Robert Wilhelmi & Kyle Saunders, City of Rockford: Part 1

SUMMARY KEYWORDS
Rockford, brownfields, water, sustainable, stormwater, city, redevelopment, foss, property, project, costs, concrete, community, lead, environmental challenges, building, impact, EPA, standpoint

Haley: Hello, my name is Haley Dahl and welcome to another episode of *Green Exploration: Rockford*. Today I'm speaking with Robert Wilhelmi, the Brownfields Redevelopment Specialist, and Kyle Saunders, the Director of Public Works, both working for the City of Rockford, Illinois. We will be discussing Rockford's environmental issues, and how the City has been working towards a more sustainable future. ***Intro Music*** Awesome. All right. Thank you guys for your time and joining me this morning. And so yeah, the first thing I would like to know is what motivated you to get involved in environmental challenge in Rockford. Can you please give me some background on your involvement, interests and motivation? And what projects are you currently working on? Also, please introduce yourself as well.

Rob: Rob Wilhelmi, I'm the Brownfields Redevelopment Specialist in City of Rockford. And I was born and raised here in Rockford. Left for four years, lived in Aurora, went to college, came back and I've been here ever since. So, you know, when I came back to town in 2001, a lot of the projects that we have seen completed now or ones that are in progress now are just sky in, you know, pie in the sky dreams at that point in time. And I started out on the private side working for a local engineering firm, I got involved in a lot of environmental cleanup type work of these brownfields properties. And always just felt that I could do more in house, you know, I could have more say, more pull, more direction, working for a municipality, as opposed to being a consultant for a municipality. Opportunity came up for me to come over the City in 2015, and I jumped on it. And, you know, like I said, a lot of those projects that were started back in the early mid 2000s, that we're [just] seeing completed today, it's very rewarding. So you're a part of that both on the private and public side.

Haley: Yeah, actually, I just declared a minor for Sustainable Cities, which is part of the college of urban planning. And that definitely, I feel like, brought in the, I guess for lack of a better term, like needed

spice for my civil engineering degree, kind of making it a more holistic look, since I want to get into green infrastructure, this kind of brings in more the economic and societal, those aspects of sustainability, instead of just the straight up infrastructure, which I've really been enjoying learning about. Alright, Kyle, would you like to introduce yourself?

Kyle: Yeah, I'll introduce myself, so Kyle Saunders, I'm Director of Public Works for the City of Rockford, been with the city for 10 years, full time this October. I started as a summer intern, so it's been a pretty crazy path to director. So I have worked in the engineering division, the water division and obviously now oversee all three of our operating divisions, so engineering, street and water. I have a bachelor's degree in biology, secondary education from Rockford University. I've got an MBA from Rockford University. I'm currently working on an organizational leadership Master's at the University of Colorado. Obviously, you know, sustainability and green infrastructure and just kind of the way that, obviously, our operations can continue to become more sustainable is within our mission at public works. You know, we are environmentalists, you know, from our stormwater team and engineering, to certainly our water team. You know, obviously, everything that it takes to, you know, produce, treat and distribute water to, you know, the, one of the largest groundwater utilities in the state of Illinois. Environmentalism and sustainable and how we can improve our operations is on our minds every day, so I'm really excited just to kind of talk about the different things. I was actually kind of just preparing, you know, this morning and last night on just kind of different topics, and they just kept rattling off, I guess, you know, all the stuff that we're doing certainly is in our strategic view, but it's kind of crazy to see them all, kind of come to confluence here, so I'm excited just to hear a little bit about what Rob is doing. I know his work is huge on a redevelopment standpoint, and, obviously, all of what he's done so far and in the past couple years with brownfields, I'm really excited to see how, as a city, we can highlight everything that we're working on.

Haley: Alrighty, would you like to describe some of the projects you're working on currently?

Rob: One of the projects, so obviously, brownfields redevelopment, I mean in all what it is, it's land recycling and it's all about environmental sustainability, whether that be on a pure environmental basis, or whether that be a social or ecological basis. You know, Urban infill redevelopment is what we strive for here. You know, obviously, urban sprawl and green spaces got to stretch out to the point where, you know, it stresses our budget, it stresses our infrastructure, and our ability to maintain it, so putting focus back into our urban core is pretty much what I do. You know, we've got, what was it, 700 brownfields in the city of Rockford that were identified in a recent inventory that I completed back in 2001, and these are parcels specific. But, you know, some of the major ones we're looking at now are the Barber Coleman Complex and South Main Street, you know, 17 acres, almost a million square feet of space. Since 2001, we've spent about $3 million in environmental cleanup funds, assessing and cleaning up the property, and it's all in basically an effort to make it more marketable, free development, you know, when you take away that environmental stigma associated with a facility like that, it attracts development, especially nowadays, where you have more open minded developers that aren't afraid to invest in these properties that are blighted and and may have some environmental issues with them. It's just a win-win for everyone. Another project I got going right now is our historic Rockford Watch factory building, built in [1875], right next to one of our most successful brownfields redevelopment projects,

the UW sports factory. You know, we recently spent $150,000 in grant funds to abate all the asbestos out of the building. And once again, it's one step that we can take to not only offset those development costs, but also make the property more marketable or attractive to developers that have the horsepower to do something with them.

Haley: I always wondered about that, because Rockford definitely has a tendency to develop outward, especially with a lot of abandoned buildings, you know, in the inner city, and I always wondered why they didn't spend more time trying to revitalize those buildings instead of just, you know, building outwards and covering more farmland and natural land, when we have so many buildings available in the city.

Rob: A lot of it was, you know, you look back in a lot of when the sprawl was happening in the late 80s, throughout the 90s, even in the early 2000s, and it was just easier for developers to take a [greenfield site and develop] instead of, you know, all the potential issues with with land recycling. I mean, you walk into an old industrial property, you don't know what you're gonna find. There's always going to be surprises. You know, you're looking at demolition costs you're looking at, you know, it just, it was just offset, but nowadays with a lot of the incentives that are out there, not only offered by, you know, the City, but also Illinois and federal government, you'll get like the historic tax credits on both sides. Even some of the Opportunity Zone incentives out there combined TIF with that, starts offsetting that and putting a lot of focus back in, you know, the urban infill redevelopment.

Haley: Definitely needs to be incentivized because people don't want to just spend extra money for the sake of sustainability.

Rob: They don't want to spend their money *laughs*

Haley: Yeah, no, that's, that is very true. That being said, Kyle, what projects are you currently working on?

Kyle: Yeah, so I again, as I was preparing for this, I kind of looked at our, you know, our operation, kind of what we do in Public Works, and I kind of broke it down into three, three things, right, three phases, one, you know, sustainability in the way that we operate, two, sustainability in the way that we plan and then, three, sustainability in the way that we strategize for the future. And I kind of took a stab at each of our divisions. So, you know, when you look at our water division, the way that we operate, just is inherently sustainable. Back in the late 2000s, we invested $75 million in our water treatment facilities, as well as our distribution network. And we transition from kind of a more antiquated, you know, just continued pumpage model, where now we're kind of more of a just in-time or on-demand operating strategy. So, you know, as demand goes up, as more people are using water, you know, we have VFDs on our pumps that obviously ramp up to meet that demand. You know, in the middle of the night, when people are sleeping, and people aren't using water, those VFDs will tune down, so that we're not just constantly operating at high system pressure, and really running our plants, you know, at, you know, red lining our plants, like we used to do in the past. You know, we had really rough starts, really rough stops, and we had a lot of cycling, which obviously is not sustainable from an operational standpoint,

certainly drives up your energy consumption, and really is wasted resources, right, because you don't need to provide 95 pounds of pressure 24/7, 365. So, you know, that that has been a huge way in which we've transitioned our operations and our water division. The other thing in the water industry as a whole, water loss is a huge thing in the water industry. And obviously, we're not going to, I'm not going to dig into to, you know, that whole construct of water loss, but really the biggest or one of the two aspects of water loss is real leakage, right, real loss. City of Rockford Water Division was founded in 1875, and we still have water mains in service that predates 1900, so we do have real loss out there, we do have a leakage. And for years and years, obviously, we operated under the mindset of, “Hey, when it breaks, we'll dig it up, we'll fix it,” obviously, you know, we're going to try to replace it as soon as we can. But back in 2016, we made a concerted choice to transition to more of a proactive or offensive approach to water loss. So we've implemented a water loss control program, where we are looking to, we do about 25% of our water system per year, so roughly 200 miles of acoustic leak detection. So we actually go out and proactively survey our system to find small leaks before they become huge leaks. And obviously, what that does is it reduces water loss, it reduces the energy, the chemical costs, labor costs that it takes to produce that water that's ultimately going to leak, reduce our overtime expense, and certainly, you know, makes our service reliability much higher. So again, just from an operating standpoint, in our water division, we've really taken, we’ve really taken grasp on being more sustainable, being more proactive. In our street division, you know, and again, Public Works, I feel like I'm, I've got like nine hours of material here. But, you know, our street division houses our forestry group, and each year we have a reforestation program. So people forget, obviously, we are the Forest City, people forget just how many trees, urban trees we've lost over the last 20, 25 years. You know, with emerald ash borer with, you know, elm disease, we have seen a lot of our more mature urban canopy be removed over the last two decades. So our forestry team, we have a team of certified arborist that obviously go through our city and strategically replace some of our trees that we've lost. So obviously, with a much more sustainable species that are going to be able to withstand, you know, the climate here and, and hopefully stay healthy and in are not susceptible to disease. But again, the benefits on the stormwater side, the benefits on the air quality side, you know, reforestation is so important. It's certainly a sustainable effort that our street team is taking on. And then lastly, just on the operation side, and again, I can talk a little bit more about kind of some of our longer term planning. In our engineering group, we truly have a group that is solely focused on environmental work. Our stormwater group, they maintain an NPDES MS4 permit. So obviously, their number one goal every single day is to make sure that the water that we're releasing, the stormwater we're releasing into the river meets both our water quality and our water quality standards. So we want to make sure that we're not, we're not discharging, you know, too much silt and sediment runoff, obviously, any type of pollution, from, you know, industry. You know, we're doing a lot of industrial inspections, we’re making sure that, you know, we're monitoring nonpoint pollution or nonpoint pollution that's entering our stormwater network. So, you know, every single day, they're out there ensuring that whatever we discharge into the river, make sure that that water quality is safe and we're certainly not negatively impacting everybody downstream, so, again, a huge thing that that our engineering group does.

Haley: Has anyone that you know of, within your engineering group, been talking about the project with Keith Creek with the greenway?

Kyle: Yes, so we're actually obviously a key stakeholder in that, and there's two things going on with the Keith Creek corridor. Obviously, we've got the SPR grant that's looking at corridor redevelopment, certainly, there's water quantity considerations there because, you know, obviously, before we can redevelop the corner, we obviously have to make sure that we reduce, you know, the chance of flooding into the future and making sure that that channel can handle significant storm events. But one thing that we're also doing is we've actually partnered with a group that's looking at a Section 319 grant as well for that Keith Creek watershed, so obviously focusing much more on nonpoint pollution, and obviously, the water quality side with Keith Creek. So yeah, we're, our stormwater team is actively engaged with both sides of that project. So we're really excited to be a part of that and seeing that advance because that's a huge, huge part of our future planning efforts.

Haley: So, as far as my knowledge, that creek is pretty heavily paved, correct. At least the parts that I've seen of the creek, it's in concrete channels. How do you make that better for flooding? Because I know that's not necessarily ideal.

Kyle: Yeah, so obviously, Keith Creek has a huge part, you know, we have a lot of different structures along the Keith Creek watershed, you know. Alpine dam right is one of our biggest flood control structures upstream that really controls flooding downstream. And just to kind of give a plug right now, we're actively working on a three and a half million dollar project to renovate and rehabilitate the Alpine dam. That's a structure that was built during the New Deal, so its structure, I think it was finished in 1942, and hadn't been touched for almost eighty years, so, you know, we're really bulking up that concrete spillway, modernizing how that gate mechanism works. Prior to this project, we actually had to have staff going in and turn that gate, and I think it was, it was like a quarter inch for every 10 turns, it was crazy, but we now have remote control of that gate. So, you know, from our desk, or from our operation center, we can actually control that gate to make sure that we're monitoring flood conditions, so that's a huge part. A lot of that channel is native stream bed, though, you know, if you look at the Keith Creek corridor that SPR grant is looking to study. They've got concrete walls, but it's native stream beds. So we are, we're looking at obviously, you know, how do we best handle that channel? Are we going to meander that channel? How are we gonna reinforce the banks? We've done a lot of work over the last several years with articulating concrete block to really stabilize a lot of our banks along Keith Creek, so we're looking at all those different things. When you talk about concrete channels, obviously that was a best management practice. It still has a role to play in how we engineer our stormwater management program. One thing that concrete channels do help is obviously low flow conditions, right? It kind of helps prevent silt and sediment runoff, because you've got that concrete channel that can kind of handle that flow. Certainly during significant rain events, it will increase velocity and certainly create some challenges with that, but we're kind of looking at all the different applications. You know, making sure that, you know, if we are recommending one BMP over another that, you know, we understand why we're recommending it and that it fits the best, fits that situation. So and to build on your point, Haley, you know, I was going to talk about our planning, so I'll just get to that on the green infrastructure side. But, you know, looking at vegetated bioswales, looking at rain gardens, you know, looking at stormwater planners in our more or urban areas, you know, we are now taking that next step in our stormwater management to really make sure that whatever we're installing is going to be more sustainable, and really helps us push forward.

Haley: That's good to hear, and the one thing that I also really love about green infrastructure, just besides the services that it can provide, I just feel like it enhances the community so much as a whole, it just makes everything look nicer, and people want to be out there more. It's opportunities to implement more parks for the communities, so I'm really excited to hear that Rockford is taking the steps towards implementing those. That being said I would like to know how you both define environmental challenges, and how those environmental challenges how would you define the parameters of the environmental challenges in Rockford specifically? So whoever would like to go first.

Rob: I think from from a brownfields viewpoint, you know, obviously, you look at brownfields, you look at these large urban areas affected by them, and I mean, there's really four, four parts affected. There's just social impacts, there's economic impacts, health impacts, and then just environmental impacts, and, which are all negative. And, you know, I look at, for instance, I look at the Barber Colman Complex as a prime example, especially for southwest Rockford. And, you know, the facility was built in 1902, at one point in time, employed upwards of 6000 people, which is huge, most of them southwest Rockford residents. You know, when the recession in the 80s hit, and they started cutting, eventually the company was sold and cut up, and, you know, the facility was finally decommissioned, I would say in 2001. And, I mean, just a huge impact on southwest Rockford, you know, property values went down, you had a lot of these legacy residents in the neighborhood move away, with the reduction of property values that obviously brought in crime. It's been an uphill battle since. But like I said, we're there's a lot of steps we've taken in the last 5, 10 years to reverse that and it's probably still another 5, 10 years before we you'll see the fruitful benefits of all that work. But, I mean, that's kind of, kind of what I see from the brownfield side.

Haley: So when it comes to the brownfield sites in Rockford, what are the ways that they can revitalize that land, to make it usable to the public in the future.

Rob: So with most properties, the path that we go down is, the Illinois EPA has what's called a voluntary cleanup program, and it's called a site remediation program, and basically what it is, is the Illinois EPA provides oversight, and there are certain cleanup objectives that you have to meet. At the end of the day, once those cleanup objectives are met, the EPA issues what's called a “No Further Remediation” letter, which basically says, you know, there's no more exposure pathways, you know, the property is safe given these conditions. And within that NFR I mean, there's a lot of different avenues, obviously, you know, first thing we do is we usually do what's called a comprehensive enrollment, which we sample a test for about every single contaminant that you could possibly come up with on a property. And then the state does allow certain levels of contamination to remain in place and naturally attenuate, so if you can't meet those certain levels of contaminants, you know, there are some options that you can go down, as long as you take away any sort of, human or environmental exposure pathway. It's sometimes, you know, sometimes the key to cleaning up a property is actually the redevelopment of that property and what I mean by that is sometimes you'll have, you know, for instance, Barber Colman, we've got shallow contaminants, polynuclear aromatic hydrocarbons, metals, so, you have to look at, “Okay, how can I remove someone from being exposed to that shallow soil?” A lot of times like a parking lot is a solution or a couple feet of clean fills a solution, so, you know, you can

easily take that and design that into the site design of the project and address the environmental contamination, as a component of that. As far as groundwater goes, you can either treat it in place, that can be very expensive. If the contaminant levels aren't that high natural attenuation they'll have you model it and see the full extent and, you know, basically, you can put a deed restriction on the property or the City has an ordinance that says no private water wells can be installed. That's a way to remove that exposure pathways, so there's a lot of, you know, efficient means to cleaning up a site. It doesn't mean you just have to go to dig out every single ounce of contamination on that site, which obviously reduces the cost significantly as well.

Haley: So when you were talking about putting parking lots as a way that could help redevelop the brownfield sites, would that only apply to nonpermeable concrete or would permeable concrete work as well, because I know that, especially in regards to urban sprawl, and water regeneration, permeable concrete is definitely the more sustainable option.

Rob: Definitely more sustainable. The EPA recognizes, obviously for pavement, it's asphalt or concrete, however, they will, and I have seen them use permeable systems. Usually, there's some sort of like geotextile underlying layer or something like that, but they do allow for a Tier 3 evaluation, where they will review an alternative proposed engineer barrier, and they're pretty good at accepting those, like I said, as long as you can document that someone's not going to be actively being exposed to that source, they're pretty open to those.

Haley: Alrighty, so is there anything else you'd like to add there?

Rob: I think I got everything there?

Haley: Alrighty, so Kyle, how would you define environmental challenges and the parameters of the environmental challenges in Rockford?

Kyle: So, obviously, Rob, I mean, I think Rob did a great job defining all the different characteristics of environmental challenges and how they impact our community differently. You know, from a Public Works standpoint, I think, and again, I could go on and on about stormwater, because, you know, certainly we are seeing a much heavier influence or impact on stormwater, right, I mean, we're seeing increased frequency and significance of rain events that are obviously putting some pressure on existing stormwater infrastructure. So obviously, we're pushed in that group to ensure that our system can meet both the water quality and water quantity standards for our community. But one thing that really stood out to me, was probably more on the water side, and that's obviously the kind of emerging contaminants and the ever changing regulatory world as it relates to providing safe drinking water. You know, obviously, in, you know, the early 2000s our community fased coming into compliance with the radium, the new radionuclide standards, and we, you know, implemented horizontal pressure filters and a pretty, you know, technological treatment system throughout our community, so, that was huge. And, you know, that's evolved to obviously VOCs, you know, we're looking at obviously, how, you know, how our existing treatment plants can handle 1,4-dioxane, you know, PCE, TCE because, you know, as Rob mentioned, you know, we're dealing with a lot of those chlorinated solvents on the the freshwater side

as well, so we have to obviously treat for that. But one of the really big things that obviously our community is planning for right now is how to handle PFAS, right? So, you know, PFAS is huge for us. You know, the state EPA did a statewide survey trying to kind of quantify the concentration, as well as the presence of PFAS throughout the state of Illinois. You know, Rockford, we did find very low level detection, some are well below the health advisory limit that, obviously, EPA is looking to establish, but, you know, that's a contaminant that's gonna ebb and flow a bit for us here in the near term. We do have one well that's located in very close proximity to the airport, and obviously we know that one of the, and certainly not all of the, but one of the possible sources of PFAS in drinking water is AFF firefighting foam. So really, you know, you see a lot of it near fire, you know, near airports or military bases, where there's a lot of training exercises going on. So, you know, we're monitoring closely a lot of our raw water sources to ensure that, you know, we've got eyes on that. You know, the state has not established a rule yet, you know, they've certainly provided guidance in terms of what they think that rule is going to look like, but, you know, as that rule goes through their rulemaking process, the MCL goes through their rulemaking process, and that's gonna be something we're gonna have to monitor very closely. Because, you know, adding a, you know, whether it's a reverse osmosis or a GAC plant, you know, trying to take that next step, in terms of how we treat our drinking water is going to be huge for us. So, you know, right now, we're working on a bit of a pilot study, and we're preparing a project plan to the EPA, so that we can secure possibly state revolving loan funds, you know, in the event, we had to construct a treatment plant, but again, that it's looking at, do we want to treat for PFAS? Or, you know, do we look at, you know, drilling our wells deeper and, you know, treating for radium as you get into those deeper aquifers. So, you know, the constraints are certainly there. You know, there are, there are both operational constraints, as well as, obviously, financial constraints, you know, adding a significant GAC treatment plant, or even a pressure filter, I mean, you're talking five, six, seven, eight million dollars, and, you know, drilling a well, in addition to that, you know, adds significant cost to the way that we operate in the water division. So we're monitoring, you know, the ever changing regulatory environment, especially as it relates to our water, so that's probably one of the biggest things that we're monitoring as a department right now.

Haley: So to aid the viewers, do you mind explaining what PFAS is?

Kyle: Yeah, so they're, they're long chain perfluorinated substances, so they're long hydrocarbon chains that are oftentimes solvents based from kind of water phobic products, so Teflon, Scotchguard. Again, AFF firefighting foams are, a lot of times, products that help in waterproofing, so they're found everywhere in our environment. I believe they were, they kind of went into commercial production back in the 1950s, they are considered forever chemicals so they don't break down. They kind of just change form, right? They kind of stick with you, you know, inside the human body and they're literally found in everything. I think they're finding it in, you know, like, and again, I heard the stories just from all of our different resources in the water industry, but, you know, they're seeing it in polar bears blood, they're seeing it in the, you know, the blood of newborns. I mean, it's very prevalent, and it just doesn't break down naturally. So, you know, they're looking at how they're going to address that in the wastewater streams. They're certainly looking at how we're going to dispose of it, you know, from a treatment standpoint, you know, as you use absorptive treatment technologies like granular activated carbon, it's

difficult to dispose of that after it's been, you know, wasted. So they're looking at a lot of, you know, holistically on how the water industry and really how the environmental sector is going to handle PFAS.

Haley: Actually, I remember in my environmental science class that I took at Rock Valley, about Teflon and how that got everywhere. And it really affected this Appalachian Community. And I remember hearing something about how a majority of people have Teflon in their bloodstream at this point, which is crazy.

Kyle: I was gonna say, I think I totally murdered the the definition, but perfluorinated substances, I think they have so many different compounds. There's PFOA and PFOS. There's a ton of different compounds that obviously the state was monitoring and looking to establish kind of advisory limits for on the drinking water side. So yeah, it's, I think *Dark Waters* was another documentary that…

Rob: Yup, very good.

Kyle: Yeah, that they just recently released that I think talked about DuPont and how, you know, the whole chemical or how that whole product was kind of commercialized back in the 1950s and certainly some of the environmental impacts of it, so it's definitely, you know, in the water world, you know, whether it be microplastics, whether it be pharmaceuticals, whether it be, you know, PFAS, 1,4-dioxane, radium, VOCs. You know, it's the du jour that obviously our sector has to respond to, so it's definitely a challenge, but we're definitely up to it and understand why, you know, why things are being considered.

Haley: Alrighty, is there anything else that you guys would like to add before we move on?

Kyle: I think Rob is the expert, so, Rob, what did I mess up with my PFAS description? What did I miss?

Rob: You got it, you got it, just, you know, very, very persistence characteristics, kind of like polychlorinated biphenyls, or even like DDT, where it just, it doesn't break down, you know, absorbs in body fats and, you know, there are studies showing detrimental health effects from high levels.

Haley: It's honestly so uncomfortable to think about how much toxins are in the products that get pushed in our day-to-day lives.

Kyle: Well, and it's, you know, the crazy part is I, you know, in the water world, I could have talked about a lot of things. Lead, right, I mean…

Haley: Yeah.

Kyle: …lead is a huge thing, and I just, I thought of, I just thought of how far we've come as a community in lead service line replacement. You know, I said that the city of Rockford was formed in 1875. I mean, we, you know, we're an old utility, we're very typical of a Chicago, a Philadelphia, Boston, maybe not quite as old as Boston, but, or Philadelphia, those are, those are like, pre 1800s, but, you

know, we did install lead service lines, up until about the 1950s. And, you know, right now, we're estimating that we have anywhere from 15,000 to 19,000 lead service lines within our system. You know, back in 2016, with, you know, obviously Flint and all of the concerns that that came into the drinking water sector as it relates to lead, we took a very proactive approach. One, you know, we have a lot of things on our side, as relates to lead. Our source water is groundwater, it's naturally hard, so you have a lot of calcium and magnesium in our raw water, that obviously helps form a scale on the inside of our pipes that prevent lead and copper from leaching into our drinking water. Two, we feed a food-grade polyphosphate at our treatment plants that obviously adds to that scale, and again, helps prevent lead and copper from leaching into our drinking water. And we also are in phase three, year five of a lead service line replacement program and, really, we're focusing our efforts on high risk lead service lines, so the lead service lines that are disturbed. Understand that, you know, lead service lines, lead is bad, right, we want to get the lead out, but a lead service line that has been in-service, has never been caught disturbed or otherwise impacted with the scale and with water quality management practices, we have seen that water moving to those pipes can actually have a lead concentration below detectable limit. So, you know, water is the universal solvent, if it sits on anything for an extended period of time, it's going to dissolve that into it and obviously it's going to be a result of the water quality there. So we're really excited, we've secured more than $10 million in principal forgiveness money to replace lead service line, so again, I wrote down a bunch of stuff that I could go on for hours on Public Works.

Haley: *laughs*

Kyle: Our water group is really forward looking and I'm really excited with everything that we're doing with that group.

Haley: Yeah, yeah. I feel like we've already touched on this, but what environmental challenges hass Rockford struggled most with in the past? It sounds like, you know, they have a history, especially due to their industrial past, that, you know, brownfields are an issue, obviously the water is an ongoing thing as well. But currently, what would you say is one of the most pressing issues, or not even just one, but the most pressing environmental challenges for Rockford currently, and how has this changed or evolved? How and why?

Rob: I would say, I would say our brownfields are still one of our most pressing challenges and, you know, obviously, you know, it's a double edged sword, you know, Rockford with its rich industrial heritage. We were a mecca center, I mean, Rockford was huge. It was known worldwide for its industrial output. And, you know, with the recession of the 1980s, the economic downturn, factories moved away, and even into the 90s when factories started pulling up, moving out of the country. And look what's left here, we've got acres and acres of brownfield sites that are either potentially impacted or are impacted. You know, obviously that takes funding to assess, it takes funding to clean up, and it takes a lot of resources to attract the right developer to a site that's going to be comfortable working on it. So it's, like I said, it's something we've been very successful with getting EPA grant funds over the years to help address those challenges and help offset some of those costs. And, you know, the biggest

thing like I said, we're reinvesting into our core. You look at, you know, Kyle, how much was spent on North Main and South Main alone, just in roadway infrastructure improvements, I mean…

Kyle: I believe, in total, it was more than $50 million between the two.

Rob: Yeah, and If you look at what just that road infrastructure investment has done, I mean, it has completely cleaned up these areas and we're starting to see, especially South Main start to come back. There's a lot of redevelopment interest, we've got, you know, the Embassy Suites hotel, another one of our most successful brownfield redevelopment sites.

Haley: That's a brownfield?

Rob: It is, yes.

Haley: I just did there for like, the whole weekend the other day.

Rob: That was another project that I started on the private side and ended up seeing the benefits on the public side, but, you know, that alone was a $85 million investment by Gorman & Company.

Haley: Oh, wow.

Rob: And, you know, you look at what that's done to the area and unfortunately, with the COVID pandemic, it's slowed things down quite a bit, but we're seeing it pop back, and so there's a lot of, a lot of redevelopment interest on South Main Street. North Main we're starting to see a trickle in. We've got some very large brownfields up on North Main with, you know, the Essex Wire site and the former Atwood building, but we're taking the right steps to get those addressed and attract that reinvestment back to North Main as well.

Haley: Yeah, the Embassy Suites is definitely a beautiful hotel, and the view off of the roof is…

Rob: Yeah.

Haley: It was really cool.

Rob: It was one of our poster childs, it's amazing when you're up because, you know, you see pictures online of aerial shots from downtown, but when you're actually up there and looking at it in person, it's like a whole…

Haley: Oh, yeah.

Rob: …a whole different perspective.

Haley: Rockford is definitely cute a community to look at, like *laughs*

Kyle: I was gonna say, I'm born and raised in Rockford, literally have never left.

Rob: Yeah.

Kyle: I went to Rock Valley College, Rockford College and I worked with the city of Rockford, and I remember going up there for the first time, and that view ,as well as the Rails to Trails view when you're on that old railroad trestle bridge.

Rob: Yup.

Kyle: It's a view that very few have ever seen prior to those two openings. I mean, you know, obviously, those that worked in the, you know, the old Amerock building certainly got some views, but I guarantee it wasn't as beautiful and picturesque as sitting at the top of the Embassy Suites, just looking at the river, so I couldn't be more it's, I sit up there and just really proud to be from Rockford, to see how beautiful the downtown and just the city is from those views.

Rob: If you would have been in that Embassy Suites building before it was redeveloped, it just makes you appreciate it that much more. You know, the first time I walked through it, once it completed construction, it just, my jaw was on the ground the whole time, just because I knew what it was like before, you know, you got chipping lead paint everywhere, asbestos, you know, all sorts of challenges, both environmental and engineering wise as well, just to see how that all came together is definitely, we're actually doing a US brownfields conference this fall, we're gonna be doing a presentation on this.

Haley: Yeah, it's exciting to see things like this going on in the community because it really, you know, facilitates that appreciation from the residents. I think now would be a good time to wrap up part one of this episode. ***Outro Music*** As always, I would love to thank Robert Wilhelmi and Kyle Saunders for sharing their valuable insight during part one of this discussion. I would also like to thank anyone listening in on this podcast, as I always appreciate your support of *Green Exploration: Rockford.* I would just like to remind you to take whatever you learned from this series, and consider how you as an individual can be a contributor to a sustainable future in your day-to-day life. And don't forget to not only show Mother Earth some love, but your fellow humans as well, each and every one of them, because all humans deserve to live in a quality environment. My name is Haley Dahl, and I am signing off. Stay green and stay exploring, Rockford.