

IPCOB

International Program on Consensus Building

合意形成学国際プログラム

Seminar on

Systems Thinking

In

Fair Water Resources Allocation

日時: 2009年4月8日(水) 17:00から18:30まで

会場: 東京工業大学 大岡山キャンパス 西9号館7階707室

参加費: 無料

使用言語: 英語

講演者: Professor KEITH W. HIPEL

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概要:

Systems thinking approaches are employed to construct a formal decision-making methodology for equitably allocating water among competing users in a river basin when taking into account both the societal and physical systems aspects of the allocation problem. In particular, within the societal component of the decision problem, multiple participants, their multiple objectives, equity principles, and economic factors are considered, while the physical systems part reflects relevant hydrologic and environmental factors. The Cooperative Water Allocation Model (CWAM) incorporates these societal and physical systems concerns within the framework of a large-scale optimization program which is divided into two main steps. Firstly, water is allocated among users based on existing legal water rights regimes or agreements. Secondly, water and associated benefits are reallocated among stakeholders to maximize basin-wide welfare. CWAM is applied to the South Saskatchewan River Basin located in the Canadian province of Alberta to demonstrate how it can be conveniently applied to a water allocation system of systems problem.

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