CASE

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SAN FRANCISCO ESTUARY PROJECT

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he San Francisco Estuary Project (SFEP) was part of the National Estuary Program (NEP), which was designed to bring all the stakeholders in an estuarine system into a consensual agreement on the state of the estuary and a plan for its restoration and management. The scope and complexity of the issues addressed by the SFEP, the size of the affected area, the range of technical information needed, the number and diversity of players, and the political and economic powers engaged by the process presented major

challenges for the process and its participants.

At the end of five years, the SFEP produced a consensually adopted Comprehensive Conservation and Management Plan (CCMP) recommending numerous actions for improving the health of the estuary. This plan, however, may be a less significant achievement than other results of the process, including agreements on technical descriptions of the estuary and methods of measuring water quality, new networks of relationships among participants, educa-

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tion of participants about the estuary and each other's responsibilities, and other consensus processes that built on this one. Although, when the plan was adopted, there were complaints that the consensus was "thin" and the prospects for implementation were uncertain, there is no doubt that the SFEP has changed the practices and politics of water management in California.

■ Context

The SFEP was contentious for many reasons, but most of all because it entered the highly conflictual arena of California water politics. In California, agricultural and urban interests in distant parts of the state hold rights to and depend on diversions of water that would otherwise flow through the estuary. In the estuary, freshwater flows mix with the waters of the Pacific Ocean, producing a gradient of less-and-less salty water as one moves upstream. The estuary's ecosystem, including a number of endangered species, depends on this gradient. Thus, in the SFEP, water rights and water quality came to be posed as conflicting values.

The link between water quality and flows also presented problems around how to set boundaries for the SFEP that in turn affected stakeholder selection and which topics would be on the table. In the bay and delta, water quality management and water

diversions are regulated by independent sets of agencies, criteria, and regulatory processes. The State Water Resources Control Board (SWRCB) is responsible for making water rights decisions, involving trade-offs between water uses and the protection of aquatic resources. Other state and federal agencies have responsibility for operating water projects and protecting water quality and endangered species. The SWRCB's decision-making process was separate from the SFEP, however, and under way as the SFEP got started. The separation of the decision making on flows led to conflicts and disagreements over who were the appropriate stakeholders. For example, if flows were to be addressed by the SFEP, how should the interests of the distant water users be represented?

In addition to the SWRCB and SFEP processes, water rights and water quality issues were being reviewed in two other arenas. A federal process to set water quality standards for the bay-delta was already under way. In addition, in the course of the SFEP, the three major groups having water interests in the state-agricultural and urban water users and environmentalists-established an informal "tripartite process." Their aim was to reach agreement quietly among themselves, out of the spotlight. Many of the same individuals and organizations were involved in all four parallel processes, and therefore had ample opportunity to influence water policy outside the SFEP -

○ COMMENTARY

This case study demonstrates an increasingly troublesome, but common, challenge to consensus building efforts: multiple, parallel, and simultaneously occurring processes. To paraphrase from an important scholarly article about the social construction of disputing, multiple processes present challenges of "framing" and "gaming," as well

as the more common issues of "naming, blaming, and claiming" (Felstiner, Abel, & Sarat, 1980-1981). To the extent that participants in issues as complex as those presented by the San Francisco Estuary Project can use different processes with different constituencies, with different issue definitions, and with different legal requirements, manipulations of processes, both public and private, can hinder the accomplishment of "resolutions" or substantive progress, while the different "processes" are "gamed" and used to thwart any forward movement. Thus, the use of multiple processes may advantage those who prefer the status quo or those who would prefer to delay some activity.

There are some solutions to these problems. In consensus building exercises that run parallel to lawsuits (such as in environmental cases like the SFEP situation), it is sometimes possible to get a stay from a court to temporarily halt the litigation while a broader base of stakeholders participate in a mediation or other consensus building exercise. In other cases, regulators or legislators may be asked to join at the beginning of a process so that appropriate legislative or regulatory approvals can be "promised," if not fully delivered, at the beginning so as to preempt at least some parallel processes. Coordination, by facilitators or convenors of parallel processes, is also sometimes possible and always useful, if for no other reason than to help frame the issues, and "police the agenda," so they remain somewhat stable across multiple meetings and processes. But if these or other "solutions" are not available, gaming or manipulation of multiple processes is a real danger to consensus building. In a recent case I mediated, for example, the parties used the press, despite confidentiality agreements, to create a public "parallel" process when they wanted to sabotage the private process.

-Carrie J. Menkel-Meadow, Legal scholar

REFERENCE

Felstiner, W., Abel, R., & Sarat, A. (1980-1981). The emergence and transformation of disputes: Naming, blaming and claiming. *Law & Society Review*, 15, 631.

The conflicts among the parties were fundamental. Environmentalists, agricultural and urban water users, business groups, and development interests had been operating in a highly adversarial mode for many years. The intensity of feelings was high, and many of these bitterly opposed parties had not sat around a table together before. In addition, the various agencies having responsibilities related to the estuary have an array of differing and sometimes conflicting missions. Among the state agencies, the Department of Water Resources plans, constructs, and operates water supply projects; its constituents are primarily agricultural and urban water users. The SWRCB and the Regional Water Quality Control Boards are regulatory agencies that address water rights and water quality issues. The California Department of Fish and Game is responsible for habitat and species protection. Federal agencies such as the Environmental Protection Agency (EPA), the Fish and Wildlife Service, and the Bureau of Reclamation also represent an equally wide range of perspectives. In addition, local governments have responsibility for land use decision making. Relationships among the various agencies are not always easy. By all accounts, Governor Deukmejian was reluctant to nominate the San Francisco Estuary for the NEP in 1987 because of the tremendous inherent political difficulties.² Due to the state's lack of enthusiasm, the EPA took the lead in organizing and staffing the project, although formally project sponsorship was shared by the EPA and the state as required by law. The EPA's role as lead agency raised suspicions among some state agencies that the project was a "conspiracy" to allow federal agencies to set standards and control state agencies' actions.

■ The SFEP Structure and Process

The NEP provides for the convening of a management conference to assess trends, collect and characterize data, and develop a comprehensive plan for the restoration and management of an estuary. It specifies that, at a minimum, the members of the conference should include representatives of federal, state, regional, and local agencies having jurisdiction within the estuarine zone, and representatives of affected industries, educational institutions, and the gen-

eral public. Based on this guidance and experience elsewhere, the EPA established a Management Committee (MC) consisting of federal, state, regional, and local agencies, and other organized interests. A Sponsoring Agency Committee consisting of representatives of four state and federal agencies was established ostensibly to oversee the project. In practice, however, the MC provided the overall direction for the project and served as the final decisionmaking body. Two other committees were created to assist the MC. The Public Advisory Committee (PAC) consisted of citizen representatives and provided a means for public participation. The Technical Advisory Committee (TAC) consisted of scientists and engineers drawn from agencies, universities, and other research settings. It was responsible for providing information and advice on science- and technologyrelated matters and, in particular, for assisting in the characterization of the estuary.3 The chairs of the TAC and PAC also served on the MC. In all, about 120 people served on these committees, and many of the same agencies and interest groups were represented on each. ••

○ COMMENTARY

Bringing to the fore the variety of conflicts in the various constituencies—such as urban-agricultural, water rights-water quality, federal-state regulatory agencies, environmental-business interests—and recognizing that these conflicts or different values themselves might cut across participating agencies demonstrates some of the strengths of consensus building exercises. Out-front identification of conflicting interests while involving those separate interests in a common task or set of tasks (creation of scientific standards, statement of the problem, etc., before "solutions") provides the possibility of working across conflicting interests. Bringing all parties to a table simultaneously has the risk of alliance and coalition formation and strategic play, but it also often surprises by allowing cross-interest alliances and coalitions on particular issues, rather than fighting the "big issues" in the more conventional adversarial mode. Alliances on different issues can lead to trades and can disrupt historical two-party fighting as well (such as long-standing environmental-business interests). The perhaps more limited

standard of success, by reaching some consensus on at least a definition of water quality, is the kind of accomplishment that can occur in this kind of setting.

-Carrie J. Menkel-Meadow, Legal scholar

At the outset, the EPA appointed about 20 people to the MC. It expanded itself several times in recognition of the need to include additional viewpoints, and by the end of the process had 49 members. Members were primarily staff of public agencies and interest groups and some citizen representatives. The MC also included several local elected officials, but only two or three participated regularly. It met bimonthly in half-day meetings, and more frequently and with longer meetings toward the end of the process. Twenty to 30 members attended on average, with as many as 35 or 40 members attending when important issues were on the table.

The issue of how to define the boundaries of the problem affected stakeholder selection. For example, one state agency official felt the MC had a regional bias toward the bay-delta and that it did not include adequate representation of statewide interests, that is, the water users who are geographically distant from the estuary but depend on its water. In contrast, the notion of including southern water users infuriated one environmental representative who felt the SFEP was about the estuary and there was no reason to include others. Similarly, some business and development representatives thought there was too much emphasis on environmental issues and not enough on socioeconomic impacts. The MC acknowledged these diverse opinions, but agreed its focus would be on how to protect the estuary. The MC members' thinking was that the statewide perspective was brought by the state agencies on the MC who were responsible for balancing state and regional needs. In addition, southern California water wholesalers and state water contractors were represented on the PAC. Thus, the southern water users were represented in the SFEP, albeit indirectly.

At the outset, there was no general agreement on the nature of the estuary's problems; some parties did not even agree that there was a problem. Over the course of the first year, the MC worked together with the TAC and PAC to identify and frame the issues, and then convened subcommittees to address them in detail. Subcommittees initially were formed to address aquatic resources and wildlife, land use, wetlands, pollutants, and dredging. A subcommittee on local government was also formed, but disbanded after a time. Later in the process, two more subcommittees were formed on flows and water use. Each subcommittee had representation from a range of interests, and included people with technical and nontechnical expertise. The subcommittees also had overlapping memberships. It was in the smaller groups that much of the substantive debate occurred and where participants built much of their shared understanding and consensus. Over the course of about three years, the subcommittees worked in concert with staff and consultants to develop status and trends reports in their issue areas and to recommend actions for inclusion in the CCMP.

Participants had a variety of motivations for coming to the table and staying there. A number of parties who were wary of environmental regulation were there explicitly for self-protection. With the EPA leading the project and a total of \$7.5

million available for the project over five years, there was significant potential for things to happen, both good and bad. As one agency representative said, "If we do not participate, decisions might be made that go against our mandates." When asked, "What kept you at the table?" another agency official replied,

Fear. Feeling that we had so much at stake that we had to be there. We talked about walking [i.e., leaving the process in protest] in some dramatic fashion . . . but it was hard to say we are not going to play. The SFEP clearly had substantial institutional structure . . . clout . . . recognition. ••

○ COMMENTARY

In addition to differing parties or constituencies, this process illustrates how people can sit down at a consensus process with different motivating factors. While some will do so out of an optimistic expectation to actually resolve a problem, negative motivators may also be important, such as the fear expressed here by some parties that did not want to be excluded from the process or the substantive outcome that might be achieved. In any process like this, it is important to recognize that different motivations may encourage parties to participate (as in mediation, some parties want cheap or faster resolution, while others want creative, party-tailored solutions) and that is the good side, but the skilled facilitator must always be aware that different motivations can also result in different behaviors—fear may not produce the same proposals as desire to see a fair resolution. The skilled facilitator must keep the variety of motivations in mind when organizing processes of communication, establishing methods for brainstorming, and evaluating solutions and decision criteria and rules.

—Carrie J. Menkel-Meadow, Legal scholar

Many environmentalists were reluctant to participate because of their view that consensus building allows too much compromise. One commented, "The environment always loses. The other interests weaken the goal of protection." For several environmental groups, it was a compromise just to be at the table instead of bringing lawsuits or lobbying for new laws and regulations.

○ COMMENTARY

I am always troubled when participants view consensus processes as "compromises." In this case, environmentalists complain that consensus processes prevent or inhibit the enforcement of legislation through lawsuits or lobbying for new laws, as if those processes don't produce compromises too. More important, there is a fallacy here in the thinking process that all "consensually" arrived at solutions either are immoral or are unprincipled compromise. I have written (Menkel-Meadow, 1984, 1995), as have several philosophers (Golding, 1979; Kuflik, 1979; Pennock & Chapman, 1979), that compromise is not a necessary part of a solution that attempts to meet the need of all sides, and that even where there is compromise, it can often be morally, as well as

practically, and Pareto, superior to other outcomes. "Litigation romanticists," as I have called them, often assume that if they litigate they will win. More than 90 percent of all lawsuits conclude without a win-lose trial; most (more than 65 percent) "settle" for something short of "total victory." More important, particularly in the environmental field, a court or legislative victory does not always lead to perfect compliance and execution of the laws. While the SFEP also clearly still has implementation issues to deal with, consensual processes are still more likely to lead to compliance or at least the process for ongoing implementation negotiations.

Participants who claim they do not like compromise assume that they must give something up to get concessions from the other side when this is not always the case. It may be, for example, that adherence to arbitrarily set standards may "move" not because of a concession but because of a new understanding of what is necessary to meet scientific requirements. Furthermore, consensus processes make clear that a multiplicity of constituencies may look at problems through the lens of different interests—all of which may have validity, if differently valued validity.

-Carrie J. Menkel-Meadow, Legal scholar

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Participants also indicated their other principal reason for attending was to get to know the others and learn about their concerns. TAC members used their meetings as opportunities to exchange scientific information and get updated on one another's research.

Issue Subcommittees

The issue subcommittees had varying success. Agreement was reached on pollution, dredging, and land use. Substantial agreement was reached on aquatic re-

sources, although a minority report was produced on this topic. Two subcommittees—wetlands and land use—ran into particular difficulties.

Wetlands

Wetlands proved to be the most contentious issue. Builders and farmers lined up against environmentalists over how to define a wetland and on whether the policy goal should be "no net loss" or restoration and increase of wetlands. One problem was a lack of technical certainty. It was unclear

which wetland types were more critical for the estuary given its current status. Also, environmentalists distrusted wetland restoration policies because of the technical uncertainties of success. Developers and farmers sought a limited and precise definition of a wetland, and preferred a no-net-loss policy to requirements for protecting them all. Another difficulty was a general feeling of resentment among business and some local representatives that socioeconomic issues were not being given adequate attention or priority.

Process was also a concern. A previous wetlands process in which most of the participants had engaged had fallen apart, leaving the participants unhappy with one another. Despite the earlier experience, the wetlands subcommittee worked without a facilitator and members wrote the report themselves. They were unable to reach a consensus, however, and a minority report was included in the final CCMP.

Land Use

The land use subcommittee was also contentious, but ultimately reached a consensus. It was one of the last of the original subcommittees to be organized. Staff and professional and university-based consultants developed technical reports on demographics and the potential impacts of land use intensification for the group. From a policy perspective, however, many difficult issues remained. A central issue dividing participants was regional government. Some participants contended that the formation of a regional government would do much to solve many land use problems. Others, especially local officials, opposed the notion of a new layer of government. The conflict in the subcommittee mirrored debates that were going on in several statewide arenas outside the SFEP, including in the state legislature. Another difficulty was that the subcommittee's task was not well-defined and its membership was stretched thin. Several of the more concrete land use issues, such as wetlands and pollutants, already were being addressed in other subcommittees, and participants were putting their energy into those efforts. Thus, the land use issues remaining for the subcommittee were essentially those around planning.

Although the subcommittee's consultants produced informative reports, the conflicts around land use continued to impede participants' progress toward a consensus. Thus, toward the end of the subcommittee process, the SFEP hired one of the consultants, Scott McCreary of CON-CUR, to facilitate meetings. Over a fourmonth period, involving just two meetings of a subcommittee subgroup, the consultant together with staff wrote the status and trends report on land use, and the land use management options. The use of a facilitator in this case clearly was useful. According to one participant who also served on the wetlands subcommittee, the process was not as "gut wrenching as the wetlands, in which the group wrote everything from scratch." The subcommittee's report and recommended actions were adopted unanimously by the MC.

Perhaps because of the inherently difficult nature of land use issues, however, the subcommittee's efforts received mixed reviews at the time of the adoption of the CCMP. Although the land use section was adopted without a minority report, the participants whom we interviewed—environmentalists, local representatives, and business interests—all felt that overall the section was weak. The lack of enthusiasm from all sides may simply reflect that genu-

ine compromises were achieved—that as one individual commented, it got "watered down for consensus purposes." Although most parties interviewed found the facilitation helpful, the process apparently did not get beyond this mutual-adjustment effort to a mutual-gains position or sense of shared mission.

Flows, Water Use, and Aquatic Resources

Initially, the SFEP organizers decided to set aside the intensely controversial issue of water flows in the estuary. Flows and water rights issues were being addressed by the SWRCB in its hearing process, which was expected to result in a decision well before the SFEP was to be completed. The organizers' thinking was to use the information that would be developed by the SWRCB rather than to attempt to debate the same issues in the SFEP. At the outset, there was also a concern that some of the key players might not come to the SFEP table if flows were on the agenda. Even without the flows issue on the table, the SFEP had numerous issues on which to work.

Two years into the SFEP, however, the SWRCB process clearly had stalled. The plan to incorporate its findings into the CCMP was not going to work. Moreover, the aquatic resources subcommittee had concluded it could not complete its work without discussing flows. Many participants had been complaining about the difficulty of completing the estuary project without addressing flows in an integral way. Environmentalists threatened to quit the SFEP and sue the EPA. Thus, in 1990 the MC convened a flows subcommittee, consisting of carefully selected members including environmentalists and water

agency representatives. In private meetings, the subcommittee designed a series of technical workshops. It also created a smaller subcommittee on water use and supported original research.

After about a year, the flows subcommittee merged with the aquatic resources subcommittee, and together they developed a comprehensive action plan. Although there was substantial support for their plan, it was accompanied by a minority report in the CCMP. The major controversy around the issue was complex and much was at stake. Views were polarized, with some members of the subcommittee taking a rigid position and apparently saying, "Don't take our water." Environmentalists accused the SWRCB of having an unfair policy of supplying water to all those with contractual and other rights, and only sending residual water into the estuary. One SWRCB representative contended,

The SFEP was not just a bay issue. The water rights they were dealing with were used by the entire state. Thus, it is a water rights issue, not just a water quality issue. Flows are not directly a water quality issue like discharges. It is not just the amount of water, but the timing, where and how, and the facilities.

The SWRCB's responsibility was to balance interests. State agency representatives also had to recognize that the governor might not accept results that took too much water from the state and federal water projects. While the subcommittees did not solve the political problem of competing demands on the water, they reached agreement on the point that flows were linked to water quality and on the idea of a conservation

strategy. Other issues would have to be worked out in other arenas.

The Role and Use of Technical Information

In retrospect, the technical role of the SFEP may be the most important contribution to the policies and practices of water management for the estuary and to improved coordination among the agencies. The process of developing technical information provided opportunities for mutual learning among scientists and between scientists and laypersons. In addition, it resulted in the development of an innovative measure of estuarine health.

○ COMMENTARY

Perhaps the greatest contribution of consensual processes in such complex scientific environments is the exchange of information across scientific specialties and the relationships that develop between people schooled in different disciplines. The cross-, or as I like to call it, trans-, disciplinary learning that occurs when scientific experts must speak to each other across a "to be solved together" rather than adversarial "expert witness" problem-solving structure can have added value beyond the particular problem being worked on. For example, while the estuary problem looked like it was about water rights and water quality, it became clear it was also about development, economic security, jobs, wildlife and wetlands preservation, governmental sovereignty, and control issues, all of which have to be accounted for and accountable for a solution to be workable. We have learned from litigation that . the "science" that is produced by contesting and adversarial experts is not always the best (Goldberg, 1994; Jasanoff, 1995). And to the extent that even scientific "decisions" are affected by important social processes and organizational behavior, it is important that we learn how to deal with and evaluate the scientific and human layers of decision making in the interactive environments in which they occur (Vaughn, 1996, 1998).

As the comments in this section of the case study make clear, "facts" are not always facts: Their interpretations depend on human processes that often need clarification, explanation, and facilitated understanding, all of which can often occur with facilitated dialogue. To the extent that scientists and decision makers need "bridge builders," often a cofacilitation team may be appropriate in highly complex disputes or regulatory problems like the SFEP: one with some technical expertise and a coleader with "process" or "educational" expertise. Errors of judgment, science, or politics are most often made when groups of similar disciplines insulate themselves within their own knowledge bases or their own internally derived ethical or accountability standards. Consensus processes can provide that external review or reality check that may be absent when a system becomes too closed (see Badaracco, 1997, for some examples of the need to consult multiple layers and communities when making difficult choices).

-Carrie J. Menkel-Meadow, Legal scholar

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The EPA first constituted the TAC by inviting scientists and engineers having relevant expertise from a variety of agencies, and research and educational institutions. The committee later expanded itself to include additional science and engineering expertise. Despite several requests, it did not enlist an economist, attorney, or social scientist. Effectively, the membership reflected a policy decision that the TAC was to focus on science and the characterization of the estuary. Academics participated initially, but soon found little incentive to stay. As they and some other researchers dropped out, the committee consisted increasingly of agency and interest group staff. The TAC's contributions were brought into the larger SFEP process through the issue subcommittees on which TAC members served, and through a set of facilitated workshops.

The status and trends reports developed by the subcommittees over the course of four years reflected a mutual acceptance of information and put a stop to endless adversarial arguments in which no one could agree on the basic facts. One of the TAC members described the difference between adversary science and how the TAC operated this way:

It is almost a joke how technical information has been abused in this area. The state water board runs quasijudicial administrative hearings. Lawvers bring their own technical experts; they cross-examine the scientists and find typos in their articles and raise the question of whether the whole article might not be riddled with mistakes. There is no question of peer review. Moreover, differing opinions are equally weighted. So if 99 percent of the scientific opinion supports one view and only a few people support another, they are weighed equally. We tried in the TAC to use scientific standards to determine what could be accepted.

Developing the reports was not an easy task, however. By design, the exercise was intended to be purely scientific. In practice, however, it proved difficult to make a clear distinction between technical and nontechnical issues. In essence, they jointly constructed the information they could agree on. According to one member,

The status and trends reports were originally meant to be technical only. We tried to be factual in what we put

there. But then there was a debate. . . . [A technical person from an environmental group] wanted to include conclusions on how badly the bay was doing. We did not do it because it was not factual. There were polarities among members, though all are scientists. You have not only environmental advocates but also people from agencies who work for the discharger community, saying, "You cannot draw those conclusions." . . . Debates were over what could be concluded or said. or over caveats that were needed. You can speculate, and you can have differing interpretations that are legitimate. One of the scientists would end up pointing out where there was little argument over conclusions.

The difficulties that arose around the attempt to distinguish between technical and nontechnical information illuminated a certain culture clash between many TAC members and others involved in the process. The issue subcommittees supervising the preparation of the status and trends reports consisted of scientists and managers. The scientists wanted the reports to be limited to scientific characterization, while the managers insisted on including a set of "management options." One TAC member noted, "Scientists don't like to talk politics." A frustrated member complained,

The MC decided there should not be separate technical and lay subcommittees on the same topic. These mixed groups did not want to use scientific criteria of relying on peer review and findings that have been well established. They wanted to rely on anecdotal evidence and common sense, gripes, and they wanted to talk about management options. Some scientists

felt they could not be tainted with hearsay and dropped out.

Managers had similar frustrations. One commented that the status and trends reports were "useful because they got the scientists to agree on some findings. They think of themselves as gods in their fields and fight over hypotheses and try to block each other's views."

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Although the process was time-consuming and sometimes frustrating, overall it appears the exercise had beneficial effects for long-term communication among participants, and for developing a common understanding of the issues and their implications. Although little *new* information was developed, much was done to sort and organize existing information so it could be understood and used. One of the participants with little scientific background expressed a common view:

The status and trends reports were good—a valuable resource for the future research. Now things are written down. The inventory of research gaps was good. The reports put the information into ordinary language and made the scientific findings accessible to people.

Some lay participants acknowledged having learned some science. And one engineer found the experience of working with the managers changed him:

Suddenly I became exposed to political realities. I used to work in an experimental mode. You get all the factors right and then systematically carry out the task. I discovered the world was not like that. It has taken me years to change from the rational, logical thinking of an experimental scientist. For

example, I used to think if we laid out the monitoring program and ran through it, people would like it. I did not realize people change their minds a lot and, over time, in any case, do not even see the same problem any more.

∞ COMMENTARY

This case study reveals so well how so-called scientific rationality must be melded with "political or managerial realities" to be enacted or effective. Consensus processes, so far, where they have worked, have been the bridges between different disciplines, with different "standards of proof," rules of decision, and methods for approaching problems. Modern-day problems are all multilayered and require a coordinator to "keep all the meat in the sandwich." In this case, a new scientific standard of water quality emerged from this "political" and "scientific" process conducted over time with multiple participants.

-Carrie J. Menkel-Meadow, Legal scholar

The SFEP made its most important technical contribution in the development of an innovative water quality index that could be used for monitoring the estuary's health. The SFEP convened a group of scientists, representing environmental protection and water diversion agencies and interests, to develop a science-based consensus on the impacts of freshwater diversion on the estuary's biological resources. They hired Dr. Jerry Schubel, a water scientist and director of a marine institute at the State University of New York at Stony Brook, to facilitate four workshops. Within the first hour of meeting, the group concluded it would not deal with quantitative measures of flows because they could not be made sufficiently precisely. Instead, it focused on how to measure water quality, much to the frustration of a state water agency representative who contended that the EPA must have manipulated the process so it could attend to its agenda of setting new water quality standards.

Whatever the case, the scientists reached substantial agreement on a new indicator of water quality for the estuary, the 2 parts-

per-thousand (ppt) salinity index, also known as X2, although some state water agency representatives did not join the consensus. A technical participant explained,

We have chosen 2 ppt as the surrogate for knowing where the mixing zone is. This zone is rich, where a lot of life is generated and high concentration of food. . . . Typically, this zone, most agreed, should be near Suisun Bay because if it goes further back into the delta where there are deep channels, then it does not have the beneficial effects it does in the shallow area.

The scientists achieved a high degree of consensus on the salinity index, although there was some disagreement about the appropriate location for the mixing zone.

The broad acceptance of this indicator had a number of important coordinative and political results. First, it formally established agreement that water quality and flows are linked in a fundamental way, since the location of this salinity level is affected by the amount of water flowing through

the estuary. This agreement was a major breakthrough, not because it was a surprise but because it provided a relatively scientific and legitimate criterion for the argument. Second, the index came to be more or less understood and regarded as important by the lay members of the MC. Even if the SWRCB would not adopt it as an official measure of water quality, other agencies likely would. For environmental agencies, it was a potentially powerful tool to challenge water user interests.

Finally, and most important, the general acceptance of this indicator was a measure of the degree to which the SFEP members had come to reconceptualize the problem of the estuary as an ecological system in which they all played a part. When they began, some said there was not even agreement that there was a problem, and each of the groups saw it somewhat differently. The choice of a system or outcome measure like the salinity index, rather than an input measure such as end-of-the-pipe discharges, represents a recognition that the estuary's health is a collective and complex problem requiring collaborative decision making and action.

Staffing

The SFEP was well staffed, with as many as 19 people at some point on at least a part-time basis. They were largely EPA employees, with some additional personnel borrowed from state agencies. A variety of consultants were also hired to assist in various tasks.

Staff generally assisted the committees rather than taking an active, leading role. According to a principal staff director,

The role of the staff was to facilitate group interaction and provide infor-

mation. They provided administrative support and made the agendas with the chair of the group they worked with. The small work groups left the lobbying and the networking to the staff to handle. Staff did its work one-on-one with the small groups to explain the new changes in the documents on the controversial issues. There was a phone tree, and one staff member handled several MC members. Sometimes they just passed along information, such as administrative things. Other times, it was more like education or lobbying.

According to a number of respondents, a level of trust among members and between members and staff was developed in the small groups, and carried through the rest of the process.

Although, even when asked, not many of our respondents said the staff were biased, there clearly was a problem in having staff come from the EPA. Most we interviewed reported that the staff tried to serve members equally with information. Nonetheless, the environmental protection orientation of the EPA created problems. One of the managers of the process said,

Nonenvironmentalists did not trust staff because they regarded them as pro-environment. Environmentalists wanted staff to be advocates. Our staff are typically pro-environment advocates in the first place.

To provide a greater sense that the project was not being unduly driven by the EPA, the staff were housed in the offices of the Association of Bay Area Governments. Two or three of the nonenvironmentalist players complained that the staff lobbied members. One said, "Staff was biased, should have been more neutral." Remarkably, though

no one disputed that staff advocated for environmental protection, most accepted it as legitimate, given the legislative purposes of the project.

Consensus Process and Facilitation

The MC was chaired by Harry Seraydarian of the EPA, who ran meetings largely in a consensus building way. Remarkably, according to our respondents, even participants who distrusted the EPA accepted his chairing as fair. Nonetheless, they found he "represented his agency when he needed to." Key EPA staff sometimes felt their loyalty split between their boss and the overall direction given to them by the MC, particularly when the chair disagreed with the MC. As the five-year deadline for plan completion approached, issues became more focused and resolving them more difficult. The MC decided to hire an outside facilitator to help it complete the CCMP, which the staff had begun to write. The SFEP selected two people who worked together to facilitate the meetings.

The size of the MC and its diversity made the meeting process difficult. The early organizers' commitment to be inclusive had led to the large size, which clearly was not efficient for working out complex issues. While the relationships may not have become warm among participants, by the end of the process they were trading jocular insults among one another, regardless of their position or role. The meeting process seemed to equalize the participants' opportunity to be listened to, in much the model prescribed by the literature. One midlevel agency participant observed,

The SFEP got us sitting around the table. I noticed that the power and

prestige of individuals faded as people sat there over time. The deputy director of [a major state agency] . . . had no more clout than the [an environmental group]. . . . The organization behind the person faded after a while and it became just two people—bricks banging into each other. . . . The monoliths were no longer there, but you had strong individual personalities.

Participants generally were pleased with the facilitators, who they felt helped the MC move along. One of the facilitators ran the meetings, keeping to a strict schedule and making sure agreements were reached if possible. The other operated a computer equipped with a large display screen that allowed everyone to see wording changes as they were made. Those we interviewed had some ambivalence around the group's focus on the language of the plan, which was promoted by the use of the display technology. Although they found it helpful as a way of keeping track of where the group was, they felt the focus on wording sometimes obscured the underlying interests. One member commented.

It tended, at times, to focus on trivia. Yet it was a clearly good way to move the process along. The focus was on the language and not on the content of the policy.

The criterion for establishing that there was a consensus was, de facto, 100 percent agreement. The facilitator alleviated the tension around this "voting" procedure by using a "six-finger" rule that gave members more than one option for expressing their views. A member would hold up anywhere from one to six fingers to signify his or her view of a proposed idea. The scale went from one finger, representing "I fully

agree," to four, "I do not like it but I will not block consensus," to five, "There is no way I will agree to this," to six, "I won't agree but perhaps further discussion can resolve it." This procedure gave participants a way to express their views, without necessarily having to be obstructionist. As a practical matter, however, over time it became dichotomous. Was a member's vote five fingers or something else? And could the five be changed to another number? A development representative said, "Everyone was relatively happy with the finger voting system, which was relatively good. The facilitator used straw polls often, which worked well." She felt, however, that in the SFEP, "consensus meant majority rule and did not mean 100 percent unanimity"-meaning the six-finger rule could mask some dissent.

Adoption of the CCMP

The last meeting of the MC was devoted to adoption of the CCMP. One hundred percent agreement was needed and there were still some "no" votes. The deadline set by the federal legislation was 5 o'clock that afternoon. As time passed, the facilitator hurried the committee along, finding words they could agree on, without pursuing the underlying reasons or meaning. Agriculture and the building industry were especially dissatisfied. Some members had difficulty with a recommendation that the salinity index should be used as a means of assessing ecosystem health. It was worked out that the recommendation would be to "consider" use of the index as an indicator, but a minority report was also prepared on this topic. In an ironic twist, the ground rules provided an incentive to agree to adoption of the plan even if one did not agree fully with its contents. One could prepare a minority report to be included in and disseminated with the plan only if one became a signatory to the document. There were also problems around the insufficiency of the information on the plan's cost implications, on which debate had to be cut off due to a lack of time.

Full consensus was reached amid cajoling and teasing of reluctant members, loudly expressed worries of some members about the support of the constituencies they represented, and clear indecision until the last moment by key state agency officials who said they would not have supported the plan if other substantial groups had not. The official vote was 100 percent. but in conversations after the meeting it seemed to represent little commitment or enthusiasm by at least some players, such as building and business groups, farming interests, and state water agencies. There was a clear tension in the room between the desire to see a product from five years of work and ambivalence about aspects of that product. Nonetheless, the CCMP covered many issues that had been resolved and most players bought into most of the plan.

Prospects for Implementation of the CCMP

At the time of adoption of the CCMP in the spring of 1993, there was great uncertainty among participants about whether and how the plan would be implemented, or indeed how it would make any difference. Most participants focused on the plan itself and the potential for implementation as the test of the SFEP's success or impact. Participants expressed concern that because of the 100 percent consensus requirement, the plan's contents were either the lowest common denominator or stated so generally that issues would have to be

fought out again in implementation. Because the plan did not have the force of law, some thought it would end up sitting on a shelf, collecting dust. No one claimed it was a radical piece of work. One participant

asserted that 90 percent of what was in the plan was going to happen anyway and that other things might happen just because they were good ideas. ••

○ COMMENTARY

The "exit" interviews in this case study demonstrate that the process produced thoughtful reflection and feedback. Participants seemed to learn that how consensus was defined mattered and that something less than 100 percent agreement might have been more effective. A customized voting system attempted to deal with priority setting, yet some felt there was still a need to establish more of a culture of cooperation and collaboration. Astute participants can learn from one process what the barriers or hindrances to resolution are and learn for the next episode how to involve all the important stakeholders, how to establish communication rules, governing and managerial units to cross technical areas, and how to develop language that is general enough for transdisciplinary understanding but specific enough to solve concrete issues.

-- Carrie J. Menkel-Meadow, Legal scholar

Participants saw a number of other problems for implementation of the plan. In addition to the consensus being thin, the plan set no priorities, did not identify lead agencies, and contained insufficient information on the social and economic costs of the proposed actions, particularly for local governments. Where the money would come from to support implementation actions was also uncertain. The plan contained proposals for developing revenue sources in support of implementation, such as surcharges on water users and real estate transfers. These proposals, however, would require support of the governor and the legislature.

A major cause of concern was that the plan had not acquired sufficient commitment among the state agencies. More important, there was an evident lack of support from the governor's office, whose concurrence was required by law. Would he sign the plan given its financial implications

and, more important, its challenges to the water supply that serves the southern farmers and urban areas? Even though they had signed on to the CCMP, some participants urged the governor to reject at least those portions of the plan on which there were minority reports.

Although many participants felt the governor's approval of the CCMP would be critical to the success of implementation, along with active support from the agencies and other communities represented, the MC chair could see ways the plan could have an effect in any case:

Some see the purpose of the CCMP as an enforcement tool and look for the teeth. I want to use the plan as a basis for implementing actions, but not as a club. We sent the plan to agencies and asked which parts were priorities from their view. It went to all relevant agencies with a request to identify costs and

actions already committed to so we can decide on the next steps. We are working to have regional water quality boards take the lead on implementation. We expect to have a new implementation committee including some interest groups, along with agency people.

■ Epilogue

In November 1993, Governor Wilson issued his concurrence, which was modified by a number of conditions he appended to the plan. The EPA administrator officially approved the plan several weeks later. The governor opposed any new revenue sources to support implementation. He also registered specific conditions in regard to water rights, endangered species, wetlands, the need for setting priorities, and

the use of the salinity index. With regard to the latter, he specified that his concurrence was based on the understanding that the CCMP "neither requires nor recommends" use of the salinity index as a water quality "standard." Around the same time, he also instructed the Bay-Delta Oversight Council (BDOC) to revisit the SFEP proposals on flows and water quality. The governor had appointed BDOC following the EPA's disapproval of a 1991 state plan to reduce the salinity of the delta. Like the SFEP, BDOC is a consensus group, but it reflects a very different notion of the boundaries of the problem and the appropriate stakeholders. Two-thirds of the participants represented farming and urban water interests in southern California that would be affected by the proposals to increase freshwater flows to the bay. ••

○ COMMENTARY

Of course, ultimately a process and a problem as complex as this may come down to the decision of one person—a governor, in this case, or a president—which may limit what groups can accomplish. Nevertheless, to the extent that a group-based consensual process is truly participatory and involves enough of the stakeholders, developing commitment to the process and the outcomes reached and reducing the adversarialism and "demonization" of the other sides, single-veto officers—like governors or presidents—may not be able to reject the outcomes of a process that has brought previously contending parties to some kind of agreement or commitment. While underlying positions may not be changed, parties may come to realize they are better off for having learned from the other side and achieving the "possible" than remaining intransigently committed to positions that will prevent anything from happening at all.

Though the jury is still out on the implementation of the outcomes of the estuary project process, it is clear that at least some groundwork ("waterwork") has been laid for talking across disciplines and attempting to manage complexity. Parties do seem to have learned that while winning may be good, the risk of loss and no action is potentially worse. If we are to manage complexity, we have to try to find ways of bringing people together in different ways. Whether multiple, ongoing processes will help or further complexify the environment remains to be seen, but at least 5 years to some realistic proposals is faster than the 10 to 20 years that complex environmental litigation and regulation often takes.

-Carrie J. Menkel-Meadow, Legal scholar

Meanwhile, four key federal agencies got together to further refine the salinity index and consider applying the standard suggested by the SFEP. Reflecting the amount of political and technical support underpinning the salinity index, these agencies officially proposed use of the 2 ppt isohaline criteria as a dynamic measure of bay-delta water quality in December 1993. This process, in loose combination with several other concurrent efforts, helped lay the groundwork for the development and signing of the 1994 Bay-Delta Accord. The accord is considered by many to represent a truce in California's water wars. It lays out an agreement for managing the delta that would be followed until a more comprehensive decision could be made through another collaborative process—the CALFED Bay-Delta Program. By the time of the signing of the accord, all parties had developed sufficient confidence in the viability of the salinity index as an indicator that it was included explicitly in the agreement, and it is now used in the management of the bay-delta. CALFED is now considering the use of the index on a permanent basis for long-term restoration and management of the bay-delta ecosystem. In 1996, as a result of the CALFED collaboration, all the major state interests supported a statewide bond measure for water projects and habitat restoration. This measure was one of only a few supported by voters and provided funding that is now being used for baydelta restoration and protection under the auspices of the CALFED program.

Five years after the signing of the CCMP, the SFEP stakeholders are continuing to implement the recommendations of the CCMP. The stakeholders built mechanisms for coordinating their efforts into the plan, most of which are being followed as planned, although some adaptations have been made to accommodate unanticipated

conditions. One of the most notable outcomes of the SFEP process has been the development of additional collaborative processes to address implementation issues.

CCMP implementation is coordinated through a 30-member committee, which receives broad oversight from a fivemember executive council. The original vision was that the implementation would be carried out through a variety of subcommittee and working group efforts involving relevant agencies and other stakeholders. In practice, a small staff also has been retained under the auspices of the SFEP. In concert with their agency partners, the staff provide a focal point for the coordination, fund-raising, and public outreach activities. In a unique collaboration among agencies, SFEP staff is housed in the offices of the Regional Water Quality Control Board, funded by the EPA, and officially employed by the Association of Bay Area Governments, which also handles the fiscal administration. All SFEP projects are supported by grants from the EPA and state and local governments. This year it will receive grants totaling nearly \$2 million in support of specific implementation actions.

The work of two other entities—Friends of the Estuary and the San Francisco Estuary Institute—is also critical for the implementation of the CCMP. Friends of the Estuary is a nonprofit corporation established in 1991 as an outgrowth of the SFEP. Friends was established originally as a way to build public support for the CCMP and obtain governmental and nongovernmental funding to supplement the estuary project. Today, it is responsible for promoting and coordinating the public involvement and education programs.

The San Francisco Estuary Institute (SFEI) is a nonprofit, technical organization that operates externally from any indi-

vidual stakeholder and at the collective direction of all of them. As such, it is able to provide technical expertise in which all of the stakeholders have trust. The SFEI conducts research and monitoring; evaluates, interprets, and manages data; and disseminates this information to agencies, universities, school systems, and the interested public. The regional monitoring program is one of the innovative ideas generated in the SFEP process that is now operating with success under the auspices of the SFEI. The program is funded by the 77 public and private organizations that discharge treated wastewater, cooling water, or urban runoff or are involved in dredging activities in the bay. Many of these organizations also provide expertise or logistical support to the program; a number of federal and state agencies also contribute funds or in-kind services to the program.

The Friends of the Estuary and the SFEI boards of directors and the implementation committee have overlapping membership through which direction to these organizations and the SFEP is loosely coordinated. In addition, the SFEP, Friends, SFEI, and their agency counterparts work closely on a variety of projects. For example, one of the two areas in which the CCMP did not contain consensus was wetlands management. The implementation committee decided that before much could be done with regard to wetlands management, a set of goals needed to be developed. The agencies having regulatory interests in wetlands created a collaborative process to develop a consensus on the areas and types of wetlands needed in the bay. The San Francisco Estuary Ecosystem Goals Project draft report was published in June 1998 and contains goals and recommendations for wetlands management. Although the project operates primarily under the auspices of the SFEI, it is a truly collaborative effort involving a number of agencies and organizations, and well over 100 individuals.

The SFEP and SFEI have been involved in a variety of other collaborations with agencies and stakeholder organizations to focus attention on CCMP implementation issues. For example, in 1996, the SFEP organized a workshop on ballast water exchange and exotic species invasions. Similarly, the SFEP collaborated with several state and regional agencies and the EPA to develop a guidebook for city and county governments on ways to help improve the estuary. Every two to three years, the SFEP in collaboration with its partners organizes a "State of the Estuary" conference. These conferences focus on the scientific, management, and policy issues relating to the health of the estuary, and they draw large audiences of people with diverse interests.

About a year after the completion of the CCMP, the SFEP staff found itself facing several problems. One was that the CCMP contained many actions, but no priorities. In addition, the SFEP was required to submit a report to Congress, but had no way of tracking progress. Based on a series of interviews with stakeholders, staff started developing a chart indicating where progress had been made on the various action items and by whom. Then in August 1996, it convened a workshop to set priorities for bay-delta action over the next five years. Seventy-five representatives from federal, state, regional, and local governments and business and environmental groups reviewed the progress chart and participated in facilitated discussions. Out of these discussions came a list of 10 priorities, which now guide the SFEP staff and stakeholders as they implement the CCMP. In October

1996, the SFEP published the CCMP Workbook, an impressive compilation of progress made on each of the CCMP recommended actions. The Workbook served as the SFEP's report to Congress and is considered such an effective communication tool that its format has been adopted by several other estuary projects around the country.

The experience gained in the SFEP has contributed to the development of several other consensus-based processes, the most directly related of which is the Long-Term Management Strategy (LTMS) for materials dredged in the San Francisco Bay. As an outgrowth of the SFEP dredging subcommittee, the Army Corps of Engineers and the EPA convened representatives of the agencies having regulatory authority over dredging in the bay, together with navigation interests, fishing groups, environmental organizations, and the public. They hoped to overcome the "mudlock"—the legal disputes and bitter conflict—that had paralyzed dredging management. The organization of this process included a steering group smaller than that used in the development of the CCMP. It also separated the policy group from other participants, but nonetheless sought wide participation. The LTMS organizers made these structural adaptations as a result of their SFEP experience. The LTMS has achieved a number of policy agreements. A final Policy EIS/Programmatic EIR was released in late 1998 and includes as the preferred alternative plans for reuse of dredge materials. In addition, LTMS agencies have established a "one-stop" interagency office for applicants seeking dredging permits. This office also allows the agencies to coordinate better their day-to-day dredging decision-making and environmental protection responsibilities.

■ Assessment

The SFEP has made and continues to make lasting changes in the way agencies and other stakeholders work to accomplish their goals in the estuary. As a first-order outcome, the public and private stakeholders continue to coordinate their actions and make progress on implementing the actions of the CCMP. As second- and third-order outcomes, the learning that has taken place in engaging in consensus-based collaborations has spawned further collaborations. Relationships built through the SFEP have proved useful in addressing concerns in related areas. As a result of experience in the SFEP and a variety of other processes. collaboration is seen now as a more effective way to address the complex, interlinked issues facing California water policy makers. In the words of the MC chair, "I can say we have gotten better coordination through consensus process, though we did not necessarily have consensus on everything." All our evidence supports this.

The CCMP

Officially, the SFEP achieved consensus on the CCMP, with brief minority reports in two areas. In other words, a great many issues and policy directions were agreed to. Although some said the consensus was thin on some points, some language was vague, and the governor only agreed to it with conditions, the CCMP remains the adopted plan for the estuary. It is an official document that has weight for administrative decision making and for legal challenges by watchdog groups. While it does not have teeth in the sense that particular parties can be forced to act in particular ways, many

parties have acted as it says because they have decided it is a good idea.

Personal and Professional Networks

Participants representing most of the key players influencing the water quality in the estuary developed working relationships and communication networks with one another, as well as an understanding of each other's perspectives. Many of them use these relationships and understandings to do their estuary-related work; they call each other and coordinate informally over issues before they become conflicts. One agency participant observed,

I now have networks into 40 different groups representing different values or at least points of view. If they have frustrations they can call me. I get called a lot. I call them a lot too. I am on the phone with the Sierra Club almost every day. I ask them what I can do to help. I try to find out what they are doing and to see what I can do consistent with my agency's objectives, to help.

Agreement on the Nature of the Water Quality Problem

Participants came to a basic agreement on the existence and characterization of the estuary's water quality problem. This agreement moved the debate away from one relying on adversary science, in which participants could hide their views behind arguments over evidence and data quality. They produced a major document, compiling a consensually agreed-on scientific description of the estuary, in a form accessible to managers and the public. They moved

from a set of narrow, parochial views of the estuary as a place where pollutants are dumped, shipping is conducted, and endangered species try to survive to an understanding of the estuary as an ecological system where the many activities interact in complex, and not fully understood, ways.

Agreement on the Salinity Index for Measuring Water Quality

They largely agreed on the salinity index as an indicator of estuarine health and a principal monitoring tool. This index is now largely accepted as a legitimate indicator of water quality because of the debate SFEP participants went through, and agencies now rely on this measure. These were achievements from a scientific viewpoint as they brought the management methods more in line with current science, but they also represented a political achievement that set up conditions for effective longterm coordination. The selection of this indicator and wide acceptance by stakeholders of the conception of the estuary as a system in which all have a stake were tantamount to an agreement that future estuary management would require collaborative problem solving.

Spin-Offs and Related Projects

The LTMS, San Francisco Estuary Ecosystem Goals Project, and federal agency consensus effort on the salinity index were all direct outgrowths of the SFEP. Each was designed differently to take into account the nature of the issues at hand and to reflect the organizers' learning about the strengths and weaknesses of collaborative

processes from their experience in the SFEP.

In addition to spin-off collaborative decision-making processes, the SFEP resulted in a number of collaborative institutions. For example, the SFEI was developed as a nonprofit organization to coordinate and carry out research and monitoring. With representatives of agencies and stakeholders on its board of directors, the SFEI operates as an external and trusted scientific group.

Changes in Participants' Formal Positions on the Issues

We were not able to find that participants had changed their positions on major issues under dispute. However, some understandings and actions changed. For example, the new monitoring strategy now provides for less intensive monitoring of individual discharges, and more comprehensive monitoring of ambient conditions in the estuary. One participant said, "Basically, no one changed their point of view," but felt people "did get a better understanding of the issue. For example, I better understood the seriousness of the problem and the issues of the delta and Suisun Bay."

Boundaries of the Problem and Alternative Decision Arenas

The biggest challenge confronted by the SFEP was that decision making relative to the estuary was being carried on simultaneously in several arenas. Although people continued to participate in the SFEP, they knew they had alternative places where they could try to undo decisions made in the SFEP. The availability of such alterna-

tives lessened their commitment to the process and meant there was not as much incentive for participants to reach agreement as there would have been if the SFEP were *the* place where decisions were made.

This problem was linked to some fundamental difficulties in setting boundaries on the problem. There were continuing disagreements in regard to the scope of the problem and the appropriate stakeholders, and around whether the project would address socioeconomic impacts in addition to environmental quality issues. These continuing issues around the boundaries of the project raised questions about the legitimacy of the process and led to uncertainty among the participants about its importance. It also placed the governor in the position of having to choose between two unresolved and conflicting agendas: that of the CCMP and that of the water users.

Local Government Buy-In

One major limitation of the estuary project was that it did not succeed in getting effective local government participation or commitment to action. It did not even really offer much in the way of strategy pertinent to local governments, although local governments would be critical players in many implementation actions. For example, the land use and the wetlands section of the report would depend to a considerable degree on the voluntary cooperation of local governments or the creation of some type of regional government.

In general, participation from local governments was low. Some larger municipalities sent technical staff, but few elected officials attended. One explanation was that these officials did not really see it as worth their while to attend. The attitudes

of many participants reflected little understanding of the multiple responsibilities and agendas of cities and their strained financial condition. Since the city leaders were not there they could not explain themselves, nor could they influence the implementation strategy to make it manageable for themselves or ensure local governments would have an incentive to take action.

The Consensus Process

Respondents gave the consensus process mixed reviews. It accomplished certain things as discussed above, but its accomplishments were limited by several factors. First, the early decisions to include every player and to define consensus as unanimity meant that inevitably some things could never be agreed on, even with almost everyone behind them. It also meant that some decisions really were the lowest common denominator. It meant too that the MC ended up being large and unwieldy. Finally, the decision to work out the language of the final report in MC meetings may have been a mistake. Although parts of the plan were drafted by subcommittees and staff, the facilitators' efforts became focused on "wordsmithing." The development of agreed-on language inevitably became more important than establishing in-depth understanding or real agreement in principle. This focus may have contributed to the sense of many players that agreement was thin.

The absolute deadline probably helped the group move to as much consensus as it did, but also truncated the process abruptly before key decisions about implementation could be made. At the last meeting, the most difficult implementation issues—costs and the identification of responsibili-

ties—were scarcely addressed, much less resolved. Those agreeing to the plan may have changed their minds had the implications of these issues been clear.

Consensus may be a slow process, but it had important political consequences in the views of most participants. One participant noted, "The SFEP might make working on implementation and legislation over the next five years easier due to the work of the last five years." Another observed, "The consensus aspects generated a lot of community support for the SFEP. The strength of using consensus was political. But the process has not gotten support outside the estuary." One participant, who was often in disagreement with others, remarked, "It kept people at the table constructively."

Participants also griped about the process. One, who came only to protect her interests and was always considering walking out, said, "I think the only thing we agreed on was that we hate this." In the first meeting of the implementation committee in 1994, there was substantial sentiment expressed that they did not want to use the consensus process they used in the MC. One critic asked herself, "Are we arriving at consensus for the sake of consensus itself? Are we really moving forward? Is the environment benefiting?" Her worry was that "people get so wrapped up in it and felt this need for consensus so much . . . they will do whatever it takes to get it." One environmentalist, who was the only participant we found with this view, said, "I would rather it not be a consensus project. Voting, majority rule would result in a stronger document for the resource. Environmental aspects were weakened in order to gain consensus."

The same critics also saw benefits. The environmentalist acknowledged that if

"that sort of thing [i.e., consensus] gets the governor to sign the plan, then it may have been good." The other concluded, "Consensus is the thing to do. I think that consensus is a good thing. I think consensus is here to stay." In the end, even the few strong critics supported the idea of consensus building as a strategy even if they disagreed with certain aspects of how it was carried out.

The philosopher among our respondents—a technical person whose eyes had been opened to many new perspectives—offered the most thoughtful overall assessment of the SFEP, its results, and its effects on him:

We are all in this together is what we have learned. None of us has the resources any more to overwhelm the

others. We can't compete in a win-lose situation any more because the cost of losing is so high. We have to try for win-win solutions. Goodwill is an important ingredient in all this. The SFEP is a good example of how goodwill was developed over time. Interest groups had argued over the toys and scientists each said their own type of science needed to be done. There was at the outset no consensus on what were the issues, or what needed to be studied. SFEP changed that. We started seeing ourselves as a neighborhood making decisions about our backyard. You realize you cannot have everything. Now the no-action solution is no longer acceptable. The process requires energy and time, but it takes us in the direction it should for a democratic society.

■ Notes

- 1. The National Estuary Program was established by the 1987 amendments to the federal Clean Water Act (§ 320) and modeled after the Chesapeake Bay Program. It is administered by the EPA.
- 2. The governor also nominated Santa Monica Bay at the same time. For a description of the Santa Monica Bay Estuary Project, see Innes, Gruber, Neuman, and Thompson (1994).
 - 3. See Tuohy (1993) for a full outline of the TAC activities.

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