Anderson, Alan

From:

Heath Ward <hward@springdalewater.com>

Sent:

Wednesday, August 13, 2014 4:52 PM

To:

Anderson, Alan

Cc:

'Charles Holt'; dsprouse@springdalear.gov; Chris Weiser; 'Sam Goade'; 'Don May'; West,

Alison; Leanna; 'Brad Stewart'; Jennifer; Kim; Ricky; Shawn; Terry; Tim

Subject:

RE: Spring Creek

Alan,

This is our latest update. After weeks of trying to find the source, we have finally narrowed it down. We consulted with karst geologist and hydrologist expert Dr. Van Brouhana with the University of Arkansas shortly after the first e-mail. He said our problem may be downstream and not up-stream due to the slant of the rock under the ground and not the direction of the pipe. This seemed unconventional, but knowing karst is a tough thing to figure out, we set up a test based on his advice.

We pumped water out of the affected area, placed dye downstream and confirmed yesterday that we had seepage in a section from a crack in a 60 year old line. We are in the process of getting a \$250,000 plus repair scheduled in less than 30 days.

In the meantime the creek is ok, the DO is good, the fish are fine and we see no effect on wild life as before. We are continuing to use all other barriers to contain any possible solids. There is no immediate risk to life or health. Conditions are somewhat improved. All other conditions or items as listed below are unchanged for the most part.

Although we have a good idea where it is coming from and we hope the repairs take care of this, we will have to verify post-repair that it is resolved.

We have submitted a formal SSO report on line via our Tech Services Director Tim Hawkins and refer to this communication. We will communicate the exact timeline of repairs and dates when we have them nailed down in the next few days. We fortunately have a sewer lining contractor in town doing some other work so we will do an emergency change order to facilitate and expedite the hopeful remedy.

Please call if you have questions. Thank you.

Heath

Heath A. Ward Executive Director Springdale Water Utilities 479-751-5751

From: Heath Ward [mailto:hward@springdalewater.com]

Sent: Tuesday, July 29, 2014 11:24 AM

To: anderson@adeq.state.ar.us

Cc: 'Charles Holt'; dsprouse@springdalear.gov; Chris Weiser; 'Sam Goade'; 'Don May'; 'west@adeq.state.ar.us'; Leanna;

'Brad Stewart'; Jennifer; Kim; Ricky; Shawn; Terry; Tim

Subject: Spring Creek

Alan-

I know you have been busy in Little Rock. Here is a summary of activities on this bizarre issue that I am confident Allison has filled you in on. We appreciate her meeting with us earlier in the week.

This is a summary of our mystery issue at Spring Creek. We believe that there may be sewage of some type getting into a section of the stream through the karst formations from an unknown location. Thus far massive and lengthy dye testing over the last 10 days from logical areas upstream have yielded no results. The D.O. levels are acceptable and the fish are thriving and so is wild life. However, our organoleptic observations and other tests tell us something is going on and we are not sure of the source. It may be a private line, septic tank, step system or some other extreme distance sewer issue we have not discovered yet. We have found no evidence it is our sanitary sewer, but we are not ruling it out due to the nature of the geology. We have placed hay bales downstream to prevent and to contain the "migration" of any solids that may be there. We do know the following:

- 1. We see no immediate threat to public health or to others downstream. There is no known wells or intakes nearby.
- 2. The wildlife does not seem to be affected. The fish seem to be very active and local wildlife feed off of them.
- 3. The water seems to be getting clearer with each day we are further away from a rain event. It may be associated with rain events. We continue to look for this as a verifiable clue.
- 4. The D.O. levels are at 1.0 and seem to be fine.
- 5. We know there is the presence of some fecal coliform.
- 6. We know the area in question is fed by multiple springs coming out of the rock.
- 7. We know it is karst type geology in the area.
- 8. We have investigated old sewer lines and have found no way they could be discharging into the area.
- 9. Thus far, no SWU sewers have shown to be contributing, although we continue to test.
- 10. There is an odor near the area and the wind obviously affects it.
- 11. The problem seems localized to this small area of the creek.
- 12. Some persons claim it is seasonal, and comes in the spring and summer. We are still trying to verify this as a possible clue.
- 13. No one from the public has complained. We believe it is due to it being in a remote area at this time.

We contacted the local ADEQ office last week. Yesterday we toured the site with Alison West and Matt Holden. We covered our actions and plans for next steps in trying to solve this perplexing issue. It was generally agreed that we were doing the right things and taking appropriate measures in this unusual case. A recommendation was made to contact the U of A and talk to a specialist on staff who is a Phd in karst hydrology. This seemed to be a logical person to consult. We will be calling him.

We have also contacted Charlie Holt, our district engineer with ADH. He has no immediate concerns, but has asked us to keep him posted as we are planning to do with ADEQ on this strange and difficult investigation.

Although George's Inc. operates a chicken plant close to the area, there is no evidence that they or the SWU sewer line nearby are contributing to the problem at this time. We are ruling nothing out 100%, but it is low on the likelihood list based on evidence.

Attached is a timeline of the past 14 days actions. A special camera crew is here this morning at a cost of \$16,000, we will continue to dye, and our team will cover this at a weekly meeting to discuss next steps. Our plan is to continue to try different things and monitor for clues. Our lab supervisor is looking for other sampling techniques or tests to help us determine a source. At this point we are gathering as many clues as we can.

Our team will meet again next Tuesday at 8:30 a.m. We will send another report as the situation develops. Please call if you have questions.

Heath

Heath A. Ward Executive Director Springdale Water Utilities 479-751-5751