

## **Poole Harbour Local Nutrient Mitigation Fund**

### **Appendix 2: Programme of Spend**

Dorset Council has been awarded £4.63m from the Local Nutrient Mitigation Fund to deliver nutrient mitigation within the Poole Harbour catchment. This award was made with notification made via a letter received in December 2023 after an Expression of Interest was made to the fund. This Expression of Interest included a number of projects and indicative mitigation opportunities to deliver nutrient mitigation within the catchment. This programme of interventions would support development with different projects being deliverable at different timescales.

Since the Expression of Interest was submitted, some of the projects within the programme of interventions have already been delivered and others are no longer available for nutrient mitigation. This is as expected as over time, projects change, new projects arise, and some projects fall by the wayside. This note sets out a high-level summary of the programme of spend associated with the Local Nutrient Mitigation Fund award. It should be noted that some of the projects may fall away but that the intent is to spend the whole Local Nutrient Mitigation Fund award to deliver nutrient credits within the catchment and to recoup expenditure through the sale of nutrient credits to deliver additional nutrient mitigation. The programme of projects and indicative spending profile outlined in this note will need to be updated regularly to reflect the projects that are being delivered within the catchment. It is likely that the proposed Oversight Group will receive and review the programme of projects on a regular basis.

The Local Nutrient Mitigation Fund was awarded to Dorset Council as the lead authority for the Poole Harbour catchment. Mitigation provided through the planned programme of interventions will deliver nutrient mitigation for qualifying development within both the Dorset Council and BCP Council areas.

The council will develop and deliver a range of different mitigation projects which can be broadly categorised into two themes: greywater solutions and nature-based solutions. For some projects 'measurable nutrient reduction' will be relatively-straight forward to achieve whilst for others, there will be some initial uncertainty on credit delivery requiring further feasibility work. Having a variety of delivery options ensures that the programme remains flexible, which will help to reduce the risks connected with delivering projects.

With some mitigation solution types, general understanding, policy and guidance is still evolving. For example, guidance is expected shortly on the efficiencies of nutrient reduction that can be achieved from the various nature-based mitigation options which will help to inform future mitigation spend. The Council also wishes to ensure there is flexibility of spend between project areas within the programme to allow investments and resourcing to be directed toward delivering the projects that offer the best value for money.

In addition to the award from the Local Nutrient Mitigation Fund, Dorset Council has also been awarded £203,841 of revenue funding to support the delivery of nutrient mitigation. This revenue funding will help to ensure the necessary staff resources are in place to deliver nutrient mitigation and administer the supply of nutrient credits. In the long term, the costs associated with nutrient mitigation will form part of the costs associated with each project.

## **Greywater solutions**

### **Upgrading of septic tanks and package treatment plants.**

The upgrade of septic tanks to package treatment plants and the upgrade of older and poorly performing package treatment plants can result in reductions in nutrient loading. This reduction in nutrient loading results in nutrient credits that can be used to enable development within the catchment.

The Council will work with both registered providers of social housing (RP) and private home owners to identify opportunities for upgrades to take place. The approach to funding these upgrades will involve grant funding the upgrade with nutrient credits being captured and sold by Dorset Council. An alternative approach could be to provide a loan to facilitate the upgrade with the funds being fully recovered and for nutrient credits being directly linked to a development of new homes. The approach of offering a loan may be appropriate for registered providers who would focus on the delivery of affordable housing to meet a local need.

A typical upgrade of an old or poorly performing package treatment plan serving around 6 homes costs around £100,000. The costs of replacing a septic tank with a package treatment plan are likely to be less.

Estimated cost of upgrade ..... £100,000

Portion of LNMF award..... £1,000,000

### **Improving water efficiency**

Improved water efficiency increases the concentrations of nutrients in wastewater, and in turn requires treatment plant to remove more nutrients. These reductions generate nutrient credits. The nutrient reductions and cost associated with these upgrades are unknown and will need to be fully evaluated for each scheme.

Working with RPs and the councils' assets and properties teams, opportunities for improving the water efficiency in properties will be explored as part of the delivery of nutrient credits. However due to the uncertainty, and their potential resource intensive nature, these types of interventions will not be a priority. If funds are needed to enable upgrades, this will be considered by the Steering Group.

## **Nature-based solutions**

### **Land Purchase**

Changing the way land is managed can reduce nutrient flows into the harbour and thereby generate nutrient credits to offset the impacts of new development in the catchment. The councils have previously had success in delivering nitrogen mitigation projects through changes in land management. Working independently or in collaboration with nature conservation bodies, opportunities to purchase additional land to facilitate land use change to lower input management, will be explored. Changes in land management, including reductions in nutrient input will help secure other benefits including natural flood management, biodiversity and nature recovery; creating bigger, better, and more joined up habitats and improving access for local communities.

It is anticipated that there will be opportunities for the council to secure between 60 – 80 hectares of land use change through land purchase. The estimated value of land is around £24,000 per hectare

meaning that an allocation of between £1,500,000 and £2,000,000 would be sufficient to cover land purchase projects.

Land purchase of around 60 -80 hectares ..... £2,000,000

#### Additionality through wetland creation

The natural processes in free water surface wetlands have the potential to be efficient at removing nutrients. These offer further reductions in nutrient loading on top of that secured through land use change. However, detailed feasibility assessment will be required to assess suitability for nutrient reduction and evaluate the construction and ongoing monitoring and maintenance costs. Detailed feasibility studies are currently being undertaken on two pilot small-scale wetland opportunities on sites where land use change has already been delivered through land purchase. There may be further opportunities to deliver wetlands on new sites secured through the land purchases that are made through this fund.

Depending on the outcomes of these studies on these smaller scale trials, these sites will be taken forward. In the future other opportunities for the creation of free water surface wetlands or more constructed wetlands will be explored. The estimated costs associated with the two pilot wetland projects is £50,000 per site. Future projects will require further investment both at feasibility and construction stages, with larger wetlands likely to have higher costs. An indicative allocation of £250,000 should help to deliver the two pilot projects and future projects.

Wetland feasibility and construction .....£50,000 to £100,000

Portion of LNMF award ..... £250,000

#### Wareham Arc Project

The Wareham Arc Project, part of DEFRA’s Round 1 Landscape Recovery Scheme, is a partnership of over 25 landowners, tenants and managers who are looking to secure river restoration and water quality improvements. Located in the east, near the harbour itself and within the catchment of three main rivers, the scheme is ideally placed to deliver nature-based mitigation solutions including wetland creation and woodland riparian planting. The Council will work with the project team to identify and support land use change and additionality associated with wetland creation and riparian planting / river restoration where opportunities arise.

Land-use change opportunities ..... £500,000

Wetland opportunities..... £200,000

Riparian planting / river restoration ..... £250,000

#### Catchment Partnership Projects

The Council is working with the Poole Harbour Catchment Delivery Group and subgroups to identify additional projects across the whole catchment. The initial focus will be on riparian planting and natural regeneration along river corridors in connection with river restoration (reconnection with the floodplain). These interventions will deliver nutrient reduction and a range of additional benefit to water courses, including biodiversity enhancement, improving climate resilience and natural flood management.

Riparian planting / river restoration ..... £400,000

Summary of indicative spend for portfolio of projects

Mitigation opportunity	Estimated project costs	Indicative total value
<b>Greywater solutions</b>		
Upgrading Septic tanks/Package Treatment Plants	<ul style="list-style-type: none"> <li>Estimate £100,000 per upgrade</li> <li>Potential for multiple projects</li> </ul>	£1,000,000
<b>Nature-based solutions</b>		
Land purchase/land agreements <ul style="list-style-type: none"> <li>Average land value of £24,000</li> </ul>	<ul style="list-style-type: none"> <li>Provisional target of around 60 -80 ha land purchase</li> </ul>	£2,000,000
	Wareham Arc Project - land use change	£500,000
Additionality - Wetland creation <ul style="list-style-type: none"> <li>Estimated cost of £50,000 to £100,000 per wetland</li> </ul>	<ul style="list-style-type: none"> <li>Feasibility and construction of two pilot wetlands</li> <li>Additional wetland opportunities across the catchment</li> </ul>	£250,000
	Wareham Arc Project - wetland creation	£200,000
Additionality - riparian planting, river restoration	Catchment Partnership projects	£400,000
	Wareham Arc Project – riparian planting, river restoration	£250,000

Mitigation opportunity	Indicative total value	Indicative spend profile		
		2023/24	2024/25	2025/26 and ongoing
<b>Greywater solutions</b>				
Upgrading Septic tanks/Package Treatment Plants	£1,000,000		£500,000	£500,000
<b>Nature-based solutions</b>				
Land purchase/land agreements	£2,500,000		£1,500,000	£1,000,000
Additionality - Wetland creation	£450,000	£50,000	£150,000	£250,000
Additionality - riparian planting, river reconnection with floodplain	£650,000		£200,000	£450,000
<b>Estimated spend profile</b>		<b>£50,000</b>	<b>£2,350,000</b>	<b>£2,200,000</b>

