

The University of New Mexico
School of Law

Fall 2003, Vol. 43, No. 4

NATURAL RESOURCES JOURNAL

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Moving from Conflict to Collaboration: Watershed Governance in Lake Tahoe

ABSTRACT

This article examines the evolution of watershed governance in the Lake Tahoe Basin. The early years of watershed management were characterized by a high degree of conflict. However, the last decade has seen dramatic changes. Organizations once embroiled in intense conflict with one another now work together on common goals to improve environmental conditions. The evolution of the governance system in Lake Tahoe is examined by looking at changes in intergovernmental relations and interactions between public agencies and civil society actors. Lessons are then drawn to provide advice for practitioners seeking to use collaboration as an implementation strategy.

INTRODUCTION

Lake Tahoe has long been known as a unique natural resource renowned for its exceptional water clarity, picturesque location, and diverse range of recreational opportunities. The basin's location, 150 miles from San Francisco and 90 miles from Sacramento, puts it within a short drive of more than eight million people.¹ The transient visitor

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This article was funded in part by research conducted for the National Academy of Public Administration as part of their Learning from Innovations in Environmental Protection Project. Both authors are grateful to Leslie Koziol and Kathryn Summers for their efforts in helping us collect and analyze the data. The views and opinions do not reflect those of the authors' affiliation or any individual that reviewed a previous version of the manuscript.

¹ Carol J. Boughton et al., Dept. of the Interior, *Stream and Ground Water Monitoring Program, Lake Tahoe Basin, Nevada and California*, FACT SHEET FS-100-97, U.S. GEOLOGICAL SURVEY, June 1997, at 1.

population exceeds 200,000 on peak holidays and exceeds 23 million on annual visitor days.² In the 1990s, tourism was a \$1 billion dollar industry employing more than 20,000 people.³ The lake's depth (1636 feet), altitude, and low average yearly temperatures create a unique ecological system. Given its economic and ecological importance, it is not surprising that the efforts to protect Lake Tahoe date back more than four decades.

Historically, much of the inter-organizational conflict in the basin surrounded the Tahoe Regional Planning Agency (TRPA) and its regulatory programs. The TRPA is a regional environmental and planning agency created to manage water quality in the basin. While the first two decades of its existence were contentious, the last decade has witnessed dramatic changes. There has been a shift from conflict-oriented interactions among agencies and civil society groups in the basin toward increasingly cooperative approaches to addressing basin problems. While early efforts focused primarily on developing the TRPA as a centralized regulatory agency, through which all development and permitting occurred, current efforts emphasize nonregulatory approaches such as habitat restoration, best management practices (BMPs), and environmental improvements through redevelopment. In recent years, the TRPA has moved toward decentralizing decision making to local governments in order to streamline its permitting program. It has also entered into cooperative arrangements with many of the same governmental and nongovernmental organizations (NGOs) that it had been in conflict with previously.

Lake Tahoe's well-documented history of water management efforts provides an interesting case for examining the evolution of watershed governance. This examination uncovers the increasing importance of decentralized, collaborative approaches to natural resource management. The information for the study was collected from two primary sources. Field interviews were conducted with 41 individuals representing 27 different organizations active in the Lake Tahoe watershed governance system. The individuals were identified using a snowball sampling technique.⁴ Documents and archival records

2. Deborah L. Elliot-Fisk et al., *Lake Tahoe Case Study*, in SIERRA NEVADA ECOSYSTEM PROJECT: FINAL REPORT TO CONGRESS, ADDENDUM 217, 238 (Centers for Water & Wildland Res., Wildland Res. Center Report No. 40, Mar. 1997).

3. *Id.*

4. Interviewing a wide range of individuals representing a wide range of organizations is important. A recent study of watershed partnerships found that information obtained from watershed coordinators is often systematically biased towards success. It also found that the differences between participants and nonparticipants are not nearly as great as the differences between the coordinators and everyone else. See William D. Leach, *Surrounding Diverse Stakeholder Groups*, 15 SOC'Y & NAT. RESOURCES 1, 641 (2002).

about basin programs, planning, and governance efforts were also examined. Systematic qualitative techniques such as coding were used to examine these data sets. Quotes and short vignettes were identified to provide context. A detailed timeline was also prepared to evaluate key events and historical patterns.⁵ Examining different data sources allowed a strategy of triangulation to increase the validity of the findings.⁶ A draft case study was sent to principal informants for factual verification.⁷

This article addresses a number of important questions about the evolution of governance systems and intergovernmental networks that are a by-product of our federal system of government. We begin by discussing the concepts of governance and collaboration. Next, we describe the environmental problems affecting Lake Tahoe. The article then describes the evolution of watershed governance as basin institutions have tried to address these environmental problems over the past four decades. Emphasis is given to the critical events and the factors facilitating the transition from a period of interorganizational conflict to increasingly cooperative approaches to basin governance. Finally, we conclude with advice to practitioners seeking to use collaboration as a strategy for improving watershed governance.

GOVERNANCE AND COLLABORATION IN WATERSHED MANAGEMENT

Governance refers to the means for achieving direction, control, and coordination of individuals and organizations with varying degrees of autonomy in order to advance joint objectives. It involves more than the configuration of governmental and nongovernmental organizations. Governance includes enabling statutes, organizational and financial resources, programmatic structures, and administrative rules and routines. It also includes the formal and informal rules, social norms, and structures governing relationships between organizations. This structure is inherently political and involves bargaining, negotiation, and compromise. It is also a dynamic process that evolves over time.⁸ As one agency

5. See Derek Kauneckis et al., *Tahoe Regional Planning Agency: The Evolution of Collaboration* 3, 4 (Nat'l Academy of Public Admin., July 2000), available at http://www.napawash.org/pc_economy_environment/trpapedf (last visited Nov. 6, 2003).

6. Triangulation is using independent measures derived from different sources to support, or at least not contradict, a research finding. See ROBERT K. YIN, *CASE STUDY RESEARCH: DESIGN AND METHODS* 91-93 (2d ed. 1994).

7. See Kauneckis et al., *supra* note 5, at 3 (providing additional discussion of the methods used for our study).

8. For a discussion of the concept of governance, see generally Lawrence E. Lynn et al., *Studying Governance and Public Management: Challenges and Prospects*, 10 J. PUB. ADMIN. RES. & THEORY 233 (2000); H. GEORGE FRIEDBRICKSON, *THE SPIRIT OF PUBLIC ADMINI-*

official in Lake Tahoe put it, current efforts are just "a single thread in the fabric" of an evolving governance system.

Watersheds provide an excellent opportunity for examining the evolution of governance systems, because they span political, ecological, and geographic boundaries. Policies and programs affecting watersheds are categorized by environmental medium (e.g., air, water, soil, land use, etc.), tailored to specific types of land use (e.g., wetlands, coastal zone, tidal waters, agricultural land, forest land, etc.), and divided among various agencies, each responsible for a different administrative function (e.g., permitting, enforcement, public education, etc.). The corresponding fragmentation ensures that no organization or single level of government has the power or authority to compel others to act.⁹ Thus, it is not uncommon to find that

no organization of government possesses sufficient authority, resources, and knowledge to effect the enactment and achievement of policy intentions. Instead, policies require the concerted efforts of multiple actors, all possessing significant capabilities but each dependent on multiple others to solidify policy intention and convert it into action. Indeed, it is often difficult for any one actor, or group of actors, to manage, or manipulate, the flow of problems and solutions onto the political agenda in the first place.¹⁰

Collaboration is defined as any joint activity by two or more organizations intended to increase public value by working together rather than separately.¹¹ It involves autonomous actors who use shared rules, norms, or organizational structures to act or make decisions related to a specific issue or problem.¹² This definition includes a wide range of collaborative arrangements. It can be understood as voluntary relationships between two or more organizations in a network of horizontal actors. Accordingly, it is fundamentally different from a

STRACTION (1996): H. Brinton Milward & Keith G. Provan, *Governing the Hollow State*, 10 J. PUB. ADMIN. RES. & THEORY 359 (2000).

9. Mark T. Imperial & Timothy M. Hennessy, *Environmental Governance in Watersheds: The Importance of Collaboration to Institutional Performance*, in ENVIRONMENT.GOV: TRANSFORMING ENVIRONMENTAL PROTECTION FOR THE 21st CENTURY 8,7, 8,58 (Nat'l Acad. of Public Admin. Res. Papers 1-7, 2000).

10. Hans Bressers et al., *Networks as Models of Analysis: Water Policy in Comparative Perspective*, in NETWORKS FOR WATER POLICY: A COMPARATIVE PERSPECTIVE 1,4 (Hans Bressers et al. eds., 1995).

11. EUGENE BARDACH, GETTING AGENCIES TO WORK TOGETHER: THE PRACTICE AND THEORY OF MANAGERIAL CRAFTSMANSHIP 8 (1998). See generally MARK H. MOORE, CREATING PUBLIC VALUE: STRATEGIC MANAGEMENT IN GOVERNMENT (1995).

12. Barbara Gray & Donna J. Wood, *Collaborative Alliances: Moving from Practice to Theory*, 27 J. APPLIED BEHAV. SCI. 3, 4 (1991).

hierarchical or vertical arrangement where formal control mechanisms exist between actors at different levels. Since collaborative relationships are often informal and temporary, they tend to be characterized by bargaining, negotiation, and compromise rather than formal de jure control. Thus, in a collaborative arrangement, participants remain autonomous and must be convinced to cooperate rather than being forced to do so.¹³

Our use of the term governance is deliberate. Watershed governance is an evolutionary process through which rules and institutions are built.¹⁴ Emphasizing the concept of governance also draws attention to the real challenge for practitioners, namely finding ways to improve watershed management in a world of shared power where the capacity for solving policy problems is widely dispersed and few organizations have the power to accomplish even their own mission by acting alone, let alone solve complex environmental problems.¹⁵ In some instances, improving watershed governance requires completely new institutions, programs, and policies. The TRPA was created to fill this need in Lake Tahoe where it serves as "the" planning department for all of the basin's governmental and nongovernmental actors [Table 1].

However, improving watershed governance often requires a great deal more than simply creating a new institution because every watershed is "managed" by decisions of governmental and nongovernmental organizations that influence the health and integrity of ecological systems. Accordingly, enhancing existing watershed governance is often more complicated than creating a new agency or program. It requires collaboration resulting in the combination of existing institutions, programs, and policies in new ways in order to improve cooperation and generate public value. Lake Tahoe illustrates both approaches to enhancing watershed governance, creating new institutions and collaboration.

13. See Nelson Phillips et al., *Interorganizational Collaboration and the Dynamic of Institutional Fields*, 37 J. MCMT. STUD. 23 (2000); Thomas B. Lawrence et al., *Institutional Effects of Interorganizational Collaboration: The Emergence of Proto-institutions*, 45 ACAD. OF MCMT. J. 281 (2002).

14. See generally ELINOR OSTROM, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION (1990).

15. Indeed, this is the central challenge for public administrators in general. See generally Milward & Provan, *supra* note 8.

Table 1: Description of the Main Actors in Lake Tahoe's Governance System

Organizations	Brief Description
Tahoe Regional Planning Agency (TRPA)	Created in 1969 pursuant to a federal-state compact, a bi-state regional planning and regulatory agency with a staff of over 50 people. Maintains environmental standards, issues permits, has enforcement powers, and is charged with attaining state and federal water and air quality standards. Directed by a 15 member governing board of various federal, state, and local officials and a 19 member Advisory Planning Commission (APC) comprised of highly educated professionals.
U.S. Dept. of Agriculture (USDA) Forest Service (USFS) Lake Tahoe Basin Management Unit (LTBMU)	Manages 77 percent of the land in the watershed. Unlike many USFS plans that emphasize resource extraction, the LTBMU plan emphasizes water quality protection. Spends \$500,000 per year to correct erosion problems. Is also involved in the acquisition of ecologically sensitive private parcels through the Santini-Burton Act (P.L. 96-586), which has provided \$100 million for land acquisition.
State Water Quality Agencies	The California State Water Resources Control Board (SWRCB), Lahontan Regional Water Quality Control Board (LRWQCB)/Nevada Department of Environmental Protection (NDEP). Implement state water quality laws and the CWA. The LRWQCB has been more involved than the NDEP and still implements the watershed's Section 208 plan pursuant to the CWA.
California Tahoe Conservancy (CTC)	Independent state agency created in 1984. A board of state and local officials makes decisions. To date, the CTC funded more than \$175 million on land acquisition and restoration projects. Acquired more than 5450 undeveloped and environmentally sensitive private parcels covering more than 6000 acres.
Local Governments	There are six local governments: Placer County (CA), Douglas County (CA), City of South Lake Tahoe (CA), Washoe County (NV), El Dorado County (NV), and Carson City (NV).
The Gaming Alliance	Formed in the early 1980s in response to the TRPA's re-organization, it represents the gaming industry's interests and was instrumental in helping form the Tahoe Transportation and Water Quality Coalition.
The League to Save Lake Tahoe	Created in 1957 and is the oldest environmental organization dedicated to protecting Lake Tahoe. Serves as a "watchdog" and scrutinizes every project brought before TRPA.
Tahoe-Sierra Preservation Council	Formed in 1981 to represent the rights of private property owners; has filed numerous lawsuits against TRPA.
Tahoe Transportation and Water Quality Coalition	Established in 1989 and is a coalition of basin actors including The League to Save Lake Tahoe, Tahoe Gaming Alliance, The Tahoe-Sierra Preservation Council, and other NGOs focused on finding creative solutions to transportation and water quality problems. Also prepares the Lake Tahoe Joint Federal Legislation Agenda.
Tahoe Research Group (TRG)	Coordinates the Lake Tahoe Interagency Monitoring Program (LTIIMP), established in 1979 to collect and analyze water and air quality data.

LAKE TAHOE'S ENVIRONMENTAL PROBLEMS

Lake Tahoe straddles the California/Nevada border with approximately two-thirds of the watershed area located in California and one-third in Nevada [Figure 1¹⁶]. The watershed comprises 506 square miles of which the lake's surface covers 192 square miles (38 percent). The lake is 22 miles long and 12 miles wide, which makes it the largest alpine lake in North America. The bottom of the lake plunges to a depth of 1646 feet, the third deepest in the United States.¹⁷ Water clarity is currently around 70 feet and is matched only by Russia's Lake Baikal and Oregon's Crater and Waldo Lakes.¹⁸ Alpine peaks surround the lake in every direction and provide a visually distinct watershed boundary. The surrounding peaks range from around 6500 to 10,000 feet in elevation with slopes often greater than 20 percent. This serves to limit development to the relatively flat area along the shoreline.¹⁹

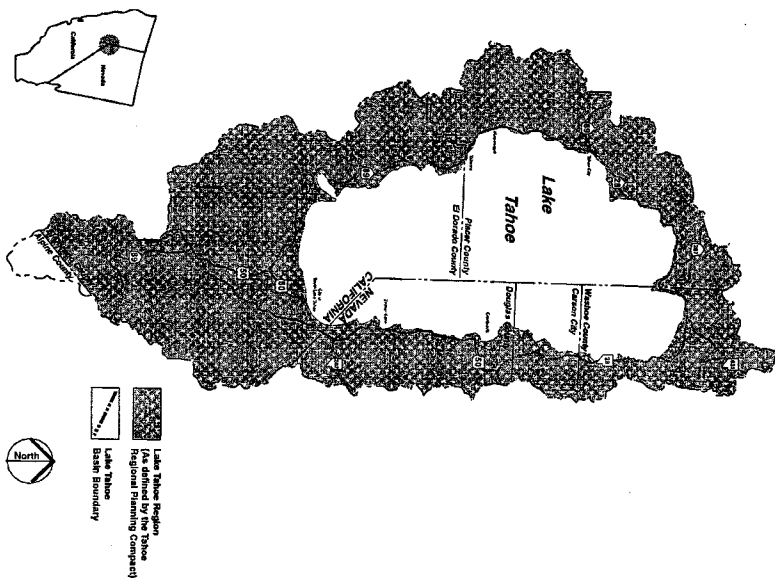
Lake Tahoe is renowned for its clarity and crystalline blue waters. The exceptional clarity of Lake Tahoe is due to low algal growth. Like all plants, algae need sunlight and nutrients to live. Under natural conditions, the lake receives only a small amount of nutrients due to natural filtering mechanisms such as wetlands and vegetation, which slow down sediment transport and absorb nutrients. Left undisturbed, algal growth would occur so slowly that the changes would be imperceptible over a lifetime.

However, the steep slopes and erodible soils make the watershed extremely sensitive to human disturbance. Factors contributing to increased sedimentation and nutrient loadings include artificially high lake levels, erosion from land development activities, stormwater runoff, wetland loss, atmospheric deposition of nutrients, and logging activities [Table 2].²⁰ Exacerbating these effects is the lake's 700-year flushing time,

16. Tahoe Regional Planning Agency (TRPA), *Regional Plan for the Lake Tahoe Basin: Goals and Policies* (Apr. 1999).
 17. CAROL A. MYERS & ANGELIA M. THACKER, U.S. GEOLOGICAL SURVEY, STREAM AND GROUND-WATER MONITORING PROGRAM: LAKE TAHOE BASIN, NEVADA AND CALIFORNIA 1 (June 1997).
 18. Tahoe Regional Planning Agency (TRPA), *Regional Plan for the Lake Tahoe Basin: 2001 Threshold Evaluation Draft 3-29-3-35* (TRPA 2001), available at http://www.trpa.org/News/2001_Thresholds.html [hereinafter 2001 Threshold Evaluation] (last visited Nov. 20, 2003).
 19. Boughton et al., *supra* note 1, at 1.
 20. See CAL. REG'L WATER QUALITY CONTROL Bd.—LAHONTAN REGION (SWQCB), WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION 5-2 (Cal. Reg'l Water Quality Control Bd. 1995) [hereinafter SWQCB], available at http://www.swrcb.ca.gov/rwqcb6/BPlan/BPlan_Index.htm (last visited Mar. 10, 2004). See also SIERRA NEVADA ECOSYSTEM PROJECT, *supra* note 2, at 228, 275.

which makes it act like a huge sink. Thus, continued nutrient loading increases phytoplankton productivity, which decreases water clarity.²¹

Figure 1: The Lake Tahoe Watershed, California and Nevada



21. NAT'L EUTROPHICATION SURV. & SPECIAL STUD. BRANCH, CORVALLIS ENVTL. RES. LAB., REPORT ON LAKE TAHOE CARSON CITY, DOUGLAS AND WASHOE COUNTIES, NEVADA EL DORADO AND PLACER COUNTIES, CAL. EPA REGION IX, at 1-9 (EPA & Nat'l Eutrophication Surv., Working Paper No. 810, 1977). See also CAL. REG'L WATER QUALITY CONTROL BD., *supra* note 20, at 5-2.

Table 2: Sources of Lake Tahoe's Water Quality Problems

Cause	Effect
Roads (construction and maintenance)	<ul style="list-style-type: none"> Land disturbance increases susceptibility to erosion Sand applied to roads during the winter contributes to sedimentation, including the addition of small colloidal particles that suspend in the water column Flat, smooth surfaces allow runoff to travel at higher velocities, which results in increased sedimentation and flooding
Stream Environment Zone (SEZ)	<ul style="list-style-type: none"> Nutrient and sediment loading due to removal of natural filtering mechanisms
Disturbance	<ul style="list-style-type: none"> Source of nutrients and sediment when disturbed
Vegetation Removal	<ul style="list-style-type: none"> Increased flooding Nutrient loading from sedimentation and precipitation Increased velocity of runoff, which exacerbates erosion problems
Fertilizer Use	<ul style="list-style-type: none"> Nutrient loading to ground and surface water
Leaking Sewer Systems	<ul style="list-style-type: none"> Nutrient loading to ground and surface water
Industries Located West of the Basin	<ul style="list-style-type: none"> Atmospheric deposition of nutrients in the watershed
ImperVIOUS Surface/Urbanization	<ul style="list-style-type: none"> Increases runoff Increases nutrient loading and sedimentation

In 1968, when consistent measurements were first taken, transparency was measured at around 100 feet. It is currently around 70 feet (depending on the time of year). While there is some indication that the rate of decline in transparency has slowed, it is difficult to tell given the lake's slow response time (around 20 years), changing weather patterns, and the variability in the data.²² Halting and reversing declining lake clarity is now the top environmental priority for basin actors.

The land use pattern in the basin has changed considerably over time. During the mid-1800s, the Basin was extensively logged to provide timber for the Nevada silver mines of the Comstock Lode. Extensive logging then caused a shift in land use to agriculture, ranching, and development of large private estates and commercial resorts beginning in the early 1900s. Agriculture and ranching activities were gradually phased out and many of the large private estates were subdivided when development pressures increased after World War II.²³ However, due to its inaccessibility, Lake Tahoe remained primarily a summer destination for the wealthy until the 1950s.

22. 2001 *Threshold Evaluation*, *supra* note 18.
 23. WES INGRAM & PAUL SABATIER, A DESCRIPTIVE HISTORY OF LAND USE AND WATER QUALITY PLANNING IN THE LAKE TAHOE BASIN 10-12 (Inst. of Ecology, Rep. No. 31, 1987).

In the 1950s, Lake Tahoe's residential population was around 2850 with a yearly visitation of around 30,000.²⁴ By 1995, the summer population was estimated at 102,000 with approximately 60,000 permanent residents.²⁵ Much of the development occurred from the mid-1950s until the mid-1980s and was fueled by casino development, improved highway access, and the development of winter sports facilities triggered by the 1960 Winter Olympics in Squaw Valley.²⁶ There are now approximately 42,800 year-round homes and 9600 vacation homes in the watershed.²⁷ Much of the development is either directly or indirectly tied to tourism, the life-blood of Lake Tahoe's economy.

LAKE TAHOE'S EVOLVING GOVERNANCE SYSTEM

Given Lake Tahoe's unique ecological characteristics and its economic importance to the region, it is not surprising that watershed governance efforts date back more than four decades. The following sections describe the major events shaping Lake Tahoe's governance system. It has been divided into four historic periods representing major shifts in the approach to managing the watershed. A chronology of key events in the history of basin governance is provided in Table 3.

24. DOUGLAS H. STRONG, TAHOE: AN ENVIRONMENTAL HISTORY 51 (1984).

25. Elliot-Fisk et al., *supra* note 2, at 238.

26. DEPT OF AGRIC., THE ROLE OF THE UNITED STATES FOREST SERVICE AND OTHER FEDERAL AGENCIES IN THE LAKE TAHOE REGION 9 (1979).

27. Mark Nechodom et al., *Chapter 6: Social, Economic, and Institutional Assessment, in LAKE TAHOE WATERSHED ASSESSMENT* 67 (1999) (unpublished draft, on file with author).

28. The following discussion of the evolution of Lake Tahoe's governance system builds on the earlier work of Paul Sabatier. See INGRAM & SABATIER, *supra* note 23; Paul A. Sabatier & Anne Brasher, *From Vague Consensus to Clearly Differentiated Coalitions: Environmental Policy at Lake Tahoe, 1964-1985*, in POLICY CHANGE AND LEARNING: AN ADVOCACY COALITION APPROACH 177-208 (Paul Sabatier & J.A. Jenkins-Smith eds., 1993); PAUL A. SABATIER & NEIL W. PEYKE, LAND DEVELOPMENT AND CHANGE AT LAKE TAHOE, 1960-84: THE EFFECTS OF ENVIRONMENTAL CONTROLS AND ECONOMIC COALITIONS ON HOUSING CONSTRUCTION (1990); Paul Sabatier et al., *The Devil Shift: Perceptions and Misperceptions of Opponents*, 40 W. POL. Q. 449 (1987). See generally DOUGLAS H. STRONG, TAHOE: FROM TIMBER BARONS TO ECOLOGISTS (1999); SUSANNE BENTLEY, LAKE STORIES: AN EXPLORATION OF THE IMPACT OF HUMANS ON THE ENVIRONMENT IN THE LAKE TAHOE BASIN (1997) (unpublished dissertation, Univ. of Nevada at Reno) (on file with author); Richard Fink, *Public Land Acquisition for Environmental Protection: Structuring a Program for the Lake Tahoe Basin*, 18 ECOLOGY L. Q. 485 (1991); LAURENCE B. BAXTER, REGIONAL POLITICS AND THE CHALLENGE OF ENVIRONMENTAL PLANNING (Inst. of Govt. Affairs, Envtl. Quality Series No. 22, 1974); ROBERT A. BURGO, POLICY AND PLANNING IN THE LAKE TAHOE BASIN: THE CASE OF TRANSPORTATION (Inst. of Govt. Affairs, Envtl. Quality Series No. 22, 1973); WILLIAM E. BELTS & GEOFFREY WANDERSORDE-SMITH, THE POLITICS OF DEVELOPMENTAL REVIEW IN THE LAKE TAHOE BASIN (Inst. of Govt. Affairs, Envtl. Quality Series No. 16, 1973).

Table 3: Evolution of Lake Tahoe's Governance System

The Technical Fix (1959-1965)
<ul style="list-style-type: none"> • 1959 Lake Tahoe Area Council is formed • 1964 Controversial <i>Lake Tahoe 1980 Regional Plan</i> • 1965 States begin efforts to export all sewage out of the basin
Development of a Regional Agency (1965-1972)
<ul style="list-style-type: none"> • 1969 Interstate Compact is adopted • 1970 TRPA begins operation • 1971 TRPA approves <i>Regional Plan</i> • 1972 TRPA approves its first Land Use Ordinance
Disillusionment with the TRPA (1972-1980)
<ul style="list-style-type: none"> • 1973 Controversial New casino and mall projects approved • 1975 California and Nevada pass different versions of a revised Compact and begin negotiations • 1978 All Sewage is exported from the basin • 1979 Report by Western Federal Regional Council highlights governance problems
The Decade of Negotiation (1980-1989)
<ul style="list-style-type: none"> • 1980 TRPA Compact revised • 1981 TRPA imposes a moratorium on new housing around the lake • 1982 TRPA adopts nine Environmental Threshold Carrying Capacities (ETCCs) • 1984 Court injunction blocks approval of the 1984 <i>Regional Plan</i> • 1984 Nevada threatens to pullout of the compact • 1985 California Tahoe Conservancy established • 1985 Consensus Workshop Group (CWG) implemented by TRPA to revise the <i>Regional Plan</i> • 1987 Regional Plan approved that contains the IPES and TDRs
The Era of Collaboration (1989-present)
<ul style="list-style-type: none"> • 1989 The Tahoe Transportation Coalition formed • 1991 First Five-year threshold review is released • 1996 Second Five-year threshold review is released • 1997 Presidential Summit • 1998 EIP Approved • 2001 EIP Revised • 2001 Third Five-year threshold review is released

The Technical Fix (1959-1966)

The explosion of residential and commercial development in the 1950s triggered the earliest efforts to improve watershed governance.²⁹ Between 1956 and 1962, the basin's permanent population increased from 2850 to 16,000. Two large development projects in particular sparked concern. The first, Tahoe Keys, was a large subdivision that destroyed a significant portion of the 1100-acre Pope Marsh on the Upper Truckee River, the basin's largest wetland area. The second,

29. For discussion of planning efforts prior to 1960, see W. TURKENTINE JACKSON, EARLY PLANNING EFFORTS AT LAKE TAHOE: THE ROLE OF JOSEPH F. MCDONALD 1956-1963 (Inst. of Govt. Affairs, Envtl. Quality Series No. 18, 1972).

Incline Valley, involved multi-unit condominiums constructed on the steep slopes on the northeastern side of the lake.³⁰

Projects such as these provided the impetus in 1959 to create the Lake Tahoe Area Council (LTAC), a nonprofit organization representing an array of basin interests. Its goal was to encourage research on Lake Tahoe and to act as a facilitator to resolve contentious development issues. Initially, LTAC was greeted with broad support. However, support soon dwindled when some individuals and organizations became more concerned with promoting economic growth than protecting water quality.³¹

One of LTAC's major accomplishments was the establishment of a regional planning commission in each local jurisdiction. Collectively, the commissions formed an umbrella advisory organization, the Tahoe Regional Planning Commission (TRPC). In 1964, the TRPC funded the creation of the *Lake Tahoe 1980 Regional Plan*, intended to provide a central development plan for the entire basin. It included a divided four-lane highway encircling the lake, with a bridge over Emerald Bay (now an International Natural Heritage Site), and projected a buildout population of over 313,000 by 1980. While no entity was identified to implement the plan, the future it envisioned frightened many residents and spurred individuals and agencies to take action to save Lake Tahoe from the scenario depicted in the "1980 Plan." It also strengthened support for a nonprofit organization, the League to Save Lake Tahoe, created in 1957 to monitor development and advocate greater environmental protection.

Around the same time, LTAC funded a study directly addressing basin water quality entitled *Comprehensive Study on Protection of Water Resources of the Lake Tahoe Basin Through Controlled Waste Disposal* (1963). Referred to as the "McCaughy Report," this study focused on pollution problems associated with the lack of adequate sewage treatment and erosion from land development activities. The report recommended the removal of all sewage from the basin in order to reduce nutrient flows into the lake.³² Although direct sewage discharges to the lake had been prohibited since 1915 in California and 1949 in Nevada, treated effluent was either disposed of on nearby land or trucked out of the basin. Sewage was also stored in septic tanks and poorly treated sewage occasionally discharged into rivers. On Labor Day 1961, two million gallons of effluent drained into Lake Tahoe from an overflow at the sewage treatment plant.³³

30. SABATIER & PELKEY, *supra* note 28, at 31.

31. *Id.* at 26; Ingram & SABATIER, *supra* note 23, at 10-12.

32. STRONG, *supra* note 28, at 66.

33. DEP'T OF AGRIC., *supra* note 26, at 12.

The release of the McCaughy Report, timed with the sewage overflow, triggered a number of reactions by public officials. The President's Water Quality Advisory Board and the Governors of California and Nevada held public meetings to focus attention on declining water quality.³⁴ By late 1966, California and Nevada passed resolutions calling for all sewage to be exported out of the basin. Prohibitions were subsequently added to state water quality plans in 1972.³⁵ The construction of the sewage treatment facilities necessary to export the sewage from the basin began in the 1960s and was completed in 1978.³⁶

While the installation of sewer systems addressed an important water quality problem, it had some unforeseen and deleterious effects. It removed what had been an important development constraint. Land that had been unsuitable for septic systems, and therefore not suitable for residential development, was now available.³⁷ Moreover, at the time there were virtually no growth restrictions and little residential planning imposed by local governments. During the 1960s, almost 20,000 housing units were approved, most of which were for hotels and motels.³⁸ Large tracts of land were also subdivided, nearly doubling the parcels available for home construction.³⁹

Development of a Regional Planning Agency (1965-1972)

To respond to these problems, in 1965 the California and Nevada legislatures created the Lake Tahoe Joint Study Committee (LJTSC), a nine-member board comprised of representatives from the local board of commissioners/supervisors in each state, a member from a state agency, and one at-large member. The committee held public hearings and ratified its final report in 1967.⁴⁰ It recommended creating a regional planning agency headed by a governing board with a governor's

34. STRONG, *supra* note 28, at 65.

35. Elliot-Fisk et al., *supra* note 2, at 229.

36. Treated effluent from the California side of the basin was first pumped 27 miles over the mountains into Indian Creek Reservoir, located in the heart of the Washoe-native land. It is now pumped into the Harvey Place Reservoir in Alpine County. North Lake Tahoe pumps its effluent to Martis Valley near Truckee, while communities on the Nevada side pump their effluent to Carson City. STRONG, *supra* note 28, at 66.

37. See LAKE TAHOE AREA COUNCIL, EPA, BUTROPHICATION OF SURFACE WATERS-LAKE TAHOE (1971).

38. JAMES E. PEPPER & ROBERT E. JORGENSEN, EPA, INFLUENCES OF WASTEWATER MANAGEMENT ON LAND USE: TAHOE BASIN, 1950-1972, at 34 (1974).

39. See *id.* (discussing the development impacts of sewers in the Lake Tahoe Basin from 1950-1972).

40. See LAKE TAHOE JOINT STUDY COMMITTEE, REPORT OF THE LAKE TAHOE JOINT STUDY COMMITTEE 8 (1967).

representative from each state, three at large members from each state, one presidential appointee, and a member from each of the six local governments. Decisions would be made using simple majority voting.

In response to these recommendations, California, Nevada, and Congress created an interstate compact to develop a regional agency.⁴¹ In 1969, after two years of negotiations, the Tahoe Regional Planning Compact (the Compact) created the Tahoe Regional Planning Agency (TRPA).⁴² The TRPA was charged with overseeing land use planning and minimizing development impacts. The agency maintained environmental standards, issued development permits, and helped attain federal and state air and water quality standards.

The Compact's negotiation significantly changed the LTJSC's recommendations. Rather than a mix of state level representatives, local officials dominated the TRPA's governing board and its advisory planning commission (APC). Projects would be approved if not acted upon within 60 days. Denial of a permit required a "double-majority" or a majority vote of each state's representatives to *reject* a project. Local governments provided the TRPA with a budget of \$150,000, while the LTJSC recommended giving the TRPA the right to levy additional property taxes.⁴³

While negotiating the Compact, Nevada and California created independent county-funded interim agencies, the Nevada Tahoe Regional Planning Agency (NTRPA) and the California Tahoe Regional Planning Agency (CTRPA). The formation of the two state agencies removed some control over development from the locally dominated TRPA. The NTRPA and the CTRPA were immediately immersed in the conflict surrounding the TRPA's creation, and, over the next six years, Placer, El Dorado and Douglas counties withheld funds from the two agencies and challenged their constitutionality without success. The presence of the competing NTRPA and CTRPA alongside the newly created TRPA also increased tensions between California and Nevada.⁴⁴

The TRPA began its operations in March 1970 with five staff members.⁴⁵ The governing board and an APC managed the TRPA. The

41. Interstate compacts are legally binding agreements between two or more states and the U.S. Congress created to address problems that transcend state lines. The process of interstate compact creation is often lengthy since all parties must agree to a common compact and it can only be amended if all parties to the original compact approve the amendments. See generally PAUL T. HARDY, INTERSTATE COMPACTS: THE TIES THAT BIND (1982).

42. Tahoe Regional Planning Compact, Pub. L. No. 91-148, 83 Stat. 360 (1969); Pub. L. No. 96-551, 94 Stat. 3233 (1980).

43. INGRAM & SABATIER, *supra* note 23, at 26-27.

44. *Id.* at 37-38.

45. By way of contrast, the TRPA's staff is now around 50 people.

Compact required the TRPA to develop the regional plan in 15 months, but the process was hindered by both time and resource constraints. The TRPA sought input from federal, state, and local entities as well as universities, the public, and the U.S. Forest Service (USFS). Simultaneously, they were responsible for processing a large number of permit applications.⁴⁶

The first regional plan was the "J.K. Smith Plan." It was based on the Bailey Land Capability System.⁴⁷ The system ranked all land in the basin in terms of sensitivity as measured by slope and soil type. Land capability was correlated to maximum allowed impervious coverage.⁴⁸ When unveiled, the J.K. Smith Plan met intense criticism and the APC declined to recommend it to the governing board. Some thought the plan would have dire economic consequences and impinge upon property rights, development, and local governments' ability to generate the property tax revenue necessary to pay off sewer and utility bonds. Others questioned whether the TRPA would be willing to follow staff recommendations.⁴⁹

In response to anti-plan sentiment, the governing board funded an ad hoc committee chaired by Richard Heikka, Placer County Planning Director, and the planning officers from the City of South Lake Tahoe and Placer and El Dorado counties. The resulting "Heikka Plan" was similar to the J.K. Smith Plan in many respects; however, while it incorporated the Bailey Land Capability System, it changed zoning and decreased density in a smaller portion of private land and did not sharply curtail development. The population capacity of the Heikka Plan was set at 280,000 people, while J.K. Smith's was set at a more modest 136,000. An added measure of the Heikka Plan was the public acquisition of 34,000 acres of private, environmentally sensitive land, provided that government funding of \$50 to \$100 million could be obtained.⁵⁰ The TRPA approved the Heikka Plan in February 1971. Due to its emphasis on a relatively new land capabilities system, its adoption received widespread national attention. Public support for the TRPA also remained high, although some organizations began to doubt

46. STRONG, *supra* note 24, at 149.

47. See generally ROBERT G. BAILEY, DEPT OF AGRIC. & TAHOE RECL PLANNING AGENCY, LAND-CAPABILITY CLASSIFICATION OF THE LAKE TAHOE BASIN, CALIFORNIA-NEVADA: A GUIDE FOR PLANNING (1974).

48. Impervious coverage is defined as any surface that does not permit the growth of vegetation or precipitation to reach the soil. Examples of impervious surfaces include roads, buildings, driveways, and wooden decks. A land capability rating of 1 or 2 allowed only one percent impervious coverage to be constructed on the site while the other extreme, 7, allows the construction of 30 percent impervious coverage.

49. *Id.* (citing STRONG, *supra* note 28, at 70-71).

50. *Id.* (citing SABATIER & PELKEY, *supra* note 28, at 35-36).

whether the Agency would have the ability to implement the plan effectively.⁵¹

Disillusionment with the TRPA (1972-1980)

In order to enforce the Heikka Plan, the TRPA passed a new land use ordinance in 1972. The ordinance did not strictly follow the Bailey system and some areas were totally exempt from its requirements.⁵² More troubling was TRPA's approval of 99 percent of all development applications during the first 15 months, resulting in 13,500 additional housing units. In part, this was due to the dominance of local government representatives on the governing board and APC, as well as the TRPA's permitting procedures. Some of the more controversial decisions included approval of the following: a major expansion of Harrah's Casino (1971); the North Shore Mall at Tahoe Vista (1973); the expansion of Harvey's Resort Hotel (1973); and the Park Tahoe Hotel-Casino (1973).⁵³ TRPA approved these projects using either the 60-day no action rule or the double-majority voting rule, which required a majority of each state's representatives to *reject* a project. Given these voting rules and local government dominance, projects were rarely rejected. This left many environmental groups disappointed and angry.

During this period, the public simultaneously accused the TRPA of being too stringent and too lax when it came to regulating development. "Some felt the new regulations resulted in an unconstitutional taking of property without compensation, and filed lawsuits against the TRPA totaling \$260 million."⁵⁴ Three counties withheld their funding for the agency, openly questioning the constitutionality of requiring local funding. Similarly, the State of California threatened to discontinue the TRPA's funding, because it saw the agency as too development-friendly, while many of the local governments in the basin resented the restrictions on increasing their tax base.

California strengthened the CTRPA by re-instituting its funding. The CTRPA drafted a more restrictive land use plan and ordinances for the California portion of the basin. The CTRPA plan would regulate all development on parcels greater than one acre. If a significant environmental impact occurred, a permit would not be granted. During this

51. *Id.*

52. Coverage of impervious surface in tourist commercial areas could reach 50 percent while in the general commercial districts it could reach 70 percent. Nearly all single-family residences with prior local government approval were exempt from TRPA review. *Id.*

53. Kauneckis et al., *supra* note 5, at 31 (citing INGRAM & SABATIER, *supra* note 23, at 35-36).

54. *Id.* (citing Tahoe Sierra Pres. Council v. Tahoe Reg'l Planning Agency, 34 F.3d 753 (9th Cir. 1994)).

period, the CTRPA took on an additional role as a parallel watchdog agency. It filed an unsuccessful lawsuit against the TRPA for its approval of the North Shore Club Casino.⁵⁵

The basin's increasing environmental problems were documented in a 1979 report by the Western Federal Regional Council entitled *Lake Tahoe Environmental Assessment*. It reported the following trends from 1970 to 1978:

- Algal concentrations had increased 150 percent;
- Urban Development had increased 78 percent; and,
- 75 percent of marshes, 15 percent of forests, and 50 percent of meadowlands had been converted to urban use or had been destroyed.⁵⁶

The TRPA also conducted its own self-evaluation. However, local governments opposed all of the TRPA's recommended changes. California continued to argue for more stringent regulations while Nevada favored additional development. By 1975, California and Nevada passed separate state legislation amending the Compact. The next five years involved considerable negotiation and conflict over redesigning the TRPA. At one point, California cut off the TRPA's funding in response to the Nevada legislature's rejection of its proposed amendments. Political leadership and support for the amendments waned and some California legislators proposed federal management for the entire basin by creating a Lake Tahoe National Recreation Area.⁵⁷

The two states eventually agreed to an amended Compact in December 1980.⁵⁸ Among other things, the revised compact directed the TRPA to establish Environmental Threshold Carrying Capacities (ETCCs) within 18 months. The ETCCs were a set of environmental

55. *Id.* (citing INGRAM & SABATIER, *supra* note 23, at 38).

56. *Id.* (citing STRONG, *supra* note 24, at 187).

57. As Kauneckis et al. relate,

The potential for federal management of the entire basin has not been an idle threat. At the height of the TRPA's criticism in the 1970s, the main central valley newspaper, *The Sacramento Bee*, suggested that perhaps the time had come to let the federal government take control of the entire basin. There have also been five attempts to make Lake Tahoe a National Park and two attempts to give it status as a National Lakeshore or Scenic Area. The first occurred in 1900 by a Nevada Senator and failed under public outcry against proposed compensation to timber barons who had profited from denuding the timber from surrounding mountains. Two attempts in 1913 and 1918 were brought down by local landowners. Bills introduced in 1931 and 1935 were both opposed by coalitions of local development interests.

Kauneckis et al., *supra* note 5, at 15-16 (citing STRONG, *supra* note 23, at 175, 68, 80, 81).

58. See generally INGRAM & SABATIER, *supra* note 23, at 57-62 (discussing the politics surrounding the Compact's revisions).

quality targets designed to direct and monitor the performance of the agency and its programs. The TRPA was required to amend its *Regional Plan* and enact ordinances to ensure the FITCCs would be met. Previously exempt activities would now be subject to the TRPA's regulatory authority. Furthermore, all new subdivisions, Planned Unit Developments (PUDs), condominiums, and new casinos or expansions were prohibited until the *Regional Plan* and ordinances were completed. The revised Compact also prohibited any sewage plant expansions.

The revised Compact modified the membership of the governing board and the APC as well. The governing board was expanded to 15 members, and the overall ratio of state to local officials was changed from four to three [see Table 4]; whereas, under the original Compact local officials held a three to two majority. The governing board's voting decision rules also changed. In order to *approve* a project, five members from the state where the project is located and nine members overall must vote to *approve* it. The no-action period resulting in automatic approval increased from 60 to 180 days. The APC expanded to 19 through the addition of four non-local members. The APC's membership included both professional staff in planning and natural resource management and lay members representing the public. Additional input comes from various working groups that the TRPA organizes and/or participating agencies.

Table 4: Current Structure of the TRPA's Governing Board

California Local Government	Nevada Local Government
<ul style="list-style-type: none"> ▪ City of South Lake Tahoe Council ▪ Member ▪ El Dorado County Supervisor ▪ Placer County Supervisors' Appointee ▪ California State Representatives ▪ California Assembly Speaker ▪ Appointee ▪ California Senate Rules Committee ▪ Appointee ▪ Governor of California Appointee ▪ Governor of California Appointee 	<ul style="list-style-type: none"> ▪ Carson City Supervisor ▪ Douglas County Commissioner ▪ Washoe County Commissioner ▪ Nevada State Representatives ▪ Designee for the Director of Nevada Dept. of Conservation and Natural Resources ▪ Governor of Nevada Appointee ▪ Nevada At-Large Member ▪ Nevada Secretary of State
<p>Presidential Appointee, Non-voting member</p>	

While the negotiated Compact satisfied federal and state legislators, TRPA lost some of its most ardent supporters during the reorganization. Moreover, the revised compact spurred other stakeholder interests to organize and respond to the stricter land use regulations. It was during this period that the Tahoe-Sierra Preservation Council and the Gaining Alliance were created to represent private landowners and business interests respectively; both organizations played important roles in transforming basin governance.

The Decade of Negotiation (1980-1989)

The TRPA's *Regional Plan* now guides all decisions in the watershed pertaining to growth and development. It includes a comprehensive land use plan; a plan for the development of a regional transportation system; a plan for the development, utilization, and management of the basin's recreational resources; and a plan for the location, scale, and provision of public services and facilities. The revised Compact required the TRPA to amend its *Regional Plan* so that "at a minimum the plan and all of its elements, as implemented through agency ordinances, rules and regulations, achieves and maintains the adopted environmental threshold carrying capacities. Each element of the plan shall contain implementation provisions and time schedules for such implementation by ordinance."⁵⁹

Given the conflict surrounding the original *Regional Plan* and the Compact's revisions, it should not be surprising that developing a new *Regional Plan* produced a great deal of conflict. The TRPA placed a moratorium on new housing in 1981 until the new *Regional Plan* was adopted and only issued development permits essential to public health and safety. The moratorium created strong divisions between groups favoring development and private property rights and those favoring development restrictions and increased environmental protection. The creation of formal organizations representing each side of the conflict, Tahoe-Sierra Preservation Council and Gaining Alliance and the League to Save Lake Tahoe, made the issue of development versus environmental protection more salient. California state agencies favored greater restrictions on development, while those of Nevada typically supported development interests. The TRPA attempted to resolve these conflicts through formal and informal meetings with various governmental and nongovernmental actors and additional input was received from members of the APC, the Steering Committee, and the Governing Board when developing the draft plan. In 1983, *An Environmental Impact Statement for Adoption of a Regional Plan for the Lake Tahoe Basin* was released for public comment.

The TRPA's 1984 *Regional Plan* encountered resistance when it was released for public comment. The League to Save Lake Tahoe and the California Attorney General immediately sued the agency for not providing adequate protection. In *People of the State of California v. Tahoe Regional Planning Agency*, California argued that the 1984 *Regional Plan* did not conform to the Compact because it did not ensure that the newly

59. Tahoe Regional Planning Compact, Pub. L. No. 96-551, art. V, § 1(c), 94 Stat. 3233 (1980).

formulated ETCCs would be achieved.⁶⁰ In August 1983, a federal district court judge issued an injunction preventing the TRPA from approving the plan. In *Tahoe-Sierra Preservation Council v. Tahoe Regional Planning Agency*, the Tahoe-Sierra Preservation Council filed suit on behalf of 700 landowners, arguing that the moratorium and the 1984 *Regional Plan* resulted in an unconstitutional taking of property without just compensation.⁶¹

The moratorium on all development in the basin not only prevented new housing and tourism development, but it also halted environmentally friendly projects—redevelopment and environmental mitigation projects. This created an incentive for all parties to negotiate a new regional plan. However, initial attempts by the TRPA, the League, and the California Attorney General failed. At one point, the State of Nevada became so frustrated that a bill was introduced in the state legislature to end its participation in the Compact. While unsuccessful, it sent a clear message that a new regional plan would have to be approved by January 1987 or Nevada would pull out of the Compact.

The situation improved in 1985 when Bill Morgan, formerly with the U.S. Forest Service's Lake Tahoe Basin Management Unit (LTBMU), became the TRPA's Executive Director. The situation at the time was described as a "war zone," with property rights advocates and development interests pitted against those favoring tighter regulatory controls. People active in the debate reported that bumper stickers favoring environmental protection created a setting for vandalism and confrontation. Morgan made a brave effort to resolve the dispute by instituting a dispute resolution process known as the Consensus-Building Workshop (CBW). The objective was to bring together the basin's major stakeholders to negotiate solutions for critical issues at the center of the conflict and reach agreement.

The TRPA hired a professional facilitator to direct a series of meetings over the next year. Initially, skepticism surrounded the consensus process. However, as one participant observed, "Attitudes slowly changed. Provisional agreements emerged. Delicately balanced treaties were constructed. Guidelines for new ordinances were worked out and finally agreed to."⁶² Most participants reported that this represented a major turning point. The process produced complex tradeoffs and

60. California v. Tahoe Reg'l Planning Agency, 766 F.2d 1308 (9th Cir. 1985).

61. In *Tahoe-Sierra Preservation Council v. Tahoe Regional Planning Agency*, 535 U.S. 302 (2002), the Supreme Court recently held that the moratorium the TRPA put in place did not constitute a taking of property without just compensation. The decision did not address the constitutionality of the Individual Parcel Evaluation System, an issue subject to ongoing litigation.

62. STRONG, *supra* note 28, at 88.

compromises that include many of the 1987 *Regional Plan's* unique features:

- Each community's development plans would be approved by the TRPA and consistent with its ordinances;
- No new subdivisions were permitted;
- New commercial development was limited to 400,000 square feet over the first ten years;
- Only 200 additional tourist accommodation units were allowed for the first ten years;
- Disturbances in high sensitivity areas (according to the Bailey system, 1-3 capability lands) were prohibited with few exemptions;
- Allocations for new single and multiple-family residential units were limited to 350 per year for a six-year period;
- A new system of zoning protections was created for critical environmental resources such as Stream Environment Zones (SEZs);⁶³
- All new development projects with water quality impacts were required to mitigate these impacts using best management practices (BMPs);
- The Individual Parcel Evaluation System (IPES) was created, ranking all residential lots in the basin in terms of their environmental sensitivity,⁶⁴ which was linked to,

63. Stream environment zones (SEZs) include wetlands, floodplains, or riparian zones and have low Individual Parcel Evaluation System (IPES) scores due to the vital importance of undisturbed streams in filtering nutrients that are otherwise deposited into the lake. Parcels located entirely within an SEZ's setback area receive an IPES score of zero. Kaunecks et al., *supra* note 5, at 36; *See generally* TAHOE REG'L PLANNING AGENCY, CODE OF ORDINANCES, ch. 37, subpart 3 (1999), available at <http://www.trpa.org/Ordinances/pdf/files/Code37.pdf> (last visited Oct. 20, 2003).

64. The IPES applies to undeveloped residential parcels. Non-residential and developed parcels remain subject to the original Bailey Land Capability System. The goal of the IPES is to provide a more objective and accurate classification of the suitability of a residential parcel's development potential. All 17,000 undeveloped residential parcels are assigned a numerical score based on eight site characteristics. Scores range from 0 to 1150. Those with the highest scores can be developed after receiving a building permit from a local government. The IPES sets a total development cap of 300 parcels per year, which is divided among the counties and incorporated areas to regulate both the location and pace of development. Kaunecks et al., *supra* note 5, at 36 (citing TAHOE REG'L PLANNING AGENCY, BRYOND BAILEY: TRPA'S INDIVIDUAL PARCEL EVALUATION SYSTEM (Sept. 1988)).

- A Transferable Development Rights (TDR) Program that allowed development rights to be sold or banked from environmentally sensitive lands to usable locations.⁶⁵

The resulting regulatory framework may be one of the most complex and environmentally restrictive of its kind in operation. While some consensus was reached, the tradeoffs remained far from ideal from any individual group's perspective. Consequently, the *Regional Plan* remains a source of litigation.⁶⁶

One of the key features of the new plan was the Environmental Threshold Carrying Capacities' (ETCCs) environmental performance targets.⁶⁷ The TRPA adopted nine ETCCs in 1982 to address scenic, recreational, water quality, air quality, noise, wildlife, soil conservation, fisheries, and vegetation issues.⁶⁸ They included both numeric and

65. The initial interest in the TDR program stemmed from the development restrictions imposed by the IPES. In order to build a residential unit, one needs a development allocation, a development right, and appropriate coverage, all of which can be transferred. Local governments are allocated a specific number of development allocations and decide how to distribute their allocations among single and multi-family dwellings. Local governments often fail to use their total allocations. Every residential parcel is also assigned a development right that can be transferred within each of the watershed's nine hydrological areas. An owner must have an appropriate amount of coverage, the amount of impermeable surface on a parcel. Landowners wishing to acquire more coverage can provide mitigation funds or transfer coverage from another parcel. The amount of coverage that can be transferred varies and the rules are more stringent for commercial and tourist accommodations than residential units in order to encourage the rehabilitation of dilapidated structures and re-development. It is possible to purchase coverage; however, the price is often prohibitive. According to one planner, about 1800 square-feet are needed to build a single-family residence and the current market price is around \$35 per square-foot. Kauneckis et al., *supra* note 5, at 39-40.

66. See, e.g., *Sutium v. Tahoe Reg'l Planning Agency*, 520 U.S. 725 (1997). Mrs. Sutium was barred from building a retirement home on a small lot on the Nevada side that she and her late husband acquired in 1972 because she received a low IPES score, which in effect denied her the right to develop her property. She argued that she had been deprived of her constitutional rights because she lost all use of her land. The TRPA argued that just compensation had been offered because she was allowed to sell development rights. The Supreme Court ruled in 1997 on a procedural issue and sent the case back without taking up the substantive constitutional questions. The case was then settled for \$515,000 as it was about to go to trial in the U.S. District Court in Nevada. Kauneckis et al., *supra* note 5, at 21.

67. According to Kauneckis et al.,
The thresholds can be amended when scientific evidence and technical information shows: two or more thresholds are mutually exclusive; scientific evidence shows a basis for a threshold is non-existent; thresholds cannot be achieved; additional thresholds are required to maintain a significant value of the region; and a threshold is not sufficient to maintain a significant value of the region. To date, no threshold has been amended.

Kauneckis et al., *supra* note 5, at 36.
68. *Id.* at 35 (citing TAHOE REG'L PLANNING AGENCY, REGIONAL PLAN FOR THE LAKE TAHOE BASIN: GOALS AND POLICIES (1986), available at <http://www.trpa.org/Goals/preface.html> (last visited Oct. 20, 2003)).

qualitative standards. The TRPA reviews all projects to "ensure that the project under review will not adversely affect implementation of the regional plan and will not cause the adopted environmental threshold carrying capacities (ETCCs) of the region to be exceeded."⁶⁹

Every five years, the TRPA undergoes a threshold review. This requires collecting and analyzing all available data, evaluating progress toward meeting the ETCCs, and making recommendations targeted at reaching unmet goals by 2007.⁷⁰ A draft of the recent threshold evaluation was issued in December 2001.⁷¹ The report notes that, of the 36 indicators, eight (25 percent) are in attainment and seven are close to attainment (19.4 percent). Of the 25 indicators not in attainment, 12 show a positive trend and seven have a negative trend.⁷²

The threshold review process has had an important impact on the governance system. While there may not be a shared vision of what the lake should look like in the next decade, the review process helps actors agree on what they do *not* want. As a member of the local business community stated, "I think there is a common vision of what we don't want and that becomes a very powerful motivator of what we do."⁷³ The threshold review process facilitates increased communication and learning among basin interests.⁷⁴ For example, the first two threshold reviews demonstrated to many basin actors that a continued emphasis on stringent land use regulations was unlikely to reverse declining water clarity and that a greater emphasis on nonregulatory approaches such as habitat restoration and BMPs was needed. Even though the TRPA's existence was no longer in question, the lack of progress towards many of the ETCCs created an incentive for basin actors to explore new approaches to improving watershed governance.

69. Tahoe Regional Planning Compact, Pub. L. No. 96-551, art. V, § 1(g), 94 Stat. 3233 (1980).

70. "The date of 2007 emerged from the consensus building process following the 1984 suits. It was intended as a mechanism to force compliance by the TRPA." Kauneckis et al., *supra* note 5, at 15, 74 n.56 (citing TAHOE REG'L PLANNING AGENCY, SUMMARY & DRAFT 1996 EVALUATION REPORT: ENV'T THRESHOLD CARRYING CAPACITIES & REG'L PLAN PACKAGE FOR THE LAKE TAHOE REGION 1-3 (1996)).

71. See 2001 *Threshold Evaluation*, *supra* note 18.

72. *Id.* Executive Summary, at xvii.

73. Kauneckis et al., *supra* note 5, at 60.

74. See generally Paul A. Sabatier & Hank C. Jenkins-Smith, *The Advocacy Coalition Framework: An Assessment in THEORIES OF THE POLICY PROCESS 117-66* (Paul A. Sabatier ed., 1999); POLICY CHANGE AND LEARNING: AN ADVOCACY COALITION APPROACH (Paul A. Sabatier & Hank C. Jenkins-Smith eds., 1993) (discussing the concept of policy oriented learning).

The Era of Collaboration (1989-Present)

The period of conflict surrounding the development of the revised Compact and *Regional Plan* marked a critical turning point. Environmental interests had effectively exercised their veto power by blocking the 1984 *Regional Plan*. However, this came at a high cost. The extended legal battles were costly. Environmental groups were unable to get the courts to change the TRPA's policies. Conversely, while development, casino interests, and local governments continued to exercise their influence on the TRPA, they were similarly ineffective in blocking TRPA policies that threatened their interests.

By the decade's end, a political stalemate emerged and many influential governmental and nongovernmental organizations realized that there had to be a better way to resolve their differences. One local businessman summed up the situation:

Allright [sic], TRPA, you are not going to go away, we can't sue you out of existence, we can't go to the Nevada or California legislatures and legislate you out of business, we can't go to the feds and have them do away with you, so we will work with you. OK. That message got into the community by '92. That cooperation was the way to go.⁷⁵

Another observed, "If you have this process where everyone can veto, what it becomes is an understanding that in order to get 'A' you have to give up 'B'. As a whole we are going to get consensus because everybody needs something, everybody wants something and everybody is afraid of something."⁷⁶ Additionally, interest group leaders involved in the lawsuits against the TRPA noted the high costs associated with using the courts to try and block TRPA decisions. As one respondent active in the litigation noted, "we don't want to go back to the days of conflict. From our point of view it is better to accept some things than go back to fighting...there is more to be gained from cooperation."⁷⁷

Interestingly, most of the respondents we interviewed failed to identify the 1987 *Regional Plan's* approval as the turning point toward more cooperative and collaborative approaches to watershed governance. While formal consensus building helped end the stalemate, many remained unhappy with the *Regional Plan's* compromises. Instead, respondents viewed the emergence of the Tahoe Transportation Coalition and Water Quality Coalition in 1989 as the critical turning

point. While conflicts continued to exist, the level of antagonism declined throughout the 1990s as organizations found new ways to work together.

The following sections describe various types of collaborative relationships that enhanced watershed governance. They are divided into three general sections. The first discusses the shift away from the zero-sum games involving win-lose regulations to non-zero-sum games involving win-win solutions such as habitat restoration. The second section examines the creation of new funding opportunities through increased collaboration. The third section discusses the increased organizational linkages across governmental agencies and between public and private entities.

MOVING FROM REGULATION TO RESTORATION

The political limitations of a purely regulatory approach led to a renewed emphasis on non-regulatory policy instruments such as wetland restoration projects, private land acquisition, creation of stormwater detention basins, and other BMPs. These non-regulatory instruments help decrease erosion, treat stormwater runoff, and protect and restore habitat. There is a long history of non-regulatory approaches to land and water management in the basin. For example, the USFS's Erosion Control Grants Program has provided financial assistance to local governments for water quality improvements. Between 1984 and 1997, \$9.6 million in federal funds were spent on restoration efforts with an additional \$24 million in matching funds coming from local governments.⁷⁸ The USFS also acquired more than \$100 million in ecologically sensitive private parcels through the Santini-Burton Act.⁷⁹ The California Tahoe Conservancy (CTC) also acquires and restores lands. The CTC has provided more than \$175 million to federal, state, and local agencies for over 375 restoration and water quality improvement projects. More than 5450 undeveloped and environmentally sensitive private parcels have been acquired covering more than 6000 acres on the California side of the basin. The agency acquires as many sites as possible on a willing-seller basis.⁸⁰

78. See generally CAL. TAHOE CONSERVANCY, CALIFORNIA TAHOE CONSERVANCY: PROGRESS REPORT (1997) (providing project expenditures authorized by the California Tahoe Conservancy since 1984). See generally Richard Fink, *Public Land Acquisition for Environmental Protection: Structuring a Program for the Lake Tahoe Basin*, 18 *ECOLOGICAL Q.* 485 (1991).

79. The Santini-Burton Act, Pub. L. No. 96-586, 94 Stat. 3381 (1980) authorized the sale of Bureau of Land Management lands near Las Vegas, Nevada, and used the proceeds to acquire environmentally sensitive lands in the Lake Tahoe Basin with low PES scores.

80. CAL. TAHOE CONSERVANCY, *supra* note 78, at 3, 15.

75. Kauneckis et al., *supra* note 5, at 56.

76. *Id.* at 57.

77. *Id.* at 55.

Restoration efforts have expanded considerably in recent years. For example, the TRPA established a Best Management Practices (BMP) Retrofit Program. While new development is required to install appropriate BMPs, the voluntary BMP Retrofit Program encourages existing residential units to install BMPs such as re-vegetation or stabilizing slopes to reduce runoff. In return, the TRPA provides education, technical assistance, and low interest loans to encourage landowner participation.⁸¹ Commercial, recreational, and public landowners are also required to implement BMPs. They must have a TRPA-approved BMP plan or receive a waste discharge permit from the regional board. Working in cooperation with agencies such as the Natural Resources Conservation Service (NRCS), the BMP Retrofit Program's aim is to have all property owners implement BMPs by October 2011.⁸²

In part, this shift in focus from regulatory to nonregulatory solutions was due to the disappointing results of the first two threshold reviews. The reviews suggested that regulations alone would not improve Lake Tahoe's water quality since many of the current environmental problems existed due to development and poor land use planning decisions during the past few decades. Respondents also attributed this shift in attitude to the leadership of the TRPA director, who was hired in 1994. While the previous TRPA director laid the groundwork for increased interagency collaboration, the new director changed the agency's underlying philosophy from "regulation is the answer" to "project is the fix" by placing additional emphasis on working with other organizations to implement non-regulatory solutions to basin problems. Today, the TRPA is much more willing to share credit for the collaborative activities with other agencies and to allow groups such as the Lake Tahoe Transportation and Water Quality Coalition to take a leadership role. This is very different from the early days of the TRPA when the agency was more likely to see its role as directing the activities of other public agencies, acting as a regulator of the regulators. These shifts in philosophy have helped to encourage other organizations to become involved in proactive partnerships focused on redevelopment and restoration.

Leveraging New Resources through Collaboration

While notable, the Environmental Improvement Program (EIP)—a collection of projects and programs designed to systematically address the watershed's environmental problems over the next 20 years—dwarfs these collaborative restoration efforts in scale, scope, and magnitude.⁸³ Basin actors had discussed developing a program similar to the EIP for years. However, it took the 1997 Presidential Summit attended by President Clinton and other top federal and state officials to make the EIP a reality. As one participant stated, "with the presidential summit, we had everyone's attention at once. We started the EIP six months before the President got here."⁸⁴ This provided the incentive for agency directors to complete a document to present at the Summit in hopes of securing a federal funding commitment. The TRPA coordinated the EIP's development, receiving input from a wide range of organizations involved in various aspects of its implementation.⁸⁵ The result is a partnership consisting of a large number of governmental and nongovernmental organizations focused on a coordinated effort to achieve the ETCCs and stop declining lake clarity [Table 5]. The TRPA merely serves as the coordinating entity.⁸⁶

The draft EIP was completed in time for the Lake Tahoe Presidential Forum (known locally as the Presidential Summit) held in July 1997. President Clinton, Vice President Gore, the governors of California and Nevada, four senators, several members of Congress, four Cabinet-level secretaries and administrators, and dozens of high-ranking federal, state, and local officials attended the event. It involved a series of events and community workshops organized by public, private, and tribal organizations framed around water quality, transportation, forest ecosystems, restoration, recreation, and tourism issues.⁸⁷

83. TAHOE REG'L PLANNING AGENCY, ENVIRONMENTAL IMPROVEMENT PROGRAM, VOL. 1: PROGRAM OVERVIEW (MAY 2001) [hereinafter EIP VOL. 1], available at <http://www.trpa.org/epidocument/pdffiles/volume1.pdf> (last visited Oct. 20, 2003).

84. Kainnecks et al., *supra* note 5, at 42.

85. See TAHOE REGIONAL PLANNING AGENCY (TRPA), ENVIRONMENTAL IMPROVEMENT PROGRAM FOR THE LAKE TAHOE REGION: THE COOPERATIVE EFFORT TO PRESERVE, RESTORE, AND ENHANCE THE UNIQUE NATURAL AND HUMAN ENVIRONMENT OF THE LAKE TAHOE REGION, VOL. 1: PROGRAM OVERVIEW 5 (2001), available at <http://www.trpa.org/epidocument/pdffiles/volume1.pdf> (last visited Jan. 29, 2003); See also EIP VOL. 1, *supra* note 83, app. A.

86. LAKE TAHOE FED. P'SHIP, REVIEW OF THE ENVIRONMENTAL IMPROVEMENT PROGRAM FOR THE LAKE TAHOE REGION 2 (1999).

87. LAKE TAHOE FED. INTERAGENCY P'SHIP, PRESIDENTIAL FORUM DELIVERABLES 1 (1997).

81. See generally SOIL CONSERVATION SER., DEP'T. OF AGRIC., S. LAKE TAHOE, CAL., EVALUATION OF PROPOSED EROSION CONTROL PROJECTS WITHIN NEVADA'S LAKE TAHOE WATERS: THE COST EFFECTIVENESS OF REDUCING THE SEDIMENT ON LAKE TAHOE (1990).

82. TAHOE REG'L PLANNING AGENCY, A PROPERTY OWNER'S GUIDE TO IMPROVING WATER QUALITY 2 (n.d.).

Table 5: Selected Organizations and Their EIP Involvement

Participant	Improvement Programs	Area of Participation			Financing
		Studies	Regulation		
Regional Agencies					
Tahoe Regional Planning Agency	X	X	X	X	X
Tahoe Transportation District	X	X	X	X	X
South Shore Trans. Mgt. Assoc.	X	X	X	X	X
Truckee North Tahoe Transportation Management Association	X	X	X	X	X
Federal Agencies					
Environmental Protection Agency	X	X	X	X	X
U.S. Forest Service	X	X	X	X	X
Soil conservation Service	X	X	X	X	X
Army Corps of Engineers	X	X	X	X	X
U.S. Postal Service	X	X	X	X	X
Bureau of Reclamation	X	X	X	X	X
U.S. Geological Survey	X	X	X	X	X
Federal Highways Administration	X	X	X	X	X
Federal Transit Administration	X	X	X	X	X
State Agencies					
CA Department of Transportation	X	X	X	X	X
CA State Water Quality Control Board	X	X	X	X	X
CA Air Resources Board	X	X	X	X	X
California State Lands	X	X	X	X	X
California State Parks	X	X	X	X	X
California Tahoe Conservancy	X	X	X	X	X
Nevada Dept. of Transportation	X	X	X	X	X
Nevada Division of State Parks	X	X	X	X	X
NV Division of Env'tl. Protection	X	X	X	X	X
Nevada Division of State Lands	X	X	X	X	X
Local Governments					
City of South Lake Tahoe (and Redevelopment agency)	X	X	X	X	X

(Table 5 Continued)

Participant	Improvement Programs	Area of Participation			Financing
		Studies	Regulation		
Douglas County	X	X	X	X	X
Carlson County	X	X	X	X	X
El Dorado County	X	X	X	X	X
Placer County (and Redevelpm't agency)	X	X	X	X	X
Washoe County	X	X	X	X	X
Washoe Tribe	X	X	X	X	X
Douglas County Sewer Improvement District	X	X	X	X	X
Incline Village Improvement District	X	X	X	X	X
North Tahoe Public Utility District	X	X	X	X	X
South Tahoe Public Utility District	X	X	X	X	X
Tahoe City Public Utility District	X	X	X	X	X
Nevada Tahoe Conservation District	X	X	X	X	X
Tahoe Resource Conservation District	X	X	X	X	X
Private Entities					
Heavenly Ski Resort Homeowners Assocs.	X	X	X	X	X
Residential Property Owners	X	X	X	X	X
Commercial Property Owners	X	X	X	X	X
N. Lake Tahoe Resort Association	X	X	X	X	X
Academic Institutions					
Univ. of Cal. - Davis	X	X	X	X	X
Univ. of Nev. - Reno	X	X	X	X	X
Desert Res. Institute	X	X	X	X	X

The Presidential Summit provided a major focusing event with several positive effects. First, the event provided the opportunity for governmental and nongovernmental officials to discuss basin problems. Second, as a high profile media event, it educated the public about declining water quality problems. Finally, it increased momentum and political support for the EIP. This resulted in an initial doubling of federal funding for Lake Tahoe over a two-year period.⁸⁸ It also proved how much could be accomplished by working together.⁸⁹

88. TAHOE REG'L PLANNING AGENCY, ANNUAL REPORT OF THE TAHOE REGIONAL PLANNING AGENCY 2 (1998).

89. While respondents supported the concept of a coordinated basin-wide EIP, some expressed concern that it has grown into nothing more than an agency "wish-list" of projects without much effort to prioritize or target the impacts. Others are critical that there

In 2001, the EIP was revised and updated based on additional stakeholder input and technical improvements that made it easier to monitor and track implementation. It now includes a comprehensive financing plan that identifies multi-agency funding needs.⁹⁰ The updated EIP identified over 700 projects and programs needed to meet the ETCCs and the organizations responsible for each activity in order to improve accountability. Even a casual review of the proposed activities reveals that most are inherently collaborative.⁹¹ As one agency director observed, "there are few projects that can be done by just one agency."⁹²

The EIP identifies almost \$1.5 billion worth of projects within the 20-year timeframe 1997-2016.⁹³ The 1998 EIP emphasized approximately \$908 million in capital project expenditures during an initial ten-year period (1997-2006), with costs shared between federal, state, and local governments, and the private sector. These costs are summarized in Table 6. The 2001 EIP contains a better estimate of other EIP costs and modifies the timeframes. For example, there is now a ten-year investment strategy and a 15-year construction goal for capital projects since project development lags several years behind the allocation of funding. The timeframes for the research and studies, program and technical assistance, and operations and maintenance categories vary as well.⁹⁴

Steps are being taken to secure the EIP's \$1.5 billion budget by 2016.⁹⁵ In November 2000, Congress passed the Lake Tahoe Restoration Act, which authorizes ten years of appropriations providing the federal share of the EIP's costs.⁹⁶ States have had some success in securing a

has been no effort to systematically review the projects and their overall environmental impacts to ensure that they will achieve the environmental thresholds. A few respondents also suggested that the widespread support that the EIP enjoys may change once the individual projects are implemented because those affected by the projects may voice opposition. For example, one informant noted that property owners in the Tahoe Keys Condominium complex are beginning to debate the CTC's large-scale restoration of the Upper Truckee River. Current debates over shoreline ordinances illustrate a potential source of controversy. Kannecks et al., *supra* note 5, at 46.

90. TAHOE REG'L PLANNING AGENCY, ENVIRONMENTAL IMPROVEMENT PROGRAM, VOL. 3: FINANCE PLAN (Apr. 2001) [hereinafter EIP Vol. III], available at <http://www.tpa.org/eipdocument/pdffiles/volume3.pdf> (last visited Oct. 20, 2003).

91. See TAHOE REG'L PLANNING AGENCY, ENVIRONMENTAL IMPROVEMENT PROGRAM, VOL. 2: MASTER LIST OF THRESHOLD NEEDS (Apr. 2001) [hereinafter EIP Vol. II], available at <http://www.tpa.org/eipdocument/pdffiles/volume2.pdf> (last visited Oct. 20, 2003); TAHOE REG'L PLANNING AGENCY, ENVIRONMENTAL IMPROVEMENT PROGRAM, VOL. 4: ACCOMPLISHMENTS REPORT (Apr. 2001) [hereinafter EIP Vol. IV], available at <http://www.tpa.org/eipdocument/pdffiles/volume4.pdf> (last visited Oct. 20, 2003).

92. Kannecks et al., *supra* note 5, at 55.

93. EIP Vol. III, *supra* note 90, at 3.

94. EIP Vol. I, *supra* note 83, at 6.

95. EIP Vol. III, *supra* note 90, at 1.

96. Lake Tahoe Restoration Act, Pub. L. No. 106-506, § 7(5), 114 Stat. 2351 (2003).

portion of their share of EIP funding. California appropriated approximately \$42 million towards implementing the EIP. In March 2000, state voters approved Proposition 12, a \$2.1 billion park bond measure that will also help fund a number of EIP projects. In June 1999, the Nevada State Assembly approved a bill authorizing up to \$56.4 million in bonds as Nevada's share, although their sale is contingent on the relative strength of the state's economy. Funding from existing state programs will also fund part of the states' share of EIP costs. It is less clear where the local governments will find their share of EIP funding.⁹⁷

Table 6: Ten-Year EIP Project Capital Needs 1997-2006 (in millions, 1997\$)

Threshold Program	Private Sector	Local Govt.	State of California	State of Nevada	Federal Govt.	Total \$ (millions)
Water Quality	75	41	88	30.4	116.2	350.6
Soil	1.2	11.2	74.2	12.9	93.2	192.7
Conservation	28.1	22	41.8	19.5	17.7	129.1
Air Quality	6	0	7.2	5.6	23.8	42.6
Vegetation	0	1.3	3.6	1.2	11.1	17.2
Wildlife	9.9	9.2	20.4	5.9	20.4	65.8
Fisheries	10.8	9.8	35.2	4.2	10.1	70.1
Recreation	21.7	6.5	4.7	2.3	4.7	39.9
Scenic						
Total	152.7	101	275.1	82	297.2	908

There has also been progress in implementing the EIP. Over \$80 million in capital projects have been funded by local (21.3 percent), state (43.8 percent), and federal (26 percent) agencies and private organizations (8.9 percent).⁹⁸ Over \$4 million have been spent on science programs. Twenty-one technical assistance efforts were completed at a cost of over \$3 million.⁹⁹ Collectively, approximately nine percent of the EIP's projects have been completed. Moreover, the planning that occurred during the last three years provides a strong foundation for implementation efforts over the next few years. The expectation is that the pace of implementation will quicken and that future projects will be implemented more efficiently now that the organizations responsible for implementing the projects have learned to work together and design projects.¹⁰⁰ Over \$185 million in projects were planned for 2001 and almost \$200 million in projects were scheduled for both 2002 and 2003.¹⁰¹

97. Under state law, local governments are limited in their ability to raise the revenue required for their share of the EIP's costs. EIP Vol. III, *supra* note 90, at 4.

98. *Id.* at 20.

99. *Id.* at 3, 17.

100. *Id.* at 22.

101. *Id.* app., at A6.

The EIP is clearly an ambitious long-term effort to both expand and coordinate environmental projects and development.

The success of the EIP remains unknown and will be subject to the vagaries of changing political and economic conditions. Nevertheless, the progress that has been made is impressive. These accomplishments highlight a new phase of collaboration to improve watershed management. A decade earlier, the same organizations that were embedded in a nearly constant state of political and legal conflict are now working on joint projects and coordinating programs.

NEW ORGANIZATIONAL LINKAGES

Collaborative interorganizational relationships have also emerged to enhance watershed governance. This includes new relationships between nongovernmental organizations as exemplified by the Tahoe Transportation and Water Quality Coalition, governmental organizations and business interests, and improved relationships between various governmental organizations. The following sections summarize these collaborative relationships and provide examples of the various ways these relationships improved watershed governance.

The Tahoe Transportation and Water Quality Coalition

The Tahoe Transportation and Water Quality Coalition (the Coalition) was initially established in 1989 as the Tahoe Transportation Coalition to develop a stronger basin transit program. It consists of a loose coalition of basin actors who traditionally were fierce opponents on many basin issues. It initially included The League to Save Lake Tahoe (The League), The Garning Alliance, and The Tahoe-Sierra Preservation Council. The local press immediately dubbed it the "unholy alliance" due to the organizations' opposing views. As one respondent who is a member of the Coalition stated, "We were three points to a triangle and we represented different interests."¹⁰²

Respondents favorably recounted the creation of the coalition. After a typical meeting with the TRPA, the three groups found themselves at a common table complaining about the agency. Reportedly, the director of The Garning Alliance asked the other directors if there was an issue they all could agree upon. They all agreed that transportation was an important problem. Casino and ski interests wanted to address the problem for economic reasons. The League believed it was an important environmental issue involving both congestion and air quality. The

Tahoe-Sierra Preservation Council viewed it as a quality of life issue for basin residents. The three organizations pooled their efforts toward finding solutions. Over time, common agreement expanded to address water quality issues. The Coalition's membership has also expanded to include representatives of the ski industry, chambers of commerce, private-property rights groups, environmental organizations, and casino operators.

Many factors contributed to the Coalition's emergence. The Coalition built upon the trust developed between organizations during the CBW. One NGO director observed, "there is still consensus building during coalition building, but the early meetings are what really built that cooperation and now we have many more focused subgroups."¹⁰³ Another interest group leader reported that, "after several years of working together, we started building up some level of trust amongst the executive directors of various groups."¹⁰⁴ While participants built relationships and developed expectations and trust in each other, they continued to use the full range of options, from public protest to the court system. However, through increased communication, the organizations found creative ways to link seemingly disparate issues (e.g., transportation, economic redevelopment, and environmental improvements) in ways that produced win-win or at least win-no-lose situations (*i.e.*, non-zero sum games). What emerged was a mutual understanding that cooperation could be pursued in some areas, while disagreement remained on other issues. As one interest group leader noted, "on some issues we agree and on others we sue."¹⁰⁵ Essentially, the partners learned how to collaborate in ways that were mutually beneficial while respecting their disagreements on other issues.

Respondents also cited leadership as an important factor. Respondents gave credit to the directors of the League and the Garning Alliance for creating the Tahoe Transportation Coalition. The League had seen a recent change in directors and showed a new willingness to negotiate that marked a dramatic shift from its previous positions. A change in the directors at The League paralleled a new willingness to negotiate, marking a dramatic shift. The then director of the Tahoe-Sierra Preservation Council, now Director of the Garning Alliance, initiated the coalition. He had been a local newspaper columnist and, as a vocal critic of the TRPA, brought considerable social capital to the new coalition.

The Coalition illustrates the strong role that NGOs can play in watershed governance. The Coalition is effectively lobbying the federal

103. *Id.* at 55.

104. *Id.* at 57.

105. *Id.*

government on a variety of issues.¹⁰⁶ In 1994, the Coalition began concentrating on getting additional federal support for transportation and other issues by creating the Lake Tahoe Joint Federal Legislation Agenda. Prior to this, each organization had its own agenda and they typically were in conflict. Through the Joint Federal Legislation Agenda, diverse organizations coordinate their lobbying by focusing on common issues and communicating shared priorities. Coalition members recounted the amazement of congressional representatives when they saw these diverse groups lobbying for common goals. Thus far, these coordinated lobbying efforts have been quite effective. For example, the Coalition recently obtained \$2.5 million to assist in coordinating public transportation along the southern shore.

Collaboration between Government and Business

The creation of the Coalition marked an important development in Lake Tahoe's governance. For the first time, NGOs exercised leadership and sought out ways to solve basin problems by collaborating with each other and with government agencies rather than merely lobbying and litigating to change TRPA policies. This is significant when one considers that many of these organizations were some of the TRPA's most ardent critics.

The coalescing of interests created an environment for collaboration. By the late 1980s, Tahoe's reputation as a tourist destination began to decline. An aging infrastructure and poor growth planning led to increasingly negative publicity as exemplified by a California newspaper editorial that noted, "if you don't like gambling you can drive and look at the ghetto in the mountains."¹⁰⁷ Negative press coverage led to a series of studies in the early 1990s that found some disturbing trends.¹⁰⁸ One study concluded that "despite certain competitive advantage...economic performance substantially trails that of other western U.S. mountain resorts. Critical destination business is stagnant. Peak period utilization patterns remain a problem."¹⁰⁹ A series of surveys discovered that few tourists were repeat visitors and many complained of the dilapidated infrastructure. Traffic congestion and

parking problems had increased because tourist sites were scattered around the lake. Casino operators also witnessed a decline due to increased competition from the relaxation in gaming laws around the country.

The result was a growing recognition that the tourist industry's only competitive advantage was the Lake's environmental quality and recreational opportunities. Business interests were therefore directly tied to Lake Tahoe's environmental health.¹¹⁰ As one tourism industry report noted, while the "TRPA regulatory process presents significant barriers to redevelopment and disincentives to private investment," it also found "widespread support for the environmental protection policies administered by the Tahoe Regional Planning Authority."¹¹¹ By the 1990s, the TRPA became firmly established as a legitimate planning agency for the community at large. Moreover, the business community discovered that not only was it impossible to remove the agency, but their success was ultimately tied to that of the TRPA.

Businesses are now actively involved in a number of collaborative projects. One of the more ambitious efforts is the establishment of the Coordinated Transit System (CTS) involving local government, state, federal, and business organizations. It focuses on coordinating public and private (*i.e.*, casino shuttle buses) transportation systems and providing better overall transportation information to visitors. The intent is to move more people from the major casino, skiing, and shopping destinations faster and more effectively, thus allowing increased visits and decreased traffic congestion. The use of alternative transportation modes (*e.g.*, water taxis, bike trails, etc.) is currently being explored.¹¹²

Collaborative efforts have also focused on redevelopment. An example is the Park Avenue Redevelopment Project designed to revive South Lake Tahoe's flagging economy. The project's key component is the redevelopment of small, aging, low capacity motels constructed in the 1960s and 1970s and replacing them with larger-capacity, modern facilities. The redevelopment plan includes a gondola that will pick up skiers in a central shopping plaza with shopping boutiques, an ice-skating rink, a movie theater, and an arcade and transport them to ski runs on the California and Nevada sides of the Heavenly Ski Resort.¹¹³ The environmental component includes scenic improvements, the

106. See generally MANAGING COMPLEX NETWORKS: STRATEGIES FOR THE PUBLIC SECTOR (WALTER J.M. KICKERT et al. eds., 1997) (discussing the concept of policy networks).

107. Kaunecks et al., *supra* note 5, at 20 (citing an editorial reported second hand by TRPA planning staff).

108. See, e.g., James E. Fletcher et al., *Assessing Public Recreation Service Facility Preferences of Tourists and Residents at North Lake Tahoe, California*, 11 J. PARK & RECREATION ADMIN. 60 (1993).

109. DESIGN WORKSHOP, INC. ET AL., NORTH LAKE TAHOE TOURISM DEVELOPMENT MASTER PLAN 4 (1995).

110. *Id.*

111. *Id.*

112. Kaunecks et al., *supra* note 5, at 9.

113. See SOUTH TAHOE REDEVELOPMENT AGENCY, SOUTH TAHOE DEMONSTRATION REDEVELOPMENT PLAN: FOR SKI RUN AND STATELINE AREAS 4-12 (Draft, City of South Lake Tahoe 1999).

creation of a new wetland adjacent to a major hotel to filter runoff, and trading in development rights, along with other actions designed to reduce the total impervious surface. Other redevelopment projects have linked the construction of affordable housing to environmental restoration.

TRPA and Local Governments

Working relationships between the TRPA and local governments improved watershed governance. Historically, the basin's regulatory programs were heavily centralized with the TRPA having authority over virtually all land use decisions, including those typically reserved for city and county governments. Local governments viewed the TRPA as overly intrusive and often opposed the TRPA's efforts to limit development.¹¹⁴ Conversely, the TRPA's supporters argued that its strong authority was necessary because local governments failed to recognize regional concerns and demonstrated an inability to effectively manage development during the 1960s and 1970s.

However, the relationship between the TRPA and local governments has improved considerably in recent years. This can be attributed in part to the improved planning capacity of local governments, their increased ability to deal with local issues, and improved communication with TRPA staff through the establishment of shared norms. Today, all local governments have professional planners with similar educational backgrounds and experience as their TRPA counterparts. This increased professionalism was often noted as an important factor contributing to the improved relationships between the TRPA and local governments. As one local planner noted, "planners tend to think alike."¹¹⁵ Another reported, "The confidence level is increasing on both sides."¹¹⁶ Most of this trust is the result of individuals working together over long periods of time on specific projects, issues, and other forms of routine interaction rather than through any formal planning process. A local planner also suggested that improved local capacity facilitated the shift from "no development" to "redevelopment" as a focus for environmental improvements. There is also a shared view that the basin's infrastructure needs improvement to increase tourism while restoring the

114. "This was reported second-hand by a TRPA official as the reaction of a long-time opponent to the placement of a representative from the Douglas County planning office being stationed within TRPA for training purposes." Kaunecks et al., *supra* note 5, at 18, 75 n.74. For more information on historical conflicts between the TRPA and local governments, see generally LAURENCE D. BAXTER, REGIONAL POLITICS AND THE CHALLENGE OF ENVIRONMENTAL PLANNING (Inst. of Govt. Affairs, Envtl. Quality Series No. 22, 1974).

115. Kaunecks et al., *supra* note 5, at 19.
116. *Id.* at 50.

environmental damage caused by poor land use planning and deteriorating infrastructure. Some local officials even reported that they not only support the TRPA but that they have begun to strategically shift the burden for denying controversial local projects to the agency.

This improved relationship led to the TRPA's Permit Integration Program. The program consists of over 30 Memorandums of Understanding (MOUs) with local governments, public utility districts, and other agencies devolving many permitting functions and waiving the requirements of permits for some activities.¹¹⁷ The program delegated authority to some local governments to review and approve certain development projects, mostly single-family and multi-family residences. When local governments issue their permits, they certify that the projects meet TRPA regulations. The TRPA then periodically audits local permitting activities for quality control. There has also been increased convergence of local government regulations and those of the TRPA. While not formally adopting the TRPA's codes and ordinances, the City of South Lake Tahoe now uses them as informal guidelines. This convergence emerged out of the close interaction between planners in the respective agencies during recent redevelopment projects. While attempts to formally adopt TRPA regulations failed to garner local support, the close interaction between local officials and the TRPA led to their de facto utilization as this proved to be a more efficient solution for both parties. El Dorado County in Nevada, traditionally one of the TRPA's most ardent opponents, chose a different option. They placed one of their planners in the TRPA to review El Dorado County permits for both local and TRPA permit requirements.¹¹⁸

The TRPA's efforts to decentralize permitting and craft different relationships with each local government based on their individual needs have several benefits. It improves service delivery by providing

117. "The TRPA currently has agreements with the regional Board, the USFS, utility districts, and most other agencies operating in the Lake Tahoe Watershed." Kaunecks et al., *supra* note 5, at 43. The TRPA has also signed MOUs with El Dorado County, City of South Lake Tahoe, Washoe County, and Placer County. No MOUs have been signed with Douglas County or Carson City (no vacant parcels). *Id.* It should be noted that some local governments have been reluctant to take on some of the regulatory authority offered by the TRPA since it adds to their financial costs and shifts the burden of denying permits to local governments. *Id.* at 18, 75 n.75. As one TRPA official put it, "we are the guys you love to hate," and the TRPA acts as a convenient scapegoat for many in the basin. *Id.* Some local officials are reluctant to now become viewed in a similar way and be blamed for blocking development. *Id.*

118. Another example would be the preparation of community plans. "Community plans are developed with the cooperation of TRPA, the business community, and other community groups and act to coordinate the accomplishment of remedial projects with redevelopment and new commercial development in the basin." Kaunecks et al., *supra* note 5, at 19, 75 n.77.

"one stop shopping" for many permit applicants. Decentralizing decision making for routine local matters provides the TRPA with more time to focus on issues of truly regional significance. The MOUs institutionalize existing interpersonal and organizational relationships, which provide a building block upon which subsequent relationships can build. The continued interaction between the TRPA and local government staff also allows trust to develop, which further expands the possibilities for future collaborative efforts.

Improved Working Relationships with State Agencies

The 1990s also witnessed improved working relationships between the TRPA and various state agencies. One example is the improved relationship between the TRPA and the Nevada Department of Transportation (NDOT). In 1995, the TRPA rejected NDOT's application for repairing a section of highway by merely repaving it. Instead, the TRPA wanted NDOT to retrofit the highway to add measures to control runoff and phosphorous levels. The NDOT's initial response was that federal and state funding was unavailable for such an extensive project. In response, the TRPA offered to help NDOT acquire the funds for the retrofiting. The TRPA worked with NDOT to get a \$20 million bond passed along with some additional federal funds to complete the project. NDOT received national recognition because of its innovative approach and the success helped secure funding for similar projects around the state. It also allowed the TRPA to use the project as an example when discussing road improvements with the California Department of Transportation.

Respondents also reported improved relations between the TRPA and the Lahontan Regional Water Quality Control Board (the Regional Board), California's agency responsible for regulating water quality issues. The two agencies have complementary missions and overlapping regulatory authority regarding water quality issues, contributing to a history of interagency conflict.¹¹⁹ However, the relationship between the two agencies has improved in recent years. Permit reviews are now governed by an MOU between the two agencies. The Regional Board relies on the TRPA's review of all residential development. Permits for commercial development of less than two acres are reviewed solely by the TRPA, while projects disturbing more than two acres are reviewed by both agencies. Conversely, the TRPA

119. For example, the regional board had opposed the 1984 Regional Plan and frequently was at odds with the TRPA over its permit decisions during the 1970s and 1980s. E.g., *People of the State of California v. Tahoe Regional Planning Agency*, 766 F.2d 1308 (9th Cir. 1985).

sometimes relies on the regional board for assistance with enforcement actions since it has greater authority to issue fines.¹²⁰

Section 208 of the Clean Water Act further institutionalizes the relationship between the TRPA and the Regional Board. The EPA designated the TRPA as the Areawide Waste Treatment Planning Agency for the Lake Tahoe Basin pursuant to section 208 of the 1972 Clean Water Act.¹²¹ The Bailey Land Capability System and IPES are included in their Section 208 Plan.¹²² Consequently, as a high level TRPA official noted, "if 208 is history...we would lose our basic structure...we would have to change the *Regional Plan*."¹²³ Thus, the Section 208 Plan serves as a protective backstop, or as one TRPA staff member put it, "the 208 Plan is the gorilla in the closet."¹²⁴ It also creates a powerful incentive for the TRPA and the Regional Board to work together within the current system because changing the *Regional Plan* also requires amending the Section 208 plan. Both involve a lengthy process with numerous avenues for legal challenge. Thus, while rarely used elsewhere, the Section 208 Plan is an integral part of basin management.

LESSONS FOR PRACTITIONERS

While there are some characteristics that make Lake Tahoe's governance system unique, the case reveals important lessons about watershed governance and the role that collaboration often plays. While the reasons for the transition from conflict to collaboration are complex and beyond the control of individual decision makers, the Lake Tahoe experience offers a number of lessons for professionals working in watershed management.

120. The regional board has the authority to impose fines administratively whereas the TRPA can only impose fines using the judicial system. Kauneckis et al., *supra* note 5, at 17.

121. 33 U.S.C. § 1288 (2000).

122. According to Kauneckis et al.,

The California State Water Quality Control Board (SWQCB) rejected the original Section 208 plan because of its voluntary nature, but it finally accepted a more proactive plan in 1980 that was the result of a compromise between the TRPA and Regional Board. The resulting *Water Quality Management Plan for the Lake Tahoe Region* applies only to the California side of the basin. Impacts from parcels on the Nevada side are reviewed on a case-by-case basis.

Kauneckis et al., *supra* note 5, at 59.

123. *Id.*

124. *Id.*

Collaboration versus Consensus

Collaboration does not mean consensus. The distinction between collaboration and consensus is similar to that between "allies" and "friends." An ally is there only for particular problems or a specific issue, usually when there are mutual benefits to cooperation. Friendship implies a denser set of personal or organizational relationships (often based on trust) and general agreement on a broader range of interests or issues. Accordingly, collaboration is often strategic and limited to win-win or at least win-no-lose situations. In Lake Tahoe, conflict and litigation continue over a number of issues in the basin. However, the parties have found productive ways to work together on a variety of issues. Nevertheless, reaching agreement on one issue does not necessarily mean agreement on other issues. For example, actors continue to oppose one another on issues such as takings on private lands while they have been able to reach agreement and find ways to work together on transportation and water quality issues.

Inertia and the Bandwagon Effect

Collaboration tends to be a trial and error process in which the outcomes of one effort such as trust become precursors for subsequent cooperative efforts. Thus, collaboration is a dynamic and constantly changing process. Research often finds that when actors engage in collaborative efforts, there is a certain amount of "collaborative inertia" that has to be overcome.¹²⁵ Because collaboration requires significant investments of time and effort to build relationships and trust, repeated interaction is an important precursor to joint action. It also takes time to develop shared understanding of problems, find opportunities for joint action with the potential for mutual gain, and obtain the resources necessary to support these actions. The initial progress is often slow. However, once a threshold level of success is achieved, the situation can change rapidly and the collaborative process takes on a new dynamic.¹²⁶ The establishment of working relationships reduces the time necessary to plan and implement projects. Researchers refer to this phenomenon as the "bandwagon effect"; collaborative efforts often build momentum, pick up speed, and gain new members and resources, and efforts expand to address a wider set of issues.¹²⁷

125. BARDACH, *supra* note 11, at 270.

126. *Id.*

127. E.g., BARDACH, *supra* note 11, at 276; JULIA M. WONDOLLECK & STEVEN L. YARFEE, MAKING COLLABORATION WORK: LESSONS FROM INNOVATION IN NATURAL RESOURCE

Lake Tahoe is an excellent example of collaborative inertia and bandwagon effects. After more than two decades of conflict, governmental and nongovernmental actors became increasingly dissatisfied with the costs and problems associated with inaction. This impasse created an incentive for collaboration, and a subset of actors began to work together on what eventually came to be known as the Tahoe Transportation and Water Quality Coalition. As these organizations experienced some success, they sought out additional opportunities for joint action. For example, local governments became increasingly willing to work with the TRPA to streamline the permit process. Today, the EIP has a momentum of its own attracting new partners and resources. Moreover, as the partners learned how to work together to implement the EIP, the pace of activity increased. Organizations overcame their differences and achieved the threshold level of success necessary to develop and implement the EIP through collaborative know how and increased trust.

Developing "Collaborative Know How"

Some organizations are accustomed to collaborative processes, but others need to learn how to cooperate and work with organizations that have different values, procedures, and processes. When organizations participate in collaborative processes, they often engage in a particular form of organizational learning that produces "collaborative know how."¹²⁸

Interorganizational collaboration develops as part of a learning process. It has a threshold effect. Once the relationship between organizations is established, and collaborative projects are successful, it is much easier to take on additional collaboration. Organizations and the individuals that comprise them learn how to collaborate by collaborating. As a corollary, organizations learn how to govern collaborative processes and find ways to reduce the costs of interacting with other organizations.¹²⁹ It takes time to find ways to take advantage of the complementary or synergistic relationships between organizations. Learning how to effectively plan and implement collaborative projects or, conversely, to identify and avoid ineffective activities, also

MANAGEMENT (2000); Matthew S. Kraatz, *Learning by Association? Interorganizational Networks and Adaptation to Environmental Change*, 41 ACAD. OF MGMT. J. 621 (1998).

128. See Bernard L. Simonin, *The Importance of Collaborative Know-How: An Empirical Test of the Learning Organization*, 40 ACAD. OF MGMT. REV. 1150 (1997).

129. See generally Jeffrey H. Dyer & Harbir Singh, *The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage*, 23 ACAD. OF MGMT. REV. 660 (1998); Simonin, *supra* note 128; Kraatz, *supra* note 127 (discussing the collaborative process).

takes time.¹³⁰ For example, when the initial EIP was developed, participants underestimated the amount of time required to plan, develop, and implement some projects and had to readjust their time schedules. However, the scope and pace of activity increased when participants gained experience implementing collaborative projects. This suggests that practitioners should gradually scale up collaborative efforts over time in order to build on early successes and allow sufficient time for these learning processes to occur.

Importance of Trust and Relationships

Equally important is the level of trust and the types of relationships that develop as a result of interactions. Respondents frequently pointed to trust and the development of personal and inter-organizational relationships as being an important precursor to and product of the collaborative processes in Lake Tahoe. In some cases, informal lunch meetings created trust. In others, trust emerged out of repeated interactions at formal meetings such as TRPA hearings. Whether the result of formal or informal interactions, this "social capital" is important.¹³¹ It facilitates cooperative efforts because people have a preference for transacting with familiar individuals and organizations. Shared norms and trust lower transaction costs by promoting smooth and efficient resource exchanges because participants are more likely to make commitments when they do not fear being taken advantage of by a trusted organization.¹³² Relationships based on trust likewise facilitate the

flow of information, since information from a trusted source is presumed to be both more reliable and accurate.¹³³

The importance of trust has several implications for practitioners seeking to understand the process of watershed governance. During early collaborative efforts there is often less trust and weaker personal and organizational relationships. As trust and relationships build, collaboration becomes easier, making trust both an antecedent to and an outcome of collaborative processes.¹³⁴ Thus, a "virtuous circle" of escalating trust and further collaboration develops if initial collaborative efforts are effective, which helps explain the emergence of the bandwagon effect.¹³⁵ While there is no magic recipe for developing trust and relationships, repeated interactions are an important ingredient.¹³⁶ These interactions come in various forms ranging from participation in a restoration project to ongoing interactive processes (e.g., an advisory committee, permit review process, etc.).¹³⁷ They can even be the product of a series of conflicts as was the case in Lake Tahoe.

Practitioners should also remember that, once trust and relationships have developed, they need to make an effort to maintain this social capital. They should also create mechanisms to socialize new participants to the norms, values, and routines associated with collaborative processes.¹³⁸ Otherwise, trust and relationships will quickly erode, especially if there is a high turnover in staff or agency leadership. Conversely, while trust tends to build slowly over time, it can be destroyed quickly as a result of negative experiences. Thus, when practitioners use collaboration to improve watershed governance, they should avoid situations that have a high risk of failure or a likelihood of generating conflict. This will allow practitioners to build on early successes that generate social capital.

Developing Networked Systems

Lake Tahoe is also an excellent illustration of the changing nature of federalism, local capacity-building, and incentives for solving environmental problems. While early efforts focused on centralizing

130. See generally Ranjay Gulati, *Social Structure and Alliance Formation Patterns: A Longitudinal Study*, 40 *ADMIN. SCI. Q.* 619 (1995); Jeffrey H. Dyer & Harbir Singh, *supra* note 129; Simonin, *supra* note 128; Kraatz, *supra* note 127 (examining the effectiveness of collaborative projects).

131. Viewed broadly, social capital encompasses social ties, trusting relations, and value systems that facilitate the individual and organizational actions within that context. It is something that is jointly owned rather than controlled by one party to a relationship. Thus, social capital is both the resources contacts hold and the structure of a network. See generally ROBERT D. PUTNAM, *Bowling Alone: America's Declining Social Capital*, 6 *J. DEMOCRACY* 65 (1995); JAMES S. COLEMAN, *FOUNDATIONS OF SOCIAL THEORY* (1990); Carrie R. Leana & Harry J. Van Buren III, *Organizational Social Capital and Employment Practices*, 24 *ACAD. OF MGMT. REV.* 538 (1999); RONALD S. BURK, *STRUCTURAL HOLES: THE SOCIAL STRUCTURE OF COMPETITION* (1992); Jane Fountain, *Social Capital: Its Relationship to Innovation in Science and Technology*, 25 *SCI. & PUB. POL'Y* 103 (1998).

132. See Wenpin Tsai & Sumantira Ghoshal, *Social Capital and Value Creation: The Role of Intrafirm Networks*, 41 *ACAD. OF MGMT. J.* 464, 467-68 (1998); Andrew C. Wicks et al., *The Structure of Optimal Trust: Moral and Strategic Implications*, 24 *ACAD. OF MGMT. REV.* 99, 99-100 (1999).

133. See Mark Granovetter, *Economic Action and Social Structure: The Problems of Embeddedness*, 91 *AM. J. SOC.* 481, 490 (1985).

134. Leana & Van Buren, *supra* note 131, at 542; Tsai & Ghoshal, *supra* note 132, at 465.

135. David P. McCaffrey et al., *The Appeal and Difficulties of Participative Systems*, 6 *ORC. SCI.* 603 (1995).

136. See generally ROBERT AXELROD, *THE EVOLUTION OF COOPERATION* (1984).

137. Larry L. Kiser & Elinor Ostrom, *The Three Worlds of Action: A Methatheoretical Synthesis of Institutional Approaches*, in *STRATEGIES FOR POLITICAL INQUIRY* 179, 203 (Elinor Ostrom ed., 1982).

138. See generally Leana & Van Buren, *supra* note 131.

decision making in the TRPA, recently many permit decisions were decentralized to local governments when their capacity for addressing watershed problems increased. Lake Tahoe also demonstrates that watershed governance, by its transboundary nature, is likely to involve complex institutional arrangements where some decisions are centralized and others highly decentralized. Given the U.S. federal system, there will always be overlapping centers of authority. Even though the TRPA has considerable authority, local governments, the Lake Tahoe Basin Management Unit, and other federal and state agencies retain important roles in basin governance. Moreover, Lake Tahoe illustrates the strong role that nongovernmental organizations have in a governance system that increasingly relies on nonregulatory policy instruments.

Lake Tahoe demonstrates that a "networked" approach to watershed governance can be effective. Accordingly, while it is important for practitioners to understand how ecological systems function, it is equally important to understand the "ecology of governance," that is, the broader context within which governance occurs.¹³⁹ The ecology of governance includes the watershed's unique contextual setting, relative tradeoffs among problems, the organizations that address the problems, and how these actors and programs function and interact. Practitioners must recognize that there is an institutional system that corresponds to the ecological system. Practitioners need to understand this institutional system because it creates opportunities for joint action while simultaneously imposing constraints on working together. It also determines how government and the industries and activities that cause problems are organized. This knowledge is critical for designing successful policy interventions and implementation structures. Practitioners also need to account for the linkages and tradeoffs among problems when looking for opportunities to collaborate as it will help identify potential partners for collaborative action as well as organizations that may be sources of political opposition.¹⁴⁰

Think Holistically but Act Strategically

Practitioners should be encouraged to find that even when there is a history of interorganizational conflict, organizations can often find

productive ways to work together when collaborative efforts highlight common interests and build on the trust and relationships that develop through previous interactions. However, collaboration can be limited both in terms of its overall effect as well as its potential. Organizations often have institutional constraints that prevent them from participating in collaborative efforts. The configuration of their collective constraints may limit the number of plausible activities that can be implemented. Even when an organization's formal rules do not conflict, its behavioral norms, professional values, knowledge, experience, and abilities may cause it to resist cooperating.¹⁴¹ For example, collaboration results in some loss of autonomy, which for some organizations will be undesirable. Moreover, even when organizations want to collaborate, institutional constraints may prevent joint action. For example, statutes may give organizations conflicting missions or budgetary constraints that may limit an organization's ability to contribute resources. Understanding these institutional constraints is important. Some are fixed by external organizations (e.g., limits on how grant funds can be used), while others are more malleable and are based on an organization's perceptions of what collaboration will cost or its corresponding value.

Fortunately, the constraints and obstacles to collaboration are often less formidable than they appear. Lake Tahoe demonstrates that, when collaborative efforts highlight common values and interests, participants often find creative ways to bridge seemingly incompatible differences and institutional constraints.¹⁴² Organizations may also be willing to sacrifice some autonomy when they expect something of value in return.¹⁴³ Thus, collaboration is both an individually rational strategy as well as a means of collectively improving watershed governance.¹⁴⁴ This implies that collaboration will typically be limited to issues of mutual interest that are primarily win-win or at least win-no-lose situations (i.e., non-zero-sum games).¹⁴⁵ Accordingly, while watershed management encourages practitioners to view ecosystems holistically, collaboration is inherently strategic and is unlikely to be an appropriate strategy for addressing controversial problems involving win-lose situations (i.e., zero-sum games). The case also demonstrates that, while participants may work together on some issues, they have to be willing

139. What is recommended is an analysis similar to the type of forward and backward mapping recommended in the implementation literature. See generally Richard F. Elmore, *Forward and Backward Mapping: Reversible Logic in the Analyses of Public Policy*, in POLICY IMPLEMENTATION IN FEDERAL AND UNITARY SYSTEMS: QUESTIONS OF ANALYSIS AND DESIGN

33 (Kenneth Hart & Theo A. J. Toonen eds., 1985).

140. WONDOLLECK & YAFFEE, *supra* note 127, at 82.

141. *Id.* at 60.

142. *Id.* at 73.

143. See generally Christine Oliver, *Network Relations and Loss of Organizational Autonomy*, 44 *HUM. REL.* 943 (1991).

144. See generally McCaffrey et al., *supra* note 135.

145. WONDOLLECK & YAFFEE, *supra* note 127, at 48.

to agree to disagree on others and respect these differences if they are to maintain cooperative working relationships.

SUMMARY AND CONCLUSIONS

All watersheds are managed by a myriad of governmental and nongovernmental organizations whose decisions and actions influence the health of the watershed and its ecosystems. The corresponding institutional fragmentation creates conflict, but it also creates opportunities for these organizations to work together in ways that improve environmental conditions and enhance watershed governance. Thus, watershed management is as much a challenge of governance as it is a question of science and designing effective policies.

The experiences in Lake Tahoe clearly indicate the important role that collaboration plays in improving watershed governance. It allowed organizations to implement projects (*e.g.*, redevelopment, habitat restoration, etc.) that otherwise would have been impossible. It improved the efficiency of the TRPA's permit process and enforcement efforts. It also produced the EIP, a unified approach to improving environmental conditions in the watershed. Accordingly, the shift from conflict-oriented to cooperative approaches to basin governance over the last decade has resulted in tangible environmental improvements.

While collaboration is a useful strategy for enhancing watershed governance, it is important for practitioners to recognize that there are clear limits to its use. Unilateral action, litigation, legislative intervention, markets, and hierarchical control remain alternative strategies that continue to be used by various governmental and nongovernmental organizations in Lake Tahoe. What has changed is that practitioners tend to look for cooperative solutions first rather than immediately resorting to conflict-oriented governance strategies. Practitioners also tend to be more pragmatic and recognize that some conflict is unavoidable and at times is even beneficial because it promotes healthy discourse and stimulates policy change and learning.¹⁴⁶ After all, the collaborative efforts underway in Lake Tahoe are themselves a product of the conflict experienced during the previous two decades. Consequently, practitioners are more willing to respect each other's differences today than they were in the past. This fosters an atmosphere that encourages

practitioners to work together and try to find creative ways to solve their shared problems.

Collaboration should also be valued only when it produces better organizational performance or lowers costs. As Bardach advises,

We should not be impressed by the idea of collaboration *per se*. That collaboration is nicer sounding than indifference, conflict, or competition is beside the point. So, too, is the fact that collaboration often makes people feel better than conflict or competition. I do not want to oversell the benefits of interagency collaboration. The political struggle to develop collaborative capacity can be time consuming and divisive. But even if no such struggle were to ensue, the benefits of collaboration are necessarily limited.¹⁴⁷

As Lake Tahoe clearly demonstrates, there will be limits on practitioners' ability to use collaboration as a strategy for improving watershed governance. Our federal system of government creates an underlying tension as to whether federal, state, or local priorities and decisions should govern a watershed. It is also unclear when organizations can or should be willing to sacrifice their priorities or those of the constituencies they represent in order to participate in collaborative efforts. No amount of creativity can overcome a shortage of the resources (*e.g.*, staff, money, etc.) necessary to participate in these activities.¹⁴⁸ Conversely, Lake Tahoe demonstrates that when collaboration highlights common values and interests, participants often find productive ways to work together and generate greater public value than can be achieved by working alone. Thus, it remains an important strategy for improving watershed governance.

146. See Mark T. Imperial, *Analyzing Institutional Arrangements for Ecosystem-Based Management: The Institutional Analysis and Development Framework*, 24 ENVTL. MGMT. 461 (1999); WILLIAM A. BLOWQUIST, DIVIDING THE WATERS: GOVERNING GROUNDWATER IN SOUTHERN CALIFORNIA 360 (1992); VINCENT OSTROM, THE MEANING OF AMERICAN FEDERALISM: CONSTITUTING A SELF-GOVERNING SOCIETY 258 (1991).

147. BARDACH, *supra* note 11, at 17.

148. *Id.*