



VALUABLE PRACTICE: Pollution prevention from land-based activities and sources

Description

The EGD element F.1 Pollution prevention (F.1.5 Measures related to other land-based activities) is pointed out as a cross-cutting topic in the MSP Plan and indirectly reflected in its objectives and measures, mainly through the provisions and implementation of the WFD and the MSFD and Programme of Measures. The Plan highlighted the need for construction and modernisation of the existing wastewater treatment plants (WWTP) and sewage systems, and the inclusion of all coastal settlements and resort sites to them.

There are still hot spots of disposal of poorly treated and untreated domestic wastewater in the sea. The practice of discharging untreated or insufficiently treated domestic wastewaters into the coastal sea waters continues. Six sewage systems along the south Bulgarian coast have been identified as "hot spots" with a significant negative impact on the quality of sea waters - the towns of Sozopol, Ahtopol and Chernomorets; complex Sarafovo - Burgas; villages of Varvara and Sinemorets. Construction and modernisation of treatment sewage plants will help to reduce the pollution from population areas, resorts and industry. The development of ecological agriculture in the adjacent territories reduces the degree of anthropogenic eutrophication and pesticide pollution of coastal waters. Some of the existing wastewater treatment plants are insufficient by degree of purification. The deep-water discharge could be a one way to reduce pollution to inshore waters and bathing areas, but it pollutes the offshore sea waters. There is a need for more effective farming practices to reduce water and wind erosion of the watershed, and these are provided in the River Basin Management Plan and its update (2016-2021) to which the Plan refers.

Practice typology

(i) Measures

Topics addressed

Main	F. Zero pollution [F.1 Pollution prevention (F.1.5 Measures related to other land-based activities)].
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Sectors/Activity involved

Coastal and maritime tourism, recreation, maritime transport, marine aquaculture, nature protection and restoration.

Stakeholders involved

Type: Private, Administrative.

Scale: Subnational, regional.

Purpose: Consultation, implementation, monitoring etc.

Geographical scope

Coastal areas, internal waters and territorial sea (Figure 1).

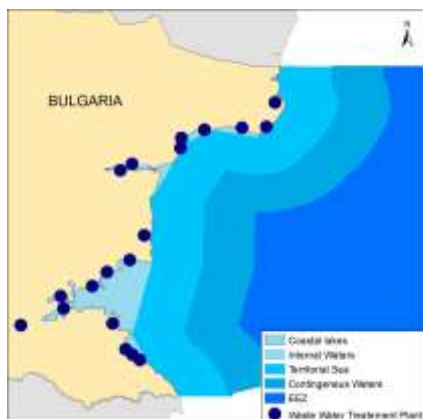


Figure 1. Area of the location to pollution prevention from land-based activities and sources in Bulgaria.

Governance context

- ✓ The Council of Ministers determines the state policy for the water supply and sanitation sector. Adopts a Strategy for the development and management of water supply and sewage in Bulgaria for a period of not less than 10 years;
- ✓ Ministry of Regional Development and Public Works is responsible for state policy, related to the activities of operation, construction, reconstruction and modernisation of water management systems and facilities (i.e. sewage systems and facilities in populated areas);
- ✓ Ministry of Environment and Water manages water monitoring; defines vulnerable sea zones to pollution with nitrates from agricultural sources; determines the sensitive areas for water protection from contamination with biogenic elements; determines the list of priority and priority dangerous substances;
- ✓ The Environment Executive Agency to the Ministry of Environment and Water conducts laboratory and field research to determine the state of the waters; conducts water monitoring at the national level;
- ✓ Regional Environment and Water Inspections to the Ministry of Environment and Water conduct wastewater monitoring; control the treatment plants of the settlements, wastewater keeps up-to-date the lists of objects that form emissions of priority and priority hazardous substances, general and specific pollutants;
- ✓ Black Sea Basin Directorate-Varna to the Ministry of Environment and Water implements the state policy for water management at the basin level. Develops the river basin management plan; coordinates sea water monitoring for Good Environmental Status (GES); develops programmes of measures to improve, protect and maintain the water quality; defines the waters for the habitat of fish and shellfish; checks the readings of the measuring devices of the wastewater discharge facilities;
- ✓ Municipal Councils - adopt programmes for the development of water supply and sewage on the territory of the Black Sea municipalities.
- ✓ The MSP Plan and its EIA Report do not have the remit to coordinate this practice, however both documents make a general analysis on the pollutions from the land-based sources, in particular from WWTP and sewage systems in coastal areas and take into consideration these issues through the provisions of the MSFD and the WFD fully integrated in the plan. For instance, the River Basin Management Plan (2016-2021) provides measures for completion of sewage systems, construction of new WWTPs and reconstruction of the existing ones.

How this MSP practice can support the EU Green Deal

The context on which this practice mainly supports the EGD is F. Zero pollution, *F.1 Pollution prevention (F.1.5 Measures related to other land-based activities)*, more specifically to pollution prevention from WWTP and sewage systems.

The MSP Plan reflects indirect pollution issues in its measures and recommends reducing the levels of all types of pollutants to values that are not harmful to marine ecosystems. This could be done through accident prevention, coherent and effective management of land-based sources of pollution and industrial activities in coastal areas. The measures include effective control and/or sanctioning of the activity of objects outside the scope of constructed sewage systems or without adequately functioning own treatment facilities, as well as introducing innovative sanitary solutions within the boundaries of the beaches outside the concession area; significant reduction of the amount of waste entering or present in the sea through effective control on the waste production in the sea and

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along the coast.

Challenges/gaps/inconsistencies still to be addressed

The main challenges to be addressed in the Plan's implementation are:

- ✓ Coastal areas with unsecured wastewater removal and treatment;
- ✓ Existence of settlements and small resorts with sewage, but without WWTPs (in particular tourism sector adversely impacts the environment due to the seasonal peak in population size, that leads to increased production of waste, and the local infrastructure in coastal municipalities is not able to face this enormous pollution);
- ✓ The existed old sewage networks are overloaded by new constructions and developments;
- ✓ Existence of WWTPs without tertiary stage, as well as those with amortised treatment facilities at all stages;
- ✓ Unregulated discharges of waste waters.

The Plan does not conduct Cumulative Impact Assessment on the land-based sources of pollution in its EIA Report, and just generally addresses this issue. Shared competences among responsible authorities and lack of funding programmes for the local population to install WWTP are also major challenges.

Replicability /Elements which can be capitalised

- ✓ Pollution reduction measures/recommendations (from urban wastewater treatment plants, industrial plants) although indirectly reflected in the Plan's objectives and its EIA Report could be replicated (through the implementation of the MSFD (Programme of Measures) and the WFD).
- ✓ Another insight is that even the MSP would probably do little to relieve impact of the dominating pressures, as they relate mostly to emissions from land (runoff, point source pollution and domestic), the Plan may still make an important guiding and enhanced coordination to improving ecological conditions by limiting the cumulative impact from additional pressures on sensitive species and habitats in particular areas.
- ✓ Land-Sea Interactions, although generally taken into account in the scenarios for future development of the MSP Plan, can also be replicated.