Hydrol. Earth Syst. Sci. Discuss., 10, C7499-C7500, 2014 www.hydrol-earth-syst-sci-discuss.net/10/C7499/2014/ © Author(s) 2014. This work is distributed under the Creative Commons Attribute 3.0 License.





Interactive Comment

## Interactive comment on "Determination of cost coefficients of priority-based water allocation linear programming model – a network flow approach" by F. N.-F. Chou and C.-W. Wu

## Anonymous Referee #2

Received and published: 28 January 2014

This is a nice application and extension of the earlier paper by Israel and Lund 1999. I like the authors' greater formalism from the earlier paper. Earlier work by Israel and Lund 1999 and a later 2007 dissertation by Ines Ferreira ("Deriving Unit Cost Coefficients for Linear Programming-Deriven Priority-Based Simulation") implicitly consider all flow paths in their work and note many of the aspects developed in this newer paper.

The Ferreira dissertation is available at http://cee.engr.ucdavis.edu/faculty/lund/students/Ferreira Dissertation.pdf and broadens the scope of the topic to include cost coefficient setting for more general linear programming formulations. There is a small application to the CALSIM model of California's water system. Linear programming has replaced network flow



**Printer-friendly Version** 

**Discussion Paper** 



programming for many priority-based simulation software applications.

Some updating of the literature review, greater noting of the lineage of the authors' approach, and extending the discussion somewhat to include comments on LP-based simulation as opposed to only NFP-based simulation would improve the paper.

I'm glad to see others address this interesting problem for priority-based simulation models that uses an optimization engine.

## **HESSD**

10, C7499-C7500, 2014

Interactive Comment

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

**Discussion Paper** 



Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 15033, 2013.