

SB611 SD1

Measure Title: RELATING TO FIRE SPRINKLERS.

Report Title: Counties; Automatic Fire Sprinklers; Residences

Description: Repeals the June 30, 2017, expiration date of Act 83, Session Laws of Hawaii 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area.

Companion:

Package: None

Current Referral: PSM/HOU, CPH

Introducer(s): NISHIHARA, KIDANI, Dela Cruz, K. Kahele, Wakai



**Testimony to the Senate Committee on Commerce,
Consumer Protection, and Health
Tuesday, February 28, 2017 at 10:30 A.M.
Conference Room 229, State Capitol**

RE: SENATE BILL 611 SD1 RELATING TO FIRE SPRINKLERS

Chair Baker, Vice Chair Nishihara, and Members of the Committee:

The Chamber of Commerce Hawaii ("The Chamber") **strongly supports** SB 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, Session Laws of Hawaii 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area.

The Chamber is the leading statewide business advocacy organization, representing about 1,600+ businesses. Approximately 80% of our members are small businesses with less than 20 employees. As the "Voice of Business" in Hawaii, the organization works on behalf of members and the entire business community to improve the state's economic climate and to foster positive action on issues of common concern.

This bill will help keep new homes affordable for Hawaii's families. The Chamber is not against fire sprinklers, just the mandating of them.

Cost prohibitive

The true cost of installing fire sprinklers in single family homes ranges, depending on where in the State you live. The largest cost is from an upgraded water meter, which is required to support a sprinkler system. For a typical 3 bedroom, 2 bath single-family dwelling upgraded to a 1" meter:

Oahu \$10,007.82 (1" meter) + \$25,826.67 (installation costs) = \$35,834.19

Maui \$33,356 (1" meter) + \$32,760.34 (installation costs) = \$66,116.34

Hawaii \$13,750 (1" meter) + \$26,902.80 (installation costs) = \$40,652.80

These numbers are the minimum required. On Kauai, the cost of the meter alone is \$35,290. If a larger home is built, a larger meter is required at a much higher cost. For example, to upgrade to a 1 1/2" meter, it would cost \$71,948 on Maui and \$70,580 on Maui, just for the meter. Yearly sprinkler inspections add to the cost of maintenance.

With the median price of a new home on Oahu at approximately \$730,000.00, adding the cost of a fire sprinkler system and larger water meter will dramatically increase the price of a

home. The National Association of Home Builders' 2016 data for Hawaii found that for every \$1,000 increase in new home price, 548 households are priced out of our housing market.

Statewide concern

Sprinklers are of statewide concern because housing affordability is a statewide concern, as evidenced by the number of bills this session addressing affordable housing and homelessness. DEBEDT reported that Hawaii needs over 66,000 new housing units through 2015 and significantly adding costs to construction will be more of a barrier to new housing. Furthermore, the State Building Code Council works on codes with county officials that impact all the Counties, so it is not a home rule issue.

Prevention and education are critical

Proponents say the contents of your home, which they say are made of materials that burn faster, cause fires. Educating the public on this is critical in prevention. Nationally, the number one cause of home fires is cooking. The public should instead be informed that cost-effective fire suppression canisters placed above your stove help prevent such fires from spreading, and also prevent any water damage that will result from a fire sprinkler.

Working smoke detectors save lives

National organizations such as the American Red Cross advocate for a working smoke detector and an escape plan to help keep your family safe during a fire. According to the National Fire Protection Association (NFPA), the fire survival rate in homes with working smoke detectors is 99.41% and only rises to 99.6% with a sprinkler. However, the cost difference between the two systems is quite significant.

New homes are safer and older homes burn

New homes are constructed with technology that offers safer, more durable building materials and products than ever before. Interconnected smoke alarms, and other improvements mean you and your family are safer than ever.

The age of the home is an important piece of information when discussing residential fires, because various aspects of older homes can make them more prone to fires and more dangerous in the case one occurs. The leading causes of unintentional home structure fires are 1) cooking equipment, 2) heating equipment and 3) electrical distribution and lighting equipment. A strong relationship between housing age and the rate of electrical fires has been observed, with housing over 40 years old having the strongest association with electrical distribution fires.

Based on data from the Honolulu Fire Department, 77% of fires occurring in residential structures between 2009 and 2015 involved homes built before 1980. Building codes have dramatically increased since 1980. The improvements to fire safety required by building codes do not evaporate with age, so it can be expected that homes built today will continue to outperform those built several generations ago.



Chamber members would benefit

Many of the Chamber's members would benefit from a mandate, but they support keeping sprinklers optional because if no homes are built due to the increased cost, then there will be nowhere to install plumbing or supply piping. Furthermore, pipes filled with water within your walls and ceilings run the risk of leakage, leading to water damage and mold.

Not a national trend

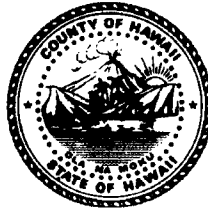
Twenty-four States defeated a sprinkler mandate through their code adoption process and 20 States defeated the mandate legislatively. Only California, Maryland, and the District of Columbia have adopted a mandate.

We do not want to place homeowners or firefighters in unnecessary danger resulting from a one or two family structure fire. We believe that there are more cost-effective means available that would provide the same level of protection at a fraction of the cost of a new fire sprinkler system and larger water meter.

Our main concern is the impact a sprinkler mandate would have on the affordability of housing in Hawaii.

We **strongly support** this bill to keep residential sprinklers optional. Thank you for the opportunity to express our views on this matter.

Harry Kim
Mayor



Wil Okabe
Managing Director

Barbara J. Kossow
Deputy Managing Director

County of Hawai'i
Office of the Mayor

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February 23, 2017

Senator Rosalyn Baker
Commerce, Consumer Protection
and Health
Hawai'i State Capitol
Honolulu, HI 96813

Dear Chair Baker and members:

RE: SB 611

Thank you for this opportunity to comment on SB 611.

As we all know, the cost of housing in Hawaii is already so high that too many of our citizens are priced out of the market. Whether it is a question of creating housing stock for ownership or rental, we need to find ways to make it less expensive to build, rather than more expensive. For that reason, Hawaii County would not consider requiring sprinklers in residential dwellings, or agricultural or aquacultural buildings.

Respectfully submitted,

Wil Okabe
Managing Director

BIA-HAWAII

BUILDING INDUSTRY ASSOCIATION

THE VOICE OF THE CONSTRUCTION INDUSTRY

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Testimony to the Senate Committee on Commerce, Consumer Protection, & Health Tuesday, February 28, 2017 10:30 a.m. Conference Room 229

RE: SB 611 SD1 – Relating to Fire Sprinklers

Chair Baker, Vice-Chair Nishihara, and members of the committee:

My name is Gladys Quinto-Marrone, CEO of the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

BIA-Hawaii is in **strong support** of S.B. 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, SLH 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area

S.B. 611 will help keep new homes affordable for Hawaii's families. BIA-Hawaii is not against fire sprinklers, just the mandating of them.

Cost prohibitive

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BIA-Hawaii members would benefit

Many of BIA's members would benefit from a mandate, but they support keeping sprinklers optional because if no homes are built due to the increased cost, then there will be nowhere to install plumbing or supply piping. Furthermore, pipes filled with water within your walls and ceilings run the risk of leakage, leading to water damage and mold.

Not a national trend

Twenty-four States defeated a sprinkler mandate through their code adoption process and 20 States defeated the mandate legislatively. Only California, Maryland, and the District of Columbia have adopted a mandate.

We do not want to place homeowners or firefighters in unnecessary danger resulting from a one or two family structure fire. We believe that there are more cost-effective means available that would provide the same level of protection at a fraction of the cost of a new fire sprinkler system and larger water meter.

Our main concern is the impact a sprinkler mandate would have on the affordability of housing in Hawaii.

We **strongly support** S.B. 611 to keep residential sprinklers optional. Thank you for the opportunity to express our views on this matter.

From: mailinglist@capitol.hawaii.gov
Sent: Monday, February 27, 2017 10:11 AM
To: CPH Testimony
Cc: ccarper@honolulu.gov
Subject: Submitted testimony for SB611 on Feb 28, 2017 10:30AM

SB611

Submitted on: 2/27/2017

Testimony for CPH on Feb 28, 2017 10:30AM in Conference Room 229



Submitted By	Organization	Testifier Position	Present at Hearing
Carol-Louise Carper	State Fire Council	Oppose	Yes


Comments: Assistant Chief Socrates Bratakos will be testifying on behalf of State Fire Council

Please note that testimony submitted less than 24 hours prior to the hearing, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

Do not reply to this email. This inbox is not monitored. For assistance please email webmaster@capitol.hawaii.gov



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Honolulu, HI 96817

February 28, 2017

The Honorable Rosalyn H. Baker, Chair

Senate Committee on Commerce, Consumer Protection, and Health
State Capitol, Room 229
Honolulu, Hawaii 96813

RE: S.B. 611, S.D.1, Relating to Fire Sprinklers

HEARING: Tuesday, February 28, 2017, at 10:30 a.m.

Aloha Chair Baker, Vice Chair Nishihara, and Members of the Committee.

I am Myoung Oh, Director of Government Affairs, submitting written comments on behalf of the Hawai'i Association of REALTORS® ("HAR"), the voice of real estate in Hawai'i, and its 9,200 members. HAR **supports** S.B. 611 which repeals the June 30, 2017, expiration date of Act 83, Session Laws of Hawaii 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area.

Building codes are important, as it has a broad community impact relating to health and safety for Hawai'i's residents. When the financial cost of a more stringent building code outweighs the actual safety accomplished, HAR believes that a careful and detailed review be taken on these building code measures. For example, mandatory fire sprinklers, although well-intentioned, increase the baseline construction cost.

In multi-family dwellings and condominiums, there are usually on-staff professionals who are trained to maintain fire sprinkler systems. However, in a single-family home this is not the case. The average homeowner does not have the skills to be responsible for the ongoing maintenance necessary to keep a fire sprinkler system in operational condition. It would be difficult to create a regulation that increases the base cost of construction and then potentially creating a cottage industry of inspectors/maintenance professionals for maintaining these private sprinkler systems.

Moreover, most fire sprinkler systems call for an additional water meter and separate water line with a back flow prevention device. Because of the high volume of water required in fire sprinkler systems, the standard meter will not suffice. The Board of Water Supply (BWS) charges a high water development fee for water meters, plus the cost of installation, which all adds significant costs to any home. The BWS may determine that the water supply is





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insufficient for some areas to add fire sprinkler systems and move to deny the permit for those reasons.

In theory, building codes could adversely affect housing production and could increase housing costs through both substantive (technical) and administrative impediments. However, we would defer specific comments to qualified builders, architects and insurance professionals.

HAR notes that some subdivisions have additional private building standards that are required for housing built within its confines such as minimum square footage, garages vs. carports, etc. These types of design covenants are privately agreed upon and market driven. HAR supports the right of a developer and owners who knowingly purchase within a subdivision with these styles of covenants to continue.

Mahalo for the opportunity to submit written comments in support of this measure.



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February 27, 2017

**Testimony to the Senate Committee on Commerce, Consumer
Protection, & Health
Tuesday, February 28, 2017
10:30 a.m.
Conference Room 229
RE: SB 611 SD1 – Relating to Fire Sprinklers**

Chair Baker, Vice-Chair Nishihara, and members of the committee:

I am Greg Thielen, President and RME of Complete Construction Services. I am a Small Business Owner and have over 25 years' experience in the Construction Industry. I am also a Past President of BIA Hawaii and serve as the National Area Chair for Hawaii and California for the National Association of Home Builders.

I am in **strong support** of S.B. 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, SLH 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area

Affordable housing is a statewide concern for Hawaii and should be addressed by the State Legislature. It is impossible to support affordable housing for the people of Hawaii **and** support mandatory residential fire sprinklers. If Act 83, SLH 2012, is allowed to sunset the result will be thousands of more Hawaii families priced out of home ownership.

Thank you for the opportunity to provide this testimony.

Sincerely,

Greg Thielen
President/RME



February 28, 2017

Senate Committee on Commerce, Consumer Protection, & Health
Hawaii State Capitol
415 South Beretania Street, Conference Room 229
Honolulu, Hawaii 96813

Chair Baker, Vice-Chair Nishihara, and members of the committee:

Subject: SB 611 SD1 – Relating to Fire Sprinklers

My name is Dean Uchida, President Elect off the Building Industry Association of Hawaii (BIA-Hawaii). Chartered in 1955, the Building Industry Association of Hawaii is a professional trade organization affiliated with the National Association of Home Builders, representing the building industry and its associates. BIA-Hawaii takes a leadership role in unifying and promoting the interests of the industry to enhance the quality of life for the people of Hawaii.

BIA-Hawaii is in strong support of S.B. 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, SLH 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area

S.B. 611 SD1, is a bill about housing affordability. As we are all aware of, we are in a “Housing Crisis” in Hawaii. Mandating the installation of automatic fire sprinkler systems in all new one and two family dwellings **WILL NOT** keep new homes affordable for Hawaii’s families. BIA-Hawaii is not against fire sprinklers, just the mandating of them.

BIA-Hawaii is speaking out for the future home buyers in the State, who unfortunately, do not have an organized voice to raise concerns about increases to the price of housing in Hawaii.

In 2016, the National Association of Home Builders (NAHB) prepared a state by state analysis of the number of home buyers impacted for every \$1,000 increases in price. In 2016, **548 households** in Hawaii were priced out of the market by a \$1,000 increase in price.

Our concern is that Hawaii’s needs to build its way out of our current housing crisis by increasing the supply of housing at all price points. A healthy housing market allows people to purchase housing at price ranges they can afford and as their income improves, provides them with the opportunity to “move up” the housing ladder.

The Building Industry Association of Hawaii and the Chamber of Commerce of Hawaii convened the first **“Houseless in Honolulu”** in November of 2015 to raise awareness of one of Hawaii’s most pressing issues - home affordability. Then again in November of 2016 we convened our second event, **“Still Houseless in Honolulu.”** The bottom line is we need to build our way out of



this crisis by increasing the supply of housing at all price points. With the median home price in the Islands now \$730,000, the repercussions are having a major impact on Honolulu's economy.

Without a solution to the State's shortage of residences, the number will soon surpass a million dollars. Every uptick in prices has increasing economic impact. Housing at all price points is desperately needed if we are to maintain the State's economic equilibrium. If potential employees cannot find affordable homes they will choose not to move to Hawaii and current residents affected by stratospheric home prices will leave. Employers across all spectrum of enterprises are already feeling the pinch. Mid-level employees are especially hard hit. Educators, medical professionals, and small businesses are especially hard hit.

We understand that others have suggested that technology is advancing so the prohibition on the counties should not be permanent. We firmly believe that a state-wide prohibition is in order to keep housing affordable. The proposed bill does not preclude individual counties from requesting an exemption from the prohibition should other, more cost effective solutions become available in the future.

We strongly support S.B. 611, S.D. 1, to keep residential sprinklers optional. Thank you for the opportunity to express our views on this matter.

Mahalo,

A handwritten signature in black ink, appearing to read "Dean Uchida".

Dean Uchida
Strategic Services Group

**Testimony to the Senate Committee on Commerce, Consumer Protection, & Health
Tuesday, February 28, 2017
10:30 a.m.
Conference Room 229**

RE: SB 611 SD1 – Relating to Fire Sprinklers

Chair Baker, Vice-Chair Nishihara, and members of the committee:

My name is Craig Washofsky, Group Vice President, Servco Home & Appliance Distribution. I am also the Immediate Past President of the Building Industry Association of Hawaii.

I wanted to convey my **strong support** of S.B. 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, SLH 2012. That bill prohibited counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area

For me, this is a case where common sense and affordability outweigh any possible benefit. Simply put, S.B. 611 will help keep new homes affordable for Hawaii's families

Cost prohibitive

Based on a study commissioned by the BIA, it has been determined that the true cost of installing fire sprinklers in single family homes ranges, depending on where in the State you live. While some who oppose this bill question the need for larger meters, current code practice is clear – depending on the number of fixtures in the home, **larger meters are not optional** so each home will be much more expensive to build. The largest cost is from an upgraded water meter, which is required to support a sprinkler system. For a typical 3 bedroom, 2 bath single-family dwelling upgraded to a 1" meter:

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I **strongly support** S.B. 611 to keep residential sprinklers optional. Thank you for the opportunity to express our views on this matter.

Sincerely,

A handwritten signature in black ink, appearing to be "E. L.", with a long horizontal flourish extending to the right.

Group Vice President

Servco Home & Appliance Distribution

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Chair Baker, Vice-Chair Nishihara, and members of the committee:

My name is Evan Fujimoto, President of Graham Builders – a design+build general contracting company, and the 2017 President of the Building Industry Association of Hawaii (BIA-Hawaii).

Graham Builders and BIA-Hawaii are in **strong support** of S.B. 611 SD1, which repeals the June 30, 2017, expiration date of Act 83, SLH 2012, which prohibits counties from requiring installation or retrofitting of automatic fire sprinklers in (1) new or existing detached one- or two-family dwelling units used only for residential purposes; and (2) non-residential agricultural and aquacultural structures located outside an urban area

S.B. 611 will help keep new homes affordable for Hawaii's families. BIA-Hawaii is not against fire sprinklers, just the mandating of them.

Fire sprinkler suppression systems are EXPENSIVE

Our company is building a new 3 bedroom/2 bath home, modest in size at around 1,200 SF of living area, in Pauoa Valley for a local family of modest means. During permitting, we were informed that a fire sprinkler system would be required due to inadequate water flow at the fire hydrant, which is only about 30' from the property.

The cost to design and engineer the system was \$2,150. The installation cost is \$15,850; cutting and trenching 45' through an existing driveway and repairing it will add another \$5,000. That's \$23,000 in total costs before any builder mark-up and taxes. The owners did not anticipate these extra costs and they were barely able to qualify for their construction loan. For small builders like us, every job counts. Graham Builders feared the loss of this project when the fire sprinkler requirement came to light, which would have had a significant financial impact.

The true cost of installing fire sprinklers in single family homes ranges, depending on where in the State you live. The largest cost is from an upgraded water meter, which may be required depending on the size of the home, water pressure and distance from the water meter, to support a sprinkler system. For a typical 3 bedroom, 2 bath single-family dwelling upgraded to a 1" meter:

Oahu \$10,007.82 (1" meter) + \$25,826.67 (engineering & installation costs) = \$35,834.19

Maui \$33,356 (1" meter) + \$32,760.34 (engineering & installation costs) = \$66,116.34

Hawaii \$13,750 (1" meter) + \$26,902.80 (engineering & installation costs) = \$40,652.80

*Installation may require trenching through existing improvements such as driveways, sidewalks, etc.



These numbers are the minimum if a 1" meter is required. On Kauai, the cost of the meter alone is \$35,290. If a larger home is built, a larger meter is required at a much higher cost. For example, to upgrade to a 1 1/2" meter, it would cost \$71,948 on Maui and \$70,580 on Maui, just for the meter. Yearly sprinkler inspections add to the cost of maintenance.

With the median price of a new home on Oahu at approximately \$730,000.00, adding the cost of a fire sprinkler system and larger water meter will dramatically increase the price of a home. The National Association of Home Builders' 2016 data for Hawaii found that for every \$1,000 increase in new home price, 548 households are priced out of our housing market.

Statewide concern

Some legislators ask why the state should enact a law that is, ultimately, a county code issue. To begin with, the state adopts IBC codes through the State Building Code Council. In the case of fire sprinklers, however, we believe the state has a compelling interest to intervene to ensure that draconian code requirements that would SEVERELY IMPACT HOUSING AFFORDABILITY are NOT adopted.

In other words, fire sprinklers are of statewide concern because housing affordability is a statewide concern, as evidenced by the number of bills this session addressing affordable housing and homelessness. DEBEDT reported that Hawaii needs over 66,000 new housing units through 2015 and significantly adding costs to construction will be more of a barrier to new housing. Furthermore, the State Building Code Council works on codes with county officials that impact all the Counties, so it is not a home rule issue.

Imagine if each of the aforementioned 66,000 new homes required fire sprinkler systems. If the cost to install sprinklers for each home was \$16,000 (low end), that would be over \$1 billion! How can anyone say that would not impact housing affordability?

Working smoke detectors save lives

National organizations such as the American Red Cross advocate for a working smoke detector and an escape plan to help keep your family safe during a fire. According to the National Fire Protection Association (NFPA), the fire survival rate in homes with working smoke detectors is 99.41% and only rises to 99.6% with a sprinkler. However, the cost difference between the two systems is quite significant.

New homes are safer and older homes burn

New homes are constructed with technology that offers safer, more durable building materials and products than ever before. Interconnected smoke alarms, and other improvements mean you and your family are safer than ever.

The age of the home is an important piece of information when discussing residential fires, because various aspects of older homes can make them more prone to fires and more dangerous in the case one occurs. The leading causes of unintentional home structure fires are 1) cooking equipment, 2) heating equipment and 3) electrical distribution and lighting equipment. A strong relationship between housing age and the rate of electrical fires has been observed, with housing over 40 years old having the strongest association with electrical distribution fires.



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Based on data from the Honolulu Fire Department, 77% of fires occurring in residential structures between 2009 and 2015 involved homes built before 1980. Building codes have dramatically increased since 1980. The improvements to fire safety required by building codes do not evaporate with age, so it can be expected that homes built today will continue to outperform those built several generations ago.

BIA-Hawaii members would benefit

Many of BIA's members would benefit from a mandate, but they support keeping sprinklers optional because if no homes are built due to the increased cost, then there will be nowhere to install plumbing or supply piping. Furthermore, pipes filled with water within your walls and ceilings run the risk of leakage, leading to water damage and mold.

Not a national trend

Twenty-four States defeated a sprinkler mandate through their code adoption process and 20 States defeated the mandate legislatively. Only California, Maryland, and the District of Columbia have adopted a mandate.

We do not want to place homeowners or firefighters in unnecessary danger resulting from a one or two family structure fire. We believe that there are more cost-effective means available that would provide the same level of protection at a fraction of the cost of a new fire sprinkler system and larger water meter.

Our main concern is the impact a sprinkler mandate would have on the affordability of housing in Hawaii.

Building permit processing delays

If fire sprinklers were mandatory, the Fire Department would have to review every permit application and evaluate designs for code compliance. This would create a massive log jam of permit applications that could potentially add weeks to months of delays as plans are being reviewed.

We **strongly support** S.B. 611 to keep residential sprinklers optional. Thank you for the opportunity to express our views on this matter.

Sincerely,

Evan K. Fujimoto



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