

**AMENDMENT TO THE AMENDMENT IN THE  
NATURE OF A SUBSTITUTE TO H.R. \_\_\_\_\_  
OFFERED BY MS. BONAMICI OF OREGON**

Add at the end of title VI the following:

1 **SEC. 6 \_\_\_\_ . TECHNOLOGY DEVELOPMENT FOR WILDLAND**  
2 **FIRE SCIENCE, MANAGEMENT, AND MITIGA-**  
3 **TION.**

4 (a) IN GENERAL.—The Administrator, acting  
5 through the Associate Director of the Earth Science Divi-  
6 sion for Earth Action, shall establish a project for science  
7 and technology development for wildland fire management  
8 and mitigation (referred to in this section as  
9 “FireSense”).

10 (b) PURPOSE.—The purpose of FireSense is to co-  
11 develop, deploy, and support NASA’s application of ad-  
12 vanced science, data, and technology capabilities to enable  
13 measurable improvement in United States wildland fire  
14 management and mitigation across the fire cycle, includ-  
15 ing pre-fire, active fire, and post-fire phases.

16 (c) OBJECTIVES.—In establishing FireSense, the Ad-  
17 ministrator shall seek input from relevant stakeholders  
18 and shall align FireSense with the goal for NASA’s Earth  
19 science and applications program set forth in section

1 60501 of title 51, United States Code, consider relevant  
2 recommendations of the most recent decadal survey on  
3 Earth science and applications from space, and shall, to  
4 the extent practicable, focus on the following objectives:

5 (1) Enhanced predictive modeling and early  
6 warning systems for wildland fire detection and pre-  
7 vention.

8 (2) Developing remote sensing technologies and  
9 data analysis tools to monitor fire-prone areas.

10 (3) Transitioning wildland fire management  
11 technologies to operational users, including agencies,  
12 private sector entities, and academic institutions.

13 (4) Conducting research to understand the im-  
14 pacts of climate change on wildland fire frequency  
15 and intensity.

16 (5) Supporting post-fire recovery and ecosystem  
17 restoration through advanced technologies and data.

18 (6) Providing necessary technical assistance to  
19 operational users to receive, process, and make use  
20 of wildland fire science, data, and technology re-  
21 sources.

22 (7) Any additional objectives as determined nec-  
23 essary by the Administrator to satisfy the purpose  
24 described in subsection (b).

1 (d) INTERAGENCY COORDINATION.—In implementing  
2 FireSense, the Administrator shall, as practicable and ap-  
3 propriate, coordinate with relevant Federal, State, and  
4 local agencies to support wildland fire science, data, and  
5 technology development activities across all phases of the  
6 fire cycle, including prevention, detection, response, and  
7 recovery.

8 (e) OPERATIONAL SUPPORT.—The Administrator  
9 shall, to the extent practicable and in collaboration with  
10 other relevant Federal agencies, continue to provide nec-  
11 essary scientific and technical support to enhance wildland  
12 fire mitigation efforts to operational users, including the  
13 following:

14 (1) Relevant Federal agencies, as determined  
15 appropriate by the Administrator.

16 (2) State, local, and Tribal governments and or-  
17 ganizations.

18 (3) Private sector entities.

19 (4) Academic institutions, including colleges,  
20 universities, and wildland fire research institutions.

21 (f) DATA SHARING AND COLLABORATION.—The Ad-  
22 ministrator shall facilitate the sharing of data, tools, and  
23 research findings with operational users and other rel-  
24 evant stakeholders to ensure effective use of NASA's capa-  
25 bilities in wildland fire management.

1 (g) FIRESENSE PROJECT EVALUATION.—The Ad-  
2 ministrator shall periodically evaluate the effectiveness of  
3 FireSense and make necessary adjustments to improve its  
4 impact on wildland fire management.

5 (h) REPORT.—Not later than one year after the date  
6 of the enactment of this Act and annually thereafter for  
7 five years, the Administrator shall submit to the appro-  
8 priate committees of Congress a report on the activities  
9 and accomplishments of FireSense, including the fol-  
10 lowing:

11 (1) An assessment of interagency coordination  
12 efforts.

13 (2) FireSense’s impact on wildland fire man-  
14 agement efforts.

15 (3) A list of emerging wildland fire manage-  
16 ment technologies and opportunities that may be  
17 considered for further research, development, dem-  
18 onstration, and deployment.

19 (4) An assessment of existing challenges to ef-  
20 fective coordination with operational users, including  
21 State, local, and Tribal governments.

