

**ENVIRONMENTAL PROTECTION OBJECTIVES,
TARGETS AND INDICATORS**



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ENVIRONMENTAL PROTECTION OBJECTIVES, TARGETS AND INDICATORS



This section of the Environmental Report describes the development of the environmental protection objectives and associated targets used in the SEA process. Environmental indicators are dealt with in the Monitoring Section of this report. Together, these parameters are used to demonstrate the impact of the Master Plan 2008 on the environment. Annex 1(f) of the SEA Directive suggests a list of environmental receptors (biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the listed factors), the impact on which should be considered in the SEA process.

Environmental protection objectives, which express a desired direction of change, have been established for each environmental receptor listed above (Table 7). Environmental protection objectives are often aspirational in nature. These objectives have associated environmental targets which often set thresholds and limits, which once breached, would trigger remedial action. In addition, the targets underpin the environmental protection objectives and subdivide these objectives into more manageable and focused parts. Finally, environmental indicators are used to track the achievements of the environmental protection objectives and targets, describe the baseline situation, monitor the impact of the proposed plan on the environment and predict impacts (Thérivel, 2004). The environmental protection objectives were used to evaluate the Master Plan alternatives, describe the environmental impact of the preferred Master Plan alternative and develop a monitoring programme.

Several, recently published articles have been used to develop the parameters in Table 7 (Prendergast and Donnelly, 2007a&b; Donnelly et al., 2006a&b;2007). In particular, a methodology for establishing environmental protection objectives, targets and indicators proposed by Donnelly et al., (2006b) was especially useful. The methodology established a decision framework, which helped determine the required parameters (Appendix 1).

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Environmental Receptor	Environmental Objective	Environmental Target
Biodiversity, flora and fauna	Protect and enhance biodiversity, flora and fauna.	No adverse impact on designated nature areas. Develop new and existing open spaces within the Area.
Population and human health	Protect and enhance human health.	Provision of cycling & walking infrastructure. Develop new and existing open spaces within the Area.
Soil	Improve soil quality.	All contaminated development sites decontaminated.
Water	Protect and enhance surface & coastal water quality.	Comply with WFD surface water targets.
	Protect and enhance ground water quality.	Comply with WFD ground water targets.
	Provide water supply infrastructure.	Provide adequate water supply infrastructure.
Air	Limit adverse impact on air quality.	Provision of cycling & walking infrastructure. Development of high capacity public transport lines.
Climatic factors	Minimise greenhouse gas emissions.	Development of high capacity public transport lines.
	Reduce flood risk.	No incidences of flooding to property.
Material assets	Provide wastewater infrastructure.	Provide adequate wastewater infrastructure.
	Provide public transport infrastructure.	Development of high capacity public transport lines. New public transport bridge over River Dodder.
Cultural heritage	Protect and enhance the architectural and archaeological heritage.	No adverse impact on archaeological sites and protected structures
Landscape	Protect, enhance and develop streetscape and enhance views.	Develop streetscapes and views.
	Protect, enhance and develop new open space areas.	Develop open space.

WFD: Water Framework Directive

TABLE 7 ENVIRONMENTAL PROTECTION OBJECTIVES AND TARGETS

Note: All environmental protection targets and indicators impact on population and human health