



Matter 4/7
Bournemouth and Poole HMA sub-regional strategy

The Environment Agency has no specific comments to make on questions a), b), c), f) and g). Specific comments follow for questions d), e) and h).

Summary

1. The relevant questions that the Environment Agency will be responding to in relation to matter 4/11 are questions d), e) and h).
2. We consider that, subject to confirmation from Wessex Water, capacity is available to treat increased sewage flows arising from the proposed development within SE Dorset sub region while continuing to meet environmental quality standards.
3. There are several public water supply boreholes in and around Wimborne. In order to reduce the risk of contamination Source Protection Zones (SPZ) are designated around them. The zone of highest risk (SPZ1) is unlikely to be suitable for certain types of potentially polluting development. The majority of the other areas in the SE Dorset sub-region do not have SPZs that are subject to development pressure.
4. Sufficient water is available for supply within SE Dorset provided the RSS overall secures higher standards of water efficiency in new homes. Investigations required under the Habitats Regulations may lead to reductions to the available supply in this zone in the long term.
5. A joint Strategic Flood Risk Assessment between Bournemouth, Christchurch, East Dorset, North Dorset and Salisbury Local Planning Authorities is about to be undertaken. Purbeck District Council, covering Swanage and Wareham, and the Borough of Poole are also currently undertaking SFRAs. Until these have been completed we consider that flood risk has not been adequately taken into account in the distribution of growth in SE Dorset.

In setting out policies and proposals for the HMA sub-region, does the draft RSS adequately deal with the following questions:

Question d): Have environmental limits arising from matters such as flood risk and the protection of environmental assets been adequately taken into account and in particular do the proposals reflect the need to avoid any impact on the integrity of the important nature conservation areas around the conurbation?

6. The Agency's interpretation of the term 'environmental limits' in the context of this sub regional matter is focussed by our relevant statutory responsibilities. Our response to question (d) is therefore provided in the context of the following themes.
 - protecting surface, ground and coastal waters;
 - balancing human and environmental needs for water
 - protecting air quality through our regulation of major polluting processes;
 - reducing flood risk.
7. We can only comment on the potential impact of development on the integrity of the important nature conservation areas around the conurbation in so far as those interests relate to the water environment.
8. We will provide further advice on waste, water supply and flood risk in our statements on 7/3, 4/14 and 7/1 respectively.

Surface and coastal water quality

9. The Appraisal (SSA) sought to test whether the plan would 'minimise water pollution'. We provided information to support the Appraisal in the form of our short report¹. This report reviewed the context in which waste water from the main settlement in this sub region (SE Dorset) is treated and recycled into the environment and considered the capacity available in the environment to handle additional treated sewage flows.
10. Since the publication of our short report we have also reviewed the environmental context of waste water treatment at a number of other smaller settlements in the Housing Market Area of South East Dorset to support the discussion of this matter. We consider that, subject to confirmation from Wessex Water, capacity is available to treat increased sewage flows of up to 25% above current consented flows arising from the main settlements in the Housing Market Area (Bournemouth, Poole, Christchurch, Gillingham, Shaftesbury², Swanage, Wimborne Minster, Colehill, Ferndown, Verwood, St Leonards, West Moors, Wareham)

¹ SWEW 49.06

² Increasing sewage flows to Shaftesbury would result in a tight ammonia standard, this should be achievable but would be costly and should be confirmed with Wessex Water

Groundwater Quality

11. Groundwater provides the baseflow in many of the region's rivers and is a vital source of public water supply. Urbanisation and regeneration can place groundwaters at risk of pollution. Parts of this sub region contain vulnerable aquifers. There are several public water supply boreholes in and around Wimborne. In order to reduce the risk of contamination Source Protection Zones (SPZ) are designated around them. The zone of highest risk (SPZ1) is unlikely to be suitable for certain types of potentially polluting development. However we do not consider that this would significantly restrict the capacity of this sub region to support the levels of growth proposed.

Balancing water supply and the needs of the environment

12. The Appraisal (SSA) sought to test whether the strategy would 'keep water consumption within local carrying capacity limits'. Overall the Appraisal reached a rather cautious conclusion, citing in particular the cautionary aspects of our own advice to the appraisal process. This advice³ and our supplementary report⁴ sought to identify whether, under a range of household growth rates and a range of water efficiency standards, adequate supplies of water could continue to be provided within the environmental limits determined through the system of abstraction licensing.
13. The Bournemouth and Poole sub region lies within the Bournemouth and Wessex South Water Resource Zones which is managed by Bournemouth & West Hampshire and Wessex Water water companies respectively. Our advice for these zones is that sufficient water is available for supply provided the strategy overall secures higher standards of water efficiency in new homes – our statement on matter 4/14 advises on what these standards should be.
14. Resource zone Bournemouth is currently subject to investigations to meet the requirements of the Habitats Regulations. These investigations are incomplete but may lead to reductions to the available supply in this zone in the long term.

Air Quality

15. The Appraisal (SSA) correctly draws a strong correlation between traffic growth in general and congestion in particular on the potential for breaches in air quality standards. We share the Appraisal's support for the positive effect of Policy RE 9 on ensuring that in those places where national air quality standards are not likely to be achieved (Air Quality Management Areas), development must be proven not to exacerbate these problems.

³ SWEWA 50.02

⁴ SWEWA 50.01

Flood Risk

16. Allocation of development in the Bournemouth and Poole HMA should be in accordance with the Regional Flood Risk Appraisal (RFRA), which is currently in draft form, and the Strategic Flood Risk Assessment (SFRA) for the appropriate area. There are several SFRAs being undertaken across the South East Dorset area. A joint SFRA between Bournemouth, Christchurch, East Dorset, North Dorset and Salisbury Local Planning Authorities is about to be undertaken. Purbeck District Council, covering Swanage and Wareham, and the Borough of Poole are also currently undertaking SFRAs.

Poole

17. Poole is subject to tidal flooding, and is particularly vulnerable to the effects of climate change on sea level rise. There are large areas of low-lying land, in the town centre. These tend to fall within Flood Zone 3 and 2.
18. The town has a heavy reliance on flood defences. The level of protection of these defences would need to be reviewed to take into account the effects of climate change. The standard of protection varies considerably along the harbour frontage, therefore flooding mechanisms are complex. Any development proposals would need a strategy for defending both the development and make a contribution to defending Poole town centre in the future.
19. Sandbanks is particularly vulnerable to tidal flooding, including wave effect.

Bournemouth

20. There are no significant flood risk issues within Bournemouth.

Christchurch

21. Christchurch lies at the confluence of the rivers Stour and Avon and is also susceptible to tidal flooding. There is a reliance on flood defences within the town centre. The level of protection of these defences may need to be reviewed to take into account the effects of climate change.

Gillingham

22. Gillingham lies at the confluence of the Shreen Water and the River Stour, with the River Lodden running through its eastern edge, therefore there is a risk of flooding from fluvial sources in this town. There is reliance on flood defences within the town. The level of protection of these defences may need to be reviewed to take into account the effects of climate change.

Shaftesbury

23. There are no significant flood risk issues within Shaftesbury.

Swanage

24. The Ulwell Stream and Swan Brook run through Swanage. This creates some fluvial flood risk and parts of the town are also at risk from tidal flooding. There is reliance on flood defences with the town. The level of protection of these defences may need to be reviewed to take into account the effects of climate change.

Wimborne (including Colehill)

25. Wimborne lies at the confluence of the rivers Allen and Stour, therefore there is risk of flooding from fluvial sources in this town. There is reliance on flood defences within the town. The level of protection of these defences may need to be reviewed to take into account the effects of climate change.

Ferndown, Verwood, St Leonards and West Moors

26. These settlements have the potential to be flooded from smaller watercourses. However, until the joint SFRA that includes East Dorset District council is completed we have no further information to add at this time.

Wareham

27. Wareham has the rivers Frome and Piddle running through the town. This creates some fluvial flood risk, and parts of the town fall within Flood Zones 2 and 3. Parts of Wareham are at risk from tidal flooding. Until the Purbeck District SFRA is completed we currently do not have any further information to add in relation to flood risk.
28. The Appraisal (SSA) was inconclusive overall about the likelihood that the plan would satisfy the objective of ‘reducing vulnerability to flooding’. We are not surprised by this given the limited detail available on the distribution of development. However since the publication of the draft plan the emerging Regional Flood Risk Appraisal⁵ and the Urban Extension Evidence Base Review⁶ have shed some more light on the processes used to identify the broad areas of search as illustrated in the draft plan. These processes are important if the plan is to be judged to have adequately tested the suitability of the preferred ‘areas of search’ in terms of minimising flood risk as guided by PPS 25.
29. We consider that flood risk has not been adequately taken into account in the distribution of growth in this SE Dorset sub region. The capacity of this sub region to accommodate the levels of growth indicated in the areas of search illustrated can only be properly assessed through Strategic Flood Risk Assessment.

Question e) Have Infrastructure considerations been adequately taken into account?

30. Where it is possible for us to identify infrastructure concerns local to this sub region these are given above under our response to question (d) on ‘environmental limits’, where we cover water supply, waste water treatment and flood risk issues. We comment on solid waste treatment infrastructure in our statement on matter 7/3.

⁵ Regional Flood Risk Appraisal – in prep, draft reviewed

⁶ SW RSS Urban Extension Evidence Base Review – in prep draft reviewed

Question h) Does the draft RSS set out adequate guidance on the provision of Green Infrastructure?

31. We strongly support policy GI1 (Green Infrastructure) and we are willing to assist where we can with the identification of 'areas of opportunity' or 'GI demand' in the SE Dorset sub-region. We consider that the framework and direction given in the RSS is adequate and we particularly welcome the direction given to local authorities and partners to develop a GI Plan with a delivery programme. We urge that these delivery programmes are embedded and monitored in the Implementation Plan