Nine Guiding Principles to Enact Change: A Legislator's Journey from Outhouse to Statehouse

Compared to the following three Actuarial/Academic Studies

1. Normalized Hurricane Damages in the United States: 1925–95

ROGER A. PIELKE JR. Environmental and Societal Impacts Group, National Center for Atmospheric Research, Boulder, Colorado
CHRISTOPHER W. LANDSEA Hurricane Research Division, NOAA/AOML, Miami, Florida (Manuscript received 5 September 1997, in final form 4 March 1998)
https://journals.ametsoc.org/view/journals/wefo/13/3/1520-0434_1998_013_0621_nhditu_2_0_co_2.xml

2. Normalized Hurricane Damage in the United States: 1900-2005

Roger A. Pielke Jr.[1]; Joel Gratz[2]; Christopher w. Landsea[3]; Douglas Collins[4]; Mark A. Saunders[5]; and Rade Musulin[6]
February 2008
https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf

3. Normalized hurricane damage in the continental United States 1900–2017

Jessica Weinkle[7]; Roger Pielke Jr.[8*]; Chris Landsea[9] ; Douglas Collins[10]; Rade Musulin[11]; Ryan P. Crompton[12]; Philip J. Klotzbach[13]
13 March 2018
https://repository.library.noaa.gov/view/noaa/27147

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Introduction to the Research Papers on Normalized Hurricane Damage
Overview of the Research Papers

"Normalized Hurricane Damages in the United States: 1925–95"

- **Authors**: Roger A. Pielke Jr. and others
- **Publication**: Weather and Forecasting, 1998
- **Summary**: This foundational study introduced the concept of normalizing hurricane damages to account for changes in inflation, population, and wealth over time. By adjusting historical hurricane damage data to present-day values, the study provided a clearer understanding of long-term trends in economic losses due to hurricanes. The key finding was that normalized hurricane damages did not show a significant upward trend, indicating that increased damages were primarily due to societal changes rather than an increase in hurricane frequency or intensity.
- **Key Quotes**:
    1. "The lack of trend in the normalized data indicates that the increase in hurricane damage over time is due to societal changes, such as increases in wealth and population in vulnerable areas."
    2. “The normalized data indicate clearly that the United States has been fortunate in recent decades with regard to storm losses as compared with earlier decades. The dat further refute recent claims that the rapid increase in non-normalized damages are due to climatic changes (cf. Changnon et al. 1997)”
    3. “With respect to hurricanes, the clearest evidence that explains increases in losses is changes in society, not in climate fluctuations.”

"Normalized Hurricane Damage in the United States: 1900–2005"

- **Authors**: Roger A. Pielke Jr., Joel Gratz, Christopher W. Landsea
- **Publication**: 2008
- **Summary**: This follow-up study extended the analysis to cover the period from 1900 to 2005. It confirmed the findings of the earlier study by showing that the trend in normalized hurricane damages remained flat over the extended period. The study reinforced the conclusion that increased damages were driven by factors such as population growth and economic development in vulnerable coastal areas.
- **Key Quote**:

1. "Stricter building codes and better enforcement can reduce damage by making buildings more resilient to hurricane-force winds and flooding."
2. “Unless action is taken to address the growing concentration of people and properties in coastal areas where hurricanes strike, damage will increase, and by a great deal, as more and wealthier people increasingly inhabit these coastal locations.”
3. “The results presented here reinforce the conclusions of the earlier studies and illustrate clearly the effects of the tremendous pace of growth in societal vulnerability to hurricane impacts. Such growth in vulnerability is expected to continue for the foreseeable future, in the United States and around the world, and without effective disaster mitigation efforts, ever-escalating hurricane damage will be the inevitable result.”
4. “A simple extrapolation of the current trend of doubling losses every 10 years suggests that a storm like the 1926 Great Miami hurricane could result in perhaps $500 billion in damage as soon as the 2020s.”

"Normalized Hurricane Damage in the Continental United States 1900–2017"

- **Authors**: Roger A. Pielke Jr. and others
- **Publication**: Nature Sustainability, 2018
- **Summary**: This latest study further extended the analysis to include data up to 2017. It provided a comprehensive update on normalized hurricane damages, confirming once again that there was no significant trend in the normalized data. The study highlighted the consistency of hurricane frequency and intensity over time, with increased economic losses attributed to more development and higher asset values in hurricane-prone areas.
- **Key Quote**:
    1. "Understanding loss trends in the context of development can aid in assessing sustainable development and the effectiveness of risk reduction measures."
    2. “As coastal communities continue to grow in wealth and population, loss potentials will continue to increase.”
    3. “Whatever the future brings, addressing vulnerability to hurricanes will remain a permanent priority for communities along the US Gulf and Atlantic coasts.

Narrative on Policy Arguments in
Nine Guiding Principles to Enact Change: A Legislator's Journey from Outhouse to Statehouse and
Their Support by the Research Papers Described Above

As I reflect on the extensive journey from my rural beginnings to my time in the Florida House of Representatives, one thing becomes abundantly clear: the pressing need for sound, informed policies in our insurance market. In my book, "From Roots to Realization: A Journey from the Outhouse to the Statehouse – The Reflections of a Country Boy," I delve deeply into the complexities of Florida's property insurance market, exploring the historical context, challenges, and potential solutions.

The arguments and insights I present in the book are not just theoretical musings; they are grounded in practical experiences and supported by rigorous analysis. This is particularly evident when we juxtapose these policy arguments with the findings and conclusions of the three white papers on normalized hurricane damages described above.

The findings and conclusion of these scholarly papers align with and underscore many of the recommendations found in my book.

Core Problem: Severity of Hurricanes and Economic Exposure

One of the central themes in my book is the recognition that the core problem in Florida's insurance market is not just the high premiums, but the underlying severity of hurricanes and the increasing development in high-risk areas. Chapter 24, "The Comedy of Stubborn Human Behavior: Insights into Florida's Property Insurance Market," emphasizes that high premiums are a symptom of a larger issue—our vulnerability to hurricanes and the human behaviors that exacerbate this vulnerability.

The white papers support this argument by demonstrating that while the severity of hurricanes has not significantly increased over time, the economic damage has escalated due to more development in high-risk coastal areas.

The 1998 study notes, "The lack of trend in the normalized data indicates that the increase in hurricane damage over time is due to societal changes, such as increases in wealth and

population in vulnerable areas.[14]" This finding reinforces the need for a strategic approach to managing development and mitigating risk, rather than merely capping premiums or providing short-term fixes.

Misguided Solutions and Market Distortions

Throughout my legislative career, I have observed that many legislative efforts focus on addressing the symptoms of high insurance premiums rather than tackling the root causes. In my book, particularly in Chapter 15, "The Key to Reducing Florida Homeowners Insurance Premiums – Reduce Losses," I argue that reducing losses through improved building standards and better risk management is the most effective way to lower premiums sustainably.

The white papers echo this sentiment by highlighting how government interventions often distort market signals and can inadvertently encourage risky behavior. The 2018 study explains, "Government policies that artificially suppress insurance premiums can lead to moral hazard, where property owners underinvest in risk reduction because they do not bear the full cost of their risk.[15]" For instance, subsidies and artificial pricing can lead to overdevelopment in vulnerable areas, increasing the overall risk and economic exposure.

The white papers' analyses provide empirical support for my advocacy of risk-based pricing and free-market solutions as more effective long-term strategies.

Risk Management and Comprehensive Strategies

In Chapter 20, "Risk Management in the Face of Florida's Catastrophe Hurricane Exposure," I stress the importance of comprehensive risk management strategies. This includes enhancing building codes, promoting public awareness, and leveraging private capital to cover hurricane risks. The policy argument here is that we need to proactively manage and mitigate risks rather than reactively addressing the fallout from disasters.

The white papers' findings align perfectly with this approach. They underscore the importance of implementing robust risk mitigation strategies, such as better building

[14] https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf
[15] https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf

codes, to reduce future damages. The 2008 study highlights, "Stricter building codes and better enforcement can reduce damage by making buildings more resilient to hurricane-force winds and flooding.[16]" The white papers' normalization of historical hurricane damage also provides a compelling argument for why modern building practices and stringent codes are essential for reducing economic losses.

Economic Exposure and Informed Decision-Making

Chapters 19 and 31 of my book, "The Price of Paradise: Unmasking the True Cost of Living in Hurricane-Prone Florida" and "Navigating the Complexities of Florida's Property Insurance Market," respectively, delve into the real costs of living in high-risk areas and the complexities of the insurance market. I advocate for greater transparency and informed decision-making by both policymakers and homeowners.

The white papers' detailed analysis of historical damage trends supports this call for informed decision-making. By providing a clearer picture of the economic impacts of hurricanes, the white papers help stakeholders understand the true costs associated with living in hurricane-prone areas. The 2018 study states, "Understanding loss trends in the context of development can aid in assessing sustainable development and the effectiveness of risk reduction measures.[17]" This alignment strengthens the case for policies that promote risk awareness and encourage sensible development practices.

Private Capital and Market-Based Solutions

Finally, in Appendix A, "Hurricane Crisis Concepts," I argue for leveraging private capital and promoting market-based solutions to ensure the sustainability of Florida's insurance market. I suggest that government intervention should be limited to fortifying homes through building codes and direct subsidies for low-income homeowners, rather than distorting the market with broad subsidies or price controls.

The white papers support this approach by demonstrating the benefits of market-based risk management strategies. The 2008 study explains, "Market-based approaches to risk

[16] https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf
[17] https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf

management, such as insurance and reinsurance, can provide strong incentives for property owners to invest in risk reduction measures.[18]"

It highlights how private capital and competitive markets can drive innovation and efficiency, ultimately leading to more resilient and cost-effective insurance solutions.

In conclusion, the policy arguments presented in my book are robustly supported by the findings and conclusions of the white papers "Normalized Hurricane Damages in the United States: 1925–95," "Normalized Hurricane Damage in the United States: 1900–2005," and "Normalized Hurricane Damage in the Continental United States 1900–2017." This alignment not only validates the recommendations but also provides a solid empirical foundation for advocating these policies in the real world.

By focusing on root causes, promoting risk-based pricing, and leveraging private capital, we can create a more resilient and sustainable insurance market for Florida.

[18] https://www.nhc.noaa.gov/pdf/NormalizedHurricane2008.pdf