Identification of national, regional and EU regulations with respect to beach wrack

By Katarina Viik, Adviser at the Department of Marine Environment, Ministry of the Environment of Estonia, Narva mnt 7a, 15172 Tallinn, Estonia, katarina.viik@envir.ee (in April 2021)

Most of the existing national legislation of the EU member states does not cover the specific issue of beach wrack. This issue may however be incorporated into existing policies of the national legislation e.g. those that deal with aquatic resources and renewable biological resources, tackling collection, storage, processing of organic material into chemicals, fertilizers or biofuels, as well as their marketing, depending on the intended and practical use of beach wrack after collection. These belong to different policy areas and are implemented through different legal instruments.

This document provides a non-exhaustive list of regulations on EU, national and regional level that govern beach wrack removal, collection and processing.

Table of contents

Denmark	109
Estonia	110
Poland	
Russian Federation	117
Sweden	
European Union	121

Denmark

Competent authorities responsible for marine and coastal environment

Danish Ministry of Environment (Miljøministeriet)¹ is the main authority that administers environmental policy and it is responsible for drafting environmental law. There are four agencies under the Ministry of the Environment:

- Danish Environmental Protection Agency (Mijøstyrelsen)² prepares legislation and guidelines and grants authorisations in several areas. Further duties include the monitoring of chemicals and offshore platforms.
- **Danish Geodata Agency (Geodatastyrelsen)**³ is responsible for conducting geographic and hydrographic surveys. This includes responsibility for the sale and distribution of marine data and products concerning Denmark and Greenland.
- **Danish Nature Agency (Naturstyrelsen)**⁴ manages tasks in forests, natural areas and along the shores of Denmark.
- Danish Coastal Authority (Kystdirektoratet)⁵ works within the coastal area in Denmark. It analyses coasts throughout Denmark and secures the technical knowledge concerning coastal dynamics and coastal protection. The Danish Coastal Authority manages functional and regulatory tasks concerning coastal protection, dune conservation, beach protection and the Danish state's sovereignty over territorial waters.

The municipalities are responsible for granting permits and inspection of smaller enterprises. Municipalities are the regulating authority on environmental legislation. The municipalities are typically the point of contact for the general public concerning regulations.

Environmental policy relevant to the issue of beach wrack

The Environmental Protection Act (Bekendtgørelseaflov om miljøbeskyttelse LBK nr. 879 af 26.06.2010)⁶

- It is the main environmental law in Denmark. The EPA sets out the fundamental environmental protection objectives and the means by which to meet these objectives.
- The EPA aims to reduce and combat pollution, including water pollution.
- Waste management is regulated by Chapter 5 of the EPA and the Executive Order on Waste⁷.
- The act sets a coastal protection line, which ensures that no changes are made to the Danish coast within 300 meters of the water's edge.

The Act on Marine Environment Protection (Bekendtgørelseaflov om beskyttelseafhavmiljøet LBK nr 1033 af 4.09.2017)⁸

- The Act sets regulations for the protection of the marine environment in order to restrict and prevent marine pollution.

¹ https://mim.dk/

² https://eng.mst.dk/

³ https://eng.gst.dk/

⁴ https://eng.naturstyrelsen.dk/

⁵ https://kyst.dk/english/

⁶ https://www.retsinformation.dk/eli/lta/2010/879

⁷ https://www.retsinformation.dk/eli/lta/2006/1634

⁸ https://www.retsinformation.dk/eli/lta/2017/1033

Act on environmental goals for water bodies and the conservation of internationally protected areas (Bekendtgørelse af lov om miljømål m.v. for vandforekomster og internationale naturbeskyttelsesområder LBK nr 1756 af 22.12.2006)⁹

- The provisions of the EU Water Framework Directive have been transposed into Danish law by the Environmental Objectives Act, which describes the work and planning process to be implemented in order to achieve the objective.
- The act aims to establish a framework for the protection of surface water and groundwater, as well as its planning within the environment internationally protected areas

Fisheries Act (Bekendtgørelse af lov om fiskeri og fiskeopdræt 27. 12.2018)¹⁰

- Regulates the management, control and development of fisheries and aquatic resources in Denmark.
- The Act sets regulations on the management of fisheries with the purposes of protection of living resources in marine- and fresh-water and for the protection of other marine animals and plants, to safeguard commercial fishing and related commercial activities.

Estonia

Competent regulatory authorities responsible for marine and coastal environment

Estonian Ministry of Environment (Keskkonnaministeerium)¹¹ responsibilities include organizing national environmental and nature protection, organising the use, protection, reproduction and accounting for natural resources, environmental supervision, nature and marine research, geological, cartographic and geodetic operations, organising the use of external tools for environmental protection, as well as compiling strategic documents and draft legislation. The Ministry is responsible for the process of development and amendment to the legislation.

The Environmental Board (Keskkonnaamet)¹² is an administrative unit under the Ministry of Environment which coordinates and executes supervision regarding the use of natural resources and the protection of the environment by applying the state 's coercive measures on the basis and to the extent specified by law. It deals with environmental licensing, environmental violations and also carries out investigations in criminal cases.

The Estonian Environment Agency (Keskkonnaagentuur)¹³ is an administrative unit under the Ministry of Environment responsible for the management and implementation of the national environmental monitoring program, environmental data collection and data management, as well as international reporting obligations.

Geological Survey of Estonia (Geoloogiateenistus)¹⁴ is a national authority administered by the Ministry of Economic Affairs and Communications. Its task is to conduct geological research

⁹ https://www.retsinformation.dk/eli/lta/2006/1756

¹⁰ https://www.ecolex.org/details/legislation/fisheries-act-no-372-of-2006-lex-faoc026268/

¹¹ https://www.envir.ee/et

¹² https://www.keskkonnaamet.ee/et

¹³ https://www.keskkonnaagentuur.ee/

¹⁴ https://www.egt.ee/et

and exploration, preserving and providing geological information, advising governmental agencies and informing the public.

All local issues regarding the coastal environment are resolved and regulated by **local municipalities**, which operate independently in accordance with law. The main tasks of the local authorities are stated in the Local Government Organisation Act.

Environmental policy relevant to the issue of beach wrack

Fishing Act (Kalapüügiseadus 01.07.2015)¹⁵

- Main purpose of this act is to ensure conservation and economic use of fish and aquatic plant resources on the basis of internationally recognized principles of ecosystem-based fisheries.
- The Fishing act *inter alia* regulates commercial aquatic plant collection from the sea. Furthermore, it also specifically mentions ownership of *Furcellaria lumbricalis* washed ashore. Pursuant to §4(3) "*F.lumbricalis* in the sea is in the ownership of the state. *F.lumbricalis* washed ashore is in the ownership of the owner of the immovable property located on the shore." Private owned beach maintenance is the responsibility of the landowner. To pick up beach wrack from the private owned beach one needs approval of the owner. Otherwise, shores are managed by local authorities who organize cleaning and maintenance of recreational beaches and who grant permit for beach wrack gathering.

Nature Conservation Act (Looduskaitse seadus 10.05.2004)¹⁶

- The purpose of this Act is to protect the natural environment, preserve biodiversity and natural environment of cultural or esthetical value, and promote the sustainable use of natural resources.
- This act also protects shores and banks, prohibiting activities like e.g. driving a power-driven vehicle outside designated roads on the seashores up to 200 m from water boundary However, the act permits to drive vehicles *inter alia* for collecting reed and gathering seaweed pursuant to §37(3).
- Pursuant to §30(4) The act permits by the protection rules to gather reed and seaweed in the conservation zone as one of the activities necessary for the preservation of the object or activities that do not harm the object. Case in point, Protection rules of Prangli Landscape conservation area (Prangli maastikukaitseala kaitse-eeskiri)¹⁷ permit to gather reed and bladder wrack from the shore in the conservation zone of the area.

Apart from the Fishing act and Nature Conservation act a number of legislative texts could be relevant to address the issue of beach wrack. These include Water act, Waste act, and Circular Economy Strategy, among others.

Waste Act (Jäätmeseadus 01.05.2004)¹⁸

- This Act provides the organisation of waste management, requirements for preventing waste generation, the health and environmental hazards arising from waste, including

¹⁵ https://www.riigiteataja.ee/en/eli/510012019009/consolide

¹⁶ https://www.riigiteataja.ee/en/eli/515052020006/consolide

¹⁷ https://www.riigiteataja.ee/akt/109102018002

¹⁸ https://www.riigiteataja.ee/en/eli/507022020001/consolide

- measures for improving the efficiency of the use of natural resources and reducing the adverse impacts of such use, as well as liability for violation of the established requirements.
- The Waste Act potentially provides an adequate framework to deal with beach wrack, however it does not specifically target beach wrack at the moment. Pursuant to § 5 "Biodegradable waste" means any waste that is capable of undergoing anaerobic or aerobic decomposition, e.g. food waste. However, the act further specifies that "bio-waste" means the following biodegradable waste: 1) garden and park waste; 2) food and kitchen waste from households, retail premises and caterers; 3) waste from food processing plants the composition and nature of which is similar to the waste specified in clause 2). Thus, although the act specifies biodegradable waste, it mostly focuses on terrestrial anthropogenic waste but does not refer to organic waste originating from the sea.
- Requirements for composting biodegradable waste specifically include *inter alia* waste from agriculture, horticulture, aquaculture, forestry, hunting and fishing, but do not address beach wrack.

General Part of the Environmental Code Act (Keskkonnaseadustiku üldosa 01.08.2014)¹⁹

- The purpose of this act is to ensure good state of the environment, promote sustainable development, preserve and protect the environment, human health, well-being, property and cultural heritage.
- This act does not specifically include beach wrack. However, beach wrack could potentially fall under paragraphs 34 and 37. Pursuant to § 34, berries, mushrooms and nuts growing freely in the wild, fallen branches and other similar natural products may be picked on a plot of land belonging to another person, unless otherwise prescribed by the owner. Additionally, § 37(1) states that the public use of a water body means bathing, water sports, moving on water and ice, fishing, water extraction and other use of the water body that does not qualify as the special use of water under the Water Act.

Water Act (Veeseadus 01.12.2019)²⁰

- The task of this act is to ensure protection of inland, transboundary and groundwater resources in the long term. The Water Act regulates the use and protection of water, waterbodies and their shores, the relations between landowners and water users.
- Water act sets out water protection zone of banks or shores which extends to 20 m from the baseline for the Baltic Sea. It further restricts activities in this water protection zone, prohibiting *inter alia* activities degrading the soil.
- Pursuant to § 72, the Marine strategy is drawn up for the entire Estonian marine area in order to achieve and maintain good environmental status (GES) of the Estonian marine area. The Marine strategy does not address the shores with the exception of requirements regarding anthropogenic marine litter washed ashore.

Act on Environmental Fees (Keskkonnatasude seadus 01.01.2006)²¹

- Provides the grounds for determining the natural resource charges, the rates of the pollution charge, the procedure for calculation and payment thereof, and the grounds and specific purposes for using state budget revenue obtained from environmental use.

¹⁹ https://www.riigiteataja.ee/en/eli/509012020005/consolide

https://www.riigiteataja.ee/en/eli/511052020001/consolide

²¹ https://www.riigiteataja.ee/en/eli/515072020006/consolide

Germany

Competent regulatory authorities responsible for marine and coastal environment

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit)²² is responsible for fundamental national environmental policy, such as conservation of groundwater, rivers, lakes and seas, waste management and recycling policy, protection, maintenance and sustainable utilization of biodiversity, etc.

The German Environment Agency (Umweltbundesamt)²³ is responsible for matters relating to emission control, soil conservation, waste management, water resources management and health-related environmental issues.

Federal Authorities for Conservation advise the Ministry of Environment. Additionally, they issue permits and support the projects in the field of environmental protection and maintenance of landscapes. They carry out scientific research focusing on environmental assessment.

State authorities (usually district or county authorities), guided by their respective state Environmental Ministry, carry out day-to-day operational activities. Their competence is usually defined geographically.

Environmental policy relevant to the issue of beach wrack

Basic Law for the Federal Republic of Germany (Grundgesetz für die Bundesrepublik Deutschland 23.05.1949) ²⁴

- This law lays out general principles of nature and landscape conservation, natural environment protection and management.

Waste Management Act (Kreislaufwirtschaftsgesetz 1.06.2012)²⁵

- The act promotes a closed circular economy-based on recycling in order to conserve resources, reduce adverse impacts on the environment and protect natural resources.
- It aims to increase and optimise the efficient use of raw materials and to permanently remove from the environment any residual waste that can no longer be used.
- The producers or owners of waste are obliged to recycle their waste. The recycling of waste has priority over its elimination. The obligation to recycle waste is to be met as far as it is technically possible and economically acceptable, in particular if a market exists or can be created for a recovered substance or energy.

Federal Immission Control Act (Bundes-Immissionsschutzgesetz 13.05.2013)²⁶

²² https://www.bmu.de/

²³ https://www.umweltbundesamt.de/en

https://www.ecolex.org/details/legislation/basic-law-for-the-federal-republic-of-germany-lex-faoc128242/?q=fundamental+law&xcountry=Germany&xdate min=&xdate max=

²⁵ http://www.gesetze-im-internet.de/krwg/index.html

²⁶ https://germanlawarchive.iuscomp.org/?p=315

- The main aim of the act is to control air and noise pollution.
- This act aims to reduce potentially harmful impacts on human beings and their environment by means of risk prevention and precautionary measures.
- The act has a holistic approach to protecting all parts of the environment, including animals, plants, atmosphere, soil and water creating the legal basis upon which hazard control measures can be taken.

Water control and management under the Federal Water Resources Act (Wasserhaushaltsgesetz 3.05.2000)²⁷

- The act refers to the protection and usage of surface and underground water resources as well as the development of unified parts of waters and planning water economy and flood control.

Act on Nature Conservation and Landscape Management (Bundes-Naturschutzgesetz 01.03.2010)²⁸

- The act sets out the main requirements for the protection and conversation of nature, habitats and biodiversity. If an impairment of nature and landscape is unavoidable, the responsible party must compensate for the damage caused by impairment of nature and landscape. A permit is generally required for any impairment of nature and landscape.

Environmental Impact Assessment Act (Gesetz über die Umweltverträglichkeitsprüfung 1.08.1990)²⁹

- The act regulates the environmental impact assessment (EIA) for activities which, in their nature, size or location, may influence the environment noticeably.
- An EIA must be carried out for large-scale projects and must cover the direct and indirect impact of the project on human beings, animals, plants and biological diversity; surface, soil, water, air, climate and landscape; cultural heritage and other material resources.

Renewable Energy Sources Act (EEG) (Gesetz für den Vorrang Erneuerbarer Energien 17.12.2020)³⁰

- The act establishes priority for renewable energy sources such as offshore and onshore wind, solar PV, hydro power and biogas.
- It's three main principles are cost covering feed-in tariff, cost sharing among all customers and fed-in priorities for renewable energies.

The fertilizer regulation (Düngemittelverordnung 09.01.2009)³¹

- The regulation lays down the requirements for placing fertilizers on the market.
- Beach wrack is mentioned as a potential material for the production of fertilizer under "Components of the beach wrack from water management and beach removal" in the fertilizer ingredients section (Table 7, paragraph 7.1.6).

²⁷https://germanlawarchive.iuscomp.org/?p=326

²⁸ https://www.bmu.de/en/law/federal-nature-conservation-act-bnatschg/

https://www.ecolex.org/details/legislation/environmental-impact-assessment-act-lex-faoc088976/

³⁰ https://www.bmwi.de/Redaktion/EN/Downloads/renewable-energy-sources-act-eeg-2014.html

³¹ https://www.gesetze-im-internet.de/d mv 2012/D%C3%BCMV.pdf

Poland

Competent regulatory authorities responsible for marine and coastal environment

Ministry of Climate and Environment (Ministerstwo Klimatu i Środowiska)³² supervises the activity of other authorities concerned with environment protection. It is responsible for sustainable development, preserving and sustainable use of natural resources.

Chief Inspectorate of Environmental Protection (Główny Inspektorat Ochrony Środowiska)³³ is responsible for supervising compliance with and inspecting and evaluating environmental protection provisions. It also supervises the remediation of any breach of the provisions.

General Directorate for Environmental Protection (Generalnej Dyrekcji Ochrony Środowiska)³⁴ main activities include implementation of environmental protection policy, NATURA2000 management, supervising investment processes and participating in issuing permits.

Environmental policy relevant to the issue of beach wrack

The Act of 27 April 2001. Environmental Law (Journal of Laws of 2017, item 519, as amended) (Ustawa z dnia 27 kwietnia 2001 r. – Prawo ochrony środowiska) ³⁵

- The act lays down the general principles of environmental protection in Poland, creating a framework for administration, planning and decision-making at the national level.
- Article 293 clause 5 does not directly forbid to store waste in internal sea waters or territorial sea waters introducing an increased fee for waste storage: *In case of waste disposal into inland surface and underground waters, internal sea waters or territorial sea waters an entity using the environment shall incur an increased fee amounting to 100 times the usual rate for placing the waste on a landfill.* The act, thus, does not introduce the ban from waste disposal directly (the provisions refers to any waste to sea including beach wrack) but imposes a noticeable increase in fee.

Regulation of the Minister of the Environment of 13 April 2010 on natural habitats and species of Community interest, as well as the criteria for selection of areas eligible for recognition or designation as a Natura 2000 areas (Polish Journal of Laws of 2014, item 1713)(Obwieszczenie Ministra Środowiska z dnia 30 października 2014 r. w sprawie ogłoszenia jednolitego tekstu rozporządzenia Ministra Środowiska w sprawie siedlisk przyrodniczych oraz gatunków będących przedmiotem zainteresowania Wspólnoty, a także kryteriów wyboru obszarów kwalifikujących się do uznania lub wyznaczenia jako obszary Natura 2000)³⁶

- The act specifies natural habitats that are subject to conservation. These include several coastal dunes habitats as well as the annual vegetation of the drift lines.
- Appendix 1 to the said regulation directly mentions the annual vegetation of the drift lines on the seashore as a type of natural habitat that is a matter of interest for Community.

 Beach wrack has been identified to be a part of this habitat. Regulation further designates

³² https://www.gov.pl/web/klimat

³³ https://www.gios.gov.pl/pl/

³⁴ https://www.gdos.gov.pl/

³⁵ http://isap.seim.gov.pl/isap.nsf/download.xsp/WDU20010620627/U/D20010627Lj.pdf

³⁶ http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20140001713/O/D20141713.pdf

- it as a Natura 2000 area and grants it with the code 1210. The habitat does not constitute the priority in conservation.
- The enactment allows to put a pressure over an entity to make it refrain from the removal of the annual vegetation of the drift lines for various reasons, including aesthetical or for further usage.

The Act of 13 April 2007 on preventing the damages to nature and their compensation (Polish Journal of Laws of 2014, item 1789, as amended) (Ustawa z dnia 13 kwietnia 2007 r. o zapobieganiu szkodom w środowisku i ich naprawie)³⁷

- This act regulates the prevention and remedying of damage caused to the environment based on the polluter pays principle.
- It allows the Regional Directorate for Environmental Protection to impose a duty to perform corrective measures. One of such activities includes a duty to refrain from disposing the annual vegetation of the drift lines, which remains, in line with the nature 2000 programme, a habitat for protected species of plants and animals.

The Act on Waste, 14 December 2012 (Ustawa z dnia 14 grudnia 2012 r. o odpadach)³⁸

- This act sets out measures for the waste management, to prevent and reduce the adverse impact resulting from the production and management of waste, limiting the overall impact and improving the efficiency of the use of natural resource, setting out liability for violation of the established requirements.
- The act does not have a direct definition of organic waste, such as beach waste (seaweeds, algae, seagrass) which could undergo recycling processes.

The Act of 13th September 1996 on maintenance of order and cleanliness within the communes (i.e. Journal of Laws of 2019, item 2010, as amended) (Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 18 października 2019 r. w sprawie ogłoszenia jednolitego tekstu ustawy o utrzymaniu czystości i porządku w gminach)³⁹

- By means of article 3b the legislator has imposed over communes a duty to maintain the recycling level at a properly high level – pursuant to article 3b clause 1: Communes are committed to achieve until 31st December 2020: 1) the level of recycling and preparation for reuse of the following fractions of household waste: paper, metals, plastics and glass, at least 50% by weight; 2) the level of recycling and preparation for reuse and recovery by means of other methods with regards to construction and demolition waste, other than hazardous ones, remaining the household waste, at least 70% by weight.

The Act of 21st March 1991 on marine areas of the Republic of Poland and maritime administration (Polish Journal of Laws of 2019, item 2169, as amended) (Obwieszczenie Marszałka Sejmu Rzeczypospolitej Polskiej z dnia 14 października 2019 r. w sprawie ogłoszenia jednolitego tekstu ustawy o obszarach morskich Rzeczypospolitej Polskiej i administracji morskiej)⁴⁰

- The act defines the legal situation of the maritime areas of the Polish Republic, the coastal area and the authorities of the marine administration and their scope of jurisdiction.
- The maritime areas of Poland consist of the internal waters; the territorial sea; adjacent zone; the exclusive economic zone.
- Article 36 defines the coastal belt, i.e *Coastal belt includes the inland area adjacent to the seacoast line. The coastal belt includes the following:* 1) technical belt remaining the

³⁷ http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20070750493/T/D20070493L.pdf

³⁸ https://www.ecolex.org/details/legislation/wastes-act-lex-faoc129566/

³⁹ http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20190002010/T/D20192010L.pdf

⁴⁰ http://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU20190002169/T/D20192169L.pdf

zone of mutual impacts from sea and land; this area is intended to keep the seashore in the state compliant to the requirements of safety and environmental protection; 2) protective belt – including the area in which human actions directly impact the state of the technical belt.

- Article 37a clause 2 refera to the Enactment on water zoning plan: **Zoning plans for** internal sea waters, territorial sea and exclusive economic zone, hereinafter referred to as plans, shall decide on: (...) 5) the areas and conditions for: a) environmental protection and the protection of cultural heritage, b) fisheries and aquaculture, c) renewable energy acquisition, d) exploration, examination of fossil deposits as well as excavation of fossils from deposits.

Draft of the enactment of the Minister of Maritime Economy and Inland Waterway Transport, the Minister of Investment and Development on the acceptance of zoning plans for internal sea waters, territorial sea and exclusive economic zone, scale 1:200 000.

- The enactment hasn't been passed yet.
- Appendix I includes the definitions of terms, inter alia regarding renewable energy acquisition means acquisition, processing and accumulation within sea areas energy from renewable sources, especially wind, waving, sea currents, sun and sea organisms (biogas), including erection of the structures indispensable for acquisition of energy together with accompanying infrastructure as well as structures serving for processing and accumulation of energy.

Russian Federation

Competent regulatory authorities responsible for marine and coastal environment

The Russian Ministry of Natural Resources and Ecology (Минприроды России)⁴¹ is the federal policymaker responsible for study, use, renewal and protection of natural resources, environmental monitoring, pollution control and waste management. The ministry co-ordinates and supervises the activities of five subordinate agencies.

Federal Service for Supervision of Natural Resource Usage (Росприроднадзор)⁴² is a federal agency under the supervision of the Ministry responsible for supervision of environmental management, nature protection, waste management, and governmental ecological expertise.

Federal Agency for Water Resources (Росводресурсы)⁴³ is a federal agency under the supervision of the Ministry responsible for the management of water resources.

Federal Service for Hydrometeorology and Environmental Monitoring (Росгидромет)⁴⁴ is a federal agency under the supervision of the Ministry responsible for hydrometeorology, environmental monitoring, monitoring of the pollution.

Federal Agency for Fisheries (Федеральное агентство по рыболовству)⁴⁵ is a federal agency under the supervision of Ministry of Agriculture responsible for the management of fisheries and marine life in the waters of the Russian Federation, excluding internal seas, Caspian and Azov seas.

⁴¹ https://www.mnr.gov.ru/

⁴² https://rpn.gov.ru/

⁴³ https://voda.gov.ru/

⁴⁴ http://www.meteorf.ru/

⁴⁵ http://fish.gov.ru/

Russia has a federal legal system with environmental matters regulated at both the federal and regional level.

Environmental policy relevant to the issue of beach wrack

The Constitution of the Russian Federation of 12th December 1993 (Конституция Российской Федерации от 12.12.1993 ред. От 01.07.2020)⁴⁶

- A basic legal act referring to the regulations on environmental protection. Article 42 underlines the right of every citizen "to live in a favorable natural environment, to be provided with credible information on its state and to receive remuneration for any damage sustained by their health and property by any infringement of ecological law.

Water Code of the Russian Federation, 03.06.2006 number 74-FZ (Водный кодекс Российской Федерации" от 03.06.2006 N 74-ФЗ)⁴⁷

- The main law applicable to water resources management, which covers administration, management, conservation and use of surface water and ground water resources; water rights; waterworks; water supply.
- It is based upon the following principles: priority of water protection and prevention of negative environmental impact resulting from waterbodies management; conservation of protected waterbodies; purposeful use and priority of potable water supply; equal access to purchase of waterbodies; basin-related regulation of water relations; charged water management; traditional water management.

Federal Law on fishing and conservation of aquatic biological resources, 20.12.2004 number 166-FZ (as amended on 26.07.2019) (Федеральный закон о рыболовстве и сохранении водных биологических ресурсов" от 20.12.2004 N 166-Ф3)⁴⁸

- Law is applicable to internal sea, territorial sea, continental shelf and EEZ of the Russian Federation, fishing vessels flying the flag of the Russian Federation and navigating outside the boundaries of the Russian Federation and plots of land pertaining to the national territory used for fisheries and conservation of aquatic biological resources.
- The law regards fishing authorization and quotas, monitoring and conservation of biological aquatic diversity and its natural habitats.

Federal Act on production and consumption of waste, 24.06.1998 number N89-FZ (as amended on 26th July 2019) (Федеральный закон об отходах производства и потребления от 24.06.1998 N 89-ФЗ)⁴⁹

- Sets basic principles and priority directions for the state policy on waste management.
- The legal framework for managing production and consumption waste in order to prevent the harmful consequences of production and consumption waste on human health and the environment as well as for the share of such waste in the business circulation as additional sources of raw materials.
- The act specifies *inter alia*: protection of human health, maintenance or restoration of favorable environment and maintenance of biological diversity. Determined directions for the state policy include maximum usage of raw materials and supplies, prevention of

⁴⁶ http://www.constitution.ru/

⁴⁷ http://www.consultant.ru/document/cons_doc_LAW_60683/

⁴⁸ http://www.consultant.ru/document/cons doc LAW 50799/

⁴⁹ http://www.consultant.ru/document/cons doc LAW 19109/

- waste generation, limitation of waste generation and decreasing waste hazard class at the sources of its generation, disposal and removal of waste.
- Russian legislation divides waste into five classes, ranging from Class I (extremely hazardous) to Class V (non-hazardous). A license is required for the collection, transportation, handling, recycling or dumping of waste of Classes I to IV. Special rules are established. In particular, for municipal solid waste, motor transport, nuclear waste, medical waste, biological waste.

Code of the Russian Federation on Administrative Offenses, 30.12.2001 number 195-FZ (as amended on 02.08.2019)(Кодекс Российской Федерации об административных правонарушениях от 30.12.2001 N 195-ФЗ (ред. от 30.12.2020))⁵⁰

- Sets the forms and extent of administrative liability for offences in various aspects of Russian law, including administrative offences related to environmental damage.
- Chapter 8 "Administrative Offenses in the Field of Environmental Protection and Nature Management", includes more than 40 articles prohibiting acts that directly cause harm to various environmental objects.

Sweden

Competent regulatory authorities responsible for marine and coastal environment

Swedish Ministry of Environment (Miljödepartementet)⁵¹ is responsible for environmental and climate policy. The Ministry responsibilities include issues concerning biological diversity, eco cycles, marine and water environments, international environmental cooperation, etc.

Swedish Environmental Protection Agency (Naturvårdsverket)⁵² is responsible for proposing and implementing environmental policies, coordinating, monitoring and evaluating efforts to meet Sweden's environmental objectives.

Swedish Agency for Marine and Water Management (Havs- Och Vattenmyndigheten)⁵³ is responsible for protecting, restoring and ensuring sustainable use of freshwater and sea resource including fisheries management.

County Administrative Boards of Sweden (CAB) (Länsstyrelse) are responsible for the supervision of beach protection in specific areas, mainly within nature reserves. It has a supervisory guiding function in the county, additionally reviewing all granted beach protection exemptions. Beach protection issues are handled at the CAB, mainly by the Nature Review Unit. The water unit at CAB is responsible for exemption from the dumping ban if someone wishes to dump unwanted seaweed at sea.

⁵⁰ http://www.consultant.ru/document/cons_doc_LAW_34661/

⁵¹ https://www.government.se/government-of-sweden/ministry-of-the-environment/

⁵² https://www.naturvardsverket.se/

⁵³ https://www.havochvatten.se/

Environmental policy relevant to the issue of beach wrack

Swedish Environmental Code (Miljöbalk 1998:808)⁵⁴

- The code states fundamental environmental rules. The purpose of the Environmental Code is to promote sustainable development and assure a healthy and sound environment for present and future generations.
- Provisions regulating when Environmental Impact Statements (EISs) are required and what information they should contain are set out in Chapter 6 of the Code and in an underlying ordinance.
- Chapter 7 stipulates a broad variety of protection for certain areas including shoreline protection. It applies to water reservoirs, seas, lakes and rivers. All land and water areas are protected by a buffer zone extending up to 100 meters on either side from the shoreline. Local authorities may extend this zone to a maximum of 300 meters if they deem a natural protection of the seashore line insufficient.
- According to the provision of article 15: Protection of beaches is intended, in a long-term perspective, to 1) provide conditions for public access to beaches and 2) maintain good living conditions for animals and vegetation on land and in water.
- The environmental code is further elaborated and specified in the form of ordinances and regulations.

Rule on the Marine Environment (Havsmiljöförordning 2010:1341)⁵⁵

- Pursuant to Paragraph 6, Swedish sea areas are divided into the North Sea and the Baltic Sea.
- According to Paragraph 8, Authority for marine and water environment shall remain the organ relevant for marine environment. It is responsible for the issues set forth by Paragraph 13 providing a comprehensive picture of marine environment state, determination of costs related to the deterioration of the marine environment.
- Pursuant to Paragraph 21 the aforementioned authority is committed to developing and implementing an internal Baltic Sea environment monitoring programme.

Waste Ordinance (Avfallsförordning 2011:927)⁵⁶

- Waste legislation is largely based on EU Waste Framework (2008/98/EC)
- Appendix 4 of the Waste ordinance contains a waste catalogue specifying different kinds of waste and producer responsibilities.

The ordinance on environmental impact assessment (Miljöprövningsförordning 2013:251)⁵⁷

- Contains provisions stating that certain plans and programmes should be subject to environmental assessment.
- It aims to integrate environmental aspects into the plan or programme to promote sustainable development.

⁵⁴ https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/miljobalk-1998808 sfs-1998-808

 $[\]frac{55}{https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/havsmiljoforordning-20101341 \ sfs-2010-1341$

⁵⁶ https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/avfallsforordning-2011927 sfs-2011-927

⁵⁷ https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/ sfs-2013-251/

European Union

The issue of beach wrack is not legally covered at EU level. There are, however, a number of directives, recommendations and strategies that could be relevant to the issue of beach wrack which touch upon the topic from different angles.

Directive is a legislative act that is binding to all EU countries in relation to objectives that must be achieved. However, it is up to the individual Member States to determine how the legal measure should be incorporated into domestic law to reach these goals.

- **Birds Directive (2009/147/EC)**⁵⁸ **and Habitats Directive (92/43/EEC)**⁵⁹ are frameworks for the conservation of wildlife throughout the EU. The protection of wildlife prohibits the destruction or alteration of their habitats and aims to maintain or restore a favorable conservation status to these species. **EU Natura 2000** network protects vulnerable species and habitats listed under both the Birds Directive and the Habitats Directive.
- Water Framework Directive's (2000/60/EC)⁶⁰ main objective of is to maintain a good status for marine waters, habitats and resources, delivering an integrated ecosystem-based approach. The WFD covers rivers, lakes, transitional waters, groundwater and coastal waters out to 1 nautical mile (12 nautical miles for chemical status, i.e. for territorial waters).
- **Marine Strategy Framework Directive (2008/56/EC)**⁶¹ aims to protect the marine environment across Europe by achieving and maintaining Good Environmental Status of the EU marine waters. The area of application of the MSFD partially overlaps with that of the WFD, i.e. the coastal waters zone extending 12 nautical miles from the baseline. MSFD further applies in the offshore waters beyond 12 nautical miles where WFD does not reach. Among other topics MSFD addresses marine litter which is currently an overlooked part of beach wrack.
- **Maritime Spatial Planning Directive (2014/89/EU)**⁶² promotes the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources. In addition, the directive promotes the coexistence of relevant activities and uses, encouraging multiple purpose uses, where it is sustainable.
- Environmental Impact Assessment Directive (2014/52/EU)⁶³ and Strategic Environmental Assessment Directive (2001/42/EC)⁶⁴ ensure that the environmental implications of decisions are taken into account before the decisions are made. EIA directive deals with individual projects, while public plans and programs are undertaken on the basis of SEA directive.
- **Bathing Water Directive (2006/7/EC)**⁶⁵ main objectives are to safeguard public health and protect the aguatic environment in coastal and inland areas from pollution.
- **Renewable Energy Directive (EU 2018/2001)**⁶⁶ establishes an overall policy for the production and promotion of energy from renewable sources in the EU, setting out precise sustainability criteria for biofuels to be considered renewable energy sources.

⁵⁸ http://data.europa.eu/eli/dir/2009/147/2019-06-26

⁵⁹ http://data.europa.eu/eli/dir/1992/43/2013-07-01

⁶⁰ http://data.europa.eu/eli/dir/2000/60/oj

⁶¹ http://data.europa.eu/eli/dir/2008/56/oj

⁶² http://data.europa.eu/eli/dir/2014/89/oj

⁶³ http://data.europa.eu/eli/dir/2014/52/oj

⁶⁴ http://data.europa.eu/eli/dir/2001/42/oj

⁶⁵ http://data.europa.eu/eli/dir/2006/7/2014-01-01

⁶⁶ http://data.europa.eu/eli/dir/2018/2001/oj

EU recommendation is an opinion of the EU institutions on a particular issue. Recommendations are non-binding and are of persuasive authority only.

- Recommendations on Integrated Coastal Zone Management (2002/413/EC)⁶⁷ promotes sustainable management of coastal zones, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics.

Further, **EU strategies** set out general direction of the policy making to achieve goals under conditions of uncertainty. Action plans outline detailed actions to achieve these goals.

- **EU Strategy for the Baltic Sea Region (COM/2009/0248)** main objectives are to enable a sustainable environment, enhance the region's prosperity, increase accessibility and attractiveness, ensure safety and security in the region.
- Bioeconomy Strategy (introduced 2012 and updated/Action Plan 2018)⁶⁹ promotes sustainable production of renewable resources from land, fisheries and aquaculture and their conversion into food, feed, fibre, bio-based products and bioenergy, while growing new jobs and industries.
- **EU Blue Growth Strategy (COM/2012/0494)**⁷⁰ supports sustainable growth in the marine and maritime sectors developing sectors with high potential such as aquaculture, coastal tourism, marine biotechnology, ocean energy, seabed mining.
- **EU Strategy for more Growth and Jobs in Coastal and Maritime Tourism (2014)**⁷¹ promotes sustainable growth and competitiveness in coastal and maritime tourism. Sustainability in coastal and maritime tourism are to be strengthened by promoting strategies on waste prevention, management and marine litter, as well as Marine Spatial Planning,
- **European Green Deal (COM/2019/640)**⁷² is a growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use while protecting, conserving and enhancing the EU's natural capital.
- **EU Biodiversity Strategy for 2030 (COM/2020/380)**⁷³ tackles the key drivers of biodiversity loss, such as unsustainable use of land and sea, overexploitation of natural resources, pollution, and invasive alien species.
- **Circular Economy Action Plan (COM/2020/98)**⁷⁴ introduces sustainability measures to transform consumption patterns so that no waste is produced in the first place.
- **Zero pollution action plan (to be adopted by the EC in 2021)**⁷⁵ intends to better prevent and remedy pollution from air, water, soil, further decouple economic growth from the increase of pollution, strengthen the links between environmental protection, sustainable development and people's well-being.

⁶⁷ https://ec.europa.eu/environment/iczm/rec_imp.htm

⁶⁸ https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52009DC0248

⁶⁹http://ec.europa.eu/research/bioeconomy/pdf/ec bioeconomy strategy 2018.pdf#view=fit&pagemode=no ne

https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52012DC0494

⁷¹ https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1479224038190&uri=CELEX:52014DC0086

⁷² https://eur-lex.europa.eu/legal-

content/EN/TXT/?qid=1596443911913&uri=CELEX:52019DC0640#document2

⁷³ https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380

⁷⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN

⁷⁵ https://ec.europa.eu/environment/strategy/zero-pollution-action-plan_en

Regional policy

The **Baltic Marine Environment Protection Commission HELCOM** is a regional platform for environmental policy making, focusing on the protection of the marine environment of the Baltic Sea. Contracting parties of HELCOM are Denmark, Estonia, European Union, Finland, Germany, Latvia, Lithuania, Poland, Russia, Sweden.

- **Baltic Sea Action Plan (15.11.2007)**⁷⁶ is a regional plan of measures that aims to reach good environmental status of the Baltic Sea, addressing eutrophication, hazardous substances, maritime activities and biodiversity.

HELCOM has issued a number of recommendations that MS have committed to incorporating into their national laws, several of which could be relevant to address the issue of beach wrack.

- Recommendation 15/1 on **Protection of the coastal strip**⁷⁷
- Recommendation 24/10 on Implementation of integrated coastal management and maritime spatial planning in the Baltic sea area⁷⁸
- Recommendation 40/1 on Conservation and protection of marine and coastal biotopes, habitats and biotope complexes categorized as threatened according to the HELCOM red lists⁷⁹

International policy

- The United Nations 2030 Agenda for Sustainable Development (SDG) includes 17 sustainable development goals and 169 targets. The goal of the agenda is to eradicate poverty and achieve sustainable development by 2030. The goals relate to social, ecological and economic outcomes, aiming to *inter alia* conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- **UN Convention on Biological Diversity (CBD)** is the international legal instrument for "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources"
- Convention on Wetlands of International Importance (the Ramsar Convention) is an international treaty for the conservation and sustainable use of wetlands. It aims to halt the worldwide loss of wetlands and to conserve, through wise use and management, those that remain
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to prevent species from becoming endangered or extinct because of international trade and to ensure that international trade of wild animals and plants does not threaten their survival.

⁷⁶ https://helcom.fi/baltic-sea-action-plan/action-plan/

⁷⁷ https://helcom.fi/wp-content/uploads/2019/06/Rec-15-1-R.pdf

⁷⁸ https://helcom.fi/media/recommendations/Rec-24-10-R.pdf

⁷⁹ https://helcom.fi/wp-content/uploads/2019/06/Rec-40-1.pdf