Point: Creative Conservation Efforts are Necessary to Preserve the Great Barrier Reef

Thesis

While conservation of the Great Barrier Reef is vital, not enough is known about its ecosystems to intervene in its processes. Instead, conservationists would be better advised to use economic strategies to limit the impact of tourism and runoff. Other threats to the reef, most importantly global warming, require even more creative thinking.

Talking Points

- The Great Barrier Reef Marine Park has significant natural protections in its favour.
- Global warming and runoff from increased agriculture on the mainland do pose significant threats.
- Problems cannot be solved primarily by direct intervention at the site of the reef.
- Solving the reef's problems requires strategic lobbying by conservationists and the adoption of ideas which they may previously have not considered.

Summary

While there is scientific consensus that protecting the Great Barrier Reef is important, many observers argue that it is also important that conservation efforts be deployed efficiently. According to Dr Louise Goggin, a marine biologist with the CRC Reef Research Centre in Queensland, the reef's natural strengths include its location—many of the 2,900 individual reefs are offshore, remote, and not easily accessible, with a low level of human use. Additionally, Australia's coastal population centres are fairly low compared to other nations. Australians are not heavily dependent on subsistence fishing, and especially destructive marine practices such as blasting or poisoning are outside the norm. Furthermore, the Great Barrier Reef is already protected and managed by the Australian government, primarily under the auspices of the Great Barrier Reef Marine Park Authority (GBRMPA), and the reef continues to be studied and monitored intensely. Many experts suggest that these existing natural and legal protections provide a strong foundation for all conservation efforts.

Experts do still recognise significant threats to the Great Barrier Reef. Runoff pollution and other human-generated water quality problems can be harmful to the

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reef ecosystem. In certain areas, tourism and fishing can potentially have a serious impact on the reef. Even more dangerous, many argue, are rising seawater temperatures brought about by global warming, which cause mass coral bleaching. Other broad impacts of climate change also threaten the reef. For example, ocean acidification can reduce the coral's ability to create the calcium carbonate skeletons that make up the very structure of the reef.

When working on solutions for these potential problems, however, many scientists have contended that it is also important to acknowledge the actual hardiness of the reef ecosystem. There appears to be a popular belief that coral reefs are particularly delicate and easily thrown out of 'balance' by intrusive factors from 'outside' those ecosystems. As the highly respected coral reef scientist Terry Hughes put it,

> Coral reefs are often described (inaccurately) as fragile ecosystems in delicate balance with nature; this notion goes hand in hand with the outmoded idea from visiting colonial scientists that the tropics are benign and stable environments. But are coral reefs stable, fragile ecosystems? The answer is no, especially at the scales most relevant to human interaction with reefs. Coral reefs are subject to a high frequency of recurrent disturbances, and they have evolved and thrive in a dynamic environment.

This view has been supported by research showing that reef-building corals may be much more resilient than previously believed. For example, a 2020 study from the Australian Institute of Marine Science (AIMS) showed that the Great Barrier Reef recovered substantially from the 2016 and 2017 bleaching events, with two-thirds of eighty-six reef structures surveyed showing 'slightly increased coral cover'. Scientists have suggested that corals may be evolving to adapt to warming waters and other aspects of climate change.

For some observers, evidence of the Great Barrier Reef's resiliency indicates that humans do not need to treat the reef ecosystem as some kind of utterly pristine, untouchable environment—and, indeed, doing so would be untenable and even counterproductive. Along these lines, critics note that strict conservation efforts must always be balanced against the realities of human needs and the complex interplay of environmental systems. For instance, pollution from agricultural runoff may be a problem, but so is the issue of food security. Simply cutting back on Australia's agricultural industry might slightly improve water quality in the reef, but have drastic negative impacts on people throughout the country and beyond; it could potentially also cause more people to turn to fishing to feed themselves, inadvertently exacerbating another threat to the reef. Therefore, some advocates argue that reef protection measures must always consider the bigger picture and favour creative solutions to large, complicated problems.

Another facet of this view holds that focusing on specific issues like agricultural runoff mitigation or fishing is inadequate given the global scope of climate change. Indeed, some environmentalists have suggested that individual reef protection efforts are essentially useless if global warming continues as projected. Addressing this problem is necessarily an effort that will have little to do with the Great Barrier Reef itself. Rather, it will have to take a global view of conservation. Therefore, some have argued that more effort should be put into international climate treaties and solutions instead of legislation limited to Australia.

Ponder This

- The author has presented the fundamental positions for this perspective in the debate. Outline the strengths and weaknesses of each perspective.

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- If asked to begin forming an argument for this position, what sources would you need to build your case? What fundamental information do you need? What opinion leaders in this debate would you look to in solidifying your argument?
- What are the weakest aspects of the position outlined by the author? How might those weaker arguments help you prepare a counter argument?
- What additional Talking Points could you add to support this position?

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