

A Reality Check for Regional Governance: Lessons from the San Francisco Bay Area

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Abstract

Regional governance reforms are often advocated on both efficiency and equity grounds. But such efforts have met with limited success in practice. This paper identifies and explores two key barriers to reform: Historical organizational structures and spatial representation. Using the proposed reorganization of a city water department into a regional agency, this paper identifies and explores serves as an illustration. Our discussion explains how historical governance structures and regional political representation affect the regional governance reforms, and the lessons to be drawn.

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The regional government is generally regarded [in both South and North] by community leaders and ordinary voters as an improvement over the institutions it replaced—certainly more accessible and probably more effective... Formal change induced informal change and became self-sustaining. (Putnam, 1993, 184)

Introduction

Urban planners and social scientists have embraced regional governance in recent years. Scholars highlight the economic, political, and social benefits of consolidating fragmented local government functions into regional bodies, and of redistributing wealth concentrated in suburbs to central cities (e.g., Altshuler *et al.* 1999; Downs 1994; Orfield 1997, 2002; Rusk 1999; Swanstrom 2001; and Wheeler 2002). In particular, practice-oriented research has typologized regional governance into distinct win-win strategies, such as public-private partnerships, single-purpose regional agencies, and state laws outlining the possible actions of regional agencies (Bollens 1997; Downs 1994).

But in implementation, regional governance efforts have met with limited success, either failing to meet their objectives, or by choosing *not* to act due to fear of political controversy (e.g., Frisken 2001; Gainsborough 2001). While researchers have explored whether and when regional governance should be initiated, practitioners have had to contend with the problems—political and technical—associated with regional governance. Unfortunately, limited knowledge exists about how the practices and procedures used in implementing different regional governance schemes affect success or failure. Planners need to understand how organizational structures can be designed *and* implemented so that regional governance reforms can meet their objectives. This paper identifies and explores the role of a key element: The historic governance structure. We argue that

the organizational structure plays a defining role in regional governance reforms, over both the long and short terms.

To develop and illustrate this argument, the paper proceeds as follows. First, the paper briefly outlines the argument concerning governance structures, their role in defining the effectiveness and equity of regional governance reform, and the link to regional governance in water management. Second, the paper describes the background for water management in the San Francisco Bay Area. The paper then moves to the case study: Attempts to reform a regional water governance network currently controlled by the San Francisco Public Utilities Commission (SFPUC). Finally, the paper derives lessons from this case approach for improving both the theory and practice of regional governance.

Theory: Governance Structures and Failure

According to Lowndes and Skelcher (1998, p. 318, 319), governance is the “purposive means of guiding and steering a society or community” using “a particular set of organizational arrangements.” Multi-jurisdictional governance of natural resources—such as water—exemplifies how particular organization arrangements affect the representation and power distribution in public decision-making.

While social scientists have long studied the nature and effectiveness of different organizational structures and processes (e.g., Daft 1989; Hall 1972), there has been less attention paid to the role of *initial* governance structures.¹ Initial governance structures are defined in this paper as the organizational rules, procedures, and practices, both formal and informal, that defined agencies and interactions at the outset of reform—that is, the founding organizational character (see also Smith 1997; Takahashi and Smutny forthcoming).

Initial governance structures define acceptable practices for the agency, reinforcing what change is possible based on existing convention (Taylor 2000). Although Putnam (1993) argued that changing formal institutions could also alter informal procedures and practices, he also noted that “the civic community has deep historical roots. This is a depressing observation for those who view institutional reform as a strategy for political change” (183). In other words, even if formal regulations and procedures are changed (a difficult task), the existing practices and webs of power created through the initial governance structure are difficult to dismantle (also North 1990).

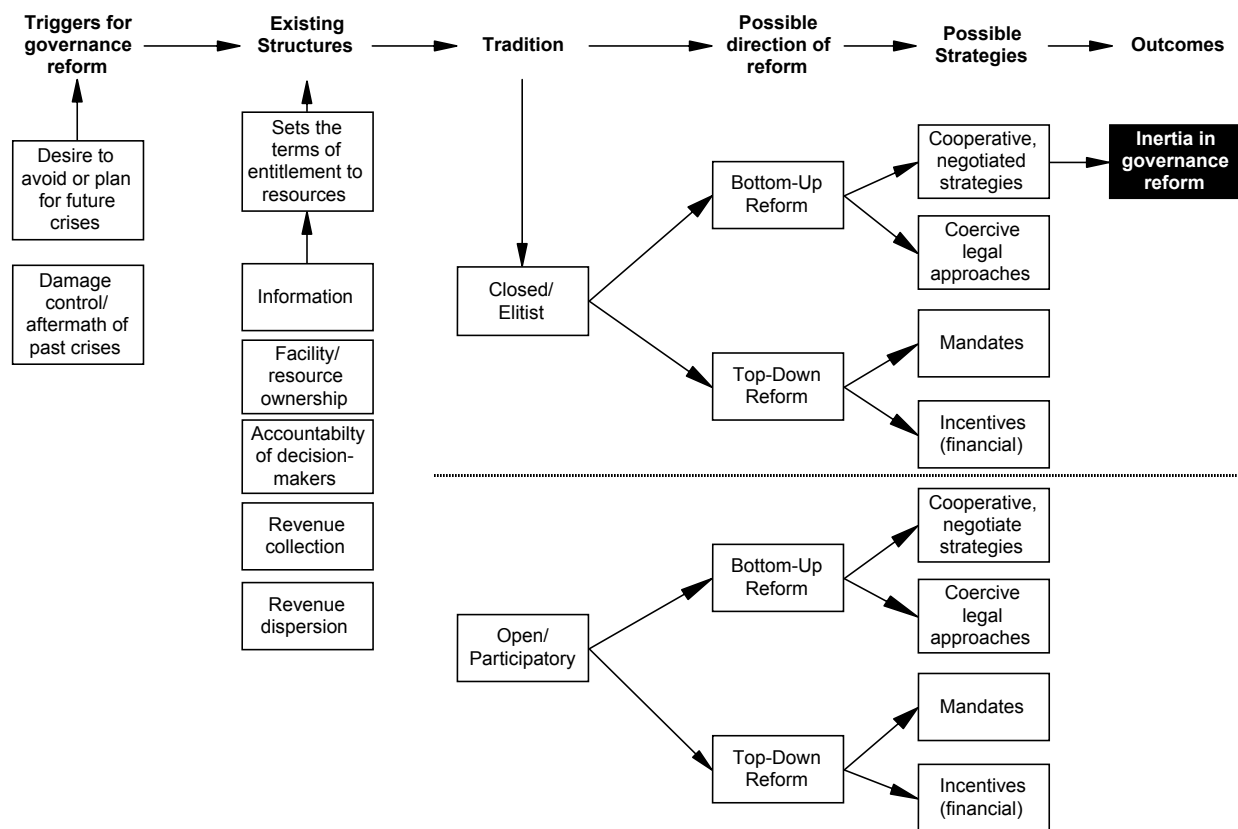
The traditions within water governance may be particularly difficult to overcome. In his analysis of community participation in South Africa, Abbott (1996) argued that power sharing occurs most often in handling relatively straightforward issues within “open” government structures—that is, governments that have traditionally accommodated participation. But this has not been the case with the regional water governance, where studies have shown how elites control much of the decision-making despite a nominally representative governance structure (e.g., Gottlieb and FitzSimmons 1991; Brechin 1999).

Because of this tradition, water governance offers a good context to evaluate the effects of the initial organization structure on the success or failure of regional governance reform. Figure 1 lays out a simplified conceptual model of governance reform which theorizes the influence of the existing organizational structures and traditions on reform. Triggers for reform result from a crisis or situation which existing structures prove unable to manage, at least to the satisfaction of a subset of stakeholders (citations). These stakeholders pursue reform based on a desire to avoid future crises, or to alleviate contemporary conditions in way not believed possible with existing institutional arrangements.

¹ Rusk (1995) discusses institutional arrangements that may affect regional cooperation, but he focuses on state rules regarding annexation in his discussion on elastic and inelastic cities.

Existing organizational structures—if present—may exert a powerful influence on both the possibilities for reform and the manner in which reform is framed. The existing structures set the terms of entitlement for stakeholders to the resources that may prove vital to stakeholders’ ability to define and carry through with demands for reform. Figure 1 lists some of the resources to which different stakeholder groups may have differencing entitlement and control.

Figure 1: Conceptual Model



For structures that have a closed tradition, like many water agencies, the resources crucial to participation and reform—information, revenue, etc—is concentrated among one or a small number of stakeholders. Although most organizational structures probably fall within between the extremes of open/participatory and close/elitst traditions, the characterization serves to distinguish between

situations in which one agency merely as as one stakeholder (open) from situations in which one agency or group of stakeholders are both formal gatekeeper and stakeholder (closed).

Ultimately, we argue that the existing structures and traditions play a strong role in determining the efficacy of reform strategies available to both constituent stakeholders pursuing bottom-up reform and for central governments attempting top-down reform. Some strategies may prove more effective than others in eacting reform given closed traditions, and the same may be true of context where the tradition has been open.

In the case we are about to describe, the traditional governance structure involved the ownership and control of water infrastructure by a municipal agency, the San Francisco Public Utility Commission. Triffers for governance reform, such as earthquake damage, drought, and unilateral decisions about rates prompted suburban stakeholders to seek both cooperative and coercive strategies for reform. The closed tradition carried through to stall cooperative efforts at reform, suggesting that in cases like this top-down reform in the form of state intervention may prove the most effective—or perhaps the only—means of reform.

Case Study Background²

Recently, radical governance reform has been proposed in the San Francisco Bay Area. Although various proposals have emerged, all of them attempt to alter the current governance structure of the San Francisco Public Utility Commission (SFPUC), established in 1932. The SFPUC case illustrates how historic organizational roles and structures can fuel resistance to regional power-sharing, even when the agencies stand to gain.

²This paper is a revision of a report on the San Francisco Public Utilities Commission commissioned and funded by the California Policy Research Center of the University of California Office of the President, entitled *Water Governance in California: Challenges and Opportunities*, by Randall Crane, Daniel Chatman, Lisa Schweitzer, and Lois Takahashi. The factual background for this paper is cited extensively in that report.

1848 to 1930: From Private Ownership to Public Concern

Water provision in San Francisco has been fraught with controversy since the gold rush of 1848 and the subsequent population explosion, when water shortages caused widespread dysentery and a series of devastating fires (Jacobson 2000). To address this issue, City officials decided to award a contract to the Spring Valley Water Company to build a waterworks system. Over the next eighty years of private ownership, the Spring Valley Water Company and the City wrangled over rate-setting and infrastructure. The Spring Valley Water Company failed to expand infrastructure to meet the needs of the region's rapidly growing population, contending that rates were set too low to allow for prudent expansions. Water shortages were frequent, and water usage per capita in the city reflected water scarcity, being substantially lower than in other cities such as Boston and Chicago.

City officials first began to consider public purchase of the private water delivery infrastructure in the 1800s. Developing a new, publicly owned infrastructure was also discussed. The 1906 earthquake and fire again demonstrated the inadequacies of the existing system and fueled the demand for public ownership. The City eventually decided to construct a dam in the Sierra Nevada on the Tuolumne River that would flood the Hetch Hetchy Valley and an adjacent valley. Much of the proposed project was on federal land within Yosemite National Park, requiring federal approval.³ In 1913, the Raker Act granted this to the City and County of San Francisco and to such other municipalities or water districts "with the consent of the City and County of San Francisco or in accordance with the laws of the State of California hereafter participate in or succeed to the beneficial rights and privileges granted by this Act." [cite]

³ This was a controversial project. Indeed, the famous naturalist John Muir spent much of the last 10 years of his life fighting to block it (Duane 1999)

In 1930, the City of San Francisco purchased the Spring Valley Water Company and merged it with the Hetch Hetchy project, creating the San Francisco Water Department, the progenitor to the San Francisco Public Utilities Commission (SFPUC). The SFPUC was established in 1932, and the first water from the Hetch Hetchy project was delivered to San Francisco in 1934.

The System Today

Today, the San Francisco Bay Area consists of nine counties with 6.6 million residents (ABAG 2000). Approximately 2.5 million (38 percent) of these residents live in a four-county portion of the Bay Area (western Alameda, San Francisco, San Mateo, and northern Santa Clara counties) served wholly or partially by water from the Hetch Hetchy system. In addition to the 2.5 million residents, nonresidential customers (primarily businesses) account for a major fraction of water consumption.

The Hetch Hetchy system includes three reservoirs in the Sierra Nevada that collect runoff from the upper Tuolumne River watershed. The system transports water eastward a total of about 200 kilometers around the southern curve of the San Francisco Bay and northward to the City of San Francisco, traveling through Alameda, Santa Clara, and San Mateo counties on its way.

The SFPUC administers and manages the Hetch Hetchy system, as well as other reservoirs that store water from local watersheds. In addition, the SFPUC sells Hetch Hetchy water to wholesale agencies outside the city limits, which in turn resell it to local retail agencies or directly to retail customers. Figure 2 shows the service area and main components of the SFPUC distribution/delivery system.

[Figure 2 (System Map) about here]

Only about one-third of the water managed by the SFPUC is consumed within the San Francisco city limits. The remainder, about 174 million gallons per day (mgd), is sold to 29 wholesale buyers outside San Francisco (see Table 1 for a list and Figure 3 for a map). These agencies formed a nonprofit organization to represent their interests, the Bay Area Water User’s Association (BAWUA).

[**Figure 3 (BAWUA MAP) about here**]

Table 1: Agencies outside San Francisco relying on the Hetch Hetchy water system

Alameda County Water District	East Palo Alto County Water District	North Coast County Water District
Belmont County Water District	Estero Municipal Improvement District	City of Palo Alto
City of Brisbane	Guadalupe Valley MID	Purissima Hills Water District
City of Burlingame	City of Hayward	Redwood City
California Water Service Company (serving Bear Gulch, Palomar Park, San Carlos, San Mateo, and South San Francisco)	City of Hillsborough	City of San Bruno
Daly City	Los Trancos County Water District	City of San Jose (portion)
Coastside County Water District	City of Menlo Park	City of Santa Clara (portion)
Cordilleras Mutual Water Association	City of Millbrae	Skyline County Water District
	City of Milpitas	Stanford University
	City of Mountain View	City of Sunnyvale
		Westborough Water District

Triggers for Reform

Perhaps the most pressing issue raised by the suburban constituents through BAWUA concerns infrastructure improvement and maintenances, as well as planning for future demand.

With existing demand, the infrastructure shows strain. The SFPUC system currently has a firm delivery capability of only 239 mgd. Existing demand is approximately 21 mgd *over* that. And the SFPUC residential service population is expected to grow by about 200,000 between 2000 and 2050, with the majority occurring outside San Francisco. Without expansion, shortfalls of 64 mgd in 2030 and 71 mgd in 2050 have been forecast.

The existing conveyance capacity is also considered unreliable. Much of the system was constructed during the 1920s and 1930s and then expanded during the 1960s. Most of the SFPUC water system components are vulnerable to an earthquake, due to their age and placement across earthquake faults. The capacity of the SFPUC's water collection, storage, and distribution system is strained to this extent because foreseeable necessary improvements, identified by the SFPUC in decades of planning documents, have not been completed.

Until recently infrastructure finance had not caused much tension between the SFPUC and its wholesale customers. Usually, bond issues presented to San Francisco voters were sized to cover debt service during construction. The SFPUC then recouped a portion of this expense through charges for water service to its wholesale customers, as well as retail customers in San Francisco. The last Master Water Sales Contract imposed detailed controls on the SFPUC's allocation of costs to wholesale water customers.⁴ BAWUA customers purchase almost exclusively from the Hetch Hetchy system; it is the governance of this system that is the point of contention.

In addition, water rates across the region have been rising over the past few years. Water management districts have effectively argued for increasing consumer water rates to cope with

⁴ The 2000 Water Supply Master Plan contains recommendations for future pricing of water supplies that would apparently cover the costs of the debt incurred to construct new infrastructure, but does not explicitly address whether the City of San Francisco will be capable of financing the construction cost to expand the system. The plan does note, "There may be value in considering alternative approaches to financing needed water supply, seismic reliability and water quality improvements. For example, a joint powers authority could be created by San Francisco and some or all of its wholesale customers" (SFPUC/BAWUA 2000: 57-8).

inflation, rising maintenance costs, and the need for expansion to address increasing population and commercial growth. For example, a nearby regional water agency, East Bay Municipal Utility District (EBMUD), voted to raise consumer water rates in June 1998 (by 3.75%), in July 1999 (by 3.5% on average), and in June 2000 (by 3.6%).

Both wholesale and city SFPUC customers experienced the opposite.⁵ In 1998, their water rates declined 13 percent, apparently for two reasons. First, sales of water increased, contributing to a greater match in suburban water revenues with predicted water sales. Second, the wholesale customers won a \$6.1 million arbitration award from the California Public Utilities Commission (Epstein 1999a).⁶

The SFPUC became significantly constrained in its ability to alter the San Francisco-based consumer rate structure when the city proposed Proposition H in June 1998. This Proposition froze city consumer water and sewer rates until 2006. The SFPUC proposed in April 1999 to increase the cost of water by 35 percent to its wholesale customers (Epstein 1999a).

Wholesale and suburban stakeholders reacted immediately. BAWUA General Manager Art Jensen disapproved of what he considered political rate setting: “The setting of wholesale rates is not arbitrary or political. It is dictated by the need for suburban customers to pay their fair share for the system” (Epstein 1999a).

⁵ San Francisco retail ratepayers typically provide one-third of the cost of the SFPUC water system, while the wholesale agencies pay two-thirds.

⁶ This paralleled a US Court of Appeals decision in 1977 on a lawsuit brought by seven suburban cities and water districts against San Francisco, which indicated that the “legislative history and language of the [Raker] Act unmistakably reveal that the Bay Cities were intended to be equal beneficiaries with San Francisco of the Hetch Hetchy grant, and thus equally entitled to enforce the conditions to that grant.”

Formal measures towards reform

Currently the SFPUC is governed by a Board consisting of five members, all of whom are appointed by the Mayor of San Francisco. But by SFPUC invitation, the BAWUA has a regularly designated slot on the agenda of one of the two monthly SFPUC meetings, and is represented on the SFPUC Facilities Reliability and Planning committee. During interviews, however, BAWUA members shared a clear and growing sense of disenfranchisement that they attribute to their limited participation in system planning and decision making.^{7, 8} This has led to increasingly insistent calls for governance reform of the Hetch Hetchy water.

The official movement towards major governance reform began in May 1999 when the San Mateo County board of supervisors voted to support proposed California state legislation asking the California Public Utilities Commission to assess the need for a regional water agency that would “require multicounty water agencies to conduct public hearings in each of the counties” (Anonymous 1999). Assemblyperson Lou Papan, D-Millbrae, indicated he would introduce this legislation. In a letter to Assemblyperson Papan, Supervisor Mary Griffin, who had introduced the resolution to the San Mateo supervisors, argued that the water conveyance system had had no significant retrofit or maintenance since the 1989 Loma Prieta earthquake, and that the SFPUC had not improved its reliability since the previous drought (Anonymous 1999).

⁷ Based on interviews with various BAWUA members (Interviews, 2000). Also note that Krieger (1995) argues that nonunanimous decision-making processes place a disproportionate risk of rate increases on excluded groups. Buchmann and Tongren (1996) rebut this argument

⁸ Baer, Edelman, Ingram and Mahnovski (2001) consider a separate set of alternative governance structures for the Los Angeles Department of Water and Power, that city’s counterpart to the SFPUC. Their focus is on governance issues internal to the city of Los Angeles, rather than the intergovernmental issues emphasized here. However, their report is an excellent discussion of city agency restructuring challenges where there are no outside customers, particularly regarding accountability, efficiency, and political feasibility.

The San Mateo supervisors sent a letter on May 20, 1999 to San Francisco Board of Supervisors President Tom Ammiano describing these issues and asking for a joint public session. That same day, San Francisco's Supervisors Finance Committee voted to recommend approval of the 35 percent increase in rates to wholesale water consumers (translating to average residential water bill increases of 10-15 percent). The Committee forwarded its recommendation to the Board of Supervisors, who approved the measure in in late May 1999.

In June 1999, Papan introduced a bill, AB 1398, that "would prohibit San Francisco officials from subsidizing water delivered to San Francisco by charging suburban customers more than the actual costs of delivering water" and would require San Francisco to hold public hearings on potential rate increases in other counties (Wilson 1999a). In addition to this bill, Papan asked the state auditor to evaluate the reliability of San Francisco's water conveyance system (Wilson 1999a). The performance audit of the SFPUC, to be conducted by an independent state auditor, was approved by the Joint Legislative Audit Committee in August 1999.

In October 1999, the general manager of the SFPUC, Anson Moran, met with San Mateo County supervisors to describe the repairs and seismic improvements necessary to modernize the Hetch Hetchy water system. Moran estimated that these improvements would cost approximately \$2.3 billion, of which the SFPUC had acquired \$304 million (\$300 million from two San Francisco bond measures passed in 1997). According to Moran, seismic retrofit of the water system had been delayed due to recent droughts, floods (stemming from El Nino), and fires (Wilson 1999b). Moran also suggested that a joint powers authority with the SFPUC and wholesale water districts as members could be one possible solution to the financial shortfall.

In February 2000, the office of the state auditor released its assessment, indicating that the 75 year-old conveyance system required significant repair and replacement. Other problems included:

- 1) The slow pace for completing of repair and replacement projects;
- 2) No alternative funding strategies if San Francisco voters reject bond measures;
- 3) Inadequate projections for future water demand; and the need for alternative sources of water given drought or disaster.

The audit faulted turnover in executive staff and a lack of leadership in the organization for these problems. The audit also identified a need for procedures to award and complete large-scale projects.

The official SFPUC response downplayed the audit's criticism, arguing that they as an organization had already identified the same problems. The response also said that the audit merely directed the SFPUC to continue to complete its master plan, improve contractual procedures, and attract high-quality professional staff (Howe 2000).

Papan and San Mateo County Supervisor Mike Nevin, however, saw the audit as evidence for the need to revamp the governance structure of the Hetch Hetchy water. Both argued that management of the Hetch Hetchy water system should be shifted in part or entirely from the SFPUC, with Nevin supporting a joint powers board (Howe 2000).

Attempts at Cooperation

Even as the conflict between the SFPUC and its suburban customers grew, the SFPUC professional staff and BAWUA agency staff pursued several cooperative planning efforts. One such effort, the Master Plan, resulted from a three-year negotiation between the SFPUC and BAWUA members.

In April 2000, the SFPUC, in a meeting with 34 representatives from cities and water districts, approved a master plan to repair and improve the Hetch Hetchy water system. The Plan called for \$1 billion in capital projects over the coming decade, in addition to \$2 billion in repairs

already committed. Water system capacity was projected to increase by 71 mgd to 310 mgd by 2050. Wholesale water rates would rise 4.4 percent beginning July 1. In its announcement, SFPUC indicated that it might support a joint powers board to manage the water system, though again it made no firm commitments to any formal reform (Epstein 2000a).

Even without a commitment to reform, the cooperation between SFPUC staff and other agencies yielded tangible progress towards system improvements. In May 2000, the SFPUC awarded a \$45 million contract to the San Francisco Water Alliance (a consulting team led by Bechtel Infrastructure Corporation) to implement the first phase of the plans to upgrade the Hetch Hetchy water system. When complete, the total estimated cost of the project ranged between \$3 and \$4 billion.⁹ After some revisions to the plan were made, the San Francisco Board of Supervisors approved the four-year, \$45 million contract in August 2000 by a 10-to-1 vote.

The SFPUC developed cooperative projects with other regional water governance agencies during the same time period. In October 2000, SFPUC and the Santa Clara Valley Water District (SCVWD) announced a plan to cooperatively construct a 1,000-foot-long, 42-inch diameter pipeline and pump station in Milpitas to connect the two giant water systems. The Intertie Project, estimated to cost \$9.1 million, would allow up to 40 mgd of water to be transferred between the two water systems in the event of an earthquake. The Intertie Project and the Master Plan represent two specific steps that the SFPUC had taken towards cooperatively addressing the maintenance and emergency supply issues raised by BAWUA members and the state auditor.

The agency continued in this spirit in March 2001, when SFPUC staff released a long-term plan outlining a list of repairs and renovations to the Hetch Hetchy water system. This list included

⁹ In July 2000, San Francisco's budget analyst Harvey Rose did not agree with SFPUC's savings projections and also argued that there were no performance measures for evaluating the Bechtel-led team's work. Rose indicated that he would not recommend the award's approval by San Francisco supervisors (Wilson 2000).

reconstruction, renovation, and seismic retrofit with an estimated cost of \$4.4 billion. The largest project for the City was the renovation of the Southeast Treatment Facility in Hunters Point, estimated at \$302 million, while the largest project for the regional water system consisted of a new pipeline crossing the bay, estimated at \$461 million.

Recognizing that such ambitious projects needed multi-jurisdictional financing, the SFPUC devised several options for developing shared-financing agreements. SFPUC proposed that \$939 million be drawn from existing revenues, \$2.3 billion be obtained through debt, and \$1 billion be garnered from federal or state grants or from public-private partnerships. Other financing options included 1) revenue bonds that would require approval by San Francisco voters, 2) the creation of a multi-county joint powers authority with the power to issue bonds to finance part of the initial costs, and 3) water rate increases that could amount to an increase of 80 percent by 2011 (Epstein 2001b).

Barriers to cooperative reform

Despite these cooperative efforts, measures taken by the city and county of San Francisco and the SFPUC board reinforced their unilateral control over the water system. A fifteen-member Public Utilities Infrastructure Task Force created by Mayor Willie Brown began meeting; it was charged with assessing SFPUC facilities, procedures, and finances, and making recommendations to the Mayor for water system improvements. Members of this task force included: Rich Bodisco (the real estate agent who authored Proposition H), former chief deputy city attorney Phil Ward, Brian Browne (infrastructure consultant) and Stephen Leslie (infrastructure consultant) (Epstein 2000b). Although the task force was intended to improve the SFPUC, the fact that members were again appointed by and for the City of San Francisco reinforced the locus of control over the agency—and the regional water system—within San Francisco.

And in October 2000, San Francisco supervisors voted against a plan (7-to-4) to use the surplus from electricity sales from the Hetch Hetchy system to finance the renovation of the water system. This surplus had fallen from \$45 million in 1997-1998 to \$29 million in 2000-2001 (Epstein 2000c).

These actions, combined with Proposition H, left BAWUA members with the impression that, although the SFPUC was willing to negotiate on some issues, the City and County of San Francisco—to whom the SFPUC staff are ultimately accountable—would protect their own parochial interests over and above those of the region. Although cooperative efforts spurred progress in the system retrofit that so concerned them, BAWUA members continued to feel that further governance reform was needed.

Coercive attempts at reform

Long before current controversies over infrastructure quality and water rates, The SFPUC's wholesale suburban customers have used coercive and judicial strategies to reform governance practices with some success. In 1974, seven cities and water districts that are BAWUA members brought a lawsuit challenging a SFPUC rate increase. In 1977, the U.S. Court of Appeals upheld a district court ruling in favor of the BAWUA agencies, holding that non-San Francisco cities and agencies were entitled to benefits from the Hetch Hetchy system under the Raker Act. In 1998, suburban and water district wholesale customers settled a contract arbitration dispute proceeding against the SFPUC for \$6.1 million, resulting in a rate reduction of 13 percent.

These pressures may have hastened the SFPUC's efforts to complete its long-term plan to improve reliability, address seismic retrofit needs, and cope with expanding demand from users outside the city limits. BAWUA member agencies, as a result of their legal and political challenges to the SFPUC, have gained some inclusion and deference from the SFPUC as an agency, if not

from the City or County of San Francisco. But such strategies can heighten already combative relationships and may result only in short-term gains. Also, BAWUA members recognized that legal challenges tend to be an *ex poste* governance strategy: Lawsuits allow stakeholders to punish and possibly overturn—rather than participate in—decision-making. BAWUA staff and political leadership therefore sought structural governance reform to gain formal representation for their agencies in the planning and governance of the Hetch Hetchy system.

Two Proposals for Formal Reform

Both BAWUA and SFPUC stakeholders recognized that a new regional decision-making body would increase the funding, planning, and management responsibilities of users outside San Francisco. Several options were available for doing so, ranging from the simple inclusion of BAWUA member agencies in planning decisions without formal governance reform to the creation of a regional agency that supercedes the SFPUC in authority. But BAWUA members argued that they were unwilling to their current status as “advisors” to the SFPUC board; they wanted full-scale reform, preferably one formalized by law. The two options favored by the majority of the BAWUA member were to create 1) a special district encompassing the existing BAWUA and SFPUC service areas, or 2) a joint powers authority.

Option #1: Special districts

Examples of this kind of regional district include the Sanitation District of Los Angeles County and the Southern California Metropolitan Water District. Three common types are specifically drawn assessment districts, county-governed special districts, and regional districts that operate independently of county government. Water districts are often enabled under specific

legislation that does not conform exactly to these three common types. Many water agencies in the Bay Area, particularly those importing water from outside the area, are enabled under such acts (see Table 2). These agencies often have features of all three common types of special district. For example, the Alameda County Water District (ACWD) is more akin to an independent regional district than to a specifically drawn assessment district, except that it has an independently elected board. The Santa Clara Valley Water District (SCVWD) is similar to a county-governed special district, but since 1970 its governance structure has been more independent than most districts of this type, because its seven-member board has five directly elected members (see Table 2).

Most water districts have direct elections for board members, which increases the accountability of the governance structure to its constituents. For example, the other three Bay Area water agencies have at least some directly elected board members (see Table 2). The East Bay Municipal Utility District (EBMUD) exemplifies a representative and accountable water delivery system and governance structure congruent with its service delivery area. As a regional agency, the EBMUD spans parts of two counties. The election wards are drawn especially for the district. Enacting an EBMUD-style water district for the SFPUC might be feasible without special enabling legislation from the state, since the EBMUD is enabled under a general water district act called the Municipal Utility District Act of 1921. However, the challenges of enactment are certainly far more substantial than would be the case for the second type of proposed reform, a joint powers authority.

The advantages of a special district for BAWUA members are obvious: their elected board members would have a direct, formal role in operations, planning, and financing. The authority the citizens of San Francisco have now would be extended to citizens throughout the service area, but a municipality rarely agrees to divest itself of a department except under severe economic distress. And indeed, the SFPUC has made no indication that it is willing to accept or support a special district, and the historic monopolistic structure makes pursuing this reform difficult without the

support of the SFPUC, due to the requirements for creating and funding a special district. The law in this case favors the existing governance structure.

There are two ways to establish a special district. The district can either be established under one of the 40 general water district acts, or the California state legislature can be requested to pass special enabling legislation, as for the SCVWD when it reorganized. Typically, the creation of a water special district requires a majority vote of the electorate within the district's service area. In addition, authorizing ordinances must be passed by each of the legislative bodies in the district.

Table 2. Comparison of Bay Area water management agencies

Agency	Alameda County Water District	East Bay Municipal Utility District	Santa Clara Valley Water District	San Francisco Public Utilities Commission
Founding date	1914	1923	1929	1932
Authorizing act	County Water District Act of 1913	Municipal Utility District Act of 1921	Water Conservation Act of 1929 (Jones Act) / Santa Clara Valley Water District Act	Charter City legislation
Board size, election procedure	Five members. Elected (at-large)	Seven members. Elected by wards within service area	Seven members: five elected by County Supervisorial ward and two appointed by County Board of Supervisors	Five members appointed by Mayor of San Francisco
Sales area (extent)	Fremont, Newark, Union City (103 sq. mi.)	Parts of Alameda and Contra Costa Counties (325 sq. mi.)	Santa Clara County (1,300 sq. mi.)	San Francisco, parts of Santa Clara, San Mateo, Alameda Counties (506 sq. mi.)
Service population, type	318,000 retail	1.2 million retail	1.7 million wholesale	780,000 retail, 1.7 million wholesale
Operating budget	\$73.4 million (FY 00-01)	\$124.2 million (2001)	\$131.6 million (FY 00-01)	\$400 million, including all SFPUC operations
Average daily production	49.9 mgd	215 mgd	N.A.	260 mgd
Major supply sources	State Water Project 55%, SFPUC 30%, Alameda Creek watershed runoff 15%	Mokelumne River (Sierra Nevada)	State Water Project and federal Central Valley Project (more than half), groundwater and surface runoff (less than half)	Hetch Hetchy (Sierra Nevada) 83%, watersheds in San Mateo, Santa Clara and Alameda Counties (17%)

The property tax is often an important source of funding for special districts, particularly those established before 1978. For these districts, such as the SCVWD, Proposition 13 reduced property tax income and created a need for alternative revenue source. A new district in the Bay Area, were it created, would require a two-thirds vote to establish a property tax, making that outcome extremely unlikely in the present California environment.

Option #2: Joint Powers Agreement

A joint powers agreement (JPA) can be created with the consent of each participating jurisdiction through ordinances adopted by each governing board. The nature of the agreement is entirely defined by those jurisdictions. The resulting joint powers authority can be authorized to carry out any of the actions that the individual jurisdictions themselves have the authority to implement. In addition, a JPA holds a new bonding authority not held independently by JPA members.

A joint powers agreement may not result in a new governance structure. JPAs are primarily used to increase public financing options. But in this case, the potential governance-related merits of a JPA include sharing both system infrastructure planning and funding responsibility more equally between the SFPUC and its wholesale customers. For example, a JPA could issue construction bonds that would relieve the City and County of San Francisco from the exclusive up-front burden of obtaining voter approval for the huge projected expense of system upgrades, repairs, and expansions. Depending on how its bylaws are written, the JPA could also extend some degree of planning responsibility to the wholesale customers for facilities that serve them directly, in some credible and accountable manner.

Another advantage of a JPA is its relative ease of formation and the fact that it could quickly address one of the core problems facing the SFPUC, the BAWUA, and the water-using

constituencies they represent: the lack of a stable funding source to pay for needed rehabilitation and expansion of the aging water storage and conveyance system. Unless the agreement is structured appropriately, however, it is possible that any member could leave the JPA at any time, or could refuse to carry through with their roles and responsibilities, without recourse by other members.

Inertia in Reform

Just as the SFPUC and its elected officials have ignored BAWUA's calls for a special district, representatives from BAWUA Agencies and Representative Papan shared a strong mistrust of any governance reform short of a special district in which their constituents were directly and formally involved. When we discussed their reasons, the sentiment they repeatedly expressed was that San Francisco politics would continually usurp any regional sentiment—that in short, San Francisco residents and their elected representatives would not honor a voluntary agreement in the case of real crisis, like a drought or an earthquake. One participant of a public meeting declared: “San Francisco takes care of its own.”

And given original structure of the SFPUC, the speakers may be right. There is no built-in incentive for the SFPUC to respond to its customers outside of San Francisco, since these cities, water districts and their residents have no representatives on the SFPUC board, and they cannot directly affect San Francisco electoral politics. To them, the SFPUC exhibits many of the undesirable characteristics associated with an unregulated monopoly agency lacking political oversight, and has done so since it was formed in the 1930s. This is a long tradition of closed management.

Besides the obvious financial barriers to BAWUA developing their own infrastructure, information asymmetries reinforce the SFPUC's closed, monopolistic tradition. Knowledge about the system is specialized and essentially proprietary to the SFPUC. Jacobson (2000, p. 12) has described how information asymmetries hobble cooperative governance. Even if one organization has the right to audit the other, "difficulties in gaining access to information and analyzing costs and benefits may still arise." The unequal information available to BAWUA members significantly detracts from both their access to decision-making and their ability to evaluate the consequences of their proposals for governance reform.

Other aspects of the SFPUC's closed structures impede the effort toward towards governance reform. Trebing (1996) identified several adverse impacts of monopolistic structures in public utilities, three of which apply in this case:

- 1) *Prices will not track costs, but will instead reflect the political power of specific groups.* For example, Proposition H has allowed San Francisco ratepayers to set the revenue availability and, by default, the maintenance and repair agenda for the entire service area.
- 2) *Cost savings will be unevenly distributed.* It is widely believed among the BAWUA members that the City of San Francisco for many years used SFPUC revenues from both the water and power sales for general City purposes.
- 3) *The technology of the network will be determined by the requirements of the most important members rather than serving the network as a whole.* In the SFPUC case, the seismic retrofits that would benefit the larger service area have been slow in materializing.

These factors embedded in the historical relationships between the SFPUC and its suburban stakeholders have contributed to the existing impasse in moving to regional governance. Past monopolistic behavior has contributed to the mistrust that BAWUA representatives have of more moderate reforms, like a joint powers authority. But the historic governance structure places the power for reform exclusively with the SFPUC. Its closed tradition also means that information

dissemination is limited even to SFPUC constituents. Because the SFPUC board is appointed rather than elected, public debate about the state of the SFPUC infrastructure seldom occurs, so that voters do not receive information on how regional and San Francisco interests align—as in this case. The monopoly powers of the SFPUC ensure that it currently holds the reins in making the first move towards shared power; its political accountability to the residents of Sana Francisco effectively keeps it from doing so. Thus, the organizational structure—born out of the region’s history—hobbles the chance for cooperative governance reform without the intervention of higher levels of government, such as the state of California.

Given the complexity of water management just within the politics of the City of San Francisco, the SFPUC may perceive—perhaps rightly—that additional and empowered jurisdictions weighing in on management decisions might add complexity that outweighs the possible gain in financial capital offered by BAWUA cities. Further, there has been little evidence from prior experience or from the governance literature itself that suggests the creation of regional agencies necessarily puts an end to inter-jurisdictional conflict. Furthermore, the SFPUC’s board answers to the mayor who answers to SF voters. Although the SFPUC has mentioned the possibility of a regional decision-making strategy for addressing ongoing challenges to water management (specifically a joint powers authority), it has made no clear effort to pursue it.

Lessons Learned

Governance reforms that better support long-term planning and finance clearly serve in the interest of all users of the Hetch Hetchy system. All bear daunting risks from an inadequately maintained and planned distribution network. In addition, wholesale customers are frustrated with their dependence on an unregulated provider over which they have no direct political or economic

influence. From their perspective, the system lacks political accountability and is non-responsive to routine, legitimate customer concerns.

This case study verifies that the governance tradition affects the potential effectiveness of regional governance reform undertaken without the participation of higher levels of government. Key lessons for other regional governance efforts derive from the ways that closed structures prevented a representational balance in management decisions between the suburbs and San Francisco proper. Had this been overcome, the capacity of all parties to be responsive to looming infrastructure costs would have been increased. Instead, the SFPUC engaged in tentative efforts at cooperation with suburban constituents, but had no mandate from its own powerbase to improve regional relations. This became a source of contradiction for the SFPUC, BAWUA, and their effort towards regional governance. The SFPUC attempted to open more cooperative relations with BAWUA at the same time San Francisco voters centralized control over water management through ballot-box initiatives and mayoral actions.

This leads to the first lesson this case study offers to efforts for reform. In a situation in which closed or elitist governance traditions, the first step towards meaningful reform requires redefined, and well-defined roles for the groups involved. Without this redefinition—and some means to carry through—those currently empowered possess strong motivation to merely protect their position rather than alter it. Again, this reinforces the likelihood that top-down reform may prove more successful in these situations, as incentives or mandates provide a way to induce a willingness to sacrifice control return for compensation.

The state (along with the federal government) could provide incentives such as additional funding for seismic and other maintenance improvements to the distribution system, to ease the transition to a new governance structure conditional on successful negotiations between SFPUC and its wholesale buyers over the form of the governance agreement. State and/or federal funds to

subsidize reform might be extremely effective in bringing regional strategies to fruition. Such subsidies might be provided for the up-front costs associated with the renovation, seismic retrofit, and expansion of the SFPUC water system conditional on successful SFPUC-BAWUA negotiations over the form and function of a funding/planning shared decision-making arrangement. As indicated previously, the State's provision of \$250 million toward resolving the Metropolitan Water District/San Diego County Water Authority wheeling rate dispute is a recent example of nonregional monies being used to reward negotiation of power-sharing arrangements among water users that benefit the State as a whole.

Alternatively, the legislature could mandate that the SFPUC and its major wholesale customers negotiate an agreement on shared governance of the Hetch Hetchy system. This governance agreement could take different forms, as discussed previously. Given this state intervention, the relevant actors and interests, particularly the SFPUC, the BAWUA, and individual BAWUA members, should be consulted regarding the language of any such legislative initiative.

Even with state intervention, questions loom about what kind of governance reform should be pursued. Given the issues involved, a relatively minor changes towards a shared-power agreement between the SFPUC and its wholesale customers offers the most straightforward way to create rapid structural/political improvements in the current system. Such an arrangement, though less of a reform than desired by some suburban constituents, would enable both groups to begin work on the system's pressing infrastructure needs.

In this case, however, the informal webs of relationships and power between the parties likely requires reform. One of the overriding sentiments repeated during interviews with suburban stakeholders was a "lack of respect" for their perspectives, both from SFPUC staff and elected officials from San Francisco. As long as this feeling persists, even top-down, mandated reform may not alleviate the disenfranchisement of suburban interests.

The inertia in governance reform we see in the Bay Area case further raises questions about the role of subsidiarity in reform. As we have suggested, top-down intervention from the state or federal government could help bring the Bay Area stakeholders out of the balkanized positions towards permanent governance reform. Less clear, however, is *whether* the state should intervene, and when. When does a regional squabble merit top-down investment in resolution? When disadvantaged stakeholders claim injustice? When, as in this case, the potential for disaster looms large? Perhaps in cases where there are clear interjurisdictional externalities for parties outside the dispute? These conditions open the field to top-down intervention for many environmental disputes. And if this is the case, it certainly counters the belief that the new regionalism represents a movement to cooperative self-management among fragmented municipal government.

Ultimately, city monopolies like the SFPUC have little direct incentive to cede authority. But the SFPUC would have the most control over a process in which it actively and constructively participates. Otherwise it runs the risk of increasingly confrontational, distractive, and expensive struggles at both the state and federal levels, in the form of legislative calls for a special district and legal challenges to its control over Hetch Hetchy water and power.

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