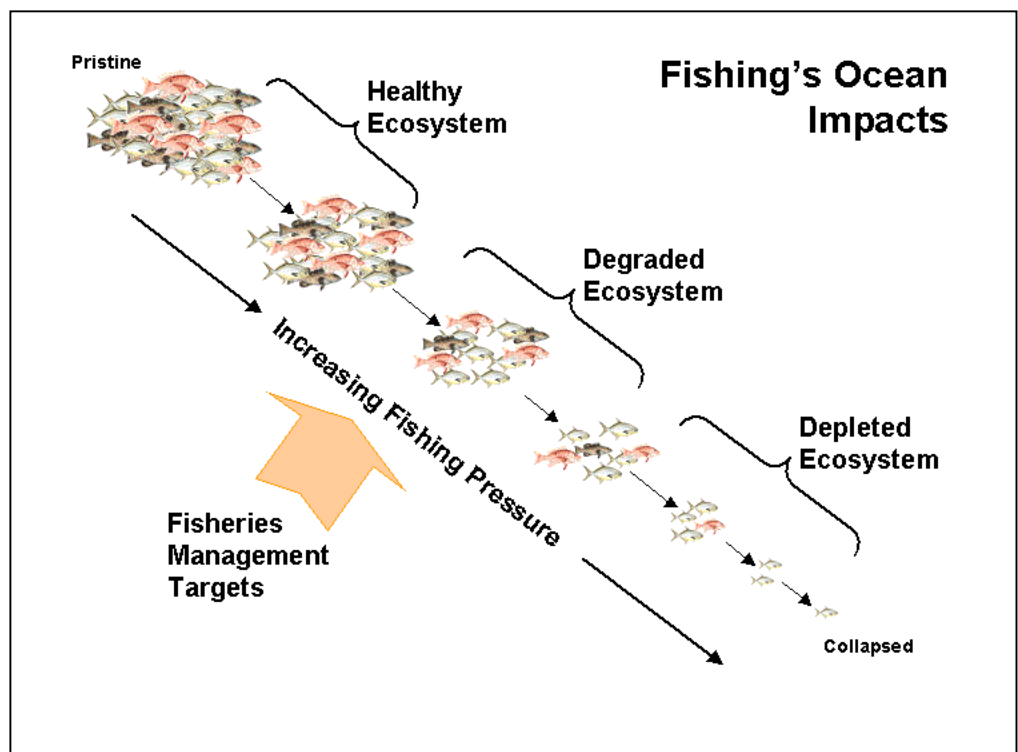


Summary of Findings and Background: Bottomfish Fishing in the Northwestern Hawaiian Islands: Is it Ecologically Sustainable?

Background:

The Northwestern Hawaiian Islands are surrounded by one of the most diverse marine ecosystems in the world. This ecosystem contains up to 10 percent of the United States' coral reefs, including massive reef colonies measuring almost 80 feet tall. The waters boast more than 7,000 marine species, many of which are unique to the region. Several of these species are endangered, most notably the Hawaiian monk seal. In addition, it is one of the last



ecosystems still dominated by large reef fish and apex predators such as sharks.

The assessment, by The Ocean Conservancy and Marine Conservation Biology Institute, documents the threat of overfishing by commercial fleets around the Northwestern Hawaiian Islands. We now have evidence to show that overfishing has been a persistent pressure on this unique ecosystem.

The Threat of Overfishing

Overfishing, catching fish faster than they are reproducing, is harmful to ocean ecosystems because it affects the natural ecological balance of predator-prey relationships and reproductive abilities. Often, overfishing a particular species removes large, older fish from the population. These large, old fish are often able to produce several times more offspring than younger, smaller fish of the same species. Their removal leads to population decline. Each organism plays a role in an ecosystem's health. A decline in healthy fish can lead to a decline in broader ecosystem health.

Using the most up-to-date methods to assess past fishery health, we were able to draw conclusions about overfishing in the region. The results show that in the years from 1988 to 2003, the bottomfish population was overfished or nearly overfished in 11 out of 16 years. As a result of the regularly excessive catch, a variety of the fishery's health indicators have declined. This is despite the fact that there has never been a high volume of fishing activity in the region, and it shows that fishing pressure from only a handful of commercial fishing boats has had demonstrably negative effects on the resources. Further, if the level of fishing pressure persists, these negative trends could continue, stressing the ecosystem further.

Methodology & Results

To ensure the best information available, we used the same data that the managers have used: survey data from the National Marine Fisheries Service and the Hawaii Department of Land and Natural Resources. This data, collected by these agencies for years, is the same information analyzed by the Western Pacific Fisheries Management Council in making its fisheries decisions. Using this data allowed us to start at a common point with government fisheries experts.

As the science of fisheries management progresses, so do the methods of assessment. Recently, the National Marine Fisheries Service changed their assessment methodology in the Northwestern Hawaiian Islands, in favor of better assessments in accord with the Sustainable Fisheries Act of 1996. We decided to use these newly adopted methods to examine federal fishery data from the past to get clearer picture of the bottomfish population's health since 1988. In a sense, it is looking at the history of the fishery's health through a more accurate scientific lens.

Policy Solutions:

The overfishing revelation augments the compelling case for protecting the Northwestern Hawaiian Islands. If we are to create an ocean legacy in the region, we must ensure that this unique ocean ecosystem remains healthy. It won't remain healthy if the bottomfish population continues to decline. As federal regulators move forward with the Northwestern Hawaiian Islands sanctuary, they must take this new evidence into account and follow the responsible lead of the State of Hawaii. The State has already taken strong measures to protect the portions of the Northwestern Hawaiian Islands in state waters and supports the same strong protections for the federal waters.

The results of the report show the harm that continued fishing could cause and emphasize the irresponsibility of *increasing* fishing pressure, as has been proposed. Despite claims to the contrary, full protection of this island chain, with an end to commercial fishing, is the only way to ensure that it continues to thrive and remain healthy for future generations.

Next Steps

Early in 2006, the National Marine Sanctuaries Program will likely unveil management alternatives for the Northwestern Hawaiian Islands Marine Sanctuary. These management plans will govern all aspects of the sanctuary, including the presence of commercial fishing. The public will have the opportunity to provide comments on these management plans, which will be taken into consideration as a final management plan is adopted. When the time comes, we know the Hawaiian community and the public across the country will continue its commitment to healthy ocean ecosystems.