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

IN THE SENATE OF THE UNITED STATES

Ms. Cortez Masto introduced the following bill; which was read twice and referred to the Committee on ____________________

A BILL

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

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

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

SEC. 2. DEFINITIONS.

In this Act:

(1) EVAPOTRANSPIRATION.—The term “evapotranspiration” means the process by which water is transferred from the land to the atmosphere by—
(A) evaporation from soil and other surfaces; and

(B) transpiration from plants.

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

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

(A) an institution of higher education;

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

(C) a private sector entity;

(D) a nongovernmental organization; or

(E) any other entity determined to be appropriate by the Secretary.

(4) SECRETARY.—The term “Secretary” means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

SEC. 3. FINDINGS.

Congress finds that—

(1) evapotranspiration is the second largest component of the water budget, which is an accounting of the allocation of water resources to various water uses;

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

(3) accurate information on evapotranspiration is required to balance water supply and water demand in a watershed and ensure that adequate water supplies for beneficial uses are available over time;

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

(A) the lack of consistent and comprehensive water use data; and

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

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

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

(B) developing more accurate water budgets and innovative management programs to better promote conservation and sustainability efforts; and

(C) employing greater groundwater management practices and understanding impacts of consumptive water use.
SEC. 4. OPEN ACCESS EVAPOTRANSPARATION (OPENET) DATA PROGRAM.

(a) Establishment.—The Secretary shall establish an Open Access Evapotranspiration (OpenET) Data Program under which the Secretary shall provide for the delivery of satellite-based evapotranspiration data—

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

(2) to provide data users with field-scale estimates of evapotranspiration data across large landscapes over certain periods of time.

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

(c) Duties.—In carrying out the program, the Secretary shall—

(1) evaluate, use, and modify sources of satellite-based evapotranspiration data based on best available science and technologies; and

(2) coordinate and consult with—

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

(i) the Commissioner of Reclamation;

(ii) the Administrator of the National Aeronautics and Space Administration;
(iii) the Administrator of the National Oceanic and Atmospheric Administration;

(iv) the Administrator of the Agricultural Research Service; and

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

(B) program partners.

(d) COMPONENTS.—In carrying out the program, the Secretary shall carry out activities that would develop, maintain, establish, expand, or advance delivery of satellite-based evapotranspiration data to advance the quantification of evaporation and consumptive water use, with an emphasis on carrying out activities that would—

(1) support the development and maintenance of evapotranspiration data and software systems and associated research and development in a manner that ensures that program data are reflective of the best available science, including by providing support to program partners, or coordinating activities with other programs within the Department of the Interior, that have developed and are maintaining evapotranspiration software systems and datasets;

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

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

(A) the Water Availability and Use Science Program, the National Water Census, and Integrated Water Availability Assessments by the United States Geological Survey; and

(B) activities under the WaterSMART program authorized by subtitle F of title IX of the Omnibus Public Land Management Act of 2009 (42 U.S.C. 10361 et seq.).

(e) USE AND AVAILABILITY OF PROGRAM DATA.—

The Secretary—

(1) shall incorporate, to the maximum extent practicable, program information and data for purposes of determining consumptive water use on irrigated or other vegetated landscapes for use in water allocation decisions, water budget accounting, and water use reporting;

(2) shall coordinate data analyses, use, and collection efforts with other Federal agencies, States,
and Tribal governments through existing coordinating organizations, such as—

(A) the Western States Water Council; and

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

(3) may provide information collected and analyzed under the program to program partners through appropriate mechanisms, including through interagency agreements with Federal agencies, States (including State agencies), or Indian Tribes, leases, contracts, cooperative agreements, grants, loans, and memoranda of understanding.

(f) COOPERATIVE AGREEMENTS.—The Secretary shall—

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

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

(g) ENVIRONMENTAL LAWS.—Nothing in this Act modifies any obligation of the Secretary to comply with
applicable Federal and State environmental laws in carrying out this Act.

SEC. 5. REPORT.

Not later than 4 years after the date of enactment of this Act, the Secretary shall submit to the Committees on Energy and Natural Resources, Agriculture, Nutrition, and Forestry, and Appropriations of the Senate and the Committees on Natural Resources, Agriculture, and Appropriations of the House of Representatives a report that includes—

(1) a status update on the operational incorporation of program data into modeling, water planning, and reporting efforts of relevant Federal agencies, including the Water Availability and Use Science Program of the United States Geological Survey and the WaterSMART program authorized by subtitle F of title IX of the Omnibus Public Land Management Act of 2009 (42 U.S.C. 10361 et seq.); and

(2) a list of Federal agencies and program partners that are applying program data to beneficial use, including a description of examples of beneficial uses.
SEC. 6. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Secretary to carry out this Act $14,000,000 for each of fiscal years 2022 through 2026, to remain available until expended.