

Policy Considerations

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The Governments

The policymaking environment for water resources management in the Palouse Basin is characterized by complexity, overlap, and shared jurisdiction. In this, it is a microcosm of the larger processes, at both state and federal level, of the American system of government. In addition to established political institutions, the ecological reality of a shared, common-pool, resource has required development of specific institutional structures to organize and structure individual actions to the purpose of the common good.¹

The primary institutional feature of the Basin is the border between Washington and Idaho. This means the water resource is shared and co-managed by different sovereign entities that have a large scope for action within their specific boundaries, but are greatly circumscribed by the limits imposed by the political boundary. Simply stated, neither Idaho nor Washington has complete jurisdiction over the watershed. Thus the federal government can and does play a mediating role as the final authority, principally through the judiciary. In addition, the federal government through its administrative agencies exercises a wide-ranging oversight. The US Environmental Protection Agency (EPA) has regulatory oversight of water quality (Safe Drinking Water Act (SDWA), Clean Water Act (CWA)) while the US Fish and Wildlife Service has responsibility to protect endangered species (Endangered Species Act (ESA)). In the Basin, because the endangered species challenges are minimal and the area lacks a direct tribal government presence, the federal government presence is limited relative to other watershed basins in the region.

State governments are the primary government actors in the basin, as both states have direct oversight of water use. In Idaho, the Department of Water Resources (IDWR) manages the state's water resources, while in Washington the primary agency is the Department of Ecology (WDOE). Moreover, both states through their environmental protection agencies (Idaho Department of Environmental Quality (IDEQ) and WDOE) regulate water quality.

At the local level, water resource use is governed by two counties (Latah and Whitman) and several municipal governments, with the cities of Moscow and Pullman the largest (other municipal governments are Albion, Colfax, Garfield, Palouse, and Potlatch). The county governments have oversight of actions in the rural unincorporated areas of the basin that may affect water use, specifically building and development activities. The city and town governments have a much more direct role in water resource management. As the provider of water to their citizens, the municipal governments are the direct contract between users and the resource. As a result, policy choices at the local level have great affect on water use. Moreover, the municipal governments have a responsibility to the state and federal governments to insure water quality and that waste discharge does not harm the environment. Finally, and in many ways most important, the municipal governments have responsibility for managing and maintaining the physical infrastructure necessary to provide this basic resource. In the Basin, the municipal role is magnified because approximately two-thirds of the population resides in Moscow and Pullman.

¹ Brown, J. R. 2004. Governing New Mexico's Water: Lessons from the Commons. In *The Commons in the Age of Global Transition: Challenges, Risks, and Opportunities*. Oaxaca, Mexico. Tenth Annual Conference of the International Association for the Study of Common Property.

Foster, S. and P. Chilton. 2003. Groundwater: The Process and Global Significance of Aquifer Degradation. *Philosophical Transactions: Biological Sciences*. Vol. 358, pp. 1957-1972.

Ostrom, E. 1990. Governing the Commons: The Evolution of Institutions for Collective Action. In *The Political Economy of Institutions and Decisions*. Ed J. Alt and D. North. Cambridge University Press

Demand Considerations

A weakness of all efforts to craft models of complex systems is the need to simplify, for explanatory purposes, the complex and intertwined multiple independent variables. In the case of a water balance model of the Palouse Basin, special attention needs to be given to the "demand" box. This box is generally a function of a number of different considerations, and reduction to a simple singular input can mask the complexity of the decision process and obscure the nuances that shape such policy choices.

In the Palouse Basin several factors will shape demand in the short- and long-term. The first, and in many ways most obvious, is the price charged to consumers. Those users who receive their water from municipal supplies are captive consumers with no alternative to that source of supply. Thus municipal governments can, if supported by public sentiment, raise or lower prices to influence consumption choices. The City of Moscow, for example, has implemented a tiered pricing system intended to encourage conservation by linking cost to consumption. As result, demand can be influenced directly by pricing targeted at a particular behavior. Price as a determinant of individual and community demand is more problematic to assess for those users dependent on individual supply systems. These range from single families on rural wells, to the University of Idaho and Washington State University, whose consumption is exceeded only by Moscow and Pullman. For these users, the price of water is less tangible and is likely to be influenced more directly by the costs of the energy necessary to lift it to the surface. Thus, many users of water in the Palouse Basin do not pay for water directly and have a limited sense of the cost due to a lack of readily available pricing information.

These users, however, are not free from the second variable influencing water demand—social expectations of water usage. There is broad interest in the long-term sustainability of the basin's water supply. This increased public awareness has brought attention to consumption patterns and has encouraged many users to rethink their usage as part of an effort to support the common good. The extent to which this will influence annual demand is difficult to determine with precision. Residential users may choose to use less water for a number of reasons, the common good being only one. Conversely, individual users rather than limit usage may seek to maximize short-term gain, the classic tragedy of the commons dynamic inherent in the use and management of common pool resources. Both universities, however, are not likely to engage in a strategy of short-term maximization. The longer time horizon as public institutions of higher education and the responsibility of being a "good" steward have led both to promote water conservation actions including reduced consumption and infrastructure improvements.

A third feature of the Basin affecting demand is the constellation of stakeholder interests. The landscape of affected interests is relatively simple and sparsely populated in comparison to other watersheds. It includes four major users, hundreds of individual users, and the smaller communities in the area. There is no sizeable industrial demand for water, and agriculture, still an important element of the local economy, is based on dry-land crops such as wheat and lentils. Thus, unlike many areas in the region, agricultural use is only a limited consideration. Further, as noted above, there is no significant tribal government presence, few large-scale endangered species challenges, and no sizeable recreational use of water resources. In total, the Palouse Basin is dissimilar to most watersheds in the region and the number of stakeholders is small and unrepresentative of other watersheds. It includes local community governments, environmental Non-Governmental Organizations (NGOs) concerned about water resource sustainability, and a number of development interests who view potential water scarcity as an indirect reason to limit growth.

The fourth consideration affecting demand are the institutional arrangements that have been crafted to govern water usage in the area.² These are a product of the inherent structural realities of American government.

² Ostrom, 1990.

Sharp, J. and D. Parisi. 2003. Devolution: Who is Responsible for Rural America? In *Challenges for Rural America in the Twenty-First Century*. Ed. D. Brown and L. Swanson. Pennsylvania State University Press.

Because of the state border, two county governments, two universities, and several municipal governments, oversight and management of water resources is divided between actors with some authority and responsibility, but none with complete responsibility or authority. In recognition of shared concern and incomplete jurisdiction, the government actors in the area created the Palouse Basin Aquifer Committee, whose members represent the various government entities, including the universities. The committee is a collaborative institution whose responsibilities include facilitating discussion among local governments and data collection on the health and limits of the aquifer. The committee, further, has an education role and seeks to develop and disseminate information to the public. Beyond these limited roles, it has only an advisory capacity. The lack of a single entity with responsibility for water management is common feature across the Inland Northwest. As noted above, this is a function of the American system of government and localized nature of institutions created to manage ecological services. The result is a policymaking environment characterized by closely guarded prerogatives, multiple access points for stakeholders, and the potential for conflict and contradiction as various parties choose policy options that reflect particularistic local concerns that do not aggregate to the best outcome for long-term resource sustainability.