

117TH CONGRESS  
1ST SESSION

# H. R. 4832

To establish the Open Access Evapotranspiration (OpenET) Data Program.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 29, 2021

Mrs. LEE of Nevada (for herself, Mr. STEWART, and Mr. HUFFMAN) introduced the following bill; which was referred to the Committee on Natural Resources

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## A BILL

To establish the Open Access Evapotranspiration (OpenET) Data Program.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Open Access  
5 Evapotranspiration Data Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) **EVAPOTRANSPIRATION.**—The term  
9 “evapotranspiration” means the process by which

1 water is transferred from the land to the atmosphere  
2 by—

3 (A) evaporation from soil and other sur-  
4 faces; and

5 (B) transpiration from plants.

6 (2) PROGRAM.—The term “program” means  
7 the Open Access Evapotranspiration (OpenET) Data  
8 Program established under section 4(a).

9 (3) PROGRAM PARTNER.—The term “program  
10 partner” means—

11 (A) an institution of higher education;

12 (B) a State (including a State agency);

13 (C) a private sector entity;

14 (D) a nongovernmental organization; or

15 (E) any other entity determined to be ap-  
16 propriate by the Secretary.

17 (4) SECRETARY.—The term “Secretary” means  
18 the Secretary of the Interior, acting through the Di-  
19 rector of the United States Geological Survey.

20 **SEC. 3. FINDINGS.**

21 Congress finds that—

22 (1) evapotranspiration is the second largest  
23 component of the water budget, which is an account-  
24 ing of the allocation of water resources to various  
25 water uses;

1           (2) evapotranspiration is a measure of the  
2 water that is consumed and lost from a water sys-  
3 tem, removed from available supplies, and unavail-  
4 able for other uses within a watershed;

5           (3) accurate information on evapotranspiration  
6 is required to balance water supply and water de-  
7 mand in a watershed and ensure that adequate  
8 water supplies for beneficial uses are available over  
9 time;

10          (4) water users and managers are impeded in  
11 more efficient decisionmaking by—

12               (A) the lack of consistent and comprehen-  
13 sive water use data; and

14               (B) the fact that access to existing data is  
15 often limited and cost-prohibitive; and

16          (5) evapotranspiration data may be applied for  
17 the purposes of—

18               (A) assisting users and decisionmakers to  
19 better manage resources and protect financial  
20 viability of farm operations during drought;

21               (B) developing more accurate water budg-  
22 ets and innovative management programs to  
23 better promote conservation and sustainability  
24 efforts; and

1 (C) employing greater groundwater man-  
2 agement practices and understanding impacts  
3 of consumptive water use.

4 **SEC. 4. OPEN ACCESS EVAPOTRANSPIRATION (OPENET)**  
5 **DATA PROGRAM.**

6 (a) ESTABLISHMENT.—The Secretary shall establish  
7 an Open Access Evapotranspiration (OpenET) Data Pro-  
8 gram under which the Secretary shall provide for the deliv-  
9 ery of satellite-based evapotranspiration data—

10 (1) to advance the quantification of evaporation  
11 and consumptive water use; and

12 (2) to provide data users with field-scale esti-  
13 mates of evapotranspiration data across large land-  
14 scapes over certain periods of time.

15 (b) PURPOSE.—The purpose of the program is to  
16 support the operational distribution of satellite-based  
17 evapotranspiration data generated under the program to  
18 sustain and enhance water resources in the United States.

19 (c) DUTIES.—In carrying out the program, the Sec-  
20 retary shall—

21 (1) evaluate, use, and modify sources of sat-  
22 ellite-based evapotranspiration data based on best  
23 available science and technologies; and

24 (2) coordinate and consult with—

1 (A) the heads of other relevant Federal  
2 agencies, including—

3 (i) the Commissioner of Reclamation;

4 (ii) the Administrator of the National  
5 Aeronautics and Space Administration;

6 (iii) the Administrator of the National  
7 Oceanic and Atmospheric Administration;

8 (iv) the Administrator of the Agricul-  
9 tural Research Service; and

10 (v) the Chief of the Natural Resources  
11 Conservation Service; and

12 (B) program partners.

13 (d) COMPONENTS.—In carrying out the program, the  
14 Secretary shall carry out activities that would develop,  
15 maintain, establish, expand, or advance delivery of sat-  
16 ellite-based evapotranspiration data to advance the quan-  
17 tification of evaporation and consumptive water use, with  
18 an emphasis on carrying out activities that would—

19 (1) support the development and maintenance  
20 of evapotranspiration data and software systems and  
21 associated research and development in a manner  
22 that ensures that program data are reflective of the  
23 best available science, including by providing support  
24 to program partners, or coordinating activities with  
25 other programs within the Department of the Inte-

1 rior, that have developed and are maintaining  
2 evapotranspiration software systems and datasets;

3 (2) demonstrate or test new and existing  
4 evapotranspiration measurement technology;

5 (3) improve evapotranspiration measurement  
6 science and technology; and

7 (4) develop or refine the application of satellite-  
8 based evapotranspiration data available to Federal  
9 agencies, States, and Indian Tribes, including the  
10 integration of program data into—

11 (A) the Water Availability and Use Science  
12 Program, the National Water Census, and Inte-  
13 grated Water Availability Assessments by the  
14 United States Geological Survey; and

15 (B) activities under the WaterSMART pro-  
16 gram authorized by subtitle F of title IX of the  
17 Omnibus Public Land Management Act of 2009  
18 (42 U.S.C. 10361 et seq.).

19 (e) USE AND AVAILABILITY OF PROGRAM DATA.—  
20 The Secretary—

21 (1) shall incorporate, to the maximum extent  
22 practicable, program information and data for pur-  
23 poses of determining consumptive water use on irri-  
24 gated or other vegetated landscapes for use in water

1 allocation decisions, water budget accounting, and  
2 water use reporting;

3 (2) shall coordinate data analyses, use, and col-  
4 lection efforts with other Federal agencies, States,  
5 and Tribal governments through existing coordi-  
6 nating organizations, such as—

7 (A) the Western States Water Council; and

8 (B) the Western States Federal Agency  
9 Support Team; and

10 (3) may provide information collected and ana-  
11 lyzed under the program to program partners  
12 through appropriate mechanisms, including through  
13 interagency agreements with Federal agencies,  
14 States (including State agencies), or Indian Tribes,  
15 leases, contracts, cooperative agreements, grants,  
16 loans, and memoranda of understanding.

17 (f) COOPERATIVE AGREEMENTS.—The Secretary  
18 shall—

19 (1) enter into cooperative agreements with pro-  
20 gram partners to provide for the efficient and cost-  
21 effective administration of the program, including  
22 through cost-sharing or by providing additional in-  
23 kind resources necessary to carry out the program;  
24 and

1           (2) provide nonreimbursable matching funding  
2           for programmatic and operational activities under  
3           this section, in consultation with program partners.

4           (g) ENVIRONMENTAL LAWS.—Nothing in this Act  
5           modifies any obligation of the Secretary to comply with  
6           applicable Federal and State environmental laws in car-  
7           rying out this Act.

8           **SEC. 5. REPORT.**

9           Not later than 4 years after the date of enactment  
10          of this Act, the Secretary shall submit to the Committees  
11          on Energy and Natural Resources, Agriculture, Nutrition,  
12          and Forestry, and Appropriations of the Senate and the  
13          Committees on Natural Resources, Agriculture, and Ap-  
14          propriations of the House of Representatives a report that  
15          includes—

16               (1) a status update on the operational incorpora-  
17               tion of program data into modeling, water plan-  
18               ning, and reporting efforts of relevant Federal agen-  
19               cies, including the Water Availability and Use  
20               Science Program of the United States Geological  
21               Survey and the WaterSMART program authorized  
22               by subtitle F of title IX of the Omnibus Public Land  
23               Management Act of 2009 (42 U.S.C. 10361 et seq.);  
24               and



1           (2) a list of Federal agencies and program part-  
2           ners that are applying program data to beneficial  
3           use, including a description of examples of beneficial  
4           uses.

5 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

6           There is authorized to be appropriated to the Sec-  
7           retary to carry out this Act \$14,000,000 for each of fiscal  
8           years 2022 through 2026, to remain available until ex-  
9           pended.

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