



# OFFICE OF PLANNING STATE OF HAWAII

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Statement of  
**LEO R. ASUNCION**  
Planning Program Administrator, Office of Planning  
before the  
**SENATE COMMITTEES ON HOUSING AND WAYS AND MEANS**  
Friday, April 5, 2019  
10:30 AM  
State Capitol, Conference Room 211

in consideration of  
**HB 588, HD 1**  
**RELATING TO GREEN INFRASTRUCTURE.**

Chairs Chang and Dela Cruz, Vice Chairs Kanuha and Keith-Agaran, and Members of the Senate Committees on Housing and Ways and Means:

The Office of Planning supports House Bill 588, HD 1, provided that its passage does not adversely impact the priorities indicated in the Executive Budget. HB 588, HD 1 appropriates funds for the State's Sustainability Coordinator to complete a comprehensive green infrastructure study and plan.

The Office of Planning appreciates the opportunity to comprehensively identify green infrastructure opportunities, and green infrastructure planning and development best practices statewide. State green infrastructure plans, like this proposal, can identify where the State can save on water management costs, recharge water, decrease pollution, lower flooding risks, sequester greenhouse gases, and mitigate and adapt to Hawaii's changing climate.

Thank you for the opportunity to offer support on HB 588, HD 1.

**LATE**

**HB-588-HD-1**

Submitted on: 4/4/2019 12:26:15 PM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Dylan P. Armstrong	Testifying for Oahu County Democrats	Support	No

Comments:

Aloha Chair Dela Cruz, Vice Chair Keith-Agaran, and Members of the Committee on Ways and Means,

The Oahu County Democrats are in support of House Bill 588, House Draft 1.

Systematic "green infrastructure" can do two main things. First, it can reduce population-level risk for natural disasters from flooding, etc., and negative health outcomes, such as air pollutant concentration. Second, it improves quality of life, measured by such means as cooler surface air temperatures, percent canopy cover increase in the urban environment, etc.

This study and plan requirement is the logical step for implementation of feasible and high-priority green infrastructure development. For the benefit of our population, this work is very important. If good government plans for the future, and reduces its environmental footprint, and works for improved quality of life, then green infrastructure meets these criteria.

Please vote 'aye' in support of HB588 HD1.

Dylan P. Armstrong, Vice Chair  
Oahu County Committee, Oahu County Democrats



**LATE**

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April 5, 2019

Committee on Housing  
Senator Stanley Chang, Chair  
Senator Dru Mamo Kanuha, Vice Chair  
Hawai'i State Capitol, Room 226  
Honolulu, HI 96813

Committee on Ways and Means  
Senator Donovan M. Dela Cruz, Chair  
Senator Gilbert Keith-Agaran, Vice Chair  
Hawai'i State Capitol, Room 206  
Honolulu, HI 96813

RE: HB 588, on Green Infrastructure and HB 1558, Hawai'i 2050 Sustainability Plan Update

Dear Chair Chang, Vice Chair Kanuha, Chair Dela Cruz, and Vice Chair Keith-Agaran,

On behalf of the U.S. Green Building Council (USGBC), our nearly 9,000 member companies nationwide, and our strong community in Hawai'i, we appreciate the opportunity to provide this letter of support for Senate Bill 588 (SB 588), on green infrastructure and Senate Bill 1558 (SB 1558), the Hawai'i 2050 Sustainability Plan Update.

#### *USGBC and LEED in Hawai'i*

USGBC is a nonprofit organization committed to transforming the way all buildings and communities are designed, built, and operated to support a more sustainable, resilient, and prosperous environment that improves the quality of life for all.

Our flagship green building rating system, LEED, continues to grow in the Hawai'i market, with over 200 certified projects amounting to more than 19 million square feet in total.<sup>1</sup> Our education and professional credential programs support green building in Hawai'i as well, with more than 1,300 Hawai'ians holding a LEED Accredited Professional (AP) or a LEED Green Associate credential.

#### *LEED and Climate Resilience*

USGBC is committed to building and design practices that are sustainable, efficient, and economically sound. Resilience is a clear extension of this work, and LEED works to encourage and support resilience outcomes in the built environment. For projects to earn LEED certification, they must meet high standards for sustainability and efficiency, thus positioning them to maximize their overall resilience as well. In order to moderate the intensifying effects of climate change on our communities and infrastructure, LEED is a critical tool that has been proven effective with industry stakeholders, including building owners and occupants.

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<sup>1</sup> [State Market Briefs](#), U.S. Green Building Council.



USGBC works to ensure project teams are supported in their resilience efforts, including providing guidance to facilitate identification of opportunities to improve the durability and sustainability of projects pursuing LEED.<sup>2</sup> Also, LEED helps guide project teams in reducing their greenhouse gas emissions and carbon footprints associated with their building projects. According to a recent study, buildings certified under LEED Operations and Maintenance (LEED O+M) were associated with lower levels of greenhouse gases (GHGs). Specifically, LEED buildings were associated with 50 percent fewer GHGs from water use, 48 percent fewer GHGs from solid waste input, and five percent fewer GHGs from transportation.<sup>3</sup> LEED gives project teams the tools they need to effectively mitigate the effects of climate change, as well as save resources, and protect the well-being of occupants and surrounding communities.

Like LEED, SITES is designed to help communities mitigate and adapt to the effects of climate change, though specifically developed to support sustainable land development. With input from landscape architects, designers, planners, ecologists, and engineers, resilience is one of the key goals of the SITES system. Credits include focus on green infrastructure, sustainable construction and maintenance, low carbon output, and more. SITES is more than just a system for individual landscape projects – SITES guides projects to enhance their resilience, thus ensuring readiness for a rapidly changing climate.<sup>4</sup>

#### *USGBC Supports HB 588 and HB 1558*

USGBC offers our strong support of both HB 588 and HB 1558, legislation that is before the committees today. HB 588 would mandate a comprehensive state-wide study on opportunities for green infrastructure in Hawai'i, and HB 1558 would require an update to the Hawai'i 2050 sustainability plan, and ensure that climate change mitigation and adaptation priorities are incorporated in any updates. Each of these proposals will support Hawai'i in its continued progress in enhancing resilience of its built environment and mitigating the effects of climate change.

USGBC commends the state of Hawai'i for its leadership on these critical issues, and we thank the Committee on Housing and the Committee on Ways and Means for bringing these bills up for consideration today. Each of these bills have already been favorably reported by the Senate Committee on Energy, Economic Development, and Tourism and by the Senate Committee on Water and Land. USGBC urges the members of the Committee on Housing and the Committee on Ways and Means to support HB 588 and HB 1558, and move towards their swift passage.

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<sup>2</sup> ["Profiles of Resilience: LEED in Practice,"](#) USGBC Resources.

<sup>3</sup> ["Quantifying the Comprehensive Greenhouse Gas Co-Benefits of Green Buildings,"](#) Center for the Built Environment, University of California-Berkeley (2014).

<sup>4</sup> ["Greenspace for Good: Using the SITES System to Advance Resilience,"](#) USGBC Resources.



Thank you for your consideration of our remarks. Please contact us if we can be of any assistance or have any questions.

Sincerely,

A handwritten signature in black ink, which appears to read "Elizabeth Beardsley". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Elizabeth Beardsley. P.E.  
Senior Policy Counsel  
U.S. Green Building Council

**HB-588-HD-1**

Submitted on: 4/3/2019 6:05:36 PM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Andrea Quinn	Individual	Support	No

Comments:

Dear Honorable Committee Members:

Please support HB588. Hawaii's valuable coastlines are eroding and our coral reefs are dying due to climate change, which is already occurring. We need to be a leader in enacting a green infrastructure.

Thank you for the opportunity to present my testimony.

Sincerely,

Andrea Quinn

Kihei

**LATE**

**HB-588-HD-1**

Submitted on: 4/4/2019 2:30:06 PM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Ian Tierney	Individual	Support	No

Comments:

Dear Chair Chang, Chair Dela Cruz, Vice Chair Kahuna, and Vice Chair Keith-Agaran,

I am testifying in support of House Bill 588 HD 1. This bill is important and I support it because Green Infrastructure has the potential to reduce the impacts of climate change. I have personally worked on and also toured several great examples of green infrastructure that exist in Hawaii, both natural and man made. The man-made projects were done in some cases as a lower cost alternative to traditional business as usual by using systems thinking and not a 1 for 1 replacement comparison. Only by thinking holistically can green infrastructure be best implemented. Thus a plan from the OP outlining best practices is the best start for implementing Green Infrastructure.

Thank you for considering my testimony.

Ian Tierney

Honolulu, HI 96816

**LATE**

**HB-588-HD-1**

Submitted on: 4/4/2019 2:53:45 PM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Keith T Matsumoto	Individual	Support	No

Comments:

I am writing in support of HB588, HD1 dealing with the development of a comprehensive green infrastructure study and plan. While such a plan would be beneficial, the coordination, development, completion, and follow-up for such work requires staffing and funding and request that the passage of HB588, HD1 include an adequate pool of funds for the Office of Planning to complete the plan.

Thank you for your consideration of this testimony in support of HB588, HD1.



**LATE**

**HB-588-HD-1**

Submitted on: 4/4/2019 4:21:27 PM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
L.M. Holmes	Individual	Support	No

Comments:

**LATE**

**HB-588-HD-1**

Submitted on: 4/5/2019 2:01:55 AM

Testimony for HOU on 4/5/2019 10:30:00 AM

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Minh Nguyen	Individual	Support	Yes

Comments:

Aloha,

I am writing in strong support of HB588, to create appropriate funds for a comprehensive study on green infrastructure in Hawaii.

This study would open new opportunities for future vertical farming for economic sustainability, sustaining the life of honey bees (natural farmers of the eco-system), quality of life for residents, beautifying urban areas while maintaining the vibrant eco-system of Hawaii. Other countries have built their first vertical forestry building like the award-winning Bosco Verticale in Milan, Italy which has provided many pioneering benefits to the city's culture, rehabilitation and sustainability. With this knowledge, it could open other opportunities to create a vertical sanctuary for rare Hawaiian plants and animals. This study could also provide many partnerships and opportunities for discoveries like geo-technology for Hawaii's future.

Thank you for your consideration,

Minh Nguyen