

# 1 Response Paper – Policy DM1

## Purpose of Polic DM1

- 1.1 Policy DM1 is designed to manage the variety of issues that may arise on a site-by-site basis and force appropriate consideration of their impacts based on local circumstances, including in combination with other existing development where relevant.

## Summary of Position Prior to March 2021 Regulation 18 (Reg 18) Consultation

- Policy S11 was considered to be in conformity with the objectives of the NPPF/PPG
- Inclusion of potential impacts on mental health through the introduction of 'wellbeing' into the policy criteria
- Through internal engagement a reference to new development not having an unacceptable impact on flood risk added to DM1
- Through the HRA it was proposed to include the effects that barges could cause on the Essex coast
- Through previous engagement it was requested that the policy is amended to address the need to ensure that mineral development will not impact on the integrity of Habitats Sites as well as the replacement of a reference to the Essex Biodiversity Action Plan with a reference to the List of UK Biodiversity Action Plan Priority Habitats

## Impact of Revisions to NPPF 2021

- 1.2 Amendments made to the NPPF in July 2021 are considered to already be addressed through Policy DM1.

## Summary of Issues Raised through March 2021 Reg 18 Consultation

- Questions around the spatial distribution of mineral workings
- Flooding, water resources and water quality
- The inclusion of designated landscapes, AONB's, Natura 2000 sites, ancient woodlands, trees, historic environment, archaeology, heritage assets and their setting, criteria on Neighbouring Land Uses, differential settlement of quarry back-filling and highways safety
- Application of Policy DM1
- Reference to the English Nature's Biodiversity Metric
- Supposed weaknesses around sustainable drainage benefits and the need to be more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk
- Geological environment to be assessed by periodic monitoring
- Introduce a screening criteria to determine whether sites not allocated in the MLP require a project-level HRA
- Reference to indirect impacts, psychological impacts and the health and wellbeing of local residents

- Wording of specific statements

## **Addressing Issues Arising Out of March 2021 Reg 18 Consultation**

- 1.3 This section acts to address the issues raised through the March 2021 Regulation 18 Consultation in relation to this policy, as set out above, and subsequently details any changes in approach made through their consideration. These changes of approach will be incorporated within The Draft Essex Minerals Local Plan 2025-2040 Regulation 18 document which will again be subjected to a Regulation 18 public consultation.

There now follows a discussion of each of the main issues raised during the March 2021 Reg18 Consultation in relation to this Plan section:

### Questions around the spatial distribution of mineral workings

- 1.4 Through the consultation a comment received agreed that the rationale behind Policy DM1 cannot be argued as it discusses all aspects that have to be considered before a site is worked. However, the comments questions, why a quarry site would be considered in Coggeshall. It is presumed that this comment refers to a proposed flood alleviation venture between a private company and the Environment Agency.
- 1.5 Policy DM1 sets out a criterion that proposals for minerals development will be subject to which ensures “that the development would not have an unacceptable impact, including cumulative impact with other developments”. Each application is assessed on a case-by-case basis. ECC recognise that mineral extraction can have an adverse effect on communities and the environment if poorly planned. To that end, the Plan contains policies to protect local amenity and quality of life.

### Flooding, water resources and water quality

- 1.6 A comment received through the Reg 18 consultation suggested that Policy DM1 should be more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk. The MLP should be read in its entirety and information around flooding, water resources and water quality can be found in the supporting text for Policy DM1, paragraph 5.26 (5.13) – 5.35 (5.22).

### The inclusion of designated landscapes, AONB’s, Natura 2000 sites, ancient woodlands, trees, historic environment, archaeology, heritage assets and their setting, criteria on Neighbouring Land Uses, differential settlement of quarry back-filling and highways safety

- 1.7 Comments received stated that Policy DM1 should include reference to designated landscapes & AONB’s. With regards to landscapes, the MLP recognises that Essex has significant areas of land designated as protected landscapes. Policy DM1 states that ‘*Proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable adverse impact, including cumulative impact with other developments, upon The appearance, quality and character of the landscape, countryside and visual environment*’. Further, Policy S12 requires

mineral sites to ‘*enhance the form, quality of local character, and local distinctiveness of the landscape*’

- 1.8 The Policy is inclusive of all landscape, and application of the policy will be commensurate with the value of the landscape, assessed on a case-by-case basis. This is in line with paragraph 211, a of the NPPF 2021. The case officers will look to the District/ Borough/ City Local plan for a more prescriptive policy around designated landscapes & AONB’s such that locality-specific policies are material to the decision.
- 1.9 More generally, a specific public consultation exercise on the application would form part of the determination process. The issues raised in the consultation responses received would be required to be assessed, particularly through Policy DM1, which seeks to mitigate the impact of mineral development during the site preparation and extraction phases.
- 1.10 Mitigation of any potential site-specific adverse impacts of proposed development would therefore be addressed through the planning application process, including those impacts which are cumulative. This includes landuse matters which would be determined by the MWPA and environmental matters regulated by the Environment Agency.
- 1.11 Further, conditions attached to the granting of planning permission would be expected to be complied with. Failure to adhere to these conditions can result in enforcement action against the operator.
- 1.12 A representation received suggested the inclusion of Natura 2000 sites, ancient woodlands & trees, historic environment, archaeology, heritage assets and their setting, criteria on Neighbouring Land Uses, differential settlement of quarry back-filling and highways safety. The points below respond to each of these subject matters.
- 1.13 Natura 2000 designations no longer applies in the UK and information around ancient woodlands and trees can be found in the supporting text for Policy DM1, paragraph 5.39 (5.26).
- 1.14 Criteria 13 of Policy DM1 will be updated as follows, “The historic environment including heritage and archaeological assets and any contribution made by their setting.”
- 1.15 The MLP should be read in its entirety and information around neighbouring developments can be found in the supporting text for Policy DM1, paragraph 5.21 (5.9).
- 1.16 In relation to the differential settlement of quarry back-filling the case officer would look to the applicant for fates that are being forecasted. If relevant, this would include looking at the pre and post settlement level submitted as part of the application.
- 1.17 The MWPA do not consider it appropriate to be so specific and mention mud and aggregates on the road. Policy DM1 considers the impacts on “the safety and capacity of the road network”. In addition, the supporting text for Policy DM1 includes a ‘Transport’ section which discusses the impacts on highway safety.

## Application of Policy DM1

- 1.18 Through the consultation a comment received stated that elements within Policy DM1 such as biodiversity, flora, fauna, heritage, archaeology, recreation and Rights of Way relate to, it is presumed, a proposed flood alleviation venture between a private company and the Environment Agency which would involve the establishment of a quarry to facilitate the creation of flood defences. Whilst the MWPA notes the comments received, they are not related to a site being proposed for allocation as part of this review and therefore they fall outside of the scope of the Regulation 18 consultation for the MLP.

## Reference to the English Nature's Biodiversity Metric

- 1.19 Through the consultation a comment received suggest that reference to English Nature's Biodiversity Metric should be made through Policy DM1. The Rationale Report accompanying the Regulation 18 Consultation 2021 highlighted that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019.
- 1.20 Subsequent to the MWPA making this specific request through the Regulation 18 Consultation 2021, the Environment Bill which was driving this revised approach received Royal Assent and became the Environment Act in November 2021. This created a number of mandatory requirements around 'Biodiversity Net Gain' including the use of a metric which will supply quantifiable data relating to development-led net gains in biodiversity which can be monitored and reported.
- 1.21 The Act requires Local Planning Authority's to report on biodiversity net gain delivery. It is expected that further information on monitoring requirements will be set out in future consultations led by the Department for Environment, Food and Rural Affairs (Defra) and secondary legislation. As such, at this stage it is not considered appropriate to update paragraph 5.29 to make reference to the English Nature's Biodiversity Metric as the MWPA await further guidance.
- 1.22 It is considered appropriate that the Monitoring Framework of the MLP is amendment to include the national requirement to monitor biodiversity net gain through the application of the current Government supported metric, or any successor, and adopt the emerging approach as this is finalised ahead of the adoption of the MLP.
- 1.23 The MWPA will however positively respond to any emerging guidance and legislation relating to a wider natural capital monitoring indicator as and when such guidance emerges at the national level and consider implementing this through subsequent plan reviews or via a Supplementary Planning Document if considered appropriate.

Supposed weaknesses around sustainable drainage benefits and the need to be more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk

- 1.24 A comment received through the consultation raised concern around a weakness inherent in the proposed addition to the policy supporting text and reflected in the wording of the Policy. While the potential for reducing flood risk through the creation of flood storage areas should not be overlooked in the assessment of applications, it could also mean that an applicant might contrive a flood management scheme and over-emphasises the advantages in order to benefit from prior mineral extraction.
- 1.25 It is presumed that this consultation response primarily relates to a proposed flood alleviation venture between a private company and the Environment Agency which would involve the establishment of a quarry to facilitate the creation of flood defences. Whilst the MWPA notes the comments received, they are not related to a site being proposed for allocation as part of this review and therefore they fall outside of the scope of the Regulation 18 consultation for the MLP.
- 1.26 It was suggested that there is a need for Policy DM1 to be more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk. The MWPA consider that paragraph 5.27 (5.14) to cover specific issues around surface water flood risk, fluvial, and coastal flood risk. The proposed additional wording in criterion 3 of Policy DM1 carries though the proposed additional wording in paragraph 5.27 (5.14). However, criterion 3 will be updated as follows, "The quality and quantity of water (*including flood risk*) within water courses, groundwater, surface water, and coastal areas".

Inclusion of information around the need to avoid adverse effects on the integrity (AEOI) of Habitats Sites

- 1.27 It was suggested through the consultation that reference to the 'need to avoid adverse effects on the integrity (AEOI) of Habitats Sites' should be included in the text of Policy S5 as it was stated in its supporting text. The MWPA do not however consider that it is necessary to update the policy wording as the MLP is to be read as a whole.
- 1.28 Policy DM1, which applies to all mineral developments states that "It must be ensured that there will be no adverse effect on the integrity of Habitats Sites either alone or in combination with other plans and projects. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.". As such, the issue raised in the representation is addressed through an existing plan policy.
- 1.29 To avoid the impression that this requirement only relates to aggregate recycling sites which are subject to Policy 5, it is proposed to remove "Any new aggregate recycling sites should avoid causing adverse effects on the integrity of internationally or nationally important wildlife sites, either alone or in combination with other plans and projects. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any new aggregate recycling sites which fall within a Impact Risk

Zone (IRZ).” from the supporting text of Policy S5 and include this in the over-arching Policy DM1.

- 1.30 Policy DM1 is therefore proposed to be updated as follows, “It must be ensured that there will be no adverse effect on the integrity of Habitats Sites (internationally or nationally important wildlife sites) either alone or in combination with other plans and projects in relation to all minerals development. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.”

#### Geological environment to be assessed by periodic monitoring

- 1.31 Through the consultation it was suggested that “Geoconservation interests to be informed by periodic analysis by geologists with access to log and sample faces as they are worked” should be included in paragraph 5.30 (5.43) of the supporting text to Policy DM1. When a site is considered for allocation, part of requested supporting information is a schedule of borehole logs taken from across the site. These borehole logs would be publicly available. In addition, when a mineral planning application is made the application would also often be supported by borehole log data taken from across the application site, which could also be publicly available.
- 1.32 However, once works begin on a site, this is by way of a commercial operation, and the MWPA has no authority to request such information is recorded as part of the public record as it is commercially sensitive. The MWPA is also unable to grant public access to commercial operations on a private site. Whether members of the public would be allowed on site to provide the opportunity to periodic monitoring of faces as they are revealed during working would be a business decision made by the operator/landowner. Such requests would be required to be made to them. It must also be noted that the MWPA consult GeoEssex as part of the consultation process.

#### Introduce a screening criteria to determine whether sites not allocated in the MLP require a project-level HRA

- 1.33 A proposed amendment to the MLP requires that a project-level Habitats Regulations Assessment is needed for any sites not allocated in the MLP. A comment received questioned this and said that there should be a screening criterion to ascertain whether there is potential for impact as opposed to a requirement for all sites. This proposed amendment is to ensure compliance with national regulations as suggested through the emerging HRA.

#### Reference to indirect impacts, psychological impacts and the health and wellbeing of local residents

- 1.34 A comment received through the consultation that the inclusion of indirect impacts, psychological impacts and the health and wellbeing of local residents is impractical to measure and assess without clear guidance and that a project-level Habitats Regulations Assessment should be used to ascertain whether there is potential for impact as opposed to a requirement

for all sites. It has been recognised through this consultation that reference to indirect and/or psychological impacts should be removed from the plan as there is not a strong enough evidence base to support this.

- 1.35 It was also suggested that “the health and wellbeing of local residents, as well as the wider community, who could be impacted by operation of the development” should be removed from Policy DM1 as potential health impacts by reason of quantifiable measures, noise and dust impact for example, are reasonable and justified. The well-being of individuals and the wider community is not something that can be easily assessed as perception of impact can be so varied. Each proposal is subject to a Health Impact Assessment (HIA) as part of the validation checklist process when the application is considered. An HIA considers the health impacts of proposed development and assesses the impact of a development on existing services and facilities. Therefore, the MWPA consider the proposed policy wording to be appropriate as this will be assessed through the HIA process.

#### Wording of specific statements

- 1.36 Through the consultation it was suggested that paragraph 5.40 (5.27) should include reference to Local Wildlife Sites which are critical across the county in order to maintain a cohesive network of complex habitats for biodiversity. Therefore, paragraph 5.40 (5.27) will be amended as follows, “The County has important international and national designations, namely Special Areas of Conservation, Special Protection Areas, Ramsar Sites, National Nature Reserves, and Sites of Special Scientific Interest, LoWS and Marine Conservation Zones”.
- 1.37 It was noted that Policy DM1 should be amended for consistency, to include reference to ‘adverse impact’. Policy DM1 will be amended as follows, “Proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable adverse impact, including cumulative impact with other developments, upon:”.

#### Conclusion

- 1.38 Various comments were received around the spatial distribution of mineral workings, water resources and water quality, the application of Policy DM1, the English Nature’s Biodiversity Metric, weaknesses around sustainable drainage benefits, periodic monitoring of the Geological environment and the need to introduce a screening criteria to determine whether sites not allocated in the MLP require a project-level HRA. However, none of these comments resulted in proposed amendments to Policy DM1 and the reasons for this have been explained above.
- 1.39 Comments received around the inclusion of Local Wildlife Sites, consistency throughout the policy, historic environment, archaeology, heritage assets and their setting and specifics for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk have resulted in proposed amendments to Policy DM1 and the supporting text.

**Table 1 - Schedule of Proposed Amendments to Policy DM1 following March 2021 Regulation 18 Consultation on MLP Review**

Old Ref	New Ref	Proposed Amendment
First paragraph of Policy DM1	First paragraph of Policy DM1	Proposals for minerals will be permitted subject to it being demonstrated that the development would not have an unacceptable <u>adverse</u> impact, including cumulative impact with other developments, upon:
Criteria 13	Criteria 13	The historic environment including heritage and archaeological assets <u>and any contribution made by their setting</u> .
Criteria 3	Criteria 3	The quality and quantity of water ( <u>including flood risk</u> ) within water courses, groundwater, and surface water, <u>and coastal areas</u>
N/A	Last paragraph of Policy DM1	<u>It must be ensured that there will be no adverse effect on the integrity of Habitats Sites (internationally or nationally important wildlife sites) either alone or in combination with other plans and projects in relation to all minerals development. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.</u>
5.23	5.11	<del>It is noted that the health impacts of mineral extraction are not always direct from operational activities, they can be indirect and/or psychological. All such health and wellbeing impacts should be addressed in supporting information.</del>
Paragraph 5.40	Paragraph 5.27	The County has important international and national designations, namely Special Areas of Conservation, Special Protection Areas, Ramsar Sites, National Nature Reserves, and Sites of Special Scientific Interest, <u>LoWS and Marine Conservation Zones</u> .

**Table 2 - March 2021 Regulation 18 Consultation Responses to Policy DM1**

<b>ORGANISATION</b>	<b>ON BEHALF OF</b>	<b>POLICY DM1</b>	<b>POLICY DM1</b>	<b>ECC RESPONSE</b>
Name of Organisation	Are you responding on behalf of another individual or organisation? - If Yes, Who?	1.Do you agree or disagree with the rationale behind the amendments proposed in this section of the emerging Minerals Local Plan? (see Rationale Report)	Please provide any comments below:	
Runwell Parish Council (631132323)	Runwell Parish Council	Agree	N/a	N/A
Blackwater Aggregates (623162177)		Agree		N/A
CEMEX (982058282)		Agree		N/A
Gent Fairhead Aggregates (871678397)		Agree		N/A
Resident (850344129)		Agree		N/A
W H Collier Limited (769297167/ 942768790)		Agree		N/A
David L Walker Ltd (559449615)	Brice Aggregates	Agree		N/A

CPRE Essex (665562826)		Agree		N/A
Coggeshall Parish Council (598729813)	Coggeshall parish council	Agree (but wish to clarify)	The rationale behind this section can not be argued about. It discusses all aspects that have to be considered before a site is taken by a quarry. Each aspect suggests each aspect has been well thought through but this then causes me questions about why a quarry site would be considered in the place in question Coggeshall.	Policy DM1 sets out a criterion that proposals for minerals development will be subject to which ensures “that the development would not have an unacceptable impact, including cumulative impact with other developments”. Each application is assessed on a case-by-case basis. ECC recognise that mineral extraction can have an adverse effect on communities and the environment if poorly planned. To that end, the Plan contains policies to protect local amenity and quality of life.
Suffolk County Council (549043477)		Agree (but wish to clarify)	General changes are agreed with however i would suggest the following:  - Being more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk.	The MLP should be read in its entirety and information around flooding, water resources and water quality can be found in the supporting text for Policy DM1, paragraph 5.26 (5.13) – 5.35 (5.22).
			The inclusion of designated landscapes & Areas of Outstanding Natural Beauty.	Policy DM1 references “the natural and geological environment (including biodiversity and ecological conditions for habitats and

				<p>species)". Specific information around Areas of Outstanding Natural Beauty (AONB) can be found in the Spatial Portrait.</p> <p>With regards to landscapes, the MLP recognises that Essex has significant areas of land designated as protected landscapes. Policy DM1 states that <i>'Proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable adverse impact, including cumulative impact with other developments, upon The appearance, quality and character of the landscape, countryside and visual environment'</i>. Further, Policy S12 requires mineral sites to <i>'enhance the form, quality of local character, and local distinctiveness of the landscape'</i></p>
			<p>The inclusion of Natura 2000 sites, ancient woodlands &amp; trees.</p>	<p>Natura 2000 designations no longer applies in the UK. Information around ancient woodlands and trees can be found in the supporting text for</p>

				Policy DM1, paragraph 5.39 (5.26).
			Point 13 to include historic environment, archaeology, heritage assets and their setting.	Criteria 13 of Policy DM1 will be updated as follows, “The historic environment including heritage and archaeological assets <i>and any contribution made by their setting.</i> ”
			Include criteria on Neighbouring Land Uses.	The MLP should be read in its entirety and information around neighbouring developments can be found in the supporting text for Policy DM1, paragraph 5.21 (5.9).
			Include criteria on the differential settlement of quarry back-filling.	In relation to the differential settlement of quarry back-filling the case officer would look to the applicant for fates that are being forecasted. If relevant, this would include looking at the pre and post settlement level submitted as part of the application.
			Point 8 to include effects of mud and aggregates on the road compromising highways safety.	The MWPA do not consider it appropriate to be so specific and mention mud and aggregates on the road. Policy DM1 considers the impacts on “the safety and capacity of the road network”. In addition, the supporting text for Policy DM1 includes a ‘Transport’ section

				which discusses the impacts on highway safety.
GeoEssex (538324742)		Agree (but wish to clarify)	see below (see respondents comment under Policy DM1 Q2)	Noted.
Strutt & Parker (891506607)	G&B Finch	No comment		N/A
Thurrock Borough Council (97704900)	Thurrock borough Council	No comment	No additional comment.	Noted.
Kelvedon & Feering Heritage Society (677892382)		No comment		N/A

<b>ORGANISATION</b>	<b>ON BEHALF OF</b>	<b>POLICY DM1</b>	<b>POLICY DM1</b>	<b>ECC RESPONSE</b>
Name of Organisation	Are you responding on behalf of another individual or organisation? - If Yes, Who?	2.Do you agree or disagree with the proposed amendments as set out in this section of the emerging Minerals Local Plan?	Please provide any comments and/or alternative wording for this section of the Plan below:	
Runwell Parish Council (631132323)	Runwell Parish Council	Agree	N/a	N/A
W H Collier Limited (769297167/ 942768790)		Agree		N/A

David L Walker Ltd (559449615)	Brice Aggregates	Agree		N/A
Thurrock Borough Council (97704900)	Thurrock borough Council	Agree	No additional comment.	Noted.
Blackwater Aggregates (623162177)		Agree (but wish to clarify)	<p>Development Management Policies, Biodiversity and Geological Conservation</p> <p>The Rationale Report highlights that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019. Therefore, an amendment should be made to paragraph 5.29 to add: ... and English Nature's Biodiversity Metric ...</p> <p>The List of UK Biodiversity Action Plan Priority Habitats and English Nature's Biodiversity Metric provides useful background information in this regard</p>	<p>The Rationale Report accompanying the Regulation 18 Consultation 2021 highlighted that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019.</p> <p>Subsequent to the MWPA making this specific request through the Regulation 18 Consultation 2021, the Environment Bill which was driving this revised approach received Royal Assent and became the Environment Act in November 2021. This created a number of mandatory requirements around 'Biodiversity Net Gain' including the use of a metric which will supply quantifiable data relating to development-led net gains in biodiversity which can be monitored and reported.</p>

				<p>The Act requires Local Planning Authority's to report on biodiversity net gain delivery. It is expected that further information on monitoring requirements will be set out in future consultations led by the Department for Environment, Food and Rural Affairs (Defra) and secondary legislation. As such, at this stage it is not considered appropriate to update paragraph 5.29 to make reference to the English Nature's Biodiversity Metric as the MWPA await further guidance.</p> <p>It is considered appropriate that the Monitoring Framework of the MLP is amendment to include the national requirement to monitor biodiversity net gain through the application of the current Government supported metric, or any successor, and adopt the emerging approach as this is finalised ahead of the adoption of the MLP.</p> <p>The MWPA will however positively respond to any emerging guidance and</p>
--	--	--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

				legislation relating to a wider natural capital monitoring indicator as and when such guidance emerges at the national level and consider implementing this through subsequent plan reviews or via a Supplementary Planning Document if considered appropriate.
CEMEX (982058282)		Agree (but wish to clarify)	<p>Development Management Policies, Biodiversity and Geological Conservation</p> <p>The Rationale Report highlights that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019. Therefore, an amendment should be made to paragraph 5.29 to add: ... and English Nature's Biodiversity Metric ...</p> <p>The List of UK Biodiversity Action Plan Priority Habitats and English Nature's Biodiversity Metric provides useful background information in this regard</p>	<p>The Rationale Report accompanying the Regulation 18 Consultation 2021 highlighted that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019.</p> <p>Subsequent to the MWPA making this specific request through the Regulation 18 Consultation 2021, the Environment Bill which was driving this revised approach received Royal Assent and became the Environment Act in November 2021. This created a number of mandatory requirements around 'Biodiversity Net Gain' including the use of a metric which will supply</p>

				<p>quantifiable data relating to development-led net gains in biodiversity which can be monitored and reported.</p> <p>The Act requires Local Planning Authority's to report on biodiversity net gain delivery. It is expected that further information on monitoring requirements will be set out in future consultations led by the Department for Environment, Food and Rural Affairs (Defra) and secondary legislation. As such, at this stage it is not considered appropriate to update paragraph 5.29 to make reference to the English Nature's Biodiversity Metric as the MWPA await further guidance.</p> <p>It is considered appropriate that the Monitoring Framework of the MLP is amendment to include the national requirement to monitor biodiversity net gain through the application of the current Government supported metric, or any successor, and adopt the emerging approach as this is finalised ahead of the adoption of the MLP.</p>
--	--	--	--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

				<p>The MWPA will however positively respond to any emerging guidance and legislation relating to a wider natural capital monitoring indicator as and when such guidance emerges at the national level and consider implementing this through subsequent plan reviews or via a Supplementary Planning Document if considered appropriate.</p>
<p>Gent Fairhead Aggregates (871678397)</p>		<p>Agree (but wish to clarify)</p>	<p>Development Management Policies, Biodiversity and Geological Conservation</p> <p>The Rationale Report highlights that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019. Therefore, an amendment should be made to paragraph 5.29 to add: ... and English Nature's Biodiversity Metric ...</p> <p>The List of UK Biodiversity Action Plan Priority Habitats</p>	<p>The Rationale Report accompanying the Regulation 18 Consultation 2021 highlighted that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019.</p> <p>Subsequent to the MWPA making this specific request through the Regulation 18 Consultation 2021, the Environment Bill which was driving this revised approach received Royal Assent and became the Environment Act in November 2021. This created a</p>

			<p>and English Nature's Biodiversity Metric provides useful background information in this regard</p>	<p>number of mandatory requirements around 'Biodiversity Net Gain' including the use of a metric which will supply quantifiable data relating to development-led net gains in biodiversity which can be monitored and reported.</p> <p>The Act requires Local Planning Authority's to report on biodiversity net gain delivery. It is expected that further information on monitoring requirements will be set out in future consultations led by the Department for Environment, Food and Rural Affairs (Defra) and secondary legislation. As such, at this stage it is not considered appropriate to update paragraph 5.29 to make reference to the English Nature's Biodiversity Metric as the MWPA await further guidance.</p> <p>It is considered appropriate that the Monitoring Framework of the MLP is amendment to include the national requirement to monitor biodiversity net gain through the application of the current Government supported metric, or</p>
--	--	--	-------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

				<p>any successor, and adopt the emerging approach as this is finalised ahead of the adoption of the MLP.</p> <p>The MWPA will however positively respond to any emerging guidance and legislation relating to a wider natural capital monitoring indicator as and when such guidance emerges at the national level and consider implementing this through subsequent plan reviews or via a Supplementary Planning Document if considered appropriate.</p>
Resident (850344129)		Agree (but wish to clarify)	<p>Development Management Policies, Biodiversity and Geological Conservation</p> <p>The Rationale Report highlights that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019. Therefore, an amendment should be made to paragraph 5.29 to add: ... and English</p>	<p>The Rationale Report accompanying the Regulation 18 Consultation 2021 highlighted that the Plan should seek 'net biodiversity gain' rather than 'biodiversity gain' to recognise that biodiversity net gain is to be made mandatory for new developments through the Environment Bill 2019.</p> <p>Subsequent to the MWPA making this specific request through the Regulation 18 Consultation 2021, the Environment Bill which was</p>

			<p>Nature's Biodiversity Metric ...</p> <p>The List of UK Biodiversity Action Plan Priority Habitats and English Nature's Biodiversity Metric provides useful background information in this regard</p>	<p>driving this revised approach received Royal Assent and became the Environment Act in November 2021. This created a number of mandatory requirements around 'Biodiversity Net Gain' including the use of a metric which will supply quantifiable data relating to development-led net gains in biodiversity which can be monitored and reported.</p> <p>The Act requires Local Planning Authority's to report on biodiversity net gain delivery. It is expected that further information on monitoring requirements will be set out in future consultations led by the Department for Environment, Food and Rural Affairs (Defra) and secondary legislation. As such, at this stage it is not considered appropriate to update paragraph 5.29 to make reference to the English Nature's Biodiversity Metric as the MWPA await further guidance.</p> <p>It is considered appropriate that the Monitoring Framework of the MLP is amendment to include the</p>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

				<p>national requirement to monitor biodiversity net gain through the application of the current Government supported metric, or any successor, and adopt the emerging approach as this is finalised ahead of the adoption of the MLP.</p> <p>The MWPA will however positively respond to any emerging guidance and legislation relating to a wider natural capital monitoring indicator as and when such guidance emerges at the national level and consider implementing this through subsequent plan reviews or via a Supplementary Planning Document if considered appropriate.</p>
<p>Coggeshall Residents Against the Quarry (449012745)</p>		<p>Agree (but wish to clarify)</p>	<p>The recognition and acknowledgement that the health and wellbeing impacts of mineral extraction on the local community can be indirect and/or psychological and that these need to be addressed in supporting information are a welcome addition (Para 5.11 of the Amended Plan). The additional inclusion of mental</p>	<p>Noted.</p>

			<p>health in a Health Impact Assessment is something that needs to be taken very seriously in connection with all future applications for mineral extraction - especially those in close proximity to existing settlements.</p>	
			<p>With reference to Para 5.18 (Amended Plan), we believe there is a weakness inherent in the proposed addition to this paragraph (and reflected in the wording of the Policy). While the potential for reducing flood risk through the creation of flood storage areas should not be overlooked in the assessment of applications, it could also mean that an applicant might contrive a flood management scheme and over-emphasises the advantages in order to benefit from prior mineral extraction.</p>	<p>It is presumed that this consultation response primarily relates to a proposed flood alleviation venture between a private company and the Environment Agency which would involve the establishment of a quarry to facilitate the creation of flood defences. Whilst the MWPA notes the comments received, they are not related to a site being proposed for allocation as part of this review and therefore they fall outside of the scope of the Regulation 18 consultation for the MLP.</p>
<p>Coggeshall Parish Council (598729813)</p>	<p>Coggeshall parish council</p>	<p>Agree (but wish to clarify)</p>	<p>This part of the review is considering what aspects one should consider in deciding on a quarry's location. It is emphasised that numerous bio diverse sites are given strong protection depending on</p>	<p>It is presumed that this consultation response primarily relates to a proposed flood alleviation venture between a private company and the Environment Agency which would involve the establishment of a</p>

			<p>its importance. The flora and fauna is locally protected, measures to avoid a quarry in a bio diverse area with conservation interests. Heritage and archaeology ( buildings and structures) must be protected and all other listed buildings and heritage. To safe guard unknown remains , an archaeological assessment should be carried out by the developer. Assessment must be carried out before a planning application is submitted. Recreation and right of way. Means mineral development can affect rights of way, open spaces and informal outdoors recreational land. All of these points can be related to the quarry in Coggeshall and if all of these aspects have to be considered the quarry area under consideration in Coggeshall will not go ahead .</p>	<p>quarry to facilitate the creation of flood defences. Whilst the MWPA notes the comments received, they are not related to a site being proposed for allocation as part of this review and therefore they fall outside of the scope of the Regulation 18 consultation for the MLP.</p> <p>More generally, a specific public consultation exercise on the application would form part of the determination process. The issues raised in the consultation responses received would be required to be assessed, particularly through Policy DM1, which seeks to mitigate the impact of mineral development during the site preparation and extraction phases.</p> <p>Mitigation of any potential site-specific adverse impacts of proposed development would therefore be addressed through the planning application process, including those impacts which are cumulative. This includes landuse matters which would be determined by the MWPA and</p>
--	--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

				<p>environmental matters regulated by the Environment Agency.</p> <p>Further, conditions attached to the granting of planning permission would be expected to be complied with. Failure to adhere to these conditions can result in enforcement action against the operator.</p>
			5.35 mixing minerals linked to the above plus CDE at sites with scale and links to no road transport.	This comment is not clear.
Suffolk County Council (549043477)		Agree (but wish to clarify)	<p>General changes are agreed with however i would suggest the following:</p> <p>-Being more specific for flooding through the use of pluvial, fluvial, tidal and groundwater flood risk.</p>	<p>The MWPA consider that paragraph 5.27 (5.14) to cover specific issues around surface water flood risk, fluvial, and coastal flood risk. The proposed additional wording in criterion 3 of Policy DM1 carries though the proposed additional wording in paragraph 5.27 (5.14). However, criterion 3 will be updated as follows, "The quality and quantity of water (<i>including flood risk</i>) within water courses, groundwater, and surface water, <i>and coastal areas</i>".</p>
			- The inclusion of designated landscapes & Areas of Outstanding Natural Beauty.	The Policy is inclusive of all landscape, and application of the policy will be commensurate with

				<p>the value of the landscape, assessed on a case-by-case basis. This is in line with paragraph 211, a of the NPPF 2021. The case officers will look to the District/ Borough/ City Local plan for a more prescriptive policy around designated landscapes &amp; AONB's.</p>
			<p>- The inclusion of Natura 2000 sites, ancient woodlands &amp; trees.</p>	<p>Reference to Natura 2000 sites has been removed from the plan and replaced with 'Habitats site' to reflect that the Natural 2000 designation no longer applies in the UK. Paragraph 2.11 states "There are extensive areas of high quality agricultural farmland (within grades 1, 2 and 3a of the Agricultural Land Classification), of which much is underlain by sand and gravel, a network of ancient woodland and major sites of international and national importance for biodiversity". Paragraph 5.37 (5.24) mentions the important ancient woodland across Essex. The supporting text to Policy DM1, Paragraph 5.40 (5.27) also mentions that "There are also important areas of ancient woodland and areas of particular geological significance,</p>

				some of which are designated as Local Geological Sites.”. Policy DM1 sets out a criterion that proposals for minerals development will be subject to.
			- Point 13 to include historic environment, archaeology, heritage assets and their setting.	Criteria 13 of Policy DM1 will be updated as follows, “The historic environment including heritage and archaeological assets <i>and any contribution made by their setting.</i> ”
			- Include criteria on Neighbouring Land Uses..	The MLP should be read in its entirety and information around neighbouring developments can be found in the supporting text for Policy DM1, paragraph 5.21 (5.9).
			- Include criteria on the differential settlement of quarry back-filling	In relation to the differential settlement of quarry back-filling the case officer would look to the applicant for fates that are being forecasted. If relevant, this would include looking at the pre and post settlement level submitted as part of the application.
			- Point 8 to include effects of mud and aggregates on the road compromising highways safety.	The MWPA do not consider it appropriate to be so specific and mention mud and aggregates on the road. Policy DM1 considers the impacts on “the safety and capacity of the road network”. In addition, the supporting text for Policy DM1 includes a ‘Transport’

				<p>section which discusses the impacts on highway safety.</p>
<p>Natural England (792269846)</p>		<p>Agree (but wish to clarify)</p>	<p>At paragraph 3.75 the Review Plan text states that “any new aggregates recycling site should avoid causing adverse effects on the integrity of internationally or nationally important wildlife sites, either alone or in combination with other plans or projects. This must be demonstrated through a project level HRA which will be required for any new aggregate recycling site which falls within an Impact Risk Zone (IRZ).”</p> <p>This addition reflects the statutory requirements of the Conservation of Habitats and Species Regulations 2017 (in relation to Habitat Sites) but the need to avoid adverse effects on the integrity (AEOI) of Habitat Sites does not appear within the text of the relevant policy (S5 - Creating a Network of Aggregate Recycling Facilities) and it is recommended that this requirement is reproduced</p>	<p>The MWPA do not consider that it is necessary to update the policy wording as the MLP is to be read as a whole, and therefore, this would create duplication throughout the plan. Policy DM1, which applies to all mineral developments, states that “<u><i>It must be ensured that there will be no adverse effect on the integrity of Habitats Sites either alone or in combination with other plans and projects. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.</i></u>”. As such, the issue raised in the representation is addressed through an existing plan policy.</p>

			<p>within the policy text to ensure conformity with NPPF requirements.</p>	
			<p>Moreover, the need to avoid AEOI of Habitat Sites does not apply solely to new aggregates recycling sites; it would apply to all forms of new minerals-related development (mineral extraction; site restoration etc) and this would indicate that the text should be reproduced or cross-referenced in all relevant policies, such as S6 – General Principles for Sand and Gravel Provision, S7 – Provision for Industrial Minerals. The existing policies require that such development is “environmentally suitable” (S6) and “environmentally acceptable” (S7) but given the statutory obligation on Competent Authorities to avoid AEOI of Habitat Sites, these terms don’t seem sufficiently robust and may not be entirely consistent with paragraph 177 of the National Planning Policy Framework.</p> <p>The updated HRA of the</p>	<p>Policy DM1, which applies to all mineral development, sets out a criterion that states that “It must be ensured that there will be no adverse effect on the integrity of Habitats Sites either alone or in combination with other plans and projects. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.”. All development proposals are subject to Policy DM1.</p> <p>To avoid the impression that this requirement relates only relates to aggregate recycling sites which are subject to Policy S5, it is proposed to remove “Any new aggregate recycling sites should avoid causing adverse effects on the integrity of internationally or nationally important wildlife sites, either alone or in combination with other plans and projects. This must be demonstrated</p>

			<p>Mineral Local Plan Review addresses this issue in the executive summary where it states:          “The recommendations to amend or add text to (the above) policies do not exclude the need for project-level HRA but enables a conclusion of no adverse effects on integrity at the Plan level, because the identified risks to Habitats Sites have been removed at a strategic level. Project level HRA provides a means of checking for any further risks unforeseen at the Plan level, and for developing project-specific mitigation measures in greater detail within a project-level Appropriate Assessment.”</p> <p>However, in the interests of clarity and consistency Natural England recommends that suitable wording is added to relevant policies. This wording could follow the amended wording in 5 (i) of amended Policy S12 which states:</p> <p>‘Adverse effects on the integrity</p>	<p>through a project level Habitat Regulations Assessment, which will be required for any new aggregate recycling sites which fall within a Impact Risk Zone (IRZ).” from the supporting text of Policy S5 and include this in the over-arching Policy DM1.</p> <p>Policy DM1 is therefore proposed to be updated as follows, “<u><i>It must be ensured that there will be no adverse effect on the integrity of Habitats Sites (internationally or nationally important wildlife sites) either alone or in combination with other plans and projects in relation to all minerals development. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.</i></u>”</p>
--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

			<p>of internationally or nationally important wildlife sites are avoided, either alone or in combination with other plans and projects.'</p> <p>Alternatively, the wording could follow the proposed new text for amended policy DM1 – Development Management Criteria which states:</p> <p>'It must be ensured that there will be no adverse effect on the integrity of Habitats Sites either alone or in combination with other plans and projects. This must be demonstrated through a project level Habitat Regulations Assessment, which will be required for any future proposals requiring a decision under the MLP, which fall within a IRZ.'</p>	
GeoEssex (538324742)		Agree (but wish to clarify)	<p>Policy DM1 Development Management Criteria Add to box item 12 'Geological environment to be assessed by periodic monitoring of faces as they are worked to evaluate the geological significance of deposits as they are revealed.</p>	<p>When a site is considered for allocation, part of requested supporting information is a schedule of borehole logs taken from across the site. These borehole logs would be publicly available. In addition, when a mineral planning application is</p>

				<p>made the application would also often be supported by borehole log data taken from across the application site, which could also be publicly available. However, once works begin on a site, this is by way of a commercial operation, and the MWPA has no authority to request such information is recorded as part of the public record as it is commercially sensitive. The MWPA is also unable to grant public access to commercial operations on a private site. Whether members of the public would be allowed on site to provide the opportunity to periodic monitoring of faces as they are revealed during working would be a business decision made by the operator/landowner. Such requests would be required to be made to them. It must also be noted that the MWPA consult GeoEssex as part of the consultation process.</p>
<p>CPRE Essex (665562826)</p>		<p>Disagree (please clarify)</p>	<p>There is a weakness inherent in the proposed addition to bullet point 3 in the wording of the Policy. While the potential for reducing flood risk through the</p>	<p>It is presumed that this consultation response primarily relates to a proposed flood alleviation venture between a private company and the</p>

			<p>creation of flood storage areas should not be overlooked in the assessment of applications, what is there in place to safeguard against an applicant contriving a flood management scheme in order to benefit from prior mineral extraction?</p>	<p>Environment Agency which would involve the establishment of a quarry to facilitate the creation of flood defences. Whilst the MWPA notes the comments received, they are not related to a site being proposed for allocation as part of this review and therefore they fall outside of the scope of the Regulation 18 consultation for the MLP.</p>
			<p>5.30 Mineral proposals must include measures to avoid or minimise adverse impacts on biodiversity and geological conservation interests and should consider the scope to protect and enhance them in the long-term. Possible measures include maintaining existing habitats on or near the site during the duration of mineral working, proposals for habitat creation as part of restoration and protecting key features during working (such as geological features or nesting grounds). Add 'Geoconservation interests to be informed by periodic analysis by geologists with access to log and sample faces</p>	<p>When a site is considered for allocation, part of requested supporting information is a schedule of borehole logs taken from across the site. These borehole logs would be publicly available. In addition, when a mineral planning application is made the application would also often be supported by borehole log data taken from across the application site, which could also be publicly available. However, once works begin on a site, this is by way of a commercial operation, and the MWPA has no authority to request such information is recorded as part of the public record as it is commercially sensitive. The MWPA is also unable to grant</p>

			as they are worked.' Suitable time scale may be annually or related to the phasing of mineral extraction operations.	public access to commercial operations on a private site. Whether members of the public would be allowed on site to provide the opportunity to periodic analysis by geologists with access to log and sample faces are revealed during working would be a business decision made by the operator/landowner. Such requests would be required to be made to them. It must also be noted that the MWPA consult GeoEssex as part of the consultation process.
Heatons (451589647)	Tarmac	Disagree (please clarify)	The final sentence of paragraph 5.11 should be deleted. 'It is noted that the health impacts of mineral extraction are not always direct from operational activities they can be indirect and/or psychological. All such health and well being impacts should be addressed in supporting information'. This is impractical to measure and assess without clear guidance.	It has been recognised through this consultation that reference to indirect and/or psychological impacts should be removed from the plan as there is not a strong enough evidence base to support this.
			Paragraph 5.28 states that 'a project -level Habitats Regulations Assessment will be needed for any sites not allocated in the MLP'. There	This proposed amendment is to ensure compliance with national regulations as suggested through the emerging HRA.

			<p>should be a screening criterion to ascertain whether there is potential for impact as opposed to a requirement for all sites.</p>	
			<p>The proposed amendments to Policy DM1 part 2, 'the health and wellbeing of local residents, as well as the wider community, who could be impacted by operation of the development' should be removed. Potential health impact by reason of quantifiable measures – noise and dust impact for example – are reasonable and justified. The well being of individuals and the wider community is not something that can be easily assessed as perception of impact can be so varied.</p>	<p>Each proposal is subject to a Health Impact Assessment (HIA) as part of the validation checklist process when the application is considered. An HIA considers the health impacts of proposed development and assesses the impact of a development on existing services and facilities. Therefore, the MWPA consider the proposed policy wording to be appropriate as this will be assessed through the HIA process.</p>
Strutt & Parker (891506607)	G&B Finch	No comment		N/A
Environment Agency (59731032)		Not Answered	<p>Biodiversity section 5.27 mentions most designated sites but omits Local Wildlife Sites which are critical across the county in order to maintain a cohesive network of complex habitats for biodiversity. We would like to see this important network included in the plan.</p>	<p>Paragraph 5.27 (5.40) will be amended as follows, "The County has important international and national designations, namely Special Areas of Conservation, Special Protection Areas, Ramsar Sites, National Nature Reserves, and Sites of Special Scientific Interest, <u>LoWS and Marine Conservation Zones</u>".</p>

<p>Lichfields (62121849)</p>	<p>Bourne Leisure Limited</p>	<p>Not Answered</p>	<p>We consider that draft Policy DM1 should also be amended for consistency (see additions in capitals):</p> <p>“Proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable <b>ADVERSE</b> impact, including cumulative impact with other developments...”</p>	<p>Policy DM1 will be amended as follows, “Proposals for minerals will be permitted subject to it being demonstrated that the development would not have an unacceptable <u>adverse</u> impact, including cumulative impact with other developments, upon:”.</p>
----------------------------------	-----------------------------------	---------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------