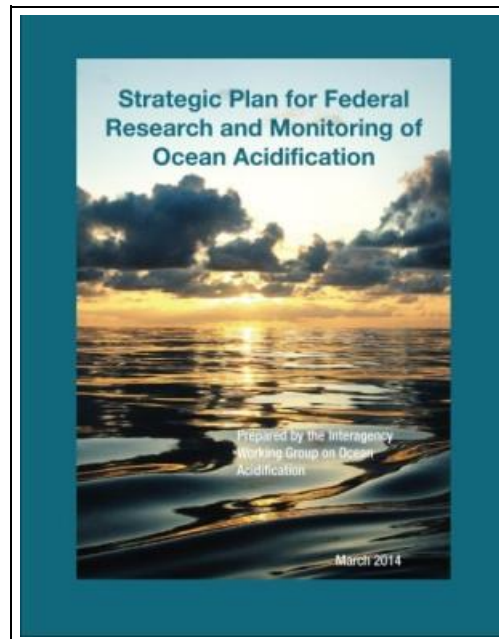


Strategic Plan for Federal Research and Monitoring of Ocean Acidification



Filesize: 4.68 MB

Reviews

Completely essential go through ebook. It can be written in basic phrases and never difficult to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.
(Jessy Collier)

STRATEGIC PLAN FOR FEDERAL RESEARCH AND MONITORING OF OCEAN ACIDIFICATION



To download **Strategic Plan for Federal Research and Monitoring of Ocean Acidification** eBook, please click the link under and save the document or have accessibility to other information that are relevant to STRATEGIC PLAN FOR FEDERAL RESEARCH AND MONITORING OF OCEAN ACIDIFICATION book.

Createspace, United States, 2015. Paperback. Book Condition: New. 279 x 216 mm. Language: English . Brand New Book ***** Print on Demand *****.Human industrial, transportation, and agricultural activities have caused global atmospheric concentrations of carbon dioxide (CO₂) to increase from a pre-industrial average of 280 parts per million (ppm) to the current value of approximately 400 ppm (IPCC AR5 2013). Atmospheric CO₂ concentrations are now higher than experienced on Earth for more than 800,000 years (Luthi et al. 2008), and the rate of CO₂ release into the atmosphere is likely unprecedented in Earth history (Kump et al. 2009; Honisch et al. 2012). Ocean carbonate chemistry is a natural buffering system, but this buffering capacity is being compromised as a direct result of CO₂ absorption by the oceans and to a lesser extent by the absorption of nitric acid (HNO₃) and sulfuric acid (H₂SO₄) at the sea surface (Doney et al. 2007). The oceans have absorbed approximately half of the anthropogenic CO₂ emissions from fossil fuel use and cement manufacturing over the past 200 years (Sabine et al. 2004). This oceanic uptake of CO₂ causes changes to ocean chemistry (Figure 1), including decreases in pH and carbonate ion (CO₃²⁻) concentrations, collectively known as global ocean acidification (Figure 2). Since the beginning of the industrial revolution, this uptake has caused a lowering of the surface ocean pH globally from about 8.2 to 8.1 (Caldeira and Wickett 2003; Feely et al. 2004; Caldeira and Wickett 2005; Feely et al. 2009), which corresponds to a 26 increase in hydrogen ion concentration, (H⁺, acidity). Reconstruction of past sea surface conditions suggest surface ocean pH has not been this low for at least 2 million years (Honisch et al. 2009). Orr et al. (2005) predicted an additional decrease in average global ocean surface pH of 0.3 to...



[Read Strategic Plan for Federal Research and Monitoring of Ocean Acidification Online](#)



[Download PDF Strategic Plan for Federal Research and Monitoring of Ocean Acidification](#)

Other PDFs



[PDF] **Everything Ser The Everything Green Baby Book From Pregnancy to Babys First Year An Easy and Affordable Guide to Help Moms Care for Their Baby And for the Earth by Jenn Savedge 2009 Paperback**

Access the link beneath to read "Everything Ser The Everything Green Baby Book From Pregnancy to Babys First Year An Easy and Affordable Guide to Help Moms Care for Their Baby And for the Earth by Jenn Savedge 2009 Paperback" PDF document.

[Read PDF »](#)



[PDF] **Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]**

Access the link beneath to read "Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English]" PDF document.

[Read PDF »](#)



[PDF] **Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]**

Access the link beneath to read "Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English]" PDF document.

[Read PDF »](#)



[PDF] **When Life Gives You Lemons. at Least You Won t Get Scurvy!: Making the Best of the Crap Life Gives You**

Access the link beneath to read "When Life Gives You Lemons. at Least You Won t Get Scurvy!: Making the Best of the Crap Life Gives You" PDF document.

[Read PDF »](#)



[PDF] **Danses Sacree Et Profane, CD 113: Study Score**

Access the link beneath to read "Danses Sacree Et Profane, CD 113: Study Score" PDF document.

[Read PDF »](#)



[PDF] **Path of Blood: The Story of Al Qaeda's War on Saudi Arabia**

Access the link beneath to read "Path of Blood: The Story of Al Qaeda's War on Saudi Arabia" PDF document.

[Read PDF »](#)