### Friends of the Tug Fork River

Madison Mooney MSW Friends of the Tug Fork Board Member LiKEN Knowledge Community Care Coordinator

### Madison Mooney's Background



2018 B.A. Sociology Alice LLoyd College



Masters Degree in Social Work, University of Kentucky 2020



LiKEN Knowledge Community Engagement Coordinator, 2021

### Water work in Eastern Kentucky

















### What will be covered today!

- Friends of the Tug Fork River
- Martin County Drinking and Source Water work
- Partnership with LiKEN Knowledge
- Debris Impacts on the River
- Clean Up efforts across Kentucky
- Dream Big!

# Tug Fork of the Big Sandy River

- ❖ 159 Miles Long.
- ❖ 1,555 Sq Mile Drainage Area.
- Drainage from West Virginia, Kentucky, and Virginia. Forms the state line between these states.
- Headwaters in McDowell County, WV.
- ❖ Joins the Levisa Fork at Louisa, KY & Ft Gay, WV to form the Big Sandy River which flows 29 miles to the Ohio River.





## 2019 - FotTFR meets REAP







# **HYDRATREK**







# The Catch of the Day









# Tug Fork River Tire Tug of War

River Tires Recovered by Location & Year

851

755

2,246

4,566

2,043

3,675

851

2,798

2,246

13,340

	2019	2020	2022	2022	2023	Total
Williamson/South Williamson	2,321	180	2,598	781	1,565	7,445

2,321

Updated 10-11-2023

180

2,598

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Kermit/Warfield

Total

Matewan/McCarr Area

Lobata/Sprigg/Burnwell Area

### FotTFR Is Incorporated & Approved As A Nonprofit

March 4, 2022

State of West Nivying Certificate I, Mac Warner, Secretary of State, of the State of West Virginia, hereby certify that FRIENDS OF THE TUG FORK RIVER, INC. has filed the appropriate registration documents in my office according to the provisions of the West Virginia Code and hereby declare the organization listed above as duly registered with the Secretary of State's Office. Given under my hand and the Great Seal of West Virginia on this day of March 94, 2022

May 12, 2022



FRIENDS OF THE TUG FORK RIVER INC CO JOHN BURCHETT JON SUNSET BILVID WILLIAMSON, WV 25661 55/13/022 Complayer for numbers, Geologies for numbers, 48-005/1770 Forest in condest. Home: Customer Service for number 1/3/95 Telephone, 677-629-6500 Accounting patient enting Descending patients (5090/2) Fame 1801-1896-62 / 199-ht required Vest

Effective date of exempts
March 04, 2022
Contribution deductionly
Yes
Addendum applies:

No DEA: 26053523001282

### Dear Applicant

We've pleased to tell you we determined you've exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(2). Denote can deduct contributions they make to you under IRC Section 170. You've also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt, status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

If we indicated at the top of this letter that you're required to file Form 990990-EZ990-N, our records slowyou're required to life an annual information return (Form 990 or Form 990-EZ) or electronic noise (Form 990-N, the o-Pontard). If you don't file a required return or notice for three consecutive years, your exempt status will be unknownizedly revoked.

If we indicated at the top of this letter that an addendom applies, the enclosed addendom is an integral part of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter \*4221-PC\* in the search has to wiser Publication 4221-PC. Compliance Guide for 501c)(3) Public Charities, which describes your reconficeping, reporting, and disclosure requirements.

Sincerely,

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Stephen A. Martin Director, Exempt Organizations Ralings and Agreements

> Letter 947 (Rev. 2-2020) Catalia familier 201007

### LiKEN Knowledge and Martin County Water Projects

### Martin County Water and Health Study: 2018-2020

### **The Study**

Responding to community concerns about drinking water quality in Martin County, Kentucky, the University of Kentucky and Martin County Concerned Citizens collaborated on a drinking water testing and health study.



From December 2018 to December 2019. researchers tested the tap water and administered a health survey at 97 randomly selected households throughout the county.

### The study aimed to answer the following questions

- . What is in the tap water? . Are there certain parts of Martin County that have
- more issues with water quality?
- . What issues are people experiencing with their tap water?

### What we tested for:



### **Testing Results**

47% of samples had at least one contaminant that exceeded the Safe Drinking Water guidelines.

The major issue of concern was disinfection byproducts, 35% of houses had levels of DBP that were higher than the allowable limit. DBP levels were higher in Summer and early Fall,

### What are disinfection byproducts?







Disinfection byomducts are contaminants in drinking water that form when chlorine used to kill bacteria reacts with organic matter (like leaves, sewage, or algae) in the water. Disinfection byproducts are the most common water quality violation in the United States, Harmful effects of disinfection byproducts can occur through ingestion or inhalation.

### Possible health effects of disinfection byproducts:

- · Bladder cancer
- · Cardiac birth defects
- · Liver, kidney or central nervous system problems

- Out of 19 metals tested, only iron and aluminum were found above the limit. One house was above the level for iron, and ten houses were above the level
- . Iron and aluminium do not threaten human health but can affect the color and taste of water

### Coliform bacteria:

- . 13% of houses had coliform bacteria, mostly in summer and fall
- . Some coliform bacteria can cause illness, but not all bacteria are harmful.
- . E. coli was not found in any samples, so there was no evidence of sewage contamination in the homes tested.

### Conclusions

It is more important than ever that Martin County residents continue to work together through the Martin County Concerned Citizens. Together, we can hold the water district and state regulators accountable to make sure that our water system is fixed once and for all.

- . Disinfection byproducts and coliform bacteria are the major water quality concerns in Martin County
- . Contamination is higher in summer and early Fall . No particular area of the county had higher levels
- . The study did not find any heavy metals from coal slurry in the water
- . Fixing the issues with Martin County's water system is a long process. Citizens, scientists, civil engineers, and policy makers must work together to ensure safe, affordable water for all county residents

Read the full "Preliminary Technical Report: The Martin County Kentucky Community-Engaged Drinking Water Health Pilot Study" here: https://pss.ca.uky.edu/sites/pss.ca.uky.edu/files/martin\_county report final.pdf.

### Report Issues

### Having issues with your drinking water quality, service, or billing?

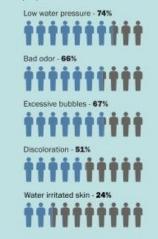
First, call the Martin County Water District (606) 298-3885. Make sure to write down the date and time you call, who you talk to, and what was

### If you don't receive an adequate response from the Water District:

- . Message us on Facebook at Martin County Concerned Citizens. We are here to help
- . Report the issue to the Public Service Commission by calling 1-800-772-4636 or emailing psc.info@ky.gov. Provide your full name and place of residence in the body of the e-mail. Make sure to reference case number 2020-00154.

### Survey on household issues with water:

99% of respondents reported issues with their tap water. Top reported issues include:



### Household Tap Water Usage: Drinking



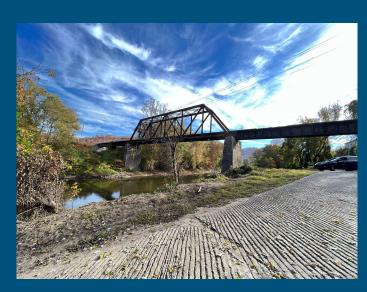
### Household Tap Water Usage: Cooking



### LiKEN Knowledge and Martin County Water Projects

• Mountain Drinking Water Project 2021-Present



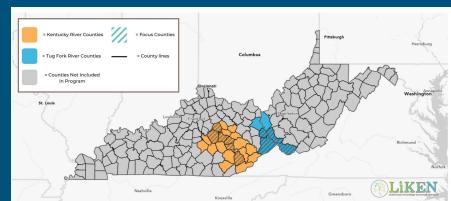




### LiKEN Knowledge and Friends of the Tug Fork River

"Community Wealth Through Healthy Rivers and Forests"

- Documenting forest and river-related economy and traditions along the Tug Fork and Kentucky Rivers
- Helping landowners manage and increase the value(s) of their forests
- Helping connect Appalachian communities with supportive forest land-use agencies, organizations, and initiatives also helping clear "tangled" land ownership titles
- Helping support and grow forest and river related livelihoods:
  - Non-timber forest products
  - Agro- and Eco-Tourism
  - Ecosystem service markets



### ACLC Flood Debris - Level of Impacts Recommendations

### <u>Debris Removal Goals in Riverine Contexts, when done correctly....</u>

 ...can remove flood-related debris while improving riverline structure to make these waterways more resilient to future floods and to withstand erosion.

 ...should not postpone the recovery of riparian areas which are key to preventing erosion, improving drinking water quality, and supporting the outdoor recreation economy.

### ACLC Flood Debris - Level of Impacts

 Following a flooding event, many communities are eager to begin cleanup of waterways. However, debris cleanup in Appalachian communities has often further damaged rivers, fragile ecosystems, and decreased bank stability.

### Concerns:

- Excessive debris removal
- Damage to riverbeds & ecosystems
- Accountability for contractors



# Green River Tire and Access Identification Project



Kentucky Waterways Alliance is taking a stand against tires in Kentucky waterways. Waterway tires are indicators of larger issues facing environmental health, public health, pollution, illegal dumping, and neglected waterways.

Tires Don't Belong in Waterways!

### **Project Goals:**

- 1. Increase Engagement and Recreation:
- Empower communities through KWA's Tire Reporting Tool
- Develop an online web map for all public access points on the Green River.
- 2. Provide Resources for Tire Removal
- Use GIS and Remote Sensing to create "Tire Hot Spot" Maps.
- Determine areas under threat for tire accumulation.
- Create a model to apply at other rivers across the state.

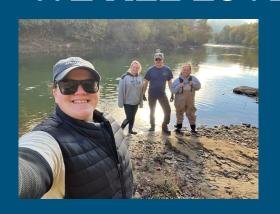
See a tire? Report a Tire!



Link: arcg.is/1SeTj11

Scan the QR or use our Link to access the Tire Reporting Tool

### WE ALL LOVE OUR RIVERS & WATERWAYS













# **QUESTIONS?**

