

THE SOUTHERN CALIFORNIA EARTHQUAKE
PREPAREDNESS PROJECT:
EVOLUTION OF AN "EARTHQUAKE ENTREPRENEUR"*

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A major problem for at governments in earthquake-prone countries is how to improve the process of preparedness. In the U.S., a relatively novel mechanism was created to accelerate the pace and intensity of preparedness, including prediction response. Known as the Southern California Earthquake Preparedness Project (SCEPP), the entity had federal and state mandates and funding. It was an extension of federal and state policy into local government and the private sector. Established in 1980 as a temporary, three-year organization under one agency in California, it continues today with a five-county region of southern California (including Los Angeles) that would be devastated by an expected great earthquake on the south-central San Andreas fault. Although it had a limited budget, small staff, and experienced delays and leadership crisis in its early life, SCEPP is widely regarded today as having made a contribution to earthquake preparedness and prediction response in southern California. This article reviews the evolution of SCEPP as an "earthquake entrepreneur" and draws lessons from its record of relevance to government and earthquake preparedness generally. SCEPP represents an organizational model that may be considered by other earthquake-threatened settings.

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Introduction

In earthquake country, whether in the United States, Mexico, Japan, Europe, or elsewhere, there is the perennial problem of how government is to speed the process of preparedness. The potentiality of earthquake prediction has further complicated preparedness planning, since prediction itself raises a host of new issues with which government must cope (Mileti, 1981).

In the U.S., a relatively novel mechanism was created to accelerate the pace and intensity of preparedness. This mechanism, called the Southern California Earthquake Preparedness Project (SCEPP), was established in 1980 through legislation at the national and state levels. Its purpose was to be an extension of federal and state policy. Its goal was to work with local government and the private sector in a five-county region of southern California (including Los Angeles) that would be devastated by an expected great earthquake on the south-central San Andreas fault.

Over the period 1980-1985, SCEPP expended approximately U.S.\$2.5 million. It never had more than nine staff members, and went through three directors. Yet there is a reasonable consensus among those who have been involved with SCEPP (as sponsors, users, or in other relationships) that SCEPP was a desirable institutional mechanism. Indeed, SCEPP may now be in transition from a "temporary" ad hoc organization to a regular part of the state emergency bureaucracy (Lambright, 1984).

The experience of the organization is worthy of study in its own right. It attempted innovation and can claim at least partial success in achieving its goals. As an organizational model it is important to examine.

Already, a similar entity has been established in the San Francisco Bay Area of northern California. There is talk of regional SCEPPs in other parts of California and there have been efforts at SCEPP-like mechanisms in other states. While a typically American mechanism, in the sense of being a new governmental organization created to instill change in old governmental organizations, SCEPP has relevance to other nations. All earthquake countries need to accelerate earthquake planning and give it greater priority. Even in those nations with relatively sophisticated earthquake plans, such as Japan, there is the danger of complacency. How to give new energy to preparedness is thus a widely shared dilemma. The SCEPP experience, including its problems, thus has general significance. SCEPP is an example of an earthquake entrepreneur, an organization designed to catalyze change in earthquake policy

and established organizations (Lewis, 1980; Meltsner and Bellavita, 1983).

A Framework for Analysis

To understand the evolution of SCEPP, it is useful to employ an interorganizational process model (Benson, 1975; Hall et al., 1977). Thus, a set of existing organizations, with somewhat different interests, gives rise to a new organization, in this case SCEPP. SCEPP itself has its own interest, which it attempts to achieve. This attempt, combined with the reaction of the other organizations in its environment that have influence over SCEPP and its capacity to fulfill its goals, constitute a matter of interorganizational accommodation (Zeitz, 1974).

The entire SCEPP process can be seen as involving a series of stages (Janis and Mann, 1977). These are as follows:

1. Planning. This is the pre-birth stage of the organization, when those who feel a need to go beyond rhetoric to action in earthquake preparedness decide what kind of organization will further their aims.
2. Establishment. This is the stage when the organization is officially adopted, given legitimacy and funds. It is "born." It is born with a mission, but that mission is stated in broad and vague terms--a result of the necessity to accommodate differing interests.
3. Development. This is the stage where the new organization gives specificity itself to its mission and role. As an entrepreneurial organization, a change agent, it is supposed to speed innovation in earthquake preparedness in Southern California. But how? It must gather a staff and define its niche or distinctive competence in a policy domain (Selznick, 1957). It comes up with a strategy to accomplish its ends.
4. Implementation. This is the stage when the organization deploys the change strategy. Ordinarily, it runs into resistance from those being changed.
5. Evaluation. At this point, after the new organization has demonstrated its capacities and strategies, it is evaluated by the various organizations in its environment who have stakes in what it does or does not do. This evaluation may cause the organization itself to change--in personnel, structure, strategy.
6. Reorientation. If the evaluation causes the organization to change, implementation will continue on a reoriented basis. Evaluation can, of course, yield decisions to maintain a given course.
7. Institutionalization. This is the final stage of the life cycle

of a new organization. On the basis of its work, it may be evaluated again. If judged successful "enough", it will be institutionalized. If not, it will be terminated.

Obviously, this process model is an abstract from reality. It is more linear and "smooth" than is often the case. Termination can occur at any time, and SCEPP in fact came close at one point.

Also, organizations can possibly end their lives short of institutionalization as successful "temporary" organizations. Nevertheless, this model provides a general guide for understanding the gestation and course of SCEPP over its first five years.

As noted, the process does not move itself. It is interorganizational. SCEPP has been subjected to the pull and haul of forces internal and external, which shape its goals and strategies. The following forces--or organizational stakeholders--are key:

1. The federal sponsor. This was the Federal Emergency Management Agency (FEMA). FEMA's stakes in SCEPP were that of sponsor of a pilot project in earthquake preparedness and prediction. While quite concerned about preparedness for a great California quake, it wanted many generic products (plans) that could be developed, demonstrated, and transferred nationally, quickly.
2. The state sponsor. This was the California Seismic Safety Commission (CSSC). CSSC saw SCEPP as a more limited pilot project, one emphasizing prediction more than preparedness. CSSC was more sensitive to how SCEPP "fit" into existing territory of state and local organizations than was FEMA.
3. The local users. These were the local cities, counties, and private organizations whose preparedness SCEPP was to upgrade. They had stakes in SCEPP insofar as they had earthquake preparedness problems and lacked resources to deal with them. They saw SCEPP as assisting them to do what they wanted to do. They did not want an organization, however, that would cause them problems, including problems with local political interests.
4. The state disaster organizations. This was the Office of Emergency Services (OES), the state organizations with the mission for preparedness. Its major stake in SCEPP initially was to minimize any interference in its bureaucratic territory.
5. The policymakers. These were federal and state elected officials who had ultimate authority over the life and death of SCEPP through funding decisions. Their stakes were vague, but generally reflected a desire to show positive support for an action program in earthquake preparedness.

6. The earthquake entrepreneur. This was SCEPP itself, the focal organization. Once created, SCEPP defined its own stakes. SCEPP wished to survive and make its mark on earthquake policy in southern California, in a way that reflected its view of the public interest. To do that required an ability to influence its environment as much as external organizations sought to influence it.

Hence, there were a number of actors involved in the SCEPP process. All are for preparedness of California for an earthquake, especially a great earthquake, and for the prediction of one. But they vary in stakes and perspective. The key problem for SCEPP was to orient them into a cooperative support system in spite of their different interests and points of view. It also required adaptations on SCEPP's part. This required a brokering and alliance-building role for SCEPP. Learning to play such a role and be an "adaptive organization" took time, and did not come without some very difficult moments for SCEPP.

Planning

The concept of SCEPP originated from discussions in the summer of 1980 involving representatives of FEMA, California legislature, CSSC, and also OES, as well as representatives of local government and the private sector in the southern California area, including the Southern California Association of Governments (SCAG). These discussions were triggered in part by FEMA, which had made known that it wished to provide funds to launch a demonstration project in earthquake preparedness, with strong attention to earthquake prediction response. The concern for the lack of any planning for prediction response was shared by officials in California, particularly certain legislators. At the same time, there was pressure for FEMA and California to initiate a significant effort arising from the reaction by President Carter to Mount St. Helens in May 1980. He had asked the National Security Council to study the impacts of an even more devastating event--a great earthquake in California--which his science adviser had told him could happen at any time. The planning effort in California resulted in a decision to focus the project (which would be jointly funded by FEMA and California) on a five-county area in the Los Angeles basin that was judged most at risk from a great earthquake. It was also decided that OES was not acceptable to key legislative policymakers (who saw it as lacking imagination and competence for an innovative project) or to various local users (who saw it as a threat to their interests in local autonomy). The preference

was a nonprofit corporation that would have flexibility. But it would take time to set up such an entity, and FEMA wanted to allocate funds before the end of its fiscal year, September 30.

So the alternative chosen was to establish the project as a part of state government, under the CSSC. This entity, the CSSC, had policymaker support, was non-threatening to locals (and in fact had local user representatives on the commission). It had been involved in the summer planning effort. CSSC did not particularly want this "action-oriented" project. CSSC was a small, policy analytic entity that provided recommendations to the legislature and executive branch of California government. It was headed by a group of essentially part-time volunteer commissioners. What was involved was an "operating" project with a budget larger than that of CSSC. But CSSC agreed to take on the effort to get it started, for the project had no other place to go, given the sense of need to act quickly to get the FEMA money.

Establishment

The new organization was established in September 1980. FEMA provided initially funding of U.S.\$300,000 through a Cooperative Agreement, effective September 26, 1980, entered into pursuant to PL93-288, "Disaster Relief Act of 1974." It was understood that an additional U.S.\$500,000 would be made available by FEMA after the turn of the fiscal year. California "matched" the FEMA after the turn of the fiscal year. California "matched" the FEMA contribution through Assembly Bill 2202. This provided U.S.\$750,000. The funds were to cover three years of activity by the new organization.

The state legislation called on the entity to:

Initiate with the assistance and participation of other state, federal, and local government agencies a comprehensive program to prepare the state for responding to a major earthquake.

The program should be implemented in order to result in specific tools or products to be used by governments in responding to an earthquake prediction, such as educational materials for citizens. This program may be implemented on a prototypical basis in one area of the state affected by earthquake predictions, provided that it is useful for application in other areas of the state upon its completion (FEMA, 1980).

The federal government, via amendments to existing legislation

in October, required FEMA to "develop a preparedness plan for response to earthquake predictions ..." In doing so, FEMA was "to include a prototype plan for one major metropolitan area which could be adapted to other high-risk metropolitan areas." It was already understood, informally, that the prototype plan that would serve as FEMA's model would be in southern California. Also, the Cooperative Agreement between FEMA and California/CSSC called for "a comprehensive prototype preparedness plan for a credible earthquake prediction in the southern California area, to include a Los Angeles Metropolitan Area Response Plan by September 30, 1981" (FEMA/CSSC Cooperative Agreement, 1980).

Development

The entity now was legitimated. Its mandate was in some ways quite ambiguous, with the dual emphasis on "comprehensive" preparedness plans, coupled with prediction response plans for a specific place. The ambiguity reflected the earlier emphasis on prediction response, espoused in CSSC, and later concern (triggered by President Carter and the NBC study) for a great earthquake, which was pushed by FEMA. In either case, California was not prepared, and the project, still with no official name, had a great deal to do.

CSSC, as state sponsor, decided that it would establish a Policy Advisory Board (PAB) to the organization. This body, composed primarily of a range of southern California interests, would largely govern the entity, subject to CSSC review. This would guarantee a measure of local/regional control and credibility. However, the PAB also would have scientific representation (e.g., the state Geologist) and emergency professionals (i.e., OES). CSSC wanted to transfer the body to OES eventually, and saw the PAB as a vehicle for keeping OES involved, although its primary aim was to build a generally supportive, grassroots committee for guiding the federal-state project.

However, it took time for CSSC to appoint a PAB, and it was not until November 1980 that the PAB had a chairman, an individual from the private sector with strong experience in seismic safety. Recruiting a director for the project was even more difficult. Relying at first in the state personnel selection system, CSSC and PAB came up with what it regarded as "conventional" emergency services applicants, rather than the "innovative" people they sought. Under a sense of time-pressure, CSSC used its own contacts, and ultimately located an individual who appeared as suitable. It was January 1981

when the first director assumed command, six months into a project with a very limited lifetime. Once aboard he gathered a staff, and decisions began getting made.

First, the legislative mandate and FEMA/CSSC agreement gave the organization the option to think broadly--an option it took. Up to this point, CSSC had been calling the project the "Southern California Earthquake Prediction--or Prediction Preparedness--Project." The director had "prediction" dropped and the name of his organization changed to the "Southern California Earthquake Preparedness Project" (SCEPP). This gave SCEPP a larger domain in which to work. However, it also helped alienate OES, which fought the name change within PAB and lost (Minutes, 1981). OES already saw SCEPP as a threat, and the name change confirmed this view.

Second, building on thinking by PAB, SCEPP decided that the central strategy in working with users by the "planning partnership" approach. The users would work with SCEPP on the prototype planning materials, in the expectation that they would more quickly adopt them once they were developed.

Thirdly, SCEPP would seek to "guide" those planning partners through a common planning "technology" called the "Mitigation-Preparedness Tableau." This tool derived from staff discussions and owed much to the original thinking of a sociologist-disaster specialist on leave from his university. This individual worked for CSSC, but was assigned part-time to SCEPP. As further developed by SCEPP, the Tableau pulled together much that was known about disaster preparedness in one place. It fit the director's notion that SCEPP take a "comprehensive" approach. The Tableau was also a way of reconciling the need for local participation with the need for a coherent regional response to a great earthquake or prediction of one. Planning of the parts would fit a common framework.

Thus, within a matter of a few months of the arrival of the director, SCEPP had a vision of its place and strategy for implementation. SCEPP emphasized notions of comprehensive planning, SCEPP-user partnerships, and the employment of a particular planning tool that would provide a regional coherency to specific actions at the local level.

Implementation

SCEPP's development was telescoped into a very short period because the director started six months late--through no fault of his own. This meant SCEPP began implementing on the run, before the organization and its strategies were fully formed.

The small full-time SCEPP staff was long on enthusiasm and short on disaster planning experience, especially vis-a-vis state and local government. Getting staff hired took time. One of the "costs" of setting up SCEPP within the state bureaucracy (rather than as a nonprofit organization) was that SCEPP had to work within state procedures, and SCEPP found this frustrating. Nor did the PAB chairman, who was from the private sector, appreciate a world in which procedure sometimes seemed more important than substance. Shorthanded as to staff and pushed hard for results by FEMA, SCEPP focused on its initial target users. These were San Bernardino County and the City of Los Angeles. Both were active in the summer planning prior to SCEPP. Both had indicated a desire to improve preparedness. Both were seriously threatened by a great earthquake.

In April 1981, SCEPP signed a planning partnership agreement with San Bernardino (SCEPP/San Bernardino, 1981). This agreement was deliberately open-ended. The county leadership was anxious to get started and felt the county and SCEPP could work out the particulars later. Los Angeles, however, proved a different story. Los Angeles government had done a good deal already in prediction and preparedness. It had recently produced a report on earthquake prediction (City of Los Angeles, 1978), and passed an ordinance to upgrade seismically defective buildings. It regarded some of its administrative staff as highly knowledgeable.

The initial interaction between SCEPP and Los Angeles went quite poorly. There had been no preparation on either side for a meeting. Los Angeles came away feeling that SCEPP was a group of newcomers pushing a particular approach on a prospective "partner" whose thinking was more advanced than (or different from) that of SCEPP. Those in Los Angeles who had wanted to work with SCEPP regarded SCEPP as having moved prematurely, without having first tried to understand the needs and background of its "users" in the field.

The Los Angeles situation created a great deal of consternation on the part of CSSC and FEMA, the two sponsor organizations. Worse, in the next month, it became clear that the link with San Bernardino was weakening. SCEPP saw "outside advocacy" as an essential strategy at this point. Its aim was to alert and arouse the people, who would in turn put pressure on local officials to change sooner, rather than later. The results of the NSC study had been published under FEMA auspices in November 1980, and provided ammunition to SCEPP. SCEPP employed some of the more dramatic statements in the report

and sometimes embellished them. The catastrophic earthquake was coming--the odds were better than 50 percent within 30 years, it was declared. Its impacts "would surpass those of any natural disaster the United States would have experienced on its own territory since the Civil War" (FEMA, 1980). Some of these statements put officials in San Bernardino--a rapidly developing county--on the defensive, and seldom was credit given to those officials who had worked in behalf of preparedness when the subject was not as fashionable a priority as it was now.

Evaluation

In short, the SCEPP strategy to "light a fire" under local officialdom hurt more than it helped. SCEPP lost support it had to have. Local users complained to the state sponsor, CSSC, which was accountable for the actions of SCEPP, but which had exercised little or no control up to this point. Inquiries by CSSC followed. In effect, it evaluated, informally, what SCEPP was doing and how. In June 1981, CSSC made a sudden change in SCEPP leadership. There was an immediate uproar. It was charged that SCEPP was the victim of certain "political and financial interests." "We were making sure the threat was well known, well understood--and the threat made them very nervous," the former director declared. "What I'm saying is that they don't want it talked about out loud" (Kirsch, 1981). CSSC defended its actions, saying: "The objective of the project is to make the earthquake threat prominent and to assist southern California in developing ways to reduce the potential impact of a major earthquake. The director left the project for reasons relating only to project management and administration" (Mader, 1981).

Contributing to the controversy was the way CSSC handled the matter. It made the change without first consulting the other organizations to which SCEPP was responsible: FEMA and PAB. There was much distress on their part with the way the state acted.

Thus, one year after the exhilarating days of anticipation, hope, and planning (summer 1980), the real-world problems of implementation were hitting home to all involved. SCEPP was close to death, its morale low, and noble visions at a standstill. Organizations in its environment, on whom it depended, were at odds with one another.

Reorientation

CSSC appointed the individual who was second in command of SCEPP as acting director in June. He worked hard at getting the various organizations in his environment to communicate among themselves and with SCEPP.

After a certain amount of posturing, it was resolved that either the various parties to SCEPP would find a way to work together or the project would die. No one wanted the latter to take place. The CSSC in particular realized it was responsible and could not remain aloof from the tactics of project implementation. It had to work closely with SCEPP, PAB, and FEMA. Similarly, FEMA relaxed some of the pressures it was imposing, particularly the need for a prediction plan for Los Angeles by the fall.

Fortunately for SCEPP, some additional personnel arrived, particularly a key individual who became "number two" in the organization and brought critical skills in urban planning and earthquake preparedness. He brought to SCEPP an experience with and sensitivity to the local user setting.

SCEPP learned from its harsh experience, in terms of what strategy not to pursue. It was clear that SCEPP had little credibility and little power. It needed the support of local officials more than they needed SCEPP, at least at this point in its organizational development. Before SCEPP could get their cooperation, it had to win their confidence. This would take time, a lower profile, and willingness to "push" less a particular internally generated approach.

By fall 1981, SCEPP had, in close and intense cooperation with FEMA, CSSC, and PAB, been reoriented. First, SCEPP would retain the notion of a planning partnership strategy, but would drop the Tableau as a technology to guide that process. The Tableau indeed conceptualized at a high level of abstraction, and was seen as too complex by local users. More importantly, it had become a symbol of a "push" approach. Second, outside advocacy would be toned way, way down. SCEPP must come across as a helper of others, rather than California's "Mr. Earthquakes." Finally, a detailed program work plan was developed that spelled out, for the first time, exactly what SCEPP intended to do, how, and when. Produced in August 1981, this work plan was approved by PAB and CSSC. It also set forth a cooperative and consultative relationship between CSSC and PAB. While CSSC was in charge, it was made clear that it would work collaboratively with PAB. There would be efforts at maintaining communication among all parties to SCEPP (SCEPP, 1981).

In September, the acting director became official director of SCEPP. He immediately consolidated his position by staff reorganization and changes. A new momentum in SCEPP was under way.

Implementation Resumes

One of SCEPP's problems was its claim to a distinctive competence. In seeking to be comprehensive, it had seemed to forget that "prediction response" was a particular gap in planning it was especially expected to help local users fill. This problem was recognized and now addressed as a priority by SCEPP. In October, a SCEPP team went to Japan, which was seen as far ahead of California and the U.S. in earthquake prediction/preparedness (SCEPP, 1982). In December, SCEPP held an Earthquake Prediction Workshop at Asilomar, California. Scientists, local, state and federal officials, and SCEPP staff gathered together and discussed the Japanese model and its relevance to the California situation. This workshop was extremely important to SCEPP's credibility with local users. They found SCEPP playing a role that was helpful, especially in knowledge transfer.

SCEPP went into 1982 with growing external support, internal confidence, and a sense of progress. The San Bernardino partnership was getting priority attention, and was back on track and going well. The County was seriously interested in upgrading its emergency plans to take account of both prediction and a great earthquake, with its special impacts. It assigned a senior administrator to work with SCEPP. This individual in turn organized inter-agency committees and other mechanisms to produce plans new to San Bernardino. SCEPP helped the county to move in directions it wanted to go. The partnership was now "user-driven," and SCEPP served as an extension of county staff.

A new partnership with a major financial institution was also under way in the first months of 1982. The partner-user was Security Pacific Bank. Later, a partnership with a small city, Westminster, was initiated. Los Angeles was also becoming a partner--but definitely on its own terms. The arrangement would fill gaps in Los Angeles' planning that would be quite specific to Los Angeles. As with San Bernardino, the price of partnership was deference to the users. Indeed, in the case of Security Pacific, prediction response was put on the back burner. The bank was not interested in dealing with what it

regarded as a technology not yet "ready," one that might cause it more problems than the quake itself (Andrews, 1982).

In September 1982, the director of SCEPP left to become director of CSSC. The previous incumbent had left state government for the private sector. The new SCEPP director had been the SCEPP deputy. The transition was smooth and illustrated how close had become the relations between SCEPP and CSSC. The fact that SCEPP had its third director in a relatively brief time mattered little, as the new leaders emphasized continuity. The two organizations acted to complete what SCEPP had started (with particular effort in Los Angeles). Meanwhile, CSSC worked to secure additional funding for SCEPP from its Sacramento base. Aided by the Coalinga earthquake of May 1983, CSSC lobbied successfully for FEMA and California to extend SCEPP one year (Andrew, 1983). This was implicit recognition that the organization had lost a year in the early developmental/implementation stages, and could not meet the original deadline. Joint funding provided an additional U.S.\$750,000 to SCEPP.

The extra time gave SCEPP's new director the opportunity, in 1983 and 1984, to write his own signature on the organization. More than his predecessor, he sought to penetrate the Los Angeles bureaucracy, in his view the key to long-term acceptance of any planning partnership innovation. Also, he gave emphasis to a strategy for adaptation and transfer of the prototype plans to the next set of local users in southern California. SCEPP continued to work closely with others on strategy. CSSC, PAB, and FEMA were all involved, with PAB playing an important role particularly in transfer strategy. Moreover, SCEPP set up special "peer" mechanisms--i.e., a group including users from the original partners and potential new partners. These peers advised SCEPP on how to make the "customized" prototype products more "generic" as a means to facilitate transfer. The expectation was that this effort would end in September 1984, at which time SCEPP would terminate.

Toward Institutionalization

However, in the first half of 1984, it became increasingly clear that SCEPP was seen as valuable and providing benefits to many parties: sponsors, users, policymakers, and the SCEPP staff itself. California was still not prepared, but certainly jurisdictions felt they were better prepared, in part because of the SCEPP process. Other jurisdictions now wanted to use SCEPP assistance for their own efforts. Both federal and state

government saw SCEPP as helping them to carry out their responsibilities in terms of preparedness. When asked what was being done about the next great California earthquake, they could point to SCEPP. This was their leverage on local preparedness. In short, by 1984, SCEPP had a firm constituency that felt a need for it to continue (California Assembly, 1983).

However, the "locational" question, not heard since summer 1980, was raised again. SCEPP was seen now as being a relatively mature organization. At least, it had survived a rocky start and gained a skill at assisting localities to think-through their preparedness problems. It had developed plans with a few entities, and was adapting these plans into more generic prototypes, and wished to disseminate them broadly. For some observers, this meant SCEPP was no longer an experimental organization, but was becoming something different. OES, once a rival, was ready to claim SCEPP as its own. CSSC was not anxious to make a fight to keep its progeny, and there was no guarantee CSSC would win if it chose to fight. There were those in CSSC who tended to agree that SCEPP was no longer in an "R&D mode" and was now "operational." As such, it "belonged" with OES. Moreover, CSSC was looking forward to sponsoring its next experiment, a "Son of SCEPP," to be put in place in the San Francisco Bay Area.

In September 1984, new legislation was in place. SCEPP now had authority for three more years of life and joint federal-state funding of U.S.\$1,500,000 for the first year. OES was the new state sponsor organization, a fact that pleased FEMA particularly. Indeed, FEMA virtually insisted in the switch. But CSSC, as noted, was not disagreeing.

In 1985, SCEPP began holding conferences with various jurisdictions in the southern California area. The aim was transfer of materials ("Counties to Apply SCEPP Plan Guides," 1983). There was some grumbling within SCEPP, as it found itself being integrated more and more into the routines of OES. There was some staff turnover, but the director stayed. The head of CSSC, meanwhile, decided to take a new job created by OES specifically for him--and apparently to facilitate OES's own outreach efforts. He became head of regional preparedness activities in southern California on behalf of OES. Once again, he was nominally responsible for SCEPP. Amidst change, there was continuity.

Lessons Learned

SCEPP is generally regarded as having been an effective

organization--after a slow start. This does not mean that it has dramatically changed the face of earthquake preparedness in California. It does not mean it will continue to be a viable organization as it ages and further integrates into OES. It does mean that it is perceived by sponsors, users, and even former rivals as having made a positive contribution over the initial years of its life.

There are plans--including prediction response plans--in being that were not there before. There is a certain momentum at the local level and a process of transfer in the region and California generally taking place. It may well be argued that this momentum is due to many factors other than SCEPP, such as publicity given recent earthquakes (Coalinga and Hall's Valley/Morgan Hill). There has been no independent and systematic study of SCEPP impacts, particularly one which compared progress in SCEPP users and non-SCEPP jurisdictions. Further, it may well be argued that what is happening is far short of what is needed. But there is no doubt that SCEPP has succeeded as a "symbolic success," and that is itself important. Sponsors, users, policymakers, and even one-time rivals are on record as attributing to SCEPP a stimulus in moving southern California forward in earthquake preparedness, and particularly in getting some attention to planning for earthquake prediction response (California Assembly, 1983; Lambright, 1984).

What SCEPP provided was the organizational embodiment of purpose. Once stabilized, its full-time staff and regionally-based policy advisory board worked energetically at developing and introducing earthquake preparedness innovations. SCEPP succeeded to the extent others who wanted to speed the process of preparedness needed a SCEPP to move their own organizations--public and private--forward. That was why SCEPP was not permitted to die during the crisis period of summer, 1981. That is why SCEPP was kept alive beyond its original termination date. SCEPP no doubt wished to survive for its own bureaucratic reasons. But others needed a SCEPP--for their interests--too. It provided a focus of activity in an otherwise highly fragmented and easily distracted system. It filled a need in the public-private administrative system. What all organizations shared was a need for a tangible symbol of commitment to earthquake preparedness and prediction response, particularly in reference to a catastrophic earthquake. Sometimes, symbols are hollow. In the case of SCEPP, there appears to have been a measure of reality: new planning products and organizational relationships have been created and there has been some dissemination of these products. Whether there is real utilization and effective incorporation of these products depends on factors internal

to users, over which SCEPP has little control. But at least there are products to be utilized.

Having said this, these are lessons to be learned from the SCEPP process that are negative as well as positive.

First, those who planned and created SCEPP were naive in thinking change could take place quickly. Under the best of circumstances, the proposed three-year period of life was too short. It is typical for California cities and counties to resist direction from federal, state, and even regional entities. Jurisdictions such as Los Angeles and San Bernardino county have a considerable resource base that allows them leverage in resisting. Their resistance to some earthquake preparedness changes is no doubt rooted in justifiable differences of professional opinion. They have their own views on how to prepare. It may also be based in part on the influence of numerous pro-development interests that believe they stand to lose if the earthquake threat receives too much emphasis in southern California.

Second, the placement of SCEPP under CSSC was both fortuitous and unfortunate. It was fortuitous because CSSC was willing to give SCEPP a autonomy and independence it needed to be an entrepreneur in the local setting. It was unfortunately because, as sponsor, it let SCEPP have too much autonomy, given SCEPP's professional inexperience and unfamiliarity with the southern California power structure. Receiving few signals from CSSC, SCEPP got strong signals to get moving from FEMA. SCEPP made serious mistakes in working with the initial users that could have been avoided with a bit more sensitivity to differences among users, and particularly the need to make users feel they--and not some new and untried organization--were driving the process of preparedness. The local governments had experience and power. They did not have to cooperate as SCEPP discovered, and CSSC knew. As sponsor, situated between FEMA and local users, CSSC was in a good position to provide realistic guidance to SCEPP in its development and initial implementation stages.

Third, SCEPP was an intergovernmental and public-private project. The fact of its interorganizational setting meant that it would have to be responsive to a number of differing interests. It took a crisis to get the various governing parties to SCEPP to communicate in a serious way during the implementation stage. This is not unusual. Organizations cooperate at the "front-end" of a process in getting a project launched, then cease communicating (at least with the same intensity) later on. There have to be mechanisms--formal or informal--for making sure this communication takes place throughout all the stages of

a process. Otherwise, implementation breaks down or goes awry (Pressman and Wildavsky, 1973). The earthquake entrepreneur must attend to this need for its own stakes in avoiding the kind of trauma that hit SCEPP. In doing so, it can create an interorganizational system of support, rather than one of conflict.

Fourth, SCEPP survived by recognizing and, in part, acquiescing to the power context in which it had to exist. This meant compromise with some of its initial goals, particularly in accepting a slower pace and less comprehensive pattern of change. Thus, planning partnerships became user-driven, rather than SCEPP-driven. There were costs to this shift. For example, the regional coherence desired had to be aggregated bit by bit, rather than imposed via a particular philosophy to which locals would have to adhere. Such "disjointed incrementalism" might be regrettable in some respects, but SCEPP had no state mandates to wield or federal largesse to provide (Lindblom, 1968). It could only persuade, a modest power for change.

Fifth, the evolution of SCEPP points up the extremely important role strategy plays in entrepreneurial organizations. SCEPP's initial approach indicated it wished to become the visible champion of major change for earthquake preparedness in southern California. Outside advocacy--waking up the public and shaking up the establishment--was a SCEPP strategy. However, in the process, SCEPP itself became an issue, losing friends it had to have. It was forced by its environment to shift to a quieter, diplomatic-bargaining strategy. Instead of attacking the system, SCEPP worked within the system. It was seen as seeking evolutionary rather than discontinuous change in California. This low-profile, conciliatory strategy helped the organization past its survival threshold (Downs, 1967), and permitted it to achieve what positive results have emerged from the SCEPP process to date.

Sixth, the SCEPP model was useful for the particular context in which it was placed--southern California in the first half of the 1980s. Federal, state, and local governments wanted more preparedness. But they were not ready to create the policy conditions for a "crash program" of utmost urgency. Hence, SCEPP's original strategy was ill-suited for the political context in which it found itself. The reorientation strategy was. It allowed SCEPP to turn its interorganizational environment into a coalition of support, a major test for an earthquake entrepreneur. That made whatever else it could do possible.

An alternative model of earthquake entrepreneurship might be found in Japan, where there is much stronger national legislation, much more money, and a greater political priority

given earthquake preparedness. But this is the U.S., not Japan. SCEPP had to deal with a U.S. reality. Within that context, it provides an important experience.

References

- Andrews, Richard
1982 Earthquake Prediction and Preparedness in Southern California: Science and Public Policy. Paper presented at the Annual Meeting of the Seismological Society of America, April 20, 1982.
- 1983 "Coalinga: The Lessons are Clear." Los Angeles Times (May 10, 1983), Part II, p. 5.
- Benson, J.K.
1975 "The Interorganizational Network as a Political Economy." *Administrative Science Quarterly* 20:229-249.
- California Assembly, Committee on Government Organization
1983 Transcript of Proceedings, Hearings on Earthquake Prediction, Preparedness, and Recovery, November 29.
- City of Los Angeles
1978 Consensus Report of the Task Force on Earthquake Prediction, October.
- Counties to Apply SCEPP Plan Guides
1984 (SCEPP) Update, II, November 4, p. 1.
- Downs, Anthony
1967 *Inside Bureaucracy*. Boston: Little Brown.
- Federal Emergency Management Agency (FEMA)
1980 *An Assessment of the Consequences and Preparations for a Catastrophic California Earthquake: Findings and Actions Taken*. Washington, D.C.: USGPO.
- FEMA/CSSC Cooperative Agreement
1980
- Hall, R.H., et al.
1977 "Patterns of Interorganizational Relationships." *Administrative Science Quarterly* 22:457-474.

- Janis, I, and L. Manning
1977 *Decision Making*. New York: Free Press.
- Kirsch, Jonathan
1981 "Confessions of a Seismophobe." *New West*, pp. 75-77.
- Lambright, W. Henry
1984 *The Role of States in Earthquake and Natural Hazard Innovation at Local Level: A Decision-Making Study*. Syracuse, N.Y.: Syracuse Research Corporation.
- Lewis, Eugene
1980 *Public Entrepreneurship*. Bloomington, IN: Indiana University Press.
- Lindblom, Charles
1968 *The Policymaking Process*. Englewood Cliffs, NJ: Prentice Hall.
- Mader, George
1981 Letter to the Editor. *New West*, October, p. 12.
- Meltsner, Arnold J., and Christopher Bellavita
1983 *The Policy Organization*. Beverly Hills, CA: Sage.
- Mileti, Dennis, et al.
1981 *Earthquake Prediction Response and Options for Public Policy*. Boulder, CO: University of Colorado.
- Minutes
1981 Earthquake Safety Policy Advisory Board. January 28.
- Pressman, J.L., and A.B. Wildavsky
1973 *Implementation*. Berkeley, CA: University of California Press.
- SCEPP
1981 Work Program
- 1982 Japanese Earthquake Prediction/Preparedness Program.
- SCEPP/San Bernardino
1981 Memorandum of Understanding.

Selznick, Philip

1957 Leadership in Administration. Berkley, CA: University of California Press.

Zeit, G.

1974 "Interorganizational Relationships and Social Structure: A Critique of Some Aspects of the Literature." Organization and Administrative Sciences 5:131-139.