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# Equity, fairness and justice in water policy

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Literature review  
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# Summary

This literature review examines peer-reviewed, academic research on equity, fairness and justice in water policy. It looks at how these three concepts are included in discussions around access, allocations and rights to water across a wide range of fields of research. This review does not examine work that aims to primarily value water as a resource; it focuses on discussions of what makes water policy equitable, fair or just. We find that the literature does not provide an agreed definition of these concepts. Water policy makers who seek to address questions of equity, fairness and justice in water policy should recognise that this is a highly contested space likely to require difficult trade-offs and considerable deliberation and debate among and with stakeholders.

Following a standard literature review approach,<sup>1</sup> we undertook a broad, inductive survey of existing academic literature and found the following broad sets of perspectives in the literature on equity fairness and justice in water policy and management.

- **Environmental water equity:** Environmental water equity focuses on fair access to water resources and the protection of ecosystems from harm, particularly as climate change alters and shifts environmental risks. Policymakers face increasing pressure to balance current demands with the needs of future generations as well as ensure water access remains fair across socio-economic groups.

Research identifies three critical dimensions in environmental water equity: access to water as a life-sustaining resource, the intrinsic ecological value of natural systems, and the holistic management of human-environment relationships. Current water management practices often fall short of these ideals, with policies failing to integrate perspectives on distributive and procedural justice. A focus on distributive justice underscores the need for fair resource allocation, while procedural justice emphasises the importance of inclusive decision-making processes that account for both human and environmental interests.

- **Socio-economic water equity:** Socio-economic water equity examines how economic and social status shape people's access to water, with inequities exacerbated by the path dependency of past decisions on resource allocation and spatial planning, current economic trends and climate change. In regions facing water scarcity, these disparities become stark, influencing daily living conditions, health, and even food security. Addressing these inequities involves understanding and reducing barriers to water access for economically disadvantaged communities.

The Water Poverty Index (WPI) is a tool used to measure water-related socio-economic conditions, highlighting intersecting factors like resource availability, infrastructure, and environmental sustainability. In Australia, socio-economic water policies attempt to integrate these issues, but marginalised communities – particularly remote Indigenous communities – continue to face significant access challenges. Researchers suggest that policies incorporating socio-economic and circular economy principles, which emphasise resource reuse, can promote fairer, more resilient water management systems.

- **Socio-cultural water equity:** Socio-cultural water equity addresses the importance of water to communities beyond its economic value, recognizing its spiritual, recreational, and symbolic significance. Policymakers must consider local cultural needs and involve community voices in water management to ensure fairness and inclusivity.

The socio-cultural value of water often remains marginalised in economic assessments, leading to policies that overlook essential community needs. Greater community engagement is necessary to integrate socio-cultural perspectives, fostering trust and legitimacy in water policy. This approach is particularly relevant in communities where water scarcity unites or divides groups, and where equitable management of water resources can strengthen social cohesion.

- **First Nations water equity:** First Nations water equity highlights the historical exclusion of Indigenous communities from water rights and governance. Ensuring equitable water access for First Nations peoples re-

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quires policies that recognise the cultural, environmental, and economic significance of water for these communities.

Though some progress has been made, Indigenous water rights remain inadequately protected. Research supports an adaptive governance approach that centers Indigenous knowledge and community input, creating flexible, culturally sensitive frameworks. Policies that allow for Strategic Indigenous Reserves and greater Indigenous participation in water management are recommended for promoting equity and justice in water allocation.

- **Citizens, markets, governments, and water equity:** Researchers note that water markets are often used to allocate water efficiently, yet they frequently fail to achieve equitable outcomes. While market mechanisms support efficient water distribution, they may disregard social and environmental values, fostering mistrust between local stakeholders and government bodies.

The management of the Murray–Darling Basin exemplifies the tensions in using markets for water allocation. Government interventions aiming to balance environmental, social, and economic interests have faced criticism for exacerbating inequities. Policymakers are encouraged to improve regulatory frameworks and market design alongside incorporating consultation processes that respect both market efficiency and local needs, fostering a balance between fairness and economic goals.

- **Equity in global governance:** Researchers note global governance frameworks often approach water equity from a limited, efficiency-focused perspective, neglecting cultural and social dimensions essential to fair water management. This narrow focus has drawn criticism, especially from researchers advocating for Indigenous rights and holistic approaches that address water's multiple social values.

The dominant Integrated Water Resource Management (IWRM) approach, while widely implemented, is criticised by some researchers for perpetuating settler-colonial biases and lacking genuine equity considerations. A shift toward inclusive frameworks that engage communities and acknowledge diverse water needs is seen as essential for equitable international water policy.

- **Equity framing in Australian water policy:** Water policy in Australia reflects various perspectives, from socio-economic development to environmental protection. Researchers track the increasing dominance of neoliberal frameworks emphasizing efficiency and criticise neoliberal approaches to policy for marginalizing regional interests and traditional values associated with water.

Researchers outline how Australian water policy has shifted through three major periods, each with distinct framings: from developmental capacity to environmental resource protection, and finally, to sustainable management. They believe that understanding these different framings and their path dependency can help policymakers balance distributive and procedural justice to better reflect community values and achieve fair outcomes.

- **Social psychology of water equity:** Social psychology research shows that communities' perceptions of equity influence their acceptance of water policies. Policies that align with community values and environmental concerns are more likely to gain support, particularly when developed through inclusive, trust-building processes.

Researchers demonstrate how local engagement is crucial in implementing sustainable water policies. Studies in Australia's Murray–Darling Basin suggest that community trust in local authorities and adherence to fairness principles enhance public acceptance, especially when policies avoid market-driven allocations and prioritise procedural justice.

- **Normative theories of water equity:** Normative theories of water equity draw on social justice traditions, focusing on distributive and procedural justice as guiding principles. These theories emphasise consistent minimum access to water, fair decision-making processes, and the identification of inequities that disproportionately affect marginalised communities and the environment.

Few comprehensive normative theories exist, but those that do advocate for context-sensitive approaches that bridge multiple justice perspectives. A Social Justice Framework (SJF), proposed for Australian policy, supports policies that integrate fairness principles from various traditions, promoting equity in complex water management systems.

- **Behavioral economics of fairness, justice, and equity:** Behavioral economics challenges the assumption that self-interest drives decision-making in water policies. Research shows that people often act cooperatively and are willing to incur costs to enforce social norms, suggesting that fairness and community-oriented policies can be more effective than those based solely on self-interest.

This insight highlights the importance of designing policies that align with social norms and community expectations, as policies perceived as unfair may face significant resistance. Researchers suggest policymakers should prioritise procedural justice and fairness in policy frameworks to foster cooperation and achieve equitable water management outcomes.

## Observations

**Equity, fairness and justice are ‘essentially contested’ concepts. Given their rhetorical power and strong political salience, individuals and advocacy coalitions seek to build these concepts into narratives to mobilise supporters and influence policy to meet their own ends. However, these concepts and policy built on them will likely be subject to ongoing disagreement because of the difficulty in achieving a settled consensus on what constitutes equitable, fair or just processes or outcomes.**

Although equity, fairness and justice are widely shared goals, the lack of agreement among stakeholders on what they mean complicates discussions and creates challenges for consensus-building. Different actors may use the same terms to justify opposing positions, masking deeper conflicts in values and policy objectives. Our other reports in this project also find that stakeholders deploy these concepts strategically to advance their interests.<sup>2</sup>

The variety of ways in which the concept of equity can be invoked in water policy also creates conceptual ambiguity that can be exploited by stakeholders and advocacy coalitions, who draw on the language of equity and fairness to try to mask self-interested arguments. Given the power of these ideas, they can invoke this rhetoric to try to mobilise their supporters in a way that reshapes – to their advantage – the discursive “terrain” on which political struggles over water occur. Incorporating considerations of equity into the water policy-making process more systematically, and being aware of the variety of ways in which ideas of equity and fairness are understood and deployed in the scholarly literature, can improve policy makers engagement with these issues in policy development.

**Citizens care about issues of fairness, trust, participation and representation in policy making. Citizen concerns about these issues influence the legitimacy of policy decisions. Legitimacy matters more than technical competence for effective policy design and implementation.**

The academic literature examined in this review presents a diverse and complex set of views around equity, fairness and justice in water policy. The literature spans numerous debates, methodologies and conclusions. While there are no clear answers to the question of how to achieve water equity, there are some consistent positions on how we might be better able to consider equity, fairness and justice in water policy. The most widely agreed on perspective is that water equity is not an outcome but a process, which might be amenable to a set of guiding principles. Adequate consultation with local stakeholders and community members is a very important part of this process. Empowering those most affected by water resource decision-making, and incorporating them into such processes, contribute to the legitimacy of water policy by providing policy processes more likely to be seen by stakeholders as equitable and fair.

## Summary

**Researchers' values are a key driver of research themes and results in this area.**

A significant portion of research on equity, fairness, and justice in water policy and management serves as advocacy for specific viewpoints. These perspectives span from prevailing disciplinary frameworks to particular outcomes preferred by individual researchers and reflect the wide range of biases and priorities across the literature.