

MAR 10 2017

SENATE RESOLUTION

REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES TO
SUPPORT THE USE OF AUTONOMOUS UNMANNED SURFACE VESSEL
TECHNOLOGY TO DETECT AND CLEAN UP OCEAN DEBRIS BEFORE IT
REACHES HAWAII'S REEFS AND BEACHES.

1 WHEREAS, Hawaii's beaches are covered with marine debris in
2 the form of pieces of plastic, bottles, nylon nets, and other
3 floating objects of man-made pollution that the Pacific Ocean
4 currents and winds continuously bring to the Hawaiian islands;
5 and

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7 WHEREAS, to protect Hawaii's reefs and aquatic habitats, it
8 is necessary to remove macro and microplastic debris from the
9 oceans; and

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11 WHEREAS, these plastic particles decompose but never
12 biodegrade, breaking down into polymers and then into molecular
13 size pieces which are invisible to the naked eye, and remain
14 suspended in the upper water column; and

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16 WHEREAS, these decomposed plastics release polychlorinated
17 biphenyl (PCB) and other known toxic chemicals which are
18 ingested by Hawaii's birds, Hawaiian monk seals, and fish; and

19
20 WHEREAS, fish ingesting the toxic PCB are in turn consumed
21 by humans; and

22
23 WHEREAS, the floating pollution made up mostly of plastic
24 aggregate accumulates in large gyres in the Central and Western
25 Pacific before finding its way to Hawaii; and

26
27 WHEREAS, this plastic debris now threatens the beauty of
28 the Hawaiian islands, its tourism industry, its wildlife, and
29 the health of its people; and
30



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1 WHEREAS, an inventor from Kailua developed an autonomous
2 unmanned surface vessel (AUSV) system that is capable of
3 cleaning up floating ocean debris; and

4
5 WHEREAS, this AUSV technology is used by Clear Blue Sea, a
6 nonprofit entity, to help clean the ocean; and

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8 WHEREAS, the mission of Clear Blue Sea is to ensure the
9 survival of the marine ecosystem and the health of the maritime
10 economy by removing macro and microplastic debris from the
11 oceans; and

12
13 WHEREAS, it is estimated that marine debris in the Pacific
14 ocean causes about \$1,270,000,000 in damage per year to the
15 fishing, shipping, and marine tourism industries; and

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17 WHEREAS, Clear Blue Sea has the capability of cleaning
18 ocean trash gyres, such as the great Pacific ocean garbage
19 patch, which is significantly far away from land, in a cost-
20 effective and safe manner; and

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22 WHEREAS, ocean going AUSVs are managed by satellite and can
23 remove millions of tons of plastic debris from the remote
24 Pacific gyres where the plastic congregates before being carried
25 to Hawaii; and

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27 WHEREAS, satellite control of the AUSV drones and ocean
28 research on drone technology is an economic niche that takes
29 advantage of Hawaii's unique location; and

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31 WHEREAS, the development of AUSV drone technology may help
32 diversify Hawaii's economy and provide future jobs in the high
33 tech industry; and

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35 WHEREAS, in addition to the potential economic benefits of
36 AUSV technology, the use of such technology to help clean
37 Hawaii's beaches of plastic debris will help protect Hawaii's
38 ocean wildlife and keep the beaches clean for all to enjoy; now,
39 therefore,

40
41 BE IT RESOLVED by the Senate of the Twenty-ninth
42 Legislature of the State of Hawaii, Regular Session of 2017,



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1 that the Department of Land and Natural Resources is requested
 2 support the use of AUSV technology to detect and clean up ocean
 3 debris before it reaches Hawaii's reefs and beaches; and
 4

5 BE IT FURTHER RESOLVED that the Department of Land and
 6 Natural Resources evaluate the benefits of using the AUSV system
 7 utilized by Clear Blue Sea; and
 8

9 BE IT FURTHER RESOLVED that certified copies of this
 10 Resolution be transmitted to the Chairperson of the Board of
 11 Land and Natural Resources and President of Clear Blue Sea.
 12
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 14

OFFERED BY:

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