

**Malta Resources Authority**

**Strategic Environmental Assessment of a Water Policy for Malta**

**Report I:**

**Scoping Report**

**Version I: November 2010**

**adi**  
ASSOCIATES  
ENVIRONMENTAL  
CONSULTANTS

**Report Reference:**

**Adi Associates Environmental Consultants Ltd, 2010. Strategic Environmental Assessment of a Water Policy for Malta: Scoping Report. San Gwann, October 2010; vi + 36pp.**

**This is a digital copy of the Report.  
Respect the Environment – Keep it Digital**



## Quality Assurance

### SEA of a Water Policy for Malta: Scoping Report

October 2010

Report for: **Malta Resources Authority**

### Revision Schedule

Rev	Date	Details	Report prepared by:	Checked by:	Approved by:
00	October 2010	Submission to Client	<b>Yury Zammit</b> Junior Consultant	<b>Rachel Xuereb</b> Director	<b>Rachel Xuereb</b> Director

File ref: F:\ADI\SEA\Water Policy\Scoping Report\Adi Associates Scoping Report Water Policy.doc



This document has been prepared in accordance with the scope of Adi Associates' appointment with its client and is subject to the terms of that appointment. It is addressed to and for the sole and confidential use and reliance of Adi Associates' client.

Adi Associates accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided. Except as provided for by legislation, no person other than the client may copy (in whole or in part) use or rely on the contents of this document, without the prior written permission of Adi Associates. Any advice, opinions, or recommendations within this document should be read and relied upon only in the context of the document as a whole. The contents of this document do not provide legal or tax advice or opinion.

© Adi Associates Environmental Consultants Ltd 2010



**Kappara Business Centre  
113 Triq Birkirkara  
San Gwann SGN 4197**

**Tel. / Fax: 21378172 - 77 – 80  
Email: [info@adi-associates.com](mailto:info@adi-associates.com)  
Web: [www.adi-associates.com](http://www.adi-associates.com)**



## CONTENTS

INTRODUCTION.....	1
Strategic Environmental Assessment.....	1
Malta’s Water Policy .....	2
THE SEA PROCESS.....	9
RELATION OF THE DRAFT WATER POLICY FOR MALTA TO OTHER NATIONAL DOCUMENTS & LEGISLATION.....	11
BASELINE DATA.....	25
EVALUATION OF THE CURRENT SITUATION IN THE ABSENCE OF THE WATER POLICY.....	27
SEA OBJECTIVES.....	28
TESTING COMPATIBILITY OF THE WATER POLICY OBJECTIVES AND THE SEA ENVIRONMENTAL OBJECTIVES.....	32
LIKELY SIGNIFICANT EFFECTS AND CONSTRAINTS .....	32
Cumulative & Synergistic Impacts.....	35
ALTERNATIVES.....	35
MONITORING .....	35
ASSESSMENT METHODOLOGY.....	35
THE ENVIRONMENTAL REPORT .....	36

## TABLES

Table 1: Analysis of Related Plans, Programmes, and Legislation.....	13
Table 2: Environmental baseline .....	26
Table 3: SEA Environmental Objectives & Indicators for Assessing Impacts .....	29
Table 4: Assessment legend.....	33
Table 5: Example Policy Assessment framework and format for environmental report.....	34
Table 6: Structure of the Environment Report.....	36

## GLOSSARY

---

CO <sub>2</sub>	Carbon Dioxide
EIA	Environmental Impact Assessment
EC	European Commission
EU	European Union
GDP	Gross Domestic Product
GHG	Green House Gases
GRDP	Greening Regional Development Programme
KP	Kyoto Protocol
LN	Legal Notice
MDGs	Millennium Development Goals
MAST	Malta College of Arts, Science and Technology
MEPA	Malta Environment and Planning Authority
MRA	Malta Resources Authority
NEEAP	National Energy Efficiency Action Plan
NGO	Non-Governmental Organisation
NREAP	National Renewable Energy Action Plan
NRP	National Reform Programme
OP	Operational Programme
PDS	Plan / Programme Description Statement
R&D	Research & Development
RES	Renewable Energy Source
SEA	Strategic Environmental Assessment
SPA	Specially Protected Area
TSE	Treated Sewage Effluent
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WFD	Water Framework Directive
WSC	Water Services Corporation

---

# SCOPING REPORT

---

## INTRODUCTION

1. This is the Scoping Report for the Strategic Environmental Assessment (SEA) of the Proposal for a Water Policy for Malta<sup>1</sup> (hereafter “the Policy”) covering the entire territory of the Maltese Islands. The aim of the Scoping Report is to set out the framework for the SEA, including setting the context of the SEA, establishing the baseline, setting the SEA objectives and indicators for the assessment, and identifying any potential significant impacts of the Policy. The Report will also discuss the proposed contents of the Environmental Report and the next stages in the SEA process.

### Strategic Environmental Assessment

2. European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment requires that a SEA of a wide range of plans and programmes is carried out prior to the implementation of the plan or programme. The objective of the "SEA Directive" is to provide a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development. SEA comprises:
  - Preparing an Environmental Report on the likely significant effects of the draft plan;
  - Consulting on the draft plan and the accompanying Environmental Report;
  - Taking into account the Environmental Report and the results of consultation in decision making; and
  - A discussion of how the results of the environmental assessment would be taken into account in the Plan or Programme.
3. The information to be included in the Environmental Report includes:
  - A description of the baseline environment;
  - Links between the plan and other relevant policies, plans, programmes, and environmental objectives;
  - An identification of existing environmental problems affecting the plan;
  - The plan's likely significant effects on the environment, including issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climate,

---

<sup>1</sup> Ministry for Resources and Rural Affairs, 2010, A Proposal for a Water Policy for the Maltese Islands. Public Consultation Document dated 30<sup>th</sup> July 2010



material assets, cultural heritage, landscape, and the interrelationship between such factors;

- The mitigation measures envisaged;
  - A description of the alternatives considered and those discarded in favour of the selected action(s);
  - Monitoring measures envisaged; and
  - A non-technical summary.
4. The SEA Directive 2001/42/EC has been transposed into national legislation by the SEA Regulations, 2005 (Legal Notice 418 of 2005). Although there are many similarities between the Directive and the SEA Regulations, the latter require that:
- A Plan / Programme Description Statement (PDS) is submitted to the Competent Authority when a proponent intends to prepare a plan that is likely to require a SEA;
  - A Scoping Report is produced and submitted to the Competent Authority and consultation is carried out on the PDS and the Scoping Report; and
  - Consultations on the Scoping Report and the Environmental Report are carried out in accordance with the time frames set out in the Regulations and / or as agreed with the Competent Authority.
5. Guidance on SEA for Malta has not yet been published. The Scoping Report therefore draws on other European guidance namely, the GRDP's (2006) "*Handbook on SEA for Cohesion Policy 2007- 2013*", the Commission's "*Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment*" and the UK's (2005) "*A Practical Guide to the Implementation of the SEA Directive*".

### **Malta's Water Policy**

6. The Water Policy for Malta sets out Government's policy in the water sector based on the information currently available. The Policy is based on the following six key objectives:
- Supply of good quality water to meet the needs of the population;
  - Sustainable use and management of the nation's water resources;
  - Protection of the water resources and the aquatic environment from pollution;
  - Fair and transparent regulation of the water industry;
  - Mitigating against the effects of floods; and

- Adaptation to climate change.
7. The Policy describes twelve policy areas that are further divided into sub-areas. Each sub-area is further divided into measures for implementation. These are summarised below.

**Policy Area 1: Supply of good quality water for human consumption**

8. This Policy Area is prescribed as follows:

*Government will seek to ensure a reliable, sufficient and good quality supply of water for human consumption in accordance to international standards, health guidelines and best practice.*

9. This will help to achieve the following objectives as identified in the Policy document:
- *To ensure a safe, wholesome supply of water for human consumption at an affordable cost and in an equitable, efficient and sustainable manner which meets international standards, health guidelines and best practice*
  - *To protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean*

Ref.	Measures
<b>1.1</b>	Protection of drinking water sources
1.1.1	Setting up of safeguard measures and appropriate controls against contamination in drinking water protection areas
1.1.2	Assessment of impacts and risks associated with certain land use activities and large-scale developments which could impact on the quality of groundwater
1.1.3	Reinforcing the environmental permitting regime for protecting groundwater against pollution
<b>1.2</b>	Monitoring water quality supplied for human consumption
<b>1.3</b>	Cost effective quality enhancing measures

**Policy Area 2: Sustainable groundwater use**

10. Policy Area 2 is prescribed as follows:

*Government will seek long-term sustainable management and exploitation of groundwater resources, meeting the needs of existing users and without compromising the ability of future generations to meet their own needs.*

11. This Policy Area aims to fulfil the set objective:

*To promote sustainable water use based on a long-term protection of available water resources*

Ref.	Measures
2.1	Water Catchment Management Planning
2.2	Development and implementation of a programme of measures
2.2.1	Modelling of the Mean Sea Level Aquifer Systems
2.2.2	Pilot projects on water demand management and supply augmentation measures
2.2.3	Farmers required to keep a record of breeding effluent volumes and destination of application to land
2.2.4	Farmers required to keep a record of farming practices
2.2.5	Construct anaerobic digestion plants for municipal waste and animal waste
2.2.6	Reduce point source nitrate contamination from livestock units
2.2.7	Farmers to draw up and comply with a nutrient management plan
2.2.8	Promote the use of alternative methods for plant protection other than pesticides
2.2.9	Creation of a perennial system to collect and treat pesticide packaging and non utilised products
2.2.10	Establishment of an advisory service for the farming community
2.3	Groundwater Abstraction (Authorisation) Legislative Framework
2.3.1	Regulations to control groundwater abstraction
2.3.2	Assessment and authorisations for groundwater abstraction
2.3.3	Implementation of a Code of good groundwater abstraction practice
2.3.4	Classification of different users of groundwater
2.3.5	Incentives to the cultivated sector for sustainable groundwater use
2.3.6	Register of abstractions

### **Policy Area 3: Water demand management**

12. Policy Area 3 states:

*Government will support and promote water demand management objectives in water planning policies as an alternative to supply augmentation and to ensure demand requirements are attained.*

13. This will be in line with the following objective:

*High efficiency in the use of water will need to be achieved to eliminate wastage and water misuse while ensuring a fair allocation of water based on socio-economic criteria.*

Ref.	Measures
3.1	National Water Saving Campaign
3.2	Support schemes for water re-cycling and re-use technologies in the industrial and commercial sectors
3.3	Promotion of water auditing and water conservation in industry
3.4	Sustained leakage control programmes and monitoring
3.5	Efficient use of water by agricultural sector
3.6	Financial instruments on water use
3.7	Implementation of smart metering programme

#### **Policy Area 4: Optimisation and Use of non-conventional water resources**

14. Policy Area 4 states:

*Government will seek optimisation of use of desalination for potable water supply, and minimise the energy demand and environmental impacts of the desalination plants.*

*Government will seek to promote cost effective utilisation of non conventional water resources, particularly treated sewage effluent for secondary uses, in particular, agriculture, landscaping and certain industries.*

<b>Ref.</b>	<b>Measures</b>
4.1	Optimisation of operations of desalination plants
4.2	Monitoring of emerging developments and technologies and where appropriate seek investment in further energy recovery at desalination plants
4.3	Optimisation and regulation on the use of TSE taking into account health considerations and the protection of groundwater resources
4.4	Pilots for small decentralised sewage treatment
4.5	Establishment of regulations, enforcement and controls on discharges of brine to the sewerage system
4.6	Upgrading of sewerage infrastructure
4.7	Studies on infrastructural requirements for distribution of TSE
4.8	Assessment of the impact of irrigation with TSE on soil salinisation and associated effects on crop and product output
4.9	Assessment of incentive schemes for the treatment and re-use of grey-waters in the industrial sector

#### **Policy Area 5: Rainwater harvesting**

15. Policy Area 5 states:

*Government will continue to investigate and exploit opportunities for the capturing and utilisation of rainwater as a means of increasing the use of renewable water resources whilst reducing reliance on groundwater and other non-conventional water sources.*

16. This is in line with the following aims:

*To increase infiltration of rainfall to recharge the aquifers*

*To continue and intensify efforts to promote the practice of harvesting rainwater in order to increase the available storage capacity*

<b>Ref.</b>	<b>Measures</b>
5.1	Assessment of health impacts and risks associated with rainwater use
5.2	Building regulations for construction of rainwater harvesting facilities
5.3	Financial support mechanism and incentive schemes for increasing storage for rainwater-runoff for the industrial and agricultural sectors
5.4	Financial support mechanisms for integration of rainwater cisterns with the domestic plumbing system
5.5	Promotion of the restoration of existing runoff storage facilities

Ref.	Measures
5.6	Integration, where possible, of runoff storage or artificial recharge facilities in flood-relief initiatives

### **Policy Area 6: Protection of water resources from pollution**

17. Policy Area 6 states:

*Government will seek to attain good qualitative status of all water resources in line with requirements of Water framework directive whilst taking into account cost-effectiveness and feasibility of measures to attain such status*

18. This aims to achieve the general objective of the Water Framework Directive to achieve good status by 2015 in all surface and groundwater bodies.

Ref.	Measures
6.1	Protection of Groundwater from Pollution
6.1.1	Implementation of the Code of Good Agricultural Practice
6.1.2	Implementation of the Agricultural Waste Management Plan
6.2	Groundwater Quality Monitoring
6.3	Protection of Groundwater Recharge Areas
6.4	Protection of Surface and Coastal Waters from Pollution
6.4.1	Investment in Wastewater Treatment facilities

### **Policy Area 7: Protection of freshwater ecosystems**

19. Policy Area 7 is prescribed as follows:

*Government will promote the protection of freshwaters supporting terrestrial ecosystems to ensure that endemic biodiversity is sustained.*

20. This objective of this Policy is:

*To maintain the “good status” of associated surface waters ... thereby avoiding significant damage to the status of terrestrial freshwater ecosystems*

Ref.	Measures
7.1	Studies on status of freshwater habitats and ecosystems
7.2	Introduction of Abstraction Controls
7.3	Planning Controls

### **Policy Area 8: Effective and transparent regulation of the water industry**

21. Policy Area 8 states:

*Government will seek effective and transparent regulation of the water industry to ensure the supply and provision of water and sewerage services at affordable cost, suitable levels of services and in accordance to best practice in the industry*

22. The stated objective in this key area is:

*Consumer protection and where possible promotion of fair competition*

Ref.	Measures
8.1	Bringing into force Water Supply and Sewerage Services Regulations, 2004
8.2	Facilitating competition in certain areas of water industry
8.3	Monitoring operations of and services provided by the water industry
8.3.1	Financial and technical assessment of Water Services Corporation
8.4	Licensing regime for regulating drilling operators
8.5	Establishment of a licensing regime for water tanker operators

**Policy Area 9: Efficient, fair and equitable water pricing**

23. Policy Area 9 is prescribed as follows:

*Government will take into account the principle of recovery of costs of water services with due consideration where possible being given to environmental and resource costs in water pricing and in line with the Water Framework Directive*

Ref.	Measures
9.1	Economic analysis of different water uses
9.2	Development of appropriate incentives for efficient water use
9.3	Introduction of costs for polluting activities
9.4	Application of principle of recovery of costs for water services

**Policy Area 10: Reduction and management of risks associated with floods**

24. Policy Area 10 states:

*Government will promote and adopt strategies and measures to mitigate the impacts of floods on human life and health, and to reduce flood damages to property, or other assets; and minimise disruption of economic activity; and, environmental damage from uncontrolled storm water.*

25. The set objectives are to:

*Evaluate on a regular basis flooding problems of worst hit areas scientifically, and develop remedial measures to mitigate them, as a matter of priority,*

*Develop further and maintain a technically sound basis for long term storm water and valley management.*

*Develop further, appraise and adapt strategies to mitigate the risks and impacts of flooding,*

*Strengthen the institutional basis for storm water and valley management,*

*Undertake a more comprehensive valley and storm water systems maintenance program.*

*Continue with the implementation of flood relief projects*

<b>Ref.</b>	<b>Measures</b>
<b>10.1</b>	Evaluate on a regular basis flooding problems of worst hit areas scientifically, and develop remedial measures to mitigate them, as a matter of priority
10.1.1	Preliminary proposals for worst hit areas, in Malta and Gozo
10.1.2	Review of the Stormwater Master Plan
10.1.3	Strategic Plan
<b>10.2</b>	Create and maintain a technically sound basis for long term storm water and valley management
10.2.1	Flood risk assessment
10.2.2	Flood Hazard and Flood Risk Mapping
10.2.3	Flood Risk Management Plans
10.2.4	Public consultation and stakeholder consultation on flood risk mapping and management plans
<b>10.3</b>	Develop, appraise and continually adapt strategies to mitigate the risks and impacts of flooding
10.3.1	Identification of areas prone to flooding
10.3.2	Options to address areas prone to flooding
10.3.3	Studies for economic and environmental appraisal of technical options
10.3.4	Monitor and review effectiveness and provide information and feedback to the data collection and strategy preparation stages
<b>10.4</b>	Strengthen the institutional basis for Flood Risk evaluation and management
10.4.1	Strengthen the competent authority for the implementation of Floods Directive
10.4.2	Capacity building of Valley Management and Storm Water Units within the Cleansing and Maintenance Department
<b>10.5</b>	Undertake a more comprehensive valleys and storm water systems maintenance program
10.5.1	Inventory of structures and infrastructure for rainwater retention
10.5.2	Maintenance program for valleys and rainwater retention structures
<b>10.6</b>	Continue with the improvement of existing storm water systems and implementation of Flood Relief Projects
10.6.1	Improvement of Existing Stormwater systems and implementation of new projects
10.6.2	Obtaining EU co-financing for Flood Relief projects

### **Policy Area II: Adaptation to climate change**

26. Policy Area II is prescribed as follows:

*Government will continue to assess impacts of climate change on water resources and adopt appropriate adaptation measures to safeguard the sustainability of the resource*

<b>Ref.</b>	<b>Measures</b>
<b>11.1</b>	Review of reverse osmosis technology to apply innovation

Ref.	Measures
11.2	Review of water transfer and distribution by WSC

**Policy Area 12: Horizontal measures – Public Information, consultation, research and development**

27. Policy Area 12 states:

*Government will seek to facilitate information on water policy issues and improve access to all stakeholders, whilst raising awareness on the strategic and economic importance of water*

Ref.	Measures
12.1	Public consultation and participation in the Water Framework Directive
12.2	Information management on water resources
12.3	Integration of education on water resources in national curriculum
12.4	Participation in EMWIS
12.5	Stakeholder dialogue on integrated water management
12.6	Strengthening capacity in R&D

## THE SEA PROCESS

28. The first stage of the SEA process is scoping. The scoping sets out the context for the assessment, methodology and defines the scope of the SEA. It is one of the most important stages in the process as it identifies the issues for consideration in the Environmental Report. The Scoping Report is being undertaken by Adi Associates Environmental Consultants Ltd. The Team is working closely with the Malta Resources Authority. MRA on behalf of the Government of Malta is responsible for the overall coordination of the Water Policy. The Government of Malta remains the sole “owner” of this policy.
29. During the development of the Scoping Report, the following entities were consulted:
- The Malta Environment and Planning Authority (MEPA), specifically technical personnel on Environmental Assessment<sup>2</sup>;
  - Department of Environmental Health within the Department for Public Health<sup>3</sup>.
30. A meeting with the Department of Agriculture was also requested during the development of the Scoping Report. Since such a meeting was not held prior to the publication of the Scoping Report, this government entity will be consulted during the formulation of the Environment Report. Other staff from MEPA will also be consulted including teams dealing with water issues and nature protection.
31. The Scoping Report will be made available to the identified stakeholders and the public. The identified stakeholders include:

<sup>2</sup> Meeting held with Charlene Smith and Dennis Kasap of MEPA’s Environmental Assessment Unit on 14<sup>th</sup> October 2010.

<sup>3</sup> Meeting held with Dr Christine Balucci and Dr Antonella Sammut on 3<sup>rd</sup> November 2010.



- Office of the Prime Minister;
- Ministry of Finance, Economy and Investment;
- Ministry for Resources and Rural Affairs
- Ministry for Health, the Elderly and Community Care;
- Ministry for Infrastructure, Transport and Communications;
- Ministry for Gozo;
- Ministry for Education, Employment and the Family;
- Malta Environment and Planning Authority;
- Malta Resources Authority;
- Malta Standards Authority
- Malta Tourism Authority;
- National Statistics Office
- Transport Malta
- Consumer and Competitive Division;
- Consumer Affairs Council;
- Malta Council for Science and Technology
- Malta Enterprise
- Water Services Corporation;
- Public Health Regulation Division;
- Public Services Division;
- Department/s of Agriculture; and
- Transport Malta;
- Farmers associations;
- NGOs (Biological Conservation Research Foundation(BICREF), Birdlife Malta(BM), Din l-Art Helwa (DLH), Flimkien Ghal Ambjent Ahjar (FAA), The Malta Ecological Foundation, Friends of the Earth(Malta), Greenpeace Mediterranean, Light Pollution Awareness Group(LPAG), Institute of Waste Management (IWM), Malta Bat Conservation Society(MBCS), Malta Chamber of

Scientists (MCS), Malta Energy Efficiency and Renewable Energies Association (MEEREA), Nature Trust Malta (NTM), Moviment Graffiti.

32. Various guidance documents (see above) recommend that the SEA process should start at the same time as the preparation of the Water Policy. Although a first draft of the Water Policy has been developed at the time of writing the Scoping Report, this is still in draft form and could be amended as a result of the SEA process.

## RELATION OF THE DRAFT WATER POLICY FOR MALTA TO OTHER NATIONAL DOCUMENTS & LEGISLATION

33. Schedule 3 of the SEA Regulations requires a discussion of the "relation [of the plan] with existing legislation, policies, and other plans and programmes and their objectives, with information on potential synergies or conflicts". **Table I** provides a list of the policies, plans, and programmes relevant to the Water Policy, which have been analysed.
34. The analysis has been subdivided into four main categories:
- (i) **International Commitments:** this category covers the highest-level environment and sustainability policy framework within which Malta must work. It includes a selection of global commitments, such as those arising from the Millennium Development Goals (MDGs), UN Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol, EU water and climate change policy as well as some international conventions. In the case of European Union Directives already transposed into national legislation, the Directives *per se* will not be discussed; the section on national legislation is described below;
  - (ii) **National Environmental & Planning Documents** including the Structure Plan for the Maltese Islands, the National Sustainable Development Strategy (2007-2016), and the National Reform Programme (2008-2010). The review provided herein summarises the key issues raised; further information can be obtained from the original documents;
  - (iii) **Sectoral Policies and Strategies:** this section covers highest-level policy and strategy documents published by the Government, such as the National Strategic Plan. Rather than summarise entire documents this review seeks to emphasise the key sustainability objectives and priorities;
  - (iv) **National legislation:** no attempt will be made to assess the individual regulations, as is done at the project level EIA (Environmental Impact Assessment). However, the main areas of concern for the Water Policy will be highlighted. Given the scale (and evolutionary nature of this field) this review is not exhaustive and represents a current (October 2010) snapshot.



**Table I: Analysis of Related Plans, Programmes, and Legislation**

Plan, Programme, Legislation	Description	Implications for the Water Policy
<b>I. International Commitments</b>		
The UN Millennium Declaration and Millennium Development Goals (MDGs)	The United Nations Millennium Declaration arose from the meeting of UN Heads of State in New York, September 2000. The Declaration was aimed at revitalising international efforts to tackle critical development issues, and led to agreement on, and adoption of, the eight Millennium Development Goals (MDG). Of relevance to the SEA is the seventh MDG: <b>ensure environmental sustainability</b> .	This is a national commitment and the Water Policy must play a role in its realisation.
UN Framework Convention on Climate Change (UNFCCC) (1992) and Kyoto Protocol (1997)	The ultimate objective of this Convention, and any related legal instruments that the Conference of the Parties may adopt, is to achieve stabilisation of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner. An important international agreement linked to the United Nations Framework Convention is the Kyoto Protocol committing 37 industrialised countries and the European community to take action against Climate Change by setting binding targets for reducing GHG emissions. Malta is a non-Annex I party to the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol (KP). Therefore, it does not have any direct legally binding commitments to limit or reduce its national emissions of greenhouse gases under these international instruments. It does, however, support efforts to reduce greenhouse gas emissions and is bound by EU legislation. Malta, by a letter dated 16 April 2009, submitted a proposal to amend Annex I to the Convention by adding the name of Malta to the list of countries contained in that annex.	The Water Policy makes specific reference to address adaptation to climate change; the Convention is also mentioned.
Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	Malta is a party to the Bern Convention. The Convention aims to ensure conservation of wild flora and fauna species and their habitats. Special attention is given to endangered and vulnerable species, including endangered and vulnerable migratory species specified in appendices. The Parties to the Convention must undertake to adopt all appropriate measures to ensure the conservation of the habitats of the wild flora and fauna species. Such measures should be included in the Parties' planning and development policies and pollution control, with particular attention to the conservation of wild flora and fauna. They should also undertake to promote education and disseminate general information concerning the need to conserve species of wild flora and fauna and their habitats.	The Water Policy has specific measures that aim to protect freshwater eco-systems and water resources.
The United Nations Convention on the Law of the Sea, 1982	<p>The ability to deploy and utilise installations or structures in the marine environment is essentially one of property rights. The basis of ownership and property rights within the marine environment emanates from the provisions of the United Nations Convention on the Law of the Sea, 1982 (UNCLOS).</p> <p>UNCLOS came into force on 16<sup>th</sup> November 1994 and among its provisions, it conveys rights to coastal states<sup>4</sup>, while imposing certain duties, among which is environmental protection<sup>5</sup> and safety to navigation.</p> <p>UNCLOS establishes the legal status of the territorial sea, of the air space over the territorial sea and of its bed and subsoil. It also sets down rules for the passage of ships through the seas and distinguishes between passenger ships, commercial ships and warships. It establishes the rights, jurisdiction and duties of the coastal State in the exclusive economic zone.</p> <p>Within harbour areas, the placing of any sort of installation, even moorings, falls under the jurisdiction of harbour authorities (in Malta's case, the Malta Maritime Authority), whose permission is required prior to the placing of any such structures (see National Legislation below). The Convention defines "pollution of the marine environment" as "introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities". However, it excludes from its definition of "dumping" the disposal of wastes derived from the normal operations of ...other man-made structures at sea and their equipment. Other relevant aspects of the Convention include the provisions on Protection and Preservation of the Marine Environment (Part XII Arts 192-196), and EIA (Art. 206).</p> <p>The protection of the marine environment is addressed in Part XII of the Convention. States have the obligation to protect and preserve the marine environment. With regards to marine pollution States are to take "all measures consistent with this Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonise their policies in this connection". The Convention applies to all sources of pollution including the release of toxic, harmful or noxious substances, pollution from vessels, and pollution from installations and devices operating in the marine environment. The measures taken to prevent pollution should include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life. Pollution from vessels is further addressed in Article 211.</p> <p>Like other Conventions, UNCLOS calls for an assessment of environmental impacts for planned activities that <i>may cause substantial pollution of or significant and harmful changes to the marine environment</i>.</p>	The Water Policy should take into account impacts to the marine environment.

<sup>4</sup> Article 56

Plan, Programme, Legislation	Description	Implications for the Water Policy
The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean, 1976 (the Barcelona Convention)	<p>This Convention, known as the Barcelona Convention, requires the Contracting Parties to “...individually or jointly take all appropriate measures in accordance with the provisions of this Convention and those Protocols in force to which they are party to prevent, abate, combat and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area and to protect and enhance the marine environment in that Area so as to contribute towards its sustainable development” (UNEP, 2004<sup>6</sup>).</p> <p>The Convention, as revised in 1995, strives to “take all appropriate measures to prevent, abate and to the fullest possible extent eliminate pollution of the Mediterranean Sea Area caused by dumping from ships and aircraft or incineration at sea.” This is in line with similar moves in other international and regional conventions (e.g. the London Dumping Convention, the Oslo Convention<sup>7</sup>, and the Helsinki Convention<sup>8</sup>), and is based on the precautionary principle, which has set a new level of priority in emerging international legislation, including EU Directives. These various amendments include the extension of the Convention's geographical field of application to the coast, the application of the precautionary and “polluter pays” principles, the obligation on the Parties to carry out and promote impact assessments, protect and preserve biological diversity as well as combat pollution from cross-border movements of dangerous waste, and access to information and public participation (EU, 2005<sup>9</sup>).</p>	The application of the precautionary and “polluter pays” principles, the obligation on the Parties to carry out and promote impact assessments, protect and preserve biological diversity, and access to information and public participation are of relevance to the implementation of the Water Policy.
The Protocol of the Barcelona Convention concerning Specially Protected Areas and Biological Diversity in the Mediterranean, 1999	This Protocol, promulgated by the Contracting Parties to the Barcelona Convention in 1999, aims to protect, preserve, and manage in a sustainable and environmentally sound way the areas of particular natural or cultural value of the Mediterranean through the establishment of Specially Protected Areas (SPAs), and to protect, preserve and manage threatened or endangered species of flora and fauna. To date, no SPAs have been designated in Malta under this Protocol.	Its relevance to the implementation of the Water Policy lies in its requirement for EIA for any infrastructural or other projects that could significantly affect protected areas and species and their habitats (Article 17 of the Protocol).
The Convention on Biological Diversity, 1992	<p>The Convention on Biological Diversity, also known as the Rio Convention, was enacted in 1992. Its objective is to “conserve the maximum possible biological diversity for the benefit of present and future generations and for its intrinsic value”. This pact among the vast majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings while maintaining economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources. Relevant aspects of the Convention are the emphasis on the sustainable use of components of biological diversity, the requirement for EIA, and the inclusion of biodiversity issues.</p> <p>A direct result of the Rio Convention was the concept of Agenda 21 – a global partnership for sustainable development. Agenda 21 addresses today's pressing problems aiming to prepare the world to meet its challenges. It reflects a global consensus and political commitment at the highest level on development and environment cooperation. Its successful implementation is first and foremost the responsibility of Governments but the broadest public participation and the active involvement of the non-governmental organisations and other groups should also be encouraged. National strategies, plans, policies, and processes are crucial in achieving this (UNEP, 2005<sup>10</sup>).</p> <p>Agenda 21 has four sections:</p> <ul style="list-style-type: none"> <li>• Social and economic dimensions;</li> <li>• Conservation and management of resources for development;</li> <li>• Strengthening the role of major groups; and</li> <li>• Means of implementation.</li> </ul>	The sustainable conservation of resources in the freshwater environment are considered in the Water Policy (Policy Area 7).
United Nations Convention to Combat	The objective of this Convention is to “...combat desertification and mitigate the effects of drought” “...through effective action at all levels,	The Water Policy should be aware of the

In the exclusive economic zone, the Coastal State has:

- (a) sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed and of the seabed and its subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds;
- (b) jurisdiction as provided for in the relevant provisions of this Convention with regard to:
  - (i) the establishment and use of artificial islands, installations and structures;
  - (ii) marine scientific research;
  - (iii) the protection and preservation of the marine environment;
- (c) other rights and duties provided for in this Convention.

<sup>5</sup> Article 194(1)

States are required to take “...all measures consistent with [the] Convention that are necessary to prevent, reduce and control pollution of the marine environment from any source”.

<sup>6</sup> <http://www.unep.ch/seas/main/med/medconvii.html>. As accessed in March 2005.

<sup>7</sup> The Convention for the Prevention of Marine Pollution from Ships and Aircraft (1972).

<sup>8</sup> The Convention of the Protection of the Marine Environment of the Baltic Sea Area (1974 revised in 1992).

<sup>9</sup> Europa website. Accessed on <http://europa.eu.int/scadplus/leg/en/lvb/l28084.htm>; March 2005.

<sup>10</sup> UNEP Earthwatch website, 2005. Accessed at <http://earthwatch.grid.unep.ch/agenda21/> in March 2005.

Plan, Programme, Legislation	Description	Implications for the Water Policy
Desertification in those Countries experiencing Serious Drought and / or Desertification, 1994	<p>supported by international cooperation and partnership arrangements”.</p> <p>The Convention is a direct recommendation of Agenda 21. It aims to achieve its objective through “...long-term integrated strategies that focus simultaneously, in affected areas, on improved productivity of land, and the rehabilitation, conservation and sustainable management of land and water resources, leading to improved living conditions, in particular at the community level”. Guidelines are presented for the preparation of action programmes with the focus and content of such programmes specified by region.</p> <p>Malta is considered part of the Northern Mediterranean region. Particular conditions found in this region include:</p> <p>(e) crisis conditions in traditional agriculture with associated land abandonment and deterioration of soil and water conservation structures (f) unsustainable exploitation of water resources leading to serious environmental damage, including chemical pollution, salinization and exhaustion of aquifers.</p>	action programme prepared for Malta in respect of this Convention.
EU’s Biodiversity Action Plan, 2008	This document aims to facilitate and encourage Member States to reach targets set and implement outstanding measures required under a number of environmental Directives with an aim to safeguarding biodiversity including the Habitats Directive and the Water Framework Directive.	The Water Policy should remain mindful of potential impacts on biodiversity. These will be assessed through the SEA.
<b>2. National Environmental &amp; Planning Documents</b>		
National Environment Policy – Issues Paper, 2010	<p>The objectives of this policy are:</p> <ol style="list-style-type: none"> <li>To provide direction to both the public and private sector and other players;</li> <li>To ensure the integration of all policies such that all stakeholders work in a coordinated manner to achieve the national objectives and key priorities, not only in the environmental field but also in areas that impact upon or are impacted by the environment, exploiting synergies and addressing potential conflicts across sectors;</li> <li>To clearly articulate and communicate national environmental commitments and priorities in a transparent manner.</li> </ol> <p>The policy is still in its initial stage where issues have been identified. Water-related issues featured in a number of environmental aspects including climate, fresh waters, soil, coastal and marine environment, and biodiversity.</p>	The Water Policy should be mindful of the issues raised in the report.
A Sustainable Strategy for the Maltese Islands 2006-2016	<p>The Sustainable Strategy is centred on four main themes:</p> <ul style="list-style-type: none"> <li>Managing the environment and resources;</li> <li>Promoting sustainable economic development;</li> <li>Fostering sustainable communities;</li> <li>Cross-cutting strategic issues.</li> </ul> <p>Within these sectors the following priorities are identified:</p> <p>The Environment</p> <ol style="list-style-type: none"> <li><u>Climate Change</u>: take steps to reduce greenhouse gas emissions through transport and energy policies that seek to promote environmental protection, competitiveness, and security of supplies and, as a result, decouple the rate of growth of Green House Gas (GHG) emissions from economic growth.</li> <li><u>Air Quality</u>: take remedial action to control emissions of air pollutants and achieve compliance with European standards;</li> <li><u>Nature and Biodiversity</u>: halt loss of biodiversity by 2010, and achieve management of protected areas by 2008;</li> <li><u>Groundwater</u>: adopt a policy that safeguards the quality of groundwater resources to protect human health, and satisfy the requirements for human use and achieve good quantitative status by 2015;</li> <li><u>Seawater</u>: sustain compliance with the Bathing Water Directive and achieve compliance with the Barcelona Convention standards;</li> <li><u>Waste</u>: prevent and minimise waste by achieving EU waste-related objectives and targets, reviewing Malta’s Waste Management Strategy by 2007;</li> <li><u>Land use</u>: protect, maintain, and improve the urban and rural environment and through the planning system protect the open countryside from uses, particularly residences, which can be more appropriately located in urban areas;</li> <li><u>Transport</u>: reduce car ownership rates to the EU average by 2014. Attain 1995 bus patronage levels by 2014 (40 million passengers);</li> </ol> <p>The Economy</p> <ol style="list-style-type: none"> <li><u>Economic Growth</u>: adopt policy measures so that the GDP (Gross Domestic Product) per capita in real terms grows at a rate that will enable the Maltese economy to converge towards the EU average.</li> <li><u>Employment</u>: create employment opportunities to generate income and improve the quality of life of the population, taking into consideration environmental and social impacts, and adopt policy measures so that the ratio of total employment to the working age population in Malta converges with the EU average and reaches at least 57% by 2010;</li> <li><u>Labour productivity</u>: adopt policy measures to increase average labour productivity at a rate of 1% per annum over the EU average by</li> </ol>	<p>Sustainable development principles must be included in the Water Policy.</p> <p>The Water Policy should reflect all the relevant sustainable development challenges contained in the Sustainable Strategy.</p> <p>The Water Policy should be responsive to the actions proposed in the Strategy.</p>

Plan, Programme, Legislation	Description	Implications for the Water Policy
	<p>2010, while attempting to balance wages, taxation, and productivity, in collaboration with the social partners.</p> <p>Society</p> <p>12. <u>Poverty reduction</u>: reduce or at least sustain the current level of 15% of the population at risk of poverty and decrease the ratio of population aged over 65 at risk of poverty from 20% to 15%, by 2010;</p> <p>13. <u>Labour force participation of women</u>: adopt policy measures so that the labour force participation rate of women increases from 33% to 40.7% by 2010;</p> <p>14. <u>Health</u>: decrease ratio of overweight/obese population in line with the EU average by 2010 by, amongst other actions enhancing the focus on healthy living and prevention, to reduce the need for curative care;</p> <p>15. <u>Education</u>: continue to adopt measures to decrease the early school-leavers rate to 35% by 2010.</p> <p>Cross Cutting Issues</p> <p>16. <u>Spatial development plan</u>: by 2010 draw up an integrated spatial development plan to take forward the National Strategy for Sustainable Development, with the participation of major stakeholders;</p> <p>17. <u>Economic Instruments</u>: gradually adjust the present income tax regime so that the ratio of green taxation to total taxation reaches the EU average by 2010;</p> <p>18. <u>Enforcement</u>: by 2008, put in place an audit of enforcement arrangements to assess the adequacy of the current enforcement mechanisms and to promote integration of responsibilities and reduction of overlaps.</p> <p>Implementation</p> <p>19. <u>Institutional setup</u>: by 2008 put in place a permanent structure, appropriately staffed and funded, to revise and implement the National Strategy for Sustainable Development, on an ongoing basis, under the auspices of the National Commission for Sustainable Development, and hold an annual Conference with participation of major stakeholders to critically evaluate progress relating to the strategy;</p> <p>20. <u>Sustainability indicators</u>: by 2008, establish and fund an entity responsible for compiling and evaluating sustainability indicators. This entity should work closely with the National Commission for Sustainable Development and the National Statistics Office.</p>	
Structure Plan for the Maltese Islands, 1990	<p>This is the national planning document that sets out the development framework for the Maltese Islands for the twenty-year period to 2010. Its' three goals are:</p> <ol style="list-style-type: none"> <li>1. To encourage the further social and economic development of the Maltese Islands, and to ensure as far as possible, that sufficient land and support infrastructure are available to accommodate it;</li> <li>2. To use land and buildings efficiently, and consequently to channel urban development activity into existing and planned development areas, particularly through rehabilitation and upgrading of the existing fabric and infrastructure thus constraining further inroads into undeveloped land, and generally resulting in higher density development than at present;</li> <li>3. To radically improve the quality of all aspects of the environment of both urban and rural areas.</li> </ol>	The Water Policy must remain aware of the broad goals of the Structure Plan.
<b>3. Sectoral Plans &amp; Policies</b>		
The Maltese Code of Good Agricultural Practice (CoCAP)	<p>This code of practice has been prepared to provide a comprehensive code that includes recommendations as set in the Nitrates Directive and other relevant legislation and directives, and good farming practices. The code makes a distinction between obligatory and voluntary recommendations. It contains recommendations that cover:</p> <ul style="list-style-type: none"> <li>• Animal husbandry;</li> <li>• Manure handling;</li> <li>• Fertilization practice;</li> <li>• Irrigation practice; and</li> <li>• Plant protection.</li> </ul>	The Water Policy should take into consideration the recommendations set out in this code.
Storm Water Master Plan	<p>This plan addresses the economic losses, social damage and environmental consequences caused by floods. It proposes alternative engineering options for storm water management and reuse, maintenance programmes and implementation measures. The key principles considered in the plan are sustainable development, the proximity principle and self-sufficiency, the precautionary principle and pollution prevention.</p>	<p>The Water Policy should be aware of the implications of the plan including the findings of the SEA.</p> <p>An SEA is being undertaken on the Storm Water Master Plan. The Draft Environment Report (dated February 2010) was issued for public consultation in March 2010. The consultation period closed on 8<sup>th</sup> June 2010.</p>
Utilities Topic Paper, 2002	<p>The Utilities Topic Paper discusses the water sector by looking at the different sources of water: groundwater, desalination, second-class water and storm water. The need to construct reservoirs for second-class water and water polishing plants is identified. The topic paper highlights the need to encourage developments to implement water conservation measures reduce the impact of storm water on downstream areas and to regulate development in or near flood prone areas.</p>	The Water Policy must remain aware of potential environmental and social impacts from proposals in the water sector as highlighted by the topic paper.

Plan, Programme, Legislation	Description	Implications for the Water Policy
	The sewage section of the paper identifies the intensification of urban development as one of the main pressures on the sewerage infrastructure. It highlights the fact that the expansion of the sewerage network is not always environmentally acceptable as pipes may be laid over sensitive areas.	
National Report on the Strategic Action Plan for the Conservation of Maltese Coastal and Marine Biodiversity, 2002	This report identifies priority actions in the field of marine and coastal biodiversity. These actions include the preparation of species and habitat action plans, declaration of marine and coastal protected areas, data compilation, monitoring proposals, upgrading research equipment, and effective enforcement.	The implementation of the Water Policy should be cognisant of the requirements in the field of biodiversity.
The First National Communication of MALTA to the United Nations Framework Convention on Climate Change (UNFCCC), 2004	The First Communication to the UNFCCC presents the national GHG inventory followed by an analysis of GHG abatement measures and climate change mitigation measures. The vulnerability of the Maltese Islands and adaptation strategies are also discussed. The document also includes a National Action Plan that suggests policies and measures to address climate change mitigation and adaptation. Measures are related to power generation, transport, water resources, solid waste management, agriculture, industry, and health.	The Water Policy should be aware of the policies and measures described in the action plan.
Cross-compliance with Statutory Environmental Management Requirements (Environmental Guidance for Agriculture), 2005	<p>This document sets out guidance on cross-compliance requirements for farmers and livestock breeders submitting applications for direct support under the Common Agricultural Policy (CAP). The document presents:</p> <ul style="list-style-type: none"> <li>• Cross-compliance requirements that farmers and livestock breeders must satisfy in order to be eligible for direct support schemes;</li> <li>• Statutory management standards that competent authorities must verify when carrying out farm inspections in view of controls on cross-compliance; and</li> <li>• The type and details of the statutory environmental management standards.</li> </ul> <p>The Directives that are featured in this document include the Wild Birds Directive, the Habitats Directive, the Nitrates Directive, and the Sewage Sludge Directive</p>	The Water Policy should be mindful of this guidance document.
National Environmental Health Action Plan, 2006 - 2010	The action plan is a policy framework document that sets targets and priority actions for the period 2006-2010. Actions are primarily concerned primarily with the protection of public health through protection of the environment. The plan identifies a number of objectives related to water including sustainable use, improving water status, and mitigation of floods and droughts.	The Water Policy should stress the importance of protection of water resources to protect public health.
Policy and Design Guidance: Agriculture, Farm Diversification and Stables, 2007	<p>This guidance document presented by MEPA provides policy guidance and design guidelines while taking into account national legislation, government policy on agriculture including the RDP, the EU Common Agricultural Policy, and the different forms of agricultural development. The policies are split into the following sections:</p> <ul style="list-style-type: none"> <li>• General policies;</li> <li>• Farm Dwellings and Agricultural Buildings policies;</li> <li>• Farm Diversification policies; and</li> <li>• Stables policies.</li> </ul>	The Water Policy must remain aware of the policy guidance set in this document.
Rural Development Programme for Malta, 2007 – 2013	<p>The Rural Development Programme (RDP) is split into four axes:</p> <ol style="list-style-type: none"> <li>1. Improving the competitiveness of the agricultural sector;</li> <li>2. Improving the environment and the countryside;</li> <li>3. Improving the quality of life in rural areas and diversification of the rural economy; and</li> <li>4. Leader</li> </ol> <p>Axis 1 (Measure 125) contains measures that encourage rainwater harvesting. Axis 2 in particular presents measures that aim at reducing water demand and the use of fertilisers and herbicides. These measures include support for:</p> <ul style="list-style-type: none"> <li>• Use of the environmentally friendly plant protection methods in vineyards;</li> <li>• The traditional crop rotation including the cultivation of sulla;</li> <li>• Low input farming; and</li> <li>• Organic farming.</li> </ul>	The Water Policy needs to be aware of the support measures that are set in this programme.
National Strategic Reference Framework. 2007 - 2013	<p>The framework set out four strategic objectives:</p> <ul style="list-style-type: none"> <li>• Sustaining a growing, knowledge-based, competitive economy;</li> <li>• Improving Malta's attractiveness and the quality of life;</li> <li>• Investing in human capital; and</li> <li>• Addressing Gozo's regional Distinctiveness</li> </ul> <p>As part of the second strategic objective, the framework proposes improvements to the environmental infrastructure with focus on water quality including waste water, solid waste management, rehabilitation of the physical environment and risk prevention; and investments in the energy sector.</p>	The Water Policy should be mindful of the relevant strategic objectives.
Operational Programme I, 2007-2013	This document identifies the overall strategy for utilising funds under the European Regional Development Fund and the Cohesion Fund assigned to Malta during the 2007-2013 programming period. Water features prominently as an area of concern in this Programme. Funding priorities include to:	The Water Policy must remain aware of the potential impacts from the proposals set out in the Operational Programme I.



Plan, Programme, Legislation	Description	Implications for the Water Policy
	<ul style="list-style-type: none"> <li>develop of infrastructure to minimise the effects of storm water and reduce the incidence of flash floods;</li> <li>develop of storm water catchments and re-use facilities;</li> <li>provide higher quality drinking water; and</li> <li>increase sewage treatment capacity in the South of Malta.</li> </ul>	
Agricultural Waste Management Plan, 2008	This plan presents agriculture waste management options for Malta and Gozo.	Water Policy measures should complement and support measures set out in this Plan.
National Reform Programme, 2008-2010	<p>The National Reform Programme (NRP) aims to set out a comprehensive strategy to deliver growth and jobs in line with the refocus of the Lisbon Agenda agreed to in the Spring European Council. Several political, economic, social, technological, and environmental factors affect Malta's economic growth and international competitiveness and hence, the Island's employment growth potential. The main thrusts of this cycle of the NRP are:</p> <ul style="list-style-type: none"> <li>Unlocking business potential;</li> <li>Investing in knowledge and innovation;</li> <li>Energy and climate change; and</li> <li>Investing in people and modernising labour markets.</li> </ul>	The Water Policy should be cognisant of these priority actions.
National Energy Efficiency Action Plan (2008-2016)	<p>The aim of this Action Plan is to promote energy efficiency under Malta's EU obligations. The Action Plan is divided into three phases, comprising three years each:</p> <ul style="list-style-type: none"> <li>Phase I: 2008-2010;</li> <li>Phase II: 2011-2013; and</li> <li>Phase III: 2014-2016.</li> </ul> <p>In each of these phases, the Action Plan aims to achieve savings of 3% of the average energy consumption of the base period (September 2001-September 2006) as a result of improved energy efficiency resulting in a gradual reduction of total consumption by 9% until 2016. Measures include reduction of water demand, improved efficiency in buildings and in water production.</p>	Water Policy measures should complement and support measures set out in this Action Plan.
Draft Solid Waste Management Strategy for the Maltese Islands, 2009	This strategy presents a number of measures for the treatment and management of solid waste.	The Water Policy includes measures that are in line with some of the measures laid out in the waste management strategy.
National Strategy for Policy and Abatement Measures Relating to the Reduction of Greenhouse Gas Emissions, 2009	This strategy, drawn up by the Climate Change Committee presents 96 actions with an aim to mitigate and embark upon adaptation measures to minimise impacts from climate change, particularly those arising from greenhouse gas emissions. The strategy includes actions that aim to secure effective management of water and water production.	The Water Policy aims to complement the actions developed in this strategy.
A Proposal for an Energy Policy for Malta, 2009	This policy presents a number of measures in six key areas related to the energy sector. It includes the promotion of efficient water use.	The Water Policy aims to complement the recommendations developed in this policy.
Draft Water Catchment Management Plan for the Maltese Islands, 2010	This plan describes the main issues for the management of water resources in the Maltese Islands and proposes actions or measures needed to deal with these issues. It identifies the possible steps needed to protect, enhance and improve the water environment. Implementation proposals are also provided in the plan.	<p>The Water Policy must remain aware of the measures set in the plan.</p> <p>An SEA is being undertaken on this Plan. Consultation on the Plan is currently ongoing and will close on the 30 November 2010. The scoping report of the SEA was issued in April 2010; consultation closed on 18 June 2010. The Environment Report was not available at the time of writing the Scoping Report.</p>
National Environment and Health Action Plan (Summary and Priorities - A Review)	The National environment and Health Action Plan identifies regional priority goal 1: to prevent and significantly reduce the morbidity and mortality arising from gastrointestinal disorders and other health effects, by ensuring that adequate measures are taken to improve access to safe and affordable water and adequate sanitation for all children.	This measure will be noted in the SEA.
<b>4. National Legislation</b>		
Constitution of Malta	The Constitution of Malta (Section 9) declares that the State shall safeguard the landscape and the historical and artistic patrimony of the Nation. These are the only aspects of the environment referred to in the Constitution, underlining the importance of the landscape and historical heritage. Chapter IV – Fundamental Rights and Freedom of the Individual of the Constitution also states that “Nothing (in this article) shall be construed as affecting the making or operation of any law so far as it provides for vesting in the Government of Malta the ownership of any underground minerals, water or antiquities”.	Landscape and historical heritage must be recognised as important assets in the Water Policy where relevant especially in implementation.
Civil Code	The Code describes springs of water and conduits that serve to conduct water in tenements as immovable property. The use of springs is also noted in the code as is the use of rainwater. Construction of roofs that do not allow rainwater onto neighbouring tenements is regulated by the Code. Access to water is also regulated.	This legislation will be noted in the SEA.

Plan, Programme, Legislation	Description	Implications for the Water Policy
Code of Police Laws	This code regulates the taking of water from aqueducts, fountains, etc. The legislation also requires that every house “shall have a cistern in good condition”.	This legislation will be noted in the SEA.
Water Services Act, 1991	The Act establishes the Water Services Corporation and assigns its functions.	The SEA should consider WSC as a potential stakeholder.
Development Planning Act, 1992	This Act regulates and controls the use of land, and in particular requires that changes of use and development of land be subject to permission granted by the Malta Environment & Planning Authority; such permissions may be subject to conditions.	Projects resulting from the Water Policy must may require a development permit in accordance with the Development Planning Act.
Malta Resources Authority Act, 2000	The Malta Resources Authority Act establishes the powers of the Malta Resources Authority whose regulatory functions centre around water, energy, and mineral resources. In relation to water specifically the Authority shall under provision 4(2)(b): <i>(i) secure and regulate the acquisition, production, storage, distribution or other disposal of water for domestic, commercial, industrial or other purposes;</i> <i>(ii) secure and regulate the conservation, augmentation and operation of water resources and the sources of water supply;</i> <i>(iii) secure and regulate the treatment, storage, disposal, use or re-use, as appropriate, of sewage, waste water, sludge and storm water run-off;</i> <i>(iv) secure and regulate the provision of adequate systems of public sewers and to ascertain their cleanliness, safety and efficiency;</i> <i>(v) ensure the safe discharge, reception, treatment and disposal of trade effluent;</i> <i>(vi) encourage and regulate the re-use of treated effluent;</i> <i>(vii) ensure the proper and fit disposal of waste water sewage;</i> <i>(viii) maximise the use of storm water run-off;</i>	The Water Policy is under administration of the Malta Resources Authority.
Environment Protection Act, 2001	The Act requires everyone together with the government to protect the environment and to assist in the taking of preventative and remedial measures to protect the environment and manage natural resources in a sustainable manner. Various duties that fall to the government are established including: 4(a) to manage the environment in a sustainable manner by integrating and giving due consideration to environmental concerns in decisions on socioeconomic and other policies; 4(b) to take such preventive and remedial measures as may be necessary to address and abate the problem of pollution and any other form of environmental degradation in Malta and beyond, in accordance with the polluter pays principle and the precautionary principle; 4(e) to apply scientific and technical knowledge and resources in determining matters that affect the environment; 4(g) to safeguard biological diversity; 4(h) to combat all forms of pollution; 4(i) to consider the environment as the common heritage and common concern of humankind; and 4(j) to provide incentives leading to a higher level of environmental protection.	The Water Policy should stress: a) the importance of protecting the natural and human environment from pollution, b) prevention at source; c) conservation of resources; d) safeguarding protected areas and buildings; and e) educating people.
Marine Pollution (Prevention and Control) Act	This Act should be the main legal source under Maltese law to address marine pollution but despite being amended three times, it has never come into force. The role of the Maritime Authority in this respect is without prejudice to the provisions of the Environment Protection Act, which enables the Minister for the Environment, to issue regulations on marine pollution, with MEPA acting as the competent authority. No regulations on marine pollution control from sea-based sources have ever been issued under the Environment Protection Act.	Not relevant yet as it has not come into force.
Government Notice 133 of 1948 Water Supply Regulations, 1948	These regulations establish the rules for the supply of water in Malta.	The Water Policy should be mindful of these regulations.
Legal Notice 128 of 1997 Deposit of Wastes and Rubble (Fees) Regulations, 1997	These regulations present the rules on waste disposal.	The Water Policy should be mindful of these regulations.
Legal Notice 212 of 2001 The Sludge (Use in Agriculture) Regulations, 2001	The purpose of these regulations is to regulate the use of sewage sludge for agricultural purposes in order to protect against harmful effects on soil, vegetation, animals, and human health.	These regulations should be considered where relevant during implementation of the Water Policy
Legal Notice 213 of 2001 Pollution Caused by Certain Dangerous Substances Discharged Into the Aquatic Environment Regulations, 2001	These regulations present measures to reduce and / or eliminate pollution of inland surface waters, territorial waters, internal coastal waters and groundwater by certain dangerous substances (such as mercury, cadmium, mineral oils and hydrocarbons, organotin compounds, organophosphorus compounds, and organohalogen compounds).	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution.  The Water Policy should be mindful of these regulations.
Legal Notice 218 of 2001 Limit Values and Quality Objectives for Hexachlorocyclohexane Discharges Regulations, 2001.	These regulations establish the limit values of hexachlorocyclohexane found in wastewaters leaving industrial plants.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution.  The Water Policy should be mindful of these

Plan, Programme, Legislation	Description	Implications for the Water Policy
Legal Notice 219 of 2001 Limit Values and Quality Objectives for Mercury Discharges by Sectors Other Than the Chlor-Alkali Electrolysis Industry Regulations, 2001.	These regulations establish the limit values of mercury found in wastewaters leaving industrial plants other than those of the chlor-alkali electrolysis industry.	regulations. A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 220 of 2001 - Limit Values and Quality Objectives for Mercury Discharges by the Chlor-Alkali Electrolysis Industry Regulations, 2001	These regulations establish the limit values of mercury found in wastewaters leaving plants of the chlor-alkali electrolysis industry.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 221 of 2001 Limit Values and Quality Objectives for Cadmium Discharges Regulations, 2001	These regulations establish the limit values for cadmium found in wastewaters leaving industrial plants.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 223 of 2001 Waste from the Titanium Dioxide Industry Regulations, 2001	These regulations establish rules for the disposal of waste from the titanium dioxide industry into water, land and air.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 227 of 2001 Limit Values and Quality Objectives for Discharges of Certain Dangerous Substances into the Aquatic Environment Regulations, 2001	These regulations set quality objectives and limit values of certain dangerous substances (such as carbon tetrachloride, chloroform, and DDT) that are discharged into the aquatic environment.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 228 of 2001 Prevention and Reduction of Environmental Pollution by Asbestos Regulations, 2001	These regulations concern the release of asbestos emissions into air, asbestos discharges into the aquatic environment and solid asbestos waste. The release of aqueous effluent from asbestos manufacturing plants is controlled and limit values are defined. Regular monitoring of these discharges is also required.	A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution. The Water Policy should be mindful of these regulations.
Legal Notice 334 of 2001 Malta Resources Authority established as the competent authority in Regulations relating to indirect discharges	These regulations establish the Malta Resources Authority as the competent authority for responsible of indirect discharges.	The Water Policy is under administration of the Malta Resources Authority.
Legal Notice 337 of 2001 Waste Management (Permit and Control) Regulations, 2001	The aim of these regulations is to control all operations that relate to the production and management of waste and to promote sound waste management practices so as to safeguard human health and the environment. These regulations set out the: <ul style="list-style-type: none"> <li>• responsibilities of waste producers, waste managers, and waste holders;</li> <li>• permit requirements for waste managers and waste producers;</li> <li>• criteria for the assessment of permit applications;</li> <li>• after-care obligations of waste management and production sites; and</li> <li>• requirement for record keeping;</li> </ul>	The Water Policy should be mindful of these regulations.
Legal Notice 339 of 2001 Quality required of Surface Water intended for the Abstraction of Drinking Water Regulations, 2001	These regulations establish the quality requirements for surface fresh waters intended for the use of drinking water. The regulations include: <ul style="list-style-type: none"> <li>• definitions of standard methods of treatment to transform surface waters; and</li> <li>• limit values of the physical, chemical and microbiological characteristics of surface water intended for the abstraction of drinking water.</li> </ul>	A key objective of the Water Policy is the supply of good quality water to meet the needs of the population. The Water Policy should be mindful of these regulations.

Plan, Programme, Legislation	Description	Implications for the Water Policy
Legal Notice 340 of 2001 Urban Waste Water Treatment Regulations, 2001	<p>These regulations establish rules to protect the environment from the adverse effects of wastewater discharges. They concern the:</p> <ul style="list-style-type: none"> <li>• collection, treatment and discharge of urban wastewater; and</li> <li>• the treatment and discharge of wastewater from certain industrial sectors.</li> </ul> <p>The regulations set out compliance requirements and control procedures for discharged wastewater as well as criteria for the identification of sensitive and less sensitive areas.</p>	These regulations should be considered where relevant during implementation of the Water Policy
Legal Notice 341 of 2001 Quality required of Shellfish Waters Regulations, 2001	These regulations concern the quality of shellfish waters and apply to coastal and brackish waters that support shellfish (bivalve and gastropod molluscs) life and growth.	<p>A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 342 of 2001 Quality of Fresh Waters Supporting Fish Life (Protection and Improvement) Regulations, 2001	These regulations aim to protect and improve waters which support fish belonging to indigenous species and other species that are considered desirable for water management purposes.	<p>A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 343 of 2001 Protection of Waters against Pollution caused by Nitrates from Agricultural Sources Regulations, 2001	<p>These regulations establish rules to reduce and prevent water pollution caused or induced by nitrates from agricultural sources.</p> <p>In these regulations, all of Malta is declared a Nitrate Vulnerable Zone.</p>	<p>A key objective of the Water Policy is the protection of water resources and the aquatic environment from pollution.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 139 of 2002 Sewer Discharge Control Regulations, 2002	These regulations establish the rules for the discharge of effluent into the public sewerage system.	The Water Policy will operate within the requirements of these regulations.
Legal Notice 161 of 2002 Waste Management (Waste Oils) Regulations, 2002	These regulations provide specific procedures and guidance for the disposal of waste oils.	These regulations should be considered where relevant during implementation of the Water Policy
Legal Notice 168 of 2002 Waste Management (Landfill) Regulations, 2002	These regulations establish measures, procedures and guidance to prevent or reduce as far as possible negative effects on the environment from the land-filling of waste, in particular the pollution of surface water, groundwater, soil, air, and the global environment, including the greenhouse effect, as well as any resulting risk to human health.	The Water Policy should be mindful of these regulations.
Legal Notice 203 of 2002 Regulations for the Protection of Groundwater Against Pollution Caused by Certain Dangerous Substances, 2002	These regulations establish rules to prevent the pollution of groundwater by certain substances, and to check or eliminate the consequences of existing pollution.	<p>A key objective of the Water Policy is the protection of the water resources and the aquatic environment from pollution.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 234 of 2002 Integrated Pollution Prevention & Control Regulations, 2002	These Regulations prescribe measures designed to prevent, or reduce emissions to air, water and land from specific activities including energy and waste industries.	Projects / infrastructure must be screened to determine whether an Integrated Pollution Prevention & Control permit is required.
Legal Notice 37 of 2003 Control of Major Accident Hazards Regulations, 2003	These regulations focus on the prevention of major accidents that involve dangerous substances, and the limitation of their consequences to reduce potential negative impacts on humans and the environment	The Water Policy and any projects resulting from it must operate within these regulations.
Legal Notice 23 of 2004 Quality of Water Intended for Human Consumption Regulations, 2004	These objective of these regulations is to protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean, and to set in place a regime that provides protection to persons consuming the Water.	<p>A key objective of the Water Policy is the supply of good quality water to meet the needs of the population.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 194 of 2004 Water Policy Framework Regulations, 2004	These regulations provide for the long-term sustainable management of water resources on the basis of a high level of protection of the aquatic environment. The purpose of these regulations is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater. The regulations also transpose the provisions of Directive 2000/60/EC.	The Water Policy lays down provisions to meet the requirements of the Water Framework Directive. These will be assessed as part of the SEA.
Legal Notice 525 of 2004 Water Supply	These regulations seek to regulate the licensing of water supply and sewerage services.	The Water Policy should be mindful of these

Plan, Programme, Legislation	Description	Implications for the Water Policy
and Sewerage Services Regulations, 2004		regulations.
Legal Notice 116 of 2005 Freedom of Access to Information on the Environment Regulations, 2005	This legislation enables the public to have access to information on the environment that is held by public authorities.	The Scoping Report and Environmental Report for the SEA on Malta's Water Policy will be published for public consultation.
Legal Notice 418 of 2005, Strategic Environmental Assessment Regulations	The SEA Regulations require that certain plans and programmes are subject to an environmental assessment prior to their implementation.	The Water Policy is undergoing an SEA.
Legal Notice 311 of 2006, Flora, Fauna and Natural Habitats Protection Regulations, 2006 and Government Notices 851 of 2010, 859 of 2008, 812 of 2008, 161 of 2007, 112 of 2007,	These Regulations transpose the Habitats Directive and designate Special Areas of Conservation including Marine Protected Areas. The legislation calls for the protection of species and habitats and the setting up of a NATURA 2000 network.	The Water Policy must ensure that its implementation does not threaten areas designated as protected areas.
Legal Notice 106 of 2007 Waste Management (Activity Registration) Regulations, 2007	These regulations complement Legal Notice 337 of 2001 (Waste Management (Permit and Control) Regulations, 2001) and provide additional information about the responsibilities for processing, storage and transportation of waste by different entities.	The Water Policy should be mindful of these regulations.
Legal Notice 114 of 2007, Environmental Impact Assessment Regulations	This Legal Notice requires that an Environmental Impact Assessment is carried out for certain developments that may have an impact on the environment.	Projects resulting from the Water Policy must be screened to ensure that an EIA is carried out if required by legislation.
Legal Notice 125 of 2008 Management of Bathing Water Quality Regulations, 2008	The purpose of these regulations is to preserve, protect and improve the quality of the environment and to protect human health by implementing Directive 2000/60/EC and to transpose the provisions of Directive 2006/7/EC.	The Water Policy should be mindful of these regulations.
Legal Notice 126 of 2008 Prevention and Remedying of Environmental Damage Regulations, 2008	These regulations establish a framework of environmental liability based on the polluter-pays principle to prevent and remedy environmental damage.	These regulations should be considered during implementation of any projects that may develop from the implementation of the Policy.
Legal Notice 254 of 2008 Borehole Drilling and Excavation Works within the Saturated Zone Regulations, 2008	These regulations establish a regulatory framework for borehole drilling and excavation works carried out partly or totally within the saturated zone.	The Water Policy seeks to address groundwater abstraction and its regulation,
Legal Notice 255 of 2008 - Notification of Groundwater Sources Regulations, 2008	These regulations establish the means to register groundwater sources with the MRA.	The Water Policy seeks to address groundwater abstraction and its regulation,
Legal Notice 261 of 2008 Energy Performance of Buildings Regulations, 2008	These regulations seek to ensure increased energy efficiency of buildings and transpose the provisions of Directive 2002/91/EC on the energy performance of buildings. The Technical Guidance Document F includes requirements for the conservation of rainwater.	The Water Policy seeks to support rainwater harvesting.
Legal Notice 128 of 2009 Protection of Groundwater against Pollution and Deterioration Regulations, 2009	<p>These regulations transpose Directive 2006/118/EC (Groundwater Directive) which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater. The groundwater directive complements the Water Framework Directive (WFD) and requires:</p> <ul style="list-style-type: none"> <li>groundwater quality standards to be established by the end of 2008;</li> <li>pollution trend studies to be carried out by using existing data and data which is mandatory by the WFD;</li> <li>pollution trends to be reversed so that environmental objectives are achieved by 2015 by using the measures set out in the WFD;</li> <li>measures to prevent or limit inputs of pollutants into groundwater to be operational so that WFD environmental objectives can be achieved by 2015;</li> <li>reviews of technical provisions of the directive to be carried out in 2013 and every six years thereafter;</li> <li>compliance with good chemical status criteria (based on EU standards of nitrates and pesticides and on threshold values established by Member States).</li> </ul> <p>The Legal Notice also establishes specific measures in order to prevent and protect groundwater against pollution and deterioration. These measures include in particular:</p> <p>(a) criteria for the assessment of good groundwater chemical status; and</p> <p>(b) criteria for the identification and reversal of significant and sustained upward trends and for the definition of starting points for trend reversals.</p>	<p>A key objective of the Water Policy is the protection of the water resources and the aquatic environment from pollution.</p> <p>The Water Policy should be mindful of these regulations.</p>
Legal Notice 241 of 2010 Groundwater Abstraction (Metering) Regulations, 2010	The purpose of these regulations is the metering of groundwater abstraction.	The Water Policy seeks to address groundwater abstraction,
Legal Notice 264 of 2010 Assessment and Management of Flood Risks Regulations, 2010	These regulations transpose Directive 2007/60/EC on the assessment and management of flood risks. The Directive establishes a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.	Mitigating against the effects of floods is a key objective of the Water Policy.

---

<b>Plan, Programme, Legislation</b>	<b>Description</b>	<b>Implications for the Water Policy</b>
Legal Notice 395 of 2010 Users of Groundwater Sources (Application) Regulations, 2010	These regulations establish procedures for the registration of users of groundwater sources with the MRA.	The Water Policy should be mindful of these regulations.



---

## BASELINE DATA

35. A good understanding of the environment of the areas covered by the SEA is essential for the performance of a sound assessment. It is therefore necessary to establish the environmental baseline relevant to the plan or programme being proposed. This provides a snapshot of the existing state of the environment and a description of the likely future trends (based on past trends) without the programme being in place.
36. Schedule 3 of the SEA Regulations indicates that the scoping report may include baseline information, either already collected or still needed, with notes on sources and any problems encountered. This is essentially a broad-brush "State of the Environment" review of the Maltese Islands focusing on the main environmental issues. Existing environmental and sustainability data will be collected from a wide range of sources. **Table 2** summarises this broad-brush description. The list is not exhaustive, and may be modified in the Environmental Report. It will also depend on the availability of data.
37. The draft Sustainable Development Strategy 2006 – 2016 identifies Malta's environmental challenges; it arises from a systematic review of official reports including the State of the Environment Report (1998, 2002, and 2005) and Malta's National Report to the World Summit on Sustainable Development (2002), and an extensive consultation process. The following environmental challenges were identified:
- Air quality;
  - Climatic factors and climate change;
  - Energy-efficiency and renewable energy resources;
  - Biodiversity including the marine environment;
  - Freshwater;
  - Waste;
  - Land use ;
  - Soils;
  - Landscape;
  - Cultural heritage;
  - Population and human health; and
  - Material assets.



38. The SEA baseline will focus on the parameters listed under Schedule I (f) of the SEA Regulations, 2005 - Information to be included in the Environmental Report
39. **Table 2** shows how the Environment Report will draw together the issues and baseline data. Sources of information included the statistics produced by the National Statistics Office, the State of the Environment Report, 2005 (and subsequent updates) and the documents prepared in connection with the Structure Plan Review process. As the Environmental Report is developed the baseline may be modified to reflect available and other relevant data.

**Table 2: Environmental baseline**

Issue	Relevant baseline data	Illustrative material
Air quality and climate change	<ul style="list-style-type: none"> <li>• GHG inventory</li> <li>• Emissions to air of pollutants by relevant sectors</li> </ul>	Graphs and figures.
Biodiversity / fauna and flora	<ul style="list-style-type: none"> <li>• Status of selected species</li> <li>• Areas designated and managed</li> <li>• Natura 2000 sites</li> <li>• Marine Protected Areas</li> <li>• Areas known to support priority Annex I habitats under the Habitats Directive</li> </ul>	Designated and managed areas
Freshwater	<ul style="list-style-type: none"> <li>• Freshwater ecosystems</li> <li>• Water production and consumption</li> <li>• Nitrate and Chloride levels in groundwater</li> <li>• Groundwater bodies</li> <li>• Pollution of the marine environment from current activities</li> <li>• Registered drilling rigs</li> <li>• Users of groundwater sources</li> <li>• Classification of groundwater sources</li> <li>• Use of groundwater sources</li> <li>• Licensed water suppliers</li> <li>• Classification of water suppliers</li> <li>• Water sources of suppliers</li> <li>• Capacities of water supplier tankers</li> <li>• Estimated volume of groundwater that may be abstracted from source (m<sup>3</sup> / annum)</li> </ul>	Maps / graphs / tables
Cultural heritage	<ul style="list-style-type: none"> <li>• Number of sites protected for cultural heritage</li> </ul>	Maps
Energy-efficiency and renewable energy resources	<ul style="list-style-type: none"> <li>• Energy and fuel consumption by sector including water production</li> <li>• Energy from renewable</li> </ul>	Graphs and figures

Issue	Relevant baseline data	Illustrative material
	resources	
Land use	<ul style="list-style-type: none"> <li>• Corinne land cover</li> <li>• Visibility of urban areas</li> <li>• Development permits</li> <li>• Number of dwellings</li> </ul>	Graphs and maps
Landscape	<ul style="list-style-type: none"> <li>• Areas protected for landscape value</li> </ul>	Maps
Material assets	<ul style="list-style-type: none"> <li>• Water infrastructure</li> <li>• Waste infrastructure in particular for animal waste</li> </ul>	Maps / figures
Population and human health	<ul style="list-style-type: none"> <li>• Groundwater safeguard zones</li> <li>• Energy (water) subsidies and benefits</li> <li>• Workforce in the water sector</li> </ul>	Graphs and tables Data
Soils	<ul style="list-style-type: none"> <li>• Contamination of soil</li> <li>• Quantities of imported pesticides and fertilisers</li> </ul>	Graphs and figures
Waste	<ul style="list-style-type: none"> <li>• Waste generation and disposal trends especially with regards to animal wastes</li> </ul>	Graphs and figures

40. Quantitative data will be presented in the form of maps, tables, and figures, where possible. A brief description of the baseline and any trends will be given, where these are available. Where difficulties in obtaining data are encountered they will be described in the Environmental Report.

## EVALUATION OF THE CURRENT SITUATION IN THE ABSENCE OF THE WATER POLICY

41. The SEA Regulations require a description of the relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the policy document with a particular emphasis on the future developments arising from other relevant plans and programmes.
42. This analysis will focus on the main environmental issues that have been identified in **Table 2**. It will include a description of the past and current trends from data available from existing monitoring systems or through expert judgements (in cases where data are lacking). It will also outline the likely evolution of these trends, if the Water Policy were not implemented.
43. The description of the likely future trends should the Water Policy not be implemented is constrained by uncertainties, including availability of data on future economic development, technological progress, or advancements in regulatory frameworks that collectively influence future trends. The assessment will include a list of major uncertainties.

## SEA OBJECTIVES

44. The SEA Directive does not specifically require the use of objectives or indicators in SEA, although they are a recognised way through which environmental effects can be described, analysed, and compared.
45. It is therefore preferable to use indicators to monitor the performance of the policy against the SEA objectives. The SEA objectives are meant to be separate from the policy objectives, and provide a way to assess the potential environmental performance of the policy objectives. Thus, the environmental objectives should influence the policy objectives, and the two may even overlap. To fulfil the requirements of the SEA Directive and the SEA Regulations, 2005, the SEA objectives must cover biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage, landscape, and interrelationships between them.
46. In developing appropriate objectives, the following documents have been consulted:
  - GRDP's Handbook on SEA for Cohesion Policy 2007- 2011;
  - The Commission's "Implementation of Directive 2001/42 on the Assessment of the Effects of Certain Plans and Programmes on the Environment";
  - A Practical Guide to the Implementation of the SEA Directive, ODPM
  - The SEA Directive 2001/42/EC; and
  - SEA Regulations, 2005.
47. In developing appropriate indicators the following documents have been consulted:
  - The Draft Sustainable Development Strategy for the Maltese Islands, 2006-2013; and
  - Malta's State of the Environment Report, 2005 (and subsequent updates).
48. **Table 3** defines the set of objectives relating to the environmental issues identified in **Table 2**. Alongside these, relevant criteria for assessment and possible data sources have been identified.
49. The SEA objectives listed in **Table 3** are not relevant to all the measures described in the Water Policy. The Environmental Report will note which objectives are not relevant and explain why this may be the case.
50. The SEA indicators are measurements of trends over time. They will be used as a means of ascertaining the success of the implementation of the Water Policy against the various SEA Objectives. Where possible the SEA process endeavours to identify how the Water Policy would affect these indicators (i.e. the trends); such a process is constrained by the fact that the SEA indicators themselves depend on other factors outside the control of the Water Policy.

**Table 3: SEA Environmental Objectives & Indicators for Assessing Impacts**

Issue	SEA Objective	Criteria Will this measure...	SEA Indicator	Data source
Biodiversity, Flora & Fauna	<ul style="list-style-type: none"> <li>Maintain biodiversity (including terrestrial and marine)</li> </ul>	<ul style="list-style-type: none"> <li>Help to maintain or enhance the conservation of designated areas (under both the Development Planning Act, and the Environment Protection Act)?</li> <li>Negatively affect protected species and habitats?</li> </ul>	<ul style="list-style-type: none"> <li>Number, % cover, and area of protected areas</li> <li>Designated areas that are subject to formal management arrangements</li> <li>On-the-ground results of site management</li> </ul>	Environmental monitoring through Environmental Impact Assessment (EIA), Appropriate Assessment (AA), or other regulatory requirements as relevant.
Population & Human health	<ul style="list-style-type: none"> <li>Maintain and where practicable improve water quality intended for human consumption</li> <li>Minimise the risk and reduce the impact of flooding</li> </ul>	<ul style="list-style-type: none"> <li>Help to maintain and where practicable improve water quality intended for human consumption?</li> <li>Help to minimise the risk of flooding?</li> </ul>	<ul style="list-style-type: none"> <li>Quality of water intended for human consumption</li> <li>National floodwater infrastructure</li> </ul>	MRA
Freshwater	<ul style="list-style-type: none"> <li>To promote efficient use of water by new and existing consumers</li> <li>To ensure sustainable levels of abstraction from groundwater</li> <li>To improve and maintain water quality in surface and groundwaters</li> <li>To maintain or progress towards achieving good ecological status under</li> </ul>	<ul style="list-style-type: none"> <li>Help to promote the efficient use of water by consumers?</li> <li>Help to enhance Malta's groundwater and, inland surface waters?</li> <li>Help to maintain or progress towards achieving good ecological status under the WFD for all surface and groundwaters?</li> </ul>	<ul style="list-style-type: none"> <li>Water consumption per capita</li> <li>Registered boreholes</li> <li>Volume of water abstracted</li> <li>Quality of surface and groundwater</li> <li>WFD ecological status</li> <li>Levels of chlorides in MSLA</li> <li>Use of extracted water</li> <li>Quantity and volumes of water tankers</li> <li>Government schemes for efficient water use</li> </ul>	MEPA MRA

Issue	SEA Objective	Criteria Will this measure...	SEA Indicator	Data source
	<p>the WFD for all surface and groundwaters</p> <ul style="list-style-type: none"> <li>To protect water safeguard zones</li> </ul>			
Air and climate change	<ul style="list-style-type: none"> <li>To improve energy efficiency of the water supply network</li> <li>To address the causes of climate change by reducing energy consumed during water production, treatment and distribution</li> </ul>	<ul style="list-style-type: none"> <li>Contribute towards reducing leakages?</li> <li>Help to increase use of renewable energy in water production, treatment or distribution?</li> <li>Help to reduce electricity consumption during water production, treatment and distribution</li> </ul>	<ul style="list-style-type: none"> <li>Energy consumption from production of water treatment and distribution (if available)</li> <li>Emissions from consumption from water production, treatment and distribution (if available)</li> </ul>	MEPA MRA
Soil	<ul style="list-style-type: none"> <li>Avoid land contamination</li> </ul>	<ul style="list-style-type: none"> <li>Help to prevent land (and therefore groundwater) contamination?</li> </ul>	<ul style="list-style-type: none"> <li>Nitrates in groundwater</li> <li>Volume of animal waste treated at AD plants</li> <li>Nutrient Management Plans</li> <li>Quantities of imported pesticides and fertilisers</li> </ul>	MRA, Wasteserv, MEPA
Material assets	<ul style="list-style-type: none"> <li>Promote reuse of TSE</li> <li>Promote rainwater harvesting at a national level</li> <li>Improve network infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Help to promote the reuse of TSE in agriculture / industry?</li> <li>Promote rainwater harvesting?</li> <li>Help to improve the network infrastructure?</li> </ul>	<ul style="list-style-type: none"> <li>% reuse of TSE</li> <li>Legislation promoting rainwater harvesting</li> <li>National rainwater harvesting infrastructure</li> <li>Network leakage levels</li> </ul>	MRA, WSC
Cultural heritage	<ul style="list-style-type: none"> <li>Maintain the conservation status of cultural heritage sites / areas with known cultural / archaeological remains</li> </ul>	<ul style="list-style-type: none"> <li>Help to preserve, enhance and promote cultural heritage including archaeological heritage?</li> </ul>	<ul style="list-style-type: none"> <li>Number of operations located away from cultural heritage sites / areas or areas with known cultural / archaeological remains as a percentage of the total number of operations</li> </ul>	MEPA, Resources Management Unit Heritage Malta Superintendent of Cultural heritage

Issue	SEA Objective	Criteria Will this measure...	SEA Indicator	Data source
Landscape	<ul style="list-style-type: none"> <li>Maintain landscape quality distinctiveness</li> </ul>	<ul style="list-style-type: none"> <li>Help to maintain landscape quality distinctiveness?</li> </ul>	<ul style="list-style-type: none"> <li>Environmental Impact Assessment results on landscape assessment</li> </ul>	MEPA

---

## TESTING COMPATIBILITY OF THE WATER POLICY OBJECTIVES AND THE SEA ENVIRONMENTAL OBJECTIVES

51. The aim of testing the Water Policy objectives against the SEA objectives is to identify both potential synergies and inconsistencies between what the Policy is trying to achieve and the aspirations for the environment. This information can help refine the implementation of measures and recommend mitigation measures to ensure that the Programme meets the environmental objectives.

## LIKELY SIGNIFICANT EFFECTS AND CONSTRAINTS

52. Significance will also be assessed in accordance with the criteria listed in Schedule 4 of the SEA Regulations, 2005. Consultation will ensure that all factors are considered. Reference documents will include the draft Sustainable Development Strategy and the State of the Environment Report, 2005 (and subsequent updates). Subsequent sections further describe how impacts will be assessed.
53. The assessment of significance is already well established in Environmental Impact Assessment (EIA) literature. Significance is a function of impact magnitude and the sensitivity of receptors. Various methods can be used to determine significance including expert judgements, the use of thresholds, reference to legislation, and consultation with stakeholders. It is expected that, in the course of the SEA process, all these techniques will be used.
54. The assessment of significance is based on the probability of the impact occurring, on the scale of the impact, its duration, reversibility, whether it has transboundary impacts, and whether the impact is uncertain. **Table 4** describes the assessment framework and the symbols used to denote the various types of impact.
55. The relevant SEA objectives identified in **Table 3** will then be used to assess the 12 Policy Areas in accordance with the significance criteria described in **Table 4**. It is proposed to present the results of the assessment in the format indicated in **Table 5**.

**Table 4: Assessment legend**

<b>Impact character</b>	<b>Symbol</b>	<b>Description of Impact</b>
Probability	VP	Impact very likely to occur
	P	Impact likely to occur
Scale	++	Large positive impact
	+	Positive impact
	0	No impact
	-	Negative impact
	--	Large negative impact
Direct / Indirect	I	Indirect impact
	D	Direct impact
Frequency / duration	LT	Long term
	ST	Short term
Transboundary dimension	TR	Possible transboundary effect
Uncertainty	?	Impact uncertain



**Table 5: Example Policy Assessment framework and format for environmental report**

Relevant SEA Objective	Indicator	Comment	Significance		Mitigation
			Symbols	Summary description	
<b>POLICY AREA I:</b> Supply of good quality water for human consumption					
<b>Measure I.1:</b> Protection of drinking water sources					
Protect and enhance protected areas.	<ul style="list-style-type: none"> <li>Biodiversity at specific sites at project level</li> </ul>	What is the potential impact?	Impact assessment in accordance with the criteria listed in Table 4	Justification of the impact assessment	Description of mitigation measures, if these are necessary
<b>Measure I.2:</b> Setting up of safeguard measures and appropriate controls against contamination in drinking water protection areas					

### **Cumulative & Synergistic Impacts**

56. This stage of the process involves an assessment of the cumulative and synergistic effects of all proposed priorities in the Water Policy on the relevant environmental issues, objectives, and indicators. Cumulative effects are effects that result from incremental changes caused by other past, present, or reasonably foreseeable actions together with the proposal. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.
57. Synergistic effects interact to produce a total effect that is greater than the sum of the individual effects. Synergistic effects often happen as habitats or human communities begin to reach carrying capacity and / or non renewable resources are depleted unsustainably.
58. The cumulative and synergistic impact assessment will be based on the information generated by the preceding assessments (described above) of the individual priorities. Any identified cumulative and synergistic effects will be summarised and used as recommendations for final adjustments to the programming document.

### **ALTERNATIVES**

59. The SEA Directive requires that an assessment must identify the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.
60. The Environmental Report will include an assessment of feasible alternatives (where relevant) that are under consideration during Policy development.

### **MONITORING**

61. The Environmental Report will include a section that describes how the success of the Water Policy's implementation will be measured with respect to the SEA objectives, by measuring (monitoring) the significant effects of the Water Policy on the environment.
62. The SEA will assess the monitoring arrangements proposed for the Water Policy and may recommend incorporation of new indicators based on the relevant environmental issues, objectives, and indicators for the programming document.
63. Again, it is noted that the correlation between indicators for monitoring and the Water Policy objectives may be constrained because indicators may be affected by other initiatives, including private sector initiatives, other plans and programmes, and legislative measures that are outside the scope of the Water Policy.

### **ASSESSMENT METHODOLOGY**

64. The SEA on the Water Policy for Malta started in July 2010, after Adi Associates Environmental Consultants Ltd were awarded the tender to carry out this SEA

through a competitive tender procedure administered by the Malta Resources Authority on behalf of the Government of Malta.

65. The SEA involves several key stages:

- The *scoping stage* aimed to agree the "scope and level of detail of information which must be included in the environmental report" (SEA Directive, Art. 5.4).
- The *collection of baseline data and analysis of relevant plans, programmes, and environmental objectives* has already commenced. The Consultants are collecting baseline data from a wide range of sources, including studies of the key growth areas, and analysing a wide range of plans/programmes/objectives using matrices to structure the data collection. Maps of key environmental issues are being prepared.
- Preparation of the *Environmental Report* – this commences once all relevant information is collected and following consultation with the stakeholders, MEPA, and the Programme Manager.

## THE ENVIRONMENT REPORT

66. The proposed structure of the Environment Report is as set out below. It is noted that as the Report develops the structure may change slightly; however, the following table gives the general framework. It is in accordance with the provisions of Schedule I of the SEA Regulations, 2005.

**Table 6: Structure of the Environment Report**

Section	Content
Summary and outcomes	Non-technical summary Statement on the difference the process has made Directions on how to comment on the assessment
Introduction	Strategic environmental assessment (compliance with the SEA Regulations, 2005) Aim and structure of the report Water Policy background
Methodology	Approach adopted Stages of SEA process (timings and responsibilities) Limitations Consultation
Baseline	The environmental baseline Summary of environmental issues Links to other relevant policies, plans, programmes
SEA framework	Objectives and indicators Assessment of significance
Assessment of alternatives	Alternatives considered Comparison of alternatives Consideration of environmental issues in development of alternatives Preferred alternative (including reasons for rejection of others)
Detailed Assessment of the Water Policy	Assessment of each policy area Recommendations Recommended changes to the Water Policy

---

<b>Section</b>	<b>Content</b>
	Proposed mitigation Uncertainties and risks
Monitoring proposals	A description of the monitoring requirements
Appendices	As necessary