

# A TALE OF TWO SPECIES: HABITAT CONSERVATION PLANS AS BOUNDED CONFLICT

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**Abstract:** Worldwide human population expansion and rising standards of living place increasing pressure on wildlife populations and their habitats. Conflict regarding conservation and preservation of endangered species is among the greatest challenges of the 21st century. Endangered species management on private lands magnifies the problems encountered by natural resource policy-makers and managers. Given that conservation of endangered species increasingly depends on securing cooperation of private property owners in local communities, understanding how to secure that cooperation is important. We used an ethnographic approach to critically review the Habitat Conservation Plan (HCP) processes used in attempts to develop regional HCPs to benefit the Houston toad (*Bufo houstonensis*) and the Florida Key deer (*Odocoileus virginianus clavium*; hereafter, Key deer). In both cases, the process was framed as a search for the optimum solution through collaboration and consensus building, and in neither case was the solution achieved. The paradoxical nature of liberal democracy precluded the possibility of a single, ideal solution. Failing to find the optimal solution led to disillusionment and pessimism with the process among HCP participants. We suggest that within democratic political contexts, approaches to conservation planning that center around bounded conflict, which is rooted in acknowledgment of the paradox inherent to the ideals of liberty and equality, are more likely to produce satisfactory results than are consensus-based approaches.

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As the boundaries and expectations of the human community continue to expand, increasing pressure will be placed on wildlife habitats, populations, and biotic communities (Liu et al. 2003). Conservationists anticipate that an explosion of wildlife–human land-use conflicts will accompany this human population expansion. To respond to these conflicts in a way that is mutually beneficial to wildlife and human communities, conservationists and regulatory agencies must develop a better understanding of how to incorporate community interests into the conservation planning process. Scholars have responded to this need with several forms of community-based conservation (CBC; Western 1994), including co-management (Chase et al. 2000), collaborative resource management (Wondolleck and Yaffee 2000), and collaborative learning (Daniels and Walker 2001).

The nexus between CBC and sustainable development allowed CBC to ride the “collective surge” (Aguirre 2002:101) of publicity and policy support arising from the Brundtland Report in 1987 (World Commission on Environment and Development 1987) and the United Nations Conference on Environment and Development in 1992. Sustainable development’s focus on local conditions, diversity, participation, and locally produced development has strengthened this link (Kothari 1990, de la Court 1992, Peterson 1997). Further, combining local interests and national priorities is considered essential to sustainability (Aguirre 2002). As is typical for fashionable notions experiencing a collective surge, CBC is an ill-defined concept. Additionally, CBC is used in reference to projects influenced by centralized governments, such as the Endangered Species Act of 1973 (ESA) in the United States (Reilly 1998), and projects influenced by the global marketplace, such as the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe (Alexander and McGregor 2000).

Although CBC may initially escalate conflict, participation from diverse interests can lead to

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greater support for the final plan (Laird 1993, Lin 1996, Turner and Rylander 1998). Greater support within the local community carries benefits, including lower enforcement costs, higher compliance rates, less conflict, and higher community satisfaction. Further, CBC promises to reduce administrative overhead by paying for management with social capital (Ostrom 1990, Kollock 1998). Social capital is “the aggregate of the actual or potential resources, which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu 1985:248). Thus, social capital, or the ability to secure benefits through membership in communities and other social structures, motivates observance of group norms.

The possible fungibility of economic and social capital has engaged the attention of administrators and managers—extending to presidents of the United States—who seek less costly alternatives to traditional privatization, command and control, and subsidy-based approaches to natural resource management. In the 1992 presidential race, George Bush, Sr., called for amending the ESA to give more weight to economic concerns, while Bill Clinton promised to move the country beyond a false choice between environmental protection and economic growth. The Clinton administration used the HCP process to achieve the necessary freedom to fulfill this promise (Doremus 1999). Implicit within this promise was reconciliation of the fundamental schism between property rights and environmental protection on private lands as a result of the ESA (Peterson et al. 2002).

Section 9(a)(1) of the ESA prohibits taking endangered species of fish or wildlife. Under the ESA, “the term ‘take’ means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (ESA § 3(18)). To clarify what constituted harm, the U.S. Fish and Wildlife Service (USFWS) issued a regulation in 1981 providing that “significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” constituted unlawful harm under section 9 of the ESA (50 CFR § 17.3). This regulation probably has generated more controversy than any other aspect of the ESA (Salzman and Thompson 2003:266) because it has the potential to limit land management activities that constitute an

incidental taking—“a taking incidental to, and not the purpose of, the carrying out of an otherwise lawful activity” (50 CFR § 17.3).

To mitigate the potential restrictions on the use of private property introduced by section 9, the U.S. Congress authorized issuance of incidental take permits in 1982. This modification to the ESA allowed the USFWS to permit an otherwise unlawful taking of a listed species if (1) the “taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity;” and (2) the applicant has devised an acceptable HCP that includes the steps “the applicant will take to minimize and mitigate” the impacts of the proposed activity on listed species and “the funding that will be available to implement such steps” (ESA § 10(a)). Over time, the HCP program evolved into a form of CBC capable of integrating local interests, control of land use, and preservation of endangered species. The HCP process was used to facilitate endangered species management “selectively” and “experimentally” for the first 10 years of its existence (Schoenbaum and Rosenberg 1996:564), but its promise to transcend the environmental protection versus economic growth—property rights dichotomy often associated with ESA implementation may have encouraged overuse in recent years. The 14 incidental take permits issued prior to the 1992 presidential race pale in comparison to the 425 approved as of July 2003 (USFWS 2003).

Endangered species management in liberal democracies, such as the United States, must address the democratic paradox (Mouffe 2000, Ivie 2002, Peterson et al. 2002). This paradox refers to the intrinsic conflict between individual liberty and equality. Attempts to maximize individual liberty do so at the expense of political equality, while attempts to maximize political equality similarly curtail individual liberty. The mutually exclusive goals of liberty and equality make locally crafted optimal solutions paid for with social capital improbable in many cases and impossible in others (Portes 1998). Endangered species management may fall into the latter category because it is, at minimum, a national issue, and at least 2 fundamentally different conceptions of optimum—emphasizing personal liberty or political equality—exist within liberal democracies. No studies of endangered species management have directly addressed these issues. The predicted increase in the number of HCPs in the United States during the next decade (Lin 1996) and the concomitant increase of public

involvement in natural resource conservation and planning (Tuler and Webler 1999) provide an opportunity to discover whether HCPs can bridge or even address this fundamental schism in United States culture. Private lands provide habitat for about 75% of the endangered species in the United States (Lockwood 1998), and conservation involving private lands exacerbates conflicts surrounding wildlife-human land use (Peterson et al. 2002). Those HCPs mitigating with land-use changes on public lands (Reilly 1998, Loew 2000) sidestep many of the explosive conflicts associated with private property rights.

Our objective was to evaluate the promise of CBC in contemporary management of endangered species. We chose 2 fundamentally different HCPs involving CBC planning on private lands as case studies: the Monroe County, Florida, USA, HCP for the Key deer and the Bastrop County, Texas, USA, HCP for the Houston toad. We chose these 2 case studies because the Monroe County steering committee was dominated by regulatory agency personnel with a focus on popular sovereignty, while the Bastrop County committee consisted primarily of landowners focused on individual liberty. This allowed us to evaluate the efficacy of HCP processes in liberal democracies where participants must balance the ideals of individual liberty and political equality.

## METHODS

Studies addressing the human dimensions of wildlife management typically employ quantifiable survey-based approaches grounded in the social sciences. Because both case studies attempted to uncover the meaning of community experiences, emotions, and thought processes, we instead chose ethnographic methodologies rooted in a more humanistic tradition (de Certeau 1984, Lincoln and Guba 1985, Fisher 1987, Peterson et al. 2002). Ethnography draws its strategies for analyzing linguistic codes and social performance from folklore and sociolinguistics and is broadly concerned with how communication practices relate to social structures (Anderson 1987, Ray 1996, Yarbrough 1999). Ethnography provides a direct means for examining interactions among and within social groups (Lindlof 1995, Ray 1996). Ethnographers immerse themselves thoroughly in the social context, taking on the role of student, to request that participants teach the ethnographer how to interpret the situation. The ethnographic regard for context enables the researcher to discover the impor-

ance of moral authority, culture, and ultimately the moral culture (Peterson et al. 2002) as they pertain to group identity performance. Understanding the practices of group identity and performance should enable natural resource managers to minimize the negative aspects of environmental conflict, while developing more effective strategies for involving human communities in natural resource management policy formation and implementation.

Ethnographic researchers rely on a variety of techniques to manage issues of accuracy (bias and precision). Freedom from bias, or the extent claims conform to actual features of group action and interaction, can be improved through triangulation in data collection and informant validation (Anderson 1987, Silverman 1993). Informant validation can take several forms, including designing clarification questions into the interview protocol, conducting multiple interviews with the same informant, and asking informants to critique conclusions from past and current analyses of the situation. The quality of contacts with informants, number of informants, and time in the field also decrease bias. In this case, we achieved triangulation by combining individual interview transcripts, field notes taken while living within the social situation and attending HCP meetings, and summaries of historical accounts. Informants participated in multiple interviews and critiqued tentative conclusions. The interview protocol also included clarification questions. Documenting informants' stories in their own words further limited the potential for bias.

Precision, or the consistency of the methodological instrument in recording data, is a more complex challenge (Lincoln and Guba 1985, Anderson 1987, Lindlof 1995). Ethnographic researchers, as socially situated humans studying other socially situated humans, recognize that they are neither value-neutral nor unresponsive to contextual sites. This means that the ethnographic researcher is the principal methodological instrument, and her or his interactions with informants become part of the research (Lincoln and Guba 1985, Lange 1990, Ray 1996). We used thematic analysis (Peterson et al. 1994) to examine interviews. Continual movement between data collection and analysis allowed us to evaluate the precision of recorded explanations (Lincoln and Guba 1985, Ray 1996). This repeated interface encourages the reflexivity so essential to any explanation of situated social action (Luhmann 1989:15-31, Gergen 1994, Peterson 1997:34-53).

After establishing the research question and situation, we contacted members of each HCP steering committee. For the Key deer HCP, we conducted informant-directed interviews (Peterson et al. 1994) with 8 of the 12 original steering committee members, which included 1 business representative, zero landowner representatives, 6 agency personnel, and 1 environmental representative. Of the 4 original members not interviewed, funding constraints prevented 2 agency representatives from participating, another chose to leave the process after the first meeting, and the last is an author of this manuscript (R. R. Lopez). For the Houston toad HCP, we conducted interviews with 14 of the 15 original workgroup members. Interviewed members included 7 business representatives, 6 landowner representatives, 4 agency personnel, and 1 environmental representative. One member attended only 1 meeting early in the process before resigning as a workgroup member. In addition, we also interviewed 2 USFWS employees, 1 Texas Parks and Wildlife (TPW) employee, and a workgroup member who joined at a later date.

We used first-name pseudonyms for all informants as a means of complying with Institutional Review Board confidentiality requirements at Texas A&M University, College Station, Texas, USA, and standard reporting procedures for qualitative research (Anderson 1987, Morse 1994). We used the following system to identify quotations from interview transcripts: Pseudonym, Interview number, Utterance, Location (K = Florida Keys, B = Bastrop County). For example, a quotation identified as (Sarah, 15, U4, K) came from the fourth utterance within interview number 5, and was spoken by the informant identified as Sarah in the Florida Keys case study.

Analyses of radio and newspaper accounts, unpublished state and federal agency reports, and personal correspondence further supplemented the field notes and interview transcripts. Although we evaluated all historical media we could locate, most information related to events since 1985. We conducted constant comparisons between field notes and interview responses. This enabled our informants to guide the interview protocol into issues that the original interview questions had not considered, as well as to clarify previously vague concepts, and to verify or refute researcher interpretations of events (Peterson et al. 1994). Our ongoing analyses provided a point of comparison for examining the nuances of the practices that informants engaged in when nego-

tiating and performing their group identities. Although some informants were ecstatic about the chance to speak openly about the conflict, many were hesitant to be candid, even within the constraints of a confidential interview. Others indicated that although the interviews were designated as confidential, they could not speak forthrightly because of their occupation and/or role in the community. Outside of the formal interview setting, however, these community members often used more explicit language. Detailed field notes of interactions with participants enabled constant comparison among statements informants made in various settings.

## ETHNOGRAPHIC ANALYSES

### Key Deer

*Background.*—Humans began clearing densely wooded land in Key deer habitat for farming and other purposes in the mid- to late 1800s. This probably resulted in increased deer numbers (Hardin et al. 1984) and, in conjunction with increasing human density, it encouraged settlers to perceive deer as pests and expanded the use of deer as food. The 1934 Ding Darling cartoon captioned “The Last of the ‘Toy’ Deer of the Florida Keys” (Fig. 1) elicited a strong public response resulting in the Florida legislature banning Key deer hunting in 1939 (Klimstra and Folk 1991). Local residents ignored and even resisted efforts to save the deer, including the ban on hunting, and by the 1950s the population was estimated at 25 deer (Hardin et al. 1984). In 1951, a federal law enforcement officer was given both state and federal authority to protect the Key deer full time. The 2,400-ha Key Deer Refuge was established in 1957, and Key deer were placed on the federal list of endangered species in 1967. By 1974, Key deer numbers had increased to 300–400 (Klimstra et al. 1974).

The combination of a leadership vacuum following the retirement of the first refuge manager and the explosive human population growth in the 1970s and 1980s plunged the area into conflict (Peterson et al. 2002). The state of Florida declared the Keys an Area of Critical State Concern in 1975, and Monroe County adopted a land-use plan and policy of preservation and reduced growth (Anonymous 2000). At the same time, both an improved highway and larger water pipeline were completed through the Keys, further stimulating growth. Current estimates for Big Pine and No Name keys indicate that Key deer numbers



Fig. 1. Cartoon by Jay "Ding" Darling that was instrumental to the instigation of Florida Key deer conservation, in the Florida Keys, USA, 1934 (used by permission of the J. N. "Ding" Darling Foundation).

increased by approximately 240% during this period (Lopez et al. 2003). In 1990, the National Wildlife Federation sued the Federal Emergency Management Agency (FEMA) claiming the issuance of flood insurance encouraged development and imperiled the endangered Key deer. On 25 August 1994, the U.S. District Court for the Southern District of Florida ruled in favor of the National Wildlife Federation, and the USFWS was given oversight for building permits that qualified for FEMA hurricane insurance. Initially, USFWS employees viewed CBC as a panacea for their controversial new role. On 16 June 1997, Noreen Clough, USFWS Regional Director, wrote to James Witt, Director of FEMA, "Over the next 3-4 years, we believe this effort will result in permanent, county-wide solutions (such as county-wide Habitat Conservation Planning) that will conserve the endangered and threatened species of the Florida Keys."

Possibly unknown to Clough, another form of CBC had already failed in the Keys. In 1992, preservation oriented community members used the ESA to stall a proposed school siting on Big

Pine Key (Peterson et al. 2002). An outside mediator was solicited to attempt a community-based approach to the problem (Bidol-Pavda, P., unpublished report submitted to the Monroe County School District, Key West, Florida, USA). The process left participants frustrated, angry, and more polarized in their views (Peterson et al. 2002). During the same year, an internal USFWS report noted serious public relations problems in the Keys (Faanes 1992).

In 1992, Monroe County adopted the Rate of Growth Ordinance (# 016-1992) within its Comprehensive Plan, which restricted the number of new residential dwellings built countywide to 255 a year until 2002, which now has been extended indefinitely. Permits are issued on a point system, and lots on Big Pine Key start with a point deficit due to the presence of endangered species. Further, if the vehicular traffic rate of flow (ROF) through a particular island does not meet minimum state-mandated Level of Service standards deemed critical for development intensity and hurricane evacuation, development is stopped.

Big Pine needed road improvements to meet the required ROF, but these upgrades were deemed a take on Key Deer and prohibited under section 9(a)(1) of the ESA. Thus, a moratorium on all development activities, including roadway improvements, was in effect on Big Pine Key almost continuously between 1995 and the initiation of the HCP process in 1999.

The community itself was divided between stakeholder groups supporting environmental preservation and those supporting private property rights (Peterson et al. 2002). National environmental groups, such as The Nature Conservancy and National Wildlife Federation, supported preservationists through litigation and land acquisition. Since the early 1990s, governmental restrictions, all tied in some manner to the ESA, slowed development. The constant threat of litigation grounded in the ESA and supported by the apparently tenuous future of Key deer prevented action for several years. The revelation that the herd actually had more than doubled since 1975 (Lopez et al. 2003), possible down listing (Peterson et al. 2002), and the push for the Florida Department of Transportation (FDOT) to achieve ROF adequate for hurricane evacuation finally motivated an attempt to develop a regional HCP in 1999.

A memorandum of agreement to develop the Key deer HCP was signed by the FDOT, Monroe County, Florida Department of Community Affairs (FDCA), USFWS, and Florida Fish and Wildlife Conservation Commission (FWC) in 1998. The HCP process began in August 1999 and originally was slated for completion in 2002. If successful, the HCP will lead to issuance of an incidental take permit under section 10 of the ESA for widening US Highway 1 from 2 to 3 lanes through Big Pine Key. The USFWS has indicated that a current wildlife crossing project (Peterson et al. 2003) may be considered mitigation for the roadway improvement. Most community members assume that this improvement will allow ROF to surpass Level of Service minimums and open Big Pine Key for its share of building permits under the Rate of Growth Ordinance.

*The HCP.*—We identified 4 groups of participants: (1) applicants—FDOT, Monroe County, FDCA; (2) advisors—USFWS, FWC, 2 citizen representatives; (3) a consultant—Dames and Moore; and (4) community members. The applicants solicited citizen representatives representing portions of the community supporting local business (business advocate) and local environ-

mental interests (environmental advocate). The HCP coordinating committee (groups 1–3) developed the HCP, but solicited community input by creating the Monroe County Livable CommuniKeys Program (Monroe County Planning Department 2000*b*).

Results from surveys administered to Livable CommuniKeys Program participants suggested that a consensus existed within the community. Community members wanted parks, wildlife, road development, and fewer, more streamlined regulations. Most committee members mistakenly assumed that this meant the community was happy with the status quo. Clay said, “They didn’t want more buildings; they wanted an easier more streamlined regulatory framework...so what they were asking for is pretty much what we have” (Clay, I6, U17, K). The schism, however, was far from over. When asked what the community needed, 15% wanted looser development restrictions and 17% wanted more environmental protection (Monroe County Planning Department 2000*c*). When asked what additional development was needed, 23% indicated more development and/or redevelopment, and 28% wanted more conservation and/or no development (Monroe County Planning Department 2000*a*). This sharp division between factions with mutually exclusive goals was never emphasized in reports to the steering committee or to the consultant.

Some steering committee members, however, recognized that the Livable CommuniKeys results did not suggest consensus within the community. Neil said,

I think Big Pine is going to remain a split community...the difference is those who want absolutely no growth, and I believe a number of them have used the Key deer as an excuse in the past to stop everything, and those who want complete private property rights on the other hand, but they don’t really want much growth either (I1, U6, K).

Sarah said, “You have people here who bought land, and Americans tend to think that if they own land they have the right to do whatever they want with it....I think there is another side of people who think more environmentally conservation oriented” (I5, U22, K).

The same committee members foresaw problems associated with 2 biases in the Livable CommuniKeys program. The first bias was using a local (geographically) perspective to represent a community that included absentee land owners. Neil said,

Big Pine has about 3,000 vacant lots out there belonging to little old lady school teachers who think they're going to retire and move here, and they're the ones that are losing...their vision for Big Pine is also rural, but it's rural including their residential use. By doing an HCP looking at the whole place they really are having less opportunity to build than if they'd done it one at a time (11, U17, K).

Jennifer described the problem as, "The people that own property who are most gonna be affected by this plan 'cause they're gonna be allowed, or not be allowed or be favored to develop their property, can't participate because they live other places" (13, U8, K). Committee members also saw limited and biased participation among local community members. According to Mandy, "A small, tiny percentage of the community participates, and in our case the largest percentage of that tiny percentage was retired people" (17, U8, K). Libby said, "I don't know if it accurately represented the whole community, people don't have time to do this stuff so you get a biased sample" (18, U2, K).

Most steering committee members entered the process with artificially inflated expectations for the HCP process. For Joane the "consensus" within the community foretold a resounding success in the HCP process. She said, "In the beginning everybody felt like this was going to be a process that would resolve decades of dispute between Key deer conservation and development" (Joane, 14, U10, K). The applicants, technical advisers, and environmental representative expected a systemic approach that would exchange a limited number of building permits and highway improvements for preservation of the rest of Big Pine and No Name Keys in perpetuity. "The HCP initially started under the concept of 'this is going to be the end all, once and for all master plan for Big Pine key'" (Libby, 18, U11, K). The property rights advocate entered the proceedings with a slightly different attitude saying, "We had our feet to the fire, we had to do this, we had no choice" (Mandy, 17, U1, K).

After participating in several meetings, most steering committee members' expectations had moderated. Representatives from USFWS, FWC, FDCA, FDOT, Monroe County, and the local environmental advocate demonstrated a focus on stewardship, popular sovereignty, and fairness. The FDCA representative felt that she shared the common goal of "insuring that development pressure in the future doesn't end up wiping out the habi-

tab" (Sarah, 15, U7, K) with the USFWS, FWC, Monroe County, and the environmental advocate citizen representative. Neil's description of the optimal solution reflected that of most committee members: "Well you don't always get what you want, sort of what you need. What does the community truly need? ...a growth management plan that hopefully is, isn't just, just wild unfair growth" (Neil, 11, U5, K). These representatives felt responsibility to "the people" whether the people were local environmentalists, Florida or national citizens concerned with endangered species, or Florida citizens needing new roads or a better quality of life. The business representative (Mandy), however, felt responsibility toward individuals. Operating from what she viewed as a relatively weak power base in the committee she opted for a defensive goal of protecting "private individuals that have in my perspective an interest in property rights" (Mandy, 17, U2, K). Mandy saw herself as "the lone wolf in the battle" (17, U7, K). Sarah said, "I would say the representative from the development community definitely had a different set of goals" (15, U8, K). Libby, a USFWS committee member, said that Mandy "was clearly representing the extreme...it was just her" (18, U5, K).

The business advocate's (Mandy's) relatively weak position as an advisor and the sole champion of her viewpoint led to a power imbalance within the committee. Mandy said,

During the middle of this thing about a year ago he [Clay] got appointed to the planning commission, and I felt that you know, really he shouldn't be on the HCP anymore...he has a very close relationship with the director of planning and DCA is part of that too. I felt that there was collusion there that wasn't really fair or shouldn't have been (Mandy, 17, U11, K).

"So the 3 of them, between Clay and Neil who's the director of \_\_\_\_\_ and Sarah who's the \_\_\_\_\_, they're like 3 peas in a pod, and they put things in this HCP, 'cause, you know, Clay had an input side to the contractor that I didn't" (Mandy, 17, U6, K). Other committee members observed the same dynamic. One responded, "Don't repeat me with anybody (nervous laugh), the lady that's with DCA kind of talks to the one citizen who doesn't want us to do anything else, on the County Planning Commission" (Jennifer, 13, U10, K). Libby said, "As she [business advocate] became more of a right winger, I started scooching away and actually started buddying up with Clay (laughing), who is all right as long as it's not on No Name. Right?" (18, U12, K).

During the first 2 years of the process, communication failure contributed to the existence of an artificial and tenuous consensus among all steering committee members, with the exception of the business representative. Joane described the communication that occurred as 1 sided, saying, "Well, I mean it was communicated, but I don't really think they really understood what it meant" (I4, U12, K). Applicants were not seriously involved in the biological basis of the HCP. Joane, one of the technical advisors said, "The applicants...didn't have much to contribute in terms of biological considerations and PVA [population viability analysis] development, so they kind of sat on the sidelines for the first year and a half" (I4, U2, K). Conversely, Libby, a technical advisor, described being excluded from process decisions as difficult, saying, "If they wanted to sit and do bong hits and eat veggie burritos its really their business and its tough because sometimes we felt like we [technical advisors] were part of the committee, and we tried to weigh in on things" (I8, U10, K).

When the applicants, in conjunction with the consultant, finished a draft HCP based on the PVA—to which they did not contribute—the USFWS rejected it because it neither provided sufficient mitigation nor specified how mitigation would be paid for. This was a surprise to the applicants and the business representative, who felt that after 2 years of work, the USFWS had blindsided them and was merely trying to bargain for higher mitigation. According to Neil, "This study has cost \$200,000 more than it was projected to cost primarily because we haven't been able to get a finished product, and I feel its because [the U.S.] Fish and Wildlife [Service] keeps changing what they want" (I1, U24, K). He went on to say, "Well I don't know why we got to the end, or about to the end, and the questions came out that, came out...I think Trey was trying to get more out of the HCP than federal regulations provided for, and to be honest with you, Libby told me he was, so you know I think he saw his role more as trying to get as much as possible in the permit application" (Neil, I1, U13, K). Joane said, "To be quite honest with you, I think they were trying to get as much as they could for as little as they could" (I4, U12, K).

The unexpected rejection of the draft HCP and the attitude change among applicants caused a rift between committee members with local versus national interests. Trey, an agency representative, described the disagreement in these words,

"They just want unbridled, unfettered growth and, 'don't, don't bother us—we'll take care of it down here because we're the county and we're the Conchs and we know what we want and we do it best'" (I2, U17, K). Several group members found it difficult to believe that the applicants and the business representative did not realize all undeveloped habitat had to be protected in perpetuity. Clay described his incredulity, "It's beyond me, it's truly beyond me. It's like, how could they have gotten this after sitting here for 2 years, they had to protect the habitat that wasn't protected in tier 1...and it's beyond me why they haven't looked for funding" (I6, U4, K). Sarah "felt that some people indicated that there had been surprises at the end that if they had been listening all along they would have felt or sensed some of these concerns from the other agencies, I certainly had been feeling and sensing them" (I5, U16, K). Trey blamed the applicants for the communication failure saying, "While the county sort of made promises and this and that and the other, they didn't really listen. I don't think they were seriously listening to what the [U.S.] Fish and Wildlife Service was saying...they just basically kinda piddled around" (I2, U16, K).

Communication also was hampered by alliances within the committee. For example, "one of the citizens has this lawyer involved, the other citizen is bending the commissioner's ear...The lady that's with the DCA [FDCA] kind of talks with the one citizen who doesn't want us to do anything else...It's just the fact that we have this lawyer sitting in and I know he's with this one woman" (Jennifer, I3, U10, K), and "the thing is, she hasn't said she's bringing him, and he comes under the guise of being with these people along the cross island road...., but he's always been interested, he sued and stopped, I think, Monroe County Public Works on the original cross island road in the late 80s on behalf of the deer" (Jennifer, I3, U12, K).

The USFWS' rejection of the draft HCP forced the committee to address individual rights by requiring a source for the proposed mitigation. Ensuing drafts became mired in argument over mitigation ratios and the minimum requirements to avoid lawsuits. Joane said, "It went from a more holistic planning and conservation tool to a permitting process" (I4, U21, K). Mandy's description of the meetings highlighted this problem:

During the meeting where this came out, he [USFWS employee] leaned over and said, 'Jesus, we've never got 3:1 mitigation on HCPs, we're lucky to get 1:1,' and of course that



perked my ears up. So I went to Neil and said, 'Why do we have 3:1?' And he said, 'Well, [the U.S.] Fish and Wildlife [Service] wants 5:1,' and I said, 'Well all the better reason to start at 1:1 and negotiate you know.' Well then it came out in...our last meeting, we've got some people from Florida Fish and Wildlife, whatever they call it, saying, 'We want to retire all the buildable land on Big Pine in the next 20 years, so you really need a 10:1 mitigation ratio'....I'm still crying bloody murder, I say that's bullshit. Let's offer 1:1. Then we're going to be back up to 3:1, if you offer 3:1 then it's still going to be back up to 5:1 or something (I7, U7, K).

The anecdote shared by Mandy illustrates how far from consensus the group was. By this point, their sessions had degenerated into traditional win-lose bargaining. Jennifer described the new focus as "the main concern of the county that states in black and white we will allow this area to be developed, or these areas, and, uh, we will not allow this area...you're telling someone they can't develop their property so it's a taking....so what we have tried to do is call it these bubble areas....so its not like you're stipulating exact lots" (I3, U6, K). Libby argued, "It [the PVA] became almost like the Bible 'OH' values of 0.0001,' I mean come on" (I8, U11, K).

The citizen member representing local businesses and the Monroe County representative were the only informants not frustrated with the movement toward permitting and away from holistic planning. This might reflect the fact that this movement ameliorated the power imbalance that the business representative was facing, and allowed Monroe County alternatives to funding all mitigation. Libby informed us that "the latest bombshell is, I think everyone assumed that the county was going to carry forth this mitigation whatever the costs were, they were going to be paid for out of county funds right?...Totally. Well now guess who pays? He who builds" (I8, U11, K).

The draft rejection and movement to a detail-oriented and time-consuming permitting process led to disillusionment with the process and doubts regarding potential success. As Jennifer described,

We're all, like sick of it, to be honest. We just want to finish the damn thing and every meeting there is this new revelation, 'oh, now we'll write it like this,' 'oh we should have done this.'...We all speak the same language, and we haven't been communicating for the last 3 years....It's pitiful. I communicate better with

the people that I speak Spanish with here (Jennifer, I3, U12, K).

"To be honest, we got into something we thought was one thing. I don't think we realize, any of us, how complicated...it was gonna be" (Jennifer, I3, U5, K). Joane maintained, "There were always surprises, and it's tough going into meetings wondering what kind of surprise you're going to get" (I4, U19, K).

The citizen members also portrayed their disillusionment: "Now when you start taking those tier maps out to people and saying, 'if you own a lot in this tier you can't build,' there may be absolute panic and lawsuits we will see" (Clay, I6, U24, K).

One good storm could throw this whole thing in the trash. We've got a ruling by the court that says any lot in a platted subdivision that existed prior to...1979, and most of our subdivisions go back prior to that, you have a vested right to build....and if you're not going to let them build you have to give them fair market value based on current markets, not what they paid, on the basis of a current buildable lot, now, and the county can't afford that. This whole thing could just throw the HCP in the trash (Mandy, I7, U15, K).

The disillusionment led Mandy to abandon the CBC process and seek resolution outside the committee. She began reporting information from meetings to County Commissioners to prevent what she perceived as abuses of power by other committee members. She described the situation in these words:

Neil said we don't need another committee meeting. Well, this just says to me there is shit in there [the draft HCP] that shouldn't be in there and somebody's going to have to yell about it. I'm preparing to do battle once again. I said, 'hey, we haven't even seen it, you haven't even,' they didn't even have the damn thing 3 days before the commission meeting—an 83 page document they're supposed to approve (Mandy, I7, U7, K).

Other committee members saw "bending the commissioner's ear" (Jennifer, I3, U10, K) as being a bad team player, so Mandy felt more isolated and planned to retaliate, saying, "They jumped all over me for going to the County Commission, and said I wasn't being a good committee member and going outside of the committee, you know. I said bullshit. You try to fast-end-run something, I'm going to stop it" (Mandy, I7, U7, K). According to Jennifer, Mandy was "bending

Table 1. Attributes and evolution of the community-based conservation (CBC) planning processes designed to develop multi-species Habitat Conservation Plans (HCP) for the endangered Florida Key deer on Big Pine Key, Florida, and Houston toad in Bastrop County, Texas, USA.

Attributes	CBC processes evaluated	
	Big Pine	Bastrop
Expectations for process	Resolve decades of dispute regarding Key deer conservation versus development	Settle dispute over land use and enable individuals and businesses to continue land uses threatened by Houston toad conservation
Committee power balance	Equality and popular sovereignty dominate	Personal liberty and property rights dominate
Committee dynamics	United front against the business representative dissolved into schism between local and outside governmental agency representatives after the U.S. Fish and Wildlife Service (USFWS) rejected the draft HCP for lack of local mitigation funds	United front against the USFWS and outside environmental interests strengthened after the USFWS rejected the draft HCP for inadequate mitigation
Process problems	Unrealistic expectations, poor argumentation and communication skills	Unknown regulatory boundaries, unrealistic expectations, poor argumentation and communication skills
Result	Abandonment of CBC process and no resolution of land-use issues	Abandonment of CBC process and no resolution of land-use issues

the commission's car" and this led to deterioration in group trust: "I just don't think we have the same level of, 'hey let's work together in trust' as we did when we started" (Jennifer, 13, U10, K). Committee members began habitat conservation planning expecting consensus to emerge, and left disillusioned with the process and more polarized than ever (Table 1).

### Houston Toad

*Background.*—The Houston toad was originally described in Houston, Texas, in 1953 (Sauders 1953) but was extirpated by urbanization. In 1970, the Houston toad became the first species in Texas to be placed on the Endangered Species List (35 CFR §§ 16047–16048). In 1978, the USFWS designated critical habitat for the Houston toad and dubbed it "probably the rarest and most endangered amphibian in the United States" (USFWS 1978:1). Although it once ranged throughout most of southeastern Texas, the Houston toad now resides primarily in an area of deep, sandy soils in the Lost Pines region of Bastrop County (Campbell 1996). Currently, many factors threaten the remaining populations in this area. Suburban and agricultural expansion was the first major threat to Houston toad populations and still remains the greatest obstacle to recovery. Other threats include introduced species, such as the red imported fire ant (*Solenopsis invicta*), certain logging practices in Houston toad habitat, and road mortality due to increasing human density in the county. Further, the conversion of Bergstrom Air Force Base, near the south end of Austin, into an international airport has intensified development in Bastrop County

and is expected to negatively affect Houston toad habitat (USFWS 1999).

Despite the fact that the USFWS was acutely aware of the dangers facing the Houston toad, little was done to ensure its survival in the years following its listing (Allison 2002). Private landowners in the county worked to keep federal and state agency personnel off their property, thus denying conservation efforts that might negatively affect their lifestyles. Ironically, these landowners also charged the USFWS with taking reactive rather than proactive approaches to planning (Allison 2002). The initial presence of the USFWS in the county helped stimulate planning for the Houston toad. As news of the toad's conservation status spread within the county, landowners realized the benefits of an individual HCP, and applications increased. Of the 378 HCPs issued nationwide as of April 2002, 162 were approved in Bastrop County for the Houston toad (USFWS 2003). This surge in applications, however, was insufficient for conserving the species. The USFWS became concerned about the cumulative indirect effects of development on toad populations and intensified efforts to conserve the species.

As a result of the population growth in the county, housing developments increased dramatically during the 1990s. Developers often worked without incidental take permits from USFWS and had little or no interaction with the USFWS concerning their projects. In 1998, the USFWS hired a new field director. This, in combination with a pending lawsuit by the Sierra Club, led the USFWS to take action. They developed a presence in the county and threatened businesses

and residents by turning off water to subdivisions under development (Allison 2002). Turning off the water to the developing subdivisions, however, had a lasting effect on the county's impression of the USFWS, and many residents feared loss of their land or their ability to use it as they wished. Public anger and frustration resulted from the sudden activities of the USFWS, and most residents saw USFWS employees as prying outsiders (Allison 2002). The USFWS did little to educate the county regarding its activities and intentions, and community meetings were ineffective at easing concerns and educating residents. Thus, the USFWS alienated itself from many stakeholders by first appearing to neglect the needs of the toad and then the needs of the community.

Employees of the USFWS were aware of their increasingly negative reputation within the community. Leroy, a USFWS employee said, "Well, I guess there were some efforts made before, but we didn't stick to our guns until 1999. So it's like, 'what happened all of the sudden?'" (II, U103, B). Despite awareness of this backlash, the USFWS surprised the community again during the summer of 2000. They authored a HCP for 46 subdivisions in the county without soliciting community input and sent a copy of the HCP with an informative letter to landowners in the affected areas of the county. Many landowners had little knowledge of their obligations under this HCP. In some areas, the local water company required individuals to make applications for 10(a) permits prior to receiving water service, so many individuals paid the US\$ 25 application fee to the USFWS thinking that the process ended with the application fee (Allison 2002). Only when these residents received the HCP in the mail did they discover that they could not utilize all their land or graze cattle on their property as they wished. When questioned about the plan, a USFWS employee admitted they "pretty much shoved it along without letting anyone know" (Leroy, II, U137, B) but reasoned that expediting the process was good for the community.

*Texas Senate Bill 1272.*—As the number of regional HCPs in the United States soared, many regions were faced with local governments as the only entities that could hold regional incidental take permits. In many cases, this was beneficial for both the endangered species and the human community (Loew 2000). Some groups expressed concern, however, that the needs of private landowners almost certainly would be neglected in a process involving only federal agencies and

local governments. To address this concern, the 1999 Texas Legislature enacted a statute addressing government entities choosing to enter into HCP agreements (Texas Senate Bill 1272, Regular Session of the 76th Legislature, [1 Sep 1999]). The statute, codified at TPW Code §§ 83.011–83.020 (1999), includes the following relevant sections:

(1) The plan participants shall appoint a citizens advisory committee to assist in preparing the regional habitat conservation plan and the application for a federal permit. At least four members or 33 percent of the citizens advisory committee, whichever is greater in number, must own undeveloped land or land in agricultural use in the regional habitat conservation plan area. A landowner member may not be an employee or elected official of a plan participant or any other local, state, or federal governmental entity. TPW Code § 83.016(a–b).

(2) A regional habitat conservation plan, including any mitigation fee, shall be based on the amount of harm to each endangered species to be protected under the regional habitat conservation plan. The size of proposed habitat preserves shall be based solely on the amount of harm to the endangered species to be protected under the regional habitat conservation plan. TPW Code § 83.015(a–b).

(3) The plan participants, together with the commission and the landowner members of the citizens advisory committee, shall appoint a biological advisory team. At least one member shall be appointed by the commission and one member by the landowner members of the citizens advisory committee. The member appointed by the commission serves as presiding officer of the team. The team shall assist in: (1) the calculation of harm to the endangered species; and (2) the sizing and configuring of the habitat preserves. TPW Code § 83.015(c).

(4) A governmental entity may not impose a regulation, rule, or ordinance related to endangered species unless the regulation, rule, or ordinance is necessary to implement a habitat conservation plan or regional habitat conservation plan for which the governmental entity was issued a federal permit.... TPW Code § 83.014(a).

(5) A plan participant may apply for a federal permit in conjunction with a regional habitat conservation plan only if the qualified voters of a plan participant have authorized the issuance of bonds or other debt financing in an amount

equal to the estimated cost of acquiring all land for habitat preserves within the time required by this subchapter or the plan participant has demonstrated that adequate sources of funding exist to acquire all land for habitat preserves within the time required by this subchapter. TPW Code § 83.013(d).

(6) The plan participants shall make offers based on fair market value to the landowners for the acquisition of fee simple or other interest in land designated in the regional habitat conservation plan as habitat preserve not later than two years after the issuance of the federal permit or three years after the initial application for the federal permit, whichever is earlier.... TPW Code § 83.018(c).

Ostensibly, Texas Senate Bill 1272 was enacted to protect private landowners. Prior to the passage of Senate Bill 1272, Texas law did not preclude local political subdivisions from independently developing and entering into conservation agreements with federal agencies. Moreover, these agreements were not subject to open meetings requirements or state monitoring. Because local planners might target private lands to be acquired for habitat preserves, the public was concerned that lands would be identified without the private landowner's knowledge or participation. At times, the market value of such lands dropped dramatically as a result of being named as potential preserve areas. In 1 case, regional plan participants publicly identified the best habitat areas desired for preservation and refused to grant landowners in those areas a permit under the regional plan (Peterson and Horton 1995; Cindy, I2, U99-100, B). Instead, these landowners were required to go directly to the USFWS, where they had little chance of getting a permit because the agency wanted to purchase the land at fair market value.

Requirements for compliance with Senate Bill 1272 have the potential to significantly shift power balances in community stakeholder groups toward private property rights interests. The Bastrop community was the first group in Texas to implement these guidelines. Thus the existing power hegemony of private property rights interests in the region was legally mandated and legitimized in the HCP steering committee.

*The HCP.*—In an effort to reach an agreement and settle the dispute over land use, stakeholders in Bastrop County joined together in 1999 to create a workgroup intended to address the needs of the Houston toad as well as the human commu-

nity. Despite differences, all parties agreed that development of a regional HCP consisting of management guidelines and mitigation for the Houston toad would provide a tool for resolving the conflict (Allison 2002). A successful HCP would grant the county an incidental take permit that would enable individuals and businesses to continue certain land uses without threat from the USFWS. The USFWS, together with the Bastrop county judge, initiated this process and donated funds for the employment of a full-time facilitator for the project. In addition, numerous other Bastrop businesses, banks, and groups donated money and/or materials to this process.

In August 2000, a project manager/facilitator began working with concerned citizen groups to better enable the groups to develop an HCP for Bastrop County. This project manager's full-time tasks were to (1) identify stakeholder groups and leaders, (2) provide conservation and funding alternatives, (3) facilitate scientific efforts, and (4) negotiate among stakeholders (Wilkins et al. 1999). To accomplish these duties, she organized a workgroup to determine the best conservation measures for the Houston toad. This workgroup consisted of stakeholder representatives from different interest groups she delineated. The mission of this workgroup was to "define a regional community-based HCP that reduces the current economic and regulatory burden for community interests in their efforts to comply with the federal Endangered Species Act and that is also protective of the Houston toad" (Workgroup Document).

The Bastrop workgroup followed Senate Bill 1272 guidelines in hope that the county would accept their proposition to be the permit holder. Aside from the goal of keeping private landowner interests a priority, the workgroup aimed to promote understanding and acceptance of the ESA and habitat conservation planning within the community. The workgroup consisted of 16 stakeholders representing business (7), landowners (6), a public agency (1, TPW), and a local environmental interest (1). After receiving input from the workgroup members but prior to the first meeting, the facilitator decided not to give the USFWS stakeholder status. Thus the workgroup reciprocated to the USFWS' earlier development of an HCP without the potential challenges of antagonistic interest groups. This sentiment was further reflected in the workgroup's decision to have environmental interests represented by only a local environmental group, thus avoiding participation by representatives of

national environmental organizations. Between 25 October 2000 and 14 January 2002, USFWS representatives received invitations to only 2 of 22 meetings, and attended both. Three members representing utility companies, 2 landowners, and the agency representative stated that the USFWS should have been invited to participate in all 22 workgroup meetings.

As the meetings progressed, workgroup members became increasingly conflicted. Utility company, state agency, and environmental representatives typically did not reveal adversarial attitudes toward other group members or the USFWS; most landowners and those representing non-utility business interests revealed varying levels of hostility toward the USFWS and/or utility company representatives. Ironically, the decision to exclude the USFWS led to information problems that many workgroup members then blamed on the USFWS. One participant argued that the USFWS should "show us the way, and the cheapest way, instead of kinda stonewalling" (Shane, I3, U121, B). Other members complained that the USFWS "didn't have a clue" (Jack, I4, U20, B) or was "scared to answer" questions (Janice I5, U140, B).

Almost a year into the process, the workgroup submitted a draft HCP to the USFWS, and invited USFWS employees to attend a meeting to discuss revisions. The USFWS critique of the draft shattered a false sense of accomplishment held by most workgroup members. In an initial interview, Janice said, "If it makes sense...I think they'll approve it" (I5, U25, B). After the draft HCP was reviewed she said, "I don't think you could get anywhere with [the U.S.] Fish and Wildlife [Service]....I think that they probably thought what we gave them was a joke" (Janice, I6, U15, B).

Communication breakdowns and/or overt deception between workgroup members and USFWS employees further exacerbated the conflict. The USFWS requested a 15,000 acre (6,071 ha) preserve as mitigation within the regional HCP, but obfuscated when asked why 15,000 acres was the critical size. In the absence of a response, workgroup members were left believing that the recovery team had arbitrarily suggested a 15,000 acre preserve, and the number was merely being carried forward. During a meeting between workgroup members and USFWS employees, stakeholders asked the USFWS representative whether land entered in Safe Harbor contracts (USFWS 2001) could count as part of

the 15,000 acres (Field Notes). The USFWS representative did not give an explicit answer, but another USFWS employee leaned over and whispered to the researcher that Safe Harbor lands could never count toward the 15,000 acres because the contracts could be reversed. This lack of candid communication encouraged unreasonable expectations among participants. One workgroup member claimed that, early in the process, a wildlife biologist from the Austin Ecological Services office told her that once Bastrop secured the 15,000 acre preserve they could "pave the rest of the county" (Janice, I6, U54, B). This impulsive statement gained mythic proportions among combative stakeholders and provided justification for dismissing future USFWS input.

Another communication breakdown occurred during the summer of 2001. Texas Senate Bill 1122, drafted in part by the supposedly neutral workgroup facilitator, had strong support from business representatives in the workgroup. Some members even testified on behalf of the bill at a Senate hearing, while other members had no knowledge of the bill's existence. The bill, a sister act to Senate Bill 1272, was an attempt to prevent utility companies from including ESA enforcement considerations during utility permitting processes. Utility companies rigorously opposed the bill, and utility workgroup representatives felt betrayed by the facilitator and workgroup members who lobbied for it. This rift in the workgroup led the utility companies to independently pursue their own 10(a) permit.

All sides of the conflict were upset about information suppression. Anne expressed concern that "information is a little skewed...because it is prepared by the [U.S.] Fish and Wildlife Service...and doesn't mention some of the things that are in the act that are apparently available for mitigation" (I7, U2-3, B). Similarly, USFWS employees were upset about being excluded from workgroup meetings and being last to get a copy of the initial HCP (Field Notes).

By the end of the CBC process, several workgroup members had demonized (Peterson et al. 2002) the USFWS. Participants said, "I'm like a missionary up against the head hunters" (Val, I8, U18, B); "they feel like they are little gods, and they have their little kingdoms. And it just permeates what they say and do" (Ryan, I9, U29, B). Tom described a meeting with USFWS employees as "Pearl Harbor II" (I10, U4, B). Melanie referred to landowners as the "silent victims" (I11, U71, B). Moreover, workgroup meetings

served as a forum for demonizing the USFWS. Many narratives negatively depicting the USFWS evolved in these meetings and gained mythic proportions within the community. In 1 story, a landowner needing a 10(a) permit to repair a fence surrounding his property discovered the permit would cost him \$20,000 in mitigation fees (Field Notes). Janice said, "I mean what do they want you to do, not replace the fence so the cows can get out and kill somebody, y'know, because a car hits them or something like that?" (I6, U30, B). Stories such as these strengthened some committee members' beliefs that the USFWS excluded logic and reasoning from its decision making processes, and was just after money or "nit picking" (Craig, I12, U205, B).

In addition to dividing workgroup members from the USFWS, the process caused conflict within the workgroup. Landowners and some business representatives accused utility representatives of "being intimidated by the [U.S.] Fish and Wildlife [Service] into enforcing the Endangered Species Act for them" (Ellen, I13, U35, B). Another member told utility representatives they were "laying over and dying" (Field Notes).

Although the state agency and utility representatives did not engage in overt conflict with the USFWS, the amicable relationship should not be taken to imply shared values. Utility representatives wanted a HCP providing operational certainty and gave less attention to value-based arguments promulgated by conflicting participants. They said of the HCP process, "We've just got a job to do. We have to get a permit, I mean this is—it is not rocket science, we just need to get a permit," and "it's just, you know, a practical decision" (Cindy, I2, U148, B). While utility representatives avoided conflict by assuming a value-neutral stance, the state agency representative did so by assuming that the USFWS was value-neutral. She felt that, since the USFWS was operating according to the strictures of its legal mandate, it could not accept anything failing to comply with the mandate. She said, "They're not going to approve something that's gonna get them sued, if they're gonna lose" (Becka, I14, U60, B).

Communication failure and conflict escalation resulting from the rejection of the draft HCP led to disillusionment with the process and doubts regarding potential success. One participant said, "I'm a little discouraged.... I thought we'd already be having—have something in the works by now, at least a finished product, and you know, the ball would be sitting in [the U.S.] Fish and Wildlife

[Service]'s court. But, we're not. We're not close to that. We're at least a year away from that. And, um, so that's frustrating" (Ben, I15, U12, B). Janice said, "It just seems like it's very possible that, y'know, we may end up having to disband this thing. And, uh, all of the work will have been for naught. Y'know, then I'd probably regret it" (I6, U22, B). Although all committee members began the CBC process expecting consensus to emerge, 2 participants discontinued involvement in March 2002 due to frustration with the lack of progress, and the committee began a new approach by hiring a consulting firm, a lawyer, and a full-time biologist (Table 1). These fundamental changes marked the end of grassroots CBC in reference to this HCP.

## DISCUSSION

Both the Big Pine Key and Bastrop County CBC committees began with unrealistically high hopes for reaching an optimum solution through collaboration and consensus building. Members of both committees thought the process would educate the community and resolve years of previously intractable land-use conflicts. Conservation policy within contemporary democracies must, however, negotiate the complex relationship between equality and liberty, rather than attempt to avoid this relationship (Mouffe 1993, 2000). In the 25 April 2000 regional HCP public meeting in Big Pine, an anonymous community member asked the critical question: "Does the registered voter have the right to vote on properties they do not own?" (Zischka 2000). The democratic paradox requires HCPs to facilitate the uneasy balance between liberty (property rights) and equality (popular sovereignty) implicit in the aforementioned question.

Both HCP committees that we evaluated attempted to skirt this task with damaging results. The HCPs are now over budget and >1 year past scheduled conclusions, while participants are disillusioned with the public participation process and uncertain regarding future conservation planning in their regions. The tentative solution being offered by the Big Pine committee essentially reverts to the individual HCP process by requiring individual landowners to provide mitigation on a case-by-case basis, while the Bastrop county HCP had not yet offered a potential solution. This transition resulted in part from an artificially homogenous portrayal of the committees and their communities, encouraging members to ignore the complexity of the political milieu within which their decisions would be evaluated.

As with most groups, membership of both steering committees resulted in disproportionate power for some interests over others. The complex, multi-layered regulatory framework surrounding natural resource management in the Florida Keys led to a steering committee dominated by county, state, and national regulatory agency personnel, resulting in an emphasis on equality and popular sovereignty over liberty. Consistent with this emphasis, most committee members joined in defining optimal solutions such as reserving all undeveloped land on Big Pine and No Name Keys in perpetuity, while allowing only limited opportunities for community growth. Although the initial draft reflected this solution, the USFWS rejected it primarily because it did not describe a method for achieving protection of all undeveloped habitat in perpetuity. After the USFWS rejected the plan, which relied on existing social structures and norms for continued habitat acquisition, a local versus national split emerged within the committee.

The apparent consensus on reserving undeveloped land on Big Pine and No Name Keys as wildlife habitat turned out to be artificially manufactured. Citizens who were more concerned with individual liberty than with equality among the community members believed that their sincere efforts to cooperate had been rejected. County representatives became disillusioned because they did not have the economic capital required to compensate landowners for the regulatory takings (Salzman and Thompson 2003:64–68) of private property required to provide mitigation under the HCP, and the process became mired in discussions of how to avoid regulatory takings. Monroe County joined 1 of the citizen representatives in refocusing efforts on an attempt to lower mitigation ratios rather than continuing to pursue what originally was seen as an optimal solution. That citizen representative used the breakdown of the committee's deliberative process to push her personal agenda forward, thus delaying draft evaluation by the county commissioners.

Even if the USFWS had accepted the assumption that current social structures could be trusted to provide the requisite habitat acquisition, legal constraints imposed from the national level still may have forced abandonment of approaches relying on social capital (Portes 1998). For example, a Monroe County ruling (Case No. 97-20-636-CA-18) being appealed by the county would allow plaintiffs in the Keys to build single family homes in subdivisions platted prior to 1979

or require the county to purchase those lots at a rate commensurate to current buildable Florida Keys lots. Thus, Monroe County may still face the financial responsibility to compensate for takings. Although maintaining awareness of the constant tension between equality and liberty would not have guaranteed a successful CBC process, this awareness certainly could have minimized the public cynicism and accompanying loss of political trust that resulted.

Alternatively, Texas Senate Bill 1272 and the dominant political power structures in Bastrop County led to a committee dominated by local citizens, particularly those keenly interested in protecting private property rights. The single citizen representing local environmental interests was considered acceptable by the remainder of the steering committee primarily because he saw property rights as an important decision-making criterion. The committee explicitly excluded the USFWS from membership even though this agency held the ultimate decision authority. Not surprisingly, the committee's optimum solution, which eased the economic and regulatory burdens on individual community members in their efforts to comply with the ESA, was achieved in a draft HCP that largely ignored existing federal law and popular sovereignty and supported individual liberty to the exclusion of equality.

The rejection of the draft HCP demonstrated that, even when a local community is not divided by the democratic ideals of equality and liberty, decisions involving the ESA or other laws still must be evaluated by both criteria. The consensus achieved within the Bastrop County committee was as artificial as that manufactured in the Florida Keys. In Bastrop, interests other than those wielding power at the local level were marginalized. Individual HCPs in Bastrop County had gone relatively unchallenged until the Sierra Club sued the USFWS for failure to enforce the ESA, thus pushing the agency into the position of championing the equality/stewardship aspect of democracy. Many committee members enjoyed the sense of camaraderie that developed as they crafted an optimum solution in isolation from the larger political scene. However, their solution could not survive the scrutiny that conservation policies must withstand. Community-based conservation planning is a means for allowing individual humans, who share local habitat with wildlife, to ensure that their needs become part of the assessment process and is not a means for denying benefits to the larger community. In the

case of animals listed as endangered, the United States has stated its desire to protect habitat necessary for recovery of these species, even when such protection comes at a cost to individuals, as evidenced by the passage and continued enforcement of the ESA.

The complex practice of democracy intruded on both of these cases in another dimension as well. No citizen-based planning effort can represent the public in the sense of 1 person, 1 vote. Participation in venues such as voting is voluntary and must remain so. Although those convening HCP or other CBC processes can—and should—do everything possible to ensure that public participation processes are widely accessible—and should affirmatively attempt to include a diverse group in public deliberations—they cannot require people to participate. Even in the rare case when an agency devotes major resources to this effort, public response remains limited. This fact always offers an opening for dissatisfaction, both with the process and its results.

Our case studies suggest that, in communities where the democratic paradox is evident (e.g., the Florida Keys), no single optimum solution exists for HCPs. More politically homogenous communities (e.g., Bastrop County) must still face the paradox at a national level. Accordingly, framing HCP processes as a search for the single, optimum solution through collaboration and consensus building often leads to disillusionment and pessimism by community members directly involved with developing the HCPs because participants are trapped within the democratic paradox.

## MANAGEMENT IMPLICATIONS

Some might suggest abandonment of community-based approaches to HCP development due to the apparent ineffectiveness of the 2 CBC efforts we evaluated. In our current regulatory framework, however, this would result in a proliferation of individual HCPs, habitat fragmentation, and poor ecosystem management. Moreover, dismissing local community input on regional and national issues, such as the ESA, dismisses localized conflicts that will eventually force their way into national conservation policy.

Based on our case studies, we suggest that community-based HCPs probably will be more successful if they incorporate the bounded conflict (Peterson 1997:171–185) inherent to the democratic paradox. Bounded conflict enables participants to collaboratively (1) develop a process for

selecting the suite of topics most essential to producing a successful HCP; (2) decide what conditions would justify making changes to that suite; and (3) engage in vigorous debate on those topics, with an eye to achieving a positive, rather than an ideal, outcome that remains open to change across time and space. This debate can only develop within a social environment that encourages participants to engage in argumentation. Meaningful engagement in argumentation requires participants to fully explain their own perspectives to those with opposing views, as well as to actively listen to opposing viewpoints with the goal of understanding those perspectives. Participants need not like each other, but they must respect each other as adversaries worth arguing against.

Developing and working through bounded conflict enables participants to explore ways their fundamental differences actually bind them together as part of a larger, not necessarily unified, whole. Bounded conflict is particularly and uniquely appropriate for managing environmental conflicts in liberal democracies because its practice requires that society be sufficiently open to allow political competition, yet sufficiently stable to render such competitive engagement safe. Although failing to critically examine fundamental organizational patterns of society that lead to environmental degradation, bounded conflict may impact these patterns through the dialogues it enables (Peterson 1997:171–185).

The first step in incorporating bounded conflict within CBC processes is to acknowledge the schism between the freedom derived from individual liberty and the equality derived from popular sovereignty (Mouffe 2000). Ignoring fundamentally different viewpoints and assuming that discussion or improved communication will make the differences less salient may backfire and lead to conflict escalation (Peterson et al. 2002). This does not mean that collaboration and a sense of community are impossible to achieve. It does mean that we may have to give up consensus as the metric by which to measure success. The second step is to design and facilitate a public process that enables participants to debate their differences without demonizing each other (Peterson et al. 2002). Within bounded conflict, success is defined iteratively through the deliberative process and is a unique product of context.

Evaluation of these 2 case studies led us to the following recommendations regarding incorporation of bounded conflict in community-based HCP planning:



(1) Facilitators must be committed to using the best practices available for delivering an effective public process and must not be committed to any particular outcome. Toward this end, facilitators must work closely with advisory bodies and conveners (which may be the same parties) to determine exactly how success will be measured. Facilitators cannot ensure a successful public process but should provide a clear explanation of (1) the process's overall design, (2) strategies the facilitator expects to use, and (3) an ongoing analysis of reasons for success and failure.

(2) Facilitators need to explicitly design processes that encourage people to bring their values into the open. These processes must help the group maintain awareness of individual values, at the same time acknowledging that some policy preferences emanating from these values simply are not within current regulatory boundaries. Ignoring conflicting values may be tempting but will not prevent such values from influencing CBC planning. Conflicting values can wreak havoc with any imagined consensus, particularly if the group has not acknowledged the existence of these values. Any CBC process in the United States or other liberal democracies will need to at least discuss conflicts between individual rights and community responsibilities.

(3) Crafting a viable CBC plan is difficult and requires hard work. Participants should be informed at the beginning of the planning process that they must work within an uncertain environment. Participants need to be reminded that they function in an advisory capacity only, and that the decision to participate does not repeal their rights to use other approaches to the planning process. Ensuring this awareness may increase the difficulty of recruitment but should help avoid the cynicism that results from creating artificially high expectations. When participants know that individuals may choose to drop out of the process and pursue their individual goals by alternate means, they should be better motivated to do their part to make the process rewarding for those with different interests.

(4) Effective communication is essential, both in terms of the general formats for discussion and in terms of specific skills needed by participants. Training in active listening and argumentation skills could have made both the HCPs we evaluated more functional. Inability to engage in active listening contributed to the false assumption that consensus had been reached. Inability to engage in argumentation contributed to the

equally false assumption that disagreements over policy preferences necessitated personal attacks. Although inadequate or ineffective communication skills will not prevent participants from attempting to exert power by various negative tactics, effective communication skills can provide a common platform from which to debate the various interests of all participants. Venues for CBC planning should be designed to incorporate basic communication training.

(5) Despite attempting to ensure that every participant possesses essential communication skills, the facilitator must not assume that all participants will choose to use them. The communication process must be designed with sufficient resiliency to recover from frequent misbehavior. Further, participants must proceed with the full knowledge that their participation in the CBC process remains but 1 of many alternatives available to them.

(6) Regulatory agencies, such as the USFWS in the 2 cases we evaluated, need to take responsibility for informing all participants of regulatory boundaries, and then documenting that they have done so. Again, agency personnel cannot guarantee that all participants will listen to and understand the relevant regulatory boundaries. This practice will, however, minimize the legitimacy of complaints that regulatory agencies were arbitrary and capricious. To do this well, agency personnel must work closely with the facilitators of the process. This could include enabling agency personnel to obtain basic facilitation skills and requires inclusion of facilitation costs in budgets associated with environmental planning processes.

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