

**Appendix 4: Predicting and evaluating the effects of Local Plan March 2019
Consultation Draft Site Allocations, IDAs and ASAs (Task B3)**

Predicting and evaluating the effects of Local Plan March 2019 Consultation Draft Site Allocations, Industrial and Distribution Areas and Avonmouth Employment Site Allocations (Task B3)

Introduction

Using the detailed site assessment framework set out within Appendix 2, the purpose of this stage is to predict and evaluate the social, economic and environmental effects of:

- Site Allocations (SAs) (Draft Policy DA1)
- Industrial and Distribution Areas (IDAs) (Draft Policy E4); and,
- Avonmouth Industrial Area (ASAs) and Bristol Port (Draft Policy E5).

Methodology and assumptions for identifying and defining site allocations and reasonable alternatives

Sites and associated development considerations noted within the March 2019 Local Plan Consultation Annex A Draft Development Allocations formed the starting point for the assessment. Beyond the strategic and policy-based reasonable alternatives identified within earlier sections of the report, site-based reasonable alternative land uses have included those suggested through the March 2019 Consultation.

Reasonable alternatives must be another way of fulfilling the plan or programme objectives. Therefore, there may be instances where a particular land use is not considered to fulfil the overall plan objectives or is contrary to the strategic options set out in section 5 of the main report – these alternative options are therefore not considered to be ‘reasonable’.

Methodology and assumptions for predicting and evaluating the effects of the site allocations and limitations and difficulties encountered

The methodology, assumptions, limitations and difficulties are set out within Appendix 2.

Assessment and evaluation of effects – Draft Site Allocations

SA Objective 1 - To ensure an adequate and diverse supply of housing that is affordable to everyone

For SA Objective 1, all sites are considered to generate minor positive effects for DMC1 given they include recommendations for purely residential or mixed-use development, except for sites BDA1802 and BDA2403, which are proposed for industrial uses and are therefore graded as neutral.

Similarly, for DMC2 in relation to affordable housing, all sites where residential development is proposed score '+' where more than 10 dwellings are proposed. This assessment outcome is consistent except for BDA0302, where estimated capacity for the site is not yet available however is likely to be of a scale where affordable housing is required; and BDA0105, where indicative capacity is between 8-10 dwellings and therefore potentially below the affordable housing threshold for smaller sites in line with DM3 of the SADMP.

Several sites are considered to generate significant positive effects for both DMC3 and DMC4 where alternative delivery methods (including community-led housing) of housing to meet needs of specific community groups is proposed (i.e. homes for older people) as part of the draft site allocation. All remaining sites are considered to be neutral under these criteria, although the draft site allocation does not preclude delivery of development using alternative delivery mechanisms.

Overall effects against this objective are considered direct, permanent and city-wide in effect. No mitigation or additional recommendations are proposed above those considered for the Housing Policies (Draft Policies H1-H7).

SA Objective 2 - Promote the conservation and wise use of land, maximising the reuse of previously developed land

The draft site allocations are considered to produce mixed sustainability effects when appraised against DMC5, which assesses the extent to which the allocation would provide an opportunity for the reuse of brownfield land. The majority of sites achieved a neutral score against DMC7. No site allocations are proposed within the existing Green Belt boundary and as such, would not affect the openness and permanence of this land. However, several sites are proposed on greenfield land (former Important Open Space sites), which are graded as minor negative when appraised against the SA framework.

All sites are considered to have positive, significant positive or neutral effects when appraised against DMC6. The majority of site allocations are proposed within either the City Centre or Inner Urban Area, with corresponding suggested minimum densities of between 100-200 dwellings per hectare (dph); or within the Outer Urban Area with a more intensive minimum density proposed (60 dph). Five sites are appraised as neutral in effect, as these are located within the Outer Urban Area with a less intensive minimum density proposed on the basis of this spatial area. It is considered that these sites have the potential to produce positive sustainable effects in combination with mitigation measures such as sustainable transport provision or through sustainable as-built design proposals. Collectively, the site allocations generate opportunities for siting of appropriate densities of development within sustainable locations in the Plan area.

SA Objective 3 - Ensure easy and affordable access to key services

Most draft site allocations perform positively when appraised against DMC8 of SA Objective 3, given these are proposed within close proximity to district, town or local centres.

A total of nine site allocations are considered to generate minor negative effects under DMC8, as these are proposed in locations that are over 800m from even the smallest centres. Appropriate mitigation recommendations include improving accessibility to and connections with local centres.

SA Objective 4 - Increase participation in cultural and community activities – N/A

SA Objective 5 - To reduce poverty and income inequality and improve the quality of life for those living in areas of concentrated disadvantage

Several draft site allocations are considered to generate minor or significant positive sustainability effects under DMC10 and DMC11 as sites are proposed within areas of high deprivation (using the Indices of Multiple Deprivation Index data, where deciles 1-3 were considered to form the top 30% most deprived Lower Super Output Areas). Such effects are likely to generate cumulative benefits for the built environment where site allocations are concentrated in wards including Ashley, Avonmouth, Bedminster, Brislington and Filwood, amongst others. However, a high proportion of site allocations are considered to generate neutral effects as they are proposed within areas of moderate or low deprivation. Overall, effects are likely to be subject to implementation.

SA Objective 6 - To reduce health inequalities and promote healthy lifestyles across the city

Over 30 site allocations are proposed within AQMAs or their cumulative air quality impact zones – this includes sites located within Ashley, Bedminster, inner urban areas such as Clifton and Cotham, Knowle and Lawrence Hill. As such, these sites are considered to have potential for minor negative effects for health (DMC12), without either appropriate mitigation and/or significant improvement to the existing air quality environmental baseline. It is therefore recommended that sites in such areas are promoted with robust technical evidence and include references to policies relating to air quality mitigation (draft policy HW2).

All residential site allocations are proposed within 400m of an existing open space, and therefore are considered to produce significant positive effects when appraised against DMC13 of the framework. However, it is acknowledged that this level of sustainability effects is based upon the current level of access to such spaces and may be subject to change with the proposed changes to the designation of Important Open Space.

Overall, the draft site allocations perform positively against DMC14 as the majority of sites are proposed within locations that are adjacent to key walking routes and/or adjacent to the existing or proposed cycling network enhancements. Appraisal of each site allocation has also accounted for proposed strategic cycleways, where these are detected on the relevant data layers/using the latest available information.

SA Objective 7 - Ensure access to education and learning for all sections of society

As details related to any planning obligations are unknown at this stage, it remains unknown whether any individual site allocation would generate a 'net gain' in educational facilities (DMC15).

However, as development of site allocations has the potential to contribute to the delivery of educational facilities across the plan area (including those stated on the former Regulation 123 List), it is considered that sites could generate positive, unknown effects for DMC15.

However, the majority of sites are already well-placed in terms of access to existing establishments being within 800m distances of primary or infant schools and 1500m of secondary-based educational facilities (including special schools) and are therefore appraised as minor positive against DMC16. Five sites (BDA0205; BDA0206; BDA0207; BDA0601; and BDA3201) are considered to have potential for minor negative effects as they are located outside the criteria thresholds for either primary, secondary or SEN educational facilities. It is recommended that development contributions and CIL reflect any requirement to meet future educational needs as a result of planned development at this site and/or be supported with a statement of how future resident needs would be met through current facilities.

SA Objective 8 - To support the economy and ensure that there are suitable opportunities for employment

With the exception of sites BDA1802 and BDA2403, the remaining site allocations were not appraised against this Objective because whilst some of these allocations may include employment space as part of mixed used development, these were not considered likely to generate significant/noticeable sustainability effects when appraised against the relevant decision-making criteria for SA Objective 8.

SA Objective 9 - Ensure access to a range of shopping facilities for all sections of society

The majority of site allocations are likely to generate minor positive or neutral sustainability effects for the vitality and/or viability of existing local centres (DMC22), as most sites (both residential and mixed use) are within 800m of a town, district or local centre and are therefore considered to have the potential to generate positive economic multiplier effects for retail facilities and/or community facilities. A small number of site allocations may produce minor negative effects for DMC22 and DMC23 based on their location outside the defined distance threshold.

SA Objective 10 - To ensure the protection and enhancement of the historic environment and its setting

All draft site allocations could have potential for minor positive or neutral sustainability effects for the historic environment (DMC24). Draft development considerations for site allocations that are located within Conservation Areas, contain listed heritage assets or other statutory or local historic environment designations include reference the requirement for enhancement to such historic features or settings.

While the potential impact of site development is difficult to determine in the absence of a detailed design proposal, it is considered that embedding the requirement for sensitive design and including reference to draft policy addressing conservation and enhancement of the historic environment would continue to safeguard and potentially improve the existing environmental baseline.

SA Objective 11 - To ensure the protection and enhancement biological and geological assets and improve the quality of wildlife habitats

No allocation overlaps with any of the international or national statutory designated assets, with the exception of BDA2401, which includes a very minor overlap with a Regionally Important Geological Site (RIGS).

All site allocations are within SSSI Impact Zones. Specifically a number of these proposed allocations (BDA0205; BDA0302; BDA0303; BDA3001) fall within these SSSI impact zone and are larger, or have the potential to be larger, than 50 units. These will require consultation with the relevant statutory nature conservation bodies to further determine the effect of development within these locations. Other sites (BDA0206, BDA0207, BDA0901, BDA1004, BDA1701, BDA2901, BDA2902, BDA3002 BDA3201) are also located within SSSI impact zones¹, however, these allocations propose fewer units and therefore effects are uncertain at this stage, subject to further consultation.

One allocation (BDA0303) partially overlaps with a local Site of Nature Conservation Interest (SNCI) designation, which could introduce negative effects for the existing ecology and habitat area in the absence of appropriate mitigation. Six other sites (BDA0601; BDA0702; BDA1402; BDA1802; BDA2604; BDA2901) partially overlap with locally-designated wildlife corridors. For sites with partial or full overlap with local ecological or geological sites, it is considered that the draft development considerations could contain adequate reference to mitigation and/or requirement for enhancement of such areas. The effect in these cases is uncertain.

SA Objective 12 - To ensure the protection and enhancement green and blue infrastructure and ensure access to a variety of open space and recreation

Several site allocations include development considerations within supporting policy text to retain existing or provide enhancement of green infrastructure (e.g. adjacent green space and/or trees subject to TPOs) in accordance with retained policy DM15 of the SADMP. Sites that are located adjacent to allotment land, greenways or within flood risk areas were considered to have potential minor positive effects for DMC27 through multi-functional green infrastructure provision. For the remaining site allocations, the provision of new green infrastructure is unknown as it is subject to the development delivered.

SA Objective 13 - To encourage a demonstrable modal shift and reduce the need to travel

In terms of whether site allocations would improve access to and quality of sustainable transport modes (walking, cycling and public transport), appraisal results are comparable to DMC14, however, also account for proximity to public transport. Appraisal of each site allocation has also accounted for proposed strategic cycleways, where these are detected on the relevant data layers/using the latest available information.

SA Objective 14 - To maintain and improve the existing highway network

While existing congestion / traffic data did not form part of the Interim SA baseline, it is considered that collectively, the site allocations could increase the level of congestion (and therefore generate

¹ <https://naturalengland-defra.opendata.arcgis.com/maps/edit?content=Defra%3A%3Asssi-impact-risk-zones-england>

negative effects for DMC30) above the existing baseline due to the potential for increased density of development and associated use of some private cars by future occupants. Effects are also unknown, as the uptake of active travel use and/or public transport modes may help to alleviate additional trip generation.

SA Objective 15 - To reduce the risk of flooding from all sources

Overall, the majority of site allocations are directed towards areas of lower flood risk and would therefore produce minor or significant positive effects for DMC32.

Four site allocations are located partly within Flood Risk Zone 3b (BDA0101; BDA0302; BDA2701 and BDA2801) and are therefore considered to have potential for significant negative effects without adequate mitigation in place, on the basis that development proposed is majority 'more vulnerable' in type. The corresponding developer considerations require proposals to be supported by a site-specific flood risk assessment and a drainage strategy, which will be expected to prioritise sustainable drainage systems, ensure no increased flood risk and provide appropriate mitigation. Retained Local Plan policies would continue to ensure that flood risk and water management is accounted for within new development.

SA Objective 16 - Sustainably manage natural resources, including water demand and quality and reducing waste being landfilled

All draft site allocations are considered to be unknown in their sustainability effects for several decision-making criteria under SA Objective 16 (DMC34 and DMC36), based on the extent to which development would reach minimise resource use and waste production, while increasing energy efficiency of development, is dependent upon final constructed design / operation, directed by other Local Plan policies.

In addition, there are several vulnerable water bodies within the Plan area (those that are currently classified by the Environment Agency as 'Poor' or 'Bad' in status²³). Site allocations located within the Southmead (BDA2901, BDA2902), Horfield (BDA2001; BDA2002), and Eastville (BDA1301; BDA1302; BDA1303; BDA1304; BDA1305) Wards could be affected by/could contribute to the poorer water quality of Trym River, Horfield Brook, Fishponds Brook and Coombe Brook, respectively. Site allocations located within Knowle (BDA2201), Brislington West (BDA0702; BDA0703), and Stockwood (BDA3101) Wards could be affected by/could contribute to the poorer water quality of the Brislington Brook source to River Avon⁴.

There are no groundwater Source Protection Zones (SPZs) or Nitrate Vulnerable Zones (NVZs) (DMC35) identified within the Plan area, based upon latest available Defra mapping⁵, and therefore

² List of Vulnerable Water Bodies- Avon Bristol Urban catchment: <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3046/classification?item=106&status=Poor&status=Fail&status=Bad>

³ Pinpoint data – river water quality 2013. <https://maps.bristol.gov.uk/pinpoint/>

⁴ ID: GB109053021980. <https://environment.data.gov.uk/catchment-planning/WaterBody/GB109053021980>

⁵

<https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/SourceProtectionZonesMerged&Mode=spatial>

sites are not subject to additional regulations associated with groundwater/aquifer sources.

Retained Local Plan policies would ensure that flood risk and water management is accounted for within new development. Any proposed polluting industrial uses would be required to comply with other proposed draft policies under Health and Wellbeing.

Four site allocations (BDA0101; BDA0601; BDA0703; BDA2604) propose within their draft policy text to maintain and enhance the integrity and connectivity of existing allotment land, either within the site boundary or immediately adjacent. It is considered that such sites therefore have the potential to enhance the urban food growing opportunities across the plan area and produce positive effects for DMC37.

SA Objective 17 - Minimise air and noise pollution

Over 30 site allocations are proposed within AQMAs or their cumulative air quality impact zones – this includes sites located within Ashley, Bedminster, inner urban areas such as Clifton and Cotham, Knowle and Lawrence Hill. As such, these sites are considered to have potential for minor negative effects for SA Objective 17 in relation to minimising exposure to air and/or noise pollution (DMC38), without either appropriate mitigation and/or significant improvement to the existing air quality environmental baseline. It is therefore recommended that sites in such areas are promoted with robust technical evidence and include references to policies relating to air quality mitigation (draft policy HW2).

SA Objective 18 - To maximise the potential for energy efficiency, reduce greenhouse gas emissions and ensure that the built and natural environment and its communities can withstand the effects of climate change

All draft site allocations are considered to be unknown in their sustainability effects for several decision-making criteria under SA Objective 18 (DMC39, DMC40, DMC42), based on the fact the extent to which development would reach energy efficiency targets, climate resilient design and/or use of renewable energy is dependent upon final constructed design / operation, directed by other Local Plan policies.

Under DMC41, several site allocations are likely to generate minor positive effects as they are located in existing Heat Priority Network Areas (Central Bristol or Hartcliffe Campus), which resultantly means that such sites are able to access low-carbon heat energy sources for any future development.

Assessment of Draft Site Allocations

Site Ref	Site Name	SA Objective																																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
BDA0101	Land opp 200-208 Mina Road, St. Werburgh's	+	+	0	0	+	+	0	+	?	0	0	0	++	++	+/?	+						0	0	0	?	?	+	++		-/?	?	-	?	0		0	+	0	?	?	0	?	
BDA0102	Land at 17-47 Lower Ashley Road, St. Werburgh's	+	+	0	0	+	+	0	++	?	++	++	-	++	+	+/?	+						+	+	0	?	?	?	++		-/?	?	+/?	?	0		0	0	-	?	?	0	?	
BDA0103	Land at Cheltenham Road / Bath Buildings, Montpelier	+	+	0	0	+	+	0	++	?	++	++	-	++	+	+/?	+						0	0	+/?	?	?	+	++		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA0105	Land to the rear of 64-68 Stokes Croft, St. Paul's	+	?	0	0	+	++	0	++	?	++	++	-	++	+	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA0205	Land south of Gloucester Road, Avonmouth	+	+	0	0	++	+	0	+	?	0	0	0	++	+	+/?	-						+	+	0	-/?	?	+	++		-/?	?	+/?	?	0		0	0	0	?	?	0	?	
BDA0206	Former Sea Mills Children Centre, West Parade, Sea Mills	+	+	0	0	+	+	0	+	?	+	+	0	++	+	+/?	-						0	0	+/?	?	?	?	+		-/?	?	++	?	0		0	0	0	?	?	0	?	
BDA0207	Land adj Custom House, Clayton St	+	+	0	0	+	+	0	+	?	+	+	0	++	+	+/?	-						0	0	0	?	?	?	++		-/?	?	+/?	?	0		0	0	0	?	?	0	?	
BDA0302	Land to West of Ashton Gate Stadium, Marsh Road / Winterstoke Road	+	+/?	0	0	++	+	0	++	?	0	0	0	++	++	+/?	+						+	+	0	-/?	?	+	++		-/?	?	-	?	0		0	0	0	?	?	+	?	
BDA0303	Former Ashton Sidings 'City Gateway', Ashton	+	+	0	0	++	+	0	++	?	+	+	-	++	++	+/?	+						0	0	+/?	-/?	?	+	++		-/?	?	+/?	?	0		0	0	-	?	?	0	?	
BDA0304	1-25 Bedminster Down Road, Parson Street	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA0305	233-237 West Street, Bedminster	+	+	0	0	+	+	0	++	?	0	0	-	++	+	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA0306	Land at Marsh Lane / Winterstoke Road, Bedminster	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						0	0	0	?	?	?	+		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA0307	155-169 West Street, Bedminster	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA0401	Land at Gloucester Road / Merton Road, Horfield	+	+	0	0	++	+	0	++	?	0	0	-	++	++	+/?	+						+	+	0	?	?	?	+		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA0402	Land adj. 321 Gloucester Road	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						+	+	0	?	?	?	+		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA0601	Land at Latimer Close, Brislington	+	+	0	0	-	+	-	+	?	+	+	0	++	+	+/?	-						0	0	0	-/?	?	+	+		-/?	?	++	?	0		0	+	0	?	?	0	?	
BDA0702	Land at Marmalade Lane (south), Brislington	+	+	0	0	--	+	-	++	?	0	0	0	++	++	+/?	+						0	0	0	-/?	?	?	++		-/?	?	+/?	?	0		-/?	0	0	0	?	?	0	?
BDA0703	Land at Marmalade Lane (north), Brislington	+	+	0	0	-	+	-	++	?	0	0	0	++	+	+/?	+						0	0	0	?	?	+	++		-/?	?	++	?	0		-/?	0	+	0	?	?	0	?
BDA0901	2-16 Clifton Down Road	+	+	0	0	+	+	0	++	?	0	0	0	++	++	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0		0	0	0	?	?	0	?	
BDA1001	Land west of Hampton Lane, Clifton Down	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA1002	Land at Whiteladies Gate, Clifton Down	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA1003	Land adjacent Alma Vale Road and Alma Court	+	+	0	0	+	+	0	++	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	+	++		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA1004	Barley House, Oakfield Grove	+	+	0	0	+	+	0	++	?	0	0	-	++	+	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		0	0	-	?	?	0	?	
BDA1101	Land at Gibson Road	+	+	0	0	++	+	0	++	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	+	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA1102	Land at Sydenham Lane	+	+	0	0	+	+	0	++	?	+	+	-	++	++	+/?	+						0	0	+/?	?	?	+	++		-/?	?	++	?	0		0	0	-	?	?	+	?	
BDA1201	16-20 Fishponds Road, Easton	+	+	0	0	+	+	0	++	?	+	+	-	++	++	+/?	+						+	+	0	?	?	?	++		-/?	?	+/?	?	0		0	0	-	?	?	0	?	
BDA1301	Stapleton Cricket Club	+	+	++	++	--	0	-	+	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		-/?	0	0	-	?	?	0	?
BDA1302	Land south of Rose Green Close, Eastville	+	+	0	0	--	+	0	+	?	0	0	0	++	+	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0		-/?	0	0	0	?	?	0	?
BDA1303	Land at Hendys Yard, Lower Grove Road	+	+	0	0	+	+	0	++	?	+	+	0	++	+	+/?	+						0	0	0	?	?	?	++		-/?	?	+/?	?	0		-/?	0	0	0	?	?	0	?
BDA1304	Land to the rear of Rose Green Road, Eastville	+	+	0	0	+	+	0	-	?	0	0	0	++	+	+/?	+						-	-	0	?	?	?	++		-/?	?	++	?	0		-/?	0	0	0	?	?	0	?
BDA1305	525 Stapleton Road, Fishponds	+	+	0	0	+	+	0	++	?	+	+	-	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0		-/?	0	0	-	?	?	0	?
BDA1401	Land at Hartcliffe Way	+	+	0	0	++	+	0	-	?	++	++	0	++	++	+/?	+						-	-	0	?	?	?	++		-/?	?	+/?	?	0		0	0	0	?	?	0	?	
BDA1402	Land at Nover's Hill	+	+	0	0	++	+	0	-	?	++	++	0	++	+	+/?	+						-	-	0	-/?	?	?	++		-/?	?	++	?	0		0	0	0	?	?	0	?	
BDA1403	Land at Bedminster Road / Highbury Road, Bedminster	+	+	0	0	+	+	0	++	?	0	0	-	++	+	+/?	+						0	0	0	?	?	?	++		-/?	?	+/?	?	0		0	0	-	?	?	+	?	
BDA1501	Land at College Road, Fishponds	+	+	++	++	-	0	-	++	?	+	+	0	++	+	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		0	0	0	?	?	0	?	
BDA1601	Land to the rear of 96 Church Road/ Orchard Drive, Bishopsworth	+	+	0	0	+	+	0	+	?	+	+	0	++	++	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0		0	0	0	?	?	0	?	
BDA1701	Brentry House, Knole Lane, Brentry	+	+	++	++	++	+	0	++	?	+	+	0	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0		0	0	0	?	?	0	?	

Site Ref	Site Name	SA Objective																																									
		1				2		3	4	5			6			7		8				9		10		11		12		13		14		15		16			17		18		
		DMC1	DMC2	DMC3	DMC4	DMC5	DMC6	DMC7	DMC8	DMC9	DMC10	DMC11	DMC12	DMC13	DMC14	DMC15	DMC16	DMC17	DMC18	DMC19	DMC20	DMC21	DMC22	DMC23	DMC24	DMC25	DMC26	DMC27	DMC28	DMC29	DMC30	DMC31	DMC32	DMC33	DMC34	DMC35	DMC36	DMC37	DMC38	DMC39	DMC40	DMC41	DMC42
BDA1702	14 Wyck Beck Road, Brentry	+	+	0	0	+	+	0	++	?	++	++	0	++	+	+/?	+						0	0	0	?	?	+	+		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA1801	Hengrove Leisure Park, Hengrove	+	+	0	0	-	+	0	+	?	0	0	0	++	+	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	+	?	
BDA1802	Western Drive - Hengrove					-			?	0	0	0		+	+/?		+	+	+	+	?	0	0	+/?	-/?	?	+	+		-/?	?	++	?	0	0	0	0	?	?	0	?		
BDA1901	Land at the corner of Lodge Causeway / Berkeley Road, Fishponds	+	+	0	0	+	+	0	++	?	0	0	0	++	+	+/?	+						+	+	0	?	?	?	+		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2001	3 Kelston Road	+	+	0	0	+	+	0	++	?	0	0	0	++	++	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0	-/?	0	0	0	?	?	0	?
BDA2201	Broadwalk Shopping Centre, Broad Walk, Knowle	+	+	0	0	++	+	0	++	?	+	+	-	++	++	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0	-/?	0	0	-	?	?	0	?
BDA2301	Land to the south of Warwick Road / Oxford Place, Easton	+	+	0	0	+	+	0	++	?	+	+	-	++	++	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2302	Former Barton Hill Nursery School, Queen Ann Road, St Philips	+	+	0	0	+	+	0	++	?	+	+	-	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2402	Land to the east of Romney Avenue and Stanfield Close (Romney PRC), Lockleaze	+	+	0	0	+	+	0	+	?	+	+	0	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2501	33 Zetland Road	+	+	0	0	+	+	0	++	?	0	0	-	++	+	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2502	Land at Cossins Road, Redland	+	+	0	0	+	+	0	++	?	0	0	0	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2601	Land at Two Mile Hill Road / Charlton Road, St George	+	+	0	0	++	+	0	++	?	0	0	0	++	++	+/?	+						+	+	+/?	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2602	81-83 Two Mile Hill Road, St George	+	+	0	0	+	+	0	++	?	0	0	0	++	+	+/?	+						0	0	0	?	?	?	+		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2603	Land at Two Mile Hill Road / Waters Road, St George	+	+	0	0	+	+	0	-	?	+	+	0	++	++	+/?	+						-	-	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2604	Land at to the south east of Cousins Lane, St George	+	+	++	++	+	+	0	-	?	+	+	0	++	+	+/?	+						-	-	0	-/?	?	+	+		-/?	?	++	?	0	0	+	0	?	?	0	?	
BDA2605	Land at Broad Road / Lodge Road, St George	+	+	0	0	+	+	0	++	?	+	+	0	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2701	Land at Crew's Hole Road, St George	+	+	0	0	++	+	0	++	?	0	0	0	++	++	+/?	+						+	+	+/?	?	?	+	+		-/?	?	-	?	0	0	0	0	?	?	0	?	
BDA2702	Land at corner of Bryants Hill and Furber Road, St George	+	+	0	0	+	+	0	-	?	0	0	0	++	++	+/?	+						-	-	0	?	?	+	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2703	Land at Nags Head Hill, St George	+	+	0	0	+	+	0	-	?	0	0	0	++	+	+/?	+						-	-	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA2801	Land to the south of Blackswarth Road, Avonview	+	+	0	0	++	+	0	++	?	+	+	0	++	++	+/?	+						+	+	+/?	?	?	+	++		-/?	?	-	?	0	0	0	0	?	?	0	?	
BDA2802	Part of Soaphouse Industrial Estate, Howard St	+	+	0	0	+	+	0	++	?	0	0	-	++	+	+/?	+						0	0	0	?	?	+	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2803	222-232 Church Road, St. George	+	+	0	0	+	+	0	++	?	+	+	-	++	+	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2901	Land at Lanercost Road	+	+	++	++	--	+	-	++	?	+	+	0	++	++	+/?	+						0	0	0	-/?	?	+	++		-/?	?	++	?	0	-/?	0	0	0	?	?	0	?
BDA2902	Works at Felstead Rd	+	+	0	0	+	+	0	++	?	++	++	0	++	+	+/?	+						+	+	0	?	?	?	+		-/?	?	++	?	0	-/?	0	0	0	?	?	0	?
BDA3001	Land at North Street / Durnford Street, Southville	+	+	0	0	++	+	0	++	?	+	+	-	++	+	+/?	+						+	+	0	-/?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	+	?	
BDA3002	1-7 Smyth Road, Southville	+	+	0	0	+	+	0	++	?	0	0	0	++	+	+/?	+						+	+	0	?	?	?	++		-/?	?	++	?	0	0	0	0	?	?	+	?	
BDA3101	Greville EPH, Lacey Road, Stockwood	+	+	0	0	++	+	0	+	?	0	0	0	++	+	+/?	+						0	0	0	?	?	+	+		-/?	?	++	?	0	-/?	0	0	0	?	?	0	?
BDA3201	Land at Sanctuary Gardens, Sneyd Park	+	+	0	0	++	0	0	+	?	0	0	0	++	+	+/?	-						0	0	+/?	?	?	+	+		-/?	?	++	?	0	0	0	0	?	?	0	?	
BDA3401	122 Bath Road, Totterdown	+	+	0	0	+	+	0	+	?	+	+	-	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2101	94-96 & 119 Cumberland Road, Spike Island	+	+	0	0	+	++	0	++	?	0	0	-	++	++	+/?	+						0	0	+/?	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	+	?	
BDA2401	Bridge Farm, Land at South Hayes, Lockleaze	+	+	++	++	--	0	-	-	?	0	0	-	++	++	+/?	+						-	-	+/?	--/?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	
BDA2002	272-276 and 290-298 Southmead Road	+	+	0	0	+	+	0	++	?	0	0	0	++	++	+/?	+						0	0	0	?	?	?	++		-/?	?	++	?	0	-/?	0	0	0	?	?	0	?
BDA2403	Former Gas Holder Site, Glenfrone Road					++		0			0	0	-		++	+/?		+	+	+	+	?	0	0	0	?	?	?	++		-/?	?	++	?	0	0	0	-	?	?	0	?	

Assessment of Industry and Distribution Areas

SA Objective 1 - To ensure an adequate and diverse supply of housing that is affordable to everyone – N/A

SA Objective 2 - Promote the conservation and wise use of land, maximising the reuse of previously developed land

All Industry and Distribution Areas (IDA) are considered to have potential to produce significant positive sustainability effects when appraised against DMC5, as they are all in excess of 0.5 hectares in area and are predominantly brownfield by virtue of their current employment use. In one case, a site currently designated as PIWA is proposed with amended boundaries so that greenfield land is no longer part of the proposed IDA site (IDA013). Other sites with revised PIWA boundaries are amended so that adjacent brownfield land is no longer proposed to form part of the IDA (IDA019, IDA021, IDA028, IDA031, IDA036). One IDA (IDA028) includes a small area of greenfield land to the west of its allocation.

Each IDA holds a good level of sustainable accessibility, with several sites being adjacent or close to train stations; multiple bus routes; and strategic or local cycleways. All IDA sites are considered to have positive or significant positive effects when appraised against DMC6, as they are all brownfield in character and are located within accepted distances of sustainable transport criteria. For some IDAs, there are opportunities to strengthen active transport (walking and cycling) routes including for 'last mile' journeys, which could form an additional recommendation for Draft Policy E4.

No IDAs are proposed on extensive areas of greenfield land or within land safeguarded as Green Belt, and therefore there are no effects of sites when appraised against DMC7.

Overall, there are no significant conflicts with the IDA site boundaries and areas proposed for Local Green Space and Reserved Open Space and as such the development of IDAs is not likely to result in the loss of greenfield land. However, the several IDAs are bounded by an LGS or ROS site⁶ or are adjacent to⁷ (severed by an existing highway route) an area proposed for LGS or ROS designation. The majority of these spaces are ROS and are commonly land adjacent to railways or allotment land; however, a select number of IDAs have potential to affect the quality/functioning of larger publicly accessible green space sites (such as IDA006), including those with LGS protection (such as IDA022).

In addition, the future development of IDAs would be directed by Draft Policy E4 requirements to make efficient use of land. As such, this would likely generate positive sustainability effects of IDA site allocations linked to maximising existing brownfield land within the Plan area.

⁶ IDA028 is the only IDA that has a small overlap (>0.1% of the total IDA area) with an area proposed for ROS (Paddocks to north of Manor Woods Valley). Very minor overlaps (<0.1%) with areas proposed for LGS and/or ROS include IDA002; IDA003; IDA006 ; IDA011; IDA012; IDA013; IDA015; IDA016; IDA017 ; IDA020; IDA022; IDA023; IDA025; IDA026 ; IDA028; IDA030; IDA032; IDA034; and IDA036.

⁷ The following IDAs are located on the boundary of or within close proximity of an LGS or ROS, however, do not overlap with such spaces: IDA004; IDA010; IDA014; IDA019; IDA021; and IDA033.

For Avonmouth employment allocations (ASAs), sustainability effects against SA Objective 2 are considered to be significant negative and negative effects for DMC5 and DMC7, given that these are large sites (in excess of 2ha) on greenfield land or predominantly greenfield land. Whilst all Avonmouth employment allocations overlap with the Avonmouth Enterprise Area, as these are greenfield land effects against DMC6 are generally likely to be neutral. In addition, some of the sites have limited transport accessibility (as per the SA Site Assessment Framework) and therefore they also achieve unknown assessments against Objective 2 (DMC6).

SA Objective 3 - Ensure easy and affordable access to key services – N/A

SA Objective 4 - Increase participation in cultural and community activities

Based on Draft Policy E4, all IDAs have the potential for enhancing the local provision of community facilities or specialised leisure uses, and therefore generate positive effects for SA Objective 4 (DMC9). However, this is dependent on implementation of Draft Policy E4.

SA Objective 5 - To reduce poverty and income inequality and improve the quality of life for those living in areas of concentrated disadvantage

Several IDA allocations are considered to generate positive sustainability effects under DMC10 and DMC11 as sites are proposed within areas of high deprivation (using the Indices of Multiple Deprivation Index 2019 data, where the top 30% most deprived Lower Super Output Areas). Such effects are likely to generate cumulative benefits for the built environment where site allocations are concentrated in wards including Brislington and Hartcliffe. However, a high proportion of IDAs are considered to generate neutral effects as they are proposed within areas of moderate or low deprivation. Overall, effects are subject to implementation.

Avonmouth employment allocations (ASAs) are located within areas of high deprivation (IMD 2019). It is considered that allocation for employment in these areas could offer potential for regeneration or investment in employment and any supporting infrastructure (e.g. through s106 agreements). Therefore effects against DMC11 are likely to be positive overall. It remains unknown the extent to which development brought forward in such locations would be an improvement to the built environment (DMC10), as this would be subject to implementation.

SA Objective 6 - To reduce health inequalities and promote healthy lifestyles across the city

A total of 18 IDAs are proposed within AQMAs or their cumulative air quality impact zones. As such, these sites are considered to have potential for minor negative effects for employee and local resident health (DMC12), without appropriate mitigation. It is acknowledged that development or redevelopment of such sites, including of other acceptable uses set out within Draft Policy E4, would be required to be delivered in line with Draft Policy HW2.

None of the Avonmouth employment allocations (ASAs) are located within the AQMA or their cumulative impact zones, and as such, the exposure of future occupants to air pollution is likely to be lower. Effects against DMC12 are assessed as unknown, being subject to the nature of development uses introduced within the area and any related mitigation.

Overall, the IDAs generally perform well across DMC14 as sites are proposed within locations that fulfil one or more of the sustainable transport criteria, as set by the SA Framework.

The Avonmouth employment allocations have a varied performance against DMC14, with a select number of sites having relatively limited accessibility (Land at King Weston Lane and Land South of Seabank Power Station). Land east of Packgate Road (Site A12) and Land east of Chittening Road are more easily accessed by two or more of the sustainable transport modes (strategic cycleways and public rights of ways). However, it is acknowledged that for Land at King Weston Lane, St. Andrews Road train station exists just beyond the 800m threshold (approximately 1.2km west); and an aspirational cycle route exists to the east/south of these sites. Effects overall at this Interim SA stage are therefore uncertain. It is recognised that public transport into the Avonmouth and Severnside area is relatively poor and reduces the accessibility of the area.

SA Objective 7 - Ensure access to education and learning for all sections of society – N/A

SA Objective 8 - To support the economy and ensure that there are suitable opportunities for employment

By virtue of their allocated use, all IDAs and Avonmouth employment allocations are considered to generate positive effects for the city's economy through provision of floorspace for strategic and local businesses with industrial or distribution needs, with several smaller industrial IDA sites identified for small – medium sized industrial and distribution businesses (DMC17).

Draft Policy E4 does not specify the types of priority sectors which are desirable, or how sites align with these sectors. Priority sectors are identified within the Local Industrial Strategy (LIS): advanced engineering, including aerospace; creative, cultural and digital industries; and financial, business and legal 'tech' services; and within this document, the importance of the Avonmouth Enterprise Area is explored. Whilst the effects of these sites against DMC18 and DMC20 are likely to be positive, draft policy E4 could be strengthened to reference these priority sectors and how proposed allocations could support these.

IDAs are predominantly proposed within South and East Bristol. Development of such sites could secure and deliver further employment opportunities in areas of the city that continue to experience relatively higher rates of unemployment (based on IMD data for 2019) (DMC19). Retention of employment land within these areas could continue to support local economic growth and reduce inequalities across the city, particularly where local populations are able to access higher quality employment through sustainable transport modes. In addition, the proposed allocation of over 50% of the city-wide total IDA land area to land within South Bristol aligns with the Local Plan's priority focus for the development and regeneration of this sub-area.

As referenced within SA Objective 5 above, the Avonmouth employment allocations (ASAs) are located within areas of high deprivation (the top 30% most deprived Lower Super Output Areas), and as such it is considered that allocation for employment in these areas could boost local employment and wider regeneration.

While the majority of IDAs are located in areas that offer opportunities for reducing the need to travel by private car and are considered sustainably accessible, the Avonmouth employment

allocations are less sustainably located (serviced by only one or two sustainable transport modes, such as PRoWs).

It is unclear at this stage of the extent to which the IDAs and Avonmouth employment allocations would support delivery of carbon neutral employment (DMC21); this is true particularly of zero carbon industry/distribution spaces, as this remains dependent upon elements such as the operational use alongside the as-built design of development. Overall effects of the IDAs and Avonmouth employment allocations against DMC21 are therefore unknown until implementation.

SA Objective 9 - Ensure access to a range of shopping facilities for all sections of society

A limited number of IDAs are not located within 800m of a Town, District or Local Centre (IDA015, IDA021, IDA023, IDA028) and therefore would offer restricted accessibility to existing retail services. The potential sustainability effects are similar for Avonmouth employment allocations, where the majority are situated outside of the specified distance threshold; except for Land at Kings Weston Lane (southern part) which is within 800m of the Avonmouth Local Centre.

However, the potential negative effects of the siting of industrial and distribution development could be mitigated by provision of on-site retail or amenity facilities for employees, as set out within Draft Policy E4.

SA Objective 10 - To ensure the protection and enhancement of the historic environment and its setting

A limited number of IDAs are considered to have potential for negative, unknown sustainability effects for the historic environment (DMC24) where they are located within (IDA018, IDA019, IDA024, IDA025, IDA028) or on the boundary of a Conservation Area (IDA001, IDA006, IDA008, IDA010). While the potential impact of site development upon the affected Conservation Areas is not possible to determine at this stage, the requirement for proposals to be compliant with other Local Plan policies that address the historic environment (including Draft Policy DC3) would ensure the appropriate safeguarding of Conservation Areas and is therefore sufficient mitigation for IDAs.

For Avonmouth employment allocations, the majority of these sites do not include any statutory designated heritage assets or areas and as such, sustainability effects against DMC24 are generally considered to be neutral. However, a small proportion of Land at Kings Weston Lane (northern part) overlaps the Scheduled Monument ('The Mere Bank and Flanking Ditches'), and therefore, there is potential for development to have negative effects upon this designated heritage asset of the highest significance. Effects are also unknown at this stage: subject to the nature of development, its siting and any proposed mitigation.

SA Objective 11 - To ensure the protection and enhancement biological and geological assets and improve the quality of wildlife habitats – need sight of final LNR information

One IDA (IDA028) includes a partial overlap of a Site of Nature Conservation Interest (SNCI), located on a small area of greenfield land to the west. IDA014, IDA015, IDA021 and IDA023 include a partial overlap with a wildlife corridor, although this overlap is limited in extent. Several sites are adjacent to wildlife corridors or on the boundary of a SNCI, including the River Avon SNCI and Easton-Staple Hill Disused Railway SNCI. Further development or redevelopment of IDAs in these locations could

therefore introduce cumulative negative effects for existing ecology and habitat areas in the absence of appropriate mitigation. For sites with partial or full overlap between ecological or geological sites, draft development considerations / IDA policy (Draft Policy E4) could reference to mitigation and/or requirement for enhancement of such areas. All sites are within an SSSI impact zone, and therefore overall effects are often uncertain at this stage.

All of the Avonmouth employment allocations overlap with a wildlife corridor area. Two allocations (Land at Kings Weston Lane (southern part) and Land east of Packgate Road (Site A12) include small areas of SNCIs (4-8% site area), whilst the northern part of Kings Weston Lane allocation is also adjacent to an SNCI. Land at Chitting Road also adjacent (within 10m) of the Hallen Marsh mitigation area. Land South of Seabank Power Station is within an SSSI Impact zone, which requires consultation with relevant statutory nature conservation bodies for all planning applications. While the extent of overlap and/or proximity to each of these ecological designations varies by site, effects are likely to be negative and generally uncertain, subject to the nature of development, its siting and any proposed mitigation.

SA Objective 12 - To ensure the protection and enhancement green and blue infrastructure and ensure access to a variety of open space and recreation

The majority of IDAs are located directly adjacent to either a wildlife corridor and/or a SNCI; and the Avonmouth employment allocations similarly include wildlife corridor areas and small areas designated as a SNCI.

Therefore, it is considered that there could be opportunities through development or redevelopment proposals for off-site enhancement and/or provision of on-site green or blue infrastructure, and that this could be delivered to be both integrated and multi-functional in nature, thereby bringing benefits for flood resilience, biodiversity and climate change.

SA Objective 13 - To encourage a demonstrable modal shift and reduce the need to travel

Overall, the majority of draft IDAs are considered to have potential to generate positive or significant positive effects for DMC14, which addresses access to and quality of sustainable transport modes (walking, cycling and public transport). Assessment accounts for accessibility to bus stops, railway stations, PRowWs and cycleways.

ASAs were considered to have neutral effects for DMC14, as public transport into the Avonmouth and Severnside area is relatively poor and as the majority of sites exist beyond the defined distances for public transport. The majority of ASAs also have limited access via PRowWs or cycleways and/or are adjacent to disconnected PRowWs, and as such, do not have good levels of pedestrian access or cycling infrastructure.

While the appraisal is primarily concerned with existing infrastructure within the distances defined in the SA Framework for site assessment, proposed strategic cycleways ('aspirational' routes) were identified as part of this process, and it is noted that the delivery of these may improve future accessibility of some IDAs or ASAs.

SA Objective 14 - To maintain and improve the existing highway network

All new development, unless required to be car-free which would be positive in effect (+), has the potential to increase the number of vehicle journeys and therefore contribute to congestion issues in the city. Therefore proposals could score negatively with an unknown effect dependent upon the scale of development (-/?).

Effects for all of the sites against Objective 14 are uncertain, potentially negative, subject to further assessment through ongoing evidence base work.

SA Objective 15 - To reduce the risk of flooding from all sources

Overall, the majority of IDAs are directed towards areas of lower or no flood risk and would therefore produce neutral or significant positive effects for DMC32.

Several IDAs have small areas within Flood Risk Zone 3b (IDA001; DIA002; IDA003; IDA012; IDA019; IDA021; IDA024; IDA025; IDA032). Whilst 'less vulnerable' development is proposed on these sites, the Flood Risk Vulnerability Classification considers that this type of development should not be permitted in areas of Flood Risk Zone 3b. Conversely, there are several IDAs proposed within Flood Risk Zone 3a or 3 with variable surface water levels. Proposals for 'less vulnerable uses' on these sites could represent effective use of city centre land that is at risk of flooding, subject to appropriate mitigation, however, as the draft policy does permit energy uses, community uses and leisure uses on IDAs, all of which have varying degrees of vulnerability and therefore effects could still be negative. In addition, several IDAs include areas of high or medium surface water flood risk and therefore development proposals at the site will be required to account for current and projected risks at planning application stage, in accordance with Retained Policies BCS16 and BCAP5. Given that the IDAs form an important component of the employment strategy (as set out in Section 5 of the Main Interim SA above), it is considered that development of such sites would meet the development requirements of the city and any flood risk could be managed through mitigation requirements of the above retained policies.

The vast majority of two of the Avonmouth employment allocations (Land at Kings Weston Lane north and south) are currently at risk from Flood Zone 3b, and are therefore considered to have potential to produce significant negative effects for DMC32 in the absence of appropriate mitigation. All other remaining Avonmouth employment allocations are located within Flood Risk Zone 3a or Flood Risk Zone 2 with variable surface flood water risk levels. Depending on the vulnerability of uses proposed on site (i.e. energy generation uses are considered to be 'essential infrastructure' and therefore require an exception test, whereas industrial and distribution uses are considered to be 'less vulnerable') effects are also uncertain. Proposed allocations at Avonmouth will require update following implementation of the Avonmouth Severnside Enterprise Area flood mitigation and habitat creation scheme.

The corresponding mitigation requirements for draft IDAs and Avonmouth employment allocations will be as set out within Retained Policies BCS16 and BCAP5, where proposals are to be supported by a site-specific flood risk assessment and a drainage strategy, which will be expected to prioritise sustainable drainage systems, ensure no increased flood risk and provide appropriate mitigation. Retained Local Plan policies would continue to ensure that flood risk and water management is accounted for within new development.

SA Objective 16 - Sustainably manage natural resources, including water demand and quality and reducing waste being landfilled

All draft IDAs and Avonmouth employment allocations are considered to be unknown in their sustainability effects for several decision-making criteria under SA Objective 16 (DMC34 and DMC36), based on the fact the extent to which development would reach minimise resource use and waste production, while increasing energy efficiency of development, is dependent upon implementation and compliance with other Local Plan policies. In addition, as there are no groundwater protection zones identified within the Plan area based upon latest available Defra mapping⁸, however, there are several water bodies identified as vulnerable on the basis of their Environment Agency classification.

Three IDAs are located in wards where there are water bodies (predominantly tributaries to the River Avon) classified by the Environment Agency as 'Poor' or 'Bad' in water quality⁹ (IDA013; IDA031; IDA032). In addition, several IDAs (IDA012; IDA019; IDA024; IDA025; IDA030; IDA031; IDA032) are located adjacent to a vulnerable water body (the River Avon), which is classified by the EA as 'moderate' in quality¹⁰. It is therefore considered that the site allocations have potential to impact directly on the water quality baseline on the basis of current policy text; and could create negative and cumulative impacts for water quality of the River Avon, subject to the type of development proposed and any on/off site mitigation. Retained Local Plan policies would ensure that flood risk and water management is accounted for within new development.

There are no groundwater Source Protection Zones (SPZs) or Nitrate Vulnerable Zones (NVZs) (DMC35) identified within the Plan area, based upon latest available Defra mapping¹¹, and therefore sites are not subject to additional regulations associated with groundwater/aquifer sources.

In relation to DMC37, Land east of Packgate Road, Ashton Vale Road, South Liberty Lane and Land South of Seabank Power Station have at least some overlap with areas of Agricultural Land Classification Grade 3. This is poorer quality agricultural land and therefore effects are unlikely to be negative.

SA Objective 17 - Minimise air and noise pollution

A significant proportion of IDAs are proposed within AQMAs or their cumulative air quality impact zones. As such, these sites are considered to have potential for minor negative effects for SA Objective 17 in relation to minimising exposure to pollution (DMC38), without either appropriate mitigation. For IDAs located in AQMAs or cumulative air quality impact zones, development or redevelopment of industrial use premises, or other uses deemed acceptable by Draft Policy E4,

⁸<https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/SourceProtectionZonesMerged&Mode=spatial>

⁹ List of Vulnerable Water Bodies- Avon Bristol Urban catchment: <https://environment.data.gov.uk/catchment-planning/OperationalCatchment/3046/classification?item=106&status=Poor&status=Fail&status=Bad>

¹⁰ <https://environment.data.gov.uk/catchment-planning/WaterBody/GB109053027371>

¹¹<https://environment.data.gov.uk/DefraDataDownload/?mapService=EA/SourceProtectionZonesMerged&Mode=spatial>

would be required to be delivered with appropriate mitigation in line with Draft Policy HW2. All Avonmouth employment allocations are located outside of AQMAs or cumulative air quality impact zones, and as such, effects against DMC38 are considered to be unknown, being dependent upon other interacting factors such as the type for future development proposed within these allocations and any adjacent sites (e.g. PIWA).

SA Objective 18 - To maximise the potential for energy efficiency, reduce greenhouse gas emission and ensure that the built and natural environment and its communities can withstand the effects of climate change

All draft IDAs and Avonmouth employment allocations are considered to be unknown in their sustainability effects for several decision-making criteria under SA Objective 18 (DMC39, DMC40 and DMC42), based on the extent to which development would reach energy efficiency targets, climate resilient design and/or use of renewable energy is dependent upon final constructed design / operation, directed by other Local Plan policies. Under DMC41, several IDAs are likely to generate minor positive effects as they are located in an existing Heat Priority Network Areas (Central Bristol or Hartcliffe Campus), which resultantly means that such sites are able to access low-carbon heat energy sources for any future development. None of the Avonmouth employment allocations are located within an existing Heat Priority Network Area, and as such, sustainability effects are considered to be neutral for DMC41.

Assessment of Industry and Distribution Area Allocations

	Site Name	1				2			3	4	5			6		7		8					9	10	11		12	13	14		15			16			17	18							
		DMC1	DMC2	DMC3	DMC4	DMC5	DMC6	DMC7	DMC8	DMC9	DMC10	DMC11	DMC12	DMC13	DMC14	DMC15	DMC16	DMC17	DMC18	DMC19	DMC20	DMC21	DMC22	DMC23	DMC24	DMC25	DMC26	DMC27	DMC28	DMC29	DMC30	DMC31	DMC32	DMC33	DMC34	DMC35	DMC36	DMC37	DMC38	DMC39	DMC40	DMC41	DMC42		
IDA001	Ashley Hill, St. Werburgh's					++	+	0				0	0	-		++			+	+	+	+	?	0	0	-/?	?	?	0	++		DMC29	-/?	?	--/?	?	0	?	?	0/?	-	?	?	0	?
IDA002	Ashton Vale Road, Ashton					++	+	0				+	+	-		++			++	+	++	++	?	0	0	0	-/?	?	+/?	++		-/?	?	--/?	?	0	?	?	0/?	-	?	?	+	?	
IDA003	Barton Hill Trading Estate, Barton Hill					++	+	0				+	+	-		+			++	+	++	++	?	0	0	0	-/?	?	+/?	+		-/?	?	--/?	?		?	?		-	?	?	0	?	
IDA004	Brislington Trading Estate / Bath Road (north)					++	+	0				+	+	-		+			++	+	++	++	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA005	Bush Industrial Estate, Whitehall					++	+	0				0	0	-		+			+	+	+	+	?	0	0	0	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA006	Cater Road, Bishopsworth / Hartcliffe					++	+	0				+	+	0		++			++	+	++	++	?	0	0	-/?	-/?	?	+/?	++		-/?	?	--/?	?	0	?	?		?	?	?	0	?	
IDA007	Central Park, Petherton Road, Hengrove					++	+	0				0	0	0		0			+	+	+	+	?	0	0	0	?	?	0	0		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA008	City Business Park, Easton					++	+	0				+	+	-		+			++	+	++	++	?	0	0	-/?	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	+	?	
IDA009	East of Kingsland Road, St. Philip's					++	++	0				+	+	-		+			++	+	++	++	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		-	?	?	+	?	
IDA010	East of Midland Road, Old Market					++	++	0				+	+	-		+			++	+	++	++	?	0	0	-/?	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	+	?	
IDA011	Eastpark Trading Estate, Whitehall					++	++	0				0	0	0		+			+	+	+	+	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA012	Feeder Road, St. Philip's Marsh					++	++	0				+	+	-		+			++	+	++	++	?	0	0	0	-/?	?	+/?	+		-/?	?	--/?	?	-/?	?	?		-	?	?	+	?	
IDA013	Fishponds Trading Estate, Eastville					++	++	0				+	+	0		++			++	+	++	++	?	0	0	0	-/?	?	+/?	++		-/?	?	0	?	-/?	?	?		?	?	?	0	?	
IDA014	Hawkfield Business Park, Hartcliffe					++	++	0				+	+	0		++			++	+	++	++	?	0	0	0	-/?	?	+/?	++		-/?	?	0	?	0	?	?		?	?	?	+	?	
IDA015	Liberty Industrial Park, Ashton Vale					++	++	0				0	0	0		+			+	+	+	+	?	0	-/?	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		?	?	?	+	?	
IDA016	Lodge Causeway (west), Fishponds					++	++	0				+	+	0		++			++	+	++	++	?	0	0	0	-/?	?	+/?	++		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA017	Malago Vale Estate, Windmill Hill					++	++	0				0	0	-		++			+	+	+	+	?	0	0	0	-/?	?	+/?	++		-/?	?	--/?	?	0	?	?		-	?	?	+	?	
IDA018	Montpelier Central / Station Road, Montpelier					++	++	0				+	+	-		+			++	+	++	++	?	0	0	-/?	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA019	Netham Road / Blackswarth Road (south), St. George					++	++	0				+	+	0		+			+	+	+	+	?	0	0	-/?	-/?	?	+/?	+		-/?	?	--/?	?	-/?	?	?		?	?	?	0	?	
IDA020	New Gatton Road, St. Werburgh's					++	++	0				0	0	-		+			+	+	+	+	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA021	Nover's Hill / Hartcliffe Way, Knowle					++	++	0				+	+	0		++			++	+	++	++	?	0	-/?	0	-/?	?	+/?	++		-/?	?	--/?	?	0	?	?		?	?	?	0	?	
IDA022	Roman Farm Road, Hengrove					++	++	0				+	+	0		++			++	+	++	++	?	0	0	0	-/?	?	+/?	++		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA023	South Liberty Lane / Brook Gate, Ashton Vale					++	+	0				+	+	0		+			++	+	++	++	?	0	-/?	0	-/?	?	+/?	+		-/?	?	-/?	?	0	?	?	0/?	?	?	?	+	?	
IDA024	St Anne's Road (north), St. Anne's					++	++	0				0	0	0		+			+	+	+	+	?	0	0	-/?	-/?	?	+/?	+		-/?	?	--/?	?	-/?	?	?		?	?	?	0	?	
IDA025	St Anne's Road (south), St. Anne's					++	++	0				0	0	0		+			++	+	++	++	?	0	0	-/?	-/?	?	+/?	+		-/?	?	--/?	?	-/?	?	?		?	?	?	0	?	
IDA026	St Gabriel's Business Park / Easton Business Centre, Easton					++	++	0				+	+	-		+			++	+	++	++	?	0	0	0	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA028	Vale Lane / Hartcliffe Way, Bedminster Down					+	++	0				0	0	-		++			+	+	+	+	?	0	-/?	-/?	-/?	?	+/?	++		-/?	?	-/?	?	0	?	?		-	?	?	0	?	
IDA029	Western Drive, Hengrove					++	++	0				0	0	0		+			+	+	+	+	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA030	Whitby Road (north), St. Anne's					++	++	0				0	0	0		0			+	+	+	+	?	0	0	0	-/?	?	+/?	0		-/?	?	+/?	?	-/?	?	?		?	?	?	+	?	
IDA031	Whitby Road (south), Brislington					++	+	0				0	0	-		0			+	+	+	+	?	0	0	0	-/?	?	+/?	0		-/?	?	+/?	?	-/?	?	?		-	?	?	0	?	
IDA032	Whitby Road (west), Brislington					++	++	0				0	0	-		0			+	+	+	+	?	0	0	0	-/?	?	+/?	0		-/?	?	--/?	?	-/?	?	?		-	?	?	+	?	
IDA033	Whitehall Trading Estate, Whitehall					++	++	0				+	+	-		+			+	+	+	+	?	0	0	0	?	?	0	+		-/?	?	0	?	0	?	?		-	?	?	0	?	
IDA034	Winterstoke Road / South Liberty Lane, Ashton Vale					++	++	0				0	0	-		+			+	+	+	+	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		-	?	?	+	?	
IDA035	Woodland Way, Hillfields					++	++	0				+	+	0		+			++	+	++	++	?	0	0	0	?	?	0	+		-/?	?	0	?	0	?	?		?	?	?	0	?	
IDA036	New Station Way					++	++	0				+	+	0		+			+	+	+	+	?	0	0	0	-/?	?	+/?	+		-/?	?	0	?	0	?	?		?	?	?	0	?	

Assessment of Draft Avonmouth Employment Allocations (ASAs)

Site Ref	Site Name	1		2			3	4		5		6			7		8				9		10	11		12	13		14		15		16			17	18									
		DMC1	DMC2	DMC3	DMC4	DMC5	DMC6	DMC7	DMC8	DMC9	DMC10	DMC11	DMC12	DMC13	DMC14	DMC15	DMC16	DMC17	DMC18	DMC19	DMC20	DMC21	DMC22	DMC23	DMC24	DMC25	DMC26	DMC27	DMC28	DMC29	DMC30	DMC31	DMC32	DMC33	DMC34	DMC35	DMC36	DMC37	DMC38	DMC39	DMC40	DMC41	DMC42			
ASA001	Land at Kings Weston Lane (southern part)					--	0/?	-			?	+	?		0		++	+/?	++	++	?		0	0	-	/?	?	+	0		-/?	?	--	0	?	?	?		0/?	?	?	0	?			
ASA002	Land at Kings Weston Lane (northern part)					--	0/?	-			?	+	?		0		++	+/?	++	++	?		-	/?	-	/?	?	+	0		-/?	?	--	0	?	?	?		0/?	?	?	0	?			
ASA003	Land east of Packgate Road (Site A12)					--	0/?	-			?	+	?		+/?		++	+/?	++	++	?		-	/?	0	-	/?	?	+	+/?		-/?	?	--	/?	0	?	?	?	0/?	0/?	?	?	0	?	
ASA004	Land east of Chittening Road					--	0/?	-			?	+	?		0		++	+/?	++	++	?		-	/?	0	-	/?	?	+	0		-/?	?	--	/?	0	?	?	?		0/?	0/?	?	?	0	?
ASA005	Land South of Seabank Power Station (Site A01)					--	0/?	-			?	+	?		0		++	+/?	++	++	?		-	/?	0	-	/?	?	+	0		-/?	?	--	/?	0	?	?	?	0/?	0/?	?	?	0	?	