

# Resource Efficiency Complexity and the Commons

## *The Paracommons and Paradoxes of Natural Resource Losses, Wastes and Wastages*

By Bruce Lankford

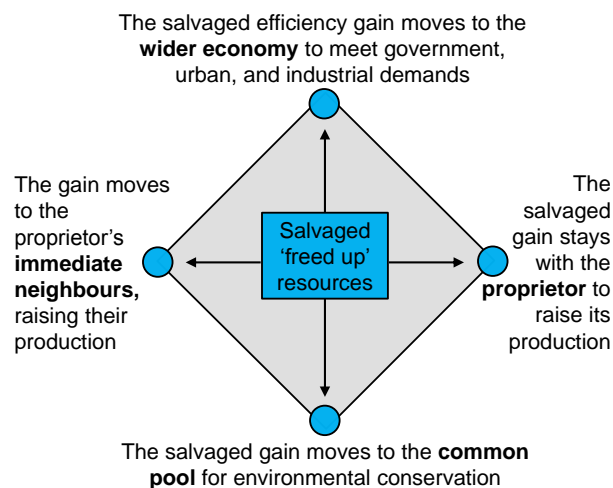
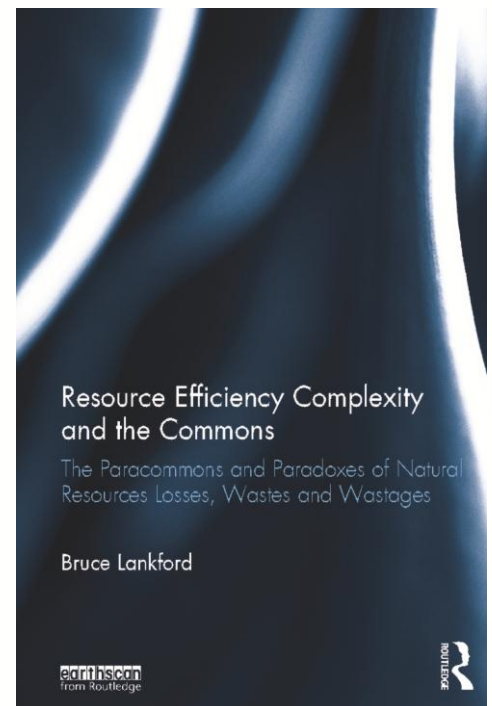
### About the book

The efficient use of natural resources is key to a sustainable economy, and yet the complexities of the physical aspects of resource efficiency are poorly understood. In this challenging book, the author proposes a major advance in our understanding of this topic by analysing resource efficiency and efficiency gains from the perspective of common pool resources, applying this idea particularly to water resources and its use in irrigated agriculture.

'Para-': alongside (parallel) or against (paradox)

The author proposes a novel concept of "the paracommons", through which the savings of increased resource efficiency can be viewed. In effect he asks; "who gets the gain of an efficiency gain?" By reusing, economising and avoiding losses, wastes and wastages, freed up resources are available for further use by four 'destinations'; the same user, parties directly connected to that user, the wider economy or returned to the common pool. The paracommons is thus a commons of – and competition for – resources salvaged by changes to the efficiency of natural resource systems. The idea can be applied to a range of resources such as water, energy, forests and high-seas fisheries.

Five issues are explored: the complexity of resource use efficiency; the uncertainty of efficiency interventions and outcomes; destinations of freed up losses, wastes and wastages; implications for resource conservation; and the interconnectedness of users and systems brought about by efficiency changes. The book shows how these ideas put efficiency on a par with other dimensions of resource governance and sustainability such as equity, justice, resilience and access.



### *US Supreme Court decision regarding Montana vs Wyoming, 2011*

The Court backed Wyoming's defence that their prior appropriation water law enabled them to use the water freed up by introducing consumptive irrigation sprinkler systems.

The previously 'inefficient' flood technology spilled drainage water that downstream neighbouring Montana had become accustomed to.

(Australia takes a different approach to this question dividing efficiency gains fifty-fifty between the irrigator and river).

Norris (2011) "... the United States Supreme Court's recent decision in Montana v Wyoming brings to the forefront one of the most complicated and contested facets of irrigation efficiency: who owns the rights to the conserved water?"

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1. A Preliminary Explanation of the Paracommons 2. Main Introduction and the Scope of the Book 3. On Resource Efficiency; Multiple Views 4. A Framework of Resource Efficiency Complexity 5. The Liminal Paracommons – Efficiency and Transition 6. Distinctions Between the Commons and Paracommons 7. Significances and Applications of the Paracommons 8. Conclusions

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