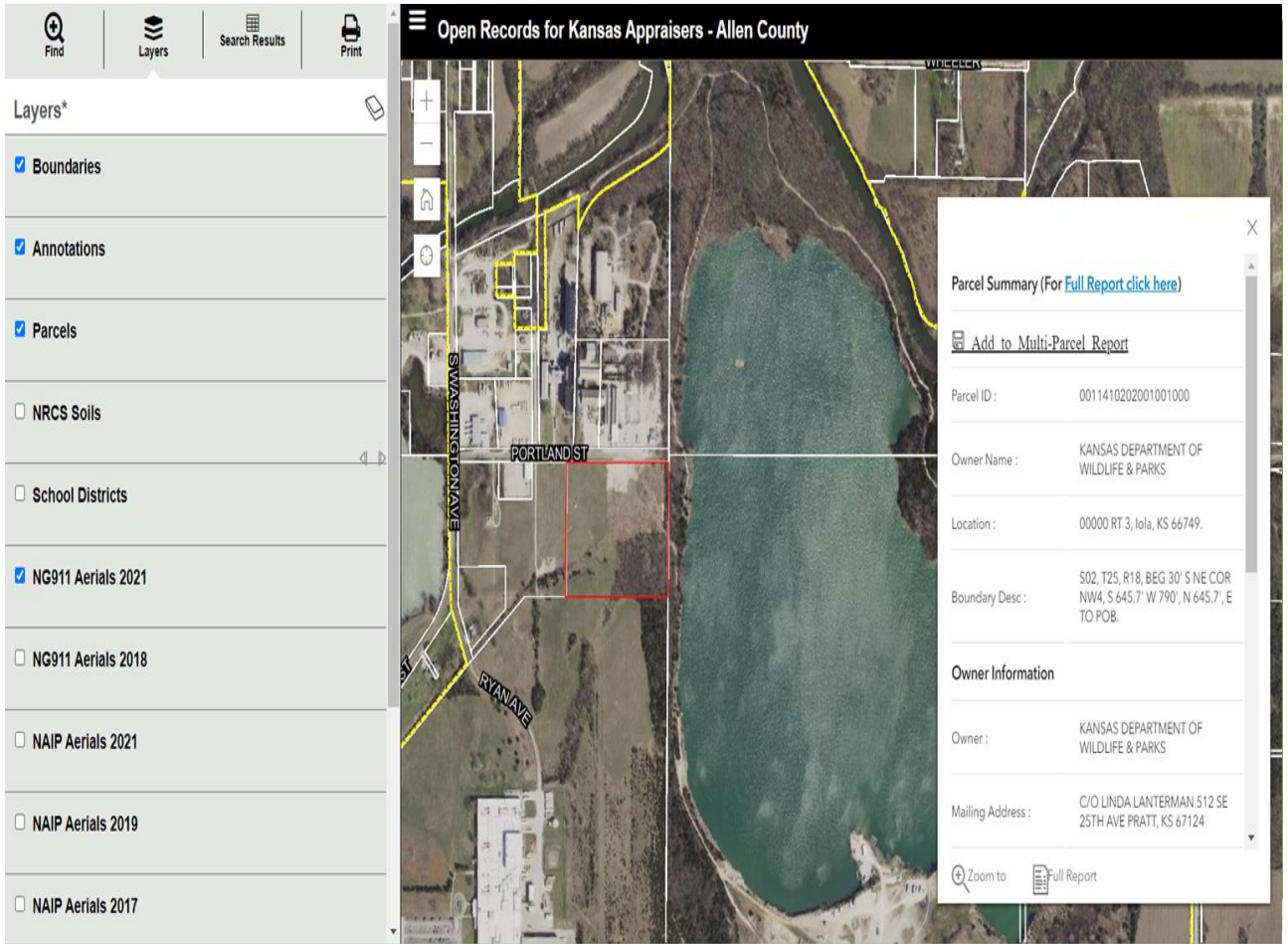
John Leahy



- Check property lines
- Right of Ways
- Public vs. Private property
- ORKA or County Appraiser

Tech Tools: GIS

John Leahy



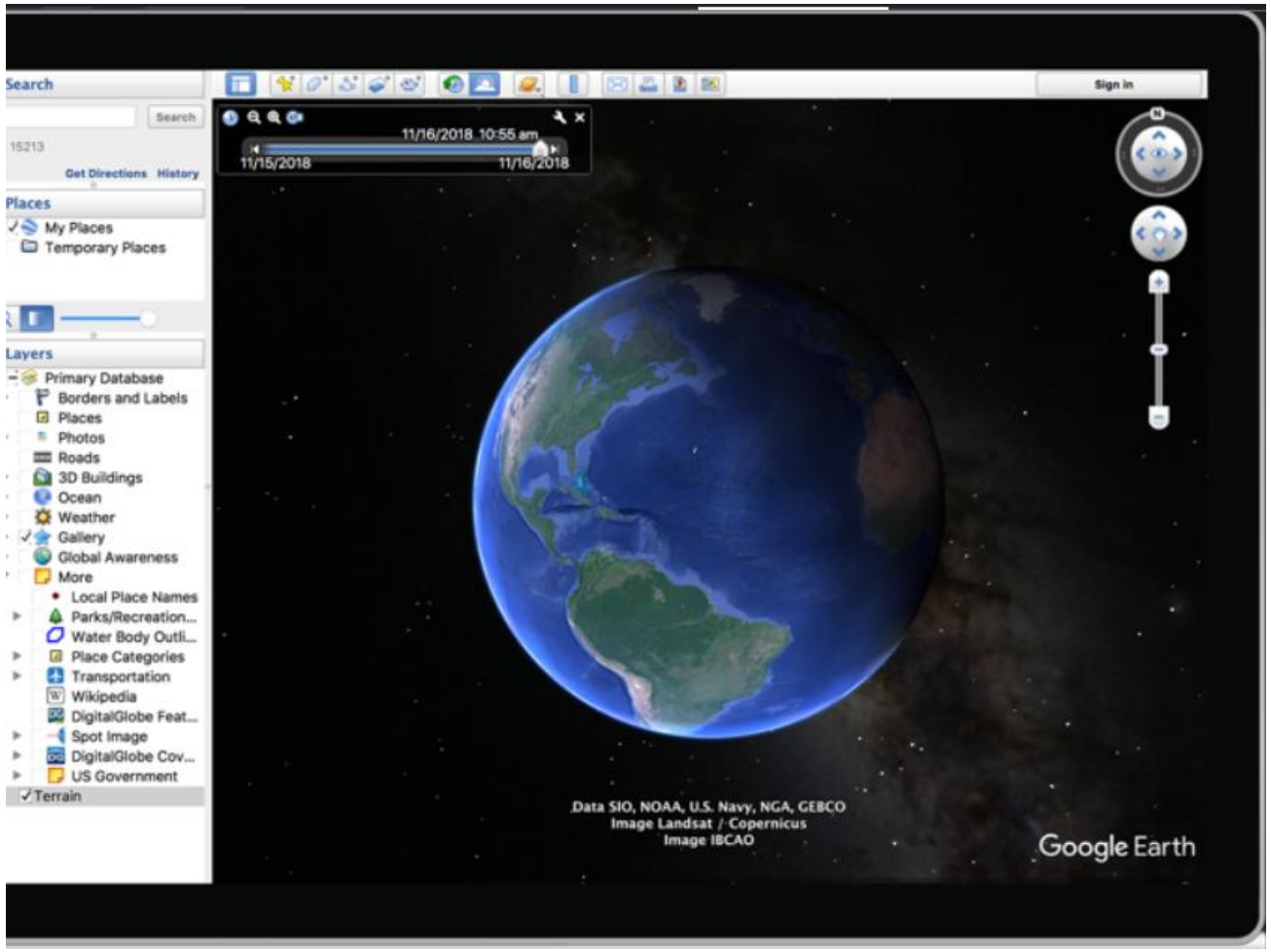
- Check property lines
- Right of Ways
- Public vs. Private property
- ORKA or County Appraiser

Tech Tools: Google Earth

John Leahy

- Free software
- Web, mobile, desktop (Pro)
- Excellent way to communicate with land managers, volunteers, and trail users
- First Time User Guide

Tech Tools: Google Earth

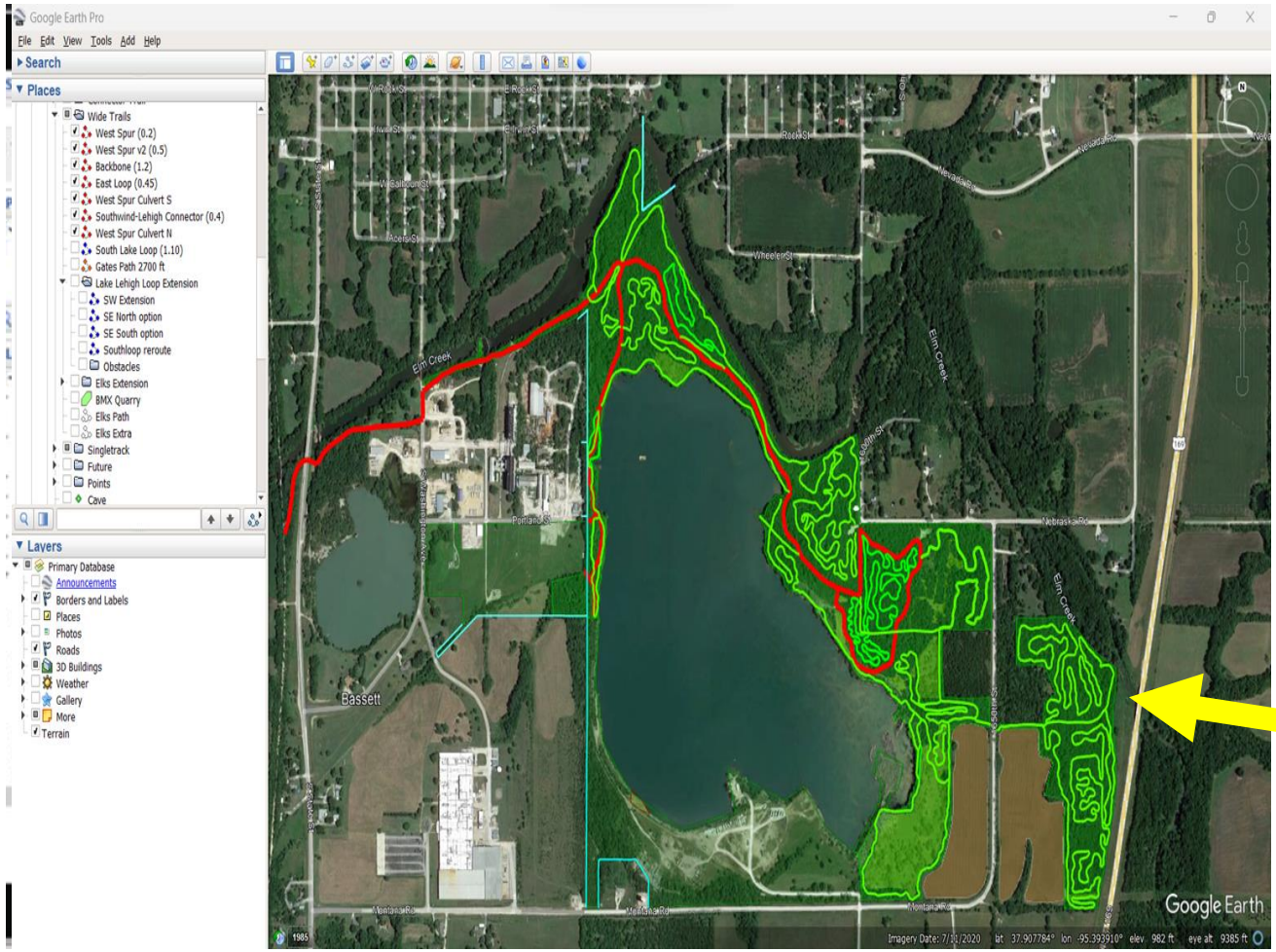


John Leahy

- Desktop download
- Import & export GIS data
- Historical imagery
- Elevation profiles
- Mark positive points of control
- Create maps

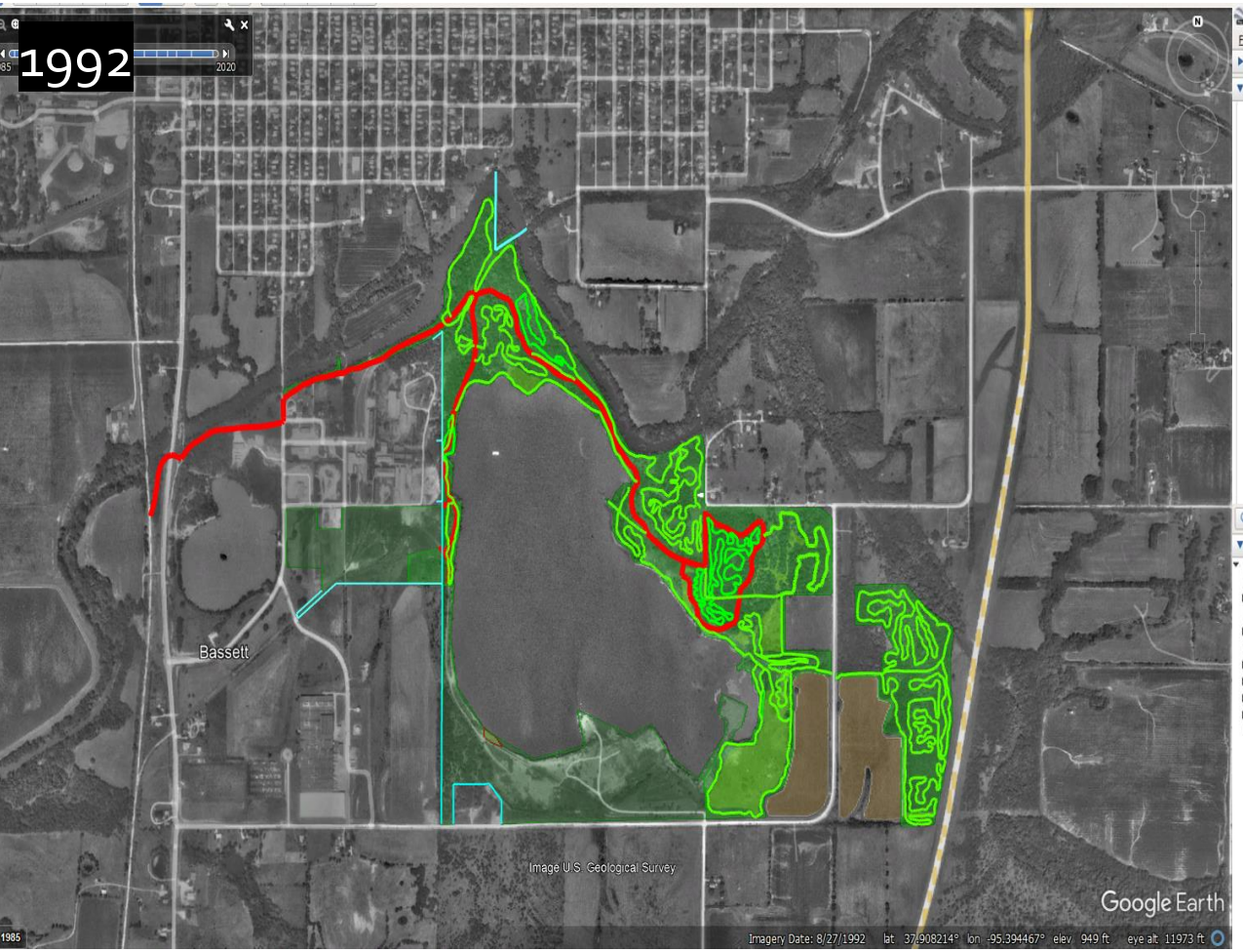
Tech Tools: Google Earth

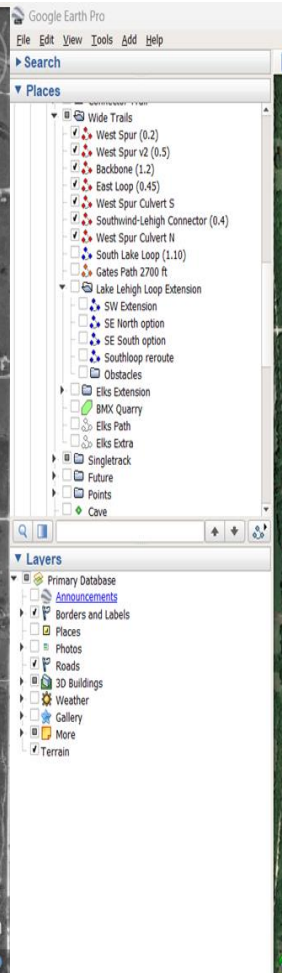
John Lea

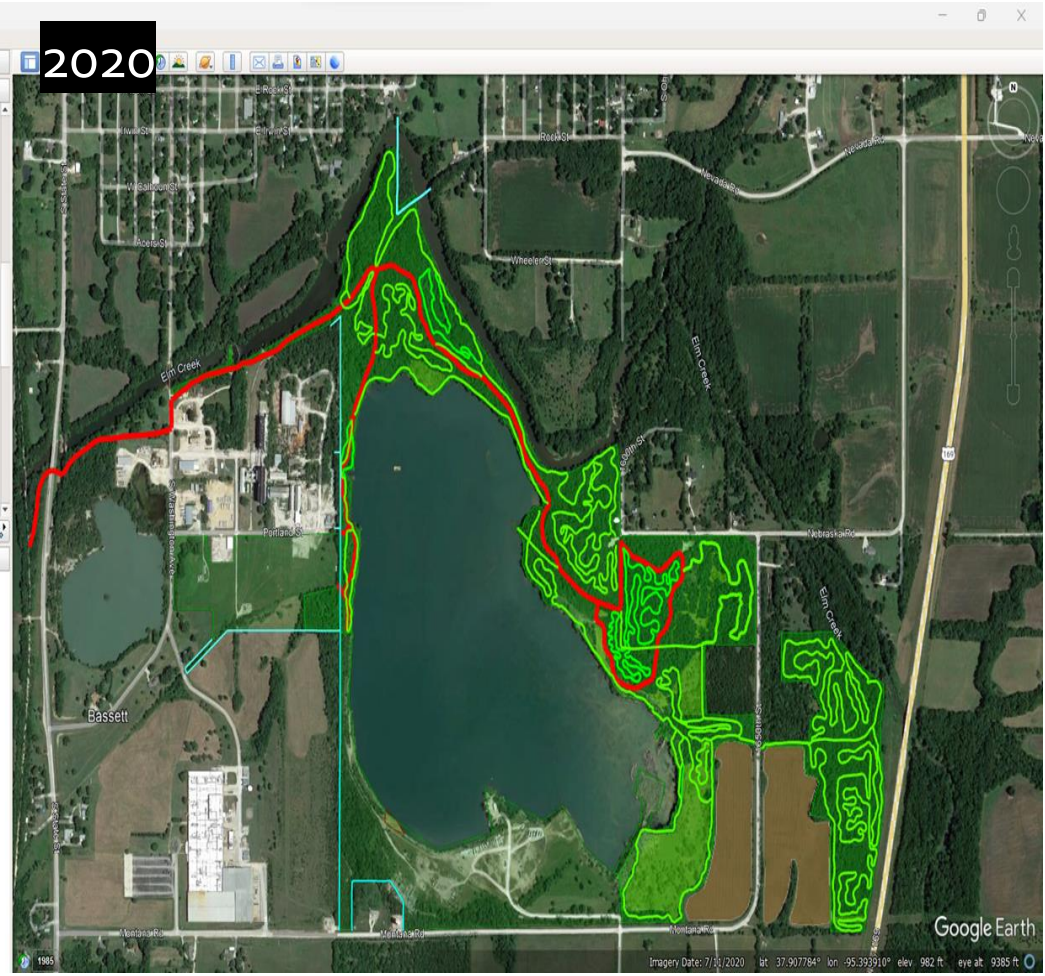


Tech Tools: Google Earth

John Leahy

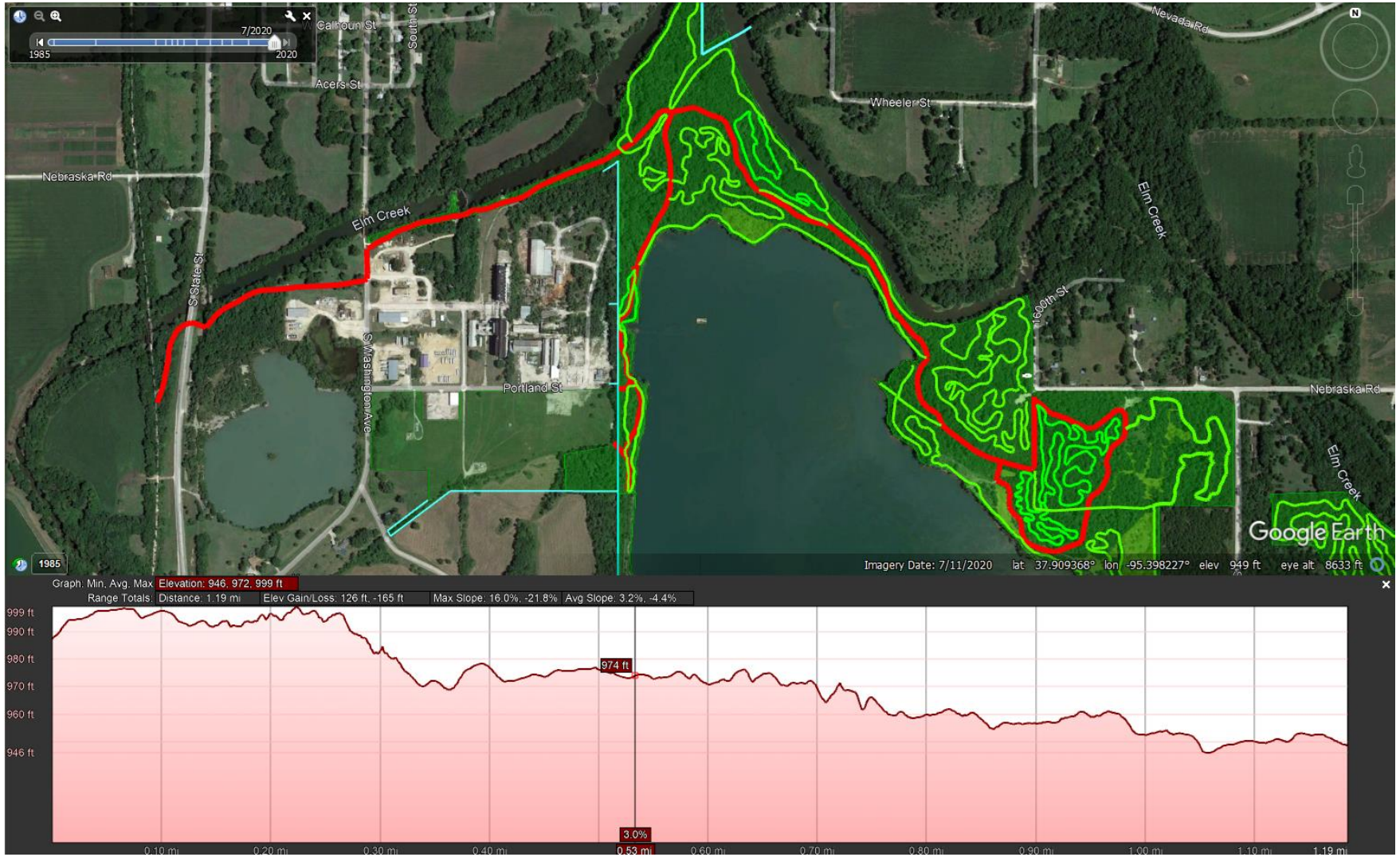






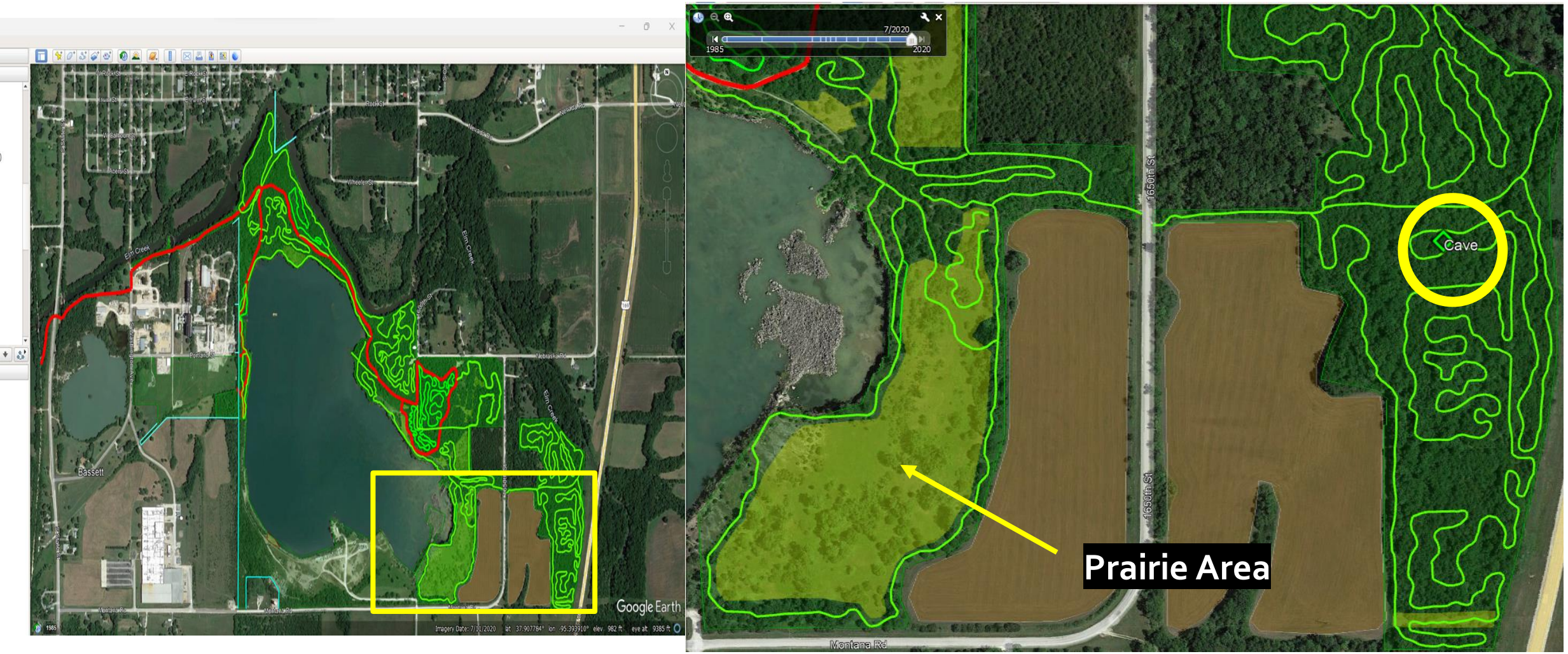
Tech Tools: Google Earth

John Leahy



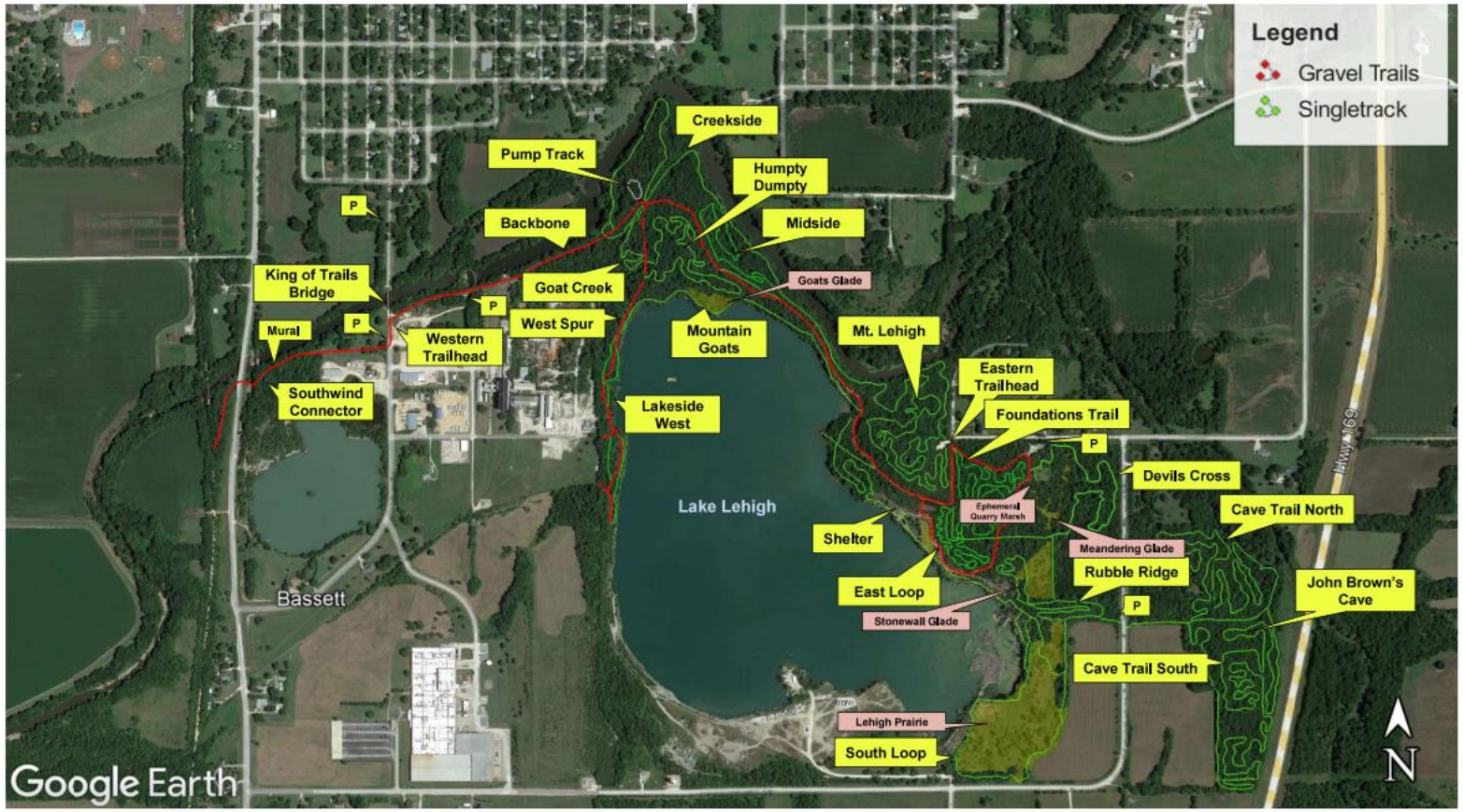
Tech Tools: Google Earth

John Leahy



Tech Tools: Google Earth

John Leahy



Lehigh Portland Trails
Iola, KS LehighTrails.com
March 2022

Online Maps:
- OpenStreetMap.org
- MTBProject.com
- Singletracks.com
- Trailforks.com

Thrive Allen County

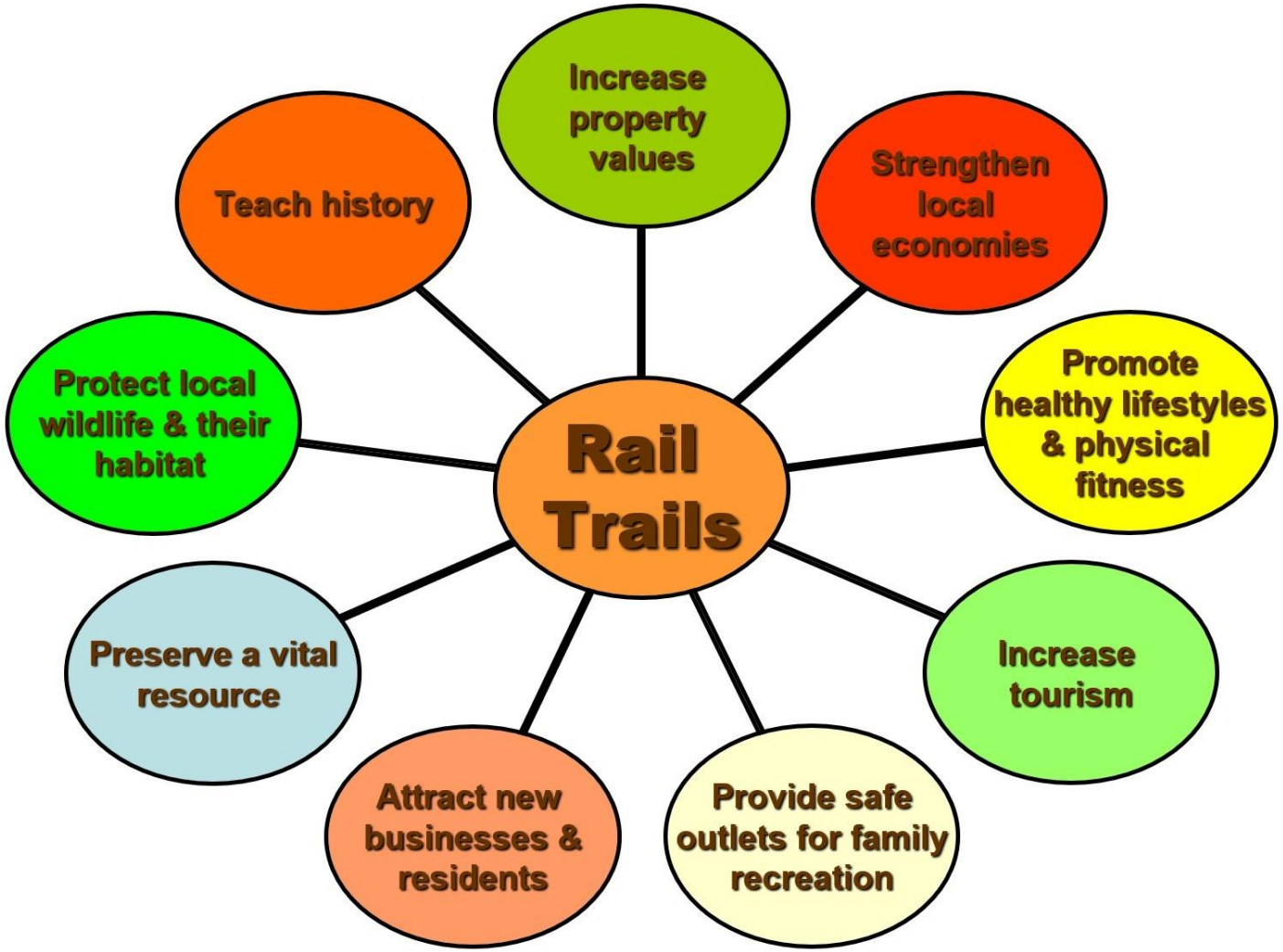
Kansas Health Foundation
Iola Industries Inc.

Working with Others

Larry Hatfield

Working With the Land Manager

Larry Hatfield



Working with:

- **Adjacent Landowners**
- **Municipalities**
- **Counties**
- **Railroads**

Rally the Volunteers

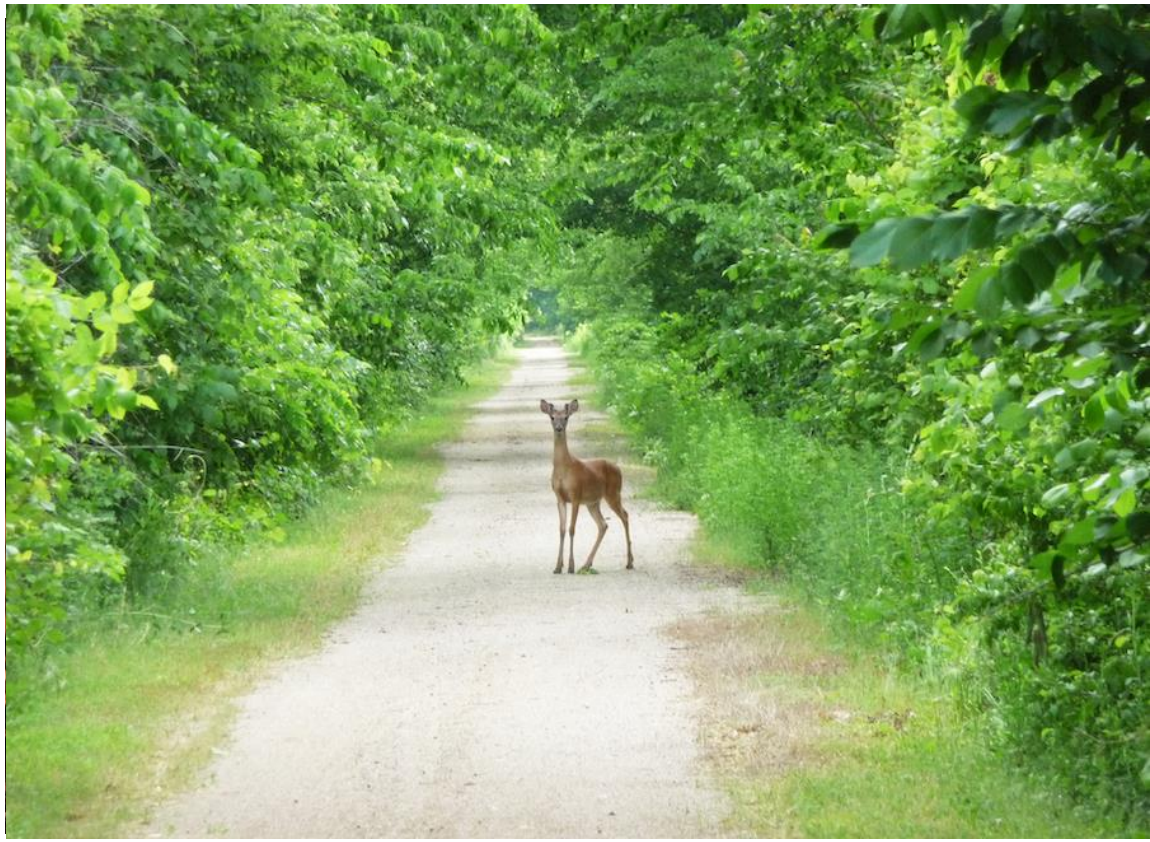
- The hardest job of all
- Getting the word out
- Organizing their efforts
- Not burning them out.

KANSAS TRAILS COUNCIL
KTC
We Build Trails

Sunflower Foundation

October 10	Where do we start?
November 14	Let's get started!
December 12	What will this cost?
January 9	Where will we find the money?
February 13	Trail sustainability
March 12	Rail trail issues

2nd Tuesday, Noon-1 pm CT



K-STATE
Research and Extension