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**RIVER POLLUTION IN CARDIFF**

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**Reason for the Report**

1. To provide Members of the Environmental Scrutiny Committee with the opportunity to review the water quality of Cardiff's three rivers and supporting tributaries. In particular this scrutiny will focus on:
  - The water quality of Cardiff's three main rivers and tributaries;
  - The work being undertaken to manage and monitor river pollution in Cardiff's three main rivers and tributaries;
  - The wider work being undertaken to keep Cardiff's three main rivers and tributaries clean;
  - The challenges faced in keeping Cardiff's three main rivers and tributaries clean and healthy;
  - The impact that the water quality in Cardiff's three main rivers and tributaries is having on the local environment.

**Background**

2. The majority of Cardiff is located on a large flood plain which hosts three rivers; the Taff, the Ely and the Rhymney. The three rivers flow into the Bristol Channel and along with a series of supporting tributaries they provide drainage for a large section of South East Wales.
3. The three rivers have played a significant role in the economic, geographical and social development of Cardiff. They continue to provide an important role by supporting a healthy environment, enhancing habitat, providing leisure opportunities, generating energy, supporting the local economy, facilitating drainage and generally supporting well being.

4. **River Taff** - the river Taff rises as two rivers in the Brecon Beacons National Park and runs for a distance of 40 miles to the Bristol Channel at Cardiff. The Taff is formed from the Taf Fechan (Little Taff) and the Taf Fawr (Big Taff); the two rivers merge just north of Merthyr Tydfil. The Taff has seven major tributaries which flow into the river, these are Nant Ffrwd; Nant Morlais; Nant Rhydycar; Taff Bargoed; Cynon; Nant Clydach and Rhondda. The river Taff flows past the settlements of Merthyr Tydfil, Treharris, Pontypridd and Cardiff.
5. **River Ely** - the river Ely rises to the north west of Tonyrefail and runs for a distance of 24 miles to the Bristol Channel at Cardiff. The Ely has three major tributaries which flow into the river, these are Nant Muchud; Afon Clun and Nant y Drope. The river Ely flows past the settlements of Tonyrefail, Llantrisant, Pontyclun, Peterston-super-Ely, Ely, Cardiff and Penarth.
6. **River Rhymney** - the river Rhymney rises at Odyn Fach within the Brecon Beacons National Park and runs for a distance of 35 miles to the Bristol Channel at Cardiff. The Rhymney has several small tributaries which flow into the river, these are the Deri; Nant Cylla; Nant y Twyn; Nant Bargod Rhymni; Nant y Bwch; Nantowen; Nant y Draethen; Nant Du and Nant Pontprennau. The river Rhymney flows past the settlements of New Tredegar, Bargoed, Ystrad Mynach, Llanbradach, Caerphilly, Bedwas, Trethomas, Machen, Draethen and finally Llanrumney and Rumney in Cardiff.
7. A map titled 'WFD – Surface Water body Status Cardiff LA' has been attached to this report as **Appendix 1**. This has been provided by Natural Resources Wales and illustrates the position of Cardiff's rivers and tributaries within the local authority boundary.
8. South East Wales has a strong industrial heritage which for many years contributed to high pollution levels in the three rivers. The decline of heavy industry in the 1980s along with ongoing work by the Environment Agency (now Natural Resources Wales) and Dŵr Cymru Welsh Water has resulted in significant improvements in water quality and pollution levels in each of the rivers. These improvements have created a number of benefits, for example, leisure activities on the rivers (and Cardiff

Bay) have increased and after a period of absence salmon once again swim up the river Taff.

9. While the general direction of travel indicates an improving picture difficulties still persist. For example, silting and other forms of river pollution are regularly reported on the river Ely, while heavy rain can result in the discharge of sewage from overflowing sewers. This means that Natural Resources Wales and its partners have an ongoing battle to maintain and improve water quality.

### **Natural Resources Wales**

10. Natural Resources Wales has the statutory responsibility for monitoring and maintaining river quality in Wales. It does this by using a number of pieces of legislation, these include:
  - The Water Framework Directive;
  - The Environmental Permitting (England and Wales) (Amendment) Regulations 2015;
  - Water Act 2003.
11. The Water Framework Directive (2000/60/EC) was introduced in December 2000 and is the most substantial piece of water legislation from the EC to date. It requires protection for the ecological status of all inland and coastal water bodies from deterioration and, where necessary and practicable, restore water bodies to "good status". It does this by establishing an integrated approach to the protection, improvement and sustainable use of Europe's rivers, lakes, estuaries, coastal waters and groundwater.
12. The Water Framework Directive creates a structure which should provide substantial benefits for the long-term sustainable management of water. In doing so, it promotes the sustainable use of water as a natural resource; the conservation of habitats and species which directly depend upon water; the progressive reduction or phasing out of releases of pollutants that present a significant threat to the aquatic environment and the management of the effects of floods and droughts.

13. The Water Framework Directive is implemented using Management Plans that operate at the River Basin Scale. These River Basin Management Plans (RBMPs) are the central tool for setting out the actions required to achieve the objectives of the Water Framework Directive in a collaborative and joined up way. They contain the main issues for the water environment and the actions we all need to take in order to make real progress in addressing them.
14. In the UK the Water Framework Directive has been transposed into domestic legislation as The Water Environment (Water Framework Directive) (England and Wales) Regulations 2003. These regulations place a duty on all public bodies to “have regard” to the RBMPs when exercising their functions. The plans, strategies and activities of Local Authorities mean that they are hugely important in influencing local communities and the environment.
15. The area served by Cardiff Council is situated in the ‘South East Wales Valleys’ management catchment within the Severn River Basin Management Plan. This management catchment is subdivided into ‘water bodies’ each with a unique identifier. The aim of achieving at least ‘Good Status’ applies to each one of these water bodies.
16. In discharging its statutory responsibility Natural Resources Wales has the task of undertaking five key roles, these are:
  - **Monitoring** – They have a statutory role to routinely monitor Welsh rivers. They monitor the chemical quality plus the state of the biology and fisheries within a watercourse. In addition they carry out investigation monitoring where they believe that there may be a specific problem.
  - **Permitting** – They issue permits for water discharges that enter rivers. To obtain a permit, individuals and business need to apply to Natural Resources Wales providing details of what and where they want to discharge. Natural Resources Wales then determines if permission should be granted. Any permit granted will contain conditions that have to be complied with to protect the environment.
  - **Compliance** - Where a permit is issued for discharge into a river Natural Resources Wales has to carry out compliance work to make sure the permit

holder is compliant with any condition on the permit. They have the powers to implement an enforcement where permit conditions are not met. In addition they investigate discharges where there is no permit.

- **Pollution Prevention** - On occasions they give advice and guidance to companies about how to prevent pollution entering a river. They do this in a number of ways, for example, they inspect individual sites, run awareness campaigns and work with partner organisations to tackle problematic areas.
- **Pollution investigation** – They have a twenty four hour response in place for any reported pollution incidents. They have a dedicated free phone number where partners or members of the public can call to report an incident. They will then investigate to stop the pollution and prevent a reoccurrence. The Natural Resources Wales powers of response include the power of entry, enforcement and clean-up cost recovery.

17. **Appendix 2** of this report provides a summary of specific water quality pressures relating to sections of water bodies within the Cardiff local authority boundary. This document provides examples of findings identified by Natural Resources Wales as a part of its water quality monitoring work.
18. While Natural Resources Wales holds the statutory responsibility for monitoring and maintaining river quality in Wales, it is not the only body that contributes to improving river water quality in South East Wales. Dŵr Cymru / Welsh Water, for example, has in recent years invested significant sums of money in improving drainage systems which has reduced the volume of sewage entering the river system.
19. A number of smaller organisations also contribute to the improvement of water quality in rivers agenda. These include the South East Wales Rivers Trust; the Cardiff Rivers Group; various angling groups; local authorities and other water leisure activities groups.

## **Way Forward**

20. Representatives from Natural Resources Wales; Dŵr Cymru / Welsh Water; South East Wales Rivers Trust; Glamorgan Anglers and the Cardiff Rivers Group have been invited to attend for this item. Councillor Bob Derbyshire, the Cabinet Member for the Environment will also take part in the meeting. They will all be invited to make a statement and take part in a Member question and answer session.

## **Legal Implications**

21. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters there are no direct legal implications. However, legal implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any legal implications arising from those recommendations. All decisions taken by or on behalf of the Council must (a) be within the legal powers of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers on behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. Scrutiny Procedure Rules; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances.

## **Financial Implications**

22. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters there are no direct financial implications at this stage in relation to any of the work programme. However, financial implications may arise if and when the matters under review are implemented with or without any modifications. Any report with recommendations for decision that goes to Cabinet/Council will set out any financial implications arising from those recommendations.

## **RECOMMENDATIONS**

The Committee is recommended to:

- i. Consider whether they wish to pass on any comments, observations or recommendations regarding the item on 'River Pollution in Cardiff' to Natural Resources Wales, the Cabinet or any other relevant parties.

**DAVID MARR**  
**Interim Monitoring Officer**  
**9 March 2016**