A large, stylized tree logo in shades of green and white, serving as a background for the title. The tree has a thick white trunk and branches, with a large green circular canopy. The canopy is filled with white, swirling, cloud-like patterns.

Key issues in the New Forest An Environment Agency Overview

Sam Orchard (New Forest Catchment Coordinator)
15th November 2018



Outline of this session



- New Forest Health Check
- Key issues and challenges
- Recent improvements
- Looking ahead

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SO – 15 minute tour

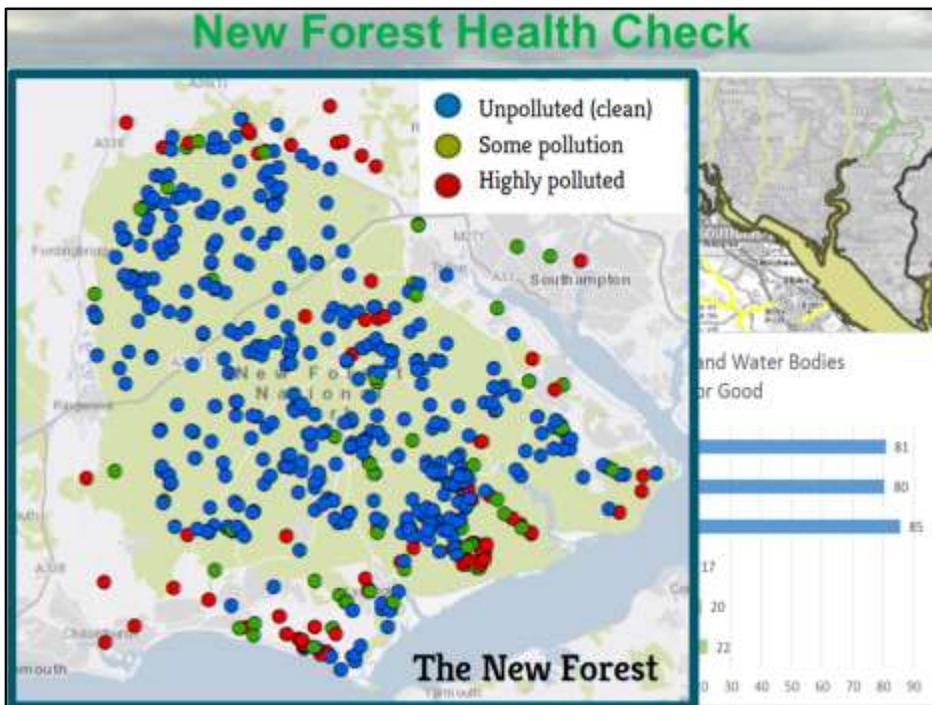
We will talk about:

What our monitoring says about the New Forest and how this compares with the rest of the country

Key issues to overcome and challenges that lie ahead

Recent improvements as a result of partnership work.

Plans for future work



Monitored for many elements depending on pressures (including **fish, invertebrates, phosphates, nitrates**, how **natural a river is heavily modified** = mitigation measures), and the **lowest scoring element** drives the water body classification (**Bad, Poor, Moderate, Good and High**). Consistent monitoring under Water Framework Directive.

Also **Protected Areas** including Shellfish Waters, Bathing waters, Special Areas of Conservation (SAC), and Special Protection Areas. (SPAs) e.g. areas classified as such under the EC Birds Directive

What does it say –

22% of our water bodies meet required standards (Good or high), compared with national average of 17%

85% of monitored elements meet the standards, and all but one water body meets moderate or above, none bad one poor (Sowley Pond – driven by phytoplankton, macrophytes and phytobenthos)

Most failing elements to mitigation measures in HMWBs and **Macrophytes and phytobenthos (plants – visible and microscopic)** as a result of phosphate levels.

But - WQ in much of NF is very good, supporting **pristine wetland habitats** and **rare species**. Monitoring undertaken by volunteers and run by Fresh Water Habitats Trust demonstrates that water quality in the centre of the forest is doing really well. This information is useful in helping direct our work. We want to grow that blue area over time by addressing sources of pollution.

Environment Agency Catchment Data Explorer has more information on water bodies, what they are monitored for (<http://environment.data.gov.uk/catchment-planning/>).



High levels of P and N as a result from **runoff from land**, discharges from **Sewage Treatment** works and poorly maintained **Septic tanks**

Tourism brings high numbers of people. Can spread **non native species**. Increase pressure on **sewage infrastructure** such as in camp sites, erode footpaths and banks, increasing **sediment**, duck feeding **increases nutrients** in delicately balanced ecosystems.

Climate change – Drier summers, more intense rainfall events and sea level rise increase **flood risk** and **drought**, can be **exacerbated by modified, straightened channels**,

Modifications – Straightening channels, structures such as sluices and tidal gates can **impede fish passage**, **reduce habitat** for fish and invertebrates in channel, and **cut back into the mires**. Can, result in higher volumes of water going through the catchment at a time (sometimes good, but can cause issues e.g. in urban areas)

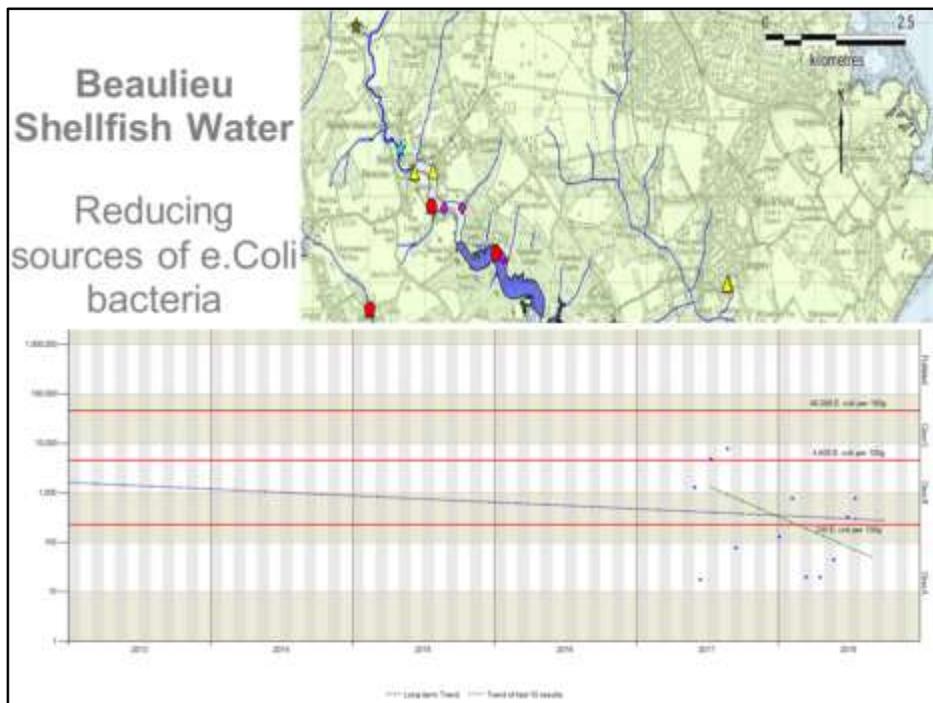
Funding – Post 2021 we do not know. What is clear is there is an **onus on partnership** and demonstrating the value of **ecosystem services**



Working through the New Forest Catchment Partnership

Park farm (currently only working dairy farm in the NF – Partnership with FWHT, NFLAS, NE CSF, Farmer and Beaulieu Estate):

Dairy yard washings **previously discharged into the Solent** under an EA discharge consent since 1981 (**legal discharge**), but into Shellfish Water Protected Area (SFWPA). We worked with the farmer to fund and put in place an **irrigation system** that could re-use the yard washings to irrigate their land. More **efficient use of nutrients** for the farmer **and reduced input of nitrates and bacteria** to the Solent SFWPA.



Working through the New Forest Catchment Partnership

Beaulieu Shellfish water (Work with FWHT, Beaulieu Estates and local land owners):

e.Coli - 2008 – 2013 failed each year. **2014 – 2015** could not be monitored as clams at Baileys Hard became prohibited so no monitoring took place. **CEFAS survey** - showed many inputs. **Point sources - Private STW, Water Company discharges and Marina.** Some of this we deal with through day to day **regulation.**

Others we undertook **specific work** to improve private discharges and raise awareness of best practice with boaters and local residents

EA MST Monitoring showed **70%** samples had stronger **ruminant** signal compared to human. Funded 3 years of partnership work to **reduce diffuse pollution** up the catchment (rainwater harvesting, advice on manure management, sediment traps. Improving trend, but potentially more to do.



Working through the New Forest Catchment Partnership

Reducing diffuse pollution in the Sowley Catchment (Partnership with FWHT, Sowley Estate and local land owners):

Failing WFD – Sowley Stream –Macrophytes and phytobenthos (Diff Pol), Sowley Pond (Many failing elements linked to diffuse pollution and upstream STW. Working with **Water Co** (East End STW) to propose improvements to discharges (P stripping) – Not yet funded. **3 Years partnership work** with **FWHT/Sowley estate** to reduce diffuse pollution through **sediment traps and ponds**, and bankside clearance to encourage natural regeneration. Put in place by end of the year all reasonable measures to tackle diff poll, but still P trapped in sediment within the pond. This year have **feasibility for removal and disposal**.

Link to Water Industry National Environment Programme

<https://data.gov.uk/dataset/a1b25bcb-9d42-4227-9b3a-34782763f0c0/water-industry-national-environment-programme>

Looking Ahead: Delivering the 25 Year Environment Plan

- Clean Air
- Clean and plentiful water
- Thriving plants and wildlife
- Reducing risk of harm from environmental hazards
- Using resources from nature sustainably/efficiently
- Enhancing beauty, heritage and engagement with the natural environment
- Mitigating and adapting to climate change
- Minimising waste
- Managing exposure to chemicals
- Enhancing biosecurity

Improving our failing Water Bodies by 2027 - Projects to address pressures across the forest such as recreation (Hatchet Pond and awareness raising), horticulture (diff), agri diffuse (small holdings) and addressing modifications (fish passage/wetland restoration - (Forestry Commission and NE), stop spread of non-native invasive species (H&IoW Wildlife Trust).

Working with Partners – Maintain and build on a strong catchment partnership. We do it well here, and have a well lead Catchment Partnership, but we cannot rest on our laurels. We need to be better at describing the benefits both to the **economy and the environment**. We need to continue to **listen to concerns** and **building support** and attracting **wider partnerships and funding**.

Delivering multiple benefits – Think as a catchment, including the impact on the **estuaries and sea**. Working with **Natural Processes** to deliver multiple benefits e.g. Beneficial Use of Dredging (**BUDS**), Natural Flood Management (**NFM**), **wetland restoration**.

In Context of 25 year Env Plan, the goals of which firmly align with our aspirations for the New Forest

25 Year Goals

Clean air,

Clean and plentiful water, meeting WFD Targets set out in River Basin

Management Plans

Thriving plants and wildlife, WFD + higher where needed - restoring protected sites to favourable condition

Reducing risk of harm from environmental hazards, managing flood risk and drought, through planning, WWNP, hard defences, rainwater harvesting

Using resources from nature more sustainably and efficiently, managing runoff of sediments. Multiple benefits, WWNP

Enhancing beauty, heritage and engagement with the natural environment, high quality, accessible, natural spaces close to where people live and work

Mitigating and adapting to climate change (Wetland restoration, WWNP, runoff capture and re-use)

Minimising waste (Reducing marine plastics – work to establish extent)

Managing exposure to chemicals (Agri Diff Poll reducing chemicals entering env)

Enhancing biosecurity (Tacking non-native species – Wildlife Trust/NE and others)

