From: Andy Mears 19 Jun 2023, 15:21

to Andrew Carey

Hi Andrew – just doing some catching up...

I'm not sure if I was fully aware of the lagoon problems when we had the WRC tour. This might be where the confusion is coming from.

<u>WW will have to achieve the Env Act targets of 10 spills per year for the high spilling WRC SSO</u>; there isn't a driver for complete elimination yet. To meet these Env Act targets, we'll need to consider the following:

- It's largely due to infiltration so CCTV surveying and sealing sewers will be needed unless a lot of this has been done already (I've asked the question of my colleagues and am awaiting feedback)
- Any remaining infiltration will come from private lateral sewer pipes and drains so there is a limit to what WW action will achieve with sealing
- Increased storage may also be needed then
- And in-catchment surface water separation of some sort would also help
- As the SSO discharge is relatively weak storm sewage, a wetland might come into play
- And as you say, UV disinfection for the SSO is also an option

WW will also have to achieve the Env Act targets of no local ecological impact; I really don't know how this will pan out, how the lagoon will be included, etc. High bacteria counts aren't considered to be ecological impact by EA though, as far as I am aware.

And we also have the lagoon bacteria problem. My notes to Peter in the email below are really saying that if you collect the flows at the bottom of a river catchment and allow them to 'pond' in a small lagoon, I think it will be a real struggle to get low bacteria counts. Very significant action may be needed much more widely than just from WW.

- My last 2 bullets below are about how WW may be able to do its very best to help clean up the lagoon.
- This would be over and above getting the existing 60 spills per year right down to 10.
- I've made absolutely no promises on this I'm just musing over potential actions.
- Just to complicate things even further, I now know that the lagoon is ephemeral and the beach is sometimes breached!

Think that's it, Andy

From: Andrew Carey CVPC < <u>acarey@charvalleypc.com</u>>

Sent: 05 May 2023 06:50

To: Andy Mears < Andy. Mears @wessexwater.co.uk >

Subject: Re: Chideock lagoon

Hi Andy,

Thanks, as ever for sharing this. When I attended the tour of Chideock WRC, I thought you also suggested:

- increased storage at the WRC to eliminate all untreated spills
- a second U/V treatment line to ensure that all WRC output was U/V treated

Did I misunderstand or has the situation changed?

Best wishes, Andrew

Andrew Carev

Parish Councillor: Stanton St Gabriel / Char Valley Parish Council

On Thu, 27 Apr 2023 at 11:32, Andy Mears < Andy.Mears@wessexwater.co.uk wrote:

Hi Andrew – I attended a parish council meeting at Chideock yesterday. I thought you'd be interested in this note I sent to Peter Stapleton afterwards...

Just for info really,

Andy

I've been mulling over the problem of the lagoon. If you tried to design an aquatic environment that would consistently collect any contamination going, and retain it, you just might come up with that lagoon. It could be extremely challenging to get it properly clean to bathing water standards long term. As it stands, it will always contain a significant proportion of volume derived from the WRC, which is not great for playing kids however well it is treated. My ideas then, some of which will never fly – and bearing in mind that the WRC SO spill reduction from 70 per year to 10 per year or less by 2030 is a given:

- 1. Plant it up somehow with the help of some clever ecologists and turn it into a wetland (the reed beds at West Bexington might be the prototype)
- 2. Pipe the river through to the sea (!)
- 3. 'Cut' the beach open and allow it to flow to the sea (!!!)
- 4. Take our 2x WRC discharges away completely, e.g. by piping them underground to the sea somewhere to the east of the lagoon
- 5. Take our 2x WRC and 1x SPS discharges away completely, e.g. by piping them underground to the sea somewhere to the east of the lagoon

One of these might be easy – the others look like a complete nightmare.

I have also just seen this, which is highly relevant: Storm overflow target to be enshrined in law - GOV.UK (www.gov.uk)