



WATERSHED NEWS

FOUNDATION

AUGUST 15, 2006

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UPCOMING EVENTS

The date for Secchi Day on Beaver Lake has been rescheduled to Saturday, August 26, 2006. For details, contact Suzanne Langley or Fran Free at slangley@audubon.org or ffree@audubon.org or call the Fayetteville Audubon office at 479-527-0700. Event co-sponsored by Beaver Water District and Audubon Arkansas

WITH YOUR HELP
WE WILL WORK
TOGETHER TO
MAKE BEAVER,
TABLE ROCK,
TANEYCOMO AND
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LAKES THE FOUR
CLEANEST
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SINKHOLE WIDENS; SOLUTIONS SOUGHT

By Mike Penprase Springfield News-Leader

Posted on August 15, 2006

URL: <http://www.news-leader.com/apps/pbcs.dll/article?AID=/20060815/NEWS01/608150380/1007>

Debris from Nixa home blocks attempt to use underground camera Filling in hole could cause more problems down the road.

As a sinkhole swallowed more of a house in Nixa, researchers worked Monday to determine how the void formed and whether it will continue growing.

Shortly before noon, the north side of the house hanging over the sinkhole's edge collapsed into the hole, breaking the house's spine.

The sight stunned people like longtime Nixa resident Charles Green, who with his wife, Karen, joined dozens of people watching in yards across the street from the roped-off area.

There are plenty of sinkholes around Nixa, but not in the downtown neighborhood where the sinkhole appeared Sunday, Green said.

"It's weird, it's weird," he said of the appearance of a sinkhole where there had been no sign of the geological formations. "I think the drought had something to do with it."

That's a possibility, said Missouri State University assistant professor of geology Doug Gouzie.

"I don't know of any evidence, but it wouldn't surprise me it played a role," he said.

Nixa officials might want to act to stop its progress before its walls collapse and it consumes a section of Delaware Street and another home to the north of the sinkhole, said Peter Price, environmental geology section chief with the Missouri Department of Natural Resources' Division of Geology and Land Survey.

Price and two colleagues surveyed the sinkhole that appeared Sunday morning and devoured Norm Scrivener's garage and car.

"It may be best to provide some remediation as soon as possible to prevent additional collapse," Price said of handling a sinkhole originally estimated to be nearly 70 feet across and 75 feet deep Sunday. By Monday, it had grown in width about 5 feet but became shallower as dirt fell from its walls.

Sinkholes shouldn't be converted to ponds or stormwater detention basins, or filled in for construction, hydrogeologist Tom Aley said.

And sinkholes shouldn't be filled with trash or debris, which along with impeding water flow can cause groundwater pollution, the owner of Ozark Underground Laboratory at Protem said.

"It's a part of the (natural) plumbing," he said of sinkholes. "You play with the plumbing, and it's going to change the plumbing somewhere else."

Sinkholes pock much of southwest Missouri. Greene County, considered the only county in Missouri to conduct a full-scale sinkhole survey, has recorded over 2,500.

Nixa has hired a consulting engineer to provide advice on what to do and is forming a plan on how to fill the sinkhole, City Administrator Brian Bingle said as firefighters and police stood by while researchers checked the sinkhole Monday.

The city's initial concern is to make sure the public is safe by fencing the site and to get ready to move a high-voltage electric line located just to the west of Scrivener's home if necessary, Bingle said.

The subdivision where Scrivener's home is located was platted in the 1950s, decades before Nixa enacted regulations that require developers to have geologists check for sinkholes and leave no-build areas around them.

Filling the sinkhole immediately might backfire, so determining the size of the "throat," or the passage leading underground, is important, engineer Gary Pendergrass said.

Pendergrass, environmental compliance officer with Springfield City Utilities, said he's working for Nixa as a consultant.

"We're looking for the throat, where the soil is actually dropping into bedrock," he said.

Once that's done, it might be possible to put stone of varying size into the sinkhole to fill it, yet allow the natural flow of water, he said.

But it's too early to determine how large the sinkhole might become, Pendergrass said.

If the sinkhole grows until it stabilizes, it could be 150 feet across, he said.

Efforts to use an underground camera on loan from Springfield Public Works to probe the sinkhole's depths were frustrated because debris from the collapsing house filled the bottom, Gouzie said after an attempt to lower him into the sinkhole was canceled.

Having firefighters spray 2,000 gallons of water into the hole to dislodge debris to get a look at the sinkhole throat didn't work, he said.

Enough dirt had fallen into the sinkhole from its vertical dirt walls to hide the remains of Scrivener's garage and Chevy Cavalier, Gouzie said.

Monday afternoon, as a half-dozen firetrucks left the scene, geologist Price remained with two colleagues to gather information that might provide a view of what's happening underground.

That work took the form of hammering a line of steel stakes into the ground near Scrivener's home, then stringing electric cables used to send impulses into the ground in an effort to determine the depth of bedrock and whether there are undetected voids.

But the testing method is susceptible to interference from water lines and other materials, he said.

"There always is a certain amount of uncertainty," he said.

Uncertainty is just as disturbing as seeing a sinkhole appear just down the street, nearby neighbor Casey Cays said.

"It's just amazing," she said. "You would never think a sinkhole."

As researchers spent Monday trying to uncover what caused the sinkhole to appear and how large it will become, people like Cays made their own discoveries that prompted concern.

While relieved Scrivener's insurance will cover his losses, she found her insurance policy doesn't have a provision for sinkhole collapses, Cays said.

"We're selling," she said. "High taxes, and it's not worth falling into a sinkhole."

Rep. Jay Wasson, while talking to constituents he represents in the 141st District, said state legislators may consider enacting a provision making sinkhole collapse insurance available.

"Certainly, it's something that ought to be considered," he said. "Yes. It's something we'd want to look at."

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CITY OF CENTERTON PAYS FINE FOR SPILL SEWAGE

By Gary Lookadoo The Benton County Daily Record
Posted on August 15, 2006
URL: <http://www.nwanews.com/bcdr/News/38439/>

CENTERTON — The state has received about \$ 6, 900 in fines and other costs from the city of Centerton, a city official said.

The city paid the money to cover the cost of replacing fish. The Feb. 27 spill of about 108, 000 gallons of raw sewage into McKissic Creek killed an estimated 8, 000 fish in a pond north of the spill, state Game and Fish Commission biologists estimated earlier this year.

A broken valve at the old lift station on Allen Road caused the spill, said Don Morgan, a water inspector for the Arkansas Department of Environmental Quality.

The city had the option of agreeing or disagreeing with a state administrative order stating the reasons for and the amounts of fines and costs. Officials of the Centerton Water and Sewer Department believed the prospective fines and costs to be reasonable ones and asked for and got only minor changes before signing off on the document and returning it, said Jeff Coffelt, superintendent of the Centerton Water and Sewer Department.

The document will become a full, codified consent order when the state signs it, and he expects that to happen soon, because the city and the relevant state officials have already worked out details in the matter, Coffelt said.

The city sent the state two checks. One check was in the amount of \$ 1, 700. It was written to the Arkansas Department of Environmental Quality to pay a civil penalty. The other check was in the amount of \$ 5, 98 to the state Game and Fish Commission to pay \$ 4, 485. 58 to replace the fish; and \$ 689. 40 for expenses the Commission incurred while counting the fish, he said.

The city sent a signed consent order to the state and anticipates that it will be signed and become a full, codified consent order, Coffelt said.

The city and the state agreed to minor changes in the order, including adding a standard disclaimer, saying the city doesn't accept liability for the incident just because it is paying the fine, he said.

“ In other words, we didn’t control the overflow, ... yet we have to be the one that takes the fine because we are the system, ” Coffelt said.

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DRAINAGE PLAN AWAITS APPROVAL

By Terri Lay Springfield News-Leader

Posted on August 15, 2006

URL: <http://www.news-leader.com/apps/pbcs.dll/article?AID=/20060815/NEWS01/608150346/1007>

Strafford --Stakes will soon be in the ground to mark off the area where a plan has been devised for solving drainage problems in the Sun Meadows subdivision.

Great Rivers Engineering has completed a survey and calculations and now will attempt to seek the approval of the residents, so they can receive the necessary easements to complete the project.

Strafford aldermen gave permission for Great Rivers to stake out its plan in the back yards of affected residents at last week's board meeting.

"I think if you put the stakes in the ground so the landowners can see how the plan will affect their property, it will make things easier," suggested City Attorney Jim Kelly during meeting.

Great Rivers' plan will include 60-inch pipes under Bumgarner Road and the cutting of flat channels in some of the back yards.

Drawings reveal the channels will be shallow and can be easily mowed.

Some of the drainage improvements will be placed in the soon-to-be-developed city park, which sits to the west of the problem area.

City Engineer King Coltrin is to meet on site with property owners to discuss the plans and work to obtain easements.

Owners must to grant the easement to the city for the project to be put into motion.

"No easements means we'll (the city) just walk away from the project," says Ward III Alderman Bryant Doss, who represents the residents of the affected area.

Once easements are obtained, the project will be put out for bid.

In previous meetings, Mayor Sandy Bowler has assured the residents the city would make all repairs to the properties, including necessary fencing, grading and seeding.

There were no residents of the subdivision in attendance at the meeting to comment on the plan.

The city is expected to continue discussion on the project at its next meeting on Monday.

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SOUTHEAST WATER PROJECT RECEIVES NEEDED FUNDS

Northwest Arkansas Times
Posted on August 15, 2006
URL: <http://www.nwanews.com/nwat/News/43840/>

The Arkansas Natural Resources Commission Monday announced approval of a loan for the Southeast Water Project in Washington County. The loan, not to exceed \$ 1, 442, 000, comes from the Arkansas Water, Waste Disposal and Pollution Abatement Facilities General Obligation Bond Program.

“ The loan will provide water service to Phase 1 of the Southeast Washington County Project, ” said Mark Bennett, chief of the Water Resources Development Division. “ The project will include 254 customers west of [U. S.] 71. ”

The loan to the Rural Development Authority of Washington County will have a 4. 9 percent interest rate and will repayed in up 33 years.

Also approved Monday was a deferred loan for \$ 618, 000 for the Water Development Fund. This loan is for 30 years with a repayment schedule of 20 years at 5 percent interest.

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MINIMUM FLOW – THE POWER FACTOR

By CHANDRA HUSTON The Baxter Bulletin
Posted on August 15, 2006
URL: <http://www.baxterbulletin.com/apps/pbcs.dll/article?AID=/20060815/NEWS01/608150339/1002>

(EDITOR'S NOTE: This is one in a series of stories examining different aspects of minimum flows in the White and North Fork rivers.)

How to balance hydroelectric generation and trout fishing, both multimillion dollar industries. Hydroelectric power is a big business. So is trout fishing. Both are multimillion dollar industries, and both are dependent on water.

How do the two coexist? Minimum flows in the White and North Fork rivers may make that coexistence a little tougher.

Beth Nielsen, public affairs officer for Southwestern Power Administration, said the agency figures it will need \$2 million in replacement power paid for by the federal government. She said Southwestern will lose 1.75 feet of storage space on Norfork Lake due to the minimum flow projects.

"Norfork will have the most impact on us because that water is coming out of the power pool, or conservation pool as it is sometimes called," she said.

U.S. Army Corps of Engineers Minimum Flow Project Manager Mike Biggs said Southwestern will be credited for storage space.

"Hydropower will be fully compensated," he said. "They will never lose money again. They are going to get a credit that they get to calculate using the worst-case scenario situation. They are going to be able to pick the worst year that they ever have to determine what capacity and raw power, and then they get to set the value on replacement power."

Southwestern Power Administration is an agency of the U.S. Department of Energy but also is an electric utility business, according to the company. Southwestern markets hydroelectric power produced at 24 U.S. Army Corps of Engineers dams.

Annual revenues vary with water conditions, but Southwestern officials say their average annual revenue is approximately \$100 million. Power generated from Bull Shoals and Norfolk dams is sold in Arkansas, Kansas, Louisiana, Missouri, Oklahoma and Texas, Nielsen said.

Nielsen said initial minimum flow plans involved more of Southwestern's storage space. She said the current conservation pool and flood pool split is a compromise between the company and the Corps of Engineers.

"We don't like it, but we'll live with it," she said. "It's better than it could have been."

Nielsen said minimum flows shouldn't have any effect on customers' rates.

Nielsen said the company is planning to submit comments to the Corps of Engineers before the public comment period ends Friday.

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PRIVATE WELLS GOING DRY AFTER REGION SUFFERS FROM TWO-YEAR DROUGHT

By Donna Osborn Christian County Headliner News

Posted on August 9, 2006

URL:

http://www.zwire.com/site/news.cfm?newsid=17027567&BRD=1815&PAG=461&dept_id=516639&rfi=6&xb=vokep

The summer heat wave continues. Sprinklers are sifting water out to thirsty lawns, flowers and trees. And some area residents who are not on a municipal water supply are finding their wells dry.

A hot, dry summer is causing many homeowners to water their lawns and gardens frequently. Many outlying shallow wells are also running dry.

"I've received six calls in the last two days," Ozark's Community Development Director Larry artin said. He's been contacted lately by residents asking how they can hook on to city water.

"The water tables have been steadily declining in southwest Missouri," Martin said. is obvious that it is dropping dramatically because of the contributing factors of growth and development coupled with two and a half years of drought."

Most private wells are no more than 300 feet deep.

"They used to be 100 to 150 feet," Martin said. "It's not that way now."

Nixa's Public Works Director Doug Colvin said he's had the same kind of calls.

"We've been hearing that from people near the outer edges of town," Colvin said. "It is the shallower wells. Fortunately in Nixa we are not having a problem."

But Ozark's Martin said that with increased demand this summer some Ozark customers are seeing low pressure.

"The high demand created by the dry weather is creating isolated flow and pressure concerns," he said.

Ozark has 12 deep wells-about 1,500 feet-to provide city customers with water. It has only been within the last two years that Ozark has needed to chlorinate its water. But because of all the development, the incidences of contamination increased, so the city added automated chlorination equipment to the pump houses.

Nixa has seven deep wells from 1,300 to 1,700 feet. Both towns draw from the same aquifer that neighboring Greene and portions of other surrounding counties do.

Martin said Ozark is in the early planning stages of adding surface storage to plan for what some think is an impending water shortage.

"We are in the talking stages of building lake for surface water storage," he said.

That is in conjunction with a regional water evaluation study planned by Greene County.

Greene County Presiding Commissioner Dave Coonrod the analysis will be done by the United States Geological Survey and will be used to determine what steps can be taken to avert a crisis.

"Back in 1986 we engaged the US Geological Survey to provide an analysis of how much the table had dropped since the pioneers," he said. "The water table had dropped over 300 feet."

He concurred with Martin that area residents are finding their wells going dry.

"We have been getting reports lately of wells either starting to suck mud or doing dry throughout Greene County," Coonrod said. "We decided to revisit this USGS study and revisit the same geographic region."

That regional is all of Greene and Polk counties, the northern tier of Christian County, which includes Ozark and Nixa, and portions of Webster and Lawrence counties. The study, which should commence within months, Coonrod said, will cost about \$500,000. Half of which will be paid for through a grant secured by Congressman Roy Blunt. The balance will be picked up by Greene County and hinges on the passage of the parks tax.

As of press time, it is unknown the outcome of that election.

"It is not a cheap study and we were very fortunate to get Roy Blunt to commit to \$250,000," Coonrod said. "We have to match it 50-50. A lot hinges on the parks tax; if that fails we've got some kind of plan B. One way or another this study is going to move forward."

The study is needed to determine how rapidly the aquifer is depleting. Individuals aren't really the problem, Coonrod said. But there are private state-approved wells that suck millions of gallons from the aquifer daily. They operate on the "principal rule of capture," Coonrod said.

"That means whoever gets there first can take all they want without any concern for their neighbors," he said. "There's nothing in the law that says you can't pump as much water out of the ground as you want to," he said. "They have state laws west of us because (water) has been more precious but those times are changing."

Coonrod noted a large horse farm north of Springfield and a golf course as examples of why the water table may be dropping dramatically.

"The golf course there runs a deep well 24-7 to keep their aesthetically pleasing lake full," he said.

Wasteful practices like that could have a chilling affect on the region in years to come. This study, he said, will provide the data to start at least monitoring the situation.

"Our goal is more than anything is to become aware as a community of how much ground water we withdraw daily throughout our community from these deep wells that can be individually owned," he said. "These can be commercial state approved wells-Kraft has four and they have to have them. Even our park board uses wells instead of city water. Even the Assembly of God has two to irrigate their campus."

Coonrod said he isn't being critical because "these people have taken advantage of what is available in the natural environment," but that in light of the drought situation and the increased demand, water conservation cannot be disregarded. He likened the situation to going on a road trip without the benefit of a gas guige.

"We don't know how much water we have in the ground and we are hurtling down the road thinking we are always going to have water ," he said. "The value of a well is best understood when the well goes dry."

Colvin agrees.

"We need to start doing some things to protect that resource," he said. "There will come a point, sooner than we realize, that we are not going to have such a viable resource-it will be hard to come by and a lot more expensive. In the meantime, Ozark Mayor Donna McQuay and Martin urge Christian County residents to conserve now.

"It is time for people in southwest Missouri to understand how valuable potable fresh water is," Martin said. "It needs to be a lifestyle change."

"It's important for our future generations," McQuay said.

Sidebar:

Conserve water by knowing when to water

*The best time to water a lawn is from 6 to 8 a.m. During this time the water pressure is highest, disruption of the water pattern from wind is low, and water lost to the atmosphere by evaporation is negligible. Watering early in the morning also has the advantage of reducing the chance of turf diseases that require extended periods of leaf moisture. Avoid irrigation during mid-day and windy conditions.

*Move sprinklers frequently enough to avoid puddles and runoff. Difficult-to-wet areas such as slopes, thatched turf and hard soils may benefit from application of a wetting agent to improve surface penetration of water.

*Water only when the plant tells you to. Become familiar with areas of the lawn that wilt first (blue/purple leaves, rolled leaves, foot printing). Water within a day of observing these symptoms.

*Water problem areas by hand to postpone the need for irrigation of the entire lawn. Some areas of a lawn usually wilt before others. These areas, or "hot spots," may be caused by hard soils that take up water slowly, slopes, southern exposures and warmer areas next to drives and walks. Lawns that have unusual shapes also may require some hand watering to avoid unnecessary watering of paved surfaces, mulched beds and buildings. Soaker hoses that have a narrow pattern and supply water at a slow rate may be useful in these areas.

Source University of Missouri Extension

Ozark and Nixa can accommodate new water customers.

*Hook up to the water main is at the homeowner's expense

*Homeowner is responsible for hiring contractor

*Property must be annexed into city limits if contiguous

*Homeowners must consent to future annexation of non-contiguous parcels

*Homeowners are responsible for all appropriate impact fees

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2006 AMERICORPS STREAM TEAM ASSISTANTS PROJECT

URL: <http://www.mostreamteam.org/AmeriCorps/Positions/IntroPage.htm>

Based on a very successful pilot project in St.Louis in 2005 (Final Report), the Missouri Stream Team Program and Missouri River Communities Network (MRCN) have expanded the project to include 12 AmeriCorps Stream Team Assistants in communities throughout the state.

Eight fulltime and four halftime Assistants will be placed in St.Louis, Columbia, Kansas City and Springfield. Local sponsors, James River Basin Partnership, Table Rock Lake Water Quality and Watershed Committee of the Ozarks will provide office facilities, local supervision and administrative support. The Assistants will spend half of their time on the sponsors stream-related projects.

The AmeriCorps positions provide a great way for anyone interested in community service and the environment to obtain experience and provide a valuable service. Applications must be received by August 25, 2006. Find more information and the position announcement at:

<http://www.mostreamteam.org/AmeriCorps/Positions/IntroPage.htm>

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