CURRICULUM VITAE University of Idaho – Faculty Senate Format

NAME: Karen S. Humes

RANK: Full Professor

DEPARTMENT: Geography

OFFICE LOCATION AND CAMPUS ZIP:

McClure 323/Campus Zip 3021

DATE: December 19, 2018

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DATE OF FIRST EMPLOYMENT AT UI: August 1999

DATE OF TENURE: July 2002

California Institute of Technology, 1979 - 1984. Analysis of space-based geodetic measurements from Very Long Baseline Interferometric systems for application in geophysics and spacecraft tracking; duties included role as Technical Group Leader (1983-84) and Technical Project Manager (1982-1984), including the supervision of 8 employees and projject budgets of \$1.7 M/yr.

TEACHING/ADVISING:

Students Mentored:

Undergraduate Students: Students hired Daniel Matsche, MS Geography, thesis option, 2017 Joseph Layton, MS Environmental Science, non-thesis option, 2018 Andrew Schnabl, MS Environmental Science, non-thesis option, 2018 Paul Reyes, M.S. Geography, 2010 Christina Brewer, M.S. Geography, 2010 (non-thesis) Enhao Du, Ph.D. Environmental Science, 2010 Imagery, Joli Hill, M.S. Geography, University of Idaho, 2005.

- < *Evaluation of Lapse Rates and Spatial Interpolation of Air Temperature in Mountainous Basin,* Troy Blandford, M.S. Geography, University of Idaho, 2006.
- < Integration of Small Footprint Lidar and Multispectral Data to Estimate Canopy Fuel Parameters, Meghan Monahan, M.S. Geography, May 2008.
- *Evaluation of MODIS Data for Mapping Surface Water Turbidity in Puget Sound,*, Michelle Howard, May 2010.
- Species Classification in Mixed Conifer Forests with Multispectral Remote Sensing, Raechel Bianchetti, July 2010
- Integration of Small Footprint Lidar and Multispectral Data to Map Canopy Fuel Models ,

Humes, K.S., W.J. Fisher, J. Basara, K.C. Crawfor, R.E. Elliot, 2001, Meson Manual, Oklahoma Climate Survey, University of Oklahoma.

Recent Invited Presentations:

The Water/Energy Nexus and Food Systems in Idaho and the Northwest, Malcolm M. Renfrew Interdisciplinary Colloquium, University of Idaho, November 27, 2018.

Professional Meeting Papers and Presentations:

Over 90 presentations, titles and dates available upon request

Grants and Contracts Awarded:

Current Research Support:

As P.I. or Team Leader:

< Sustaining the Competitiveness of the Food

• Improving Streamflow Forecasts in Snowmelt Dominated Basins, Pacific Northwest Regional Collaboratory (Geospatial Consortium led by Pacific Northwest National Lab), funding

around the merging of remote sensing and Mesonet data for water and energy balance studies.

\$82,000 per year for three years (November 1996 - October 1999),.

Other funded grants (non-research):

As P.I.:

C Teaching and Learning Grant from UI Viceacademic year) for the development of comparative and small group exercises in GEOG 483 and field trip for GEOG 100.

As Co-I:

- Idaho State Board of Education, Development of Distance Education capabilities in Environmental Science, 2000, P.I., Karl Chang
- Idaho State Board of Education, Distance Education Capabilities in Environmental Science, 2001, P.I., Margrit vonBraun.
- Water of the West (WoW), 2006-2011, University of Idaho Presidential Strategic Intiative (P.I. Jan Boll) \$1.5 M to provide support for a new interdisciplinary degree program in Water Resources (M.S and Ph.D.), a new faculty line in water resource law, and several water education initiatives.
- Sustainable Idaho: Learning Together, Leading the Way, 2006-2011, University of Idaho Presidential Strategic Intiative (P.I.s Christine Dixon, Environmental Science Program), \$350,000 for curriculum development and small research initiatives in sustainability.

Grants recently submitted – pending:

 Toward Understanding Current and Future Pressures on Water Supply/Use in the Eastern Snake Plain: Spatial Patterns of Drought, Sectorial Competition, Excess Nutrients and Water-Energy Interconnections

- Session chair for sessions at annual meetings of the American Association of Geographers, 1997; the American Geophysical Union; 1994, 1995; the American Meteorological Society; 1999.
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