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**HOUSE JOINT MEMORIAL 4000**

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**State of Washington**

**66th Legislature**

**2019 Regular Session**

**By** Representatives Shea, Fitzgibbon, Dent, Goodman, Eslick, Sells, Stokesbary, Tharinger, DeBolt, Fey, Walsh, Ryu, Maycumber, Blake, Kretz, and Doglio

Prefiled 12/06/18.

1 TO EACH MEMBER OF CONGRESS FROM THE STATE OF WASHINGTON, AND TO  
2 JAY INSLEE, THE GOVERNOR OF WASHINGTON STATE, AND TO THE DIRECTORS OF  
3 THE PACIFIC NORTHWEST AND ROCKY MOUNTAIN RESEARCH STATIONS OF THE  
4 UNITED STATES FOREST SERVICE, AND TO THE UNITED STATES FOREST SERVICE  
5 REGION 6 REGIONAL FORESTER, AND TO THE UNITED STATES FOREST SERVICE  
6 DEPUTY CHIEF FOR STATE AND PRIVATE FORESTRY, AND TO THE PRESIDENTS OF  
7 THE WASHINGTON STATE UNIVERSITY AND THE UNIVERSITY OF WASHINGTON, AND  
8 TO THE DIRECTORS OF THE WASHINGTON STATE DEPARTMENT OF ECOLOGY AND  
9 THE WASHINGTON STATE DEPARTMENT OF AGRICULTURE, AND TO THE WASHINGTON  
10 STATE COMMISSIONER OF PUBLIC LANDS:

11 We, your Memorialists, the Senate and House of Representatives of  
12 the State of Washington, in legislative session assembled,  
13 respectfully represent and petition as follows:

14 WHEREAS, Biochar is a carbon rich solid produced for  
15 noncombustion purposes by the thermochemical conversion of organic  
16 matter; and

17 WHEREAS, An important coproduct of biochar production is energy  
18 in thermal, gaseous, electrical, and liquid fuel forms; and

19 WHEREAS, Biochar can be produced from many forms of organic  
20 matter including: Whole trees, residual forest materials, wood chips,  
21 seaweed, food processing waste, demolition waste, wheat straw, and  
22 many other forms of agricultural and municipal waste; and

1       WHEREAS, People working for the United States Forest Service, the  
2 Washington State University, the University of Washington, and the  
3 Washington State Department of Ecology have been researching the use  
4 of biochar and found that several potential markets exist for the  
5 product, including as agricultural soil amendments, reforestation  
6 treatments, pollution remediation, animal feed, and landscaping  
7 material; and

8       WHEREAS, Forest health activities to thin forests, decrease fuel  
9 loads, and remove trees killed by insects and disease can be  
10 expensive because there are currently few markets for small roundwood  
11 and virtually no markets for residual material, such as tops and  
12 limbs; and

13       WHEREAS, Biochar provides a potential economic use for woody  
14 biomass that can help offset forest fuel reduction project costs,  
15 which means more acres can be treated; and

16       WHEREAS, Removing excess forest biomass for use as a feedstock  
17 for biochar can minimize the severity of wildfires; and

18       WHEREAS, The Agricultural Research Service has found that the  
19 addition of biochar to soils may increase soil carbon, soil nutrient  
20 content, and plant productivity; and

21       WHEREAS, Biochar can increase the economic value and productivity  
22 of Washington soils and benefit Washington farmers by reducing  
23 expenditures for irrigation and fertilizer while increasing soil pH  
24 and yields; and

25       WHEREAS, Designer biochars can be produced from different  
26 feedstocks with varying production techniques to enhance or diminish  
27 specific attributes; and

28       WHEREAS, Biochar is a porous material that retains water which  
29 can reduce drought risk and irrigation inputs to farms, urban  
30 landscaping, and recreational facilities; and

31       WHEREAS, United States Forest Service studies have found that  
32 biochar in soils attracts and holds water, increases ion exchange  
33 capacity, makes soil more porous, and enhances absorption of organic  
34 compounds, all of which enhance soil productivity and facilitate  
35 plant growth to reduce erosion and restore compacted, oxidized, and  
36 degraded soils; and

37       WHEREAS, Biochar can be used in filters, such as those used in  
38 water treatment facilities, and well-established markets exist for  
39 activated carbon; and

1       WHEREAS, Biochar can be used for remediation projects to absorb  
2 pollutants destined for our wells, rivers, lakes, and oceans; and

3       WHEREAS, Biochar is modeled after "terra preta" a process used  
4 thousands of years ago in Brazil's Amazon basin where indigenous  
5 people created plots of rich, fertile soils that continue to hold  
6 carbon today and remain nutrient rich; and

7       WHEREAS, Biochar can store carbon in the ground that may  
8 otherwise be released into the atmosphere from wildfires or  
9 decomposition; and

10       WHEREAS, Biochar can be fed to ruminants to increase weight gain,  
11 and its application can also reduce methane emissions from manure and  
12 compost piles; and

13       WHEREAS, Washington State is a national leader in the advancement  
14 of biochar research, development, and early commercialization; and

15       WHEREAS, The production, placement, and benefits of biochar can  
16 enhance rural economic development and employment;

17       NOW, THEREFORE, Your Memorialists respectfully affirm their  
18 support for the research efforts of the United States Forest Service,  
19 the Agricultural Research Service of the United States Department of  
20 Agriculture, the Washington State University, the Washington State  
21 Department of Ecology, and other institutions to produce biochar from  
22 the removal of wildfire fuel loads from the forest floor, waste  
23 agricultural products, and other waste biomass destined for landfills  
24 or combustion; and support the research of biochar as an animal feed,  
25 remediation tool, landscaping material, and soil amendment for forest  
26 and agricultural lands.

27       BE IT RESOLVED, That copies of this Memorial be immediately  
28 transmitted to Jay Inslee, the Governor of Washington State; the  
29 Directors of the Pacific Northwest and Rocky Mountain Research  
30 Stations of the United States Forest Service; the United States  
31 Forest Service Region 6 Regional Forester; the United States Forest  
32 Service Deputy Chief for State and Private Forestry; the Presidents  
33 of the Washington State University and the University Of Washington;  
34 the Directors of the Washington State Department of Ecology and the  
35 Washington State Department of Agriculture; the Washington State  
36 Commissioner of Public Lands; and each member of Congress from the  
37 State of Washington.

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