Guidance

Water supply, wastewater and water quality

Advises on how planning can ensure water quality and the delivery of adequate water and wastewater infrastructure.

From:
Department for Levelling Up, Housing and Communities (/government/organisations/department-for-levelling-up-housing-and-communities) and Ministry of Housing, Communities & Local Government (/government/organisations/ministry-of-housing-communities-and-local-government)
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Guidance amended - see previous version (https://webarchive.nationalarchives.gov.uk/20190606212040/https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality).

Where plans are being prepared under the transitional arrangements set out in Annex 1 to the revised National Planning Policy Framework (https://www.gov.uk/government/publications/national-planning-policy-framework--2), the policies in the previous version of the framework published in 2012 (http://webarchive.nationalarchives.gov.uk/20180608095821/https:/www.gov.uk/government/publications/national-planning-policy-framework--2) will continue to apply, as will any previous guidance

which has been superseded since the new framework was published in July 2018. If you'd like an email alert when changes are made to planning guidance please subscribe (https://www.gov.uk/topic/planning-development/planning-officer-guidance/email-signup).

Water supply, wastewater and water quality – introduction

What is the legal and policy framework for the water environment?

The Water Environment Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/407/contents/made) apply to surface waters (including some coastal waters) and groundwater (water below the surface of the ground). These regulations set out requirements to prevent the deterioration of aquatic ecosystems; protect, enhance and restore water bodies to 'good' status; and achieve compliance with standards and objectives for protected areas. Local planning authorities must, in exercising their functions (http://www.legislation.gov.uk/uksi/2003/3242/regulation/17/made), have regard to River Basin Management Plans (https://www.gov.uk/government/collections/river-basin-management-plans-2015). These plans contain the main issues for the water environment and the actions needed to tackle them.

The National policy statement for waste water (https://www.gov.uk/government/publications/national-policy-statement-for-waste-water) forms part of the overall framework of national planning policy.

Related policy:

- paragraph 170 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment)
- paragraph 180 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment#para180)
- paragraph 20 (https://gov.uk/guidance/national-planning-policy-framework/3-plan-making#para20)

Paragraph: 001 Reference ID: 34-001-20161116

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How can the planning system plan positively for water supply and quality?

Multiple benefits for people and the environment can be achievable through good design and mitigation. For example, flood risk can be reduced (https://www.gov.uk/guidance/flood-risk-and-coastal-change) and biodiversity and amenity improved by designing development that includes permeable surfaces and other sustainable drainage systems, removing artificial physical modifications (for example, weirs and concrete channels) and recreating natural features. Water quality can be improved by protecting and enhancing green infrastructure and further information on this can be found in the planning practice guidance on the Natural Environment (https://www.gov.uk/guidance/natural-environment).

Good design and mitigation measures can be secured through site specific policies for allocated sites and through non-site specific policies on water infrastructure and protecting the water environment. For example, they can be used to ensure that new development and mains water and wastewater infrastructure provision is aligned and to ensure new development is phased and not occupied until the necessary works relating to water and wastewater have been carried out. Local planning authorities can use planning conditions (https://www.gov.uk/guidance/use-of-planning-conditions) and / or obligations (https://www.gov.uk/guidance/planning-obligations) to secure mitigation

and compensatory measures where the relevant tests are met. Planning obligations can be used to set out requirements relating to monitoring water quality, habitat creation and maintenance and the transfer of assets where this mitigates an impact on water quality.

Paragraph: 019 Reference ID: 34-019-20140306

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Water supply, wastewater and water quality – considerations in plan making

What are the water supply, wastewater and water quality concerns that plans need to address?

These will vary depending on the character of the local area, the type of issues the plan (https://www.gov.uk/guidance/plan-making) covers and the contribution that can be made to a 'catchment-based approach (https://www.gov.uk/guidance/water-supply-wastewater-and-water-quality#catchment-based-approach)' to water. Wastewater treatment plants are waste developments and handled by the waste planning authority. In plan-making, there are a number of broad considerations relevant to water supply and water quality:

- infrastructure (water supply and wastewater)
- water quality
- wastewater
- cross-boundary concerns
- strategic environmental assessment and sustainability appraisal
- habitats regulations assessments.

Early discussions between strategic policy-making authorities and water and sewerage companies can help to ensure that proposed growth and environmental objectives are reflected in company business plans. Growth that requires new water supply should also be reflected in companies' long-term water resources management plans. This will help ensure that the necessary infrastructure is funded through the water industry's price review (https://www.ofwat.gov.uk/pricereview/).

Strategic policy-making authorities will also need to consider the objectives in the government's 25 Year Environment Plan (https://www.gov.uk/government/publications/25-year-environment-plan) to reduce the damaging abstraction of water from rivers and groundwater, and to reach or exceed objectives for rivers, lakes, coastal and ground waters that are specially protected.

Paragraph: 002 Reference ID: 34-002-20140306

Revision date: 22 07 2019

What might need to be considered when planning for water infrastructure, water quality and wastewater?

Planning for water infrastructure:

Plan-making may need to consider:

- identifying suitable sites for new or enhanced waste water and water supply infrastructure. When identifying sites it is important to recognise that water and wastewater infrastructure can have specific locational needs (and often consists of engineering works rather than new buildings). This means exceptionally otherwise protected areas may have to be considered, where this is consistent with their designation.
- existing and proposed development in the vicinity of a location under consideration for water and wastewater infrastructure. In two-tier areas there will need to be close working between the district and county councils.
- whether new development is appropriate near to sites used (or proposed) for water and wastewater infrastructure (for example, odour may be a concern).
- phasing new development so that water and wastewater infrastructure will be in place when and where needed. The impact on designated sites of importance for biodiversity should be considered to ensure the required infrastructure is in place before any environmental effects occur.

Paragraph: 005 Reference ID: 34-005-20140306

Revision date: 06 03 2014

Water quality:

Plan-making may need to consider:

- how to help protect and enhance local surface water and groundwater in ways that allow new development to proceed and avoids costly assessment at the planning application stage. For example, can the plan steer potentially polluting development away from the most sensitive areas, particularly those in the vicinity of drinking water supplies (designated source protection zones or near surface water drinking water abstractions)
- where an assessment of the potential impacts on water bodies and protected areas under the Water Environment Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/407/made) may be required, consider the type or location of new development
- whether measures to improve water quality, for example sustainable drainage schemes, can be used to address impacts on water quality in addition to mitigating flood risk

Related policy:

- paragraph 170 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment)
- paragraph 180 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment#para180)
- paragraph 20 (https://gov.uk/guidance/national-planning-policy-framework/3-plan-making#para20)

Paragraph: 006 Reference ID: 34-006-20161116

Revision date: 22 07 2019

Wastewater:

Plan-making may need to consider:

- the sufficiency and capacity of wastewater infrastructure
- the circumstances where wastewater from new development would not be expected to drain to a public sewer
- the capacity of the environment to receive effluent from development in different parts of a strategic policy-making authority's area without preventing relevant statutory objectives being met

Related policy:

- paragraph 20 (https://gov.uk/guidance/national-planning-policy-framework/3-plan-making#para20)

Paragraph: 007 Reference ID: 34-007-20140306

Revision date: 22 07 2019

Cross-boundary issues:

Water supply and water quality issues often cross local authority boundaries and can be best considered on a catchment basis. Liaison between strategic policy-making authorities, the Environment Agency, catchment partnerships and water and sewerage companies from the outset (at the plan scoping and evidence gathering stages of plan-making) will help to identify water supply and quality issues, the need for new water and wastewater infrastructure to fully account for proposed growth and other relevant issues such as flood risk. The duty to cooperate (https://www.gov.uk/guidance/plan-making#maintaining-effective-cooperation) across boundaries applies to water supply and quality issues, and should be evidenced through a Statement of Common Ground (https://www.gov.uk/guidance/plan-making#maintaining-effective-cooperation).

The Department for Environment, Food and Rural Affairs has published a policy framework to encourage the wider adoption of an integrated catchment-based approach (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/204231/pb13934-water-environment-catchment-based-approach.pdf) to improving the quality of the water environment:

- to deliver positive and sustained outcomes for the water environment by promoting a better understanding of the environment at a local level; and
- to encourage local collaboration and more transparent decision-making when both planning and delivering activities to improve the water environment

The framework explains that adopting this approach will promote the development of more appropriate river basin management plans (which underpin the delivery of the objectives of the Water Environment Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/407/contents/made)) but will also provide a platform for engagement, discussion and decisions of much wider benefit including tackling diffuse agricultural and urban pollution, and widespread, historical alterations to the natural form of channels.

Related policy:

- paragraph 20 (https://gov.uk/guidance/national-planning-policy-framework/3-plan-making#para20)
- paragraphs 24-27 (https://gov.uk/guidance/national-planning-policy-framework/3-plan-making#para24)

Paragraph: 008 Reference ID: 34-008-20140306

Revision date: 22 07 2019

Using strategic environmental assessment and sustainability appraisal:

Water supply and quality are considerations in strategic environmental assessment and sustainability appraisal (https://www.gov.uk/guidance/strategic-environmental-assessment-and-sustainability-appraisal). Sustainability appraisal objectives could include preventing deterioration of current water body status, taking climate change into account and seeking opportunities to improve water bodies.

Paragraph: 009 Reference ID: 34-009-20140306

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Information about the water environment

Where is there information about the water environment?

The River Basin Management Plan is the key over-arching source of information on the water environment, including the condition of water bodies and measures to help meet the objectives of the Water Environment Regulations 2017 (http://www.legislation.gov.uk/uksi/2017/407/introduction/made).

Other sources of information on the water environment include:

- the Water Industry National Environment Programme (https://data.gov.uk/dataset/a1b25bcb-9d42-4227-9b3a-34782763f0c0/water-industry-national-environment-programme) published by the Environment Agency, which outlines actions for all 20 water and sewerage companies operating in England to complete between 2020 and 2025, in order to contribute towards meeting their environmental obligations
- statutory water company water resource management plans
- water and sewerage company business plans
- information published by the Environment Agency (https://www.gov.uk/government/organisations/environment-agency), including flood and coastal risk management plans and strategies, abstraction management, public registers, groundwater vulnerability maps and the location of source protection zones
- water cycle studies
- water and sewerage company drainage strategies
- Local Record Centres (http://www.alerc.org.uk/), which may hold relevant information on the water environment
- information from environmental statements
- diffuse water pollution plans and nutrient management plans (https://www.gov.uk/government/collections/nutrient-management-plans), produced by Natural England and the Environment Agency, for internationally and nationally designated sites of importance for biodiversity and where relevant other SSSIs

Paragraph: 010 Reference ID: 34-010-20140306

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What are river basin management plans?

River basin management plans describe the river basin district and the pressures that the water environment faces. The plans show long term objectives, what these mean for the current state of the water environment and how organisations and communities will work together to improve the water environment. There are 8 river basin management plans covering England (https://www.gov.uk/government/collections/river-basin-management-plans-2015). They are produced by the Environment Agency (https://www.gov.uk/government/organisations/environment-agency) and approved by the Secretary of State for Environment, Food and Rural Affairs.

Paragraph: 011 Reference ID: 34-011-20161116

Revision date: 22 07 2019

What is a water cycle study?

A water cycle study is a voluntary study that helps organisations work together to plan for sustainable growth. It uses water and planning evidence to understand environmental and infrastructure capacity. It can identify joined up and cost effective solutions, that are resilient to climate change for the lifetime of the development.

The study provides evidence for plans (https://www.gov.uk/guidance/plan-making) and sustainability appraisals and is ideally done at an early stage of plan-making. Local authorities (or groups of local authorities) usually lead water cycle studies, as a chief aim is to provide evidence for sound plans, but other partners often include the Environment Agency and water companies.

Paragraph: 012 Reference ID: 34-012-20140306

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What is a drainage strategy?

A drainage strategy can be prepared by water and sewerage companies and sets out how they intend to deliver statutory drainage functions and meet customer needs within a particular catchment. The Environment Agency and Ofwat have published a Drainage Strategy Framework (https://www.ofwat.gov.uk/wp-content/uploads/2015/12/rpt_com201305drainagestrategy1.pdf) which sets out principles and best practice for water and sewerage companies to develop catchment based drainage strategies.

Paragraph: 013 Reference ID: 34-013-20140306

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How can the Environment Agency help?

The Environment Agency can often provide help to plan-makers and applicants by:

- identifying the circumstances in which water quality is likely to be a significant planning issue and, where it is, the scope and content of any assessments that may be needed
- advising whether an environmental permit or other consent is likely to be required before the proposed development can start operating (they have published guidance for developments requiring planning permission and environmental permits (https://www.gov.uk/government/publications/developments-requiring-planning-permission-and-

environmental-permits)). If so, whether there are any significant water issues that may arise at the permitting stage – so there are 'no surprises' and to help ensure that regulation is not duplicated by planning and permitting
- clarifying any special permit requirements that might affect the likelihood of getting planning permission

Paragraph: 014 Reference ID: 34-014-20140306

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Water and neighbourhood planning

Are water issues relevant to neighbourhood planning?

Protecting and improving water bodies may be relevant when drawing up a neighbourhood plan (https://www.gov.uk/guidance/neighbourhood-planning--2) or considering a neighbourhood development order. It is always useful to consult the local planning authority about whether water could be a concern.

Paragraph: 015 Reference ID: 34-015-20140306

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Water supply, wastewater and water quality – considerations for planning applications:

Water supply

Early engagement with the local planning authority, the Environment Agency and relevant water and sewerage companies as appropriate can help establish whether particular water and wastewater issues need to be considered.

Planning for the necessary water supply would normally be addressed through authorities' strategic policies, which can be reflected in water companies' water resources management plans Water supply is therefore unlikely to be a consideration for most planning applications. Exceptions might include:

- large developments not identified in plans that are likely to require a large amount of water; and/or
- significant works required to connect the water supply; and/ or
- where a plan requires enhanced water efficiency in new developments as part of a strategy to manage water demand locally and help deliver new development.

Water quality

Water quality is only likely to be a significant planning concern when a proposal would:

- involve physical modifications to a water body such as flood storage areas, channel diversions and dredging, removing natural barriers, construction of new locks, new culverts, major bridges, new barrages/dams, new weirs (including for hydropower) and removal of existing weirs; and/or
- indirectly affect water bodies, for example,

- as a result of new development such as the redevelopment of land that may be affected by contamination, mineral workings, water or wastewater treatment, waste management facilities and transport schemes including culverts and bridges;
- result in runoff into surface water sewers that drain directly, or via combined sewers, into sensitive waterbodies e.g. water bodies with local, national or international habitat designations;
- through a lack of adequate infrastructure to deal with wastewater
- through a lack of adequate infrastructure to deal with wastewater where development occurs in an area where there is a strategic water quality plan e.g. Nutrient Management Plans (https://www.gov.uk/government/collections/nutrient-management-plans), River Basin Management Plans, water cycle studies, diffuse water pollution plans or sewerage undertakers' drainage strategies which set out strategies to manage water quality locally and help deliver new development.

Assessing impacts on water quality

Where water quality has the potential to be a significant planning concern an applicant should be able to explain how the proposed development would affect a relevant water body in a river basin management plan or designated sites of importance for biodiversity, and how they propose to mitigate the impacts.

Where it is likely that a proposal would have a significant adverse impact on water quality then a more detailed assessment will be required. The assessment should form part of the environmental statement, if one is required because of a likely significant effect on water.

When a detailed assessment is needed, the components are likely to include:

- the likely impacts of the proposed development (including physical modifications) on water quantity and flow, river continuity and groundwater connectivity, and biological elements (flora and fauna)
- how the proposed development will affect measures in the river basin management plan to achieve good status in water bodies to ensure local authorities discharge their duty to have regard to river basin management plans when exercising their duties, including making planning decisions
- how it is intended the development will comply with other relevant regulatory requirements relating to the water environment (such as those relating to bathing waters, shellfish waters, freshwater fish, drinking water, internationally and nationally designated sites of importance for biodiversity) bearing in mind compliance will be secured through the Environment Agency's permitting responsibilities

Paragraph: 016 Reference ID: 34-016-20140306

Revision date: 22 07 2019

What is good status in water bodies?

Good status for surface water bodies depends on biological quality (such as fish), physico-chemical conditions (for example oxygen or ammonia) and hydromorphological conditions (physical characteristics, such as size, shape and structure of a channel, and hydrology – the flow and quantity of water). Good status for groundwater bodies takes account of quantity and chemical status.

Paragraph: 017 Reference ID: 34-017-20140306

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Can planning permission be granted for developments that harm water bodies?

Changes to scheme design and mitigation will often avoid harm to water bodies. In the few cases where a detailed assessment indicates that development will have a significant adverse impact on water quality then the proposed development will only be acceptable where the conditions in Article 4.7 of the Water Framework Directive (https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32000L0060) 2000/60/EC having regard to the river basin management plan are satisfied. The Environment Agency may be able to advise on meeting those requirements.

There is a general duty on all public bodies (http://www.legislation.gov.uk/uksi/2017/407/contents/made) to provide information and such assistance as the Environment Agency may reasonably seek in connection with exercising their responsibilities for implementing the Water Environment Regulations 2017. Where this has been requested by the Environment Agency, the local planning authority should notify the Environment Agency if planning permission is granted for a new development likely to lead to a deterioration of a water body.

Paragraph: 018 Reference ID: 34-018-20161116

Revision date: 22 07 2019

Are there particular considerations that apply in areas with inadequate wastewater infrastructure?

The preparation of plans should be the focus for ensuring that investment plans of water and sewerage companies align with development needs. If there are concerns arising from a planning application about the capacity of wastewater infrastructure, applicants can be asked to provide information about how the proposed development will be drained and wastewater dealt with. Applications for developments relying on anything other than connection to a public sewage treatment plant will need to be supported by sufficient information to understand the potential implications for the water environment.

When drawing up wastewater treatment proposals for any development, the first presumption is to provide a system of foul drainage discharging into a public sewer to be treated at a public sewage treatment works (those provided and operated by the water and sewerage companies). This will need to be done in consultation with the sewerage company of the area.

The timescales for works to be carried out by the sewerage company do not always fit with development needs. In such cases, local planning authorities will want to consider how new development can be phased, for example so it is not occupied until any necessary improvements to the public sewage system have been carried out. Read further information on conditions (https://www.gov.uk/guidance/use-of-planning-conditions#para008).

Where a connection to a public sewage treatment plant is not feasible (in terms of cost and/or practicality) a package sewage treatment plant can be considered. This could either be adopted in due course by the sewerage company or owned and operated by a sewerage undertaker appointed under a new appointment or variation (https://www.ofwat.gov.uk/regulated-companies/markets/nav-market/). The package sewage treatment plant must comply with the

general binding rules (https://www.gov.uk/guidance/general-binding-rules-small-sewage-discharge-to-the-ground), or a permit will be required. A package sewage treatment plant must be used if the treated effluent is being discharged to surface water.

A proposal for a package sewage treatment plant and infrastructure should set out clearly the responsibility and means of operation and management to ensure that the permit is not likely to be infringed in the life of the plant. There may also be effects on amenity and traffic to be considered because of the need for sludge to be removed by tankers. Where a system will rely on the use of a drainage field consideration may be given to the need to periodically replace that drainage field in a new area of land in order for the sewerage system to continue to function properly.

Septic tanks or package sewage treatment plants may only be considered if it can be clearly demonstrated by the applicant that discharging into a public sewer is not feasible (taking into account cost and/or practicability and whether the package treatment plant poses a risk to a designated site) in accordance with Approved Document H of the Building Regulations 2010. Septic tanks must not discharge effluent to surface water and must comply with the general binding rules, or a permit will be required.

Related policy:

- paragraph 170 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment)
- paragraph 180 (https://gov.uk/guidance/national-planning-policy-framework/15-conserving-and-enhancing-the-natural-environment#para180)

Paragraph: 020 Reference ID: 34-020-20140306

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