Swedish Agency for Marine and Water Management

Operating strategy 2018-2020

SOURCE TO SEA

Operating strategy 2018–2020 Swedish Agency for Marine and Water Management

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Foreword

The Swedish Agency for Marine and Water Management is a government agency. We shall apply knowledge-based and coordinated management from source to sea. We shall work on issues involving the conservation, restoration and sustainable utilisation of lakes, streams, the sea and fish resources. We shall also cooperate with all the different parties in society.

The Swedish Agency for Marine and Water Management's operating strategy lays down overarching goals for our operations over a three-year period, 2018–2020. This is based on our commission and responsibility in our instructions from the authorities, other statutes and policies.

The operating strategy comprises a framework for our planning process. We combine this with an annual focus on the business to prepare an operational plan. We then break the plan down into activities for each unit (see figure 1).

National policy emphasises responsibility for the future, for Sweden and our environment. This requires the realisation of forceful measures to achieve clean seas, lakes and streams. Such measures could comprise combating eutrophication, environmental toxins, littering and other threats to Sweden's lakes, coast and sea. Several UN sustainability targets, along with the generation and environmental quality targets adopted by the Swedish Parliament, also designate these requirements.

One method of achieving sustainability may be to work towards a circular and bio-based economy. This may require a transition to a renewable energy system by means of a balanced

The Agency's commission

- · The Agency's instructions
- · Statutes
- The Budget proposal
- · Government approval document
- Special assignments

Agenda 2030 Generation target **Environmental quality**

Our interpretation of and prioritisation for the commission

Operating strategy The Agency's annual focus Operational plan



Figure 1.

Control model for the Swedish Agency for Marine and Water Management, based on the commission from the government, how we interpret and prioritise for the commission and how we control our performance.

exploitation of hydropower as adjustable power. It may also require the realisation of the Swedish maritime strategy and food strategy. The above could engender a sustainable blue and green growth with competitive and innovative businesses, and developing the EU's Europe 2020 strategy regarding sustainable growth for all.

Sustainable development requires balanced development of different public interests, while at the same time protecting and conserving fundamental ecosystem functions. The links between sustainability and development are reflected in our vision: *Flourishing seas, lakes, and streams for the benefit and enjoyment of all.*

Our environment is changing, and our operating strategy is therefore not a static document. It may be updated during the strategy period, up to 2020, based on national, EU and global priorities.

Jakob Granit Director General

Our commission

Our fundamental commission, according to instructions from the authorities, comprises the conservation, restoration and sustainable utilisation of lakes, streams, the sea and fish resources.

During the strategy period, the Agency will play an active role in the construction of the sustainable society within our area of activities. Our mission is as follows:

"We are responsible for managing the use and preventing the overuse of Sweden's marine and freshwater environments. We take into consideration the requirements of the ecosystem and people, both now and in the future. We do this by gathering knowledge, planning, and making decisions about actions to improve the environment. To be successful, we coordinate and establish our efforts with all parties involved, both nationally and internationally. We are available and obliging, and all our activities are governed by principles of democracy, rule of law and efficiency."

The governing principle for our work is our responsibility to take measures to achieve the generation goal "to hand over to the next generation a society in which our major environmental problems are solved, without causing increased environmental and health problems outside of Sweden's borders".

This involves working towards the 16 environmental quality targets adopted by the Swedish Parliament. These environmental quality targets define and delimit sustainable utilisation in practice.

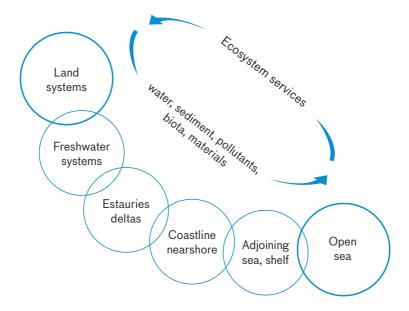


Figure 2.

Coordinated and integrated management from source to sea. Source: Granit, J., Liss Lymer, B.; Olsen, S., Tengberg, A; Nömmann, S.; Clausen, T. J. (2017) A Conceptual Framework for Governing and Managing Key Flows in a Source-to-Sea Continuum. Water Policy 19, 673–691. doi: 10.2166/wp.2017.126.

Several of the 16 environmental quality targets adopted by the Swedish Parliament relate directly to water: Flourishing Lakes and Streams; A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos; Zero Eutrophication; Natural Acidification Only; A Non-Toxic Environment; Good-Quality Groundwater; A Rich Diversity of Plant and Animal Life; and Thriving Wetlands. The Swedish Agency for Marine and Water Management has been allocated responsibility for follow-up of the first three in the list above. In addition to the eight targets mentioned above, several of the remaining eight have close links with water, for example: Reduced Climate Impact; A Varied Agricultural Landscape; Sustainable Forests; and A Good Built Environment.

Issues relating to water and seas are not bound by national borders, but are also part of a major hydrological cycle – from land to coast to sea. We shall be instrumental in fulfilling the EU directive regarding water management, marine management, marine planning and biodiversity in addition to common fisheries policy.

The Swedish Agency for Marine and Water Management aims to coordinate management of the flow from source to sea – water, sediment, biota, pollution and material – between the different management areas and geographic segments. This ensures support for ecosystem efforts and ecosystem services necessary for society, such as clean water, healthy food, protection from flooding and droughts, and services such as tourism (see figure 2).

On a global scale, Sweden is actively instrumental in working towards Agenda 2030. This requires well-coordinated, integrated planning and management of both water and marine resources, with the aim to achieve the sustainable development and public welfare targeted with Agenda 2030, both at home and abroad.

Policy and our work from source to sea

The Swedish Agency for Marine and Water Management has a multi-faceted commission. We are involved in several areas of policy at national, EU and global levels. Below is an overarching description of our work as an agency and the policy areas in which we are involved related to water, sea and fisheries.

Marine and water management are incorporated in many sectors within society. One fundamental principle to fulfil is coordinated and integrated management, given that ecosystems are not aware of political and economic limits. Water policy has strong links with marine policy, and shall be seen as one unit, from source to sea.

Freshwater and marine environments are affected by climate change. Sustainable management of these environments requires action, partly to limit climate impact and partly to manage inescapable climate change. The climate policy framework, comprising a Climate Act and new climate goals, comes into force on 1 January 2018. The aim is for Sweden to achieve a long-term and stable climate policy. One new long-term climate goal is that Sweden shall have net zero emissions of greenhouse gases to the atmosphere by 2045 at the latest.

Water and marine management in Sweden shall be based on sound scientific grounds. Politicians in Sweden have for many years worked hard to promote research and analyses, primarily within Universities and colleges, and to a certain extent also expert authorities and research institutes.

Environmental monitoring and data collection are some of the most important sources of data and fundamental information for water, marine and fish management. The political goal of accelerating the process of digitalising public Sweden is important in this context. Accessible data, collected using new and more efficient methods, provides the potential and premises for innovation and a more climate-smart society. In the autumn of 2015, the UN adopted an action plan for humans and for the welfare of humans and our planet. The nations under the UN, including Sweden, have committed to executing this plan in cooperation and as a partnership. The action plan, Agenda 2030, builds on the success of the Millennium Development Goals, and shall promote action within all our areas of activity. Agenda 2030 therefore represents an undertaking also for Sweden in the years to come.

Three of the UN's Sustainable Development Goals (SDGs) are of particular importance within the boundaries of our development work. These are Goal 6: Clean Water and Sanitation, Ensure access to water and sanitation for all; and Goal 14: Life Below Water, Conserve and sustainably use the oceans, seas and marine resources. The third goal is Goal 15: Life on Land, on sustainable ecosystems and biodiversity.

The more overarching goals provide guidelines for our work. These are Goal 1: No Poverty, End poverty in all its forms everywhere and Goal 2: Zero Hunger, End hunger. The same applies to Goal 5: Gender Equality and Goal 17: Partnerships for the Goals.

Public administration plays a central role in the development of Sweden. A legally bound and efficient management boosts democracy and is of decisive importance for the development of a sustainable, economic growth.



Water

Society is largely constructed on the basis of water resources, watercourses and water's ecosystem services. These represent a fundamental value and a resource for most sectors.

Water resource management in modern-day Sweden is all the more important and vulnerable than before if we are to achieve sustainable utilisation and sustained development. Climate change, the growing population and increased economic activities are all challenges to water quantity and quality. Drinking water supply is of particular importance in this context.

Marine and water environments do not comply with administrative borders, but comprise a combination of local premises and ecosystems that interact from the drainage basin sources to the sea. This also implies that the water resources, water environment quality and ecosystem services require cohesive management. As such, they may represent a sustainable resource for utilisation by society and the different sectors in society, within a well-balanced framework. Social development places requirements on access to high-quality water. Sweden faces challenges in simultaneously fulfilling the environmental quality standards in our water bodies.

Issues regarding water resources, energy and climate are

interlinked. Water is required to generate energy – and energy is required to manage water. Adaptations to climate change and limiting greenhouse gas emissions from water-related energy systems are significant issues during the strategy period.

We are aware that hydropower – currently representing approximately. 50 percent of Sweden's power production – will require environmental adaptations. At the same time, its regulatory capacity needs to be maintained and reinforced. Moreover, important cultural monuments require protection in accordance with the political energy agreement from 2016.

The water shortage experienced in recent years primarily in East Sweden manifests the importance of preventive measures to protect drinking water supply. Water management implies national prioritisation and weighing up of measures. This work in turns requires advanced dialogue and cooperation between national authorities, county councils, the water authorities, municipalities and other stakeholders.

The implementation of water management shall be comprehensive, cooperative and coordinated. It shall be integrated with the execution of other regulations and directives related to both water and nature conservation. Within the scope of the work on water environment at a national level, the primary focus is on achieving the following environmental quality goals: *Flourishing Lakes and Streams*; *A Rich Diversity of Plant and Animal Life*; *Zero Eutrophication* and *A Non-Toxic Environment*.

Sweden's water policy is also boosted by our work within the EU. The EU water directive is a national undertaking. The Swedish environmental goals coincide with the EU framework directive for water and the EU directive for species and habitat – and their respective cycles for execution. The directive has been incorporated in Sweden by means of regulations. The execution cycle of six years allows sufficient premises for adaptive management, i.e. a process of learning and change in management work.



Sea

Marine policy is based on the premise that our seas represent an indispensable resource for humans and society. At the same time, Sweden faces challenges in fulfilling the environmental quality standards in our marine environments.

The impact of eutrophication remains evident and comprehensive. An increased volume of marine waste is an ever-increasing threat. Further measures are required to reduce waste from land coming into the sea. Local measures require development, such as the work to minimise internal impact, primarily of phosphorus in lakes, coastal waters and the sea.

The goal is to develop utilisation of marine resources in a sustainable manner, securing a good marine environment. Many of the threats to the marine environment originate from the land and must be remedied at source. In addition to measures to combat eutrophication, marine policy also covers a number of measures to achieve clean seas. This implies restoring and protecting marine environments and minimising the impact of environmental toxins in the sea.

In terms of protection of marine areas, the agricultural objective has been achieved. However, the level of protection must be increased and improved in relation to ecological representativity and functionality.

The Swedish government has stated that the marine sector is important for growth and development. A national maritime strategy was compiled in 2015. This strategy comprises a focus document for future work on the development of maritime businesses, and is based on three equal perspectives: the sea in balance, competitive maritime businesses and attractive coastal areas. In addition to the development of traditional industries such as fisheries and shipping, there is potential for e.g. energy production at sea, new forms of aquaculture, environmental technology, biotechnology and marine and coastal tourism.

The ongoing marine planning process within marine management provides good opportunities for a consensus on how to achieve sustainable utilisation of the sea, both in Sweden and the EU. It can equally generate a consensus on how to recreate the ecosystem's integrity and the connection to activities upstream on land.

The national strategy is linked to the EU strategy for blue growth, which aims to achieve long-term sustainable development in the maritime sector. Blue growth relates to other strategies: The Europe 2020 strategy for smart and sustainable development for all, the national innovation strategy and the environmental technology strategy.

On a regional level, similar goals are expressed in strategies adopted within the Oslo Paris Convention (Ospar) for the North-East Atlantic, and the Helsinki Convention (Helcom) for the Baltic Sea. On a national level, these goals are expressed in the *Strategy for development of the maritime businesses* from 2015. Within the framework of Agenda 2030, sustainable development goal number 14 stipulates that we conserve and sustainably use the oceans, seas and marine resources for sustainable development.



Fisheries

The Swedish government aims to promote sustainable fisheries in Sweden, Europe and worldwide. Working towards this goal is in line with Sweden's policy for global development and Agenda 2030. Sustainable fisheries management is a prerequisite for boosting the potential for employment within professional fisheries. It also contributes towards the supply of food.

Sweden has more than two hundred miles of coast, some thousand miles of streams and around one hundred thousand lakes. A prolonged good and expedient fish management and protection of fisheries, both in coastal areas and inland, provides good opportunities for increased enterprise. This is also true for new forms of aquaculture such as recreational fishing and fishing-based tourism. Recreational fishing is also a widespread and highly valued outdoor activity in Sweden and represents an important recreational activity for citizens.

The national environmental quality goal underlines the importance of protecting threatened species, conserving genetic diversity and sustaining ecosystem services. It also underlines the importance of ensuring the survival of naturally occurring fish species in viable numbers, and of sustaining good economy for natural resources. Fisheries management is central in achieving the environmental goals within marine and water policy. One of the many factors here is protection of fish and the sea by arranging an increased number of marine conservation areas. The EU's common fisheries policy provides the premises required to achieve the goal for good environmental status and long-term, sustainable fisheries.

Many threatened species have complex life cycles. They also have a geographical dispersion that requires both local conservation strategies and international cooperation. We have identified changes in the stocks of different fish species, a more stable population of seals and both improvements and deterioration in sea bird species.

The EU's control regulation shall be renewed during the strategy period. This is an important and high-priority measure in order to rectify defects and adapt the control to the new basic regulation comprising landing obligation.

The EU's reformed fisheries policy stipulates that all catches – of species governed by a quota – shall be reported, landed and settled according to respective quotas. The transition from landingbased management to catch-based management is a major change for both fisheries and management. We are of the opinion that an allocation system may facilitate the execution of the landing obligation. This system is based on individual fishing potential, in combination with the opportunity to temporarily transfer this during the year. This also makes it easier for the individual fisher to make plans.

The changes have a diverse impact on how fishing is carried out and our coastal communities. Professional fisheries, the processing industry and related industries create employment. For many coastal communities, the local professional fishers are an important part of the town or village's identity, and are important for attracting both residents and tourists to the municipality. We aim to implement a system for tracking fishery and aquaculture products in order to boost control of fisheries. These products originate from fishing or farming in the sea in the EU and shall be utilised as food. The new system fulfils the EU requirement for traceability. The system makes it easier to control how much fish has been caught and whether the catches are legal. Information for consumers is increasingly secure and improved, also making it easier for consumers who want to make conscious choices when buying fish and shellfish.

If Britain exits the EU without Sweden retaining its fishing rights in the areas involved, this will represent a major disadvantage, both for Swedish fisheries and the processing industry. The Brexit negotiations will require a high level of cooperation between the government and the authorities. GOALS FOR THE OPERATIONAL AREA 2018-2020

Knowledge development

- We have good knowledge about the status of the environment within our areas of responsibility and on the impact of our work.
- We are instrumental in the execution of relevant research, in support of management.
- Environmental monitoring is cost-effective and provides the greatest possible level of support to management work.
- The Agency's environmental data and environmental information is open and accessible where possible.
- Follow-up of the environmental goal helps generate adaptive management and more efficient work on measures.
- Socio-economic analysis methods are developed to support management.



GOALS FOR THE OPERATIONAL AREA 2018-2020

Marine and water management

- Public welfare factors such as renewable energy, sustainable food production, sustainable buildings and exploitation of water resources are supported by good marine and water management.
- The ratio of lakes, streams, coastal waters and seas that achieve a good ecological and chemical status is on the rise.
- Eutrophication, the volume of marine waste and hazardous substances in the Baltic Sea and North-East Atlantic have been reduced. At the same time, conservation of biodiversity has improved.
- Action and management programmes protect threatened and valuable aquatic species and biotopes.
- There has been an acceleration in the protection, conservation and restoration of important limnic habitats.
- Risks and the impacts of invasive species in limnic and marine environments is on the decline thanks to the management programme.
- Protection of the marine area is now stronger.
- Essential ecosystem services have been secured, supporting the maritime industries and the fulfilment of the maritime strategy goals.
- Climate influence, climate change and climate adaptations are taken into consideration within management.



Goals for the operational area: Marine and water management

GOALS FOR THE OPERATIONAL AREA 2018-2020

Marine planning



- Marine planning has resulted in three proposals for marine plans, and, if necessary, related regulations for the Gulf of Bothnia, the Baltic Sea and the North-East Atlantic.
- The proposed marine plans have firm foundations via extensive and well-documented dialogue with participants from all parties involved.
- The marine plans provide guidelines for all authorities who are involved in marine management. This applies to both the industries' claims for space and the need for marine area protection and green infrastructure.
- One working method for follow-up has been defined.
- The maritime strategy with its focus on sustainable, blue economy and exploitation of the sea is integrated and followed up as part of the marine planning work.



GOALS FOR THE OPERATIONAL AREA 2018-2020

Fish management



- There has been an increase in the number of fish and shellfish stocks that are managed in relation to levels of maximum sustainable yield. Moreover, the stocks shall have a size and age structure that allows maintenance of the ecosystem's functions.
- The parties that exploit fish and shellfish resources and other ecosystem services from the sea and freshwater are informed of and take part in the management.
- Fish management helps ensure that the ecosystem services in and connected to the sea, lakes and streams allow for varied and sustainable outdoor activities.
- Those industries that rely on fish and shellfish stocks are sustainable in accordance with the framework for sustainable utilisation.
- The regulations for fishing have been simplified, are easy to follow and provide the premises for good compliance.
- The landing obligation has been fully implemented throughout the fishing industry.
- Traceability of fishery and aquaculture products has been implemented. This has contributed towards improved control of fisheries and more secure and improved information for consumers.
- Fishery control is risk-based, maintains a high quality, is costefficient and contributes towards sustainable fisheries management.



Goals for the operational area: Fish management

GOALS FOR THE OPERATIONAL AREA 2018-2020

International development cooperation

- The Agency has developed an efficient working method for international cooperation. This includes the expertise of employees and other national expertise regarding the processes involved, from source to sea.
- We have been instrumental in generating improved premises for sustainable management of freshwater, marine and fish resources. The main objective is to combat poverty.
- We have promoted cooperation and exchange of experience regarding integrated and coordinated water and marine management. This comprises fish management with a focus on relevant goals in Agenda 2030.



LS FOR THE OPERATIONAL AREA 2018-2020

Our internal work





- We have established a sound working environment where the individual, working group and company have the potential for development. We have achieved reductions in stress levels.
- We have a communicative, responsible and committed management.
- We have achieved a reduction in reports of sick leave, down to 4 percent of reported working hours.
- We have documented a sound economy with government resources.
- A new communications strategy has been implemented, and our digital communications platform has been developed to allow increased dialogue with citizens and social entities.
- We have minimised our direct impact on the environment and climate.



Goals for the operational area: Our internal work

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