

AWSC TR letter.002

## STATE OF COLORADO

### OFFICE OF THE STATE ENGINEER

Division of Water Resources  
Department of Natural Resources

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Received  
OCT 24 2006  
Chief Hydrologist

Bill Owens  
Governor  
Russell George  
Executive Director  
Hal D. Simpson, P.E.  
State Engineer

October 16, 2006

Mr. Robert M. Hirsch  
Associate Director for Water  
U. S. Geological Survey  
409 National Center  
Reston VA 20192

Dear Mr. Hirsch:

Re: **Association of Western State Engineers Position Statement  
Landsat Data Continuity Program**

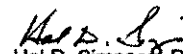
The Association of Western State Engineers (AWSE) was established in 1928 and represents eighteen Western states. The membership comprises either the State Engineer of each member state or agency directors responsible for water allocation and water rights within the state.

As you know, the West is characterized by its aridity, and water availability controls our economic and environmental well-being and quality of life. Our role is to manage the water resources of our states in a manner to maximize the beneficial use of our most precious resource.

The AWSE held its annual meeting in Estes Park, Colorado, and on September 20, 2006 passed the above referenced position statement. I am enclosing this position statement for your information and with the hope that you will support this resolution.

If you have any questions on this position statement, please feel free to contact me.

Sincerely,

  
Hal D. Simpson, President  
Association of Western State Engineers

## **ASSOCIATION OF WESTERN STATE ENGINEERS**

### **POSITION STATEMENT**

#### **LANDSAT DATA CONTINUITY PROGRAM**

The Association of Western State Engineers hereby expresses its strong support for maintaining a thermal band as part of the Landsat Data Continuity Program. This information is increasingly critical for the management of western water resources, particularly agricultural water use. The current Landsat thermal band provides data vitally important to the computation of evapotranspiration and water use on a field-by-field basis. Specifically, the Surface Energy Balance Algorithm for Land (SEBAL) and other similar algorithms rely on thermal data from the Landsat satellites to compute evapotranspiration for water management uses.

The Landsat data archive holds thermal data going back to the launch of Landsat 4 in 1982. We understand that current plans call for a new Landsat satellite to back up and replace the aging and failing Landsat 5 and Landsat 7, and that a request for proposals includes a thermal band option. Given the statutory directives authorizing the data continuity mission, we strongly believe the inclusion of appropriate thermal sensors should be a mandatory requirement.

As the cost of obtaining thermal imaging data has dropped, the uses to which this information has been put have increased dramatically. Currently, demonstrated water resources planning and management applications include quantifying and monitoring consumptive water use by irrigated agriculture, urban and suburban landscapes, and natural vegetation, as well as calibrating ground water models, monitoring aquifer depletion, and computing water budgets for surface water models. It is also an increasingly essential tool in monitoring the exercise of water rights, in order to ensure their use according to myriad state and federal laws, decrees, interstate river basin compacts and federal apportionment decrees, Indian water rights settlements and other negotiated agreements, as well as rules and regulations.

We strongly support spending to provide for the continued availability of Landsat-comparable thermal data, and oppose any move to omit or delete the thermal band from future satellites. We hope to be able to work with you to ensure the availability of this data as we struggle to balance water uses and demands in the West.

Adopted this 20<sup>th</sup> day of September, 2006.

**Association of Western State Engineers**

  
\_\_\_\_\_  
Hal D. Simpson, President

Ward W  
Staubitz/WRD/USGS/  
DOI

11/15/06 04:25 PM

To Bruce K Quirk/NMD/USGS/DOI@USGS

cc

bcc

Subject Fw: Landsat Letter of Support

1. to Ray  
Luo  
Ran

2. 11/15/06

----- Forwarded by Ward W Staubitz/WRD/USGS/DOI on 11/15/2006 05:25 PM -----

Ward W  
Staubitz/WRD/USGS/  
DOI

11/15/2006 04:48 PM

To Barbara J Ryan/DO/USGS/DOI

cc Martin Eckes/NMD/USGS/DOI@USGS, Wayne A  
Miller/NMD/USGS/DOI@USGS, K. Bruce  
Jones/NMD/USGS/DOI@USGS, Robert M  
Hirsch/DO/USGS/DOI@USGS

Subject Landsat Letter of Support

Edward C. Grigsby@nasa.gov

Barb, Theodore. F. Hammer-1@nasa.gov

Attached in a letter of support from the Association of Western State Engineers for continued maintenance of thermal data collection under the Landsat program. Thought that you might be interested in seeing it ( you may need to click on page 2 of the attachment if the position statement does not immediately appear). We received a similar letter for the Cooperative Water program as well. Hal Simpson, current president of AWSE, is also the Colorado State Engineer.

Regards,  
Ward

Ward Staubitz  
Cooperative Water Program Coordinator  
US Geological Survey  
409 National Center  
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Reston Virginia 20192  
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Landsat Data Continuity Program.doc