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### Permalink

<https://escholarship.org/uc/item/9cq8n96f>

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### Publication Date

2008-05-16

# **Accountability in Emerging Forms of Governance:**

**A Comparison of the California Bay-Delta Process and the  
European Water Framework Directive**

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Landscape Architecture and Environmental Planning 222: Hydrology

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May 16, 2008

## **Abstract**

Water resource governance in California is characterized by complex jurisdictional relationships and overlap between agencies tasked with specific mandates. This is exemplified in the California Delta, where critical needs such as flood control do not fall exclusively within the purview of any one entity and therefore must be addressed through coordination and collaboration at multiple scales. Yet CALFED, a recent effort to produce integrated, collaborative governance in the Delta, has had mixed results. In this paper, we examine *accountability* within the existing governance system in the Delta. As a thought experiment we ask how accountability would function in a hypothetical governance system that incorporates principles from the European Water Framework Directive (WFD) into the context of the Delta. Network-based governance approaches such as CALFED blur the lines between public and private authority. They challenge traditional notions of vertical, top-down / down-up accountability by instead adopting a logic of accountability that is more horizontal, relationship-oriented, and diffused among multiple actors and organizations.

We use the case of the Dutch Slough salt marsh restoration project in the Delta to understand the fragmented institutional landscape in which such projects are embedded, to ask how this landscape shapes the pathways of accountability in governance, and to reflect on the rise of alternative models in the European Union that may offer lessons for California. The case study reveals the need for governance efforts to more effectively embed both vertical and horizontal accountability. To understand the applicability of the WFD to California, we compare the European and American social and political contexts as they relate to water. We suggest that different views of the roles of the state and non-state actors, property rights, and values associated with water ultimately shape the unique contexts in which European and American water policy can proceed. We conclude with suggestions for crafting governance institutions with effective linkages across organizations and multiple scales of government.

## **Problem Statement**

The California Delta is located east of San Francisco Bay in California's Central Valley. The Delta forms at the confluence of the Sacramento and San Joaquin rivers

and is a fragile ecosystem upon which most Californians depend, either directly (for drinking and agricultural water) or indirectly (for the state's economy and productivity). However, the Delta is a radically changed landscape – a tidal estuary reclaimed in the early to mid 1800's for agriculture and settlement. Despite the importance of the Delta to millions of people within the state, the aging infrastructure includes over a thousand miles of levees and a host of other problems ranging from drastic land subsidence, to potential salt-water intrusion, to seismic risk and agricultural run-off. There are no easy answers that will address the myriad of risks and interests that relate to the Delta. Because of this stew of existing and potential risks, absolute and perceived needs, and disputed claims as well as a system of overlapping yet non affiliated jurisdictions, the Delta is a locus for experimental policy making and horizontal, collaborative long-range planning.

This project tracks the processes of governance and decision making within the complex political climate of the Delta to understand the challenges of collaborative, holistic governance in a system that traditionally favors narrow agency mandates and objectives. We examine the practice of governance in the Delta, and the interplay of agencies, politics, legislation, and ecological concerns, through a case study of the Dutch Slough Restoration Project. We also seek to understand other models that can shed light on and possibly provide direction for improvements to the processes and accountability structures associated with the Delta. To do so, we examine the European Water Framework Directive (WFD) as a counterpoint to the scenario in the Delta. Are there lessons to be gleaned from the truly broad and far-reaching WFD, or are the broad strokes of the WFD too broad to address the messy, unique, in situ complexities in the Delta?

### ***Theory***

The notion of accountability has become increasingly important with recent global trends related to the transition from "government" to "governance". Governance refers to the deployment of a diversifying array of multi-party strategies to address public policy problems, including environmental concerns that require greater levels of coordination among actors from multiple organizations and sectors. Network-based governance approaches, like the CALFED process, blur the lines between public

(non-governmental) and private (governmental) authority. In doing so, they challenge traditional notions of vertical, democratic accountability; that is, accountability embedded in mechanisms of voting, representative governance, and linear, hierarchical accountability of civil servants to policy principals. Instead, network-based governance operates according to a different logic that is more horizontal, relationship-oriented, and where accountability is diffused among multiple actors and organizations. Despite a proliferation of theory, little empirical work has been done to understand how this horizontal accountability functions in practice or to determine the factors that condition achievement of accountability in network-based governance. Within an only recently burgeoning field of practice, there is not a lot to draw upon. We can expect however, that the largely untested assumptions in the literature of collaborative governance models will become, with time and proliferation, better documented.

Multiple authors have raised accountability as a key concern in the rise of network-based governance (e.g., see Mulgan 2000; Agranoff and McGuire 2001; Papadopoulos 2007). The standard definition of accountability is "the legal obligation to be responsive to the legitimate interests of those affected by decisions, programs, and interventions" (Considine 2002, 22). However, this definition leaves a great deal of wiggle room, and emerging forms of governance reveal that accountability is a malleable, multi-faceted, and often contested concept (Mulgan 2000).

The literature, in general, differentiates between two basic forms of accountability, which we refer to here as vertical and horizontal. Vertical accountability operates through clear chains of authority and top-down directives. It is grounded in organizational structure and treats non-conformance with material sanctions. Vertical accountability is commonly regarded as the accountability of those who implement policy (bureaucrats) to those who create policy (policy principals), but in fact is bi-directional: policy principals are also accountable to those who implement policy. They provide the necessary resources, funds, and support to enable effective implementation. Unlike vertical accountability, horizontal accountability operates through peer-to-peer relationships across organizational boundaries, trust, shared norms, and the production of joint visions and goals.

Most authors recognize accountability as a spectrum encompassing both vertical and horizontal forms and suggest that effective governance embeds both forms in varying configurations. But the agreement seems to end here. The debate over the capacity of newer, horizontal forms to be democratically responsive is unresolved. Critics cite concerns such as the lack of transparency and diffusion of control which may enable certain participants to have power over governance in non-democratic and nearly invisible ways (Papadopoulos 2007). Conversely, proponents suggest horizontal forms can produce superior outcomes to complex problems by facilitating greater adaptability, citizen participation, and integration of diverse knowledge and values (Innes and Booher 1999). More empirical work would resolve this debate and elucidate the conditions under which emerging forms of governance utilizing networks, collaboration, and cross-boundary work can achieve accountability.

Our study, the first to explicitly and empirically examine processes of accountability in the Delta along two dimensions, contributes to this work. We suggest that effective water resource governance must embed both horizontal and vertical accountability and attend to the nexus where these systems operate together.

### ***Governing Water Resources in California and the European Union***

#### **CALFED**

Not unlike the WFD that is based on a “water basin” jurisdiction rather than traditional political boundaries, CALFED is a body of 25 state and federal agencies that came together to pursue more integrated resolution to interrelated problems of water governance in the California Delta. At its inception in the early 1990s, “CALFED represent(ed) a leading edge experiment in a new form of governance suited to the pace of change and the fragmentation and conflict of contemporary times and to addressing the competing demands on a limited resource” (Innes et al. 2006, 7). CALFED intentionally sought to break the status quo of water governance in a policy arena that was locked into a stalemate of litigation, dispute and inadequate capacity for response and coordination by regulatory agencies.

*Background:*

Between 1987 and 1992, California underwent years of heavy drought. Disputes around water rights – always at a simmer in California, even in wet years – exploded into conflict as water supplies dwindled and water quality deteriorated. Environmental groups discovered that several endemic fish species were all but extinct in the Delta waterways and mounted lawsuits against the state. The general mayhem of the drought years showed that the existing system of water governance was broken and unable to address the myriad needs and concerns that were beating at the door.

Around 1990, four federal agencies began to collaborate informally to look at joint solutions in the Delta. The group became known as “Club Fed” and in 1994 “Club Fed” and the state signed an official accord to work together, forming CALFED. Federal participation in CALFED was authorized shortly thereafter. CALFED and stakeholder groups developed the “Bay-Delta Accord” and other documents in an attempt to provide a long-range planning framework for the Delta.

Despite CALFED’s early success as a collaborative and inclusive governance model that was praised and closely watched by academics, policy theorists, and law professionals, by all measurable accounts the environmental quality in the Delta continued to decline. An independent review of CALFED in 2005 revealed that after ten years and some initial improvements, the current state of the Delta was as precarious as ever with still declining fisheries, failing levees, and at-risk water supplies (The Little Hoover Commission 2005). In 2007, the courts mandated a temporary pump shut-down as an emergency measure to save the federally protected delta smelt from the brink of extinction. The downturn in ecological conditions was concurrent with a collapse of the CALFED system itself, as funding sources dried up and the structure of the group dissolved (Owen 2007). In recent years, CALFED has taken a backseat, and the Governor established the current Blue Ribbon Task Force and Delta Vision process to develop recommendations for managing the Delta in the future. Part of this Task Force’s charge is to advance recommendations for a new governance approach.

What went wrong with CALFED? According to several recent studies, CALFED suffered from “(flaws in its) institutional structure, which left communication and accountability lines unclear; weak funding mechanisms that failed to produce

anticipated money; leadership voids at the state and particularly federal levels; and failures of adaptive management" (Owen 2007, 1153). However, it is important to underscore the emergent and experimental nature of a project such as CALFED. While there are a handful of other cross-jurisdictional efforts at water governance in the country, notably at Lake Tahoe, along the Columbia, Colorado, Delaware and Platte Rivers, and in the Chesapeake Bay, to date there have been few studies that comparatively examine the institutional and structural arrangements that characterize *and can support* these new collaborative forms of governance (Gerlak and Heikkila 2006). In other words, while CALFED had its ills, it was in many ways operating in the dark with few other reference points for guidance. Further, the seeds that were sown in the collaborative model of CALFED may be beginning to bear fruit within the new configuration of governance emerging from the Delta Vision process.

### The Water Framework Directive

The European Union is implementing a water resource policy model which may hold lessons for California. The EU's Water Framework Directive, adopted in December 2000, was the result of negotiations among the EU's member states in the European Parliament and Council of Ministers (Kaika 2003). The impetus for the WFD arose from the convergence two primary factors: 1) the increased need for coordination across multiplying actors and scales and 2) increasing ecological concern for Europe's waters (Kaika 2003). The WFD institutionalizes water resource management across the EU at the river basin scale, with the hope of achieving a "more holistic and territorially integrated approach to solving water-related problems" (Moss 2004, 85) Rather than using command-and-control mechanisms – widely viewed as a hindrance to successful implementation of prior EU policies (Moss 2004) – the WFD establishes a system of objectives for all surface, groundwater, and coastal waters in the EU. Each member state is accountable for achieving these objectives. For surface waters, the objective is to achieve good status along two dimensions – ecological and water quality – by 2015. Although exceptions are made for heavily modified water bodies, this objective reflects the uniquely strong ecological orientation of the WFD under European law (Scheuer 2005).



According to Stefan Scheuer, "The largest part of the WFD is devoted to planning and management measures in order to achieve the objectives." (2005, 127) These measures establish identifiable authorities responsible for environmental and economic analyses, risk assessments, public consultation, developing a program of measures, establishing river basin management plans, and reporting progress to the EU (Scheuer 2005). The WFD does not specify the organizational or institutional structure for its implementation. Instead, it requires member states to identify the appropriate "competent authority" for each River Basin District (European Commission 2000, Article 3). Some member states, such as France, have established these competent authorities as formalized agencies. Others, such as Germany, have established coordinating bodies without formalized authority. Although its architects meant the WFD to be flexible in the context of each member state, this open-endedness presents a large uncertainty for the success of the program. For example, highly bureaucratic states with hierarchical governing structures may face difficulty developing effective institutions for horizontal coordination (Moss 2004). Implementation of the WFD to date has revealed several potential deficiencies including failure of member states to clearly integrate overall objectives, the establishment of weak competent authorities, a lack of public involvement, and failure to collect needed ecological data (Scheuer 2005).

## **Methods**

This research proceeded in two phases. First, to understand how accountability functions at the project level in the Delta, we developed a case study of the Dutch Slough Restoration Project. We gathered case study data through a site visit, document analysis, and an interview with a Dutch Slough project partner, John Cain of the non-governmental Natural Heritage Institute. The interview and document analysis focused on the history of this restoration effort and its position within Delta governance processes. Documents reviewed include the *Dutch Slough Restoration Site Management Plan* (Dubin 2003), City of Oakley City Council Meeting minutes, the Little Hoover Commission's report on CALFED, the new Bay-Delta Authority 10 Year Action Plan, and the Bay-Delta Commission Task Force reports.

Second, we conducted interviews with WFD experts and a literature review to compare water resource governance in California and the European Union. Literature

reviewed included: *A Fresh Perspective for Managing Water in California: Insights from Applying the European Water Framework Directive to the Russian River* (Grantham et al. 2008), the text of the WFD, and academic literature on the WFD and its implementation. We interviewed the following European experts on WFD implementation: Gabrielle Bouleau of Cemagref, Montpellier, France (Bouleau 2008) Rodrigo Maia of Universidade do Porto, Portugal (Maia 2008), and Graca Saraiva of Instituto Superior Tecnico and Ministry of the Environment, Lisbon, Portugal (Saraiva 2008). We also discussed the WFD, European perceptions of government and non-governmental organizations, and European decision-making structures with our Portuguese counterpart in this research, Nuno Oliveira. Using these data, we analyzed the interplay of agencies, politics, legislation, and ecological concerns associated with Dutch Slough and compared them to European constructs.

## **Results**

### ***Dutch Slough Case Study***

At least 97% of the Delta's historic tidal marshes and seasonal wetlands were lost to reclamation and levee construction, and many of the native fish species that depended on this habitat are in danger of extinction (Small 2002). This drastic reduction in tidal marsh and wetlands has taken place as the human population in the Delta has grown from just under 1 million in 1950 to 3.7 million today (Eisenstein et al. 2007). The growing population centers in the Delta have reduced the amount of undeveloped and agricultural land in this environmentally sensitive area (Figure 1).

As development pressures increase, opportunities to restore tidal marshes and wetlands in the Delta are dwindling. One of the most promising potential restoration sites is Dutch Slough, a 1200 acre parcel of land used for the last 100 years by grazing and dairy operations. Located within the official boundaries of the newly incorporated City of Oakley in Contra Costa County, Dutch Slough is in an area of the Delta region experiencing tremendous development pressure. Between 1990 and 2007, the City of Oakley swelled by nearly 85%.<sup>1</sup> This pressure nearly sealed Dutch Slough's fate as the next patch of agricultural land to be paved over and built up as a residential sub-

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<sup>1</sup> Calculated from 1990 census figures and 2007 data published on the City of Oakley website at <http://www.ci.oakley.ca.us/subpage.cfm?page=286055>

division with a projected 4500 to 6100 housing units. Instead, as a result of years of work initiated by an interested non-governmental organization (NGO) and implemented through a partnership between the NGO and various local, regional and state government entities, Dutch Slough is now slated for tidal marsh restoration.

Dutch Slough offers a unique opportunity to restore a large parcel of land within the Delta to tidal marshland and was identified by the CALFED Ecological Restoration program as a pilot project for salt marsh restoration and adaptive management. Much of the Delta is inappropriate for marsh restoration due to widespread subsidence, lack of topographic diversity, and local opposition to farmland conversion. In contrast, the Dutch Slough site features topographic diversity, appropriate elevations and zoning, and strong local support (Small 2002). It is one of the only large-scale sites suitable for salt marsh restoration in the Delta. Today, the project is on Governor Schwarzenegger's short list of priorities for the Delta.

Figure 2 illustrates the process that led to identifying, acquiring and planning the future of Dutch Slough. Many agencies and organizations worked together to move this restoration project forward during the initial stages of this process. But roadblocks – including the City of Oakley at the onset and the Department of Water Resources more recently – have stalled the project's progress. The following narrative describes the essential components of the effort to conduct Habitat Restoration on Dutch Slough thus far.

*Project Identification/Securing Government Interest:* Dutch Slough was identified for restoration by an NGO, the Natural Heritage Institute (NHI). NHI recognized the value of this site and was instrumental in drawing political and financial support from local, regional and state government. Politicians and state agency staff with an interest in the Delta helped the project gain institutional traction. This support allowed NHI to team up with two state Agencies: 1) the Department of Water Resources (DWR), responsible for managing and protecting the State's water resources, and 2) the Coastal Conservancy, charged with preserving and protecting California's Coast. These organizations worked together horizontally to gain support from state level politicians and ultimately other state and regional agencies. The DWR employee engaged in the partnership was a key project champion despite his position in an agency that was otherwise ambivalent about the project.

*Securing Land:* Prior to selling the land, the three families that owned Dutch Slough requested that all efforts related to government purchase and restoration of the parcels be kept confidential. Once the proposal became public the City of Oakley protested, a move that created a temporary roadblock. Oakley city officials were counting on the thousands of single-family homes proposed for Dutch Slough to help draw in the "executive demographic" and encourage retail development, which would translate into fees and revenue for the city. City officials raised concerns about how the project impacted "the balance between development and environmental enhancement...loss of regional fees....(and) adequate acreage and revenue for public parks."<sup>2</sup> However, once the City of Oakley reached a settlement with the property owners, it became a partner in the restoration project.

*Securing Capital/Owner:* The project partners, led by the Coastal Conservancy, applied for a \$28 million grant from CALFED to purchase the site and plan the restoration project. CALFED funded the project, recognizing its relevance to its mission (CALFED listed ecological restoration as one of its top four objectives) and its significance to the Delta. DWR took ownership of the site to partially mitigate the impacts of the State Water Project.

*Addressing Surrounding Infrastructure:* Different agencies have jurisdiction over the multiple layers of infrastructure in the Delta, including Dutch Slough. For example, a canal bordering Dutch Slough is owned by the US Bureau of Reclamation and is managed by the Contra Costa Water District which draws water from the Delta. To move the restoration project forward, the partnership had to work with these agencies to address concerns that changes to subsurface hydrology, salinity, and wave action resulting from the project would impact the canal. These concerns were addressed when the canal was replaced with an underground pipeline. Conflict remains over plans to install a fence around this infrastructure

*Obtaining Proper Government Approvals:* A long list of government agencies must issue permits or conduct consultations before restoration begins at Dutch Slough. However, these agencies will not issue permits until the project partners issue a draft Environmental Impact Report (EIR, currently under development pursuant to the

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<sup>2</sup>Minutes, Special Meeting of the Oakley City Council 12/17/01  
<http://www.ci.oakley.ca.us/UserFiles/File/minutes/2001/121701sp.pdf>

California Environmental Quality Act). These agencies and the resulting permits/consultations include:

- Army Corps of Engineers (Federal) – A Section 404 permit is needed since the project will affect existing Delta wetlands.
- Regional Water Quality Control Board (State) – A Section 401 permit is needed since there is concern that the restoration of Dutch Slough could lead to discharge of methyl mercury. The federal government under the Clean Water Act has delegated this issue to the state, with Environmental Protection Agency oversight.
- Department of Fish and Game (DFG, State) – A Stream Alteration Agreement is required. The project may also need a consultation from DFG that says the project will not harm state-protected species
- National Marine Fisheries Service (Federal) – A Section 7 consultation is needed under the Endangered Species Act to address impacts on endangered fish.
- Fish and Wildlife Service (Federal) – The project requires a consultation and a determination that the project does not cause harm to native species including the Swainson's Hawk, which feeds on rodents living on Dutch Slough. This food source could dwindle once wetlands restoration takes place.

The Dutch Slough project is currently stalled at the EIR phase. At the request of the project champion employed there, DWR took on the primary responsibility for the project and is the current lead agency on the EIR. Its leaders originally saw Dutch Slough as a mitigation opportunity for the State Water Project. But the key project champion has since left DWR, and the project is now orphaned in a division with little interest in it. Without another agency with the resources and authority to take on this project, the project remains at DWR. Following the "dismembering" of CALFED, its Ecological Restoration Program was reassigned to the California Department of Fish and Game, which has not prioritized the Dutch Slough project. A major issue is the lack of funds and resources for managing and maintaining the restored site, which is not expected to generate a revenue stream. The East Bay Regional Park District is a possible choice for long-term management, but will not take on this responsibility without dedicated maintenance funds. Although the Coastal Conservancy would seem a

logical choice for taking on DWR's responsibilities, it is prohibited from leading public works project of this magnitude. Without another agency dedicated to ecological restoration as its core mission, the project seems destined to remain under the purview of an ambivalent DWR.

## **Analysis**

### ***Accountability in Dutch Slough***

A focus on accountability helps to explain the trajectory of the Dutch Slough project. Horizontal relationships were essential during the project identification and planning stages. Progress required the coordinated efforts of committed actors working across organizational and sectoral boundaries to tackle a project of this size, regulatory complexity, and technical and scientific scope. The project would likely have faltered sooner – or never have gotten off the ground – without the efforts of all of the partners. This cooperative, horizontal accountability structure is especially necessary in the US since, as illustrated in this example, “there are multiple agencies with overlapping (and often conflicting) mandates for various functions” (Grantham et al. 2008). But following the loss of a key project champion, horizontal relationships between DWR and other project partners broke down. We assert that this breakdown was a result of DWR's inability to sustain its horizontal accountability to other project partners.

Further, despite the project's priority status, no one is ultimately accountable for restoring Dutch Slough. Project implementation requires vertical accountability: that is, restoration of Dutch Slough must ultimately be in the job description of one or more actors with the authority and resources to get the job done. These actors need support from their home agencies, and they must face consequences for failure. Agencies that have committed to projects must fulfill their obligations despite staff turnover. In the latter phases of the project, these components of vertical accountability have failed. The lack of support from the top to fund ongoing maintenance is an additional impediment that can be understood as a failure of vertical accountability. *Ongoing* vertical accountability is essential and must include support from the top that sustains the actions of those below. This case study demonstrates that both horizontal and vertical accountabilities are important AND that effective governance ultimately depends on the successful linkage of these two dimensions. Ultimately, the lack of

vertical accountability for the restoration of Dutch Slough has resulted in a half success: while the site remains agricultural land, it is not yet a restored wetland.

### ***Applicability of WFD Principles to Delta Governance***

Our case study illustrates the difficulty of achieving accountability for ecological restoration in the fragmented Delta policy landscape. This policy system must improve the capacity of actors to work across organizational boundaries and ensure that actors at all levels are vertically accountable for achieving results. But this is no easy task, and scholars have only begun to understand how governance systems can embed these dimensions of accountability. The European Union's WFD may hold some lessons for California. However, these lessons are necessarily tempered by uncertainties with WFD implementation in Europe and by the different political contexts in which the WFD and water governance in the US operate.

Table 1 compares key features of the WFD and CALFED governance approaches. The WFD establishes a framework whereby member states are accountable to the EU for achieving substantial water quality improvements. Since ecological restoration is a key strategy under the WFD for achieving these water quality improvements, managers in the EU will likely prioritize wetland restoration projects similar to Dutch Slough. The WFD focus on a clear and transparent process of developing goals, planning, monitoring, and adapting may represent the most feasible channel for achieving accountability (Kettl 2005). Furthermore, clear outcome goals are developed and nested at the regional, national, and EU levels. This focus on nested, transparent, and shared outcome goals is a key lesson that California's policy makers could adopt. But while it is tempting to suggest that the WFD would establish more accountability for projects like Dutch Slough, a closer look reveals a more complicated picture. The institutional structures and implementation strategies emerging in different countries suggest that accountability for such projects under the WFD is, as in the Delta, far from clear cut.

First, the success of the WFD in Europe depends crucially on how it is implemented in each country, and this is an ongoing experiment with many uncertainties. Water resource governance in Europe, as everywhere, is political. To the extent that the WFD forces realignments in existing control over water and related

resources such as land, it is likely to be resisted by entities that benefit under the current situation or reformulated to suit their objectives (Lundqvist 2004). The WFD and other recent EU environmental policies rest on a network-based, bottom-up style of policy implementation that “assumes the presence of motivated and capable implementers who are willing and able to work with the policy instrument in the local context and toward the intended goal” (Knill and Lenschow 2000, pages not numbered). This assumption remains untested.

Second, although the WFD requires the establishment of “competent authorities” for each river basin, their form is allowed to vary by country. While France has established River Basin Authorities as formal agencies with clear authority, Germany has established only coordinating bodies without formal authority over the agencies it is supposed to coordinate. These bodies must coordinate the efforts of multiple bureaucracies with narrow historical mandates, a situation not unlike that found in the Delta (Moss 2004). Even in countries that have established more formal agencies, implementing the WFD will require significant horizontal coordination with other agencies and municipalities, an unfamiliar task for many European bureaucrats accustomed to working for strong centralized states (Bouleau 2008). Therefore, just as in the Delta, this change will require new capacities in supporting horizontal accountability and in linking it with vertical authority to implement projects.

Third, the governance literature suggests that achieving accountability through performance management techniques – i.e., shared objectives and outcomes, rather than rules and hierarchy – requires a high degree of organizational capacity (Berman and Wang 2000; Cavalluzzo and Ittner 2004). It is not yet clear whether the competent authorities in each member state will have sufficient capacity to adopt this orientation effectively.

Finally, although the WFD may embed accountability more effectively by creating clear lines of accountability from river basins to member states to the EU, it is not clear that the political context in California and the United States can accommodate vertical accountability conceived in quite the same way.



## ***Political Contexts and Opportunities for Governance***

In particular, the tension between state and federal levels that permeates public policy in the United States means that actors with competing agendas have multiple channels to pursue alternative policy goals, thus thwarting the operation of clear lines of vertical accountability. The US and the EU derive from distinct political contexts that create different opportunities for and challenges to water governance reforms. These differences are summarized in Table 2. Our discussion of these differences is necessarily generalized but nonetheless helps to shed light on the distinct challenges that the US and EU face in implementing comprehensive watershed restoration efforts.<sup>3</sup>

First, most EU member states have strong budget and enforcement capacity and thus are very strong in the dimension of vertical accountability. In the US, by contrast, the vertical accountability of the state is fragmented. The lack of a strong centralized national government means that municipal, state, and federal levels compete for authority in many policy arenas.

Second, this fragmentation enables disaffected interests to shop for alternative venues of decision-making more likely to favor their interests (Baumgartner and Jones 1991), and as a result, courts and other venues of appeal play a much more central role in adjudicating environmental disputes in the US than in the EU (Kelman 1981). Such appeals can hold up environmental projects for years.

Third, this picture is further complicated by the tradition of strong private property rights to both water and land in the U.S. In the US, property owners can and often do strongly resist efforts by the government – whether local, state, or national – to effect policies that affect their property. In the EU, by contrast, although individual property owners would likely receive compensation for their losses, the authority and legitimacy of member states to reallocate private property in the public interest is far less contested.

The difference in attitudes toward private property underscores a fourth distinction: the collective value placed on water. The WFD articulates water as a common value that should not be viewed as merely a commercial commodity: it says, “Water is not a commercial product like any other but, rather, a heritage which must be

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<sup>3</sup> Unless otherwise indicated, the insights in this section were developed through conversation and interviews with European colleagues, in particular Gabrielle Bouleau of France and Nuno Oliveira of Portugal.

protected, defended and treated as such" (European Commission 2000). This language would be highly controversial in the US context, where private property rights – including access to water for strictly commercial enterprise – can still trump other societal values including recreation, ecological restoration, and social justice.

Fifth, the relative fragmentation of the US state has enabled a history of grassroots involvement by NGOs in many policy arenas and through multiple access points at local, state, and federal levels (Doh and Guay 2006). For example, environmental NGOs in the US commonly initiate restoration projects and may also serve a watchdog function to monitor the actions of the state. By contrast, in many EU countries, the role of NGOs tends to be constrained to the watch-dog role. Projects such as watershed restoration usually originate with the state. The stronger centralized government of many EU states also offers opportunities for clearer establishment of priorities and adjudication of disputes.

Attention to these differences in political and social contexts suggests that the EU and the US offer different opportunities and challenges for accountable governance of water resource systems. What lessons can the WFD offer California, and vice versa?

The WFD's clear transparency and accountability structure, and its capacity for institutional diversity and flexibility at the regional scale, may be a useful model for California. If well-implemented, the WFD process of developing clear outcome goals at nested scales of decision-making can serve the critical role of prioritizing watershed improvement efforts. Development of these outcome goals must include meaningful participation and coordination not only with national and EU Governments but also across the interests and organizations within the watershed. Still, accountability and authority for attaining these prioritized goals – the critical missing link in the Dutch Slough case – must be clear, focused, transparent, and backed with resources and the threat of sanctions for non-attainment.

EU member states also face challenges in water governance. Over the past 20-30 years, grassroots and NGO participation in the United States has facilitated numerous successful collaborative natural resource governance efforts (Wondolleck and Yaffee 2000; Weber 2003). These models may prove useful to EU member states newer to the task of building meaningful public participation in environmental projects and developing effective bodies for coordinating across actors, scales, and organizations.

## Conclusions

We used the case of an ecological restoration project in the California Delta to illustrate the fragmented institutional landscape in which such efforts are embedded, to ask how this landscape shapes the pathways and outcomes of ecological restoration, and to reflect on an alternative policy model in the European Union that may have lessons for California. Based on this analysis, we present the following conclusions:

1. California and the EU both acknowledge the need for integrated approaches to water resource governance to address issues beyond the competency of any single agency or organization. Applying the WFD to the Dutch Slough case study suggests that future efforts to govern the Delta must go further to explicitly tie responsibility for outcomes to existing institutions with the authority to implement those goals. Our findings underscore the utility of an explicit empirical focus on accountability both for the study of governance and for designing institutions of governance.
2. Policy-makers, scientists, and other observers may be tempted to impose top-down frameworks with clear authorities to resolve complex environmental issues that seem mired in gridlock. But we do not believe that is a realistic solution for high-stakes regions like the Delta. Decision-making in the Delta is and always will be political. More hierarchical institutions will not change this immutable feature of the landscape and will instead create and exacerbate prolonged legal battles between competing interests. Instead of more hierarchy, we must craft institutions with both the maximum capacity to resolve political issues horizontally through coordination and collaboration, and the authority and political will to move forward where consensus is unachievable.
3. For environmental issues that span scales and jurisdictional boundaries, accountability necessarily acts on both vertical and horizontal dimensions. Institutions that engage in cross-boundary collaborations such as CALFED, as well as in more structured agencies that require substantial coordination with other entities (like France's River Basin Authorities), must provide employees with the capacity to engage in cross-boundary work. This means, for example, structuring incentives, aligning organizational goals, and growing organizational cultures that support and sustain work across boundaries with peers in other

organizations. To create such organizations, we must engage experts in organizational development and change.

4. The crucial lesson that the WFD offers for governance of the California Delta is the value of strategic planning to develop shared objectives across policy institutions, scales, and interests. Carefully crafted plans and outcome goals, established and agreed upon at multiple, nested institutional scales, are critical to the implementation of the WFD. It is these transparent plans and outcome goals that provide a baseline by which to assess achievement of both horizontal and vertical accountability. Future efforts to address water resource policy in the US – whether at the local, regional, or national scale – would be wise to emulate this strategy. Furthermore, because this strategy of governance requires a high degree of organizational capacity, performance goals should assess not only ecological conditions but also institutional and organizational conditions and capacity.
5. In practical terms, existing governance structures like California's Regional Water Quality Boards could be harnessed to conduct comprehensive water basin planning that goes beyond water quality issues to include quantity, development impacts, salinity, flood risks, access, recreation, and ecosystem health. These plans could be modeled on the State's General Plan requirement for cities and counties. Implementation and enforcement of these plans could employ both incentives (such as fee waivers and rapid permitting) and penalties (such as fines and withholding of permits) to achieve compliance.

Both California and the EU are embarking on new experiments with governance of water resources. The path ahead is uncharted, and no single model can satisfy the unique needs of different political and social contexts. But past and current experiences provide some lessons and cautions, and the EU and California would be wise to learn from one another. In neither region can we assume that policy developed at higher levels – whether in Sacramento, Washington, D.C., or Brussels – will translate easily to the ground level. Policy makers must provide adequate resources for governing and improving water resources, and must do all they can to ensure that capable, well-equipped organizations with dedicated personnel are in place to carry

out their mandates. This focus on organizational capacity will be critical in systems whose effectiveness depends on the successful embedding of both horizontal and vertical dimensions of accountability.

### **Acknowledgements**

This project emerged through our participation in a unique workshop on the UC Berkeley campus from April 3-11, 2008, called *Innovative Water Frameworks for California? Insights from Comparative Study with the European Union*. We are grateful to workshop leaders Gabrielle Bouleau, Juliet Christian-Smith, Ted Grantham, and Professor Matt Kondolf for their patience, help, and insights. We owe special thanks to Nuno Oliveira, our Portuguese colleague in the workshop, for challenging our assumptions, provoking our thoughts, and providing a constant supply of humor and laughter.

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Table 1. Comparing Water Resource Governance Structures in the California Delta and the European Union.

<b>California Delta: CALFED</b>	<b>European Union: Water Framework Directive</b>
Horizontal structure of “cobbled” affiliate agencies	Vertical, hierarchical structure topped by River Basin District Authorities
Process-oriented procedures	Outcome-oriented procedures
Fragmented, narrowly focused policy landscape	Nested, broadly outlined policy landscape
Embedded public process	Limited public process
Specific mandates with hazy procedural process (lack of vertical support)	Broad mandates with hazy procedural process (lack of horizontal support)



Table 2. Comparing Political Contexts in the European Union and United States.

<b>European Union</b>	<b>United States</b>
Government with strong budget and enforcement capacity	Government with weak/variable enforcement capacity
Weak NGOs, grassroots	Strong NGOs, grassroots
Centralized authority retained at local level	Decentralized authority; fragmented at state and local level
Appeals rare	Appeals common
Weaker property/water rights	Strong property/water rights
Water as common value?	Water as contested value?

Figure 1. Development pressure in the California Delta. (From Eisenstein et al. 2007, with credit to Brooke Ray Smith and Alex Westhoff, available at <http://landscape.ced.berkeley.edu/~delta>).

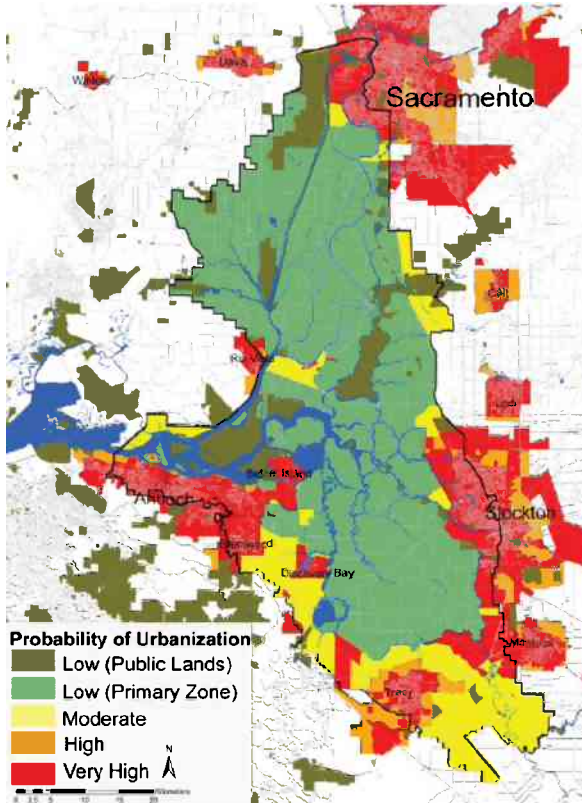


Figure 2. The Dutch Slough Process.

