

Dan Hoffman ([00:05](#)):

Welcome to another edition of the Rouss Review. I'm your City Manager, Dan Hoffman. And with me is Communications Director Amy Simmons. Hello, Amy.

Amy Simmons ([00:13](#)):

Hello, Dan, how are you doing?

Dan Hoffman ([00:14](#)):

Are you enjoying the warm weather?

Amy Simmons ([00:15](#)):

Oh my gosh, it's so beautiful.

Dan Hoffman ([00:16](#)):

I know. From the time I moved here, I guess I moved late summer, it hadn't really gotten cold yet. It was late September, October. I got a little bit of fall. The leaves had already turned and it started to fall. So I never really got a lot of warm weather. I'm looking forward to spring in the Valley. It's so nice. Already, just all the little buds and stuff. Driving down Valley the other day, you know, obviously pink and green are big here because of Apple blossom, but it wasn't until I was driving down Valley the other day that I really realized, 'Oh, this is why,' because all along the road, there's greens and pinks. It's really, really gorgeous. So, I am looking forward to a spring in Winchester. I am looking forward to getting out and sitting outside and eating restaurants on the walking mall. It's really starting to pick up down there. Especially as people are starting to get their shots. I know Amy, you and I got, got our shots a little while back. Pretty soon they're going to open it up to 1C. That is a Phase II, I should say.

Amy Simmons ([01:33](#)):

Phase II is April 18th. So anybody over 16.

Dan Hoffman ([01:37](#)):

Anybody over 16. So April 18th, keep an eye on communications from the health district because the flood gates are about to open.

Amy Simmons ([01:46](#)):

[Vaccinate.virginia.gov](https://vaccinate.virginia.gov).

Dan Hoffman ([01:48](#)):

Yes. Go there. Register. Get vaccinated. Let's talk about tomorrow's Council meeting before we start talking about water with Mr. Don Riggleman from our team. Tomorrow we are back in person.

Amy Simmons ([02:04](#)):

Yay!

Dan Hoffman ([02:04](#)):

Yes, I'm very excited. This will actually be in my first in-person Council meetings starting this job. First in-person in Council Chambers, I should say. I had a few of them out at the Rec Center. We're not going to be at the Rec Center, everybody. So when I say in person, don't show up at the Rec Center, unless you're there to go swimming. Show up here at City Hall. We will ask that you wear a mask, even if you've been vaccinated, wear a mask.

Amy Simmons ([02:28](#)):

Social distance still.

Dan Hoffman ([02:29](#)):

Social distance. You'll see there's limited seating. We've got a big agenda, so I do anticipate that there'll be some people out there, but please this is your opportunity to engage, but do it safely. So, tomorrow, City Hall Council Chambers, we'll kick off with a regular meeting at six o'clock. Early in the agenda, we're going to have a couple of conditional use permits, nothing major to go into there. I'm scanning through the agenda, a couple of text amendments, some of those land use types of things that we're processing per usual. To me, one of the more exciting things in the agenda comes up, you'll see an under 11.6, and that is an agreement between the City, our Economic Development Authority and Trex. Trex is moving into the city. So the City of Winchester will now be home to Trex Company headquarters. We're very excited to have them. They've been a great partner. We've had great discussions with them as they look forward and plan out the future of their headquarters. They've been awesome to deal with and we're very excited to have them. I think it really shows that the city is a great place to do business.

Amy Simmons ([03:47](#)):

Where are they going?

Dan Hoffman ([03:49](#)):

They're going to a property over. It's kind of hard to describe. It's over in that area of the crossover site, behind Lowe's.

Amy Simmons ([03:59](#)):

Oh, on the way towards the bridge going over I-81.

Dan Hoffman ([04:03](#)):

Exactly, exactly.

Amy Simmons ([04:04](#)):

Behind Friday's, Chuck-E-Cheese.

Dan Hoffman ([04:05](#)):

Exactly. Okay. I don't, it's hard to describe exactly where it's going to go.

Amy Simmons ([04:10](#)):

Off of Pleasant Valley.

Dan Hoffman ([04:11](#)):

Off of pleasant Valley. You got it. We have a few first readings for some developments that are going on. You can check those out online. Then we get into some updates to City Code and the charters for our committees. We talked about this during Work Session last meeting virtually. Now, this is just first reading and the resolution. So, it moved out of Work Session, and now it goes to the full regular Council meeting.

Amy Simmons ([04:45](#)):

So, no action yet.

Dan Hoffman ([04:46](#)):

Yeah. First reading, there's no action unless they want to send it back. It'll just move forward to second reading. That's just updating our code to make it reflect our current practice. And, the resolution for the charters was just to make some minor changes that Council and our team had in mind. Then, budget, one of the things I think folks will probably be very interested in. I know we get lots of emails and comments about the budget. So, we are now at the stage with the budget and that all of our department budgets, all of the individual components of the budget have been discussed in detail at the committee level. The Public Safety Committee, the Finance Committee, the Planning and Economic Development Committee, they've all been looking at the departments that are relevant to their committee. The public has had an opportunity to review the detailed budgets. The public has had an opportunity to comment. All of those committee meetings are in-person so virtually every aspect of this budget, since our committee meetings were in person, virtually every aspect of this budget is being discussed in a public forum at an in-person meeting. So, you have had, you the residents, have had many opportunities to provide us feedback, and you still will. This process is going to go on until the end of May. This is the first time, though, when the budget in its entirety is being heard by the entire Council. So, I'll be going through some of the highlights. Again, it's already been discussed in detail and various committees, so I'm not going to get into the weeds during this presentation, but we will talk about some of the highlights, some of the main points. This is a very public safety focused budget. We're adding firefighters and if we get some Federal grants that we anticipate, we'll be adding up to 10 new firefighters.

Amy Simmons ([06:38](#)):

Wow.

Dan Hoffman ([06:38](#)):

Yeah. We've got that, we're adding some police position. We're adding police cars. We're doing a lot to bolster our solid waste program or trash collection as folks might think of it. And our recycling program. That does mean that we are proposing an increase. We are proposing to increase the solid waste fee from \$5 to \$10. That's long overdue. It's been five for...

Amy Simmons ([07:10](#)):

Since we started.

Dan Hoffman ([07:10](#)):

Since we started, six, seven years ago. And, unfortunately when you don't gradually increase it over time to reflect increased costs, like increased landfill fees, which we have no control over.

Amy Simmons ([07:21](#)):

\$30,000 increase this year?

Dan Hoffman ([07:23](#)):

Yeah, this year alone is a \$30,000 increase because we send a lot to the landfill.

Amy Simmons ([07:28](#)):

Right.

Dan Hoffman ([07:29](#)):

We need to change that. Unfortunately, we're in a position where we have to do some catch-up but this increase, residents, you're going to see a lot of value out of this increase first off. We will start giving people opportunities to recycle their glass again. I know, personally, it pains me every time I throw a glass bottle in my trash. We then pay to put that in a landfill. So, we'll be adding a glass crusher. There'll be a drop-off site for glass, hopefully in the future, we'll start picking it up from the curb. Then, I think the most clear evidence of the value people are getting out of this investment and really, it is the residents investing into this system is that we are going to be distributing, if approved, we'll be distributing standardized heavy duty, trash cans, roll off trash cans to our residents. So, if you're in one of the areas that gets these, and it'll be the vast majority of the city. There might be some limited areas where we can't do it. It might be downtown or the roads are too narrow, there's no place to put the cans. You'll be in a position where you never have to go to Lowe's or Home Depot and buy a trash can again.

Amy Simmons ([08:48](#)):

And you can choose your size as well.

Dan Hoffman ([08:50](#)):

You can choose your size. There's a small, a medium and a large. If your trash can gets damaged or stolen or lost, we will come replace it for you. These are good, solid heavy-duty cans. So you'll also see a lot less trash getting blown around on a windy day.

Amy Simmons ([09:06](#)):

And they hold more. You don't have to worry about counting your bags anymore.

Dan Hoffman ([09:10](#)):

Exactly. You just toss it into these, take it out. They're standardized cans so we can start using some of this newer equipment to basically load your trash into the trash trucks. That's important and it's going to save the City money because a lot of the repetitive stress injuries and workers' comp issues that we have currently, because our solid waste workers are manually picking up all of these variety of cans people have. They're throwing them into the back of the truck. This is going to allow us to automate some of that process, which is going to save us money in the future too. So I want everybody to think about this as an investment in our trash collection system. But I digress. Back to it. So, after we talk

about the budget, we'll have first reading for the tax rate. We are keeping the tax rate the same. It was 93 cents last year. It will be 93 cents this year, if the Council approves that. I know some folks are going to see increases in what they pay because the value of your home increased. Appraisals went up. The market's still strong. I know people point to the fact that we're in a pandemic, but, not only is the general economy in a fairly, I'm cautiously optimistic. But the City's well-poised, I believe, for a good rebound, because a lot of our other metrics are solid. Property appraisals went up. The city is still an attractive place for people to be.

Amy Simmons ([10:42](#)):

They're flying off the shelves.

Dan Hoffman ([10:43](#)):

It is really hard to get a house. And as somebody that just bought a house about six, seven months ago, I can tell you, there's not a lot of supply. So, houses in the city are valuable and yeah, the appraisals reflect that. We are proposing to keep the tax rate the same. It's still 93 cents and this first reading is just to set that and it is a not to exceed rate. I think that's important for folks to note. Why are we setting the tax rate before we approve the budget? We have to know what we're working with to set the budget and.

Amy Simmons ([11:19](#)):

There's advertising requirements, too.

Dan Hoffman ([11:20](#)):

There's advertising requirements. We have to publish it 30 days in advance. This is a somewhat necessary step, which is why we already discussed the budget in detail at all the committees. We know that we're planning on having 93 cents tax rate, but it is a not to exceed rate. So, if over the course of the next six months, the Council identifies ways that we can go lower, so be it. Or if they identify things that they want to cut, that they don't want to see in the budget that I'm proposing, that's their prerogative to take those out. That's why there's still plenty of opportunity for public input. Moving along, that will wrap up the regular agenda. I know there's a lot of things on here, but some of these things will move very quickly because they are standard items that have already been discussed in committee. After that, we'll have a Work Session. Work Session should be relatively brief. I will be giving an update to the Council on the strategic plan. For those of you who don't know, we are updating our strategic plan. Hopefully, you get the CitE-Newsletter and you've noticed that we're doing a survey we want to hear from you. Please fill out the survey. It's going to be incredibly helpful for us to hear from the residents. Sometimes a survey might feel a little bit sterile, a little cold, 'I'm filling this out and where does it go?' We do look at all the comments too, that you're going to put in the survey. And, you know, if you really just want to give us some general feedback that doesn't fit neatly into the survey, just email me. Go to the website, find my email address. You can always email me. You can always call the City Manager's Office. You can show up at every single regular meeting of the Council and speak during public comment. There is no shortage of ways for you to engage with us and provide us feedback on the plan.

Amy Simmons ([13:11](#)):

We also plan on opening an Open Town Hall poll slash survey on our portal that will allow people to give that feedback as well. That'll be coming soon

Dan Hoffman ([13:21](#)):

If you want to talk about just things that weren't highlighted, because the survey is fairly general. We didn't want to ask you a hundred questions about every little minutiae of City operations. So it's a real brief survey to fill out. It covers the highlights but if there's something specific you wanna bring to our attention, you got plenty of ways to do that. So, we're going to talk a little bit in that session about where we're at with the strategic plan. All of the counselors have been interviewed by our facilitator. I'm going to be getting some feedback and validation on what we heard in those interviews and that will set us up for a Council retreat in mid-May. Then finally on the agenda is an Executive Session. We're gonna talk about the right of way fees with the City Attorney and that's all I can tell you.

Amy Simmons ([14:09](#)):

Because you can't talk about it.

Dan Hoffman ([14:10](#)):

Because it's an Executive Session.

Amy Simmons ([14:10](#)):

Right.

Dan Hoffman ([14:11](#)):

So that's our agenda for tomorrow. Join us down at City Hall.

Amy Simmons ([14:16](#)):

Or you can watch it online.

Dan Hoffman ([14:18](#)):

You can watch it online. How do we broadcast that?

Amy Simmons ([14:21](#)):

We have it on our agenda portal. So, you just go to our website, go to the government tab, click Council, Meeting Agendas, and it will take you to our portal where the agenda is. And the video will start just a minute or two after six, because there's a slight delay.

Dan Hoffman ([14:34](#)):

Alright, Amy, what's next?

Amy Simmons ([14:37](#)):

We're going to talk to Don.

Dan Hoffman ([14:38](#)):

All right, Don. Welcome.

Don Riggleman ([14:40](#)):

Thanks Dan.

Dan Hoffman ([14:41](#)):

All right, first off, whenever we do one of these, we have some City staff come in. I like them to introduce themselves and tell folks a little bit about what their role is the City. So, why don't you start with that?

Don Riggleman ([14:52](#)):

Okay. I'm Don Riggleman, I'm the Water Supply/Wastewater Treatment Division Manager for the City of Winchester. I oversee the water and wastewater treatment, the water treatment from the north fork of the Shenandoah River and our plant in Middletown and the wastewater treatment down on Route 7, the Opequon Water Reclamation Facility. And a common misconception is that that's where our water comes from, which is not the case.

Dan Hoffman ([15:28](#)):

Where does our water come from?

Don Riggleman ([15:30](#)):

Water comes from the north fork of the Shenandoah River, Middletown, and it's treated in Middletown and then pumped 12 miles to the city.

Dan Hoffman ([15:41](#)):

We basically siphon off water off the north fork, treat it. What happens there when it's in that first bit of treatment?

Don Riggleman ([15:50](#)):

What they're doing is they're adding a coagulant.

Dan Hoffman ([15:54](#)):

What's a coagulant?

Don Riggleman ([15:57](#)):

A coagulant is a chemical that removes organics and whatnot, not so much organics, fine solids. There's another chemical added for the organics.

Dan Hoffman ([16:09](#)):

Got it. Is it similar to the stuff you put in a fish tank to take a lot of the cloudy crud out?

Don Riggleman ([16:15](#)):

Very similar. And we put it through a flocculation system to support it.

Amy Simmons ([16:21](#)):

That's a fancy word.

Dan Hoffman ([16:22](#)):

I can tell we're going to learn a lot of new words today. [Laughing] So, after the coagulation, the flocculation happens.

Don Riggleman ([16:26](#)):

That's right.

Dan Hoffman ([16:28](#)):

And then what happens after that?

Don Riggleman ([16:31](#)):

Then the next process is sedimentation.

Dan Hoffman ([16:33](#)):

Sedimentation. There's a new one.

Amy Simmons ([16:36](#)):

Yay. And there's a word for when it's cloudy. What does that word?

Dan Hoffman ([16:39](#)):

Turbidity.

Amy Simmons ([16:41](#)):

Yes! Turbidity.

Dan Hoffman ([16:42](#)):

Turbidity.

Don Riggleman ([16:44](#)):

Common surface water treatment is five steps. Coagulation, flocculation, sedimentation, filtration...

Dan Hoffman ([16:52](#)):

Filtration four.

Don Riggleman ([16:54](#)):

Four. Yes. And that's where the water flows through filters, sand and anthracite coal, that are fine enough to trap viruses, things like that.

Dan Hoffman ([17:07](#)):

Oh, wow. And then it gets pumpationed up to...[laughing].

Don Riggleman ([17:12](#)):

That's right. [Laughing].

Dan Hoffman ([17:15](#)):

I wanted to get it to five. And so then 12 miles.

Don Riggleman ([17:19](#)):

Actually, we missed the disinfection process. So chlorine is added, sodium hypochlorite.

Dan Hoffman ([17:24](#)):

Disinfectation. [Laughing]

Amy Simmons ([17:25](#)):

Yeah. And then there's the fluoridation, right?

Dan Hoffman ([17:29](#)):

Oh, when does the fluoride happen?

Don Riggleman ([17:31](#)):

It happens prior to the chlorination.

Dan Hoffman ([17:35](#)):

Obviously, I've heard for generations, I mean, there's been fluoride in the water for however long. How does that actually occur? Cause in my mind, when I think of fluoride, I think of the stuff that I swish around in my, mouth at the dentist. Do you have to have a giant vat of Listerine or something that you dump in the water? How does this work?

Don Riggleman ([17:57](#)):

Well, you're going to love this. [Laughs] If you like sedimentation, [laughing] we use a chemical: hydrofluoric salicylic acid.

Amy Simmons ([18:07](#)):

Nice.

Dan Hoffman ([18:08](#)):

Well, that sounds like it's going to burn up my insides.

Don Riggleman ([18:10](#)):

Exactly, but it's, I think 50-some percent fluoride. And that is metered into the water at the recommended dosage rate of 0.7 milligrams per liter.

Dan Hoffman ([18:26](#)):

Point seven milligrams per liter. So that's how much? If I get a gallon of water out of the tap, there is 0.7 milligrams per liter of fluoride in it.

Don Riggleman ([18:36](#)):

Yes. The milligrams per liter is equivalent to a part per million. So there's seven tenths of one part per million in a gallon.

Dan Hoffman ([18:46](#)):

That's a tiny amount.

Don Riggleman ([18:46](#)):

Yeah. Very.

Amy Simmons ([18:50](#)):

I'm so confused. That's a lot of fractions.

Dan Hoffman ([18:51](#)):

Yeah. It's a tiny amount. Very tiny amount. Interesting. Okay. So, it gets pumped. Does the fluoride go in before it's pumped up to Winchester or after.

Don Riggleman ([19:02](#)):

Before. Yes, sir.

Dan Hoffman ([19:04](#)):

So once it's on its way up to Winchester, it's ready to drink?

Don Riggleman ([19:08](#)):

Yes.

Dan Hoffman ([19:09](#)):

Oh, okay. So, it's coming out of the north fork, so ample supply of water.

Don Riggleman ([19:16](#)):

And quality, good quality source water.

Dan Hoffman ([19:21](#)):

So, we are never going to be in a, well, it's highly, highly unlikely, we'll ever be in a situation where you have where we are short of water.

Don Riggleman ([19:29](#)):

Right.

Dan Hoffman ([19:29](#)):

Okay. It's pumped into Winchester from there. At what point does it get put up in the water towers?

Don Riggleman ([19:38](#)):

The main line branch is off close to Handley High School, flows up to the Jefferson Street tank, the elevated tank at Jefferson Street, and then also to the new Strothers Lane storage tank behind National Fruit, Fairmont Avenue. And we're talking about moving, you know, five to 6 million gallons a day on the average. And we can do up to 10.

Dan Hoffman ([20:08](#)):

So, if everyone flushed the toilet at the same time, what would happen?

Don Riggleman ([20:13](#)):

I think we would be okay. [Laughing].

Amy Simmons ([20:13](#)):

That's all we need to know.

Dan Hoffman ([20:16](#)):

Hey, halftime of the Super Bowl. That's what they I say. So, we recently did a water quality test. We put out a report, tell us what we found.

Don Riggleman ([20:27](#)):

Well, as usual, our water quality is excellent. It meets all Federal and State standards. We put out an annual Drinking Water Quality Report, send a large majority of our samples to the State lab and they test for different components. At the beginning of the following year, we put together a table which you'll find in the Drinking Water Quality Report. And we send that to VDH. VDH then reviews their numbers that came from the State lab, compares and say, 'yes, our numbers match'. Then they send them back and we included in our CCR template.

Amy Simmons ([21:21](#)):

What's in the table? What are you testing for?

Don Riggleman ([21:24](#)):

Well, the table has a lot of information in it, what we're testing for. Some of it goes back to 2019 because it's a running quarters. But we're testing for turbidity, which is, we talked about.

Amy Simmons ([21:41](#)):

Cloudiness in the water.

Dan Hoffman ([21:41](#)):

It's a good indicator of water quality. Total organic carbon, which is the organics in the water.

Don Riggleman ([21:54](#)):

Bacteria?

Dan Hoffman ([21:54](#)):

No bacteria. The organics react with chlorine when we use chlorine and they can form what we call disinfection byproducts which are possibly cancer causing. So, there we list those total trihalomethanes and haloacetic acids, which are two things we test for.

Dan Hoffman ([22:23](#)):

And they're bad?

Don Riggleman ([22:24](#)):

Yes. But I'm happy to say we're well under the recommended level set by VDH.

Dan Hoffman ([22:30](#)):

And the thing that everybody, of course, after all the horror stories of Flint, Michigan, everyone wonders about lead.

Don Riggleman ([22:38](#)):

Right. Happy to report that we just went through a water meter replacement project, replaced all the water meters in the city. And the crews laid hands on all of our service lines. We have no lead service lines in the city. With that being said, our lead levels are fine. We meet the requirements. We are doing lead and copper sampling again this year. We do it every three years based on the levels in our system. So the minimum being every three years. So that's why we fall into that.

Dan Hoffman ([23:17](#)):

So, if we have no lead pipes, how would lead possibly get into the water?

Don Riggleman ([23:22](#)):

Water is an interesting compound. It likes to seek neutrality. We add a corrosion inhibitor also at the treatment plant to prevent water from attacking various compounds. But what happens if it sits in the pipe, it can then attack solder joints and copper pipe and the old lead solder, things like that can produce a lead result. The best thing to do is run your water for a minute before you drink it, if you're concerned about lead in your water.

Amy Simmons ([24:05](#)):

And we also can't control any lead pipes that are between where we take it into the house, right?

Don Riggleman ([24:11](#)):

Right. Yes. Good point, Amy. Thank you. We maintain to the water meter. So, from the water meter into the house, and any plumbing in the house, if there's lead plumbing or piping, we have no control over that. That can also be a source.

Dan Hoffman ([24:31](#)):

If someone's got an older home, at what point did they stop building homes with lead pipes and copper pipes and things?

Don Riggleman ([24:40](#)):

I can't recall the actual date, but it's in the seventies. We have a specific criteria of the house that we sample from. We provide that list to VDH and they approve it.

Amy Simmons ([24:56](#)):

And you'll test if someone calls and they may have a concern, you'll come out and test, right?

Don Riggleman ([25:01](#)):

Yes, absolutely.

Dan Hoffman ([25:02](#)):

All right. Can I make a request right now to come out to my house? My house was built in 1926, and it initially just had a ground well. When I walk out my back door, there's an old pump ground that I think it sits on a cistern that provided all the water to the house back in 1926. How does the groundwater compare? I'm assuming some homes in Winchester still have wells that they tap into.

Don Riggleman ([25:32](#)):

Right.

Dan Hoffman ([25:32](#)):

How does that water compare to the water we're getting out of the north fork?

Don Riggleman ([25:40](#)):

Well, we are continuously monitoring what comes out of it-what leaves the plant 24/7, for chlorine, turbidity. These are online monitoring devices and that send alarms to the SCADA system, to the operators at the plant, if there's any issues.

Dan Hoffman ([26:02](#)):

What's a SCADA system?

Don Riggleman ([26:05](#)):

I'm sorry, that's a Supervisory Control And Data Acquisition. It's an acronym for that. That is basically a computer computerized system that monitors the entire plant, like a power plant.

Dan Hoffman ([26:19](#)):

So, the water that we're pumping to people's homes, the main difference is it's regularly monitored, it's controlled. Groundwater coming out of a well that could have all kinds of what in it?

Don Riggleman ([26:30](#)):

Well, primarily it could have bacteria, pathogens, which are disease causing organisms. The chlorine disinfects that, the filters also take it out and then we disinfect it as well. And the chlorine, one of the benefits of the chlorine is it maintains a residual throughout the distribution system. The plant personnel come out, they pull 30 bacteria samples every month throughout the distribution system and send it off. If one of them comes back positive, then we have a whole list of things we have to do. Go back and retest, things like that, but we haven't had that happen.

Dan Hoffman ([27:16](#)):

So, I guess for everybody out there that's got some well in their backyard or their house is still pumping water out of the ground well, you should get that tested regularly because no one else has taken a look at it.

Don Riggleman ([27:28](#)):

Right.

Dan Hoffman ([27:29](#)):

All right. Excellent. We're running short on time. So let's move along real quick. Folks right now, you might be seeing hydrants getting flushed. Why do we do that?

Don Riggleman ([27:39](#)):

If our water starts attacking pipes, things like that. Sediment can form. What our crews do is they start at the water plant and they flush the system. They open the hydrant up to what's called a scouring velocity. There's a certain amount of volume of water that has to move through the pipe so it scours the pipe. Cleans out everything that could settle, some minor corrosion, things like that.

Dan Hoffman ([28:08](#)):

Like an enema for our water system.

Don Riggleman ([28:11](#)):

[Laughing] And they do that through the entire system, work their way through the entire system, flush it out every year.

Amy Simmons ([28:17](#)):

Make sure that they're working also for fires.

Dan Hoffman ([28:21](#)):

Yeah. If there's no pressure. Excellent. So we're doing that right now. Do we do that every year? Every spring?

Don Riggleman ([28:26](#)):

Every year. Yes, sir.

Amy Simmons ([28:27](#)):

Until October. March to October, really.

Dan Hoffman ([28:30](#)):

Awesome. Let's move on to the end process. Now, I know at both both treatment plants, we've been doing some improvements, things that folks might never see. So, when they ask or wonder where their money goes for their water, sometimes it's easy to forget that there's a lot that happens before they open their tap or flush the toilet. What improvements have we been making at those two plants?

Don Riggleman ([29:00](#)):

Sure. We just recently completed an upgrade to the buildings, mainly the filter gallery at the water plant, which is where we house our filters. This building was built back in the fifties and the moisture and in that, as you can imagine, open filters in that building of the moisture is attack the ceiling, windows. We, uh, the building itself, the building itself. Yes. So you

Dan Hoffman ([29:33](#)):

The building itself. You don't want to make clean water in a dirty building. Kind of defeats the purpose.

Don Riggleman ([29:36](#)):

[Laughing] Good point. We also did the exterior of the building, repointed the brick, put new roof on it. And our pumping station at the river where we pull water out of, we also replaced the generator at the raw water pumping station. It was 25 years old. We want to make sure that if we lose power, we have reliable backup power. We've recently, 2018, 2019, went through a long project looking at our coagulant, which we discussed earlier. We use ferric chloride, which is an iron salt, but the iron stained everything red. And, there was a new product, polyaluminum chloride. That is an alum, based with the poly is a polymer and it produces an excellent quality water that we've not seen in our process before. When water went through the flocculation process in the sedimentation basins, where it settles out, we can now look down and see the bottom of the tanks. We could never do that before. That was a project that saves us probably about a hundred thousand dollars in chemicals because we use less of coagulant. We dose less and then we do not have to feed sodium hydroxide or caustic sodas it's normally called. So, we don't have to do that. It's a chemical, a harsh chemical used to raise the pH of the water. And that was another effect of the ferric chloride and iron salt. It was acidic and it would drop the pH. So we had to feed a caustic soda, raise the pH back up after the treatment.

Dan Hoffman ([31:46](#)):

So long story short. There's a lot that goes into your water. We pay very close attention to it as should you, because you're putting it in your body every day.

Amy Simmons ([31:54](#)):

And it's a 24 hour operation.

Dan Hoffman ([31:56](#)):

24 hours operating. At no point do we take our eye off the ball, because, we want you to be able to trust what you're putting into your body, into your kid's body. So, it's something we take very seriously. I know we've been talking about a lot of chemicals today, but there's nothing we're doing that is unsafe. It's all been thoroughly tested. We're using best practices. We're working with the state. We're not just putting random chemicals in your body. It's monitored constantly. So, regardless of what you might think about various treatment processes or fluoride in the water, this is the kind of thing that we've been doing for really decades and decades, and it's only getting better. All right. So moving on to wastewater. Let's talk about things downstream. We've had the water that's coming out of our tap. We've drank it. We've put it in our food, then we're done with it and we flush it. So once someone flushes it, it goes an entirely different system, our wastewater system. Where does that get handled?

Don Riggleman ([33:10](#)):

That gets handled, gets treated at the Opequon Water Reclamation Facility on Route 7. Once again, we treat the water to a better quality than what is in the stream. We are an enhanced nitrogen removal process, which means we meet limits of technology for the amount of nitrogen that we discharge from the plant.

Dan Hoffman ([33:40](#)):

Stuff that literally you have flushed down the toilet goes directly to this plant, in its raw form, and then when it comes out the other side of the plant it's drinkable. Like someone could just take a cup of water out and just take a sip.

Don Riggleman ([33:57](#)):

No, sir.

Dan Hoffman ([33:57](#)):

But it goes into the creek.

Don Riggleman ([33:59](#)):

Correct. And we don't recommend people drinking out of the creek. It needs to go through a different process.

Dan Hoffman ([34:06](#)):

I'm sure a lot of stuff pees in the creek. So, I'm not going to go drink creek water. [Laughin] But, what are we putting out at the other end then. What's wrong with it? I shouldn't say wrong with it, but why couldn't I drink it at that point

Don Riggleman ([34:21](#)):

Because of the possible contamination, bacteriological.

Don Riggleman ([34:27](#)):

Something that might've made it through.

Dan Hoffman ([34:28](#)):

Yes. What we do is we disinfect, we don't sterilize. Our goal is to return it to stream water quality. So you need a different process such as our water plant, where you're going through filters and removing anything.

Dan Hoffman ([34:45](#)):

So, we just pump our pretty good, but not drinkable water, into the Opequon.

Don Riggleman ([34:52](#)):

Correct.

Dan Hoffman ([34:52](#)):

But it's fine.

Amy Simmons ([34:54](#)):

It's safe.

Dan Hoffman ([34:55](#)):

It's not going to make a deer goes down and drinks it. The deer's going to be fine. When folks flush things, at this point, hopefully everybody listening and all of our residents have heard this at least 15 times, there's a lot of stuff you should not flush. There's the obvious stuff like cell phones and kids' toys and mementos from an ex-spouse. But what are the things that people might not know that they should not flush?

Don Riggleman ([35:35](#)):

The primary thing is the flushable wipes.

Dan Hoffman ([35:38](#)):

Flushable wipes...

Amy Simmons ([35:42](#)):

Now, they're flushable, but not treatable.

Dan Hoffman ([35:45](#)):

That's right.

Amy Simmons ([35:45](#)):

That's the problem.

Dan Hoffman ([35:46](#)):

So it's false advertising.

Amy Simmons ([35:47](#)):

No, you can still flush them.

Dan Hoffman ([35:50](#)):

I can flush anything. I can take this microphone and flush it.

Amy Simmons ([35:55](#)):

Yes, but they can't treat it very well.

Don Riggleman ([35:58](#)):

Right. And it causes problems throughout the process.

Dan Hoffman ([36:02](#)):

Give me an example of a flushable wipe.

Don Riggleman ([36:06](#)):

Like a baby wipe, that type of thing. And like Amy said, they're advertised as flushable wipes. Some of the other things are paper towels and tissues.

Dan Hoffman ([36:17](#)):

Yeah. I think half the restaurants in town, if you go to the bathroom, it says, please, please do not flush these things. And that's at home too. Just because you think you got a good toilet, don't start flushing, paper towels.

Don Riggleman ([36:31](#)):

And the first process at the treatment plan is to screen out things that cannot be treated. So that's basically pulled out and screened off and hauled away to the landfill.

Dan Hoffman ([36:47](#)):

When the stuff, the raw material comes in, there's an actual, when you say screen it out, there's an actual, giant grate that all of this hits, right. What are some of the odder things that you've seen get caught in the giant screen?

Don Riggleman ([37:03](#)):

Tools.

Amy Simmons ([37:05](#)):

Yeah. Corey mentioned, the Operations Manager, he's pulled out a full pair of jeans before.

Don Riggleman ([37:10](#)):

Yes.

Dan Hoffman ([37:12](#)):

Like a kids size? How does that even get down the toilet?

Amy Simmons ([37:14](#)):

I don't know what size.

Don Riggleman ([37:15](#)):

Yeah, exactly. There's been a host of things like that. Pillowcases and things that you wouldn't think could make it through the toilet. But the process is mechanical. It pulls everything up and there a brush that scrapes it off.

Dan Hoffman ([37:36](#)):

[Laughs] That sounds awful.

Amy Simmons ([37:39](#)):

It causes tangles.

Dan Hoffman ([37:41](#)):

Tangles. Oh, that's even worse.

Don Riggleman ([37:43](#)):

Then it bags it.

Dan Hoffman ([37:44](#)):

All right. So, one of the things in the list that surprised me was hair. So, I obviously don't have that problem, but for the people out there with longer hair, you should not go reach down out of the shower, grab that clump of hair and throw it in the toilet. Throw it in the trash, right?

Don Riggleman ([38:02](#)):

Correct. Yes, sir. It doesn't break down. Feminine products is another issue, dental floss, bandages. They won't break down.

Dan Hoffman ([38:17](#)):

Yeah, they're plastic, right.

Amy Simmons ([38:18](#)):

Yeah, they'll clump together.

Don Riggleman ([38:19](#)):

Medications.

Dan Hoffman ([38:21](#)):

Definitely don't do that. I've seen a bunch of stories about some of those medications. Obviously, the containers of the medications, you obviously should not flush, but the medications themselves, a lot of that stuff we can't screen out. There's no process by which to remove some of these, the anti-psychotics and other kinds of hormone-related therapies. That can really mess with the ecosystem. You do not want to throw that stuff away.

Amy Simmons ([38:50](#)):

Yeah. We have a box for those at the PD, at the Timbrook Public Safety Center. There's a big red box out front where you should take your unused medication or drugs, whatever you need to get out of your house. Take them there.

Dan Hoffman ([39:03](#)):

You should not have old and expired drugs at your house.

Amy Simmons ([39:06](#)):

Yeah. They should be disposed of properly.

Dan Hoffman ([39:08](#)):

Yep, absolutely. What else is on the list?

Don Riggleman ([39:10](#)):

Fats, oils and grease.

Dan Hoffman ([39:13](#)):

Oh, that's a big one. That's actually valuable. I mean, Valley Proteins, that's their entire business. It's collecting from restaurants and whatnot, the unused grease and byproducts.

Don Riggleman ([39:23](#)):

And then Valley Proteins is a major customer for us, for the waste to energy. They bring a lot of the fats, oil and grease that they can't use down and then we put it in our anaerobic digester and generate methane gas and electricity.

Dan Hoffman ([39:48](#)):

So real quick, let's wrap up on that point cause we're running out of time. We do have a waste to energy machine, for lack of a better word, down at the plant. It takes a lot of these byproducts and actually converts them into electricity, well, methane that we then run a generator with. Tell me, what can we actually generate? How long have we had it? Just the basics.

Don Riggleman ([40:16](#)):

It came online in 2016 and we have been working toward getting customers, more customers to bring us their waste. We generate, full out, 825,000 kilowatts power, which is at times enough to power the entire plant. And then sometimes at night, we can put power back out onto the grid. Also, the biosolids from the treatment process are put into the digesters and broken down. Then they are trucked off as a soil supplement for farmers that are land applied.

Dan Hoffman ([41:05](#)):

Interesting.

Amy Simmons ([41:05](#)):

So, less going into the landfill.

Dan Hoffman ([41:07](#)):

That's right. Well, Don, thank you so much for joining us. We clearly covered a lot of ground today. Way much more than I thought I would, but I shouldn't be surprised cause this is one of the more interesting topics cause it affects everybody. Thanks for joining us today. And if folks want to check out that water quality report, Amy where should they go?

Amy Simmons ([41:31](#)):

It's on our website under the utilities section.

Dan Hoffman ([41:33](#)):

All right. Thank you very much, Don. I think if folks have been listening to the podcast over the last several ones, at least since I've started doing them, hope, you've noticed that every time we bring in a City staff person, this is somebody who's been with the City for an extended period of time. We have a very seasoned, experienced and qualified senior staff.

Amy Simmons ([41:56](#)):

Did he say how long he's been here?

Dan Hoffman ([41:57](#)):

He didn't.

Amy Simmons ([41:57](#)):

I'm sure it's gotta be over 15 years.

Dan Hoffman ([42:00](#)):

It's a long time. I don't know the specific number off the top of my head, but he's yet another member of our team that has just really committed their career to serving the residents of Winchester and in his role, we have to trust him. It's good to have somebody good in that role because we're drinking what he makes. So, we got to take it seriously. We got to have good qualified people there.

Amy Simmons ([42:25](#)):

And we do, they're phenomenal.

Dan Hoffman ([42:27](#)):

They're excellent. They're an excellent team. And if somebody wanted to actually see some of the facilities that we talked about today, Amy, what kind of opportunities do we have?

Amy Simmons ([42:38](#)):

Well, of course they give tours if you want to, but the better way to do it is sign up for our INSIGHT Citizen's Academy. Every year we, except for this year, thanks to COVID, we get together with anybody who wants to join and learn more about government operations. We'll take tours, we're learn about different services and programs and meet staff. And we actually go to the water plant in Middletown and the wastewater treatment plant and do a tour, and you get all the information you ever wanted to know.

Dan Hoffman ([43:07](#)):

Very cool. All right. So, what else is coming up?

Amy Simmons ([43:11](#)):

Well, it's National Library Week, did you know that?

Dan Hoffman ([43:14](#)):

I did not know that.

Amy Simmons ([43:15](#)):

Do you have a library card?

Dan Hoffman ([43:16](#)):

I think I do.

Amy Simmons ([43:19](#)):

I know your wife does.

Dan Hoffman ([43:19](#)):

Does it count if she has one?

Amy Simmons ([43:21](#)):

Yes.

Dan Hoffman ([43:21](#)):

Okay, good. Then our family has a library card.

Amy Simmons ([43:24](#)):

[Laughs] Well, you know, I think about it all the time because I get their notices and I see it on social media. They have a lot of stuff going on and it really amazes me that they're not just books over there.

Dan Hoffman ([43:33](#)):

And it's a gorgeous building.

Amy Simmons ([43:34](#)):

Oh, my gosh, they're not just books and building. Oh Lord, they have a lot of stuff going on and I love going there. You mentioned the community input survey for the strategic plan. We have that plus two others going on right now. There's the Win-Fred Metropolitan Planning Organization is doing one for a bike share program. And they would like to just know, it's six questions. How can we make biking in Winchester more safe? So, if you'd like to bike or if you don't, please check out the survey and let us know your thoughts. And then this one isn't necessarily for us, but it's one for Virginia. VDOT is collecting data for commuting to see how it's changed during the pandemic and how they can make improvements to make that a little safer, flow better, or what can they do? And whether you're commuting locally or to another jurisdiction or you're working from home, they still want to know. You're still considered a commuter. And all three of those can be found on our website. If you go to WinchesterVA.gov/getengaged, we have them all there. Parks and Rec, of course, I mentioned they have lots of stuff going on. They have an Earth Day Kids Art Class. So, that's pretty cool. They'll take a little nature walk and they'll collect leaves, rocks, twigs, anything to make a little art project with. And they also have several Mother's Day programs going on from cookie decorating class for ages 14 and up to Creative Crafters Monthly Club. They have you just pick up a little project kit, take it home for ages three and up, and you just registered for both of those and you can enjoy Mother's Day together. And then the Dog Obedience Class is coming back for those pooches need to learn how to be better doggies. Last, but not least, Michael Recycle.

Dan Hoffman ([45:19](#)):

Oh yeah. We talked to him two weeks ago.

Amy Simmons ([45:22](#)):

Two weeks ago, I think. Really Michael Neese, but Michael Recycle to me. He will be joining several other recycling experts in the area to participate in a panel discussion. It's called "What's Up With Recycling." So if you want to know what's up with the recycling market today, tune in on April 19th, this program is organized by Sustainability Matters and it's being held virtually. Just go to [ecycling.eventbrite.com](https://recycling.eventbrite.com) to sign up now.

Dan Hoffman ([45:52](#)):

And one last thing that I should mention because we won't have another podcast before it happens. We're in the planning stages for a big stream cleanup on April 17. So keep an eye out on our website. We'll probably send out an email blast to folks. We'll be cleaning up big stretches of Town Run from the downtown all the way down towards where Mr. Carmel and the community garden is. We'll be doing some cleanups around the community garden. Keep an eye out for that great opportunity to volunteer. The city and folks will be out there. I'll be out there. You can come say hi, if you haven't met me yet and pick up some trash.

Amy Simmons ([46:35](#)):

Awesome. I know it's needed.

Dan Hoffman ([46:36](#)):

Yeah, absolutely. All right. Well with that wraps up another edition of the Rouss Review. Thank you for listening. I hope you enjoyed it as well. Amy, thanks again. Thanks always for helping to organize this and we'll see you next time. See you around in City Hall.