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Europe's fish stocks need sustainable recovery plans

*now!*

*There is no time to lose*

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*for a living planet*

Ref. A Template for the Development of Plans to Recover Overfished Stocks, by Andrew A. Rosenberg, University of New Hampshire, and Charlotte B Mogensen, WWF European Policy Office



*Essential* guide to  
**successful recovery plans**  
*for* Europe's fish stocks



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## The problem

Europe's fish stocks are in bad shape. Overfishing due to insensitive fishing practices and unsustainable quota are pushing vital resources to all-time low levels.

Overfishing affects not only the species being fished. Through taking away large quantities of one or several species, relationships between remaining species and habitats are changed, and the productivity of the entire ecosystem is affected in often unpredictable ways. This in turn has negative effects on the economies of many European regions and countries.



*Both North Sea and Baltic cod need urgent measures to stop overfishing.*  
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## 6. Ensuring comprehensive monitoring

A comprehensive monitoring programme as part of a recovery plan is essential. A full stock assessment for as many species as possible is desirable, but relative rates and levels, by analogy with other stocks, for example, can be used when full assessment is not yet available. For longer-lived species such as cod, plaice or hake, a truncated size composition, with only a small percentage of the fish above the minimum size limit for the fishery, is a clear indication of overfishing.

Size composition can continue to be an indicator of whether the recovery plan is inducing rebuilding, while more comprehensive assessment information is being developed.



A successful monitoring programme must ensure:

- Biological reference points must be established for the stocks under recovery, to provide an index of the progress of recovery
- When data is scarce, the precautionary principle must prevail, and reference points should be established by using for example size composition, relative abundance and geographical distribution information.
- Fishing mortality should be monitored to ensure that overfishing has been stopped and is not recurring
- Abundance is monitored to ensure stocks are recovering
- Monitoring data must be fully available and used for continuous updating of measures and improvement through adaptive management

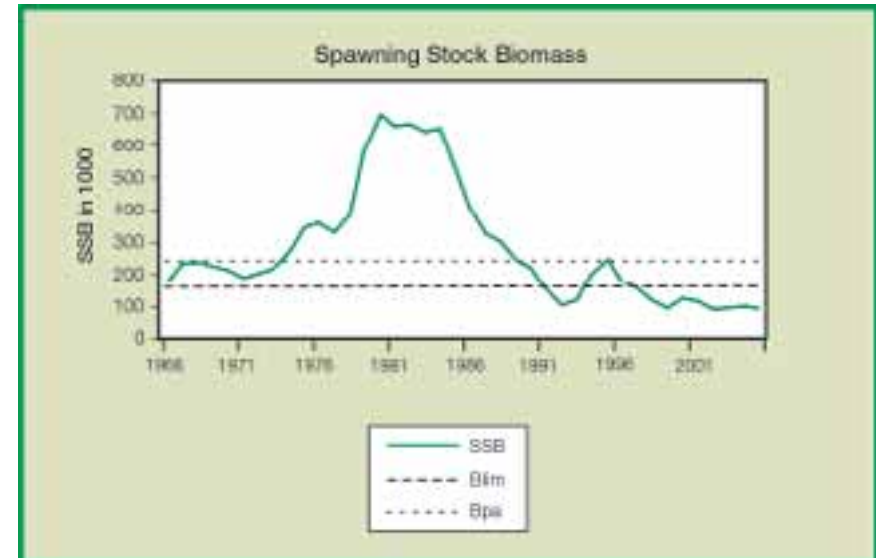
## 5. Controlling effort displacement

Once a recovery plan is in place, fishing fleets seek to maintain income by moving in to other, less restricted areas or fisheries.

It is necessary to control such displacement of effort so that it does not undermine the recovery of depleted stocks by catching them as bycatch.



*The future of fishers depends upon the health of fish stocks.*  
© WWF-Canon / Quentin Bates



*The spawning mass of Baltic cod has plummeted to below safe biological limits.*  
(ICES, 2005)

## The solution

Depleted fishery resources may often be rebuilt if appropriate steps are taken quickly to end overfishing, which will allow for stocks to recover, and ensure that overfishing does not recur. This can be ensured through the adoption of carefully designed *recovery plans* that promote a fundamental change in the way the fishery is managed and operated.

For the last several decades, overfishing of vital marine resources has been all too common. In this decade, recovery plans need to dominate the management of the oceans.

WWF has developed this guide to establishing successful recovery plans to help decision-makers move Europe out of the overfishing problem – into an era where sustainably managed fisheries provide its citizens with healthy food and job security.

## No time to lose

Reducing the rate of harvest quickly improves the chances and rate of recovery of fisheries resources. However, the longer fishing at high rates continues on a depleted stock, the longer recovery will take. In fact, if overfishing goes too far, recovery might be jeopardized.

Therefore, there is substantial time pressure to reduce fishing quickly and to make this reduction as large as possible, rather than to slowly introduce the reductions. Whenever possible, management actions that promote recovery should be taken quickly to preserve the remaining resource and increase the chance of a rapid recovery of overfished stocks.

Taking quick action may mitigate the need for more drastic actions later with accompanying greater economic and social costs.

There is no time to lose!

## Lack of information is no excuse for inaction

Waiting for complete information or a full stock assessment only damages the stock and makes recovery more difficult. When insufficient scientific information is available, the *precautionary principle* must guide decision-makers.

In many cases, if not most, there is sufficient information on relative abundance, reduced size composition and other indicators of overfishing to warrant reductions in fishing mortality despite the lack of a full stock assessment.



Cold-water coral reefs provide important habitats that can be protected through closed areas. © WWF-Canon / Erling Svensen

### 4. Reducing bycatch and discard

Bycatch and discard reduction is essential to recovery. This is done through the use of gear fitted with bycatch reduction devices, closed areas and intensive monitoring of catches.

Recovery plans must ensure that:

- Mis-reported, illegal and unlicensed fishing are curtailed
- Observers cover the entire fishery
- All catches are counted, including discards, landings and landed bycatch in other fisheries
- Reporting is done in real-time and data made available immediately for evaluation, both of landings, discards and bycatch, as well as of fishing efforts and distribution of vessels
- Gear is fitted with devices that reduce bycatch, such as turtle exclusion devices (TEDs), increases in mesh size or other measures that increase the age at full recruitment
- In some cases, the most effective way to ensure control is a straightforward ban on discard

### 3. Creating closed areas

Through combining quota and closed areas, or effort controls and closed areas, rebuilding is more successful compared to any one type of control measure. This is because the closed area acts as an insurance against any false estimate of quota and other uncertainties, such as illegal catch or excessive bycatch.

In order to have a positive effect on the targeted fish stock, closed areas need to be:

- Large enough to protect a significant proportion of the stocks needing to be rebuilt
- Closed to all fishing gear that might have an impact on the depleted species
- Be strictly enforced, to ensure fairness to those fishers who work within the rules

Habitat protection is an important component of any rebuilding plan. Insensitive gear, such as heavy bottom trawls or gillnets, can substantially alter or destroy bottom habitat.

When the habitat is destroyed, the spawning, juvenile or feeding grounds are lost, resulting in reduced productivity of the stock. By reducing habitat damage recovery is given the best chance to succeed.

To be effective in protecting habitats, closed areas must:

- Be year-round and maintained in the long term
- Cover important areas, such as spawning and juvenile grounds, particularly where concentrations of juveniles are found, as these lay the foundation of the fishery
- Be closed to all gear types capable of modifying or destroying the habitat

## Addressing all sources of fishing mortality

Recovery plans must contain comprehensive measures to address all sources of fishing mortality, including both landings and discards. Bycatch and discards in other fisheries can undermine efforts to control the targeted fishery, thereby jeopardising the rebuilding of stocks.

For recovery plans to be effective, they must include protection for commercially important but smaller fish subject to bycatch, as well as for commercially less valuable species associated with the target species. Otherwise, mortality of young fish continue to have a detrimental effect on the size and composition of stocks, and ecosystem changes can under mine the rebuilding through changing the balance between species.



*Taking quick action may mitigate the need for more drastic actions later. © WWF- Canon / H  l  ne Petit*

## Six steps to designing recovery plans

WWF asks decision-makers to urgently develop recovery plans to protect the long-term future for Europe's fish stocks, through using the following six steps.

### 1. Reducing access and capacity

Limited access and capacity reduction programmes are needed in both targeted and associated fisheries.

This is done through:

- Tight control of entry into the fishery, to ensure that impact on resource is reduced
- Capacity reduction that controls both the number of boats allowed to operate **and** increases in fishing power
- Clear and strictly enforced restrictions on upgrading of gear and boat capacity



Capacity and effort reductions must be strictly enforced.  
© WWF-Canon / Edward Parker



WWF's six steps to establishing recovery plans give fish stocks a chance to recover. © WWF-Canon / Quentin Bates

### 2. Reducing mortality rates

Fishing mortality rates must be rapidly reduced, even if the final recovery targets are uncertain, to ensure that more fish are living longer and have time to reproduce before being caught.

To be effective, the recovery plan must:

- Take steps to reduce fishing pressure, once the need for stock rebuilding is clear
- Apply the precautionary approach to ensure immediate reductions in fishing pressure, and must not delay measures while awaiting a full stock assessment
- Reduce fishing pressure on several stocks at once, as more than one species in one area are usually affected by overfishing