

Paul:

I'm on the Thames in London, a river which has long suffered from sewage pollution. Finally, there is now a ray of hope for this legendary river.

(to Darren) Hello. Nice helmet.

Darren:

Hello Paul.

Paul:

Hello Darren. Don't feed me.

Darren:

Welcome to Tideway.

Paul:

Thanks very much.

Darren is project manager of the Tideway, a major infrastructure development for the Thames, which will help free the river of dirty discharges.

Darren:

This is my world, this is my domain, it's where I live.

Paul:

Once completed, this 4.4 billion pound mega project will be operated by Thames Water. Greenwich is one of 24 sites across the capital upgrading the Victorian system and building a new future for the Thames.

Darren:

Here we are.

Paul:

Yes.

Darren:

Yeah, so this is, uh, Greenwich's, Thames Water Pumping Station.

Paul:

Uh huh.

Darren:

So Thames Water own this, this asset. It's, er, it's a listed building, it's dealing, it's fully live, fully operational. The reason behind Tideway is just, an old age problem that the river's just too dirty and the amount the sewage, forty million tonnes a year, um, being directly pumped into the river was just not acceptable and we need to do something about it.

Paul:

Yeah, I mean it's, it's an extraordinary project but you can see evidence all around of the pressure that is on the river because there's new flat developments there, all, all around us, aren't there?

Darren:

Poke your head over the side there.

Paul:

Okay.

Darren:

That's the one. So, if you look down there now, you can see the live sewers, Paul, coming through. So there's three sewers coming into here from all the parts of Greenwich and Lewisham.

Paul:

That's not too bad.

Darren:

No, it's not too bad.

Paul:

No, not at the moment. I bet, I bet on some, oh, there we are.

Darren:

Excuse the smell, it wasn't me.

Paul:

Oh.

Darren:

Someone just flushed.

Paul:

Oh, yeah, it's pretty grim, isn't it, yeah.

Darren:

Yeah, so what you can see here, Paul, is uh, where the sewers come in from all over Greenwich on a day to day basis. They go through here, go into the pumping station, pumped off for treatment as, as normal. When the flows get too much - heavy rain, big storms, it back flows all the way down to the river and into the river, which we don't wanna see. That is why we're here,

Paul:

So get on with it.

Darren:

Yeah, yeah. We're building a CSO combined sewer out-flow and that will intercept this overflow. Then all of it will go out to Beckton for treatment and then it'll be all treated into clean water at Beckton and pumped out to sea as, as clean water.

Paul:

Brilliant. Have you got something against Beckton or something?

Darren:

No they just love treating dirty water. So we're going to give it all to them.

Paul:

Hat, hats off to 'em.

Darren:

We're going to give it all to them.

Paul:

They wouldn't want to do it in Chelsea, would they?

Darren:

Correct, yeah. If you carry your little re-breather with you.

Paul:

Okay.

Darren:

Throw it over your shoulder.

Paul:

Will do. Do I need to do this up here?

Darren:

You don't have to, that's up to you.

Paul:

Oh okay, I won't then.

Darren:

And I'll take mine. Right, let's go down the stairs and we'll have a little look at what we're building.

Paul:

This one?

Darren:

Yeah, follow me.

Paul:

Having avoided it for so long and now is the time to head into the sewers below.

Darren:

Follow me.

Paul:

Right.

Darren:

In it's current set up, about eight million tonnes of sewage a year, just from this area, just from Greenwich, get dumped directly into the river untreated.

Paul:

No.

Darren:

Yeah. So, we're intercepting 95-more per cent of all of that. That, that's going to get intercepted by our Tideway Tunnel and out for treatment. Right Paul, we're now going to head down 57 metres to the bottom of the shaft.

Paul:

No we're not.

Darren:

Let's go.

Paul:

Alright.

You take me to all the most wonderful places, don't you? How long does it take?

Darren:

Couple of minutes.

Paul:

Okay. Descending two hundred fifty two stairs, I'm heading into the bowels of the Tideway.

Darren:

Here we are 57 meters down.

Paul:

It's incredible. It's like a sort of industrial Sistine Chapel, isn't it?

Darren:

Yeah, an upside down Chapel.

Paul:

Yes. Very bond, you know, especially all those noises as we were coming down.

Whoop, whoop, all of that. Incredible.

This massive pipe is bigger than Nelson's Column and will intercept excess wastewater, diverting it along the 25 kilometer network of tunnels to be properly dealt with.

I mean, it feels like we're slightly walking to our doom.

Darren:

Yeah, we're walking downhill.

Paul:

Yeah.

Darren:

So, here we are Paul.

Paul:

Yeah.

Darren:

The Greenwich connection tunnel. That's the finished product. This is what Tideway is going to look like.

Paul:

It's, it's impressively smooth.

Darren:

Yeah.

Paul:

Some of my old classroom work wasn't as good as this.

Darren:

Yeah, yeah.

Paul:

So if we were down here, of course, when it's operational, we'd see a tidal wave of effluent.

Darren:

Yeah. You might need to bring a little boat with or maybe waders you use.

Paul:

Yeah, yeah true. It's very impressive, its very laudable. Extraordinary feat of construction.

Darren:

Yeah, fantastic.

Paul:

It's going to take a lot of pressure off the River Thames and I assume that you've built in extra capacity, operational capacity to deal with, you know, the excess demands that are going to occur.

Darren:

Yeah, I mean absolutely, this, this, this tunnel, all of the Tideway network has been designed for the population of London, with a 120 year design life. So it should last and it should do its capacity for the next 120 years, at least.

Paul:

I expected to have to look in detail at sewage at some point. I'm obviously more home, you know, looking around the chalk streams and our beautiful rivers. But that's the story of our rivers, you know, they've been used as a dumping ground for waste and sewage. The river washes everything away. It washes your sins away. But unfortunately, sometimes your sins come back to bite you on the bum.

Tideway is a huge step forward for the Thames. But according to OFWAT, there are no plans to build any other Super Sewers in England, leaving many of our rivers at the mercy of outdated infrastructure.