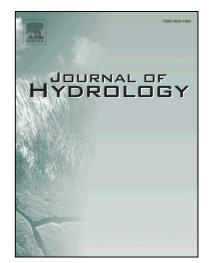
Accepted Manuscript

Research papers

Impact of water allocation strategies to manage groundwater resources in Western Australia: equity and efficiency considerations

Md Sayed Iftekhar, James Fogarty

PII: DOI: Reference:	S0022-1694(17)30131-2 http://dx.doi.org/10.1016/j.jhydrol.2017.02.052 HYDROL 21851
To appear in:	Journal of Hydrology
Received Date: Revised Date: Accepted Date:	22 November 20163 February 201725 February 2017



Please cite this article as: Iftekhar, M.S., Fogarty, J., Impact of water allocation strategies to manage groundwater resources in Western Australia: equity and efficiency considerations, *Journal of Hydrology* (2017), doi: http://dx.doi.org/10.1016/j.jhydrol.2017.02.052

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

CCEPTED MANUSCRIPT

Impact of water allocation strategies to manage groundwater resources in Western

Australia: equity and efficiency considerations

Impact of water allocation strategies to manage groundwater resources in Western Australia: equity and efficiency considerations JUSCE

- 1. Md Sayed Iftekhar (Corresponding author)
- CRC for Water Sensitive Cities
- Centre for Environmental Economics & Policy (CEEP)
- UWA School of Agriculture & Environment, M089
- -The University of Western Australia (UWA)
- 35 Stirling Hwy, Crawley WA 6009, AUSTRALIA -
- Ph: +61 8 6488 4634
- Email: mdsayed.iftekhar@uwa.edu.au -
- Fax: + 61 8 6488 1098 -
- 2. James Fogarty
- UWA School of Agriculture & Environment, M089
- The University of Western Australia (UWA)
- 35 Stirling Hwy, Crawley WA 6009, AUSTRALIA
- Ph: +61 8 6488 3419
- Email: james.fogarty@uwa.edu.au _
- Fax: + 61 8 6488 1098

Abstract

In many parts of the world groundwater is being depleting at an alarming rate. Where groundwater extraction is licensed, regulators often respond to resource depletion by reducing all individual licences by a fixed proportion. This approach can be effective in achieving a reduction in the volume of water extracted, but the approach is not efficient. In water resource management the issue of the equity-efficiency trade-off has been explored in a number of contexts, but not in the context of allocation from a groundwater system. To contribute to this knowledge gap we conduct an empirical case study for Western Australia's most important groundwater system: the Gnangara Groundwater System (GGS). Resource depletion is a serious Download English Version:

https://daneshyari.com/en/article/5771218

Download Persian Version:

https://daneshyari.com/article/5771218

Daneshyari.com