



**ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

**KENTUCKY DIVISION OF WATER
WELLHEAD PROTECTION PLAN
5-YEAR UPDATE FORM**

Update Requirements:

This form should be used for the 5-year update submittal requirements of the Kentucky Wellhead Protection Program (WHPP) in compliance with 401 KAR 4:220 and SDWA Section 1428. Once the form is complete, please sign and send to:

Kentucky Division of Water
Watershed Management Branch
Attention: Allan Shingleton
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601 or allan.shingleton@ky.gov

For assistance contact Allan Shingleton at (502) 782-6907 or allan.shingleton@ky.gov

System Information:

PWS Name: Hardin County Water District #2

PWS ID Number #0470175

AI Number: 1674

Contact Person/Title: John Cruse

Mailing Address: P.O. Box 10 White Mills, KY 42788

Telephone: (270) 862-3213 Email: jcruse@hcwd2.org

System Type*: Community

***Community; Non-Transient/Non-Community; Transient/Non-Community**

Source*: Spring *Well(s) or Spring(s) and total number of each

County: Hardin ADD: Lincoln Trail ADD

WWD Permit #: 1125 Permitted Amount (mgd): 6 mgd

Population Served: 41,900

Overall Susceptibility Rating*: High *High, Medium or Low

WHPP Changes Summary: No significant changes

Update Form Instructions:

Please complete each section that applies to any system or WHPP updates and submit the supporting documentation. Please indicate if a section is not applicable to this update. **Sections 4, and 6 through 11 are required for every 5-year update.**

Please sign certification on the last page upon completion.

Section Updates:

Section 1: Treatment Plant

There has been no change to the treatment plant location since the previous WHPP submittal. A copy of the County Highway Map with the plant's marked location has been attached.

Section 2: Water Withdrawal and Water Quality

Since the previous WHPP submittal, Hardin County Water District #2 saw an increase in their water withdrawal at the White Mills Spring that slightly exceeded their permitted amount. In 2017 the Water District began purchasing water from the Louisville Water Company which allowed them to return to normal withdrawal amounts from the spring. In 2020 Hardin County Water District #2 experienced an increased demand from interconnected Hardin County Water District #1, which had closed their Muldraugh Plant for renovation upgrades. This added demand forced Hardin County Water District #2 to again exceed their permitted withdrawal amount from the spring. The minimum purchase amount increased considerably with the Louisville Water Company in 2021. This agreement allows for sustainably less water withdrawal from the White Mills Spring moving forward.

Section 3: Change or Modification to Groundwater Source

There has been no modification to the groundwater source (White Mills Spring) since the previous WHPP submittal. A copy of the Spring Inventory Form has been attached.

Section 4 (REQUIRED): Planning Team

Leader:

John Cruse – Chief Water Plant Operator

Team Members:

Shaun Youravich – General Manager

Ryan Kynett – Water Quality Supervisor

Section 5: WHPA Delineation

The Water District will not be revising their approved WHPA delineation. A series of three dye traces were employed to delineate and determine the extent of groundwater contribution to the White Mills Spring.

Section 6 (REQUIRED): WHPA Map

Copies of the WHPA Map and CSI Map have been attached

Section 7 (REQUIRED): Contaminant Source Inventory

Provide an updated CSI in table format. This can be created using the spreadsheet template provided, and copied into the space below. If no changes occurred since the last update, the table can be pulled from previous WHPP documents. Each contaminant source listed should have a Contaminant Source ID # that corresponds to the WHPA map in Section 6. The CSI table must show the susceptibility determination ranking for each contaminant source. Include a brief discussion of the overall system susceptibility. Please contact program staff for assistance.

There have been no changes made to the CSI since the previous WHPP submittal. A copy of the CSI table has been attached.

Section 8 (REQUIRED): Management Strategies

Previous Management Strategy Update:

The Water District uses a strategy of public education to promote springhead protection awareness and involve the community in the protection of their groundwater source. The Water District will work within the framework of existing regulations. Public education will be used to draw attention to the springhead protection program and educate the public about their roles in protection efforts. The Water District has an annual Groundwater Protection Week Campaign via social media that engages the community with protection activities and efforts. The Water District will utilize the annual Consumer Confidence Report along with brochures to educate the public concerning information and the status of springhead protection planning.

The Water District will assist local landowners and residents with the implementation of Groundwater Protection Plans as required by the State.

The Water District will assist local farmers with State required BMPs.

The Water District will install WHPA road signs at the 5 main entry points to the Basin and on ramps to the Parkway as directed by DOW.

The Water District will report any illegal dumping or spills to the regional office.

Newly Proposed Management Strategies:

The 5 WHPA road signs have been placed at the designated locations.

The Water District will comply with groundwater protection planning regulations by reviewing or updating the current Groundwater Protection Plan.

The Water District will continue to report any illegal dumping or spills to the regional office.

Hardin County Water District #2 will continue to promote the protection of their water supply to their customers and residents by utilizing the annual CCR as well as an annual Groundwater Protection Week Campaign via social media along with remaining vocal about any activities that could adversely impact the water supply.

Section 9 (REQUIRED): Contingency and WHP Planning

Provide a description of Contingency and WHP Planning. Complete the Emergency Response Phone List, Procedures for Public Notification, identification of Potential Future Problems and the procedures to establish Alternative Water Supplies. This section must also address how often the WHPP will be reviewed and updated.

Emergency Response Phone List

Fill in all Blanks and Phone Numbers with appropriate information.

Local Emergency Response	Phone Number
Plant Operator	270-862-3213
Fire Department	270-769-2900
KY State Police	270-766-5078
Hardin County Sheriff	270-765-5133
Local Emergency Dispatch Click here to enter text.	911

State and Federal Assistance	Phone Number
Kentucky DOW (Frankfort)	502-564-3410
Kentucky DOW Associated Field Office Louisville	502-425-4671
Kentucky Environmental Response Team 24 hour response line	(502) 564-2380 (800) 928-2380
Kentucky State Fire Marshall	(502) 573-0382

Any Other Pertinent Contacts	Any Other Pertinent Numbers
Click here to enter text.	PHONE NUMBER
Click here to enter text.	PHONE NUMBER
Click here to enter text.	

Procedures for Public Notification:

In the event of a water system emergency that would threaten the health or life of the public, use the following procedure. Prepare and broadcast an advisory, including directions for the public. Describe the public notification process and provide contacts for those media outlets. If the system uses methods other than traditional media please list them.

Newspaper, Television, and Radio Stations	Phone Numbers
Radio WQXE	270-737-8000
Television Wave 3	502-585-2201

Potential Future Problems:

No particular problems are identified at this time.

Alternative Water Supply (Short and Long Term):

Short-term contingency plans include boil water notification, encouraging conservation practices, and shifting to an interconnected community water supply if necessary. Hardin County Water District #2 has interconnections with neighboring Hardin County WD #1, Larue County WD, Grayson County WD, Hodgenville Water Works, and the Louisville Water Company.

Long-term contingency plans would include modification to the treatment process or consideration of an additional water source.

Schedule for Update and Review:

The Wellhead Protection Plan will be reviewed regularly and updated every five years as required by regulation.

Section 10 (REQUIRED): Copies of Public Notices and Education Materials

Provide copies of wellhead protection public notices and education materials distributed.

[Click here to enter text.](#)

Section 11 (REQUIRED): Public Meeting Documentation***

Provide the record of WHPP public meeting attendance, minutes and comments.

[Click here to enter text.](#)

*****Non-Community Water Systems are not required to have public meetings for 5 year updates, but must post a public notice in a conspicuous place. A public notice template is provided as a separate document. However, public input and associated documentation are encouraged. Please contact program staff if you have any questions.**

Certification Signature (TO BE COMPLETED BY PLANNING REPRESENTATIVE):

"I certify that this document and all attachments were prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete."

Signature: John Cruse Date: 4-22-21

Printed Name/Title: John Cruse/ Chief Plant Operator

Assistance:

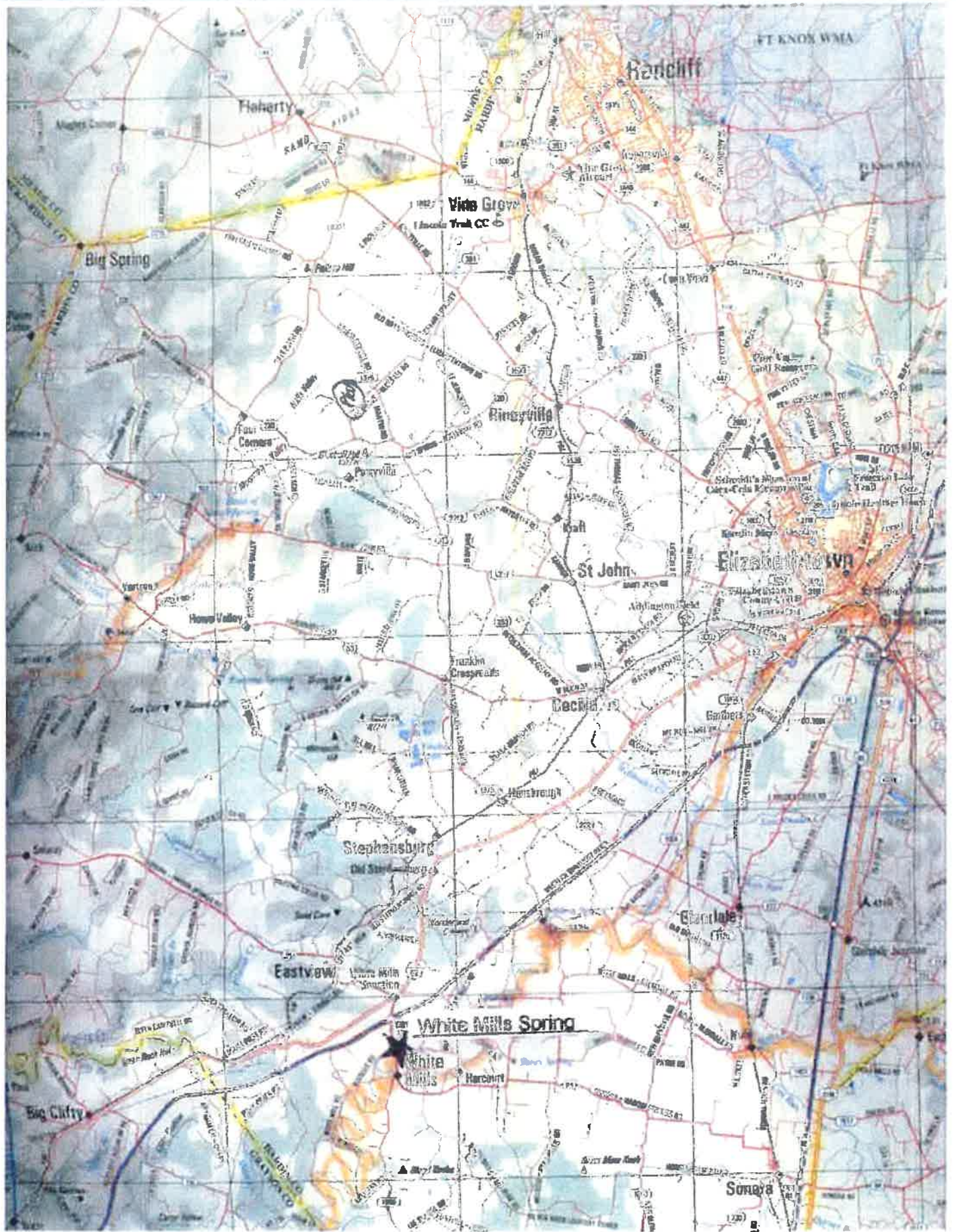
For any assistance please contact Wellhead Protection Staff:

Rob Blair
(502) 782-6893
Robert.Blair@ky.gov

Allan Shingleton
(502) 782-6907
Allan.Shingleton@ky.gov

Please sign and return completed form to:

Kentucky Division of Water
Watershed Management Branch
Attention: Allan Shingleton
300 Sower Boulevard, 3rd Floor
Frankfort, Kentucky 40601
or allan.shingleton@ky.gov



KENTUCKY SPRING INVENTORY FORM

Kentucky Spring Tag

9000-1064

JUL 26 1995

(1) AKGWA NUMBER:

9 0 0 0 - 1 0 6 4 - [] []

(2) GENERAL INFORMATION:

Spring Owner's Name: Hardin Co. Water District #2 () unknown
 Mailing Address: P.O. Box 66 () unknown
 City: E-TOWN State: Ky Zip: 42701
 Phone: () no phone () unknown

(4) SPRING LOCATION:

Spring Name: White Mills () unnamed
 USGS Quadrangle Name: Summit
 County: Hardin
 Elevation: 610 () map () altimeter () Abney level
 () other
 Latitude: 37 33 44 Longitude: 86 02 11
 Physiographic or Hydrologic Region:
 () Blue Grass () Ohio River Alluvium () E. Coal Field
 () Miss. Plateau () Jackson Purchase () W. Coal Field

(8) SPRING USE:

() domestic () public supply () irrigation
 () industrial () livestock () monitoring
 () unregulated public access () unused
 () other

(10) TYPE OF TREATMENT SYSTEM:

() none
 () water softener
 () ultraviolet
 () chlorination
 () aeration
 () charcoal filter
 () sand filter
 () iron inhibitor
 () settling tank
 () other

(5) SPRING CHARACTERISTICS:

Spring type: () seep () bluehole (artesian)
 () other () unknown
 Is the spring the headwaters of a surface stream? () yes () no
 Which side of the stream is the spring (when facing upstream)?
 () left () center () right () not applicable
 Type of flow: () perennial () seasonal () intermittent
 Spring discharges from: () cave () rock () fracture
 () soil () alluvium () mine adit () unknown
 () other
 Spring discharges into: () stream () soil () swamp
 () pond or lake () sinkhole () other

(9) SPRING SERVICE:

Number of people served: ?
 Number of service connections:
 Any quantity problems? () yes () no () unknown
 Any quality problems? () yes () no () unknown
 Describe: 1.8 MGPD
pumped from spring

Is a treatment bypass available? () yes () no
 Describe water quality problem requiring treatment:

(6) WATER (DYE) TRACE INFORMATION:

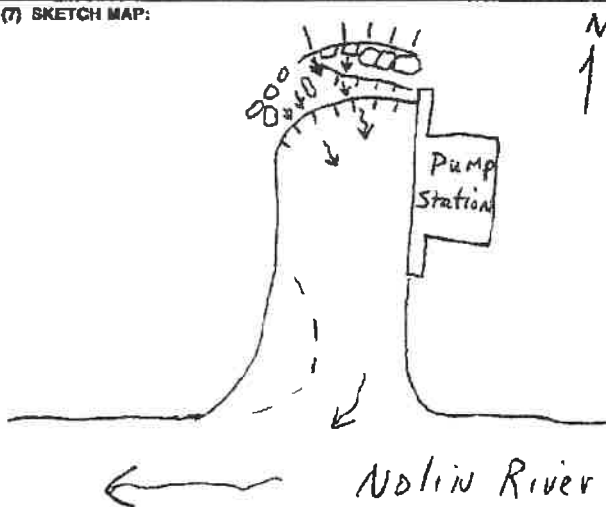
Have any water (dye) traces been run to/from this site?
 () yes () no () unknown
 If yes, who conducted the trace? Mall () unknown
 Address: USGS - Louisville () unknown
 City: Louisville State: Ky Zip: _____
 Date of trace: _____ Trace #: _____
 Name of water body spring discharges into: Nolin River () unknown () unnamed
 Spring discharge: 6.7 cfs () no flow () < 0.1 cfs () 0.1-1.0 cfs
 () 1.0-10 cfs () 10-100 cfs () > 100 cfs () gpm
 Discharge was: () measured () estimated () not determined
 Spring modifications: () dam () pump () spring box
 () gravity fed pipe or trough () spring house () none
 () other Concrete Pump Station

(11) INSPECTION INFORMATION:

Date of Inspection: 9 22 94 Check one: () original inspection () re-inspection
 () yes () no
 Was a water quality sample taken as part of this inspection? () yes () no
 Reason for inspection (check all that are applicable):
 () general water quality analysis requested
 () specific complaint investigation
 () general survey
 () ambient groundwater monitoring
 () other Spring Inventory
 Permit/Program Name _____

(7) SKETCH MAP:

Other ID #: _____
 Other ID #: _____
 Spring Inventory #: _____



(12) OPTIONAL USE:

Will spring owner allow state monitoring? () yes () no () unknown
 Extent of monitoring allowed: () collect sample () modify spring
 () measure discharge () access to spring or spring house
 () other Full Access
 Monitoring feasibility: Easy

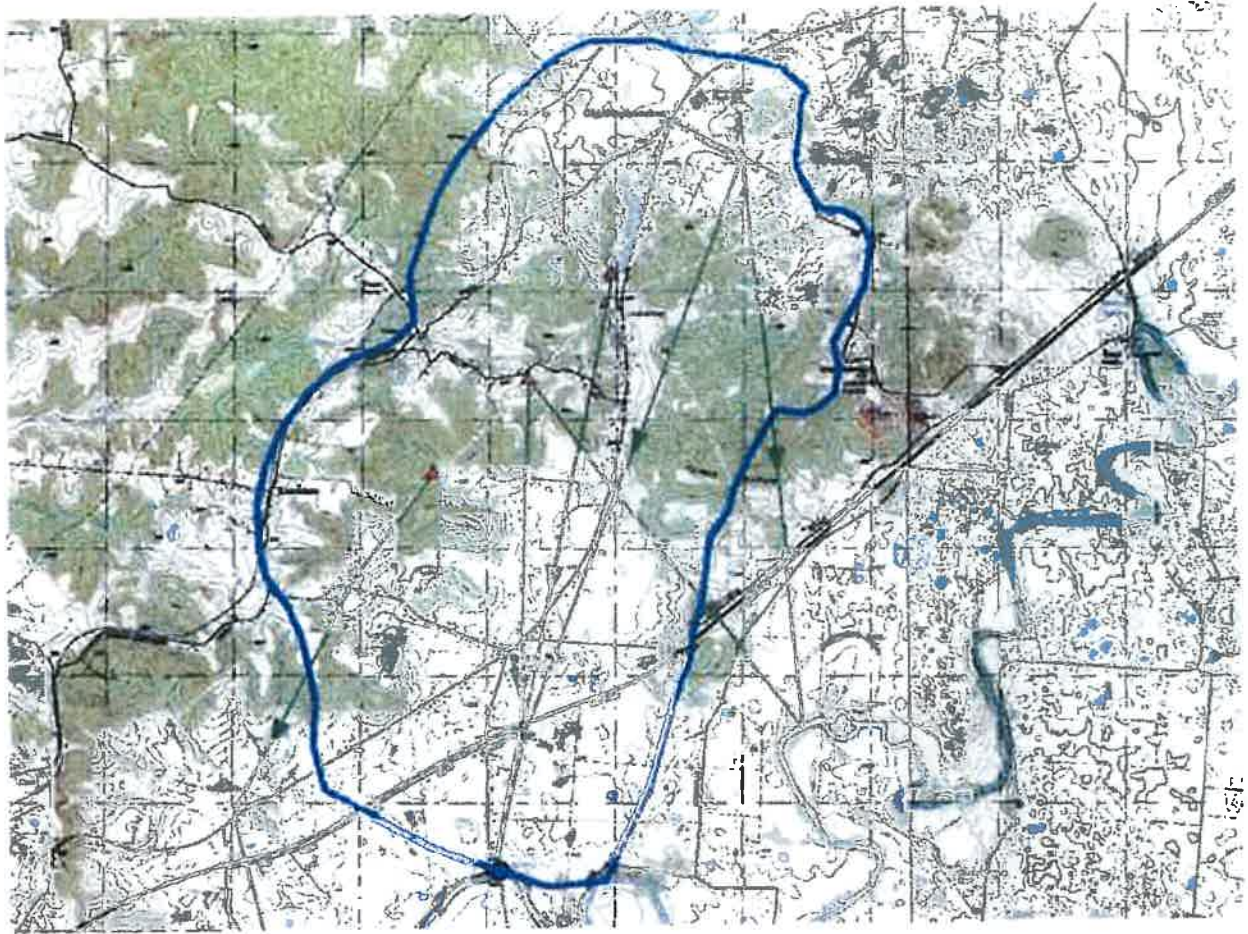
(13) COMMENTS:

Swallet in bank of Nolin River 2400'
to east of Spring contributes water
to White Mills Sp. (about 20%-30%
of flow of Sp [est.]

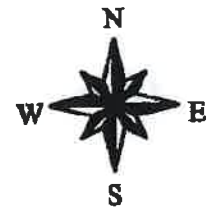
(14) INVESTIGATOR IDENTIFICATION:

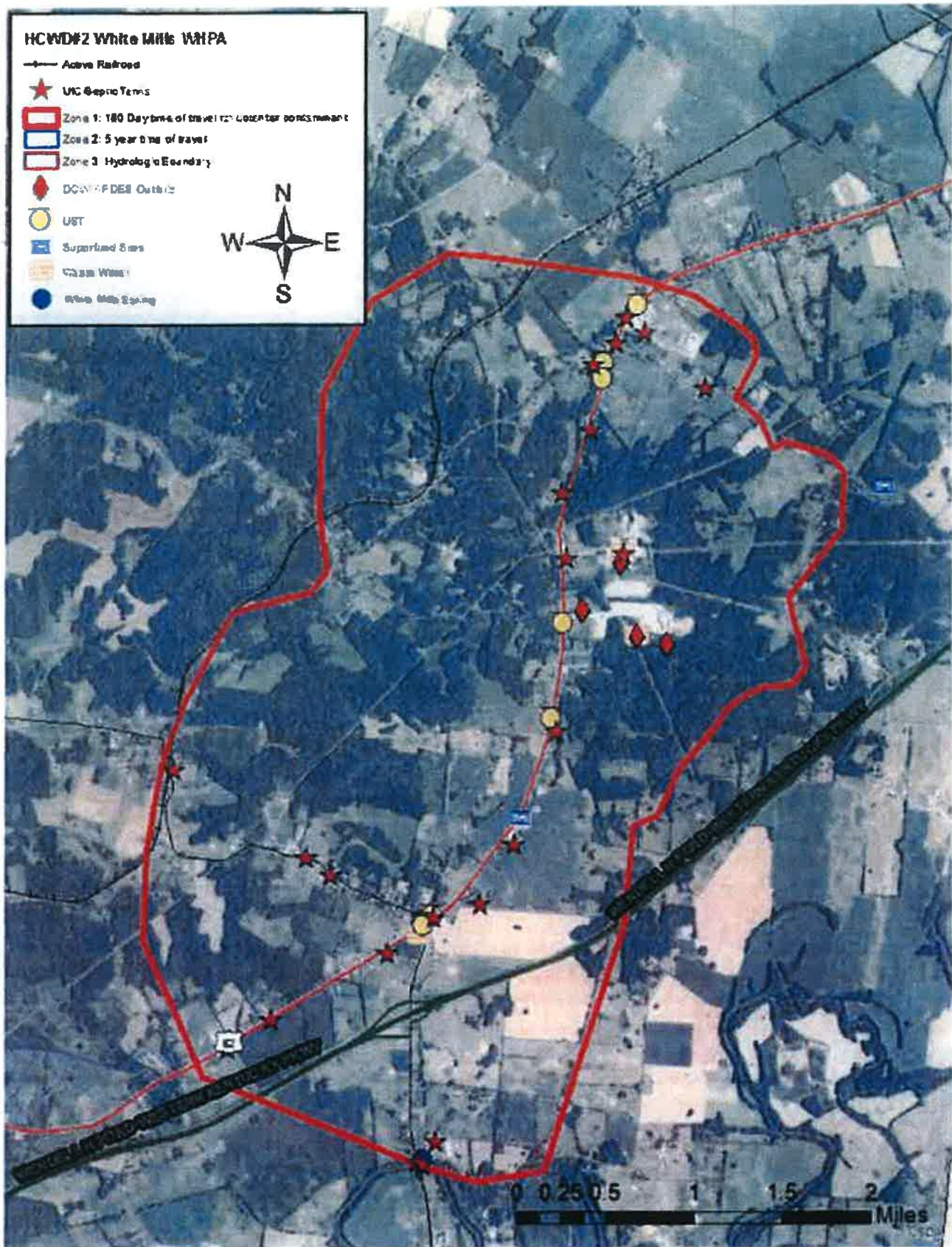
Name: Ray Joseph A Inspector ID # _____
 Agency: () CHR () DOW () DWM () KGS () SOAP
 () Other _____
 Signature of Inspector: Joe Ray
 Date: 7 26 95 Number of Attached pages: 1

Hardin County Water District #2 White Mills Springhead Protection Area Map PWSID # 0470175



-  White Mills Springhead Protection Area (4828 acres)
-  White Mills Spring (AKGWA 9000-1064)
-  Dye input locations
-  Dye trace.shp





Contaminant Source Inventory and Susceptibility Analysis for Hardin County Water District #2 PWSID # 0470175

ID#	Contaminant Source/Land Use	Address	Quantity	WHPA	Contaminant Value	Proximity Value	Hydrologic Sensitivity	Response Rating	Susceptible Ranking
1	Railroad		1	1	3	3	3	18	High
2	Elmhurst Quarry, 5 AST Diesel, gasoline, hydraulic, motor oil, waste oil	Hwy. 62	5	1	3	3	3	18	High
3	electrical substation	Hwy 62	1	1	2	3	3	15	High
4	Gas Station, 1UST low, mid, high gasoline, 2 AST diesel, leachate septic system	75 Station Hwy 62	3	1	3	3	3	18	High
5	Middle School, 2 large septic systems	Hwy. 62	2	1	3	3	3	18	High
6	Middle School, AST 10,000 gal diesel	Hwy 62	1	1	3	3	3	18	High
7	Row Crops & pasture (6,000 acres)	Whole Protection Area	1	1	3	3	3	18	High
8	Salvage Yard, septic system	84 Auto Recycle	1	1	3	3	3	18	High
9	AST diesel	Gar's Towing, Hwy 62	1	1	3	3	3	18	High
10	Mechanics shop & auto repair, junk yard	Cox Machine Shop, Hwy 84	1	1	3	3	3	18	High
11	Gas Station, 4 UST 2 10,000 gal gasoline, 6,000 diesel, 4,000 kerosene	Hwy 84 & 62	4	1	3	3	3	18	High
12	Gas Station 4 UST gasoline, diesel, kerosene	Sum Food Mart Mountain Station, Hwy 84 & 62	4	1	3	3	3	18	High
13	Mechanics shop & auto repair, junk yard	Weiss Auto Repair, Hwy 62	1	1	3	3	3	18	High
14	Septic Systems, Water wells	Whole Protection Area	300	1	2	3	3	15	High
15	Highway	Western Kentucky Parkway	1	1	3	3	3	18	High
16	East View Slaughter House	East View Slaughter Plant, Hwy 84	1	1	3	3	3	18	High
17	Bridges and Culverts	Bridge # B00044 on Ky 84	1	1	1	3	3	12	Med
18	Bridges and Culverts	Bridge # B00088 on Ky 1375	1	1	1	3	3	12	Med
19	HCWD #2, WTP, KPDES Permit	White Mills	1	1	2	3	3	15	High
20	HCWD #2, Landfill, sludge WTP	White Mills	1	1	3	3	3	18	High
21	UIC Class 5, septic System	White Mills Baptist Church	1	1	2	3	3	15	High
22	UIC Class 5, septic System	White Mills Christian Church	1	1	2	3	3	15	High
23	UIC Class 5, septic System	Linnvale School	1	1	2	3	3	15	High
24	UIC Class 5, septic System	White Mills Ball Park	1	1	2	3	3	15	High
25	UIC Class 5, septic System	Jayco Furniture & Appliance	1	1	2	3	3	15	High
26	UIC Class 5, septic System	Highway of Holiness Church	1	1	2	3	3	15	High
27	UIC Class 5, septic System	East View Post Office	1	1	2	3	3	15	High
28	UIC Class 5, septic System	Spears Vette Market	1	1	2	3	3	15	High
29	UIC Class 5, septic System	United Baptist Chapel	1	1	2	3	3	15	High
30	UIC Class 5, septic System	Epiphany Chapel	1	1	2	3	3	15	High
31	Wilbur Lindsey & Son Farm Supply	Leitchfield Road, East View, Ky	1	1	3	3	3	18	High
32	Foley Burden Auto Repair	3437 Shamills East View Road	1	1	3	3	3	18	High
33	Waste Generator or Transporter	George Lowe Property, 12407 Leitchfield Road, Cecilia, Ky 41724	1	1	3	3	3	18	High
						Total	High	Medium	Low
						345	343	2	0