
SENATE CONCURRENT RESOLUTION

REQUESTING THE DEPARTMENT OF LAND AND NATURAL RESOURCES, IN
COLLABORATION WITH THE NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION, TO EXPLORE THE POSSIBILITY OF USING
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 macroplastic and microplastic debris from
9 the 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 sized 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

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

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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

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1 WHEREAS, this plastic debris now threatens the beauty of
2 the Hawaiian islands, its tourism industry, its wildlife, and
3 the health of its people; and
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5 WHEREAS, an inventor from Kailua developed an autonomous
6 unmanned surface vessel (AUSV) system that is capable of
7 cleaning up floating ocean debris; and
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9 WHEREAS, it is estimated that marine debris in the Pacific
10 ocean causes about \$1,270,000,000 in damage per year to the
11 fishing, shipping, and marine tourism industries; and
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13 WHEREAS, AUSV technology may have the capability of
14 cleaning ocean trash gyres, such as the great Pacific garbage
15 patch, which is significantly far away from land, in a cost-
16 effective and safe manner; and
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18 WHEREAS, ocean-going AUSVs are managed by satellite and can
19 remove millions of tons of plastic debris from the remote
20 Pacific gyres where the plastic congregates before being carried
21 to Hawaii; and
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23 WHEREAS, satellite control of the AUSV drones and ocean
24 research on drone technology is an economic niche that takes
25 advantage of Hawaii's unique location; and
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27 WHEREAS, the development of AUSV drone technology may help
28 diversify Hawaii's economy and provide future jobs in the high
29 tech industry; and
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31 WHEREAS, in addition to the potential economic benefits of
32 AUSV technology, the use of such technology to help clean
33 Hawaii's beaches of plastic debris will help protect Hawaii's
34 ocean wildlife and keep the beaches clean for all to enjoy; now,
35 therefore,
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37 BE IT RESOLVED by the Senate of the Twenty-ninth
38 Legislature of the State of Hawaii, Regular Session of 2017, the
39 House of Representatives concurring, that the Department of Land
40 and Natural Resources is requested to, in collaboration with the
41 National Oceanic and Atmospheric Administration, explore the
42 possibility of using autonomous unmanned surface vessel



1 technology to detect and clean up ocean debris before it reaches
2 Hawaii's reefs and beaches; and

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4 BE IT FURTHER RESOLVED that certified copies of this
5 Concurrent Resolution be transmitted to the Chairperson of the
6 Board of Land and Natural Resources and National Oceanic and
7 Atmospheric Administration Pacific Islands Regional Office.

