

Environmental Conflict Resolution: Performance Evidence from the Field

Since environmental conflict resolution (ECR) generally requires stepping beyond business as usual, it is reasonable for public managers and stakeholders to ask what outcomes can be expected before investing in ECR. To respond to this question, the U.S. Institute created the following briefing on ECR performance based on key findings from published empirical studies from the past two decades.

The available empirical studies, including results from the U.S. Institute led Multi-Agency ECR Evaluation Study (MAES), provide a positive performance-based account of what can be accomplished through ECR.

- ECR is an effective tool for solving environmental problems/resolving environmental issues;
- ECR processes significantly improve relationships and build trust among stakeholders; and
- Participants believe that more progress and better outcomes are achieved through ECR than alternative processes, such as litigation.

Background on MAES

To better make the case for ECR and to understand what contributes to ECR success, a group of federal and state agencies developed an evaluation framework and data collection instruments to assess ECR performance. The framework represents a shared articulation of ECR practice and its intended outcomes and impacts. Based on the framework, federal and state agencies collected systematic evaluation data on 52 ECR cases concluded between 2005 and 2007. The resulting analysis (known as the MAES study) helps document the value of ECR and provides insights into how federal managers can ensure that resources invested in ECR are spent wisely.

Summary of ECR Performance

Resolving Environmental Conflicts

- The MAES findings indicate that in more than 80% of cases full or partial agreement was reached to help resolve complex multi-party environmental conflicts and issues. The MAES cases involved collaborative efforts to develop natural resource plans, site and construct facilities, negotiate government rules, and negotiations to resolve environmental conflicts in the context of administrative appeals or litigation. The MAES findings are generally in line with those of previous empirical studies where agreement rates range from 61% to 93%, with the majority reporting rates in the 70-80% range (Table 1). The empirical evidence suggests that despite the diversity of contexts for which agreements are being sought, ECR represents an effective tool for resolving environmental conflicts and issues.

ECR Studies of Agreement Rates			Agreement Rates	
Multi-Agency ECR Study - Emerson, Orr, Keyes and McKnight (2009)	Environmental and natural resource conflicts	52 cases	82% 85%	of cases reached full or partial agreement of responding mediators reported full or partial agreement reached
Frame, Gunton and Day (2004)	Land and resource management planning	15 cases	93%	of completed cases reached agreement
Berry, Stiftel and Dedekorkut (2003)	Multi-party state agency administrative mediation	11 cases	89%	of respondents (mediators and participants) reported their cases as having settled at mediation or after mediation.
O'Leary and Husar (2002)	Environmental and natural resource conflicts (primarily waste cleanup)	500 attorneys surveyed	61%	of responding attorneys reported that the use of ADR successfully resolved the dispute.
Andrew (2001)	Waste management	54 cases	81%	of cases resulted in a final settlement
Susskind et al. (1999)	Land use	100 cases	61%	of responding participants stated that their cases settled
Sipe (1998)	Environmental enforcement cases	21 cases	85%	of cases resulted in a settlement
Sipe and Stiftel (1995)	Environmental enforcement cases	19 cases	74%	of cases reached agreement
Buckle & Thomas Buckle (1986)	Environmental cases where mediation was extensively pursued	8 cases	75%	of cases had signed agreements
Bingham (1986)	Agreement-seeking policy and site specific environmental cases	132 cases	78%	of cases resulted in an agreement

Table 1. Comparison of agreement findings in the literature.

Improvements in Working Relationships

- The MAES study findings indicate that ECR processes significantly improved relationships and built trust among stakeholders (Figure 1). Results are consistent with previous research on this question (Talbot, 1983; Buckle and Thomas-Buckle, 1986; Susskind, McKernan, and Thomas-Larmer, 1999; Innes and Booher, 1999; O'Leary and Raines 2001; O'Leary and Bingham, 2003; Dukes 2004; Frame, Gunton and Day 2004). This insight may be of particular interest to public managers working with other agencies or stakeholders on an ongoing basis. When relationships and trust building have long-term value, ECR can help create the necessary foundation.

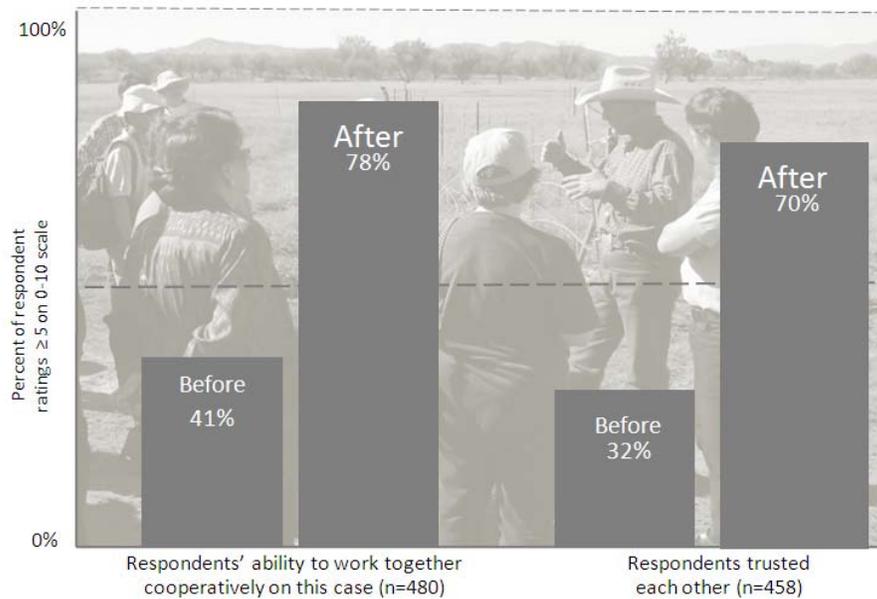


Figure 1. ECR improved stakeholder working relationships.

Effectiveness – The Relative Merits of ECR

- The MAES findings indicate that participants believe more progress and better outcomes are achieved through ECR than alternative processes, such as litigation. Specifically, when asked to compare ECR with the likely alternative in the absence of ECR, the majority of respondents felt the collaborative process they participated in:
 - more effectively addressed the issues or resolved the dispute;
 - better served their interests;
 - led or will lead to a more informed public action/decision; and
 - resulted in outcomes that are less likely to be challenged.

The respondents also endorsed the use of ECR, indicating they would recommend it to others in a similar situation without hesitation. Other studies have documented additional positive attributes of ECR. For example, Frame et al. (2004), in a study of land and resource management plans, found that collaborative processes result in creative and innovative outcomes. An in-depth evaluation of ECR outcomes and impacts is forthcoming from the Environmental Protection Agency's Conflict Prevention and Resolution Center and the Department of Interior's Office of Collaborative Action and Dispute Resolution. This work, the Systematic Evaluation of Environmental and Economic Results (SEEER), will provide much needed in-depth insights into ECR performance when compared to other decision-making approaches.

Cost Effectiveness – The Relative Merits of ECR

- Multi-party, complex, contentious disputes can be costly to resolve whether in the context of ECR or a likely alternative such as litigation. What makes ECR an effective use of resources is its ability to bring stakeholders together, repair and build relationships and social capital, so that stakeholders can work together to craft workable solutions that resolve issues now and help manage issues in the future. These outcomes translate into a greater return on investment for ECR over traditional processes such as litigation.

- The MAES study found that 78% of respondents reported they felt ECR was cost-effective (i.e., ECR cost less or cost more but the additional resources were worth the investment). It was beyond the scope of the MAES study to quantify the costs of ECR and to compare those costs to the alternative decision-making processes. The empirical literature does provide perspective and suggests that cost estimates vary greatly depending on case characteristics and the participants' affiliation and role in a given case. Both MAES and the empirical literature suggest that ECR can represent a cost-effective tool for solving environmental problems and resolving environmental issues.

Studies of ECR Cost-Effectiveness			Cost Effectiveness	
Multi-Agency ECR Study (2009)	Environmental and natural resource conflicts	52 cases	78%	of respondents indicated that ECR cost less or cost more but the additional costs were worth the investment.
Berry, Stiftel and Dedekorkut (2003)	Multi-party state agency administrative mediation	11 cases	87%	of respondents said staff and consultant costs were less in mediation than in administrative hearings. Estimated savings ranged from \$2,000 to \$700,000.
O'Leary and Husar (2002)	Environmental and natural resource conflicts (primarily waste cleanup)	500 attorneys surveyed	81%	of responding attorneys reported their clients participated in ECR because of anticipated cost savings. Savings per client were estimated at \$168,000.
Kloppenber (2002)	Environmental mediation cases	2 case subset from a study of a pilot mediation program	-	Case 1- savings to clients estimated between \$200,000 and \$400,000. Case 2 - higher costs for mediation but more satisfactory outcomes achieved.
Andrew (2001)	Waste management	54 cases	81%	of cases saved money compared to conventional processes. Savings per case ranged from \$100,000 to \$3.5 million.
Langbein and Kerwin (2000)	Regulatory negotiations	8 reg-negs and 6 conventional	-	Participants in reg-negs incurred higher costs.
Susskind et al. (1999)	Land use	100 cases	91%	of respondents indicated the collaborative process cost less than the costs of other forums.
Manring (1998)	Forest planning processes	4 cases	-	Reduced agency or organizational costs but higher costs to individual participants in the processes.
Sipe and Stiftel (1995)	Environmental enforcement cases	19 cases	94%	of respondents agreed mediation was cost efficient. Cost savings per case were estimated at \$150,000.
Buckle & Thomas Buckle (1986)	Environmental cases	81 cases, 8 extensive mediations	76%	of those responding reported mediation as less costly (95% when corrected for those who reported "didn't know").

Table 2. Empirical evidence on ECR cost-effectiveness.

Lessons to Improve Future Use of ECR

The MAES findings indicate that the more challenging the case and the less willing parties are to engage at the outset, the more difficult it is to succeed. These results demonstrate why it is important for public managers and those who convene and sponsor ECR processes to focus on getting the right parties to the table, ensure that there is access to pertinent information, and work with a third-party mediator or facilitator with the requisite skills. Without addressing these elements managers are reducing the prospects of positive outcomes from ECR.

For public managers and stakeholders, ECR provides a much needed opportunity to find workable solutions that deal with environmental issues today and help manage environmental challenges in the future. It is important to continue to develop ways to demonstrate the value of ECR so that ECR can be appropriately promoted and adopted through the federal government (Figure 2).

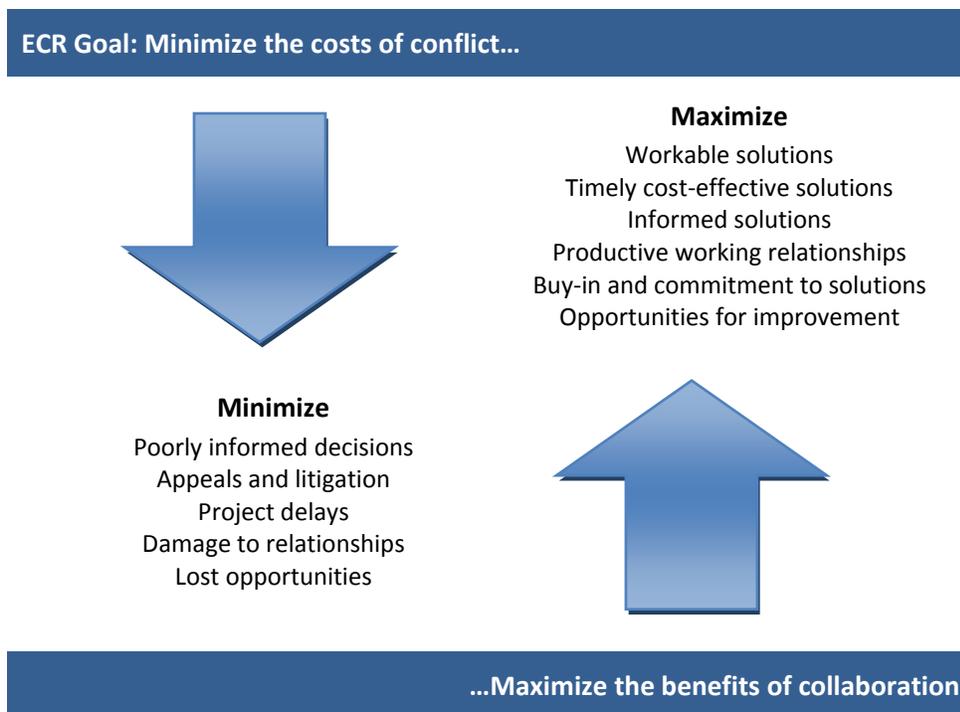


Figure 2. ECR a tool that can minimize the costs of conflict and maximize the benefits of collaboration.

For more information contact:

Patricia Orr, Director of Program Development and Evaluation
U.S. Institute for Environmental Conflict Resolution
130 South Scott Avenue, Tucson, Arizona 85701
Telephone: (520) 901-8548 Email: orr@ecr.gov