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TESTIMONY OF SCOTT E. ENRIGHT CHAIRPERSON, BOARD OF AGRICULTURE

BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

FEBRUARY 15, 2017 8:40 A.M. CONFERENCE ROOM 312

HOUSE BILL NO. 777 HD1 RELATING TO AGRICULTURE

Chairperson Creagan and Members of the Committee:

Thank you for the opportunity to testify on House Bill No. 777 HD1 that seeks to allow gray water systems on agricultural land on Hawaii island with Land Study Bureau Overall Productivity Ratings of "C", "D", and "E" to provide farmers with an alternative source of irrigation water. The Department of Agriculture supports the intent of this measure and offers comments.

We do not understand the need to amend Section 205-2 to allow "gray water facilities" on agricultural lands. We understand that typical residential potable use for a four-person household is 400-600 gallons per day, so gray water output would be 320 to 480 gallons per day. Our estimate for planning purposes for daily irrigation water demand for most crops is 3,400 gallons per acre per day. Irrigation with gray water in the quantities estimated above will be sufficient for 4,150 to 6,150 square feet of cropland. We would hesitate recommending using gray water to irrigated directly-edible crops. With the Food Safety and Modernization Act, water sampling and appropriate water sourcing will question the use of gray water irrigation for certain crops. We would recommend irrigation only when the crop requires it, not because the gray water is available.

Thank you for the opportunity to testify on this measure.



SCOTT E. ENRIGHT Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER Deputy to the Chairperson



ON THE FOLLOWING MEASURE: H.B. NO. 777, H.D. 1, RELATING TO AGRICULTURE. BEFORE THE: HOUSE COMMITTEE ON AGRICULTURE DATE: Wednesday, February 15, 2017 TIME: 8:40 a.m. LOCATION: State Capitol, Room 312 TESTIFIER(S): Douglas S. Chin, Attorney General, or Dawn T. Apuna, Deputy Attorney General

Chair Creagan and Members of the Committee:

The Department of the Attorney General provides the following comments on this bill.

The purpose of this bill is to allow gray water facilities on C, D, and E rated lands in the state agricultural district on an island greater than four thousand square miles in size by amending section 205-2(d), Hawaii Revised Statutes (HRS).

Section 205-2(d)(7), HRS, already allows uses and facilities that are accessory to agricultural activities in the state agricultural uses. Gray water facilities for the purpose of irrigating crops are thereby currently allowed in the agricultural district under section 205-2(d), HRS. The portion of the bill that amends section 205-2(d), HRS, is therefore unnecessary and should be deleted.

Section 342D-70, HRS, provides that the Department of Health may authorize counties to implement gray water recycling water programs for the limited purpose of irrigating lawns and gardens. Upon request and after receiving further guidance from Representative Creagan, we have drafted the following subsection (d) to be added to section 342D-70, HRS, as follows:

"(d) Notwithstanding subsections (a), (b), and (c), any person may use gray water for agricultural farming purposes subject to the following conditions:

 The use is on land classified as agricultural, on a lot greater than one acre in size, and on an island greater than four thousand square miles in area; Testimony of the Department of the Attorney General Twenty-Ninth Legislature, 2017 Page 2 of 2

- (2) The use is on soil classified by the land study bureau's detailed land classification as overall (master) productivity rating class C, D, or E;
- (3) The use is solely for agricultural irrigation; and
- (4) The water used is not more than 200 gallons per day from a water catchment system.

As used in this subsection, "gray water" means any untreated wastewater that has not come into contact with toilet waste. Gray water includes water from bathtubs, showers, and bathroom wash basins and water from clothes washers and laundry tubs; provided that the water is not contaminated with any household hazardous waste as defined in section 342G-1 or hazardous waste as defined in section 342J-2. Gray water excludes wastewater from food preparation sinks or dishwashers."

We hope the proposed wording is consistent with Representative

Creagan's request.

From:	mailinglist@capitol.hawaii.gov		
Sent:	Monday, February 13, 2017 10:40 PM		
То:	AGRtestimony		
Cc:	sustainablesakala@gmail.com		
Subject:	Submitted testimony for HB777 on Feb 15, 2017 08:40AM		

<u>HB777</u>

Submitted on: 2/13/2017 Testimony for AGR on Feb 15, 2017 08:40AM in Conference Room 312

Submitted By	Organization	Testifier Position	Present at Hearing
Steve Sakala	Hawaii Farmers Union United Kona Chapter	Support	No

Comments: Aloha Committee Members, I'm writing in complete support of this bill to allow farmers to use grey water systems. Many of the farmers on the Big Island continually deal with water shortage due to long dry seasons, insufficient water storage capacity and other environmental conditions. Grey water systems would allow for farmers to take advantage of this captured resource in the form of not just water but nutrients as well. We appreciate your consideration in support of this bill. Mahalo, Steve Sakala President, Kona Chapter HFUU Owner, Honaunau Farm

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, 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.

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February 15, 2017

HEARING BEFORE THE HOUSE COMMITTEE ON AGRICULTURE

> TESTIMONY ON HB 777, HD1 RELATING TO AGRICULTURE

> > Room 312 8:40 AM

Aloha Chair Creagan, Vice Chair DeCoite, and Members of the Committee:

I am Randy Cabral, President of the Hawaii Farm Bureau (HFB). Organized since 1948, the HFB is comprised of 1,900 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

The Hawaii Farm Bureau offers the following comments on HB 777, HD1, which would allow those on agricultural land in Hawaii county (only) to use gray water systems. HFB supports measures that will benefit Hawaii's farmers and ranchers and that are protective of human and environmental health.

Over at least the last 30 years, HFB has participated in efforts by the State Department of Health (DOH) to establish fair and reasonable policies and rules that affect agriculture, while ensuring public and environmental health and safety.

HB 777, HD1 apparently expands the permitted use of gray water systems to all occupants of agricultural land on Hawaii Island. Because this measure raises issues that have been contemplated by DOH and its working groups, HFB defers to the expertise of the department to address those concerns. We note that because of DOH's previously identified concerns and the limitations of safely reusing household gray water, the bill may only benefit residential gardeners, but not commercial farmers.

The bill cites the "DOH Guidelines for the Reuse of Gray Water", that was published to provide for the **residential** use of gray water resources while protecting a family's health, that of the neighborhood, and the environment. The Guidelines restricted gray water use to residential only because of health risks and safety issues associated with its use. The Guidelines include precautions that must be taken to "significantly reduce the potential of coming in contact with gray water, for both residents and non-residents."

These include the caveat that the landscape must be irrigated by **subsurface** methods alone because many of the contaminants in gray water are harmful to health, especially if the water is ingested or there is physical contact with it, especially through skin abrasions.

The Guidelines emphasize that homeowners who irrigate even just their lawns with gray water need to understand the risks and safety issues associated with such use. They are warned to know the constituents of their gray water as well as their potential effects on human, soil, plant and environmental health.

The use of spray irrigation to apply gray water is prohibited. **Furthermore, gray water** is prohibited from being used to irrigate root crops, vegetables that will be eaten raw, or other crops where the consumed portion of the plant rests on the ground.

The Guidelines state that gray water should be used to irrigate established lawns and plants and that seedlings and barren areas where a potential for runoff and/or ponding exists should not be irrigated with gray water. It also cautions that bacteria can accumulate and grow in a gray water holding system.

Hawaii Farm Bureau appreciates the opportunity to provide these comments and looks forward to working with you to help farmers provide food and other agricultural products to Hawaii's people.