Interreg France ( Channel Manche ) England

EUROPEAN UNION

Channel Payments for Ecosystem Services

European Regional Development Fund

CPES

# CPES Case study: Portsmouth Water

## Geographic scope report

Lead authors: Alastair Stewart & Bethany Fairley (Portsmouth Water)

---

Date/Version: March 2019

Contact: Susie Holmes (susieholmesconsulting@gmail.com)

Acknowledgements: Portsmouth Water would like to thank Southern Water for the use of some of its text and tables in this document.

The INTERREG VA France (Channel) England programme is financed through the European Regional Development Fund (ERDF).

# Contents



# Introduction

Portsmouth Water's supply zone covers 868km² in an area between Fareham up to Eastleigh in the west, to Littlehampton in the east, and from the south coast up to the top of the South Downs. The area contains many rivers including the Meon, Alver, Wallington, Lavant (E.Hants), Ems and Lavant (W.Sussex). The area is predominantly agricultural but also contains significant urban areas along the coastal plain including Gosport, Portsmouth, Havant, Chichester, Fareham and Bognor Regis.

The water company supplies 316,000 properties, serving a 725,000 population. It does not directly supply businesses any longer, but still remains the wholesale supplier for business-supplied water. Portsmouth Water's water supply is derived from 85% groundwater, via boreholes and springs (Havant and Bedhampton Springs) and 15% of its water is abstracted from the River Itchen, outside the company's supply area.

The Downs & Harbours Clean Water Partnership (D&HCWP), set up between Portsmouth Water, the Environment Agency and Natural England in 2008, is currently the delivery mechanism through which catchment management efforts operate.

Within the company's area of supply and the D&HCWP area lies several nationally and internationally important wetland areas, the most notable of these are within Portsmouth, Langstone and Chichester Harbours; these are nationally important for a number of wetland bird species and also support areas of intertidal habitat and are rich in associated flora, such as Eel Grass.

Local harbours and shorelines support a diversity of recreational activities, including sailing, other boating activity, swimming and fishing. A shellfish industry still exists, albeit affected by pollutants – particularly Faecal Indicator Organisms (FIO).

There is a specific focus on the 'priority catchments for catchment management' associated with the groundwater abstractions at Lovedean, Eastergate, Northbrook, Slindon, Funtington, Bedhampton Springs and Aldingbourne, which are designated by the Environment Agency as Safeguard Zones (nitrates) . More specifically, the Eastergate group of boreholes and their catchments are the primary focus of future PES schemes.

## Portsmouth Water's Supply Area

The following maps show Portsmouth Water's supply area; the supply area superimposed upon the Downs & Harbours Clean Water Partnership area and the focus area for the CPES project.

*Figure 1 Portsmouth Water supply area*


Overall Portsmouth Water operational area largely sits within the Downs & Harbours Clean Water Partnership area, as illustrated below in Figure 2.

*Figure 2 Portsmouth Water supply area superimposed on the Downs & Harbours Clean Water Partnership area*

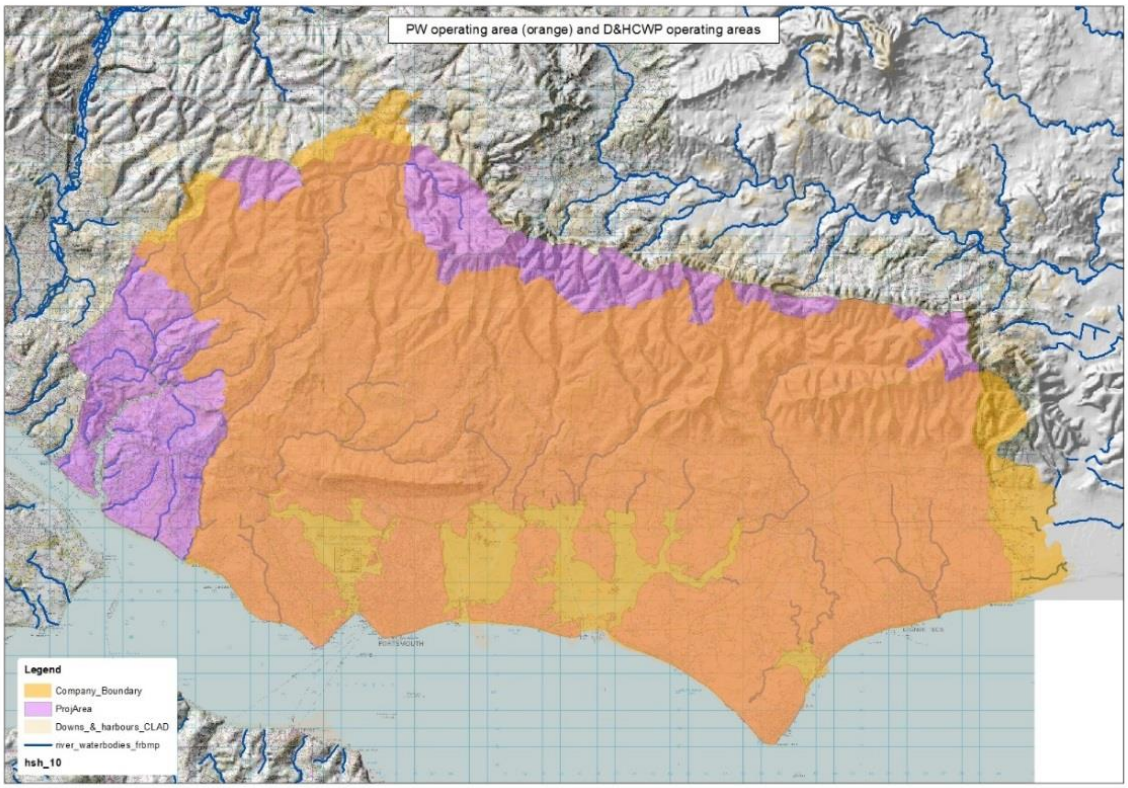
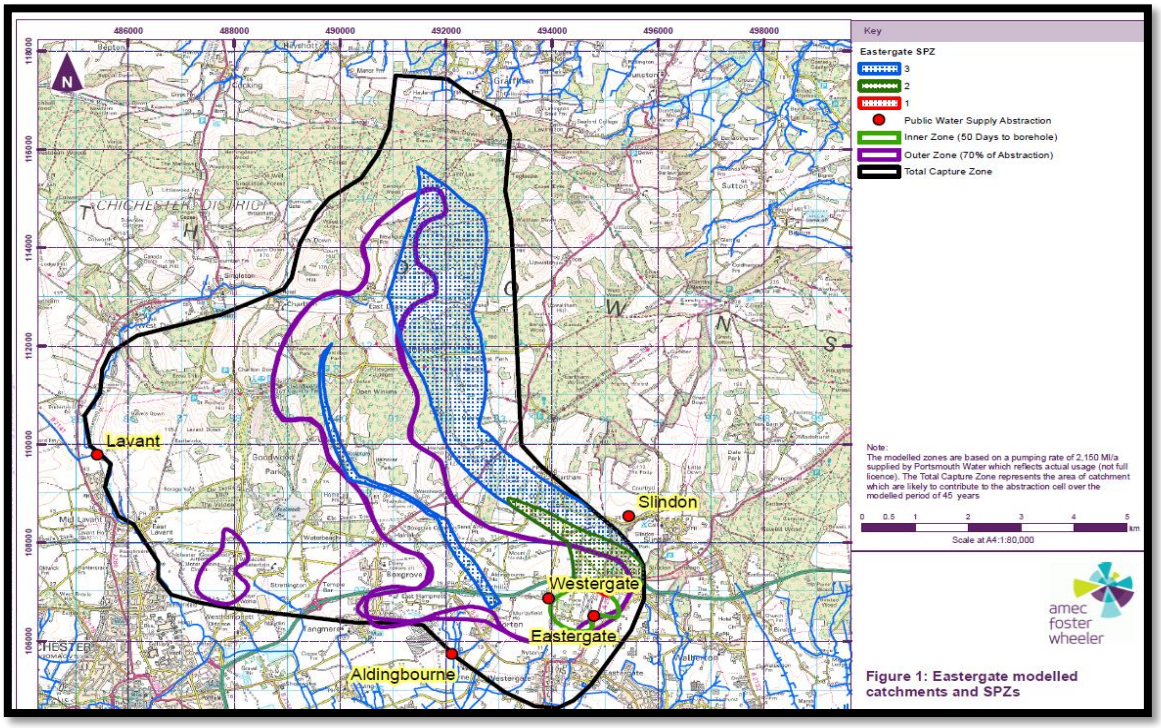



Figure 3 shows the specific region of concern to Portsmouth Water: the Eastergate group of boreholes and their catchments.

*Figure 3: Principal focus area: Eastergate, Westergate, Aldingbourne and Slindon*






The INTERREG VA France (Channel) England programme is financed through the European Regional Development Fund (ERDF).

# Key stakeholder analysis

On a catchment-wide basis, stakeholders could be numerous and would be likely to change over time. Therefore, the below is limited to the key stakeholders who would directly influence any potential scheme. Other main stakeholders and the level of communication with them are listed in Appendix 1.

## Portsmouth Water

The principal 'buyers' of a PES scheme will be Portsmouth Water, 'selling' to farmers - but any eventual scheme is technically open to other buyers and sellers, providing there is a 'product' or are 'products' that both are willing to trade. For the purposes here, only farmers will be considered. The relationship envisioned by Portsmouth Water between the company and local farmers is to support or subsidise cover crops, forestry, and other catchment interventions where it is practically and economically viable to do so.

Portsmouth Water's current strategy of reducing high nitrate in its raw water is via blending in service reservoirs of sources containing high nitrate with low nitrate sources. As a danger exists that levels of nitrate may rise in sources with low(er) nitrate, catchment management options are incorporated as they are calculated to be at least twice the cost-effectiveness as the end-of-pipe treatment of nitrate, i.e. the construction and the running of nitrate removal plants.

The specific benefits presented to Portsmouth Water are not based on cost alone. Others include reducing the risk of rising nitrate, particularly nitrate 'spikes' – thus protecting its sources, engagement and involvement/partnership with principal land users, reducing the likelihood of issues with other pollutants (e.g. pesticides), and perhaps the ability of more rain/water to be captured and held for public water supply and the environment, rather than running off.

The company has always strived to keep its water bills to the minimum. Ofwat, a principal regulator, also endeavours to keep water company charges to the minimum. More catchment management work in the future will be done by using customer-sourced income; Portsmouth Water needs to ensure that catchment management work is as cost effective as possible, therefore making its customers important stakeholders.

## Farmers (and other land owners where appropriate)

Within the catchment, LPIS data Natural England suggests that there are over 500 farms. In practice, the actual number of active farmers may be as little as 150, owing to the high level of contract farming (e.g. by agricultural contractors or neighbouring farmers), and leasing of land to large agricultural concerns. On the Chichester Plain, numerous horticultural/glasshouse enterprises exist and there is a gradual growth in vineyards, albeit it from a small base. In past years, there has been an increasing conversion of agricultural land into horse pastures and associated equine activity, which is not governed by agricultural legislation.

Farmers would be the principal 'sellers' of a PES scheme by being supported or subsidised to undertake catchment interventions such as cover cropping, forestry and other measures where there would be little apparent or perceived economic benefit to do so.

The specific benefits to farmers are projected to be as follows:

- Protection and enhancement of soil as their principal resource, and its theoretical increase of productivity
- Recapture and reuse of nitrate that would otherwise be leached (lost), in theory reducing the use and cost of nitrate (and other inputs)
- Potential cash crops, where feasible
- Financial support (short or long term) from local water companies or other stakeholders and/or free advice and services to maximise their farming systems

There are a number of dis-benefits/risks:

- Cost of cover crop seeds, planting and 'killing off cover crops', where subsidies do not exist that prove economically disadvantaged
- Cost and time needed to manage trees/woodland/forestry
- Difficulties of tillage etc with existing machinery (CCs); new machinery may be sought at (high) cost
- Potential issue of encouraging slugs or pathogens (e.g. club root in brassicas)
- Largest benefits of cover crops may take a number of years to become apparent; return from forestry will take a minimum of 5 years (e.g. short term coppice) and could take decades
- The vagaries of the weather and markets may make cover crop use/forestry planting economically marginal
- Forestry EIA regulations preventing land that is turned over to forestry being reverted back to arable at a later date

## South Downs Farmers' Group

The SDFG is largely a farmer-led group who are seeking to farm more sustainably and make ecological improvements via catchment management approaches. Recognising Portsmouth Water's need to reduce nitrate in its drinking water sources, the SDFG are working with the water company to develop an ecosystems services approach via incentive based schemes, such as payment for taking cropped areas out of production, beyond the scope and abilities of Countryside Stewardship. Portsmouth Water Catchment Management see the SDFG as a principal means through which to test catchment interventions through CPES on top of developing other incentive-based methods outside the immediate CPES project.

The principal risk for both parties is that a workable, economically viable and sustainable programme for both may be difficult to formulate, given the vagaries of weather, fluctuation of markets and unknown outcomes of Brexit. Farmers could be left financially constrained and Portsmouth Water may lose a mechanism by which to reduce nitrate loss into groundwater.

## Local Authorities

Key concern for LAs will be through their role as a lead flood authority. There are two Catchment Flood Management Plans (CFMP) that cover Portsmouth Water's supply area: South East Hampshire Catchment Flood Management Plan and the Arun and Western Streams Catchment Flood Management Plan. The CFMPs were intended to assist spatial targeting of resources to areas where the risks are greatest.

For South East Hampshire, since 2001 flooding has only been seen to have been serious with a combination of prolonged rainfall, high water table and surface runoff (over saturated ground). Two villages (Hambledon and Walderton) were affected. Some fluvial flooding is possible, particularly in combination of high tides, but flooding events are generally rare.

As a rural catchment with highest flood risk limited to the lower part of the Rother catchment (around Pulborough and outside Portsmouth Water's supply area), flood risk may be perceived to be of less importance than elsewhere in the Arun and Western Streams catchment and the wider southern region. The Arun and Western Streams CFMP indicates that the main areas of flood risk (from fluvial, surface water, groundwater flooding and tidally influenced flooding) are located in Arundel, Littlehampton and Horsham, which are also all outside Portsmouth Water's supply area.

Benefits of catchment management to LAs would be:

- The reduction of rapid run-off from fields that are cover cropped
- Interception, storage (in the soil) and slow release of water via newly afforested areas

## Environment Agency and Natural England

The Environment Agency's Catchment Abstraction Management Strategy (CAMS) report sets out the water resources situation in the catchment.

The Environment Agency and Natural England state that water companies are required to have at least one bespoke Environmental Outcome Delivery Incentives (ODI) that relates to the environment.

The PR19 catchment management programme is driven by the statutory Water Industry National Environment Programme (WINEP), which comprise 11 groundwater safeguard zone schemes in the Portsmouth Water supply area.

Catchment management will inherently deliver wider environmental/biodiversity outcomes (i.e. beyond Portsmouth Water's own sites). For example, reducing nitrate could do the following: increase the number of SSSIs or hectares of land designated SSSI brought from unfavourable to unfavourable recovering condition (or from unfavourable recovering to favourable) due to water company actions or improving habitat resulting from water company actions.

Natural England's principal concerns lie with eutrophication of Portsmouth, Langstone and Chichester Harbours, the Hamble estuary and the Solent in general that affect both fauna and flora. The harbours are both nationally classified (e.g. SSSI) and internationally classified (i.e. RAMSAR) for key plant and bird species. A principal issue lies with excessive algal growth that smothers and detrimentally affects important feeding grounds on mudflats and sands.

## South Downs National Park Authority

The South Downs National Park Authority is a key stakeholder within this catchment, with the national park occupying approximately 50% of the D&HCWP/PW area. It is involved with enhancing and preserving the ecology and function of the park, promoting public enjoyment of its assets and ensuring regulator aspects within the park (e.g. planning) are adhered to. It will be particularly interested in "greening" up farming to promote biodiversity and to help reduce diffuse pollution.

## Hampshire County Council

The council still remain as significant land owners in East Hampshire with a number of tenanted farms and farm-based centres (i.e. Manor Farm Country Park and Staunton Country Park). Regular staff changes regarding farming operations have led to an inconsistency of approach but the council still strive for farm and land management improvements, particularly in view of improving the environment – but also for some regulatory aspects to help reduce diffuse and other pollution.

## Others

Other stakeholders will have a direct interest, largely in environmental improvements, with listed groups comprising representatives from a range of organisations – Councils, EA, NE, IoW and Hants Wildlife Trust, Angling and Fishing groups, Groundworks, CLA and NFU. The list includes:
East Hants Partnership
Arun and Rother Rivers Trust
Meon Valley Partnership

# Stakeholder perceptions

The below was directed to Colin Hedley, who leads two Farmer Cluster Groups, the South Downs Farmers' Group and the Adur and Arun Farmers' Group that reside in Portsmouth Water's and Southern Water's areas of operations respectively.

1. What do you feel is the level of perception with the farmers you deal with of the nitrate issue and the risks it conveys?

*Although I don't think the majority of farmers are convinced that there is a clear health issue over nitrates they are fully aware that there is a legal limit which they must comply. The proximity of Langstone and Chichester harbours has helped some farmers focus on the issue; the growing trend to making environmental management a core part of the business and increased cost of nitrogenous fertiliser have also influenced general awareness and action.* (Colin Hedley, edited pers comm, 2018)[1]

2. What is their attitude regarding corrective measures, technical solutions and best practice?

*I think the farmers do have a high level of knowledge and positive attitude towards introducing steps to reduce diffuse pollution of nitrates. The majority are open to introducing land management options, whether rotational or possibly permanent, to the farm but need to be confident that these will be well rewarded and not expose the farm to excessive bureaucracy. All are open to reducing nitrate losses as part of farm management and some farmers in particular are very interested in using the latest research and technology to reduce variable costs and also the farm's impact on the wider environment.* (Colin Hedley, edited pers comm 2018)

# Existing regulatory framework

## Water company regulation

Portsmouth Water is a supply-only water company; it is not involved with waste water, which either enters sewers operated by Southern Water or disposed in septic tanks and cess pits. The water industry is governed by the following regulatory bodies (with kind thanks to Southern Water for the replication of much of their tables):

| Regulatory Body | Key responsibilities |
|---|---|
| Department for Environment, Food and Rural Affairs (DEFRA) | Sets the overall water and sewerage policy framework in England. |
| European Union | Sets European water, wastewater and environmental standards. |
| Ofwat | The economic regulator of the water and sewerage sectors. |
| Environment Agency | The environmental regulator of the water and sewerage sector in England. They are the principal adviser to the government on the environment, and the leading public body protecting and improving the environment of England. They work in partnership with a range of other organisations. |
| Drinking Water Inspectorate | The drinking water quality regulator. They check that the water companies in England and Wales supply water that is safe to drink and meets the standards set in the Water Quality Regulations. |

[1] Colin Hedley is both a farmer and coordinator of two farmer-led groups: the South Downs Farmers' Group is currently working with Portsmouth Water's Catchment Management programme

| | |
|---|---|
| Consumer Council for Water | They represent consumers within the water and sewerage sectors. They also investigate consumer complaints that have not been satisfactorily resolved by the water companies. |
| Natural England | The government's advisor on the natural environment. They provide practical advice, grounded in science, on how best to safeguard England's natural wealth for the benefit of everyone. Their purpose is to protect and improve England's natural environment and encourage people to enjoy and get involved in their surroundings. |

## Agricultural regulation (Farmers and Landowners)

The following regulatory bodies directly affect and govern farming in England and Wales. Post Brexit, it is assumed that EU legislation will be largely be adopted into UK legislation.

| Regulatory Body | Key responsibilities |
|---|---|
| Department for Environment, Food and Rural Affairs (DEFRA) | Sets the overall agricultural policy framework in England. |
| European Union | Sets European waste and environmental standards in Europe. |
| Environment Agency | The environmental regulator of the agricultural sector in England. They are the principal adviser to the government on the environment, and the leading public body protecting and improving the environment of England. They work in partnership with a range of other organisations. |
| Rural Payment Agency | Responsible for provision and administration of subsidy payments from the European common Agricultural Policy to farmers and land-owners. Also control the payments for Stewardship and Catchment Sensitive Farming. |
| Natural England | The government's advisor on the natural environment. They provide practical advice, grounded in science, on how best to safeguard England's natural wealth for the benefit of everyone. Their purpose is to protect and improve England's natural environment and encourage people to enjoy and get involved in their surroundings. |

## SWOT of current schemes, regulations and current pressures

| | Types | Strengths | Weakness | Opportunities | Threats |
|---|---|---|---|---|---|
| Nitrates Directive – Surface and groundwater NVZs present | Regulation | -Targeted at priority catchments<br>-Much improves nutrient management | -Measures aren't appropriate for all farming scenarios<br>-Already minimal inspection regime by multiple agencies lacking in coordination<br>-Doesn't consider P fully | -Opportunity to reform post Brexit to address weaknesses | -Brexit related changes to agricultural policy<br>-Increase in extreme storm events due to climate change could mask water quality improvements |
| Catchment Sensitive Farming | Advice | -Good level of engagement<br>-EA report sediment | -Optimal targeting of grants/advice hindered by data deficiencies, | -Continued and closer work with CSF<br>-Cover areas that PW will not cover, | -Reducing investment by Govt/Defra for both EA and NE/CSF |

| | | | | | |
|---|---|---|---|---|---|
| | | reductions in CSF catchments<br>-Site specific measures and advice<br>-High level of funding<br>-Collaboration with catchment partnerships | uncertainty regarding the nature and severity of water quality problems, and limits to the time that advisors can spend visiting farms<br>-Conflicting advice from different advisors leads to mixed messages<br>-Difficult to 'prove' some measures work, e.g. for nitrate, especially regarding poor baseline data and owing to various weaknesses & inaccuracies of CSF Reporter (database) | therefore providing great catchment-wide benefits | re catchment measures<br>-Increase in extreme storm events due to climate change could mask water quality improvements<br>-Continuous changes in on-the-ground staff reducing local knowledge<br>-Change in farmer attitudes<br>-Uncertainty from Brexit |
| Conservation designations – SACs, SPAs and SSSIs present | Regulation | -High levels of protection for SACs and SPAs<br>- Restrictions on damaging activities | -Not heavily water quality focussed<br>-Lack of management led to large number SSSIs in unfavourable condition<br>-Often protects only physical aspects of aquatic habitats and not water quality aspects through upstream catchment management | -Increased public awareness of conservation issues<br>-Opportunity to reform post Brexit to address weaknesses | -Brexit related changes to agricultural policy<br>-Brexit related changes to conservation policy<br>- Large areas of new housing or other land use may reduce ecosystem function of protected and other areas |
| South Downs National Park | Regulation | -Provides powerful restrictions on new developments<br>-Involvement in catchment partnerships<br>-High interest in water quality issues | -Too blinkered re its own aims to have a more holistic catchment view and proactive with working with other stakeholders<br>- | -to become more proactive and involved with CSF and Partnerships to increase coverage of advice and services | -Government weakening legislation that counters provision of Ecosystems Services (e.g. increased housing in the NP) |
| Countryside Stewardship | Incentives | -Some incentives for uptake of measures | -Weak incentives for farmers to adopt those measures with the greatest potential to deliver soil and water protection outcomes<br>-Regional priority statements inadequately prioritised water | -Increased farmer awareness of environmental issues<br>-Increased need to consider economics of whole farm system with phasing out of subsidies – possibly increasing | -Brexit related changes to agricultural policy<br>-Increase in extreme storm event due to climate change could mask water quality improvements |

| | | | | | |
|---|---|---|---|---|---|
| | | | quality protection as compared to landscape heritage and biodiversity conservation<br>-Contracts too short to 'lock' environmental improvements into the landscape<br>-Bad press/experiences reduces interest | demand<br>Stewardship | |
| Catchment Partnerships | Voluntary | -Bringing together of a wide range of stakeholders<br>- Good amount of local knowledge relating to diffuse pollution<br>-Highly proactive<br>-Site specific measures and advice | -Takes time to gather momentum, e.g. to acquire enough funds to make changes that result in a measurable water quality outcome<br>-Difficult to sustain momentum<br>-Difficult to 'prove' some measures work, e.g. for nitrate<br>-Self interest may reduce greater catchment benefits via partnerships | -Increased public and farmer awareness of water conservation issues | -Change in farmer attitudes away from environmental issues |
| Rivers Trusts | Voluntary | -Bringing together of a wide range of stakeholders<br>-Good amount of local knowledge relating to diffuse pollution<br>-Highly proactive<br>-Site specific measures and advice | -Takes time to gather momentum, e.g. to acquire enough funds to make changes that result in a measurable water quality outcome | -Increased public and farmer awareness of water conservation issues | -Change in farmer attitudes away from environmental issues |
| Water Framework Directive | Regulation | -Provides common framework for assessing and improving ecological quality across member states<br>-Provides targets for ecological quality<br>-Stakeholder participation | -Socio-ecological construct<br>-Individual catchment response to management not adequately accounted for<br>-Basic measures rarely adequate to achieve good status<br>-Over optimistic goals<br>-Low sampling frequencies bring | | -Brexit related changes to agricultural policy<br>-Increase in extreme storm events due to climate change could mask water quality improvements |

| | | | | | |
|---|---|---|---|---|---|
| | | | observational uncertainty | | |
| Drinking Water Safeguard zones, Drinking Water protected Areas and Source Protection Zones | Regulation | -'Hard' measures like prohibitions, restrictions and conditions have direct effects on water quantity and quality and they are effective within short-term | -Design, establishment and administration of DWSZ are costly<br>-Often only established for abstractions exceeding certain water quantities or population served | -Promotes closer working opportunities with CSF and CSF Partnerships to work with regulators (e.g. EA) re common goals, i.e. Safeguard Zones. | -Government reducing funding for regulators to be able to do their work, including (joint) farm visits |

## Cost of inaction

AMEC Foster Wheeler's report, *Nitrate Measures for Portsmouth Water PWS: Cost Effectiveness Assessment Report* assessed non catchment-based and catchment-based options and their associated costs. This included avoided costs of treatment, environmental and societal benefits of measures and also considered the wider benefits of measures.

As a principal concern for Portsmouth Water, the cost of inaction has been projected as the following:

- Shutdown of Eastergate pumping station
- Impact on resilience of public water supply
- With the continued nitrate trend, the Littleheath blending reservoir (supplied by the Eastergate group of boreholes) would fail in 2040, thus forcing the construction of a nitrate treatment plant (see Economic Impact, below).
- Other sources are deemed to be of less risk, owing to the greater (economic) ability to blend with a wider range of sources.

The cost of inaction for the greater environment would likely result in no appreciable reduction in nitrate (and other diffuse pollutant) loads in near-shore environments, including estuaries – and possible gradual increase followed by decline, as described by the nitrate modelling as a bulge of historically applied/leached nitrate moves through the chalk matrix. Therefore, eutrophic conditions in harbours and near shore environments would prevail, but this is likely to happen anyway – as it has been estimated that two thirds of the nitrate that enters harbours and other protected areas is resident in the Solent and comes in with the tide.

## Economic impact of intervention (i.e. to stakeholders in general)

Although there would be a cost involved to Portsmouth Water for catchment management work, the overall cost has been calculated as significantly less than an engineering solution. The report states that *"in most catchments the avoided costs of treatment installation outweigh that of catchment management measures".* However, *"in Slindon, Westergate and West Meon, the estimated cost (low) of CAPEX to install treatment is less than the cost of measures."* Nevertheless, this cost does not consider the price of the wider environmental and societal benefits of the measures.

- Catchment management in the Eastergate and Slindon catchments until 2075 estimated at £3.3M (to sustain blending at Littleheath)
- The alternative is 1 nitrate removal plant estimated at **£2M capex**, and **£110,000/a opex** – therefore ~£8M until 2075

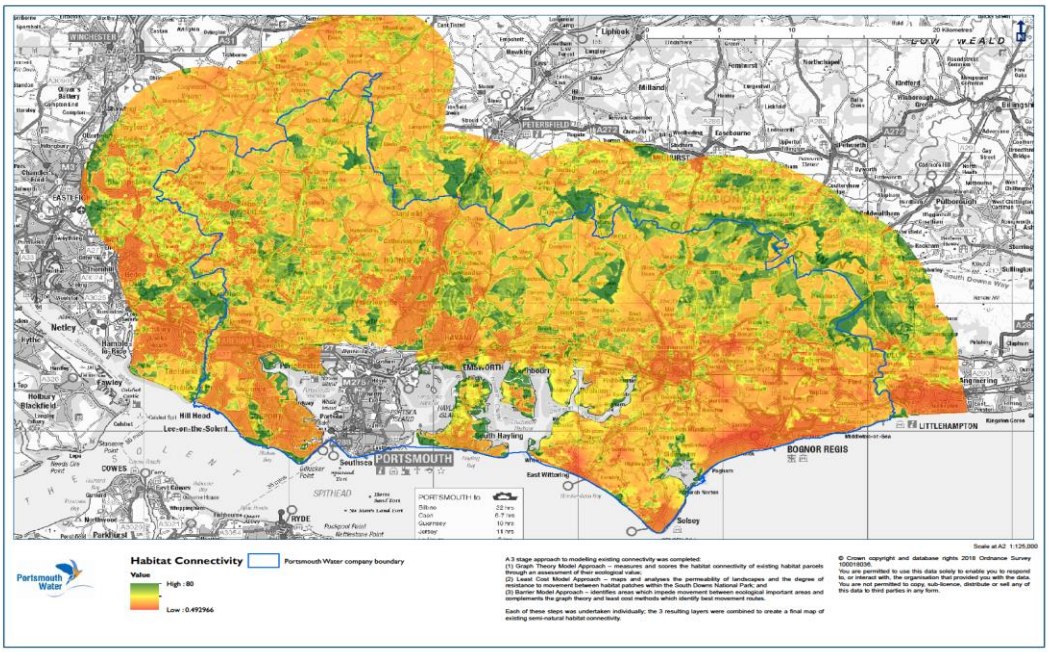
Economic analysis (by AMEC) identifies several catchment measures that can be implemented to deliver cost effective mitigation for nitrates in groundwater– therefore trials will be developed through CPES. The AMEC report includes a qualitative assessment of wider ecosystem services benefits associated with woodland creation and improved soil management. These relate to:

- **Provisioning services** – benefits in the form of goods or products (e.g. crops, timber etc);
- **Regulating services** – benefits through the control of natural processes such as water quality and flows, pollination, climate regulation and erosion control;
- **Cultural services** – non-material benefits such as recreation, spiritual values and aesthetic enjoyment; and,
- **Supporting services** – natural processes that maintain the production of all other ecosystem services such as habitat provision, nutrient cycling, soil formation etc.

The most effective mitigation practices for each subsection of 'service' were listed with a description of that benefit (e.g. 'storage and retention of water for domestic, industrial and agricultural use by current and future generations') provided. Full details can be seen in Appendix D in *Nitrate Measures for Portsmouth Water PWS: Cost Effectiveness Assessment Report*.

The Portsmouth Water Catchment Management team commissioned a contractor to construct a Habitat Connectivity map (Figure 4) to highlight target areas that would produce the most effective gains in habitat creation and/or maintenance. The map in essence shows good existing connectivity in green – to poor connectivity in red. The map helps to position catchment measures to avoid damaging areas with good connectivity but target those that have poor connectivity.

*Figure 4: Habitat connectivity in the Portsmouth Water/Downs & Harbours area*






The INTERREG VA France (Channel) England programme is financed through the European Regional Development Fund (ERDF).

# Appendix 1 : Summary of stakeholders and interest level

| Engagement Approach | Stakeholders | Communication objectives | Communication methods | Responsibility | Timing and frequency of communications |
|---|---|---|---|---|---|
| Manage - regular contact | Agronomists | Enable them to be informed intermediaries between farmers/ SWS | Workshops, 1:1, published material, website, phone calls, emails, newsletter, farm walks/demos | PW/ SDNPA, UoC, EA | Milestones, monthly |
| | ARRT | Enable them to be informed intermediaries between farmers/ SWS | As above | PW – Strategic Environment Panel & Sussex stakeholder Panel comms | As needed/milestones |
| | Environment Agency | Ensure objectives meet expectations- share of data | As above | PW – Senior management meetings with regulators and key stakeholder meetings | |
| | DWI | Ensure objectives meet expectations | As above | | |
| | Land Agents | Buy in and support | As above | | |
| | NFU | Enable them to be informed intermediaries between farmers/ SWS | As above | | |
| | Natural England/CSF | Ensure objectives meet expectations | As above | | |
| | Ofwat | Ensure objectives meet expectations | As above | | |
| | Other farmers (in SWS catchment areas) | Buy in and participation in the scheme | As above | | |
| | Rother Valley Farmers' Group | Buy in and participation in the scheme | As above | | |
| | South Downs National Park Authority | Ensure objectives meet expectations- share of data | As above | | |
| | Environment Agency | Ensure objectives meet expectations- share of data | As above | | |
| | Sussex/Hants-IoW Wildlife Trusts | Ensure objectives meet expectations | As above | | |

| Engagement Approach | Stakeholders | Communication objectives | Communication methods | Responsibility | Timing and frequency of communications |
|---|---|---|---|---|---|
| Manage - when needed | CLA | Ensure objectives meet expectations | Workshops, 1:1, published material, website, newsletter | | |
| | Defra | Ensure objectives meet expectations | As above | | |
| | Rural Payments Agency | Enable them to be informed intermediaries between farmers/ SWS | As above | | |
| | West Sussex co-operative | Enable them to be informed intermediaries between farmers/ SWS | As above | | |
| | West Sussex County Council | Buy in and support | As above | | |
| | WWF | Ensure objectives meet expectations | As above | | |
| | General public | | As above | | |
| | Hampshire County Council | | As above | | |
| | Southern Water CCG | | As above | | |
| | RSPB | | As above | | |
| | Southern IFCA | | As above | | |
| | Sussex IFCA | | As above | | |

| Engagement Approach | Stakeholders | Communication objectives | Communication methods | Responsibility | Timing and frequency of communications |
|---|---|---|---|---|---|
| Contact | CPRE | Inform projects aims and objectives and invitation to support/participate(?) | As above | PW/ SDNPA, UoC , EA | Start up and milestones |
| | Horsham District Council | | As above | | |
| | National Flood Forum | | As above | | |
| | Sussex Chamber of Commerce | | As above | | |

| Engagement Approach | Stakeholders | Communication objectives | Communication methods | Responsibility | Timing and frequency of communications |
|---|---|---|---|---|---|
| Anticipate | Local Councillors | Inform projects aims and objectives and invitation to support/ participate(?) | Newsletter | PW/ SDNPA, UoC , EA | Start up and milestones |
| | Local MPs | | As above | | |
| | MEPs | | As above | | |
| | Parish Councillors | | As above | | |
| | Water UK/ other water Companies | | As above | | |
| | West Sussex Growers | | As above | | |