North Somerset Council

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Main River Maintenance Reduction in North Somerset: Policy, Responsibilities and Implications

Introduction

The Environment Agency (EA) is scaling back or withdrawing certain river maintenance activities in Somerset, including areas of North Somerset due to funding shortfalls. This move has raised concern because of the consequences this may have locally. The law around river maintenance responsibilities is complex. The EA has no absolute legal duty to maintain rivers; instead, it works under permissive powers, meaning it may carry out maintenance at its discretion (focused on highest-risk areas) but is not obligated to do so. As a result, if the EA steps back, it is unclear who will assume responsibility for upkeep, and the implications for North Somerset could be significant. Reduced maintenance may increase flood risks and place unexpected burdens on local landowners or authorities. Crucially, the EA does not set its own budget, its funding is allocated by central government. In practice, the Agency often receives much less than it bids for based on local needs. For example, in a recent settlement the EA obtained only about 60% of the river maintenance funds it requested from the Treasury. These maintenance funds come from the EA's revenue budget (annual operational funding, not one-off capital grants), and limited availability means there is often a considerable mismatch between needs and resources. High inflation in recent years has further eroded the purchasing power of these funds, leaving the EA short of what is required and forcing it to scale back maintenance targets. All these factors contribute to a challenging situation in North Somerset, where legal ambiguities and funding constraints intersect to complicate future flood risk management efforts.

National Policy and Legislation

Several key statutes and policies frame this issue. A main river is a legally defined term under Section 113 of the Water Resources Act 1991, referring to a watercourse designated by the Environment Agency (EA) as being of *strategic importance for flood risk management*. Main rivers typically include larger rivers, engineered channels, and some key drainage arteries that play a significant role in carrying floodwater through a catchment.

The **main river map** Statutory Main River Map, maintained by the EA, formally identifies which sections of rivers, rhynes, or ditches are designated as main rivers. This designation gives the EA specific powers under Section 165 of the Water Resources Act 1991 to carry out maintenance, improvement, and flood defence works. All other watercourses not shown on the main river map are classed as ordinary watercourses, for which local authorities or Internal Drainage Boards (IDBs) hold powers under the Land Drainage Act 1991.

In practice, main rivers in North Somerset include the Land Yeo, Congresbury Yeo, Banwell River, Kenn, Middle Yeo, Portbury Ditch, and Uphill Great Rhyne. Many of these are artificial or heavily modified channels dating from historical land drainage engineering. Because of the district's low-lying topography, they are integral to managing floodwater from both the inland moors and coastal areas.

The classification originates from earlier Land Drainage Acts (notably 1930 and 1976), which sought to distinguish between locally managed ditches and regionally significant watercourses. When the Environment Agency was established in 1996, it inherited responsibility for the main river network from the former National Rivers Authority.

Water Resources Act 1991

Under the Water Resources Act 1991 (WRA 1991), the Environment Agency (EA) has permissive (discretionary) powers to maintain and improve designated main rivers for flood risk management, but no legal obligation to do so. In other words, the EA *may* carry out maintenance or improvement works on main rivers, but it "is not obliged to carry out either maintenance or new works on Main Rivers" unless it chooses to prioritise that river for flood risk reduction. By contrast, the Land Drainage Act 1991 assigns responsibilities for ordinary watercourses (smaller streams, ditches and drains not designated as main river). Local authorities or Internal Drainage Boards (IDBs) can enforce under Section 25 of the Land Drainage Act that riparian owners keep ordinary watercourses clear if flow is impeded. This means North Somerset Council (or the relevant IDB) can serve notice on a landowner to remove obstructions in an ordinary watercourse, but for main rivers the EA retains jurisdiction.

Flood and Water Management Act 2010

The Flood and Water Management Act 2010 (FWMA 2010) established unitary authorities and county councils as Lead Local Flood Authorities (LLFAs) responsible for managing local flood risk. North Somerset Council is the LLFA for its area, with various duties under the FWMA 2010. This includes developing a local flood risk management strategy and coordinating flood risk management among different bodies. However, the LLFA's remit is limited to local sources of flooding, principally surface runoff,

groundwater, and ordinary watercourses. Flood risk from main rivers and the sea remains the strategic responsibility of the Environment Agency. The FWMA 2010 encourages cooperation between risk management authorities; Section 13 of the Act places a duty on these bodies to work together and share information. Under FWMA Section 13(4), any risk management authority (such as the EA, a council, or an IDB) *may arrange for another risk management authority to exercise a flood risk management function on its behalf*. This provision enables Public Sector Co-operation Agreements (PSCAs), formal agreements where, for example, a council or IDB can carry out works on a main river by agreement with the EA. In practice, a PSCA could allow North Somerset Council or the North Somerset Levels IDB to undertake maintenance of a main river with EA consent, potentially sharing resources. These agreements are underpinned by the duty to cooperate and are meant to "achieve optimal use of available resources" in managing flood risk.

National Planning Policy Framework

National planning policy is also relevant. The National Planning Policy Framework (NPPF) requires sustainable flood risk management in spatial planning. Local Plans and planning decisions must take account of flood risk and ensure new development is safe for its lifetime without increasing flood risk elsewhere. In fact, the NPPF's guidance is that inappropriate development in flood-prone areas should be avoided, and any necessary development in such areas must incorporate mitigation so that it is "safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere". This means planners must consider whether adequate drainage infrastructure and flood protection measures are in place. If main river maintenance is scaled back, potentially leading to higher flood risk, this could become a material planning concern. For example, if a main river's capacity is reduced due to lack of dredging or weed-cutting, proposed developments upstream might face objections or require stronger drainage solutions. Planning authorities (including North Somerset Council as LPA) must ensure new development does not exacerbate flooding, and that any residual risk is managed. Thus, a decline in main river maintenance by the EA could conflict with these policy aims by reducing the effectiveness of existing drainage networks that new developments rely on. In summary, national legislation gives the EA broad powers but few duties for main rivers, assigns councils like North Somerset a coordinating role for local floods, and via planning policy demands that flood risk be proactively managed for current and future development. Diminished main river maintenance sits uneasily within this framework, since it may undermine both flood risk duties and planning objectives.

Roles and Responsibilities

Environment Agency

Clarity on the division of responsibilities is crucial. The Environment Agency's role (defined by the WRA 1991 and related bylaws) is to take a strategic overview of flood risk and to manage flooding from main rivers and the sea. The EA is responsible for operating and maintaining major flood defence assets (pumping stations, sluices, barriers) and for issuing flood warnings and mapping flood hazards.

Riparian Owners

That onus falls on riparian landowners. A riparian owner is any person or entity that owns land adjoining a watercourse (including a river, stream, ditch, or rhyne). By common law and statute, riparian owners must maintain the bed and banks of the watercourse on their land and keep the flow unobstructed. They must allow water to pass without hindrance, remove blockages or debris, and refrain from any action that pollutes the water or impedes flow. If a watercourse marks a boundary between two properties, each owner typically owns up to the centre line of the channel and is responsible for their half. These duties are set out in laws like the Public Health Act 1936 and Land Drainage Acts. Critically, if riparian owners do not meet their responsibilities, authorities can intervene. For ordinary watercourses, the council or IDB can enforce maintenance (e.g. North Somerset Council as LLFA has powers under Section 25 LDA 1991 to require works where an ordinary watercourse is impeded). For main rivers, the Environment Agency can serve notice or ultimately carry out works and recover costs if a negligent riparian owner causes an obstruction (though this is used sparingly). The EA also has the power to levy fines or prosecute if a landowner's lack of maintenance leads to an environmental incident such as local flooding or pollution. In practice, enforcement is a last resort; the system largely relies on landowners doing the right thing.

If the EA withdraws from routine maintenance, the default burden shifts back to these riparian owners. Adjacent landowners, whether private individuals, farmers, companies, Network Rail (for watercourses by railway embankments), or public bodies like the Council itself would be expected to assume responsibility for clearance of vegetation and silt on their stretch of river. If a lack of maintenance by a landowner causes flooding to a third party, those affected could take legal action against that landowner for damages. This underscores the point that riparian owners carry the liability if their failure to maintain contributes to a flood.

North Somerset Council

North Somerset Council has multiple roles in this arena, which can be a source of confusion. As noted, the Council is the Lead Local Flood Authority, meaning it "takes the lead for coordinating flood risk management in North Somerset" for local sources of

flooding. The Council must develop a Local Flood Risk Management Strategy, investigate significant flood incidents (under Section 19 FWMA 2010), maintain a register of flood risk assets, and exercise general leadership on surface water and drainage issues. However, this leadership does not extend to main river channels, the Council has no statutory duty to perform routine maintenance on main rivers. North Somerset Council cannot simply assume the EA's former tasks on main rivers without proper arrangements, because main rivers remain the EA's legal jurisdiction. The Council could get involved via cooperation agreements (like a PSCA), or in emergency situations, but it must usually obtain the EA's consent for works on a main river (a requirement of the WRA 1991 and EA's land drainage byelaws).

Besides being LLFA, the Council is also the Highway Authority for North Somerset. This is relevant because highways must be drained effectively under the Highways Act 1980. The Council is responsible for road gullies, culverts, and drainage ditches along roads. Often, these highway drains discharge into nearby watercourses (ordinary or main river). The Highway Authority has a duty to ensure drains are clear and roads safe from flooding; this includes managing culverts under roads and ensuring that outfalls are functional. If a main river backs up due to lack of maintenance, highway culverts can also back up, causing road flooding. So, the Council's highway drainage role intersects with main river maintenance, poor main river conditions can force the highways team into reactive measures like pumping or unblocking outfalls to protect roads.

North Somerset Council is also directly a riparian owner in places. The Council owns parks, public open spaces, and sometimes sections of land adjacent to watercourses. For example, a rhyne might run along the boundary of a Council-owned park or alongside a public highway. In those cases, the Council has the same legal responsibilities as any riparian landowner for that stretch, it must maintain its half of the channel and not obstruct flow. The Council or its contractors already carry out such maintenance on certain watercourses where it owns land. However, the Council often only owns one bank of a watercourse, with the opposite bank in private ownership. This limits what the Council can do unilaterally (it generally cannot enter private land without permission to maintain the opposite side of a channel). We return to the implications of this in the finance section.

Internal Drainage Boards

Finally, Internal Drainage Boards operate in parts of North Somerset, working in low-lying drainage districts (the North Somerset Levels). IDBs are independent public bodies responsible for water level management in areas of special drainage need (mostly agricultural flood plains). They have permissive powers under the Land Drainage Act to maintain smaller watercourses (ditches, rhynes) within their district, and they raise funds through drainage rates on landowners and special levies on the Council. Notably, IDB

powers exclude main rivers: IDBs manage ordinary watercourses, while main rivers in their district are still the EA's domain unless formally "demained" (re-designated as ordinary watercourse). In North Somerset, the IDB maintains a network of rhynes and drainage ditches on the Levels, working closely with landowners and sometimes the EA (for example, operating sluices to manage water levels). North Somerset Council works in partnership with the IDB and the EA, for instance through the Wessex Regional Flood and Coastal Committee, where funding priorities are discussed. The duty to cooperate under FWMA 2010 has also fostered tools like PSCAs as described, making it possible for an IDB or the Council to perform maintenance on a main river if agreed with the EA.

Characteristics of North Somerset's Main Rivers

North Somerset's geography includes low-lying moors and floodplains criss-crossed by artificial drainage channels (locally called rhynes), as well as small rivers that have been highly modified over centuries. Many of the "main rivers" in this district are not large natural rivers but rather slow-flowing, embanked channels originally dug or straightened to drain land for agriculture. Key main rivers in North Somerset include the Land Yeo (running through Clevedon), the Congresbury Yeo, the Middle Yeo and Kenn River (around Yatton and Kingston Seymour), the Banwell River, Portbury Ditch in Portishead, and the Uphill Great Rhyne at Weston-super-Mare, among others. These watercourses typically have very low gradients (flat terrain), meaning water moves sluggishly and relies on the channel capacity to convey flows. They are often tidal at their downstream end (with outfalls into the Severn Estuary or Bristol Channel), which complicates drainage as high tides can stop flow and back water up.

Because of these characteristics, the main rivers in North Somerset rely on regular maintenance to function properly. Without routine management of aquatic vegetation these slow rivers quickly experience vegetation succession and sedimentation. Reeds and water plants thrive in the nutrient-rich waters of the Levels and, if not cut, can form dense mats that choke the channel. Over just a couple of growing seasons without cutting, a small river can become clogged with weeds. Silt carried by the water (or runoff from fields) also settles in the slow flows, gradually raising the riverbed. If not removed, it reduces the depth and capacity of the channel. Over time, the combination of unchecked plant growth and sediment build-up leads to reduced conveyance capacity (the channel can carry less water) and higher normal water levels. The river effectively loses the open water cross-section it once had. The result is that even moderate rainfall can cause the river to fill and overtop its banks or, more insidiously, that it cannot accept as much water from feeder ditches and drains, causing water to back up into those systems.

Maintenance Challenges on the Ground

Even before the EA's formal reduction in activity, maintaining these watercourses presented practical challenges. Access to the channels is a primary constraint. Many rhynes and rivers run through private property or form boundaries between properties. Gaining access for heavy maintenance equipment (like long-reach excavators or weed-cutting boats) often requires driving machinery onto someone's land. In parts of North Somerset, one bank of a rhyne might back onto people's gardens or a railway line, limiting access to the opposite bank. There are cases where historic housing development has been built very close to the riverbank, or landowners have installed fences, sheds, or tree plantings that block the maintenance strip. For instance, along parts of the Land Yeo in Clevedon and the Portbury Ditch in Portishead, the EA has noted that physical barriers (fences, dense trees, etc.) and safety considerations have made access increasingly difficult for their staff and contractors. In one portion of the Land Yeo, the EA can only get machinery in from one side of the river because back gardens occupy the other side. This means weed-cutting or de-silting can only be done from that one bank, which is less efficient and sometimes leaves the far side untouched.

Similarly, the Uphill Great Rhyne near Weston has sections where the banks are very unstable or the ground extremely marshy, raising health and safety issues for maintenance crews. Those areas have sometimes been left untouched for years because no contractor will risk heavy machinery there without extensive preparation. Reduced maintenance may further degrade bank stability, making future access even harder, a vicious circle.

Another challenge is balancing environmental regulations and ecology with flood maintenance. Watercourses are habitats, and overzealous clearance can harm wildlife. The EA, as a public body, must comply with the Wildlife and Countryside Act 1981, the Water Framework Directive (WFD) objectives (ensuring "good ecological status" of water bodies), and other laws protecting species (such as not disturbing nesting birds or water vole habitats). In practice, the EA has developed maintenance regimes that try to minimise ecological damage while managing flood risk. For example, when cutting aquatic vegetation, the EA often leaves an uncut margin of plants along one bank or alternate sections to provide refuge for wildlife. The agency's published guidance notes that leaving a margin of weeds on one or both sides encourages river wildlife by creating habitat and helps protect the bottom of the riverbank from erosion, while still removing the bulk of weeds from the channel centre. They also avoid sensitive periods, and cutting is usually done in late summer/autumn after most birds have bred. If North Somerset Council or private owners start taking up maintenance, they may not have the same level of ecological oversight or expertise. There's a risk that ad-hoc clearance by others could inadvertently breach environmental rules (for instance, harming protected species or causing silt pollution). Moreover, any work in a main river by outside parties requires EA consent precisely so that impacts can be assessed (e.g. through the Flood Risk Activity Permit process). With the EA stepping back operationally, it's unclear how

environmental compliance will be ensured if others try to fill the gap. Will each landowner apply for permits to dredge their section? That would be onerous and unlikely. This ambiguity could lead to either inaction (for fear of breaking rules) or uncoordinated actions that might harm the environment.

The distinction between permissive powers and duties creates further complications. Because the EA is not obliged to maintain main rivers, its withdrawal doesn't violate a specific duty, but it does raise questions about who will act when necessary. North Somerset Council currently has no legal duty to maintain main rivers (beyond its riparian responsibilities), and in general has no right to intervene on a main river without the EA's blessing. The main rivers remain legally under EA jurisdiction; doing work on a main river without consent could lead to enforcement action by the EA. In an emergency, the Council could invoke emergency powers, but short of that, it must go through procedures. For example, if a fallen tree is blocking a main river and causing flooding, in theory the riparian owner should remove it. If they don't, the EA could serve notice. If the Council wanted to step in proactively, it might technically need a permit or emergency authorisation from the EA to do so. These bureaucratic steps could slow down response times. The Council cannot simply deploy a digger to clear a main river blockage the way it might on a small highway ditch, at least not without coordination.

A further maintenance challenge is simply the resource limitation (people, equipment, money). The EA's Wessex region has seen cuts in its revenue budgets. The agency stated it had to prioritise [its] resources and focus on works with the highest flood risk benefit due to increases in [operating] costs and budget pressures. This meant deferring or cancelling maintenance in lower-priority areas. Main rivers in North Somerset, being semi-rural and not protecting large urban populations, were deemed lower priority in that national risk calculus.

Financial Implications for North Somerset Council

The EA's reduction or withdrawal of main river maintenance may lead to significant financial pressures on North Somerset Council. Firstly, there are potential direct costs if the Council feels compelled to step in. While, as noted, the Council has no formal duty to do so, in practice it may face situations where intervention is necessary to protect residents and infrastructure. For example, if a main river trash screen is blocked and causing water to back up toward homes, the Council might decide it must clear that screen if the EA will not. Such activities incur staff time, contractor fees, equipment hire, and possibly administrative costs for obtaining permissions (since working on a main river might require getting EA consent or an emergency waiver). These are activities the Council has not historically budgeted for as previously the EA would handle them using central funding. Now it would fall to the local authority's purse. The Council, as mentioned, is also often a riparian owner itself for one bank of various watercourses. At

minimum, it will have to continue maintaining those stretches. If the opposite bank (owned by someone else) is not maintained, the Council might find its efforts less effective, but it would still need to keep its side clear to fulfil its own legal duty. That could mean hiring specialists or contractors to cut vegetation on the Council's side of a rhyne where previously the EA might have done an end-to-end clearance. Similarly, in its Highway Authority role, the Council might need to undertake extra works if main river levels remain high. For instance, if a highway culvert that drains into a main river is surcharging because the river is clogged, the Council might resort to emergency pumping or temporary flood barriers to keep a road open, all of which incur costs (fuel, pump hire, overtime pay, etc.). These reactive expenses add up over time.

There may also be costs associated with establishing Public Sector Co-operation Agreements (PSCAs) or other arrangements. If the Council enters a PSCA with the EA or partners with the IDB to carry out maintenance on certain main river sections, there might be an expectation of cost-sharing of the full cost burden being with NSC. The EA could agree to reimburse some costs or provide equipment, but given the EA's constrained budget, it is unlikely to fully fund such works. The Council could end up bearing a large share of the expense. Without new external funding, any money spent on main river maintenance by the Council must come from its general funds, effectively local taxpayers' money or reprioritisation of existing budgets. Preliminary estimates have not been formally made, but filling the EA's shoes could cost on the order of tens of thousands of pounds per year in North Somerset. The Council currently has no allocation for this, it would be an entirely new burden. At a time when Council finances are already under strain (as is widely the case for local authorities), finding money to take over a task that was previously funded by national government is particularly challenging.

Beyond direct maintenance costs, the Council could face indirect financial impacts from the knock-on effects of reduced river maintenance:

- **Emergency Response and Recovery:** More frequent or severe local flooding would require additional spending on the Council's emergency response. This includes activating incident response teams, setting up road closures or diversions, providing support to affected residents, and post-flood clean-up (clearing debris, disinfecting public areas, etc.). It also could extend to recovery assistance, such as emergency accommodation or relief grants in extreme cases. Each flood incident can cost a council many thousands in staff overtime and recovery works. If lack of maintenance makes floods more frequent, these costs could spike unpredictably.
- **Routine Drainage Operations:** The Council's drainage and highways teams might need to increase the frequency of their own maintenance tasks to compensate. For example, if silt and vegetation are not being cleared from main

rivers, some of that material might accumulate at the outfalls of highway drains or in culverted sections the Council manages. The Council may have to clean certain gullies or trash screens more often because they get clogged more quickly when receiving water from an ill-maintained channel. Also, ordinary watercourses under Council jurisdiction might need extra attention if main river levels cause water to back up into them. All this could mean diverting staff and equipment to do repeated tasks that normally would be handled by one annual EA intervention downstream.

- **Infrastructure Deterioration:** Persistently higher water levels in watercourses can damage infrastructure over the long term. For example, if a road embankment is adjacent to a rhyne that is now always full (due to weeds/silt), that prolonged saturation can undermine the stability of the road, leading to more repairs. Culverts and bridges may experience higher loads of debris and water pressure, necessitating more frequent inspections and maintenance. If an asset fails (say a culvert collapses because it was surcharged or undermined), the Council will face a major capital repair cost. Preventative maintenance is cheaper than reactive fixes, but without the EA's preventative work on main rivers, the Council may face costly repairs to its own assets more often.
- **Impacts on Development and Planning:** If flood risk increases, the Council (as Local Planning Authority) might need to invest more in flood risk assessments and surface water flood modelling and require more from developers. Planning applications in areas previously considered low risk might now need detailed flood studies if drainage is compromised. The Council could find itself contesting more often with developers or the EA at the planning stage about mitigation measures. In some cases, developments might be delayed or altered to address new flood concerns, which can have economic implications for the area (affecting investment, housing delivery, etc.). The planning team might need to consult flood engineers more frequently, increasing workload. Additionally, if inadequate maintenance of rivers is raised in planning appeals or inquiries (for instance, an appellant arguing the Council's infrastructure is not up to scratch), the Council might incur costs defending its position.
- **Community Engagement and Complaints:** A very likely consequence of visible decline in river maintenance is a rise in public complaints and requests for service. This is already being experienced by NSC. Residents will notice if a river becomes overgrown and will often contact either the EA or the Council. Given that many people do not distinguish between agencies, the Council is likely to receive more calls about "blocked rivers" or local flooding issues. Each inquiry requires officer time to investigate and respond. If the answer is unsatisfying ("it's not our responsibility, but the EA isn't doing it either"), this can escalate to complaints to councillors, MPs, or the press, all of which consume more time and resources to address. The Council may also feel pressure to conduct community meetings or increased engagement in affected areas to manage expectations and

provide advice, which again is staff time. Moreover, if frustrated community groups or landowners attempt to undertake their own clearance without proper coordination, it could result in issues (e.g. someone might dump cut weed on a road, or inadvertently cause ecological harm), which the Council might then have to step in and sort out (perhaps legally or physically). There's even liability risk if a well-meaning resident injures themselves trying to clear a blockage, there could be questions about whether authorities failed in their duty, even if not strictly liable.

Although we don't have hard numbers yet, qualitatively the cost pressures could be significant. Maintenance of watercourses is known to be labour-intensive and expensive; it requires specialised machinery and careful disposal of material (often classified as controlled waste if it's silt/weeds). The EA's local maintenance program in the past had a certain economy of scale (they have the kit and teams to do many miles efficiently). If the Council were to replicate even a portion of that, it would likely pay more per mile due to mobilising contractors for small stretches in an ad hoc way. This could make any local intervention comparatively inefficient in terms of spending. Furthermore, the Council's flood risk management budget is finite. Money spent reacting to river maintenance shortfalls is money *not spent* on other flood mitigation projects. For instance, North Somerset Council has schemes for property-level protection, surface water attenuation, etc. If funds have to be diverted to basic channel clearing, some of those proactive projects might be delayed or shelved, potentially harming long-term resilience.

Another inefficiency comes from the split ownership of channels as mentioned. The Council often only has legal responsibility (or land access) for one side of a river. If it spends money to clear just its side, the benefit is partial. Weeds on the opposite bank might quickly grow back across or fallen trees from the opposite side could still block the channel. In effect, doing half the job can be nearly as costly as doing the whole job, but with far less benefit. It might need to be done twice as often to achieve the same flow improvement that a full-width clearance would achieve once. This means any unilateral spending by the Council could have a low return on investment unless it's coordinated with other landowners or the EA. Such situations might lead to difficult decisions: does the Council invest public funds in clearing its bank of a river if the other bank remains a jungle? In many areas, *"mid-channel"* is the limit of our responsibility and nature doesn't respect that imaginary line when it comes to regrowth or blockages.

Funding and Support Gap

At present, there is no specific funding mechanism that channels money to North Somerset Council (or other councils) for the routine upkeep of main rivers. The Environment Agency's maintenance work has traditionally been financed through central government essentially, taxpayer funds allocated by DEFRA. When the EA reduces its

work, there is no automatic transfer of those savings to another body. In other words, the EA's retreat does not come with any compensatory budget for the Council or IDB to do the work instead. North Somerset Council would have to rely on its own local funding sources, primarily council tax or reserves, to pay for any main river maintenance activities it decides to undertake.

National flood funding policy has in recent years heavily focused on capital investment (building new flood defences) rather than maintenance. Flood Defence Grant-in-Aid from DEFRA is largely for capital schemes e.g. new walls, embankments, pumping stations and not for ongoing operational costs. In fact, analysis has shown a discrepancy nationally: capital spending on flood defences has increased substantially, while revenue spending on maintenance has not kept pace (and in some periods has even been cut). The Public Accounts Committee noted that poor maintenance is now undermining the benefits of new capital works, highlighting that due to funding shortfalls the EA has been unable to maintain all its existing defences to target condition. It found that about 203,000 properties are at heightened flood risk due to deteriorating defences, which is ironically more properties than will be newly protected by the government's major capital building program by 2027. This national picture illustrates that maintenance has been the poor relation in funding terms. The Government's own strategy has no clear numeric target for resilience or maintenance outcomes, and committees have urged a rebalance between building new defences and looking after what's already in the ground. In our context, the *"defences"* in question are the network of drainage channels. Letting them silt up is analogous to letting a flood wall crumble, it erodes flood resilience for want of relatively modest maintenance investment.

North Somerset's main rivers were considered by the EA to be relatively low-risk (in terms of immediate threat to large populations for fluvial flood risk only), which is likely why maintenance funding here was cut first. But from the local perspective, these rivers are critical infrastructure and provide a surface water flood risk benefit. The regional flood committees (RFCCs), which include local authority members, have raised concerns that maintenance in regions like Wessex was being de-prioritised because of national funding formulas.

Some potential avenues to address the funding gap include:

- **Internal Drainage Board (IDB) involvement:** If certain main river lengths were formally "demained" (reclassified as ordinary watercourse), the local IDB could take them into its maintenance program. IDBs levy drainage rates on landowners and a special levy on councils to fund their operations. In theory, the North Somerset Levels IDB could adopt some of these channels and increase its levy to cover the cost. However, demaining is a formal process requiring consultation and agreement, it hasn't happened yet for these rivers. Also, shifting burden to

the IDB means ultimately local landowners and the Council (via the special levy) still pay, so it's just a different pocket of local funding. Demaining might make maintenance more locally accountable but doesn't miraculously bring new money unless accompanied by a one-off transfer (ADA has argued any demaining should come with either a good standard of maintenance at handover or funds to achieve it).

- **PSCA Cost-Sharing:** Under a Public Sector Co-operation Agreement, the EA might pay the Council or IDB to do specific tasks on a main river. The EA uses PSCAs elsewhere to leverage local authorities' or IDBs' capabilities, sometimes reimbursing costs or providing materials. Given the EA's budget issues, any such payments are likely to be partial. For instance, the EA might agree to cover a fraction of the contractor cost if the Council provides the manpower or project management. This could stretch limited funds further. North Somerset Council could explore a PSCA where, say, it agrees to carry out weed-cutting on a river and the EA chips in what it can. This might make sense for one-off or pilot projects but is not a sustainable long-term funding solution unless the EA commits funds each year.

- **Grants and Partnership Funding:** Occasionally, there are competitive grants or partnership funds for related objectives (habitat restoration, natural flood management, climate adaptation) that could indirectly support maintenance activities. For example, a scheme to create a wetland could involve maintenance of a channel as part of it, thereby achieving both environmental and flood benefits with external funding. The Council is alert to opportunities to "piggy-back" maintenance under other funding. The downside is these are typically one-time project funds, not recurring monies for routine work. They also often require outcomes beyond just flood risk (e.g. biodiversity gains), which may not align with every maintenance need.

Crucially, North Somerset Council has not been allocated any additional funding for main rivers. The EA's withdrawal has effectively left an unfunded responsibility gap. The Council's stance is that, without new funding from central government, it is not feasible for the Council to replace the EA's maintenance role in the long term. We can perhaps manage short-term reactive works to deal with hotspots, but absorbing the full program on a permanent basis is beyond our means without cutting other services.

This situation strengthens the case for lobbying and collaboration. The Council is likely to advocate for increased EA maintenance funding (so that the Agency continues to do its job here) or for a dedicated resource to local bodies if they are to take on these rivers. The underfunding of maintenance has been highlighted by Regional Flood Committee chairs and the National Audit Office, as well as Parliament's committees. In essence,

bridging the maintenance funding gap is imperative to avoid false economy, a point made by the Association of British Insurers and others, noting that every £1 spent on maintenance can save many times more in avoided flood damage down the line.

Legal and Liability Considerations

The shift in maintenance responsibilities raises several legal questions. The Environment Agency's powers and liabilities merit examination. The EA's authority over main rivers comes primarily from Section 165 of the Water Resources Act 1991, which (in simplified terms) gives the Agency permission to do flood defence works on main rivers. These are permissive powers, not duties which is a long-standing principle in flood law. Because of this, if the EA decides not to carry out maintenance on a given main river, it is generally within its legal rights. One cannot easily compel the EA to exercise its permissive powers. Historically, courts have held that authorities with permissive flood powers (like the old river boards) can use their judgment and are not negligent simply for failing to act, unless perhaps they make the situation worse by intervening improperly. Here, the EA would argue it is simply refraining from action, which the law allows.

However, there is an angle of duty of care and reasonable expectation. The EA does have an overarching duty under Section 6 of the WRA 1991 to "exercise a general supervision" over all matters relating to flood defence. Some might argue that completely abandoning maintenance on a river that has been actively managed for decades could be inconsistent with that general supervisory role. Additionally, if representations were made (promises in public strategies, etc.) that certain rivers would be maintained, there could be a public law argument about legitimate expectation. These are nuanced points and likely, the EA has been careful not to guarantee maintenance in perpetuity anywhere. The ADA mentioned *"unresolved statutory questions"* about cases where maintenance is stopped. ADA's response to DEFRA's guidance suggested that guidance should explicitly cover the situation in which the Agency decides to stop maintenance on the lower reaches of a Main River and how to enable others to take over. This implies concern that the legal framework isn't clear on what happens if the EA just pulls out without formal demaining or agreements.

From a liability standpoint, the EA likely enjoys statutory immunity for flood management decisions. Thus, if flooding occurs after they withdrew maintenance, affected parties would have an uphill battle claiming the EA was negligent, since the law does not impose a duty to maintain. Practically, this means residents looking for compensation might instead pursue riparian owners (as noted earlier, one can claim against a landowner who fails to maintain their stretch if it causes damage). But many riparian owners might be small farmers or householders with limited means or knowledge.

For North Somerset Council, the legal position is that we have no *obligation* to take on main river works, but if we choose to, we must do so lawfully. Under the WRA 1991 and the Land Drainage Byelaws, any works in, over, under or near a main river (like altering a bank, dredging, or building a structure) typically require the EA's consent (now usually in the form of an Environmental Permit for Flood Risk Activities). The Council is not exempt from this, except in an emergency where immediate action is needed to protect life or property, in which case work can precede consent with retrospective notification. Therefore, any planned maintenance the Council might undertake on a main river would involve an administrative step of getting the EA's permission. The EA has indicated it is willing to cooperate (it would likely welcome the Council or IDB helping to manage these rivers, and would issue consents or enter PSCAs to facilitate it). But this process could be a barrier for rapid or flexible action. It introduces bureaucracy that normally doesn't exist for our own ordinary watercourse duties.

Moreover, if the Council does carry out work on a main river, it could also assume some liability for that stretch. For example, if the Council maintained part of a river and that inadvertently caused downstream siltation that flooded someone, the Council might be liable for those damages because it undertook the work (even though it had no duty to act, once you do act, you must act competently). Similarly, any environmental harm caused (say fish killed due to de-oxygenation from works) could potentially land on the Council's shoulders (or at least its reputation) rather than the EA's, since we executed the activity. This is a classic dilemma: stepping in might reduce one risk (flood) but open up another (legal or environmental liability).

For riparian owners, as we've stressed, the law says they must not let their section of river deteriorate to the point of causing obstructions. With the EA stepping back, there may be an expectation that landowners start performing tasks like weed removal or minor de-silting. Legally, if a landowner does nothing and their section becomes a problem, the EA could use its enforcement powers on a main river. The EA's powers under the WRA allow it to serve notice on a person requiring them to remove an obstruction or (failing that) to do the work and recover costs. It's rarely used except for things like illegal trash dumping, but it exists. We could end up in an odd situation where the EA is no longer "getting its hands dirty" but might still issue enforcement letters telling others to clear the river. This is speculative, but possible. If many riparian owners simply cannot afford or arrange maintenance, enforcement would either be widespread (unlikely due to resource) or the problem will persist. Some landowners might also question, if the EA with all its funding couldn't justify doing this work, how are private individuals expected to? It could lead to friction and non-compliance, possibly even legal disputes between neighbours (for instance, if one landowner clears their stretch and feels a neighbour's neglect is flooding their land, that could become a civil dispute).

Emergency powers are a special case: During a flood emergency, the authorities have fairly broad powers to do what is necessary. The EA can under WRA 1991 (and Civil Contingencies Act 2004) take emergency action on any watercourse if urgent. The Council under the Civil Contingencies Act and Local Government Acts can also do whatever is needed to save lives or property in immediate peril. So if a major flood is happening, anyone can jump in to clear a blockage without waiting for formal consent. But this is a last resort scenario as by the time emergency powers are invoked, you're already in a flood fight. We would prefer maintenance prevents reaching that stage. The worry is, if roles are unclear, two things could happen in a developing crisis: **(1)** Everyone assumes someone else will act and no one does in time (e.g., Council thinks "it's EA's river" while EA staff have no orders to respond), or **(2)** the Council acts but then gets tangled in aftermath questions about whether it had authority (if, say, the emergency was borderline). Realistically, in a dire situation the Council would act first and sort permissions later but it's not a comfortable legal position.

In light of these issues, North Somerset Council and others are seeking clarity and formal agreements. Ideally, before the EA fully withdraws, there should be a Memorandum of Understanding or some document spelling out who will do inspections, how consents will be expedited if we need to work, and how liability is shared or handled. ADA and the Local Government Association have been pushing for such guidance. The current state, however, is a bit "grey".

One legal mechanism to clarify roles is "de-maining", which was mentioned earlier. If the EA formally demains a river, it legally ceases to be a main river and becomes ordinary, and then the IDB or Council can adopt it under their powers. With that would come legal responsibility (not mandatory but de facto since it's now under local jurisdiction). ADA's advice to DEFRA was that if enmaining/demaining happens, it must ensure maintenance doesn't slip through cracks. In our case, no demaining has occurred yet; the EA has simply ceased some activities on main rivers that remain legally main rivers. This is perhaps the worst of both worlds legally: responsibility still officially lies with the EA (since they didn't change the designation), but they aren't exercising it, and others legally can't fully take over either. This limbo is what we need to resolve.

Environmental Implications

From an environmental standpoint, the impacts of halting maintenance are mixed but largely negative for the current ecosystem balance. On one hand, if humans step back, a river will tend to "re-wild" itself to some degree. We might see more wetland vegetation like reeds, and less of an artificial canal-like appearance. This could benefit certain species: for example, water voles prefer slow, reedy channels; some bird species like snipe or reed warblers thrive in marshy conditions. One could argue that reduced clearance allows a more natural habitat structure to develop (as long as the water

doesn't become too stagnant). There is something to be said for letting nature take its course, however, one must consider that these are not truly natural rivers but engineered drains that many semi-natural habitats now rely on. The negative effects likely outweigh the limited "re-wilding" benefits in this case:

- **Loss of Open Water and Aquatic Habitat:** Across North Somerset open water habitat in streams and rhynes is already declining due to lack of maintenance. If maintenance stops, open water sections will shrink further. This affects species that need open water. For instance, fish populations (e.g. eels, sticklebacks, and trout in some upper reaches) will suffer if the water is choked and oxygen-depleted. Eels migrate through our rhynes; heavy weed growth can impede their movement and lower oxygen levels at night (when plants respire). Extreme weed blooms in summer can lead to de-oxygenation of water (especially during warm weather), which can cause fish kills or force fish into small clear pockets. We could see incidents of fish dying or local extirpation of sensitive species if conditions deteriorate. Also, kingfishers and other predators need open water to hunt, a continuous mat of plants means they cannot see fish or dive, so they abandon such stretches.

- **Water Quality Decline:** Flowing water tends to carry pollutants away and maintain oxygenation. Stagnant or slow-moving water in a clogged channel will have longer residence time for any pollutants (e.g. excessive nutrients in agricultural runoff and urban contaminants). Sediments will accumulate on the bed, potentially binding pollutants like heavy metals and phosphorus. In a well-maintained channel, those sediments might be periodically flushed or removed; in an unmaintained one, they sit and can be released in a toxic pulse during disturbances. Additionally, dense vegetation can cause *eutrophic conditions* where lots of plant material that eventually dies back. When masses of weed die in autumn, their decomposition can suck oxygen out of the water, creating anoxic conditions. Algal blooms are also more likely in slow, nutrient-rich waters, further harming water quality and aquatic life.

- **Habitat Changes in Adjacent Land:** Many of North Somerset's rhynes are part of designated conservation sites (e.g. parts of the Tickenham, Nailsea and Kenn Moors are a Site of Special Scientific Interest for their wetland habitat). These areas rely on a delicate balance of water levels. Active water level management (including maintenance of channels and control structures) has been part of preserving those wetlands. If main rivers are not managed, water levels might become too high for too long in some areas, converting what used to be seasonally wet meadows into more permanent swamps (changing the plant communities). Conversely, if blockages cause water to divert or not reach certain ditches, some areas could become *drier* than they should, allowing scrub to

encroach on wet grassland. Both situations can degrade the rare habitat those SSSIs were designated for. In essence, a sudden change in management regime can shock an ecosystem that has adapted to regular human intervention. We might lose the *"mosaic"* of habitats; open water, shallow margins, wet meadow and end up with either monotonously overgrown ditches or over-dried ones.

- **Invasive Species Proliferation:** Lack of maintenance can also allow invasive non-native species to get a stronger foothold. One major concern already present in North Somerset is floating pennywort, an extremely invasive aquatic plant (more on this in the next section). If regular monitoring and clearance lapses, pennywort or others like Himalayan balsam or Australian swamp stonecrop can spread unchecked, which then further harms native biodiversity and can exacerbate flood risk (pennywort forms mats that block water flow). The Council's riparian guide lists floating pennywort and other invasive plants as present in our area, noting landowners have a responsibility to prevent their spread. Without coordinated maintenance, tackling these invasives is much harder.

- **Floodplain Connectivity and unintended effects:** In some cases, letting a river naturalise could create new wetland features that are beneficial, but in our context, it's more likely to cause negative flood outcomes. Higher normal water levels mean that minor rain can spill water into areas that aren't adapted to frequent flooding, think of farmland or back gardens that could be waterlogged more often. Frequent inundation can kill trees that aren't accustomed to standing water (for instance, if a field hedge gets its roots waterlogged for months due to a clogged ditch, those hedgerow trees might die). So we could see changes in landscape vegetation over a few years with perhaps more reed and rush in fields, fewer healthy hedgerows or trees along watercourses (ironically, trees might fall into the river as banks stay saturated, causing more blockages).

It's important to realise these rivers are hybrid socio-natural systems. They aren't pristine rivers; they were created or altered for drainage. Many wildlife species in the Levels and Moors have come to depend on the *managed* state of these watercourses (for example, certain rare aquatic plants that grow in clear water ditch segments that farmers maintain). A sudden cessation of management is likely to cause a decline in those species. Ideally, any change in maintenance would be done in a controlled, monitored way to observe environmental impacts but here it seems to be happening by default rather than design.

One might ask, could we harness this as an opportunity for more nature-based solutions? Perhaps in some cases, allowing vegetation in a channel could slow water and create upstream storage, reducing peak flows. However, that only helps if flooding

upstream is tolerable (i.e. you intentionally allow a flood in a sacrificial area to protect another). Unplanned neglect doesn't guarantee the flood will happen where convenient.

If anything, blocked channels might cause flooding in undesirable locations (like someone's home rather than a field). A properly designed natural flood management scheme would involve re-meandering, creating planned wetland storage, etc., not just letting every ditch grow wild.

It's worth noting that it is unknown if the EA's reduction in maintenance came with an environmental assessment specific to these rivers. Normally, projects or policy changes affecting watercourses might undergo a Strategic Environmental Assessment (SEA) or at least consideration under the Habitats Regulations if protected sites are involved.

Flood Risk Management Implications

Reducing maintenance on main rivers elevates a spectrum of flood risks that must be managed. The most direct impact is an increased likelihood of flooding from these watercourses, even in moderate rain events. Let's break down the risks to different receptors:

- **Residential and Commercial Properties:** North Somerset has numerous homes and businesses situated in or near the floodplains of the main rivers. For instance, parts of Clevedon (around the Land Yeo) include residential areas at low elevation; portions of Weston-super-Mare near Uphill and Oldmixon are adjacent to the Uphill Great Rhyne and vulnerable to high rhyne levels. Many of these areas have not experienced frequent river flooding in recent years, in part due to regular channel maintenance. If maintenance lapses, the probability of those defenses overtopping or failing increases. It's important to note that in many of these places, surface water flooding and main river flooding are interrelated, if the main river is full, the drainage network in the town cannot empty, which causes more widespread urban flooding. So, a clogged river can essentially translate to higher baseline flood risk for an entire community.

- **Critical Infrastructure:** Drainage infrastructure itself is at risk, pumping stations, sewage treatment works, etc. If rivers aren't maintained, outfall flap gates might be submerged more often, causing water to back up into sewer systems.

- **Highways and local roads:** Many smaller roads cross watercourses. Flooding of roads is dangerous (vehicles can be swept or stranded) and disruptive. If maintenance lapses, certain spots could flood regularly, requiring more frequent road closures. For instance, a B-road crossing the Banwell River might see water over-topping more often. The Council then bears the cost of traffic management

and repairs (as flowing water can damage road surfaces). Also, as mentioned, highway drainage is compromised when receiving waters are high. North Somerset Council has had cases where heavy rain caused roads to flood not because the rain on the road was so exceptional, but because the ditch the road drain led to was full and stagnant essentially hydraulic locking the drain. With less main river maintenance, expect more of these occurrences.

- **Upstream/backwater effects:** Flood risk is not just immediately along the main river. Lack of maintenance can cause a backwater effect, raising water levels upstream into the network of ditches and streams feeding the main river. So even areas a few kilometres away that drain toward the main river can suffer higher flood risk because the "plug" is in place downstream. For example, reduced conveyance in the River Kenn could cause its upstream feeder ditches on Kenn Moor to fill up and overspill into fields or toward Nailsea. Similarly, the Land Yeo backing up can affect surface water ponds and culverts within Clevedon town.

Another consideration is insurance. If flooding becomes more common, residents might struggle with higher insurance premiums or excesses. While this is not directly the Council's liability, it is a community impact. We might see more people turning to the Council for help or advice after flooding if insurers penalise them, which becomes a socioeconomic issue (linking to equality impacts).

Reputation and public confidence are intangible but very important. The public often doesn't draw fine lines between the EA and the Council, they just see "the authorities". If rivers become overgrown and flooding occurs, people will likely say "the council/they let the river get into that state". We can explain the legal distinctions, but in the court of public opinion, that may not absolve us. The Council risks reputational damage if it's perceived that we allowed flood risk to increase without doing something. This could manifest in angry public meetings, negative press, or pressure on councillors.

Reputational issues also matter because they can erode trust: in future climate adaptation initiatives, we need the public on board, but if they've lost confidence in local authorities' ability to manage basics like drainage, it's harder to get buy-in for other measures.

Therefore, a key part of risk management here is communication and expectation-setting. The Council will likely have to engage in public information efforts, explaining to communities what's happening, what the Council can and can't do, and encouraging preparedness. If we just let the situation play out silently, we risk appearing negligent. It may be necessary to openly advocate (as we plan) for more resources or the EA to reconsider, showing residents we are fighting their corner. Otherwise, we might face the brunt of backlash for something largely outside our budget control.

Each additional year of no maintenance will compound the flood risk. Sediment doesn't stop accumulating; weeds once established often become perennial issues (rhizomes, seeds in the system, etc.). So the risk curve likely steepens with time. The first year might see some minor flooding; by year 3 or 4 of neglect, we could have major capacity loss.

In practical terms, we will likely add this issue to the Council's Corporate Risk Register as a high-level risk (if not already). It touches on community safety, financial risk, and service delivery (emergency planning). Regular monitoring at senior management level will be needed. It also intersects with our Climate Change risk assessments as increased flood frequency from this cause should be considered in our adaptation planning.

Equality and Social Implications

Flood risk does not impact all communities equally, and changes in maintenance could disproportionately affect vulnerable groups. Under the Equality Act 2010, public bodies like the EA and the Council have a Public Sector Equality Duty (PSED) to consider how their actions (or inactions) affect people with protected characteristics (such as age, disability, race, etc.) and to try to avoid unfair, disproportionate impacts. One concern is whether the EA, in deciding to withdraw maintenance, conducted an Equality Impact Assessment (EqIA) to examine these implications.

From the Council's perspective, we can anticipate several equality implications of increased flood risk and reduced maintenance:

- **Low-Income and Socially Deprived Communities:** Research has shown that more deprived areas often face higher flood risk and have fewer resources to recover. In North Somerset, some of the most at-risk flood areas coincide with lower-income neighbourhoods. For example, parts of Weston-super-Mare (such as the Oldmixon area, near Uphill Rhyne) include social housing and communities that rank higher on indices of deprivation. If flooding becomes more frequent there, these residents may struggle more than wealthier households to bounce back. They may not have insurance (or face high premiums), and they lack savings to replace damaged belongings or pay for temporary accommodation. This can trap such families in a cycle of hardship. Similarly, rural farming communities may not be "deprived" in the urban sense, but a small tenant farm family hit by regular field flooding could face economic ruin without support. When maintenance was routine, these floods might have been prevented. Now, those with the least capacity to adapt bear more risk. The Environment Agency's own research acknowledges *"more deprived areas disproportionately face more*

flood risk, especially in coastal and rural areas", which is precisely the scenario we risk exacerbating.

- **Elderly and Disabled People:** These groups are physically more vulnerable during floods. Elderly individuals, especially those living alone or in bungalows in low-lying areas, may have difficulty evacuating or protecting their property. Disabled residents (mobility impairments, visual impairments, etc.) may be unable to respond quickly to flooding or may suffer health issues if their home is damp or without power for long periods. If maintenance withdrawal leads to floods in areas with concentrations of older residents (perhaps retirement bungalows often built on flat sites) or near care homes, then those people face disproportionate danger. There are also mental health impacts as the anxiety and stress of living with heightened flood risk can severely affect vulnerable individuals' well-being. Someone with an existing mental health condition or cognitive impairment might experience heightened confusion, fear, or trauma from flood warnings or events.

- **Access and Mobility:** Overgrown waterways can indirectly affect those with disabilities in terms of access. Many drainage paths or riverside footpaths could become inaccessible if water levels are constantly high or vegetation encroaches. While this is not as significant as flood danger, it's an equality issue if, say, a wheelchair user can no longer use a riverside trail they enjoyed because it's now boggy or blocked due to lack of upkeep. The Council has duties under the Highways Act to maintain public rights of way; if paths adjacent to watercourses become impassable, we might have to divert or close them, which disproportionately affects people who rely on those paths (potentially those with limited transport who used them as walking routes).

- **Rural Isolation:** Rural communities often have older populations and fewer services. If a hamlet or village is affected by increased flooding, it might isolate people who are already isolated. For instance, if a minor road floods more often, an elderly resident might be unable to leave their home for groceries or medical appointments. These communities can also feel forgotten if attention and resources concentrate on urban problems. There's a fairness issue in that the EA's triage of maintenance tends to favour protecting dense urban areas (more houses per mile of river). That leaves sparser rural settlements out, yet those communities are just as "at risk" on an individual level and often have less flood protection infrastructure to begin with. It's worth noting that many rural residents are older (some moved there for retirement).

- **Mental Health and Well-being:** This cuts across all demographics but is particularly poignant for those who have experienced past flooding. The uncertainty and worry can be debilitating. Vulnerable groups, such as those with

anxiety disorders or PTSD from previous flood events, are at risk of serious mental health declines. There's an equality aspect in that services need to be aware and supportive.

It's also relevant to mention national insights: a government research report noted that "more deprived areas…face more flood risk" and that recent investments have tried to address this inequality. If maintenance cuts reverse that progress, it's a step backwards in social justice.

Sources:

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- Social Deprivation and Flooding (EA/DEFRA research): *"More deprived areas disproportionately face more flood risk, especially in coastal and rural areas, compared to less deprived areas."* assets.publishing.service.gov.uk