CONSTRAINTS TO DEVELOPMENT

- what the planning white paper should have said
Contents

Executive summary 4
1. Introduction 6
2. The white paper’s view of constraints 7
3. Protected areas 10
4. Flooding and sea defence 15
5. Water supplies 19
6. Food 23
7. Biodiversity 26
8. Transport 30
9. Conclusions 37
The Smart Growth UK Principles - 2007

Plan Compact Communities - Smart Growth promotes well-designed, compact, functional communities and rejects land-hungry sprawl and wastage of greenfield land.

Strengthen and direct development towards existing communities - Smart Growth emphasises use of communities’ existing infrastructure and resources and conserves open space and urban fringes.

Provide sustainable transport choices - Smart Growth reduces dependence on road transport and increases opportunities for walking, cycling and public transport. Towns, cities and villages should be pedestrian-friendly and rail-accessible.

Protect the unbuilt environment - Smart Growth believes our countryside and open space is a precious environmental, social and economic resource. It should be protected and husbanded if we are to move towards a more sustainable society. Squandering it will create, not solve, problems for our towns and will do nothing for our national economy.

Foster distinctive, attractive communities with a strong sense of place - Smart Growth encourages communities to develop their own identity and vision, respecting their cultural and architectural heritage. It supports human-scale development and opposes large, monolithic developments, out-of-town retailing and “big box” architecture.

Mix land uses - Smart Growth supports a sensible mix of land uses to suit communities and which meet their daily needs.

Encourage communities to flourish and grow - Smart Growth supports mixed-income, mixed-age, inclusive communities that take responsibility for their own development. Local economies should be developed to make them more self supporting.

Create a range of housing opportunities and choice - Smart Growth supports quality living for people of all income groups, ages and needs. We want human-scale development at appropriate densities to support sustainable transportation and local facilities.

Make development decisions fair and economically inclusive - For communities to successfully implement Smart Growth they must ensure all three sectors of the economy – public, private and community - function successfully and sustainably.
Executive summary

Land is a precious and irreplaceable asset, yet the planning white paper’s main concern is making more of it available for housing development. It accepts there should be constraints on this, but its treatment is inadequate in some areas and wholly lacking in others (Section 1).

The white paper’s treatment of the constraints on development is cursory and its plans for zonal planning simplistic. Its treatment of those it does identify is wholly inadequate (Section 2).

The proposals would not even protect areas which current policies regard as protected. The treatment of them is cursory and inadequate (Section 3).

Although climate change is making flooding more serious and more frequent, the white paper’s apparent strong line on the issue is partial and inadequate. The vital issues of coastal management and sea defence are completely ignored (Section 4).

Completely ignored too is the huge constraint that lack of water supply should impose in some regions and the damage already being caused to water bodies by over-development. Also being ignored in strategic planning are the deficiencies in waste water treatment which are inflicting further damage on the water environment. These issues should be central to any consideration of constraints on development (Section 5).

The United Kingdom is unable to feed itself from its own production and the problem is becoming worse. Yet the white paper proposes extensive development on farmland which now appears to receive no protection from the planning system. At a time of rising population, international instability, trade protectionism and rising national debt, it makes no sense to impose this further stress on our environment and our economy (Section 6).

The natural world and its biodiversity have very low priority in the proposals despite their importance to our prosperity, well-being and survival. The white paper depends on unproven plans for “net-gain” and “offsetting” despite lack of any evidence they work consistently and effectively (Section 7).

One of the most serious absences in the white paper is transport, despite its climate impact and its central role in planning. Freight planning has been totally centred around unsustainable modes and major development has largely ignored the need for transit-oriented development if we are ever to tackle the climate crisis (Section 8).

Climate change is perhaps the major existential challenge facing our civilisation but the white paper only pays lip-service to countering it. We believe planning policy should play a central role in this and that needs to include hitherto unconsidered constraints on development like soil (Section 9).

The planning system needs to be an holistic and inter-dependent system of controls which recognises the major constraints our environment places on development. To put
narrow concerns about house building numbers in front of that would be a fundamental failure of government (Section 10).

We recommend:

(i) that the white paper be rewritten with a fundamental focus on the nature and importance of the constraints on development, particularly those associated with land.

(ii) a complete rethink of the white paper’s approach to protected areas, with a view to it promoting clear and proportionate protection to the full range of England’s protected areas.

(iii) that the white paper stress the need for at least “great weight” to be given to flood and sea defence risks when assessing local plans and individual proposals for development.

(iv) that:

- in water-stressed areas, areas already with high sewage overflows, with insufficient capacity at waste water treatment plants and where rivers are not meeting Water Framework Directive good ecological status, local authorities should be allowed to adopt a lower local plan housing target than the standard formula suggests unless the Government provides the necessary funding for sewage treatment plants, transfer schemes, reservoirs and desalination plants;
- in addition, water companies should be required to review their Water Resource Management Plans if the revised, much higher, housing targets are imposed.

(v) that:

- the white paper give clear recognition to the availability of water supplies and the effect of abstraction on the environment when creating local plans;
- the new sustainability test proposed in the white paper should directly refer to water supply and pollution and make clear that plans must not be adopted where they fail this test.

(vi) that, if the proposed zonal system goes ahead, all Grades 1, 2 and 3 agricultural land should be automatically safeguarded by “protected area” status and, if it does not, that national policy be amended to give protection to such land.

(vii) that any use of net gain ideas must acknowledge the uncertainties in the measurement and success of these methods elsewhere, and the almost total lack of UK experience with them to date.

(viii) that protection of soils be added to the climate change objectives of the white paper.
1. Introduction

Land is a precious and irreplaceable asset, most particularly in a densely populated country like England with thousands of years of intensive use behind it. No-one is making any more land, so we must take the very greatest of care of the land we have.

The recent English planning white paper Planning for the Future\cite{1} has a great deal to say about land, mentioning it almost a hundred times. But the vast majority of those mentions are simply about making more land available for housing development. “We wish to increase the supply of land available for new homes where it is needed to address affordability pressures, support economic growth and the renewal of our towns and cities, and foster a more competitive housing market,” it says (1.12). But this does not address the shortage of land in England, nor its damaged or vulnerable environmental condition, nor the growing threats to it. It merely proposes changing the use of other sorts of land to housing.

The white paper does admit that there are constraints to this process, though it only makes eight mentions of “constraints”. But it believes such constraints are few and nowhere does it spell out with any clarity what it considers the constraints are or how they constrain development.

We believe that any planning policy which ignores these threats is itself a significant threat to our well-being. We live in a country with a badly degraded environment which faces existential threats from climate change, food shortages etc.. We believe the white paper should be rejected by the Government and that new policies should be formulated which take account of the constraints which it admits exist.

Any consideration of land constraints on development should include the following, non-exhaustive, list:-

- Protected area status
- Water supplies
- Agricultural produce
- Biodiversity
- Flooding/sea defence
- Remoteness from rail-based public transport
- Climate change
2. The white paper’s view of constraints

The white paper makes a commitment to factor in land constraints, but only in the context of house building.

“We propose ... a new, nationally-determined, binding housing requirement that local planning authorities would have to deliver through their local plans,” it says (1.20). “This would be focused on areas where affordability pressure is highest to stop land supply being a barrier to enough homes being built. We propose that this would factor in land constraints, including the green belt, and would be consistent with our aspirations of creating a housing market that is capable of delivering 300,000 homes annually, and one million homes over this Parliament.”

So, essentially, it considers that constraints on development of land should only determine where houses are built, not the protection of land itself. This is a recipe for environmental destruction on the grand scale. The white paper doesn’t even define precisely what it considers the constraints on development for housing are, merely scattering a handful of references through the text.

**Growth areas:** The definition of the proposed “growth areas” (2.8) includes a stipulation that sites included in this category in local plans would automatically have outline approval, so there would be no possibility of objecting to development once the plan was imposed. The paragraph has little to say about any constraints at all apart from: “Areas of flood risk would be excluded from this category (as would other important constraints), unless any risk can be fully mitigated”. However, it makes no attempt to say what “other important constraints” might be.

**Renewal areas:** The definition of “renewal areas” (2.8) includes a presumption in favour of planning permission and makes no mention of constraints at all and another alternative, even more extreme, proposal (2.11) suggests combining growth and renewal areas and “to extend permission in principle to all land within this area” (our italics). This would, presumably, recognise no constraints at all.

**Protected areas:** The proposed “protected areas”, however, would enjoy a few specified “development controls to ensure sustainability” which it says would be “more stringent” than the laissez faire permitted elsewhere. Here the white paper finally gives a few hints as to what constraints might be.

“This would include areas such as green belt, areas of outstanding natural beauty (AONBs), conservation areas, local wildlife sites, areas of significant flood risk and important areas of green space,” says paragraph 2.8. “At a smaller scale it can continue to include gardens in line with existing policy in the National Planning Policy Framework (NPPF). It would also include areas of open countryside outside of land in growth or renewal areas. Some areas would be defined nationally, others locally on the basis of national policy, but all would be annotated in local plan maps and clearly signpost the relevant development restrictions defined in the National Planning Policy Framework.”
What areas would be constrained? The constraints specified here are:-

- green belts;
- areas of outstanding natural beauty;
- conservation areas;
- local wildlife sites;
- areas of significant flood risk;
- “important areas of green space”;
- gardens;
- areas of open countryside outside of land in growth or renewal areas.

Whether all or only some of these would apply in growth areas is unclear. There are also remarkable omissions from this list – national parks even. If taken literally, it would mean all undeveloped land in the growth areas defined in local plans would either have outline planning permission for development straight away, or would have it imposed when so defined in the frequent updates of local plans the white paper demands.

Paragraph 2.25 offers a little more discussion of what constraints might be in the context of the new standard method of imposing the new annual national target of 300,000 new homes (actually 337,000 according to the proposed algorithm). It suggests, inter alia, the target should be subject to a number of bullet points including:-

- “the extent of land constraints in an area to ensure that the requirement figure takes into account the practical limitations that some areas might face, including the presence of designated areas of environmental and heritage value, the green belt and flood risk. For example, areas in national parks are highly desirable and housing supply has not kept up with demand; however, the whole purpose of national parks would be undermined by multiple large-scale housing developments so a standard method should factor this in”;

- “the opportunities to better use existing brownfield land for housing, including through greater densification. The requirement figure will expect these opportunities to have been utilised fully before land constraints are taken into account”.

This is a scatter-gun document, but possibly means that two further categories, were the Government to so decide, might be added to the list:-

- national parks;
- designated areas of environmental and heritage value.

The casual nature of these references is all too symptomatic of the careless drafting of the white paper which shows little interest in anything apart from over-ruling any local or environmental objections to central government imposition of house building numbers on local planning authorities.

What effect would constraints have? Proposal 4, of which these paragraphs are a discussion, suggests that the imposed housing requirement for the next 10 years “would factor in land constraints”. Local authorities would be responsible for allocating enough
land to meet these instructions and, given the importance differences that “constraints” might make (if this is to be taken literally), it’s astonishing how ill-defined they would be.

“The future application of the formula proposed in the revised standard method consultation will be considered in the context of the proposals set out here,” says paragraph 2.29. “In particular, the methodology does not yet adjust for the land constraints, including green belt. We will consider further the options for doing this and welcome proposals.”

So the white paper explicitly admits that the vital question of constraints on development has not yet even been seriously addressed, though the Government still intends to introduce a new “standard method” which, in its initial iteration, ignores them. The white paper makes other casual references to some individual constraints like green belts, and we will consider some of them individually, but the list is wholly inadequate. It is shocking that a white paper should have been published without even mentioning important constraints which include existential threats to national well-being.

We recommend that the white paper be rewritten with a fundamental focus on the nature and importance of the constraints on development, particularly those associated with land.


3. Protected areas

The white paper has a significant amount to say about “protected areas”, though cynically perhaps these are not what have hitherto been recognised as protected areas. Instead, the white paper’s protected areas would form the relatively few areas where permission for development would not be accelerated by the automatic planning permission in principle in growth areas (as soon as sites appear in local plans) or by the statutory presumption in favour of development being granted in renewal areas.

What are “protected areas” at present? Certain sorts of English land are presently subject to a range of protections and the National Planning Policy Framework (paragraph 11) does give a definition of which areas should, in theory, receive some protection from its demands for the “objectively assessed needs for housing” that the Framework imposes on local planning authorities. Its Footnote 6 defines what these areas are:

“The policies referred to are those in this Framework (rather than those in development plans) relating to:

- habitats sites (and those sites listed in paragraph 176) and/or designated as sites of special scientific interest (SSSI);
- land designated as green belt, local green space, an area of outstanding natural beauty, a
- national park (or within the Broads Authority) or defined as heritage coast;
- irreplaceable habitats;
- designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 63);
- and areas at risk of flooding or coastal change.”

Paragraph 176 amplifies this to include the following as habitat sites:

- “potential special protection areas and possible special areas of conservation;
- listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential special protection areas, possible special areas of conservation, and listed or proposed Ramsar sites.

Footnote 63 identifies a few other heritage sites which should be protected as: “non-designated heritage assets of archaeological interest, which are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets”.

All these have been theoretically protected from development since 2012, although substantial development has already taken place in some of these areas, notably in England’s 14 green belts and areas at risk of flooding.
What areas does the white paper propose protecting? It is unclear whether the “protected areas” proposed in the white paper would cover all of these, or only some of them. As noted above, but worth repeating here, the white paper’s paragraph 2.8 appears to cover:

- green belts;
- areas of outstanding natural beauty;
- conservation areas;
- local wildlife sites;
- areas of significant flood risk;
- “important areas of green space”;
- gardens;
- areas of open countryside outside of land in growth or renewal areas.

This would exclude several important protected areas, but paragraph 2.25 may possibly add to this list:

- national parks;
- designated areas of environmental and heritage value.

Yet this leaves the white paper’s “protected areas” in a curiously vague position. Perhaps this is deliberate, to confuse opponents, but whatever the reason it is unforgiveable in a white paper which is supposed to be a prelude to legislation.

We could, perhaps, infer that “designated areas of environmental and heritage value” might include “habitats sites (NPPF paragraph 175) and/or designated as sites of special scientific interest” and just possibly “irreplaceable habitats”, though it’s far from clear. Perhaps they don’t.

So would that include the NPPF paragraph 176 sites: “potential special protection areas and possible special areas of conservation” and “listed or proposed Ramsar sites and sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential special protection areas, possible special areas of conservation, and listed or proposed Ramsar sites”?

“Areas of significant flood risk” now makes no mention of “areas at risk of coastal change”, so perhaps we could infer that also excludes areas at risk of coastal flooding.

“Conservation areas” and “designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 63)” have become merely “designated areas of environmental and heritage value” – and note that that is “areas” rather than “assets”.

On the other hand, the white paper insists that its protected areas would include “important areas of green space” (wholly undefined), “gardens” and “areas of open countryside outside of land in growth or renewal areas”. “Important areas of green space” might, or might not, be the same as the NPPF Footnote 6 and paragraphs 99-101 “local green space”. 
“Areas of open countryside outside of land in growth or renewal areas” is particularly uninformative. It appears to assume greenfield land in rural areas which gets designated as a “protected area” would be protected from development. This might sound unexceptional in itself, but the implications are huge. It means that any greenfield land in a “growth area” would essentially be open for development, even where it had yet to be designated for development in the current local plan. If only “areas of open countryside outside of land in growth or renewal areas” enjoys any sort of protection from development, it would mean that while growth area land identified for development in local plans would enjoy automatic outline planning consent, the rest of the greenfield land in such areas would effectively be zoned for eventual development without any obstacle from the planning system.

It is significant that the Government has not suggested what percentage of English land would be included in which category. That might make it possible to judge how much land would be made available for development and, indeed, once other policies were applied, to confine development to sustainable areas. It would be for local plans to define (Proposal 1) which land would be put into which category. What's less clear is whether local planning authorities themselves would have much say in this process and whether it would be revisited at every frequent revision of the plan.

**How effective would the proposed “protected areas” be?** Would such status actually give any real protection to the land in question? Given the weaknesses in the existing system of protection, which the white paper threatens to make worse, it can only be concluded that protection of protected areas would be significantly weakened.

**Green belts:** The white paper says that: “the existing policy for protecting the green belt would remain” (2.26). As recent research for CPRE has demonstrated, annual green belt house building had risen to over 8,000 annually by 2018 and has been expanding rapidly. “Exceptional circumstances” are becoming ever less exceptional.

“Our key findings show that the Government has broken its promise to secure the green belt,” concluded the CPRE report. “The NPPF has failed to protect greenfield land here from inappropriate development.”

So the assurance that: “the existing policy for protecting the green belt would remain” offers no actual assurance that “constraints” or “protected areas” would offer much in the way of actual protection. And that’s not only true for green belts.

**Areas of outstanding natural beauty:** AONBs too are coming under increased pressure for development. A report by the National Trust in 2015 highlighted research which showed that AONBs are coming under increased pressure from unplanned, inappropriate development. It found that local authorities with less than the “five-year housing land supply” imposed by Government were the main sources of pressure to release land for development in AONBs and other sensitive areas. It found decision makers had to give significantly less weight to the qualities of the areas than AONB partnerships and conservation boards expected.

The report found that, in 10 out of 15 cases, the “duty of regard” for AONBs was not formally noted in planning reports and, although most identified that the NPPF
demands that “great weight” should be given to AONBs, two-thirds did not demonstrably do so in practice. Where the Government judged local plans out of date, the correct AONB tests were not always applied and reports frequently failed to identify the NPPF policy exempting AONBs from the so-called “presumption in favour of sustainable development”.

“In some areas the integrity of AONBs is being challenged by incremental and cumulative development, where one poor development justifies the next,” concluded the report. “The legal precedent of the Highfield Farm, Tetbury, case (that it is possible for a pressing need for housing as a matter of principle to override the landscape protection that AONB policy normally provides, where there is a limited availability of alternative sites outside the AONB in the same authority) is proving problematic for AONBs.”

**National parks:** National parks, meanwhile, should enjoy the highest level of protection against all but the most essential development, but they too have come under pressure. It was wholly symptomatic of both the hurried way the white paper was drafted and its essential lack of interest in protecting land that the inclusion of national parks, which should be our most carefully protected landscapes, should have been forgotten in the list of constraints on development in protected areas in paragraph 2.8. Their inclusion in paragraph 2.25 looks like a panicky afterthought.

DEFRA’s Glover review of landscapes⁵ agreed that despair about what may happen to landscapes is not misplaced. “In the south-east of England in particular, the pressure of development is immense and may only get greater,” it pointed out. It recommended changes to the NPPF and a strengthened place for national landscapes in the planning system with AONBs given statutory consultee status.

“The ability to control and/or influence development that would have an adverse impact on our national landscapes is crucial,” it says. “We feel a number of areas of planning need addressing.”

**Habitat sites:** England has over 4,000 SSSIs which cover more than one million hectares (around half of which are in national parks or AONBs). Their state is monitored by Natural England and their overall condition has been worsening both inside and outside national parks and AONBs. According to the Campaign for National Parks⁶, 61% of English SSSIs and nearly 75% of them in England’s national parks are in unfavourable condition. Furthermore, the Glover Review noted that: “…according to the IUCN our National Parks and AONBs ‘only just’ met the nature conservation standards for international recognition” concluded the Glover Review.

The NPPF identifies SSSIs as Footnote 6 sites and its paragraph 175(b) says development should not normally be permitted – except “where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network” of SSSIs. The Framework says local wildlife sites should be identified in local plans as habitat sites (175) and sets out principles for protecting conservation areas.
The white paper has little to say about these areas other than claiming that, since 2010: “protections for environmental and heritage assets – such as areas of outstanding natural beauty, sites of special scientific interest and conservation areas – continue to protect our treasured countryside and historic places” (paragraph 1.8).

It claims (3.22) too that the reformed planning system would continue “to protect the places of environmental and cultural value which matter to us”. Paragraph 3.23 asserts that: “the planning system can and should do much more than this”. This, it says, is to be achieved via the 25 year Environment Plan, the Environment Bill, Local Nature Recovery Strategies, more street trees and unspecified stronger policies for managing flood risk, most of which lie outside the planning system.

**Conservation areas:** Conservation areas are also: “places of environmental and cultural value which matter to us”. There are over 10,000 conservation areas in England but, by last year, the number on Historic England’s Heritage at Risk Register had passed 500. The white paper says conservation areas would automatically be put in protected areas and paragraph 3.22 also makes vague assurances about them. Paragraph 3.29 goes further and says that conservation area (and listed building) status has worked well.

“We want to build on this framework as we develop the new planning system,” it says. “We envisage that local plans will clearly identify the location of internationally, nationally and locally designated heritage assets, such as world heritage sites and conservation areas, as well locally important features such as protected views.”

This is fairly surprising, given that the *NPPF* already demands that plans should set out positive strategies for sustaining and enhancing heritage assets. And despite protesting the system has worked well and the need to strengthen it, the white paper warns (3.31) it wants both to review and update the planning frameworks for listed buildings and conservation areas and to weaken them: “allowing, where appropriate, sympathetic changes to support their continued use and address climate change. In doing so, we want to explore whether there are new and better ways of securing consent for routine works, to enable local planning authorities to concentrate on conserving and enhancing the most important historic buildings. This includes exploring whether suitably experienced architectural specialists can have earned autonomy from routine listed building consents”.

We recommend a complete rethink of the white paper’s approach to protected areas, with a view to it promoting clear and proportionate protection to the full range of England’s protected areas.
4. Flooding and sea defence

Climate change is rapidly making flood risks throughout the UK more severe. Rainfall is becoming more concentrated and extreme events are becoming more frequent and more pronounced. Sea levels are rising and wave climates are changing. These challenges are set to intensify.

“Climate change is causing many extreme weather events to become more intense and frequent, such as heatwaves, droughts, and floods,” says the Meteorological Office⁷.

Are extremes events becoming more frequent?

Flooding: Given the increasing frequency of flood events and the number of homes which have been, and continue to be, built in flood-risk areas, insurers have become increasingly averse to providing flood cover to homes and businesses located in such areas. Responding to a Government announcement of a review of flood insurance in December 2019, the Association of British Insurers said its members were expecting to pay out £100m in claims from the South Yorkshire floods alone. Since 2016, insurance companies have organised a “Flood Re” scheme for people who live in such areas to obtain some kind of flood insurance - but only for homes built before 2009. Flats in leasehold blocks containing four or more homes are also excluded.

“So far 250,000 home owners have benefitted from the scheme, who would otherwise face difficulties in getting flood cover,” said ABI director-general Huw Evans⁸. “UK insurers, who set up Flood Re, and pay £180m per year to support it, will resist any attempts to widen the scheme to cover recent floodplain development.”

His comments reflect the weakness of the English planning system in resisting development in flood-risk areas. The National Planning Policy Framework devotes 11
paragraphs to avoiding development in areas at risk of flooding, including strategic flood risk assessment and a sequential test. But, as ever, these strong policies are all too often over-ridden by the Framework’s policies designed to build houses at any cost.

The Environment Agency has long been warning of the number of homes built, contrary to its advice, in flood-risk areas. One recent analysis\(^9\) suggested that 84,000 homes were built in high-risk zones in England between 2013 and 2018, with the annual total more than doubling over that period.

“We’re compounding the existing risk by continuing to build on the floodplain,” responded Professor Robert Wilby of the University of Loughborough. “The more we’re paving over natural areas the more we’re making it easier for water to move across the land and enter rivers.”

**Flooding and the white paper:** So the strong proscriptions on development in flood-risk areas are trumped by provisions to stimulate house building at whatever cost. Would the white paper make this any better?

At first sight, the white paper takes a strong line on such developments. Paragraph 2.8 says that “areas of flood risk” would be excluded from “growth area” status and “areas of significant flood risk” (a somewhat different definition) would be included in its “protected areas”. Paragraph 2.25 says distributing 300,000 new homes each year would have to have regard to a number of issues, including the extent of land constraints, including flood-risk. Paragraph 2.39 would require greater standardisation of technical information including flood-risk, but makes clear this is only to speed up approval of developments. Paragraph 3.20 discusses form-based types of permitted development which would include types of prior approval, including “avoidance of flood risk” as part of a “fast-track for beauty”.

More obviously concerned with stewardship is paragraph 3.23 which claims: “we are also assessing the extent to which our planning policies and processes for managing flood risk may need to be strengthened...” And finally, paragraph 5.30 says the Government: “will also consider what more can be done in cases where the Environment Agency’s flood risk advice on planning applications is not followed”, though it has been promising action on this for some years.

At first sight, the proposal to exclude “areas of flood risk” from areas designated as growth areas and to include “areas of significant flood risk” in protected areas looks like a firm proposal to end such dangerous development, whatever the house building imperative. But while that inclusion of “significant” could just be sloppy drafting, it may indeed be significant. We have no way of knowing.

The statement that distributing 300,000+ homes annually would only have to “have regard to” a number of issues including flood risk is extremely alarming. All too often a range of issues are given some regard during the approval process, then ignored thanks to the house building ambitions of the NPPF. One of these is flooding.

Faster approval of planning applications and prior approval as part of a “fast-track for beauty” are unlikely to reassure anyone that proper regard is to be taken of flood-risk.
Nor, given the rapid worsening of the risk, is anyone likely to be much reassured by possible strengthening of planning measures on flooding or action on flood-risk area development. Action needs to be definite, not possible.

Perhaps the best hope for action on flooding the white paper offers is the suggestion that areas of flood-risk, or significant flood-risk, would be included in protected areas and excluded from growth areas – and that such exclusions would be rigidly enforced and not ringed around with get-out clauses. As drafted, it fails to offer such reassurance.

**Coastal management and sea defence:** While the white paper is less strong than it should be on flood-risk issues, it is positively outspoken about the subject compared to its coverage of coastal change, management and defence. It is in fact entirely silent on the subject.

It could, perhaps, be argued that coastal flooding is covered by what it says on flood-risk in general and, although the two issues involve many separate issues, this is to some extent the NPPF approach. But the Framework does devote four paragraphs to coastal change and further paragraphs to protection of coastal environments. It makes clear this involves a range of issues including:

- the UK Marine Policy Statement;
- marine plans;
- integrated coastal zone management;
- natural flood management;
- avoidance of inappropriate development in vulnerable areas;
- effects of development on coastal change;
- the continuous and signed trail around the coasts;
- future risks to people;
- designated areas including coastal change management areas, heritage coasts;
- marine dredging.

As with inland flooding, climate change is exacerbating risks of marine flooding and coastal change but the issues are by no means the same. Sea levels are rising, severe storms and storm surges are increasing in severity and frequency and wave climates are changing. All these mean greater areas are at risk of inundation. Coasts are changing too due to erosion and other processes. The need to protect these sensitive environments is increasingly understood and modern sea defence is recognised as a dynamic activity, involving both fixed and “soft” defences which may involve dedicating large areas of undeveloped land to sea defence and coastal management.

All these issues are completely ignored by the white paper, despite the fact that most, if not all of them, must be constraints on development. As ever, it suggests the white paper was drafted not by those interested in having a functional planning system, but merely finding ways of building some more houses.

**Flooding and sea defence as constraints:** Once again these constraints on development are either played down, as in flooding, or completely ignored, as with sea defence. If the white paper were to be taken seriously on the subject of constraints, it
would include discussion of the degree of weight to be given to such issues when plan making and taking decisions on development. But that might undermine the raw numbers approach to house building which it claims is the central purpose of the planning system.

We recommend that the white paper stress the need for at least “great weight” to be given to flood and sea defence risks when assessing local plans and individual proposals for development.
5. Water supplies and waste water

The planning white paper says (2.25) that the number of new homes demanded by its revised standard method must have regard to: “the extent of land constraints in an area to ensure that the requirement figure takes into account the practical limitations that some areas might face.”

Perhaps the most obvious such constraint is the ability of the environment in an area to supply new homes with water or to deal with the wastewater they create. Obviously where such ecosystem services cannot be provided, the houses must not be built; every house consumes water and generates waste water.

The white paper, however, has a dangerous way of dealing with this challenge. It completely ignores it.

The NPPF currently requires plans to meet objectively assessed need (OAN) unless there are adverse impacts of doing so which significantly and demonstrably outweigh the benefits. There is an inevitable risk that the build, build, build agenda proposed in the Government’s planning reforms would threaten water supplies and quality, certainly outweighing any benefits.

This is particularly so in the south and east of England where the proposed formula would double housing targets, to 100,000 per annum. There should, therefore, be real concern about where water will come from and the Government must ensure that over-development does not exacerbate existing problems such as the depletion of aquifers and associated drying out of chalk streams and the pollution of rivers.

We believe that water must be recognised as a constraint in the setting of a housing target and in the creation of local plans. Any new sustainability test, as proposed in Planning for the Future, must directly refer to water supply and water pollution. Plans should not be adopted if they fail the sustainability test.

Supply – an unsustainable situation: Water companies have done their forward planning based on current growth projections. The new formula would render their planning meaningless. New reservoirs are needed, including one in south Lincolnshire, but there is no funding set aside to build them; they take many years to plan, approve and come into service and face substantial sustainability challenges.

Last year the BBC reported that: “In the south-east of England, the average annual rainfall lingers around 500-600mm – drier than South Sudan, or Perth, Western Australia” and: “The latest Government Water Abstraction plan shows that 28% of groundwater aquifers in England, and up to 18% of rivers and reservoirs, are unsustainably abstracted. Only 17% of England’s rivers are classified as being in ‘good ecological health’”.

In April this year, the head of the Environment Audit Committee wrote to government urging for action to stop UK running out of water in 20 years.
OFWAT admitted last year\textsuperscript{12} that the water sector faces profound challenges, not least from climate change and population growth and noted that the public wants water companies to leave the environment in a better condition for our grandchildren. It now has a “RAPID”\textsuperscript{13} task force to look at how to bring forward solutions at a pace but local plans should be assessed against new supply that is funded and in the process of being constructed, not on solutions that appear on the horizon without certainty of delivery.

\textbf{Sewage and pollution:} Already our rivers and aquifers are in terrible shape. In September, water companies received a scathing annual report from government and assessments. It showed that England’s rivers and lakes are polluted beyond EU legal limits.

Fast development and under-investment mean that our sewage systems cannot cope, with thousands of hours of raw sewage dumping each year and many of England’s rivers polluted beyond legal limits\textsuperscript{13}.

This is in part because, during heavy rain, water companies use combined sewer overflows (CSOs) to dump mixed rain water and raw sewage into water courses to provide relief to the sewer system. The Rivers Trust has an interactive map\textsuperscript{14} which shows the number of these CSOs and notes that: “everything which gets flushed down the toilet or poured down the sink – including non-biodegradable items like wet-wipes – ends up polluting the river. In theory, the rainwater should dilute the sewage—however, the existing infrastructure can’t cope with our rapidly increasing population, leading to many discharging more than they should.”

In Colchester, for example, where already 920 new homes a year are required, the number would rise to 1,612 per annum under the new formula. Much of the borough’s sewage is sent to one plant. In 2019 this plant spilled sewage 342 times for 7,248 hours\textsuperscript{15} straight into the protected habitats of the Colne Estuary and upstream of the popular beaches of Brightlingsea, Frinton, Mersea.

Raw sewage adds to our already polluted waters. It threatens species, habitats and bathing beaches. Increased housing development would only make this situation much, much worse without proper investment, and there is no sign of that coming.

We believe that water must be recognised as a constraint in the setting of housing targets and in the creation of local plans.

We recommend that:

- in water-stressed areas, areas already with high sewage overflows, with insufficient capacity at waste water treatment plants and where rivers are not meeting Water Framework Directive good ecological status, local authorities should be allowed to adopt a lower local plan housing target than the standard formula suggests unless the Government provides the necessary funding for sewage treatment plants, transfer schemes, reservoirs and desalination plants;
in addition, water companies should be required to review their Water Resource Management Plans if the revised, much higher housing targets are imposed.

Sustainability - water in the planning system: In the planning system, the burden of supplying fresh water and getting rid of waste water safely falls on the water companies, in theory policed by OFWAT and the Environment Agency.

A planning inspector examining the local plan for three new towns with 43,000 homes in north Essex said, in May this year: “Plan policies are capable of requiring adequate water supply and waste water treatment capacity to be provided before any dwellings are occupied”.

This means that the only checks on development, even where water stress is identified and where assumptions about use and grey water are flawed, and where there are serious doubts about the ability of the waste water system to treat the sewage, will be the plan policies. Those policies will not stop development happening in the first place.

So can we trust the water companies to deliver? The short answer is no. The Government’s report into the performance of water and sewerage companies in 2019 has just been released, showing that their performance deteriorated for the second year in a row.

The sector has now moved further away from the performance expectations for 2015 to 2020 that the Environment Agency set out in 2013 and four out of the nine water companies are now rated as poor or requiring improvement, the worst result since 2011.

Can’t we rely on the water saving measures in public policy? Again no. While water neutrality and use of grey water are very important parts of the solution, we are a long way from being able to rely on them to solve the supply and waste treatment issue. In reality, significant new developments in an area could mean rationing for its existing residents and that would certainly seem to meet the NPPF definition of adverse impact.

The money for grey water will have to come from somewhere. Developers will not be able to subsidise grey water systems because already the proposed Single Infrastructure Levy will have to pay for First Homes, affordable housing, on-site infrastructure, off-site infrastructure and biodiversity off-setting. There would not be enough money to go around. Nowhere in England are there any large-scale grey water schemes, nor has water neutrality been achieved.

Therefore it is imperative that the planning system deals with the issue of water shortages and water pollution robustly. We need a system which insists on assessing and quantifying the problem to enable an inspector to determine whether a plan is sound. The precautionary principle should be the guiding one. If there is any doubt about impacts on aquifers, rivers or estuaries, a plan should not proceed.
With the Government proposing to create a sustainability test for local plans, now is the time to seize the bull by the horns and refer explicitly to water in the new test, with a requirement for the highest possible standards.

We recommend that the new sustainability test proposed in *Planning for the Future* must directly refer to water supply, waste water capacity and water pollution, with a robust assessment of risk. Plans should not be adopted if they create stress on aquifers or rivers, if the assumptions on use and grey water recycling are flawed or over-ambitious or if there is no funding for waste water treatment which prevents raw sewage overflows.

We recommend that:

- the white paper give clear recognition to the availability of water supplies and the effect of abstraction on the environment when creating local plans.
- the new sustainability test proposed in the white paper should directly refer to water supply and pollution and make clear that plans must not be adopted where they fail this test.
6. Food

The planning white paper makes entirely clear how seriously it takes the issues of food and protection of the land on which it is produced.

It doesn’t mention them.

It’s a stark contrast to the planning policies of earlier times which regarded the need to protect farmland as a most significant constraint on development. The United Kingdom was threatened with starvation by U-boat campaigns in both world wars and the experiences left governments acutely aware of the need to protect domestic food production. The country was never wholly self-sufficient in food and some foodstuffs that we consume significant quantities of cannot be produced in the UK. But the need to maximize production was clear to governments through the 20th century.

This was reflected in post-war planning policy, mindful too of the hypersprawl of the 1930s which consumed agricultural land at an astonishing rate. Despite this, and despite strong proscriptions on use of the best and most versatile farmland in planning policy, continued attachment to the low-density garden suburb type of development throughout the second half of the 20th century and beyond ensured that we continued to lose agricultural land to development at a significant, and unnecessary, rate.

Its destruction was accelerated by the new National Planning Policy Framework\textsuperscript{17} in 2012 which reduced protection to a very low level.

“Local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land,” it said. “Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of a higher quality.”

That was about it, apart from a suggestion that mineral site restoration should take agriculture into account. It fell a long way short of the previous protections for at least some grades of farmland (Grades 1, 2 and 3a) in earlier planning policy. But even the feeble NPPF policy proved too strong for Whitehall’s house building ambitions and it was watered down even further by the 2019 NPPF\textsuperscript{18}.

“Planning policies and decisions should contribute to and enhance the natural and local environment by... (b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland,” was the best the 2019 version could muster. The injunction to prefer lower quality land when scheduling it for destruction had been reduced to a footnote.

Current statistics\textsuperscript{19} indicate that the UK is presently around 61% self-sufficient in all foods and 75% in those foods we are capable of producing. But both these figures have long been in decline and there is plainly concern about this at all levels. The Agriculture
Bill reintroduced to Parliament in January 2020 includes a duty for the Government to report to Parliament on food security in the UK every five years.

There are many potential threats to UK food security. The Committee on Climate Change\textsuperscript{20} recognised risks to domestic and international food production and trade as one of the country’s top six climate risks. Other threats identified include conflict, economic shocks and agricultural diseases.

**The threat from development:** One threat which is seldom identified is loss of farmland to development. DEFRA assesses that around 72\% of the total UK land area was utilised for agriculture in 2019 - around 17.5 million hectares. Arable land made up around 26\% of total farmland, with cereal crops accounting for 52\% of that. Most of the rest is used for animal production, including almost 30\% classified as rough grazing.

However, the majority of the UK’s most productive farmland is in England and that again is concentrated in the south and east, some of the areas under the heaviest pressure for building development. Research at the UK Centre for Ecology & Hydrology\textsuperscript{21} shows that, across Great Britain, 112,100 hectares of arable land and 250,505 hectares of grassland were lost to urban development in the period 1990-2015.

So the 112,100 hectares of arable land lost to building development over 25 years represented around 2.5\% of the nation’s crop land. But that was nearly all in an era when strict planning controls at least made some effort to protect “best and most versatile” farmland and, during most of which, “brownfield-first” planning policies applied. Since 2012 and the *NPPF*, losses in England, where most of the UK arable land is situated, will have accelerated and, thanks to the white paper proposals with farmland the prime target for “growth area” status and building development, that is likely to accelerate sharply. As we have seen, it doesn’t even mention farmland or food.

It might of course be objected that even a doubling of the earlier rate – by no means unthinkable given the hunger of building developers for farmland – would only mean a loss of 0.2\% of England’s arable land each year. But England’s arable land, and in particular to the best in Grades 1, 2 and 3a, is located in the south and east of England where builders are keenest to build. And that percentage is cumulative. Over a century it would represent no less than 20\% of our main food production resource.

And, of course, existing policies\textsuperscript{22} have only protected Grades 1, 2 and 3a. Yet there is no reason why Grade 3b should have to be sacrificed. In the system revised in 1988, Grade 3a land is defined as: “Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops”. Grade 3b meanwhile is defined as: “Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year”.

There is not, in reality, much difference between the two, Grade 3b land lacking a little consistency, having slightly lower yields and possibly excluding a few types of crop like the “less demanding horticultural crops” only included in 3a as an afterthought. Yet this
has long been the cut-off point between “best and most versatile farmland” protected by
the planning system and productive land not protected by it (though even the weak
protections offered to Grades 1, 2 and 3a have, it is true, been progressively reduced
since 2012). We believe that productive farmland urgently needs protecting, and that
should cover all of Grades 1, 2 and 3.

The argument against protecting farmland has hitherto been that there is no need to
worry, even in a world where millions routinely go hungry, because we would always be
able to import food to make up the shortfall, as we’ve always done (apart of course from
the two world wars and the austerity of the late 1940s). But can anyone guarantee such
security in the future?

The United Kingdom is a heavily indebted country with a severe balance of payments
problem in a world which is rapidly becoming less stable, where climate change is
damaging agriculture and which has a fast rising population. The UK’s national debt has
now been pushed above £2tn, representing over 100% of annual GDP, compared to a
little over 40% a decade ago. We have just severed trading links with our main trading
partners from whom we have been importing a significant proportion of our food, with
food exports to the EU worth £23.6bn and imports £47.9bn in 2019\textsuperscript{23}. The EU supplied
around 70% of the UK’s food, feed and drink imports in that year. Future trading
relationships are in the balance and trade deals with other countries are proving
difficult.

Yet now we propose to greatly increase building, especially in the areas where our best
and most productive arable land is located. It is no surprise that the white paper wholly
fails to even mention this problem, as securing planning consent for building on this
land can mean enormous profits for both land owners and developers. This land is set to
be the main target for “growth area” status and a significant and growing proportion of
it would be threatened with automatic planning permission, mostly for low-density, car-
dependent sprawl.

This is utterly reckless and irresponsible for any government in a world where food
security is turning into food jeopardy. Here, perhaps most strongly, lies the existential
threat to our well-being that the planning reforms pose.

\textbf{We recommend that, if the proposed zonal system goes ahead, all Grades 1,
2 and 3 agricultural land be automatically safeguarded by “protected area”
status and, if not, that national policy be amended to give protection to such
land.}
7. Biodiversity

The planning white paper uses the word “biodiversity” only four times and “net gain” only five. “Environment” or “environmental” occurs 49 times but often in the context of more general planning considerations (for example “environmental and heritage assets”).

The words “natural capital”, “nature recovery networks” and “natural environment partnerships” (all planks of the Government’s 25-year Environmental Plan and local nature recovery strategies, each mentioned only once) appear nowhere at all in the entire document.

It is hard to escape the conclusion that the natural world and its biodiversity have a very low priority within the proposed new planning system; not a great performance from a Government which, introducing its Environmental Bill, promised: “the most ambitious environmental programme of any country on Earth”.

So what, if anything, is the importance of biodiversity in any planning system? The NPPF defines “sustainable development” as “meeting the needs of the present without compromising the ability of future generations to meet their own needs”, a definition drawn from a 1987 UN Resolution that itself was based on the Brundtland Report of the same year. That report’s definition of sustainability was based on two key concepts; one of “needs”, the essential requirements for human life (with a priority for the world’s poorest people) and the other of “limitations” as imposed by current technology and social organisation on the environment’s ability to meet both present and future needs. The idea of environmental limitation seems to have been lost in translation from one report to another such that it is now development rather than the environment that is required to “meet the needs of the present without compromising the future”, in terms of economic, social and environmental objectives, the latter involving nothing more than a commitment to protect and enhance the natural environment. What was originally the constraint (the environment) has now become the constrained.

Natural ecosystems are only sustainable because there is a net production by plants of resources, both food and oxygen, over and above the requirements for those same resources of the animals that live among them. Take away the plants and the systems will collapse. Humans are the ultimate consumers, unable to live sustainably in the absence of a supportive environment. Failure to appreciate this simple, basic fact is the ultimate cause of the world-wide destruction of biodiversity and ecosystem services, and of increasingly severe climate change. No human activity is sustainable in the long run without reversing these trends.

Those in favour of more development point to the relatively low proportion of land area that is classified as built upon (about 11% of England’s 13 million hectares, a figure that excludes areas with no residents, such as employment and industrial sites; an additional 5% of the population live in areas classified as non-built-upon), suggesting that, from...
such a low base, the environment can sustain much more development. Those against more development point to the dramatic declines in both biomass and biodiversity in just the last 40 or 50 years, concluding that if only 11% or so of urban land cover is associated with such a sharp decline, additional urban development will only make matters worse. This decline is all the more worrying because 40% of England’s land area has some degree of protection from development (as SSSIs, AONBs and national parks). It is not just the footprint of development that is important (the amount of nature that is concreted over) but the hand-print as well, in terms of air and water pollution that spreads far from the urbanised areas. Roads that link settlements also fragment the natural environment and destroy habitat connectivity, thereby threatening nature recovery networks.

Development destroys a portion of the goods and services the natural environment provides. In trying to balance development with self-preservation the early arguments about the intrinsic beauty and importance of nature, hence the moral imperative of preserving it, have been replaced with a more utilitarian argument that seeks not only to quantify the goods and services the environment provides but their value as well. The early arguments of biodiversity net gain during development were superseded by a natural capital accounting approach where the monetary value of what might be lost to development is calculated for both goods in the form, for example, of woodland timber, and services in the form, for example, of water retention in catchment areas to prevent downstream flooding.

Net gain arguments remain, however, in the developers’ lexicon, and can be applied both to the natural capital approach, for example to choose from several options the one where natural capital losses are the least, and to the original biodiversity approach. There are problems with each approach, however. For example, the monetary value of leisure time is included in natural capital accounts (value for physical health, mental health, or the money saved because healthier people use hospital services less frequently?), and biodiversity is measured as a single metric based not on actual surveys of the totality of plants and animals in an area (with appropriate weightings for rare or endangered species) but on habitat types which are used as quick and easily-assessed proxies for biodiversity. This is a little like assessing the quality of a painting from the paints with which it was made, or of a piece of music from the notes it contains. An area which is to be built upon will have an assessed biodiversity metric, so many units of which will be lost by development (after initial mitigation and other steps have been taken into account). Compensatory increases in the biodiversity metric elsewhere must be included in any development proposal, with the aim of a net gain of 10%.

The funding of such offsetting arrangements is uncertain, but is assumed to come from developer contributions (Section 106 charges or infrastructure levies). The first formal example of such offsetting in the UK is less than 10 years old and was planned to run for 15 years on a 98-home scheme near Oxford.

Despite the lack of UK experience in such planning offsets, they are becoming the natural currency for developer proposals, willingly aided in some cases by wildlife
NGOs looking for a regular funding stream from supervising offset areas. A side industry has established, lining up areas which might be offered to developers as offset sites, whilst much bigger, regional approaches have identified very much larger environmental opportunity areas (for example, the Chilterns, and the Greensand Ridge between Milton Keynes and Cambridge) defined as “strategic-scale and collectively-agreed areas of high environmental value and opportunity and large-scale investment potential – for example to create or enhance biodiversity, habitats and/or green infrastructure.” Are AONBs and others only to be viewed as large-scale investment opportunities?

The dangers of reliance on offsetting are well presented in short documents from Counter Balance and Friends of the Earth. Commodifying nature does not amount to protecting it; usually the reverse. Offsetting has been an official policy in Austria and Germany for 40 years, and in Australia for 10 years. In the former countries, “a substantial proportion of offsetting has failed to achieve the stated objectives, with another significant number either not being implemented or taking place but failing to meet the aim of compensating for harm”. In Australia, a 2017 review of offsetting in New South Wales found that “the policies being pursued would not provide no net loss of biodiversity, as proponents had advocated, for 146 years”.

The UK has limited experience of offsetting to date. A 2014 evaluation of a series of 2-year pilot offset projects reviewed process rather than outcome (the pilots were either theoretical or retrospective studies) and concluded that: “the market for offsets was immature”. Shortage of expertise, or of suitable offset sites, and an unwillingness of developers to pay for the full impacts identified by the biodiversity metric, were all contributors to this outcome.

Given this lack of offsetting experience in the UK and the uncertain outcome of offsetting elsewhere it is alarming that so much reliance might be placed on the smooth running of an offsetting system that is so far untried and untested.

But, as pointed out above, the planning white paper is more or less mute about the role of offsetting schemes in the new planning process, despite the fact that the key objective of sustainability within the NPPF cannot possibly be met without a serious attempt to preserve and enhance as many of the present ecosystem goods and services as possible. To do so it would be necessary to define the carrying capacity of the environment for any further development, a series of red lines beyond which development should not proceed.

Yet nothing at all is said about sustainability in the definition of “growth” and “renewal” areas in the planning white paper. Does this mean that no attempt will be made to develop them sustainably, by any definition of that word? Sustainability is raised as an issue only in defining “protected” areas, where it shouldn’t be necessary, although clearly some development is anticipated in these areas which “justify more stringent development controls to ensure sustainability” (2.8).

Any development that does take place must be as near carbon neutral as possible, both during construction and afterwards. Developers currently have little motivation to
create energy efficient housing. It increases the selling price, and there is such a shortage of houses that buyers are prepared to accept anything. If and when energy efficiency becomes much more important, inherent dangers in some current modern methods of construction (MMC) must first be overcome, to avoid life-threatening disasters\textsuperscript{38}.

Without all future development being net zero carbon none of it would be remotely sustainable. “Net environmental gain” at scale has never been achieved anywhere globally to date, according to Dieter Helm, chair of the Government’s Natural Capital Committee, the fourth report of which\textsuperscript{39} contained far reaching proposals to link the work of the National Infrastructure Commission (NIC), local authorities, the national parks, OFWAT, the Treasury (through \textit{Green Book} appraisals), the ONS and the Climate Change Committee to the 25-year Environment Plan through a natural capital approach\textsuperscript{40}. This at least was a plan that put the environment where it belongs; at the centre of all future development, in a 21\textsuperscript{st} Century take on the original Brundtland Report.

The development industry has hijacked some previously clearly defined words and re-purposed them for its own ends. Thus we have “business ecosystems” delivering “affordable housing” “sustainably” by promising “net environmental or natural capital gains”. A natural ecosystem is generally self-sustaining; stable through time, with complex and efficient re-cycling mechanisms; and produces a constant net output from the sun’s energy. So, will those houses really be affordable; will development be truly sustainable; isn’t the term “business ecosystem” an oxymoron?

For clarity of purpose we must have clarity of language. Or do we have examples here of what playwright Alan Bennett says the English excel at - hypocrisy?

“Words which start off as good and meaningful, terms like environment and energy saving, rapidly lose any credence because [they are] converted into political or PR slogans, ending up the clichéd stuff of an estate agents' brochure. A manual for hypocrisy,” (Alan Bennett, \textit{Independent}, 2nd March 2015).

Our natural environment is far too important to us, and far too complex, for it be algorithmically condensed into a single number or group of numbers representing biodiversity or natural capital, to be traded away for a particular level of development. Relying on use of net gain ideas at present is like flying in an aeroplane made out of paper.

\textit{We recommend that any use of net gain ideas must acknowledge the uncertainties in the measurement and success of these methods elsewhere, and the almost total lack of UK experience with them to date.}
8. Transport

The white paper’s mentions of transport are even fewer than its mentions of climate and, given that the transport sector is now our biggest greenhouse gas emitter and that shows no sign of slowing, this is very disappointing. In 2018, domestic transport accounted for 68Mt CO$_2$e, around 28% of all domestic emissions$^{41}$. While the rest of the country slowly decarbonised, transport has continued to grow; transport emissions were 4% higher in 2018 than 2013.

Current Government policy has little to offer on this apart from a move to electric for cars and vans. Even that won’t achieve all that much. The DfT’s central projection for greenhouse gas emissions from cars from 2018 to 2050 envisages only a 52% fall thanks to its car-centric policies which are expected to increase car mileage by no less than 35% over the same period. And if that weren’t poor enough, the DfT also expects heavy good vehicle mileage to increase by 7% over the same period, though it expects their greenhouse gas emissions to fall by 26% over the same period, thanks to unspecified efficiencies, despite there currently being no practical alternative to diesel.

Neither of these is remotely near “net-zero”, let alone actual zero.

Planning can and should play a huge role in reducing transport carbon emissions by locating development in places which reduce the need to travel by unsustainable modes and by facilitating expansion of sustainable modes like public transport and active travel for people and by rethinking our over-reliance on heavy goods vehicles for freight.

The white paper is almost entirely lacking in such ambition. Indeed, it only mentions transport five times and the first of these simply says the planning system must ensure new development includes the necessary transport, as indeed it always has done. The second makes the entirely dubious claim that switching decisions on major energy, transport, water, waste projects from local democracy to ministers has introduced “greater democratic accountability”.

Finally, however, it gets round to transport policy and claims its reforms would mean that new places would be “built closer to where people want to live and work to reduce our reliance on carbon-intensive modes of transport”. A fine ambition, but how might it be achieved? The only real clue is provided by paragraph 3.24 which says that once the proposed local plan system is in place, it would be important for councils to “consider how the identification of different categories of land, and any sub-areas within them, can most effectively support climate change mitigation and adaptation”. The sole example it proposes gives little cause for optimism.

“For example, in identifying land for inclusion within the growth area [MHCLG italics], or the densities of development appropriate in different locations, the ability to maximise walking, cycling and public transport opportunities will be an important consideration,” it says (3.24).
We would argue that density and access to active travel opportunities and public transport are more than just important considerations, they should be central to any locational aspects of planning anywhere. Indeed, all significant developments which fail to meet such necessities should be rejected.

What is completely unacceptable, however, is that the white paper effectively says such considerations should only be important when designating land as a growth area or deciding on densities. This looks more significant than mere sloppy drafting; it goes to the core of the whole direction of the white paper, which is to stimulate greenfield housing development.

So it believes the only cases where consideration of availability of public transport and active travel are relevant is in the designation of growth areas which, as paragraph 2.8 makes fairly clear, is essentially greenfield land outside existing settlements. Instead of the ringing call for transit-oriented-development that any modern planning policy should make in the face of the growing climate emergency, it merely says walking, cycling and public transport should only be “important considerations” when discussing the locations for major greenfield developments and discussing their density.

Even the attached question (22) which asks what is your priority for what comes with new development: “more affordable housing / more or better infrastructure (such as transport, schools, health provision)/design of new buildings/more shops and/or employment space/green space/don’t know/other” leaves open the possibility that people might gainfully advocate unsustainable transport modes. Given that paragraph 3.24 makes clear that this is a discussion of new greenfield development, that is quite likely.

**Freight:** As stated above, current Government transport policy regarding road freight is a complete surrender, projecting that HGV mileage will grow 7% between 2018 and 2050 and van mileage by no less than 70% over the same period.

Here again, planning policy offers huge scope for reducing such mileage, especially of HGVs. The current *National Planning Policy Framework* requires that planning policies make provision for “storage and distribution operations at a variety of scales and in suitably accessible locations” and, if that isn’t clear enough that “proposals for new or expanded distribution centres should make provision for sufficient lorry parking to cater for their anticipated use”. In practice this, coupled with new distribution techniques, has led to development of a vast and wholly unsustainable network of HGV-based distribution operations across the country. Junctions on motorways and high-standard trunk roads inevitably become centres for huge greenfield developments for such centres on a massive scale; truly this is truck-dependent-sprawl.

It would have been good to see some recognition of this issue in Government policy and the planning white paper in particular. Its silence on the issue says it expects this to continue, with inevitable massive degradation of the environment and increases in greenhouse gas emissions.

**Transit-oriented-development:** If the Government is serious about its aims to reduce greenhouse gas emissions and to see new housing and other development served with
public transport, it needs to set out policies to achieve this. It has yet to do so. It should state unequivocally that major developments would only be allowed where they are within 800m of access to major rail-based public transit networks. This means more than just a single railway station; plenty of research shows that new settlements in such places still see the majority of their trips made by car.

All too often major developments, especially greenfield, lack serious provision of sustainable transport. Developers make much of their walking and cycling facilities when these are, in reality, minimal and likely to be little used given the distance of the development from major destinations. The “high-quality public transport” promised turns out, all too often, to be merely a half-hourly bus service which often fails to last very long.

Major development needs to be located near rail-based transit and this needs to be part of a network, rather than simply a station on one line. Inevitably this is going to tend to concentrate development near major conurbations, but that has a substantial effect in reducing the need to travel. A huge problem is that even many major UK conurbations lack the networks of rail-based transit that modern cities should expect.

Remedying these defects should be a major feature of the planning white paper. Instead it goes virtually unmentioned.

What is needed is some way of ranking developments of, perhaps, more than 10 dwellings, in terms of their proximity to rail-based public transport networks. In North America, for instance, the LEED (Leadership in Energy and Environmental Design) system is designed to reduce energy consumption in buildings and there have been suggestions of ways to improve it to secure improvements on mobility and parking. America now also has a Comprehensive Public Transit Accessibility (CPTA) score system using a comprehensive set of spatial and temporal measures (connectivity to the network, connectivity to destinations, service frequency, flexibility, and time efficiency) to estimate accessibility to transit. Whatever scale is adopted, it’s likely that most large-scale current house building projects would score close to, or at, zero.

Transport planning policy is absolutely central to any consideration of the constraints on land development. The question of whether we use land efficiently on medium-density housing development or squander it on low-density sprawl is intimately connected with transport policy and its impact on the environment. Low-density sprawl will always have an element of car-dependency, especially if combined with typical features of such layouts such as cul-de-sacs which militate against walking and cycling and make public transport access difficult. Low densities also undermine the economics of public transport, even bus services.

We recommend:

- that planning policy require that developments of more than 10 dwellings be located within 800m of access to a rail-based public transit network;
- that major freight distribution facilities include rail access.
Climate change and biodiversity decline in a world with an ever-growing population remain existential challenges for the years ahead. Much ink is being spilled over our need to tackle climate change, but rather less action is resulting. Many of the constraints to development we have identified in the previous sections are essential parts of our response to climate change but there are others, notably soil protection.

It's long been accepted that soil remains the neglected element compared to the significant attention we give to pollution of air and water. The old joke about us “treating soil like dirt” is not wholly fair, but there is no doubt it has had much less consideration in environmental protection than other media.

The same could be said for consideration of the land in our response to climate change. For a raft of reasons, protection of our land ought to receive great consideration in the intensifying threat of climate change and the battle to mitigate and adapt to it.

We agree with the National Planning Policy Framework that: “the planning system should support the transition to a low-carbon future in a changing climate, taking full account of flood risk and climate change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure”.

In practice the NPPF has not achieved that because although many of its provisions are designed to secure those objectives, they are all too often undermined by other provisions designed to promote car-dependent sprawl and truck-dependent business. It has done little or nothing effective to protect farmland or soils.

The white paper has similar fine words (1.18) about meeting the challenge of climate change and reducing greenhouse gas emissions. “We will ensure the planning system supports our efforts to combat climate change and maximises environmental benefits, by ensuring the National Planning Policy Framework targets those areas where a reformed planning system can most effectively address climate change mitigation and adaptation and facilitate environmental improvements,” it says, tacitly admitting the Framework has failed to do that over the past eight years. But there is little sign the white paper proposals would achieve much more, despite saying that combating climate change is one of the most important national challenges to which the planning system is central.

“We wish to promote the stewardship and improvement of our precious countryside and environment, ensuring important natural assets are preserved, the development potential of brownfield land is maximised, that [sic] we support net gains for biodiversity and the wider environment and actively address the challenges of climate change,” says the white paper (1.12) and we agree.
Similar statements about the need to mitigate and adapt to climate change pop up all over the white paper, without any clear indication of how that could actually work in practice. About the nearest it comes is Proposal 15.

“We intend to amend the National Planning Policy Framework to ensure that it targets those areas where a reformed planning system can most effectively play a role in mitigating and adapting to climate change and maximising environmental benefits,” it says (Proposal 15).

It claims that these measures, together with reform of the policy framework, “provide important opportunities to strengthen the way that environmental issues are considered”. And specifically?

“In doing so, we will want to be clear about the role that local, spatially specific policies can continue to play, such as identifying important views, opportunities to improve public access or places where renewable energy or woodland and forestry creation could be accommodated,” it says (3.26).

The planning system can certainly do much more than this, but the white paper thinks its role should only be:-

- ensuring the NPPF “provides a clear and robust basis for development management decisions more generally”, apparently because the Government wants to exclude generic policies from local plans;
- scrapping strategic environmental assessment, sustainability appraisal and environmental impact assessment and replacing them by strengthening “protections that make the biggest difference to species, habitats and ecosystems of national importance, and that matter the most to local communities;
- faster, earlier and simpler environmental assessment;
- energy efficiency in historic buildings;
- energy efficiency in new homes;
- “high standards” for design, environmental performance and safety of new and refurbished buildings.

Some of these would help to mitigate or adapt to climate change and some would actually hinder our response. But as a summary of what the planning system needs to do they are woefully inadequate.

The importance of location, including reducing the need for travel by unsustainable modes, the need to protect biodiversity, farm land, flood risk areas and land important for sea defence, together with the need to avoid further high levels of development to water-stressed areas is covered in the earlier sections.

Soils: More specifically, both the NPPF and local plans need to protect soils which are as important to our well-being as air and water. Healthy, unsealed soils:-

- form the basis for all terrestrial life;
- allow infiltration of rain to recharge aquifers;
- support an enormously rich biodiversity, including microfauna;
store huge quantities of carbon and potentially can sequester much more;
form the basis for most of our food and all of our timber production;
provide most of our flood-defence capacity;
slow run-off from upland areas.

Sad to say the planning white paper makes no mention of soils. Yet their protection in many ways should be central to the planning system. In the most obvious ways this will be through things like minimizing further soil sealing by restricting greenfield building, road and airfield construction etc., but there are other issues in soil too.

Protection of peat soils, for instance, is a clear and urgent imperative in the climate emergency. Yet we are still some years off a ban on extracting lowland peat for horticulture and a promised ban on burning of upland peat soils to stimulate heather growth for the shooting industry has not materialised. At first sight these are not matters for the planning system, but there is no reason why such ecological concerns about the use of land should not feature in policy. We already use our uplands for collection and storage of the water we drink, so the possibility of using large areas of them for other environmental purposes should also be considered.

One possibility might be to add Grade 5 agricultural land to the list of areas to be “protected”. While it is true that the majority of such land is in areas already protected by national park, AONB etc. status, this is not wholly true. Such land is important for biodiversity, water supplies, flood control and carbon sequestration.

A few possible protections are actually entertained in the white paper which says (3.22): “the reformed planning system will continue to protect the places of environmental and cultural value which matter to us”. It references national parks, SSSIs, conservation areas and wildlife sites but admits: “the planning system can and should do much more than this”. We agree.

“Nationally, the Environment Bill currently before Parliament will legislate for mandatory net gains for biodiversity as a condition of most new development,” it says (3.23). “And the Local Nature Recovery Strategies which it will also introduce will identify opportunities to secure enhancements through development schemes and contributions.”

But that, apart from street trees, flood risk and green infrastructure is about it. But planning indeed can and should play a much bigger role than that. We need, for instance, a national strategy for maximizing carbon in soils, addressing issues like peat protection and, most importantly, for tackling soil sealing.

Soil sealing is the process by which healthy soils are prevented from carrying out their important environmental functions by hard coverings – buildings, roads, airports, car parks etc.. Those functions matter – food and timber production, biodiversity, infiltration of rain water to recharge aquifers, flood control, sequestration of carbon. Life on this planet, and even life in England, depends on them being able to carry out these functions without being sealed. England is a highly densely populated country, just about Europe’s most densely populated large country, and so needs to treat its soils
with the greatest respect. Yet we've long built at the lowest densities in Europe and have squandered our soils for romantic but destructive ideals of low-density living.

There is nothing in national policy on this and, some years ago when the EU proposed a soil directive with measures to discourage soil sealing, the UK was one of a small handful of national governments that formed a “blocking minority” and prevented it becoming law.

So, in a whole variety of ways set out in this and earlier sections, the white paper’s ambitions to combat climate change must be judged a very serious failure. Climate change needs appropriate and radical responses, not fine words and more soil sealing.

We recommend that protection of soils be added to the climate change objectives of the white paper.
10. Conclusions

The white paper concedes (1.28) that: “this consultation document does not address every detailed part of the planning system”. Indeed it does not; it concentrates on finding ways of overcoming environmental opposition to major greenfield housing developments. In that context, the rest of that sentence which says that it: “rather focuses on the key reforms that can help improve the delivery and quality of homes and neighbourhoods, set within our drive towards net-zero greenhouse gas emissions by 2050” is only partially true. It is certainly aimed at delivery of the wrong kind of homes in the wrong places, but it would have a seriously detrimental effect on the need to reduce greenhouse gas emissions.

This paper simply looks at the issue of what the terrestrial environmental constraints on development should be. The white paper, however, repeatedly makes clear that only a very limited range of these should be seen as constraints to making development more widespread on our land.

It claims the new nationally determined housing requirement to be imposed on local authorities (1.20) would factor in “land constraints”. “Growth” areas would exclude flood risk areas and unspecified “other important constraints” (2.8). The white paper does admit Government proposals for a new standard methodology are a complete failure in respect of constraints (“the methodology does not yet adjust for the land constraints” 2.29), yet Question 8(a) asks whether respondents consider whether a new standard method should even factor in constraints.

And that’s about it. We agree with the white paper that constraints on development of land are key elements of the planning system, but the list of possible constraints it sprinkles around its text is totally inadequate.

The planning system needs to be an holistic and mutually inter-dependent system of controls, not a way of stifling debate on the environment. Many of the constraints on development the white paper ignores or dismisses are indeed existential threats to our well-being, our survival even. To put the delivery of a narrow class of house building in front of these would be a fundamental failure of government.
References

Analysis of the satellite derived CORINE land cover dataset suggests rather different figures for England of 8.8% built upon (including roads), 3.8% green urban areas, 14.5% natural and 72.9% farmland; https://www.bbc.co.uk/news/uk-41901294
derived from the original Sheffield University study at https://www.sheffield.ac.uk/news/nr/land
derived from the original Sheffield University study at https://www.sheffield.ac.uk/news/nr/land
54for example, file:///C:/Users/djrogers/Downloads/Principles%20of%20Natural%20Capital%20Accounting.pdf
55http://publications.naturalengland.org.uk/publication/6020204538888192#text=The%20proposed%20upda
ted%20Defra%20Biodiversity%20Metric%20is%20designed%20based%20on%20an%20approach%20to%20determining%20a%20proxy%20biodiversity%20value.
582013.pdf
59https://static1.squarespace.com/static/5e85a98d52770001874963880/t/5ea2d70e1c239e20ad7b29a4/158773
600232960/Opportunity+ReportFinal.pdf
63Friends of the Earth (2018). Summary Briefing. Biodiversity offsetting, no net loss and net gain – a licence to
64continue to trash Nature. https://cdn.friendsoftheearth.uk/sites/default/files/downloads/Biodiversity-
65offsetting-summary_0.pdf
DEFRA project code: WC 1051.
67D=18229#Description
68https://www.insidehousing.co.uk/insight/are-two-fires-on-the-shetland-islands-a-canary-in-the-coal-mine-
69for-modular-construction-68170?utm_source=Ocean%20Media%20Group&utm_medium=email&utm_campaign=11905596_IH-THE-
70FRIDAY-LONG-READ-16-10-2020-GR&dm_i=1HH2,736F0,2157YZ,SN1BY,1
71Improving Natural Capital – An Assessment of Progress, Fourth Report to the Economic Affairs Committee
72[London: Natural Capital Committee, 2017]
74ncc-annual-report-2017.pdf
75Javad Jomehpour, Chahar Aman and Janille Smith-Colin: Transit Deserts: Equity Analysis of Public Transit
76Accessibility [Journal of Transport Geography, Volume 89, December 2020]

