

Decision maker:	Cabinet member Infrastructure and transport
Decision date:	Monday 10 August 2020
Title of report:	The construction and management of Integrated Wetlands as tertiary treatments for waste water treatment works to reduce phosphate levels within the River Lugg catchment area.
Report by:	Head of Environment, Climate Emergency and Waste Services

Classification

Open

Decision type

Key

This is a key decision because it is likely to result in the council incurring expenditure which is, or the making of savings which are, significant having regard to the council's budget for the service or function concerned. A threshold of £500,000 is regarded as significant.

This is a key decision because it is likely to be significant having regard to: the strategic nature of the decision; and / or whether the outcome will have an impact, for better or worse, on the amenity of the community or quality of service provided by the authority to a significant number of people living or working in the locality (two or more wards) affected.

Notice has been served in accordance with Part 3, Section 9 (Publicity in Connection with Key Decisions) of the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012.

Wards affected

(All Wards);

Purpose

To approve the design, land acquisition, construction and management of integrated wetlands, providing tertiary treatment to waste water treatment works in order to reduce phosphate levels within the River Lugg catchment area.

Recommendation(s)

That:

- (a) That the approved £2m allocation in the Council's 2020/21 capital programme from the New Homes Bonus is authorised for the land purchase, design, construction and management of the integrated wetlands as set out in this report;
- (b) Subject to the identification of suitable sites for development as integrated wetlands, the Assistant Director for Regulation, Environment & Waste in consultation with the Cabinet Member for Infrastructure & Transport and Section 151 Officer, is authorised to undertake land purchasing and lease negotiations with land owners for acquisition of up to 8 sites;
- (c) Subject to a successful funding decision, that up to £1m of match funding from the Marches Local Enterprise Partnership and the Ministry of Housing, Communities & Local Government is accepted;
- (d) Up to £30,000 of the approved capital programme is made available to commission the development of an interim delivery plan. This plan will include a phosphate calculator and a suite of recommended mitigation measures appropriate to the River Lugg in order to enable developers to calculate, mitigate and/or offset the identified phosphate load from development proposals;
- (e) Subject to the identification of existing agricultural land suitable for repurposing, the Assistant Director for Regulation, Environment & Waste in consultation with the Cabinet Member for Infrastructure & Transport and Section 151 Officer, is authorised to undertake land purchasing and lease negotiations with land owners as a complimentary solution for reducing phosphate pollution in the River Lugg catchment area;
- (f) The Assistant Director for Regulation, Environment & Waste be authorised to take all operational decisions necessary to implement the scheme including the required land acquisitions and leases.

Alternative options

1. Option 1 - To do nothing.
 - This would result in phosphate levels remaining in exceedance of conservation targets within the River Lugg catchment area and a moratorium upon development within the River Lugg catchment area in the north of the county.
2. Option 2 - To consider alternative mitigating measures such as the retrofitting of Sustainable Urban Drainage (SUDs) schemes or additional technology introduced to waste water treatment works.
 - These alternative measures have been considered by the Nutrient Management Board, but are considered to be significant works which require substantial investment and long term planning. All parties agree these measures are less likely to provide the 'quick win' that would be achieved through the development of integrated wetlands.

3. Option 3 – To consider the acquisition and repurposing of existing agricultural land in the river catchment.
 - This option would help to reduce diffuse pollution into the river catchment area and is proposed as a complimentary option which should be further explored as appropriate land becomes available for purchase.

Key considerations

Background

4. The River Wye and River Lugg are considered important in terms of nature conservation, as a consequence both rivers are designated as Sites of Special Scientific Interest (SSSI). In addition the lower stretch of the River Lugg; from Hope under Dinmore, along with the River Wye are also designated as a Special Area of Conservation (“SAC”) under the European Community Habitats Directive (Council Directive 92/43/EEC).
5. The special features for which the River Wye is designated include a range of aquatic habitats and species. Good water quality is relied upon as one of the main supporting processes, upon which these habitats and species rely. Water quality is measured in terms of both chemical and ecological status, the physico – chemical element of this assessment measures nutrient levels within the water which include Phosphorous.
6. Phosphate conservation targets for the watercourse are agreed between Natural England (NE) and the Environment Agency (EA), these are based upon factors such as the underlying geology and the flow categories of the river, they consider the identified level at which the healthy functioning begins to decline and the effects of eutrophication may be likely to commence. As a result the phosphate targets alter moving through the catchments; within the River Lugg catchment area the level is identified as 0.05mg/l.
7. The Environment Agency is the regulatory body responsible for monitoring phosphate levels. The Common Standard Monitoring Guidance for Rivers sets out the quality indicator for phosphate as a 3 year period which should be recorded for both an annual mean as well as a growing season mean. Monitoring has been sporadic within the last decade and sufficient data is not available to calculate the growing season mean, however the annual mean has been calculated as 0.071mg/l and is in exceedance of the phosphate conservation target.
 - In 2014 when high levels of phosphates were first identified within the River Lugg watercourse, it was agreed by Natural England and the Environment Agency that the implementation of new measures were necessary in order to bring the river back into compliance; this led to the development of the Nutrient Management Plan (NMP). The evidence base supporting the plan provided an analysis of local data and concluded that the source apportionment of phosphate within the River Lugg catchment area was roughly equal between point sources (sewage treatment works) and diffuse pollution (livestock and arable agriculture). The NMP therefore set out a series of measures in order to target pollution from both sources.
8. As part of any development that the council as the local planning authority considers, The Conservation of Habitats and Species Regulations 2010 (as amended) (“the Habitat Regulations”) need to be adhered to. For Herefordshire Council as the ‘competent authority’ this means that it is legally required to assess the potential impact of projects and plans, on European Sites including the River Lugg catchment area as part of the River Wye SAC through initially a screening opinion carried out by the competent authority and where likely

significant effects are identified a subsequent Habitat Regulation Assessment (“Appropriate Assessment”) is legally required to be undertaken. In the instance of the addition of phosphate into the river as a result of the development, these effects are required to be mitigated and only if it is considered that the development will not, adversely affect the integrity of the European site, can permission be granted.

9. Previously the approach taken by the council with the agreement of Natural England has been to allow development to proceed within the River Lugg catchment area despite its exceedance of its phosphate target, as it was considered that the combination of phosphate reductions (planned works at waste water treatments and adaptations to land use through schemes such as Catchment Sensitive Farming) as set out in the NMP were sufficient to bring the river back into compliance.
10. However recent European case law has provided further context as to the interpretation of the Habitat Regulations: In particular the case of *Cooperatie Mobilisatie* handed down in November 2018 by the Court of Justice of the European Union (Joined Cases C-293/17 and C-294/17) known as the *Dutch judgment*, has prompted a review of the aforementioned approach taken within the River Lugg catchment area.
11. Natural England advised the council in July 2019 that any plans or projects in the River Lugg catchment area requiring an Appropriate Assessment which subsequently raised issues of additional phosphate, must now be considered uncertain and development cannot be granted. This is because there is reasonable scientific doubt as to whether the NMP provides adequate mitigation and can be relied upon to underpin a conclusion of no adverse effects on the integrity of the SAC.
12. Herefordshire Council has sought its own legal advice which confirms this view and at present a moratorium upon development within the River Lugg catchment area, a significant portion of the north of Herefordshire, is in place.

Proposal

13. The council is liaising with all interested parties including; Natural England, The Environment Agency, Welsh Water and the National Farmers Union, through the Nutrient Management Board and its assigned technical working party, to find an effective solution which will both seek to reduce phosphate levels within the River Lugg and River Wye SAC and allow development to proceed in the north of the county.
14. It is envisaged that in the long term the solution will be provided through the revision of the NMP which will reflect the measures implemented by Welsh Water through their Asset Management Programme as well as more stringent requirements placed upon land owners to ensure the minimisation of diffuse pollution through appropriate infrastructure and updated environmentally friendly farming techniques. However it is understood this is unlikely to take effect in the short term and an interim approach is therefore required.
15. Following consideration of a number of options to further reduce phosphate levels the recommended solution is to:
 - Design, construct and manage up to 8 integrated wetland sites set in strategic locations in order to provide tertiary treatment to waste water treatment works within the River Lugg catchment area.
 - Commission the development of an interim delivery plan including a phosphate calculator and a suite of recommended mitigation measures appropriate to the River

Lugg catchment area. This will enable developers to calculate the phosphate load of their development proposals and therefore agree measures independently with landowners to mitigate or offset the identified phosphate load, although this has to demonstrate with scientific certainty that it will be phosphate neutral or show betterment and any offsetting has to comply with the Habitat Regulations. This has the potential to be further developed as a trading platform for offsetting identified loads in future developments subject to the criteria referred to.

- The appointment of an environment officer to lead on reductions in levels of diffuse pollution. To liaise with the regulatory bodies and carry out an audit in the River Lugg catchment area, identifying through mapping and farm visits where risk of pollution occurs and working with the farming community to introduce improvements to infrastructure and farming techniques.
16. An outline feasibility study has identified a number of potential sites with the potential to deliver significant phosphate reduction. The proposal is to engage a wetland specialist in order to undertake detailed feasibility and design. The council will then seek to procure and develop up to 8 sites through negotiations with landowners by means of purchase, leasehold or land stewardship agreements.
 17. Detailed design proposals of the wetlands will be commissioned from the wetland specialist and planning permission sought. At this point in time the council will hold sufficient information to calculate both the phosphate load of proposed growth, as well as the potential offsetting capacity of the wetlands and can therefore seek confirmation from Natural England, the statutory body for the regulation of European designated sites, that sufficient scientific certainty is now in place to meet the Habitat Regulations and allow development to proceed.
 18. In addition to improving the water quality of the River Lugg, this proposal will also positively contribute toward the delivery of the environmental and economic priorities within the County Plan 2020-2024; enhancing local biodiversity, enabling sustainable housing growth in the north of the county and reducing carbon emissions through carbon sequestration.

Ongoing Management

19. Following construction of the wetlands, the council will seek to procure a managing agent for the ongoing management of each site. This will be done through the use of a commuted sum or land stewardship agreement and will require the ongoing management for a period of 50 years as agreed with Natural England.
20. The monitoring of water quality and discharge consents to be agreed with the Environment Agency.

Community impact

21. The proposed development of multiple sites as integrated wetlands positively contributed to the following ambitions within the County Plan 2020-2024.
 - Seek strong stewardship of the county's natural resources
 - Protect and enhance the county's biodiversity, value nature and uphold environmental standards

22. The removal of the current development moratorium in the River Lugg catchment area will enable future economic development in a significant proportion of North Herefordshire.
23. Furthermore the council will seek to provide opportunities for community engagement with the wetlands; through the planting of surrounding landscape, the provision of public access and educational opportunities in line with the objectives identified in the county plan

Equality duty

24. Under section 149 of the Equality Act 2010, the 'general duty' on public authorities is set out as follows:

A public authority must, in the exercise of its functions, have due regard to the need to -

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
 - (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
25. The public sector equality duty (specific duty) requires us to consider how we can positively contribute to the advancement of equality and good relations, and demonstrate that we are paying 'due regard' in our decision making in the design of policies and in the delivery of services. Our providers will be made aware of their contractual requirements in regards to equality legislation.
 26. The construction of wetlands will support sustainable housing growth in the north of the county which will benefit all sections of the community. In addition to this the council will seek to provide education opportunities and the provision of public access for the enjoyment of all.

Environmental Impact

27. Currently the majority of Welsh Water treatment works discharge phosphate at 1mg/l which can be reliably achieved through iron dosing. The introduction of tertiary wetlands can further reduce phosphate levels to the required conservation target of 0.05mg/l thereby helping to return the Special Area of Conservation to favourable condition.
28. In addition to improving water quality in the River Lugg, the wetlands will also support the Council's commitment to address the climate and ecological emergency as the wetlands will also become excellent wildlife habitats and will help to sequester local carbon emissions.

Resource implications

29. A capital allocation of £2m within the Council's 2020/21 capital programme was approved by Full Council on 14 February 2020 for the development of integrated wetlands. This capital allocation is funded through use of the Council's New Homes Bonus to enable the future housing development in the Lugg catchment area.

30. The requirement for the development of an interim delivery plan in conjunction with development of the wetlands is estimated at £30,000.
31. In addition a separate funding application has been submit to MHCLG for £1m of match funding to support the delivery of this project. If successful this would enable the acquisition and development of additional wetlands sites to further reduce phosphate levels and the additional purchase of existing agricultural land for repurposing.
32. The land acquisition, commissioning of all technical and consultancy advice, site development and future site management will all be undertaken in line with the council's contract procedure rules with assistance from the Commercial Services and Property Services teams.

Funding Streams	2020/21	2021/22	Future Years	Total
New Homes Bonus	£1,200,000	£800,000	£0	£2,000,000
MHCLG grant funding (tbc)	£600,000	£400,000	£0	£1,000,000
Total	£1,800,000	£1,200,000	£0	£3,000,000

Legal implications

33. This is an Executive function under the Council's Constitution Part 3 Section 3 and is a key decision because it is likely to be significant having regard to the strategic nature of the decision; and/ or whether the outcome will have an impact, for better or worse, on the amenity of the community or quality of service provided by the authority to a significant number of people living or working in the locality (two or more wards in Herefordshire) affected. It is also likely to result in the council incurring expenditure which is, or the making or savings which are, significant having regard to the Council's budget for the service or function concerned. The leader has delegated this key decision to the Cabinet member Infrastructure and Transport as it relates to their portfolio.
34. There are no statutory obligations on the council to purchase or lease the land referred to, to undertake the construction and subsequent management and maintenance of the integrated wetlands and there are no statutory powers to be able to do so.
35. The council is not obliged to purchase or lease the land to construct the wetlands, however as referred to in previous paragraphs to this report, the failing levels of phosphate in the River Lugg catchment area of the SAC mean that development in that area cannot be granted planning permission by the local planning authority unless it can be demonstrated with scientific certainty that the projects or plans of that development will not adversely affect the integrity of the SAC as the European Site under the Habitat Regulations (Regulation 61(5)) .
36. These wetlands are to be located next to the Welsh Water treatment works and the discharge from the treatment works into the integrated wetlands is then filtrated so any subsequent discharge from the wetlands into the SAC will reduce the phosphate levels or provide for betterment, although this is yet to be proven.

37. Planning permission will be required to construct the integrated wetlands and the planning applications will have to undergo a formal screening opinion and Appropriate Assessment (if there are likely significant effects) (Regulation 61(1)) under the Habitat Regulations. The Appropriate Assessment as part of the formal planning process will need to be considered by Natural England (Regulation 61(3)), and their responses taken into account. It will need to be demonstrated with scientific certainty that the projects or plans for the integrated wetlands will not adversely affect the integrity of the SAC. If Natural England agree that this is the case and any other planning constraints are overcome, then planning permission can be granted, with suitably worded conditions.
38. The relevant leases will need to be negotiated and put in place for any lease of the land referred to, or the lands successfully purchased from the landowners. The appropriate licences for discharge will also be required from the relevant statutory bodies prior to bringing the wetlands into use.

Risk management

Risk / opportunity	Mitigation
Land suitability and availability	<p>An outline feasibility study has identified numerous potential sites.</p> <p>Detailed feasibility and design will be commissioned by a wetland specialist.</p> <p>Early engagement will be held with prospective landowners and will consider alternative delivery models including land sale, lease or land stewardship.</p>
All sites comply with the discharge permit issued by the Environment Agency	<p>Discharge permits to remain with Welsh Water</p> <p>Wetland is established as a pilot scheme for a 3 year period in order to allow fluctuations without penalty from the EA.</p> <p>Legal agreements will be established to apportion and mitigate risk.</p>
Ongoing management	Soft market testing has identified potential interest for the commissioning of ongoing external management of the wetland sites.
Achieving the required phosphate reduction	<p>Current modelling indicates high confidence levels in phosphate reduction</p> <p>Two local pilots schemes are in development by third party at Canon Pyon and Dilwyn</p>

Consultees

39. This proposal has been developed in discussion with the Nutrient Management Board comprising Natural England, Wye & Usk Foundation, Welsh Water and the Environment Agency.
40. Political groups have been consulted and comments were received from the Green Group in support of the proposals.
41. Natural England have been consulted on the draft scope for the proposed interim delivery plan.

Appendices

- None

Background papers

- None