

EVALUATION OF THE SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE MASTER PLAN

7.1 Impacts of Master Plan on Environmental Receptors

- 7.1.1 Biodiversity, Flora And Fauna
- 7.1.2 Water
- 7.1.3 Air
- 7.1.4 Climatic Factors
- 7.1.5 Material Assets
- 7.1.6 Cultural Heritage
- 7.1.7 Landscape
- 7.1.8 Population And Human Health

7.2 Summary of Impacts on Environmental Receptors



7.1 IMPACTS OF MASTER PLAN ON ENVIRONMENTAL RECEPTORS

The Environmental Report is required to include information on the likely significant effects on the environment of the Master Plan 2008. Matrices were used to evaluate each of the proposed Master Plan 2008 policies devised by the Master Plan team once the preferred plan alternative had been identified. Proposed policies were assessed against the environmental protection objectives developed earlier in the SEA process, to determine the potential environmental impact of implementing the policies and to highlight any potential conflict between the policies and environmental protection. The full assessment is included in Appendix IV where a commentary is provided on each of the proposed policies. The assessment of policies matches their inclusion in the Master Plan 2008 where policies are divided into the following sections; social, economic, land use, transport and infrastructure, urban design and architecture, culture, tourism and leisure and implementation (which includes financial and marketing).

A summary of the impacts of the Master Plan Policies on the environmental receptors is presented in Table 8.

7.1.1 BIODIVERSITY, FLORA AND FAUNA

Master Plan policies such as the maintenance of the variety and diversity of the environmental character of the Area, the enhancement and provision of open space areas and the continued remediation of contaminated soil, have the potential to increase opportunities for biodiversity, flora and fauna throughout the Area. However, any potential contamination of water bodies (surface and coastal) in and adjoining the Area could have significant adverse consequences on biodiversity (see S.7.4).

| Master Plan Policies | Summary of Impact on Biodiversity, Flora and Fauna |
|---------------------------------|--|
| Social Regeneration | Neutral impact |
| Economic Development | Neutral impact |
| Land Use | Positive/ neutral impact |
| Transport | Positive/ neutral impact |
| Infrastructure | Positive/ neutral impact |
| Urban Design Framework | Positive/ neutral impact |
| Art Culture Tourism and Leisure | Positive/ neutral impact |
| Implementation | Neutral impact |

7.1.2 POPULATION AND HUMAN HEALTH

The continued regeneration of the Area, supported by Master Plan policies to protect air and water quality and decontaminate soil, has positive impacts on population and human health. In addition the creation of development and employment opportunities, the provision of public transport, the development of enhanced community, recreation, housing and educational opportunities benefit those living, working and visiting the Area. The overall impact of the Master Plan 2008 on population and human health is very positive.

| Master Plan Policies | Summary of Impact on Population and Human Health |
|---------------------------------|--|
| Social Regeneration | Positive impact |
| Economic Development | Positive impact |
| Land Use | Positive impact |
| Transport | Positive impact |
| Infrastructure | Positive impact |
| Urban Design Framework | Positive impact |
| Art Culture Tourism and Leisure | Positive impact |
| Implementation | Positive impact |

7.1.3 SOIL

Master Plan policies have an overall positive impact on soil with the improvement in soil quality due to the decontamination of contaminated sites.

| Master Plan Policies | Summary of Impact on Soil |
|---------------------------------|---------------------------|
| Social Regeneration | Neutral impact |
| Economic Development | Neutral impact |
| Land Use | Positive/neutral impact |
| Transport | Neutral impact |
| Infrastructure | Neutral impact |
| Urban Design Framework | Neutral impact |
| Art Culture Tourism and Leisure | Neutral impact |
| Implementation | Positive/neutral impact |

7.1.4 WATER

Water quality in and adjoining the Area is satisfactory at present. The existing deficiency in wastewater treatment at regional level creates the potential for the deterioration of water quality, necessitating mitigation. Equally, the deficiency in water supply infrastructure at regional level has the potential for negative impacts and will necessitate mitigation at Master Plan level.

| Master Plan Policies | Summary of Impact on Water |
|---------------------------------|--|
| Social Regeneration | Positive/neutral impact |
| Economic Development | Neutral impact |
| Land Use | Generally neutral/positive impact. Potential negative impact relating to quantum of development proposed in the context of wastewater and water supply infrastructure deficiencies at regional level |
| Transport | Neutral impact |
| Infrastructure | Positive impact |
| Urban Design Framework | Neutral impact |
| Art Culture Tourism and Leisure | Neutral impact |
| Implementation | Neutral impact |

7.1.5 AIR

The main impact on air quality arising from the Master Plan 2008 relates to transport. Master Plan policies have a strong emphasis on public transport provision. Potential uncertain impacts on air arise reflecting the need to provide public transport in tandem with the roll out of further development. This will be necessary in order to ensure the continuation of a positive modal split which is a feature of the Dublin Docklands Area

| Master Plan Policies | Summary of Impact on Air |
|---------------------------------|---|
| Social Regeneration | Neutral impact |
| Economic Development | Generally neutral impact- potential uncertain impact reflecting need to provide transport infrastructure to service new development areas |
| Land Use | Generally neutral impact- potential uncertain impact reflecting need to provide transport infrastructure to service new development areas |
| Transport | Positive/neutral impact |
| Infrastructure | Neutral impact |
| Urban Design Framework | Neutral impact |
| Art Culture Tourism and Leisure | Neutral impact |
| Implementation | Neutral impact |

7.1.6 CLIMATIC FACTORS

Flooding poses a natural threat in the Dublin Docklands Area due to its coastal location. This threat is increased due to climate change. Master Plan policies emphasise flood protection. Mitigation measures will substantially reduce the risk of flooding. However, potential uncertain impacts on climatic factors arise reflecting the need to provide public transport in tandem with the roll out of further development.

| Master Plan Policies | Summary of Impact on Climatic Factors |
|---------------------------------|---|
| Social Regeneration | Positive/neutral impact |
| Economic Development | Neutral impact |
| Land Use | Generally neutral impact- potential uncertain impact reflecting need to provide transport infrastructure to service new development areas |
| Transport | Positive/neutral impact |
| Infrastructure | Positive/neutral impact |
| Urban Design Framework | Positive/neutral impact |
| Art Culture Tourism and Leisure | Positive/neutral impact |
| implementation | Neutral Impact |

7.1.7 MATERIAL ASSETS

Master Plan policies support the continued roll out of infrastructure in the Area to support development. The provision of wastewater and public transport infrastructure will be critical for the continued sustainable development of the Dublin Docklands Area.

| Master Plan Policies | Summary of Impact on Material Assets |
|---------------------------------|--|
| Social Regeneration | Positive/neutral impact |
| Economic Development | Positive/neutral impact |
| Land Use | Generally neutral impact- Potential negative and uncertain impacts relating to quantum of development proposed in the context of wastewater infrastructure deficiencies at regional level and the need to provide public transport infrastructure in tandem with the roll out of development |
| Transport | Positive impact |
| Infrastructure | Positive impact |
| Urban Design Framework | Positive /neutral impact |
| Art Culture Tourism and Leisure | Neutral impact |
| Implementation | Neutral impact |

7.1.8 CULTURAL HERITAGE

The overall impact of Master Plan policies on cultural heritage is positive, due to the regeneration of the Area through the creation of high quality environments for those living, working and visiting the Area.

| Master Plan Policies | Summary of Impact on Cultural Heritage |
|---------------------------------|--|
| Social Regeneration | Neutral impact |
| Economic Development | Positive/neutral/ impact |
| Land Use | Positive/neutral impact |
| Transport | Positive/neutral impact |
| Infrastructure | Neutral impact |
| Urban Design Framework | Positive impact |
| Art Culture Tourism and Leisure | Positive/neutral impact |
| Implementation | Neutral impact |

7.1.9 LANDSCAPE

The overall impact of Master Plan policies on landscape is positive, due to the regeneration of the Area through the creation of new high quality streetscapes, open space areas and areas of public realm.

| Master Plan Policies | Summary of Impact on Landscape |
|---------------------------------|--------------------------------|
| Social Regeneration | Positive/neutral impact |
| Economic Development | Neutral impact |
| Land Use | Positive/neutral impact |
| Transport | Positive/ neutral impact |
| Infrastructure | Neutral impact |
| Urban Design Framework | Positive impact |
| Art Culture Tourism and Leisure | Positive/neutral impact |
| Implementation | Neutral impact |

7.2 SUMMARY OF IMPACTS ON ENVIRONMENTAL RECEPTORS

It is clear from the information presented in Table 8 below that, in general, the proposed Master Plan Policies have a positive to neutral impact on the environmental receptors. In particular, all policy categories have a positive impact on population and human health in the Docklands Area.

| Environmental Receptor | Master Plan Policy Category | | | | | | | |
|-------------------------------|-----------------------------|----------------------|----------|-----------|----------------|------------------------|---------------------------------|----------------|
| | Social Regeneration | Economic Development | Land Use | Transport | Infrastructure | Urban Design Framework | Art Culture Tourism and Leisure | Implementation |
| Biodiversity, flora and fauna | 0 | 0 | +/0 | +/0 | +/0 | +/0 | +/0 | 0 |
| Population and human health | + | + | + | + | + | + | + | + |
| Soil | 0 | 0 | +/0 | 0 | 0 | 0 | 0 | +/0 |
| Water | +/0 | 0 | +/0 | 0 | + | 0 | 0 | 0 |
| Air | 0 | 0/? | 0/? | +/0 | 0 | 0 | 0 | 0 |
| Climatic factors | +/0 | 0 | 0/? | +/0 | +/0 | +/0 | +/0 | 0 |
| Material assets | +/0 | +/0 | 0/- | + | + | +/0 | 0 | 0 |
| Cultural heritage | 0 | +/0 | +/0 | +/0 | 0 | + | +/0 | 0 |
| Landscape | +/0 | 0 | +/0 | +/0 | 0 | + | +/0 | 0 |

0 = neutral impact += positive impact -= negative impact ? = uncertain impact

TABLE 8 SUMMARY OF THE IMPACTS OF THE MASTER PLAN POLICIES ON ENVIRONMENTAL RECEPTORS

Green represents a positive impact and yellow a neutral impact– the intensity of the colour reflects the intensity of the impact.