

A Review of Native Hawaiian Benefits Received through the Inflation Reduction Act of 2022

Gwendolyn A. Richardson

University of Wisconsin-Parkside, Kenosha, USA Email: richa082@rangers.uwp.edu

How to cite this paper: Richardson, G.A. (2023) A Review of Native Hawaiian Benefits Received through the Inflation Reduction Act of 2022. *Journal of Environmental Protection*, 14, 206-212. https://doi.org/10.4236/jep.2023.143014

Received: January 25, 2023 **Accepted:** March 19, 2023 **Published:** March 22, 2023

Copyright © 2023 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). http://creativecommons.org/licenses/by/4.0/

<u>()</u>

Open Access

Abstract

On August 16th, 2022, Public Law 117-169, The Inflation Reduction Act of 2022, was signed into law by the President of the United States, Joseph R. Biden Jr. The Inflation Reduction Act of 2022 provides the Native Hawaiian community an opportunity to engage in activities of climate resilience and adaptation through making funds available to support such actions. This article provides a preliminary policy analysis of the Inflation Reduction Act of 2022 to identify the opportunities presented by this legislation that can provide ecological and cultural benefit to the Native Hawaiian community. Findings suggest policy language included in this Act is broad which emphasizes the need for the Senior Program Director of the Office of Native Hawaiian Relations, who is tasked with fund distribution, to rely upon the knowledge of the Native Hawaiian community and ecological experts to direct funds in a manner that best benefits the Native Hawaiian community.

Keywords

Inflation Reduction Act, Climate Crisis, Environmental Law, Hawaii

1. Introduction

On August 16th, 2022, Public Law 117-169, The Inflation Reduction Act of 2022 (IRA), was signed into law by the President of the United States, Joseph R. Biden Jr. [1]. This landmark piece of legislation marks the federal government's greatest investment in addressing the climate crisis [2] [3] [4]. Among substantial investments in clean energy, the IRA provides significant funding for communities disproportionally affected by pollution and climate change. In particular, the IRA provides Native Hawaiian communities with the opportunity to engage in activities of climate resilience and adaptation. However, it has been predicted the IRA could have marginal impacts by the continuing support of fossil fuel devel-

opment [4]. It has therefore been recommended that engagement in the funding and programs implemented through the IRA is a key strategy for maximizing the positive aspects of this legislation [4]. Likewise, prior to engagement in the implementation of IRA policy and funding opportunities, it is important to understand the full capacity to which the passing of the IRA can benefit frontline climate communities, such as Native Hawaiians, that have been historically marginalized, especially in reference to environmental justice [5].

2. Analysis of Title VIII Sec. 80002 of the Inflation Reduction Act of 2022

To begin, it should be noted that Native Hawaiians are not included within the jurisdiction of the Bureau of Indian Affairs (BIA). Instead, the Office of Native Hawaiians Relations (ONHR) was established as an independent entity under the Office of the Secretary of the Interior in 2004 as part of Public Law 108-199. As a result, Title VIII of the IRA separates funding opportunities for climate resilience between Sec. 80001 and Sec. 80002. Under Sec. 80001 of the IRA, climate resilience funding is directed to the Director of the Bureau of Indian Affairs for tribe-related appropriation. Funding to benefit the Native Hawaii community is included under Sec. 80002 of the IRA.

Sec. 80002 is here examined as the Native Hawaiian community only derives direct climate benefits from the IRA through Title VIII Sec. 80002. As stated under subsection (a), fiscal years 2022-2031 will allow for the appropriation of \$23,500,000 to the Senior Program Director of the ONHR. Appropriations may be made in the forms outlined below:

- Financial Assistance;
- Technical Assistance;
- Direct Expenditure;
- Grants;
- Contracts;
- Cooperative Agreements.

Appropriations are to be made for the purpose of climate resilience and adaptation activities that service the Native Hawaiian Community. An amount of \$1,500,000 is earmarked for administrative costs associated with the aforementioned program. Subsection (c) prevents these funds from becoming subject to cost-sharing or matching requirements. To fully realize the potential benefits as well as limitations of Sec. 80002 of the IRA, consideration of the language included in this section must take place within the context of Hawaii's ecological and cultural idiosyncrasies. Therefore, the following will consider what aspects of Hawaii's unique ecological and social history must be considered in the appropriation of funds from Sec. 80002 of the IRA.

3. Ecological Review of Hawaii

The Native Hawaiian culture, to this day, remains dependent on the landscape

that their Polynesian ancestors transformed into a social-ecosystem with cultural, spiritual, and genealogical elements [6]. With this expansion of human civilization has come the increasing impact of human existence such as changing atmospheric conditions and transformation of native ecosystems [7]. The list is extensive of the ways in which humans have altered the environment and in doing so put natural processes at risk. Changes such as distributional shifts in species, rising sea levels, ocean acidification, and rising temperatures among a host of other global environmental changes are associated with anthropogenic actions [8] [9]. The IRA provides funding for the Native Hawaiian community to deal with these exact anthropogenic harms, to which Hawaii is distinctly susceptible, through supporting climate resilience and adaptation specifically benefiting the Native Hawaiian community.

It has been documented the severe socio-economic, cultural, and environmental threat Pacific Island Countries (PICs) or Small Island Developing States (SIDS) face because of climate change [10]. The social and environmental conditions associated with the vulnerability of PICs and SIDS, as a result of climate change, are regarded as a salient topic of research, especially given the notoriously inadequate volume of climate change research that incorporates marginalized communities [10]. Pacific cultures, including Hawaii, have long incorporated socio-economic systems to manage environmental changes which is yet another reason the islands of the Pacific provide a compelling area in which to study climate change [6]. In framing the research completed on social and cultural issues associated with climate change in PICs or SIDS, differentiation can be noted between adaptation and mitigation [10]. To outline this difference, the following definition of adaptation relied upon: "adaptation refers to a process by which strategies to moderate and cope with the consequences of climate change, including variability, are developed and implemented" [11]. Serving as a contrast to the idea of adaptation is mitigation which is as "managing the unavoidable" [9]. Adaptation and migration activities cannot be considered as opposing strategies but instead implemented in complement to one another [12].

In addition to the analysis of the benefits presented by climate adaptation and mitigation action, it is recognized that characteristics such as cultural presence should be considered in the assessment of the climate action efficacy. As previously stated, the Native Hawaiian culture remains tied to native lands which have been transformed through this symbiotic relationship into a social-ecosystem [6]. It is therefore reasoned that the Native Hawaiian culture has developed a keen understanding of the land through this kinship and stewardship. Science, however, often does not take these types of relationships into consideration when assessing the effects of management activities. While it is not questioned the theoretical value of putting resources towards such actions, adaptation, mitigation, or preferably both, the extrinsic value of such activities can be marginal [13]. Divergence in objectives between scientific advancement and tangible ecological improvements leaves those focused on the achievement of both often capable of accomplishing neither. Hawaii, rich culturally as well as ecologically, requires

the implementation of such an integrative approach to environmental and climatic concerns to benefit the landscape as well as the people. Accordingly, it would be appropriate if the appropriation of IRA, Sec. 80002 funding was directed towards such projects.

Certainly, the future prosperity of human existence on the planet requires the development and implementation of effective conceptual and practical tools to address climate change [7]. Important to the development and implementation of such tools is sufficient funding. It is therefore fortunate that increasing funds are being directed towards conservation and restoration activities across the globe [14]. The IRA is one such example. Nonetheless, the distribution of these funds remains a problem not only in matters of equity but also demonstrates the influence implementation methodology, as well as scientific methodology supporting these processes, have in the outcome of a project practicality [10] [15] [16]. Considering this along with the fact that there exists a difference between adaptation and mitigation activities further compliments the importance of these decisions. These decisions are ultimately what determine how funds are spent [14]. It is recognized that climate planning is influenced by a variety of limitations [17]. This suggests a singular framework for universal climate planning may be unfeasible. Nonetheless, research on climate and islands in the Pacific Ocean has found the incorporation of both adaptation, as well as mitigation techniques, community involvement, and sound implementation strategy, is important to consider in the completion of a climate project that provides "benefit". Necessary to consider, in order for the use of funds from Sec. 80002 of the IRA to contribute to successful climate resilience and adaptation activities, is the application of aforementioned recommendations to the management of these funds appropriated to the Native Hawaiian community.

4. Discussion

In consideration of Sec. 80002 of the IRA, the funding made available to the Native Hawaiian community for climate resilience and adaptation activities appears quite amicable to the environmental protection of Hawaii and further limitation of climate change impacts in Hawaii. The climate-related funding for the Native Hawaiian community is directed for use as part of resilience and adaptation activities. Resilience strategies combine both adaptation and mitigation activities, along with emergency planning [18]. Activities considered as a combination of such would therefore include preservation, restoration, resistance, and recovery from climate impact. In cooperation, these activities, as part of resilience, are an optimum strategy to maximize funding to address climate change and its associated impacts. Nonetheless, strategies included under resilience planning, namely adaptation and mitigation activities as well as emergency planning, still must be conducted in a way that promotes cooperation. Vulnerabilities associated with the area being assisted should be assessed and an accompanying list of actions required to reduce these vulnerabilities be completed [19]. Hawaii, an isolated archipelago, is uniquely situated not only in the abundance of endemic species

and rich biodiversity present on the islands but also in the geographic location and geological characteristics of the land [20]. This arrangement of the island state makes it the only place in the United States subject to earthquakes, volcanic eruptions, tsunamis, and hurricanes [21]. These characteristics are just some related to the ecological individuality of the land and its associated vulnerabilities. Consideration of these phenomena, and the recognition that they are not ecologically independent is therefore paramount when funding such resilience activities.

As part of funding such resilience activities, the imposition of an appropriate framework, outlining the transition between the implementation of actions and their associated objectives must be utilized. It is important to consider that scientific achievement and tangible environmental benefit are not always in consonance [15] [16] [19]. Therefore, the complexity of Hawaiian ecosystems and climate-related impacts must be cognizant of scientific findings and the furthering of such without compromising the realized benefits made plausible through funding by the IRA. Objectives should therefore be well developed by the Director of the Office of Native Hawaiian Relations prior to funding projects through Sec. 80002 of the IRA.

The lack of guidance associated with fund distribution of Sec. 80002 of the IRA highlights the value of consultation with the Native Hawaiian community. It is not only recognized that the Native Hawaiian community is who should benefit from this funding made possible by this legislation as directly stated by the legislation's specific inclusion of this group as part of Sec. 80002, but also that this group has been found to have extensive knowledge of the actual systems looking to be protected, restored, or assisted. As previously stated, the Native Hawaiian culture remains tied to native lands, a relationship described as a social-ecosystem [6]. The understanding of this land is one that science does not often consider and adequately manage. It is therefore reasoned that Hawaii, rich culturally as well as ecologically, requires the implementation of such an integrative approach to environmental and climatic concerns to benefit the landscape as well as the people.

5. Conclusion

In totality, the IRA is a direct reflection of the Biden administration's commitment to promoting principles of Environmental Justice and strengthening relations with tribal and indigenous communities. Through Sec. 80002 of the IRA, \$25,000,000 will be appropriated for distribution to the Native Hawaiian community for climate resilience and adaptation activities. Of this amount appropriated, \$1,500,000 will be directed towards administrative costs. Hawaii, a state exploited by colonization and annexation activities as well as the continued marginalization of the Native community, provides a meaningful location in which to direct environmental justice funding. The presence of ecological and biological phenomenon exclusive to the islands furthers the salience of environmental justice in this region of the United States. In Sec. 80002 of the IRA, it should be noted the language directing climate resilience and adaptation funding is broad. To effectively appropriate this funding, maximizing the climate benefit received by the Native Hawaiian community, consideration of the state's unique ecological phenomenon is pertinent. Funding climate and adaption activities must take place in a well-planned manner that considers these phenomena and their correlation to one another as well as the islands' ecosystems. Therefore, the imposition of an appropriate framework, outlining the transition between the implementation of actions and their associated objectives, must be utilized. Maintaining a social-ecosystem, the Native Hawaiian community is knowledgeable on many aspects of the islands' environment and should likewise be consulted during the development of a management framework. Together, these recommended actions should effectively maximize the climate benefit received by the Native Hawaiian community through the IRA, making this legislation an important step towards investment in climate resilience and environmental justice.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] White House (2022) Inflation Reduction Act Guidebook. <u>https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/</u> <u>https://doi.org/10.1063/PT.6.2.20221209a</u>
- [2] Green, C.R. and Yukins, N. (2022) Feature Comment: The Inflation Reduction Act: A New Role for Green Procurement? *Government Contractor*, 64, Article 260. <u>https://ssrn.com/abstract=4224832</u>
- [3] Mahajan, M., Ashmoore, O., Rissman, J., Orvis, R. and Gopal, A. (2022) Modeling the Inflation Reduction Act Using the Energy Policy Simulator. Energy Innovation Policy & Technology LLC, San Francisco, CA. <u>https://energyinnovation.org/wp-content/uploads/2022/08/Modeling-the-Inflation-Reduction-Act-with-the-US-Energy-Policy-Simulator_August.pdf</u>
- [4] Rudolph, L., Beyeler, N. and Patel, L. (2022) The Inflation Reduction Act—A Historic Piece of Climate and Health Legislation. *The Journal of Climate Change and Health*, 7, Article 100172. <u>https://doi.org/10.1016/j.joclim.2022.100172</u>
- [5] Spencer, M.S., Fentress, T., Touch, A. and Hernandez, J. (2020) Environmental Justice, Indigenous Knowledge Systems, and Native Hawaiians and Other Pacific Islanders. *Human Biology*, 92, 45-57. <u>https://doi.org/10.13110/humanbiology.92.1.06</u>
- [6] Winter, K.B., Ticktin, T. and Quazi, S.A. (2020) Biocultural Restoration in Hawai'i Also Achieves Core Conservation Goals. *Ecology and Society*, 25, Article 26. <u>https://doi.org/10.5751/ES-11388-250126</u>
- Hobbs, R.J. and Harris, J.A. (2001) Restoration Ecology: Repairing the Earth's Ecosystems in the New Millennium. *Restoration Ecology*, 9, 239-246. https://doi.org/10.1046/j.1526-100x.2001.009002239.x
- [8] IPCC (2022) Summary for Policymakers. In: Pörtner, H.O., Roberts, D.C., Tignor, M., Poloczanska, E.S., Mintenbeck, K., Alegría, A. and Rama, B., Eds., *Climate Change* 2022: *Impacts, Adaptation and Vulnerability, the Working Group II Contribution to the Sixth Assessment Report*, IPCC, Geneva, 1-33.

- [9] Scientific Expert Group on Climate Change (SEG) (2007) Confronting Climate Change: Avoiding the Unmanageable and Managing the Unavoidable. In: Bierbaum, R.M., Holdren, J.P., MacCracken, M.C., Moss, R.H. and Raven, P.H., Eds., *Report Prepared for the United Nations Commission on Sustainable Development*. The United Nations Foundation, Washington DC.
- [10] Weir, T., Dovey, L. and Orcherton, D. (2016) Social and Cultural Issues Raised by Climate Change in Pacific Island Countries: An Overview. *Regional Environmental Change*, 17, 1017-1028. <u>https://doi.org/10.1007/s10113-016-1012-5</u>
- [11] Lim, B., Spanger-Siegfried, E., Burton, I., Malone, E. and Huq, S. (2005) Adaptation Policy Frameworks for Climate Change: Developing Strategies, Policies and Measures. Cambridge University Press, Cambridge.
- [12] Core Writing Team, Pachauri, R.K. and Meyer, L.A. (2014) Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, IPCC, Geneva. <u>https://www.ipcc.ch/report/ar5/syr/</u>
- [13] Cabin, R.J. (2007) Science-Driven Restoration: A Square Grid on a Round Earth? *Restoration Ecology*, 15, 1-7. <u>https://doi.org/10.1111/j.1526-100X.2006.00183.x</u>
- [14] Goldstein, J.H., Pejchar, L. and Daily, G.C. (2008) Using Return-on-Investment to Guide Restoration: A Case Study from Hawaii. *Conservation Letters*, 1, 236-243. https://doi.org/10.1111/j.1755-263X.2008.00031.x
- [15] DeWan, A.A. and Zipkin, E.F. (2010) An Integrated Sampling and Analysis Approach for Improved Biodiversity Monitoring. *Environmental Management*, 45, 1223-1230. <u>https://doi.org/10.1007/s00267-010-9457-7</u>
- [16] Mawdsley, J. and O'Malley, R. (2009) Development of Multi-Species Indicators for the Nevada Wildlife Action Plan. *Ecological Indicators*, 9, 1030-1036. https://doi.org/10.1016/j.ecolind.2008.11.005
- [17] Tiepolo, M. and Ponte, E. (2016) Conclusion. In: Tiepolo, M., Ponte, E. and Cristofori, E., Eds., *Planning to Cope with Tropical and Subtropical Climate Change*, De Gruyter, Berlin, 376-380. <u>https://doi.org/10.1515/9783110480795-022</u>
- [18] Tiepolo, M. and Cristofori, E. (2016) Planning the Adaptation to Climate Change in Cities: An Introduction. In: Tiepolo, M., Ponte, E. and Cristofori, E., Eds., *Planning* to Cope with Tropical and Subtropical Climate Change, De Gruyter, Berlin, 1-5. https://doi.org/10.1515/9783110480795-002
- [19] Tiepolo, M. and Cristofori, E. (2016) Climate Change Characterisation and Planning in Large Tropical and Subtropical Cities. In: Tiepolo, M., Ponte, E. and Cristofori, E., Eds., *Planning to Cope with Tropical and Subtropical Climate Change*, De Gruyter, Berlin, 6-41. https://doi.org/10.1515/9783110480795-003
- [20] Gillespie, T.W., Keppel, G., Pau, S., Price, J.P., Jaffré, T. and O'Neill, K. (2013) Scaling Species Richness and Extinction of Tropical Dry Forests on Oceanic Islands, Diversity and Distribution. *Diversity and Distributions*, **19**, 896-906. <u>https://doi.org/10.1111/ddi.12036</u>
- [21] Richmond, B.M., Fletcher III, C.H., Grossman, E.E. and Gibbs, A.E. (2001) Islands at Risk: Coastal Hazard Assessment and Mapping in the Hawaiian Islands. *Environmental Geosciences*, 8, 21-37. <u>https://doi.org/10.1046/j.1526-0984.2001.008001021.x</u>