

An Investigation of Incentives and Disincentives for Conflict Prevention and Mitigation in the Bureau of Reclamation's Water Management

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

An Investigation of Incentives and Disincentives for Conflict Prevention and Mitigation in the Bureau of Reclamation's Water Management

prepared by

Oregon State University Kim Ogren Aaron Wolf, PhD



DATE	PEER REVIEW,	CODE
0.22.12	Signature Breet Ster	
9-27-12	Printed Name BRENT STEEL	
	Signature	
	Printed Name	
Author Initials	Peer Review Not Re	quired

OFFICIAL FILE COPY					
DATE SURNAME CODI					
	-				
	 				
		ļ			
	,				
	·····				
		-			
Classification:					
Project:					
Control No.:	Control No.:				
Folder I.D.:					

Disclaimer:

The findings and conclusions in this report are those of the author(s) and do not necessarily represent the views of Reclamation.

Contents

	1 agc
Acknowledgments	vii
Executive Summary	
1.0 Introduction	
1.1 Agency Background	
1.2 Significance and Justification of Research	
1.3 Previous Research	
1.3.1 Previous Studies on Conflict and Collaboration in Reclamation.	4
1.3.2 OSU Preliminary Study of Incentives and Disincentives	5
1.4 Objectives	
2.0 Methods	
2.1 Theoretical Foundation	9
2.2 Data Collection and Analysis	11
2.2.1 Participant Recruitment	
2.2.2 Survey	
2.2.3 Focus Groups	13
3 Results	15
3.1 Surveys	15
3.2 Focus Groups	
4 Discussion	
4.1 Findings	25
4.2 Limitations of Research	27
4.3 Implications and Recommendations	29
4.3.1 Implications for the Bureau of Reclamation	
4.3.2 Implications Beyond Reclamation and Water Management	
4.3.3 Future Research for Bureau of Reclamation	30
4.3.4 Other Agencies	31
5 Conclusion	32
6 References	33
Appendix A – Glossary of Acronyms and Key Terms	36
Appendix B – Survey	
Appendix C – Focus Group Questions	41

Acknowledgments

We are extremely grateful to the Bureau of Reclamation for providing funding for this study. Specifically we would like to thank Dr. Curtis Brown, Director of Reclamation's R&D Office, and Mr. Chuck Hennig, Deputy Director of the R&D Office, for allocating funding to this research within the Western Water Institutional Solutions project and for their support over the years of this collaborative effort between Oregon State University (OSU) and Reclamation.

Gratitude must also be expressed to Dennis Kubly, in the Bureau of Reclamation, Upper Colorado Regional Office, and Douglas Clark in the Bureau of Reclamation, Technical Services Center. They were the first to pose the question of what incentives or disincentives might influence the pursuit of conflict prevention and mitigation in Reclamation. We are grateful for the opportunity they gave us to explore the issue and learn about water conflict in the western United States.

We cannot even begin to express how grateful we are for the contributions of all those that participated in the skills-building workshops from which the data in this research was collected and aided this research by offering their experiences and observations.

We are also grateful to Bridget Brown, Racquel Rancier, and Mariya Pak whose previous work on conflict management in the Bureau of Reclamation laid the foundation for this investigation into the incentives and disincentives for conflict prevention and mitigation through their preliminary report.

Executive Summary

In previous studies of conflict and collaboration in Reclamation, researchers found that factors such as decentralization and an over reliance on crisis management may have inhibited Reclamation from pursuing conflict prevention and collaboration (Brown et al. 2009). To further understand this issue, this study addresses the question: "What are the incentives and disincentives for conflict prevention and mitigation in the Bureau of Reclamation?" The goal of this study is to understand what factors influence the decision making process in order to identify where to increase institutional capacity and reduce risk of conflict.

Incentives and disincentives for conflict prevention (i.e., actions taken to avoid conflict) and mitigation (i.e., actions taken to resolve, manage, or temper a conflictive situation after conflict has occurred) are identified through a survey and focus groups of Reclamation employees. The study builds on a preliminary investigation previously conducted by Brown et al. (2009) at Oregon State University (OSU). Survey and focus group question development was based on that previous research as well as theories of motivation from the fields of public administration and psychology.

Twenty-one Reclamation employees participated in the survey and focus groups at two conflict management courses in Sacramento, California and Boise, Idaho that were conducted as a part the larger OSU and Bureau of Reclamation partnership through which this study was funded. Basic descriptive statistics were used to analyze the survey results. The focus groups were analyzed through content analysis to identify concepts and themes.

Two dominant disincentives for conflict prevention (and to some extent mitigation) were identified: a lack of resources (particularly funding and staffing) and Reclamation's organizational culture (specifically its reliance on crisis management, water delivery focus, and being slow to change). The two are linked in a cyclical fashion. In the view of a portion of study participants the reactive culture in Reclamation leads to a lack of resources for more proactive initiatives as resources were reallocated to conflict mitigation from conflict prevention. Without proactive efforts geared toward conflict prevention, conflicts will continue to arise and consume time, money, and human resources. Other disincentives identified include a lack of forward planning, the existence of an acceptable bandwidth or level of conflict, a perception that conflict is unavoidable or entrenched, politics, and limits on acceptable actions associated with the legal authorization of Reclamation projects (Table S-1). Fewer incentives for both conflict prevention and mitigation were identified, but include, pressure from

higher management, the promotion of collaboration within Reclamation, and a desire to avoid litigation.

Table S-1. Summary of incentives and disincentives identified

	Incentives	Disincentives
Conflict Prevention	 Pressure from higher management Promotion of collaboration with others outside of Reclamation Desire to avoid litigation 	 Culture of Reclamation (i.e., crisis-driven, water delivery focus, slow to change) Limited availability of funding, time, & staff Reallocation of financial resources (i.e., from projects with prevention efforts to projects with conflict) Reallocation of other resources Politics Acceptable bandwidth of conflict Perception that conflict is unavoidable or entrenched in all projects
Conflict Mitigation	 Allocation of financial resources Allocation of human resources Pressure from higher management Pressure from outside Reclamation (e.g., Congress) Desire to resolve litigation 	 Culture of Reclamation (i.e., crisis-driven, water delivery focused, slow to change) Discomfort associated with actions needed and lack of skills to pursue those actions Limited availability of funding, time, & staff
General	Trust/relationships created from collaboration, conflict prevention, and conflict mitigation efforts	Legal authorization and other legal constraintsLack of strong leadership

With this all in mind, when it comes to choosing a path forward in respect to conflict prevention and mitigation, the Reclamation has its challenges. Limitations due to authorization, politics, and funding climates present outside challenges that may direct Reclamation down a path of continuous conflict mitigation efforts due to an inability to get out of the crisis and conflict management cycle. Similar internal characteristics are factors that work against conflict prevention and mitigation. At the same time, while the culture of the agency may be slow to change, hampered by decentralization, engineering focused, and often crisis-driven, Reclamation has demonstrated that it can prioritize conflict prevention and mitigation and does have incentives for those actions. It simply needs to bolster and duplicate those efforts and/or find ways around the barriers for conflict prevention and mitigation.

This report is part of a larger study that seeks to develop a set of specialized tools and teaching modules for Reclamation water managers. These tools will aid Reclamation in detecting, preventing and mitigating water-related conflicts, as well as to foster collaboration. In avoiding or ameliorating conflict and fostering collaboration, Reclamation can conserve time, energy, and resources in accomplishing its mission to "manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public" (Bureau of Reclamation, 2010).

Introduction

1.0 Introduction

Water management can often be described as conflict management. If agencies managing water want to pursue conflict prevention and mitigation, it is important to ask, what motivates an organization or individual, to pursue conflict prevention, conflict mitigation, or no action? This study seeks to answer the question: "What are the incentives and disincentives for conflict prevention and mitigation in Reclamation?" At the heart of the question is a search to determine why individuals and offices may choose whether or not to act to prevent or mitigate conflict. Therefore, this study offers insight as to how Reclamation rewards (or fails to reward) conflict prevention and management, and suggests institutional changes that could be made to enhance the incentives for effective, proactive water resource conflict management. This research also presents general recommendations for water agencies to consider in regards to how they incentivize conflict prevention and mitigation.

In this study *conflict* is defined as "a process of social interaction involving a struggle over claims to resources, power and status, beliefs, and other preferences and desires" (Rahim, 1992). However for this study, conflict is limited to that between Reclamation and another entity (e.g., individual, state agency, etc.) and conflict within Reclamation is not studied. *Conflict prevention* consists of actions taken to avoid conflict and thus occur before a conflict develops. It can include actions such as collaborative initiatives between agencies as well as public participation or stakeholder engagement programs. It is generally a proactive, ongoing process and may involve activities designed to address a specific issue in a basin, such as testing techniques for selenium removal or optimizing fish reproduction (Brown et al., 2009). Whereas, *conflict mitigation* consists of actions taken to resolve, manage, or temper a conflictive situation and thus are pursued after conflict has occurred.

Incentives are defined as both material and non-material rewards for an action, decision, or behavior and can include increased funding for personnel, programs, and activities, job stability, promotions, publications, and awards, affirmations, or positive re-enforcements by superiors. On the other hand, disincentives can simply be a lack of incentives or can include consequences for an action, decision, or behavior such as withdrawing funding for programs and activities, job insecurity, and/or disapproval, discouragement, or sanctions by

_

¹ A separate report complements this study by exploring how the factors identified here factor into the Bureau's management of water in the western United States? This supplemental case study is titled, "Understanding Incentives and Disincentives for Conflict Prevention and Mitigation in the Bureau of Reclamation: A Case Study Examination of the Bureau's Response to the Endangered Silvery Minnow in the Middle Rio Grande Basin."

² Key term definitions and acronyms are presented in Appendix A.

superiors (Brown et al., 2009). These disincentives can also include institutional weaknesses, barriers, or perverse incentives—anything that would influence an employee to not choose to pursue conflict prevention or mitigation.

1.1 Agency Background

The Bureau of Reclamation, an agency of the United States Department of Interior (DOI), was established in 1902 through the Reclamation Act (Figure 1). Reclamation is the largest wholesaler of water in the nation providing water to over 31 million people and to 1 in 5 farmers in the western United States. The water provided to farmers is enough irrigation water for approximately 10 million acres of farmland that produce 60% of the nation's vegetables and 25% of its fruits and nuts (Bureau of Reclamation, 2010). Reclamation also produces 42 billion kilowatt-hours of electricity annually making it the second largest producer of hydroelectric power in the western United States (National Research Council, 2006).

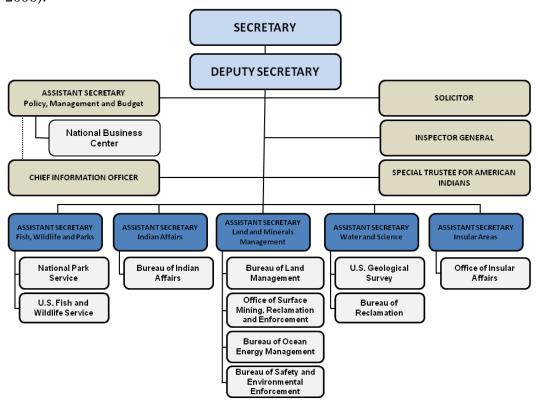


Figure 1. Department of Interior organizational chart (Department of Interior, 2012)

When first formed, Reclamation's mission was to serve as a water developer in the western United States, helping to promote economic activity through its various projects including dams, canals, and power plants. Over time that mission has changed. Today, the role of Reclamation is that of a water manager, rather than its original role as a water developer (Bowersox, 2000). The formal mission of the federal agency is to "manage, develop, and protect water

Introduction

and related resources in an environmentally and economically sound manner in the interest of the American public" (Bureau of Reclamation, 2010).

To accomplish its mission, Reclamation has identified two primary tasks, "(1) the operation, maintenance, and rehabilitation of existing structures and systems and (2) the creation and nurturing of brokered agreements among a variety of players affected by the management of water resources" (National Research Council, 2006, p. 71). While distinguished as two tasks, Reclamation realizes their interdependence, understanding that operation, maintenance, and rehabilitation of existing structures and facilities may necessitate the creation and implementation of agreements with customers and stakeholders (National Research Council, 2006).

Reclamation faces many challenges in accomplishing its mission. These challenges include water shortages, ongoing conflicts, population growth, aging infrastructure and budget cuts. Citing the fact that conflicts stemming from these challenges require additional time and resources to address, Reclamation and DOI launched initiatives such as Water 2025 Initiative and the Western Water Institutional Solutions (WWIS) Program as an attempt to prevent and mitigate conflicts and therefore avoid the costs associated with conflict (Brown et al., 2009; Department of Interior & Bureau of Reclamation, 2003).

1.2 Significance and Justification of Research

Research on the relationship between water conflict and institutions provides a framework for understanding how incentives and disincentives within Reclamation might foster or reduce conflict in an office, project, or water basin. Yoffe et al. (2003) found that contrary to common belief, the climate type and changes in the economy or demographics of a region did not provide a good indicator of conflict over water in international basins. Rather, the likelihood and intensity of conflict rises as the rate of change within a basin exceeds the ability of its institutions to absorb the change or, more simply, basins with lower 'institutional capacity,' or ability to adapt to change had increased conflict (Yoffe et al., 2003). They found that conflict arises when institutions do not have the infrastructure or communication capability to handle rapid change. Similar studies in the state of Oregon and the Upper Colorado Region of the Reclamation were conducted under the assumption that limitations on water supply would be the primary cause of conflict. However, it was determined that rapid implementation of new legislative requirements was the most common trigger of conflict (Eidem, et al., 2008; Fesler, 2007). If one understands how incentives and disincentives fit into an individual employee's or Reclamation office's decision making process one can identify areas to improve the institution and increase institutional capacity, thus reducing risk of conflict.

1.3 Previous Research

1.3.1 Previous Studies on Conflict and Collaboration in Reclamation

In previous research on conflict prevention in Reclamation, the agency found a strong desire to promote collaboration as a means of conflict prevention as indicated by Reclamation and Department of the Interior policies. Reclamation updated all job descriptions to include "collaborative competency requirements" and implemented training plans for employees to learn effective collaboration techniques (Department of the Interior & Bureau of Reclamation, 2008). Reclamation also established an excellence award for employees that develop effective relationships and promote collaboration within Reclamation and with outside stakeholders. The agency then developed a performance benchmark that requires all employees to collaborate with customers and stakeholders (Brown et al., 2009). Reclamation's customers and stakeholders also want to provide increased input through collaborative processes. In fact, they wished to be engaged early and often in Reclamation projects (National Research Council, 2006). This begs the question, if all parties seemingly want to increase collaboration and cooperation inside and outside of Reclamation, is this occurring in order to prevent conflict? Do the formal policies of Reclamation lead to conflict prevention? What else may be driving decisions within Reclamation to pursue these or other actions?

Studies on Reclamation decision making found that Reclamation over relies on crisis management which can result in poor decisions that are either illogical or ineffective (Bureau of Reclamation, 2004, 2006; National Research Council, 2006). Specifically the consequences relying on crisis management included a:

Lack of credibility inside and outside the agency, poor accountability for a decision and implementation, damage to image and reputation inside and outside the agency, decline of morale and internal frustration, inefficient use of time, personnel and financial resources, loss of control of decisions to others, such as the courts and or Congress (Bureau of Reclamation, 2004, p. 15).

Reclamation also acknowledged that reliance on crisis management is not in the best interest of the agency (National Research Council, 2006). In addition to the consequences listed above, litigation and other efforts necessitated by conflict are costly to Reclamation at a time when resources are already stretched thin (Brown et al., 2009). This raises the question, if costs are decreased through proactive rather than reactive management why might an office in Reclamation not pursue collaboration and/or conflict prevention?

One possibility identified by Reclamation was the organizational structure of Reclamation. Two studies by Reclamation noted how the public administration theory of New Public Management (NPM), which promotes decentralization of government, heavily influenced the structure and organization of Reclamation (Bureau of Reclamation, 2004; National Research Council, 2006). In the 1990s,

Introduction

Reclamation was one of the federal agencies in the United States to adopt the principles of NPM and this resulted in the devolution of the organization through the reductions in oversight, elimination of senior management positions, delegation of operational authority, and a reduction in mandatory policies. The reasons for this reorganization included changes in the agency's function and work, reductions in funding and human resources available, as well as the desire to streamline the organization, reduce administrative layers, and keep the work close to Reclamation's projects and customers (National Research Council, 2006). As noted by the National Research Council (2006), the result of this reorganization was a reduction in staff by 10 percent and increased variability in decision making across regional, area, and project offices.

The reports found that the decentralization of Reclamation led to the formation of informal decision making processes within Reclamation (Bureau of Reclamation, 2004, 2006; Department of the Interior & Bureau of Reclamation, 2008). Decentralization then led to confusion amongst Reclamation offices and employees as there was a lack of a clearly defined decision making process and clearly defined roles and responsibilities. Confusion was accompanied by inconsistency in the application of Reclamation policies (Bureau of Reclamation, 2004; National Research Council, 2006). This was in part attributed to the fact that without mandatory policies and guidelines, different regions developed unique characters and the organization and function of the offices varies (National Research Council, 2006). Inconsistency across Reclamation can also be explained by the varying degrees to which individuals adopted Reclamation policies. In Decision Process Team Review of Decision Making in Reclamation (2004) the authors note that decision making processes in Reclamation have become less dependent on formal decision making processes and more dependent on individual leaders (Bureau of Reclamation, 2004). To address this issue Reclamation produced guidance documents on decision making for its employees (Bureau of Reclamation, 2006; Department of Interior & Bureau of Reclamation, 2008)

With this in mind it is important to determine what are the actual incentives and disincentives considered by employees and their offices as they make decisions to purse conflict prevention and mitigation. Do formal policies have influence or are there other motivators that Reclamation may be purposefully or inadvertently providing? This research identifies other potential motivators outside formal policies, thus addressing this gap in information and complementing the previous research done by Reclamation.

1.3.2 OSU Preliminary Study of Incentives and Disincentives

The research presented here is part of a larger collaborative study between Reclamation and Oregon State University (OSU) that seeks to develop a set of specialized tools and teaching modules for Reclamation water managers. This larger collaborative study is a successor to the WWIS Program. These tools aim to aid Reclamation in detecting, preventing and mitigating water-related conflicts, as well as to foster collaboration.

OSU completed a preliminary investigation into the topic of incentives and disincentives in 2009 (Brown et al., 2009). As part of the study, the authors conducted two hour-long focus groups of individuals from Reclamation and its agency partners in Billings, MT and Albuquerque, NM. The results from the focus groups reiterated previous Reclamation report findings that the agency is reactive instead of proactive but also that litigation and a desire to keep issues from needing upper management attention were incentives for cooperation (Table 2) (Bureau of Reclamation, 2004, 2006; National Research Council, 2006). Thus, these initial findings on incentives and disincentives for conflict prevention and mitigation in Reclamation's water management indicate that Reclamation may be creating a rewards-based culture that promotes conflict instead of conflict prevention and cooperation (Brown et al., 2009).

Table 2. Themes of focus group discussions (Brown et al. 2009)

Table 2. Themes of focus group discussions (Brown et al. 2009)		
Handling of Conflict in Bureau	 Conflict prevention is neither discussed nor recognized in Reclamation (though the Department of Interior recognizes the need for collaborative skills and may offer awards for it) Conflict is recognized, through rewards, promotions and public attention; proactive collaborative skills are not as highly valued as resolution skills 	
Incentives for Cooperation	 Threat of litigation is a major incentive to mitigate for conflict (and save money); however a lot of money is tied up in litigation (e.g., Endangered Species Act cases) leaving little funding for preventative action Pressure present at higher levels of management to avoid engaging in a conflict Promotions may come with conflict avoidance Employees prevent conflict in lower-level management to avoid involving the higher-level managers 	
External Factors	 Changes in administration influence the dynamics within Reclamation and conflict management Decision-making occurs at a higher level and higher level managers fail to heed warnings from regional and/or area managers that decisions may result in conflict; this may be interpreted in two ways: Higher level decision-makers wait to see the conflict before they act against it, or Higher level decision-makers fail to recognize the value of local knowledge or bottom-up information in making decisions 	
Tendencies of Bureau of Reclamation	 Resistant to change Reliance on crisis management Diversion of resources flow toward conflict; it is difficult to get resources for prevention of conflict 	

This preliminary investigation determined that there is a disincentive to proactively manage conflict and promote cooperation since experience managing conflict is valued within Reclamation and often rewarded through promotions. Likewise, basins and offices managing conflicts tend to receive more funding than those proactively managing their projects to prevent conflict. In fact, Reclamation employees noted that not only did those projects in conflict receive more funding

Introduction

but those resources were diverted from proactive, cooperative offices (Brown et al., 2009). This occurs because offices are faced with increased responsibilities and tasks while overall funds for Reclamation remain steady. Therefore, they are often competing for resources such as funding and personnel within a region as facilities/offices are typically managed on a portfolio basis. While not noted in the report by Brown et al., other research on Reclamation's decision making processes reveal that the primary driver in decision making is the budget process (National Research Council, 2006).

While Brown et al. concluded that there were greater disincentives for conflict prevention and mitigation. Incentives for cooperation were identified as well. One major incentive for conflict prevention and mitigation noted in the focus groups run by Brown et al. (2009) was litigation. Litigation is typically the result of conflict and carries a high cost; however, it can often be avoided through proactive, collaborative efforts. Yet, it is important to note that this is not necessarily an incentive for individuals; instead it is an incentive for Reclamation as a whole. Another incentive for cooperation was the desire to keep upper management from being involved with a project, which would be necessary if conflict were to occur. However, little is known about the strength of this incentive (Brown et al., 2009).

Brown et al.'s work also found that external factors influenced conflict prevention and mitigation as well. The focus groups also identified what they perceived to be four major drivers in Reclamation's choice to pursue proactive cooperation or to do nothing and allow conflict. They were stakeholders, upper management, individual employees, and resources (human and economic). Stakeholders influence Reclamation decisions and actions by giving litigation threats, attracting negative attention, and putting pressure on local managers. Upper management refers to the offices in Denver and Washington D.C. whose level of support and interaction with regional offices sometimes determines which action is taken and to what extent. Individual employee's inclination towards conflict or cooperation was seen to be dependent on his/her personal comfort level with conflict or if there is personal gain associated with conflict. The final driver, resources, influenced this decision as funding and personnel are stretched very thin and therefore there is an incentive for individuals and offices to act in ways that ensure they will have access to these resources (Brown et al., 2009).

Brown et al.'s analysis and findings focused on explicit incentives and programs for collaboration. They performed a preliminary investigation of incentives and disincentives for individuals, but did not feel they had fully explored the subject nor did they consider how these factors play into decision making. This research expands upon Brown et al.'s preliminary work by further investigating which incentives and disincentives, particularly those for individuals within Reclamation, are present in the federal agency. While previous studies have identified a number of incentives and disincentives within Reclamation, the evidence is solely anecdotal understanding of how these factors influence decision

Introduction

making within Reclamation remains as a critical knowledge gap. By understanding this influence on Reclamation water management, Reclamation can identify strategies for promoting conflict prevention and mitigation and thus increase its institutional capacity. This study also serves as a follow up to the Reclamation studies on decision making to see if there has been any change since the Managing for Excellence program started five years ago (Reclamation 2006).

The applicability of this research is not limited to Reclamation. Understanding what incentives and disincentives may exist within a natural resource management agency provides a starting point for other agencies or organizations to identify what incentives and disincentives may exist within their institution as well. It also provides a roadmap of what incentives/ disincentives to actively avoid. Understanding how incentives and disincentives play out within water management decisions in other organizations also provides insight into how they may impact decisions in similar institutions.

1.4 Objectives

With an understanding of what prior research has revealed on this subject, the objectives of this research study are as follows:

- 1. Identify incentives and disincentives for conflict prevention in Reclamation's water management;
- 2. Identify incentives and disincentives for conflict mitigation in Reclamation's water management;
- Develop recommendations on ways Reclamation can increase its institutional capacity by incentivizing conflict prevention and mitigation; and
- 4. Develop generalized recommendations for water management organizations and agencies on how to incentivize conflict prevention and mitigation and how to avoid undesirable disincentives.

2.0 Methods

Two methods were employed to collect data to answer the first component of the research question (i.e., identification of incentives and disincentives for conflict prevention and mitigation in Reclamation): surveys and focus groups of Reclamation water managers (see section 2.2. for a detailed explanation). This study builds upon the work previously done by Brown et al. by empirically testing whether the anecdotal incentives and disincentives mentioned in the focus groups in Billings, Montana and Albuquerque, New Mexico are also present in other offices as well as providing an opportunity to discuss how those factors play into decision making through focus groups. The theoretical foundation that serves as the basis for the study methodology is first explained prior to laying out the data collection methodology.

2.1 Theoretical Foundation

The themes from the focus groups conducted by Brown et al. provide a starting point for identifying what incentives and disincentives for conflict prevention exist within Reclamation. Research in the fields of psychology and public administration provides context for understanding how these factors are incentives and disincentives and for identifying other potential factors. In public administration several groups of factors influence the decisions and actions of bureaucrats: 1) the direction provided by the public, the legislature (or elected officials in general), the organization/bureaucracy, and managers through various external incentives and/or 2) his/her desire to satisfy his/her own needs. The relative influence of these groups of factors is an area of debate within the field of public administration. Different theories emphasize the dominance of one over the other.

On one side of the spectrum is the politics-administration dichotomy. This dichotomy postulates that government agency actions (administration) only implement the policy decisions made by elected officials (politics) (Denhardt, 2010; Smith & Frederickson, 2003). Principal-agent theory, or agency theory, attempts to explain the range and form of legislative and executive control over bureaucracy. In this theory elected officials are seen as principals and bureaucracies are agents, where, as with the politics-administration dichotomy agents act as the principals dictate. While theorists like Wood and Waterman (1994) found in their research that responsiveness to political control was the norm, agency theory notes that bureaucracies are often caught between the desires of the policymakers and the bureaucracy's preferences, or, in other cases, the past agendas of elected officials (Smith & Frederickson, 2003).

In their work on agency theory, Wood and Waterman conclude that there are dynamic bidirectional relationships in which those in politics indicate preferences to bureaucrats and vice versa. Wood and Waterman believe it to be healthy for bureaucracy to assert this influence as bureaucrats are often better informed than policy makers on the policy issue or how it best fits into the bureaucratic process. They also state that bureaucratic resistance to implementation of a policy defined by elected officials is often more in-line with public preference. While this may be the case in some instances, there is also the potential for the bureaucracy to resist change simply because it is easier to continue with old policies (Smith & Frederickson, 2003).

Further along the continuum of the amount of control held by bureaucrats in their decisions and actions are theories of bureaucratic control. These theories discuss the issue in terms of cooperation or resistance to direction from elected officials. Martino Golden (1992) and other theorists attempt to examine the complex relationship between bureaucrats and elected officials and the potential reasons for cooperation or resistance. Golden found that resistance depends upon five factors, the bureaucrat's 1) careerist ideology, 2) the dominant agency profession, 3) the agency's spirit, 4) the agency's history, and 5) the confidence of the careerists. This ties in with Judith Gruber's (1987) conclusion that bureaucrats are influenced by their professional associations and the technology of their work. Gruber concludes that bureaucrats tend to resist controls and to be self-serving. She argues that the characteristics, values, and ideas of the individual bureaucrats themselves influence policy implementation (Smith & Frederickson, 2003).

Based on these theories of agency and bureaucratic control, incentives and disincentives such as pressure from management and funding allocation are included in the survey inquiry looking into incentives and disincentives. Yet at the same time it is also recognized that bureaucrats have some discretion in their decision making and personal factors impact how this discretion is used. Therefore, this study assumes that Reclamation employees in some ways serve as agents of the government and in other ways are influenced by personal motivating factors. With this in mind it is important to determine what personal motivators might be incentives or disincentives for conflict prevention and mitigation. To explore that, one must first consider what general factors are known to motivate people.

Most of the research on work motivation and personal motivators occurred before 1970. Advances were made in the field after 1970 but the amount of research has drastically declined since that time (Steers, Mowday, & Shapiro, 2007). In regards to motivation theory, specifically in the public sector, limited work has been done (Wright, 2001). The study presented here will help to fill this gap and to do so will rely on classic theories of motivation and some more modern theories to lay a theoretical foundation for the formation of the survey and focus group questions that speak to personal motivation.

Early researchers and theorists such as Maslow (1943) and later Maslow with Frager (1987), McClelland et al. (1953), and Herzberg (1959) focus on personal motivators. Maslow argues that a hierarchy of needs (physiological needs, safety needs, social needs, esteem needs, and self-actualization needs) exists where once a lower set of needs are met an individual would find him/herself desiring to meet the next set of needs, which serves as an individual's motivations for action (Maslow, 1943; Maslow & Frager, 1987). Research by McClelland et al. (1953) on achievement motivation found that people are not all the same and have different tendencies that motivate their propensity toward valuing certain needs over others. He identified three groups of individuals: gamblers, conservative individuals, and achievement-motivated people. He also established his need-based motivational model which proposes three needs that motivate: the need for achievement, the need for authority and power, and the need for affiliation.

Like McClelland, Herzberg also identified achievement as a motivating factor in his motivator-hygiene factor theory (or two way theory). He also identified recognition, work itself, responsibility, and advancement as other motivating factors (i.e., those factors that produce satisfaction and motivate employees). Hygiene factors (i.e., factors that result in dissatisfaction) include policy, relationship with supervisor, work conditions, salary, status, security, relationship with subordinates, and personal life (Herzberg, 1959).

In recent years, and relevant to this study, regulatory focus theory offered the idea that employees can be promotion focused or prevention focused (Crowe & Higgins, 1997). Those that are promotion focused are concerned about advancement, growth, and accomplishment. Those that are prevention focused are motivated by security, responsibility, obligation, and rule-following (Gorman et al., 2012). Within the context of this study incentives and disincentives for promotion and prevention focused individuals are included in the survey.

With an understanding that both individual needs and direction from the public/legislature influence bureaucratic action, both theoretical foundations are included in the survey and focus group questions. The questions were written to investigate a combination of personal motivating factors (e.g., career advancement and awards) as well as more traditional top-down organizational factors (e.g., organizational policy, orders handed down from a higher, often elected, authority). The degree of bureaucratic control or autonomy is not investigated, but rather it is surmised that aspects of bureaucratic control and personal motivators may serve as incentives and disincentives for conflict prevention and mitigation.

2.2 Data Collection and Analysis

A mixed-methods approach using a survey and focus groups was taken to identify incentives and disincentives for conflict prevention and management. The

sections below explain how participants were recruited and how data was collected and analyzed.

2.2.1 Participant Recruitment

Participants in the survey and focus group were recruited from two conflict management training courses at Reclamation offices in Sacramento, California and Boise, Idaho. The course, offered as part of the collaborative project between Reclamation and OSU, sought to provide Reclamation employees with training on skills in facilitation and conflict management and transformation as well as educate participants about general trends in water conflict. Under the collaborative study, instructors from OSU taught the course in each of the five regions of Reclamation. These two courses were the courses for the Mid-Pacific and Pacific Northwest Regions. The course was advertised to all water managers at the Sacramento and Boise offices. Individual employees or teams of employees elected to participate in the course. Thus, participants in the survey and focus groups were self-selected in the sense that they chose to take a conflict management course or their supervisor wanted them to take the course. The survey and focus groups were conducted at the end of the two day long course. An explanation of the approach for each of the methods utilized in this study (i.e., a survey and focus groups) is outlined below.

2.2.2 Survey

Twenty-one Reclamation employees participated in the survey, including 11 from Sacramento, CA and 10 from Boise, ID. In the survey, participants were asked to rate the degree to which they agreed certain factors acted as motivators for conflict prevention and mitigation or served as disincentives for prevention and mitigation of conflict. Participants were also asked to rate the importance of those factors in their decision making as water managers at Reclamation. The survey also provided an opportunity to list out other incentives and disincentives not included in the survey and provide an explanation of the degree to which they impact decision making. See Appendix B for a copy of the survey. The goal of the survey was to provide individuals an opportunity to report their views independent of what others might think.

On applicable survey questions quantitative analysis was completed using Excel to calculate descriptive statistics including percentage of respondents with certain views. Due to the low number of surveys additional statistical analysis was not conducted.

Qualitative questions were analyzed using content analysis, specifically looking at themes, characters, concepts, and semantics. Codes were developed using a combination of inductive and deductive approaches. Some codes were developed deductively based on information collected during two earlier focus groups in the fall of 2009 and theories of motivation and bureaucratic control. Other codes were developed inductively, pulled from the data collected at the two focus groups in California and Idaho. Using Grounded Theory, these codes were developed by reviewing all responses and identifying common responses/topics.

Codes were not limited to a single key word; rather the answers were coded by theme. A survey answer could contain several themes. With the coding scheme established each answer was assessed to identify which themes or codes it contained. Totals for each code were then calculated.

2.2.3 Focus Groups

The focus groups were held after the surveys were collected with the intent of providing participants further opportunity to expand upon the responses they provided in the survey as well as discuss group incentives and disincentives. Twenty-one Reclamation employees participated in the two focus groups, including 11 from Sacramento, CA and 10 from Boise, ID. During the first session in Sacramento, CA extensive notes for the analysis were collected by an observer. The second session in Boise, ID was recorded and the proceedings were transcribed.³ The groups were given the opportunity to discuss what was asked on the survey and were also specifically asked to discuss further how various incentives and disincentives for conflict prevention and mitigation play out in group decision making. Questions asked included "What encourages a Reclamation office or project (vs. an individual) to pursue conflict prevention?" "What specific incentives does Reclamation provide to offices and projects for cooperative activities and initiatives in water management?" and "What discourages conflict management/mitigation in a Reclamation office or project?" (see Appendix C for the full list of questions). Focus group participants were given the opportunity to provide additional comments for two weeks after the focus group session via a website sent to them after the focus group concluded. The intention of providing this venue for further input was to allow participants to share any information they remembered after the session or did not feel comfortable sharing in the presence of others. The online platform provided a way for the participants to provide input anonymously. No participants opted to submit information online.

Data collected from the focus group discussions were analyzed using content analysis, specifically looking at themes, characters, and concepts. Following the methodology described above for the qualitative survey questions, codes for the focus groups were also developed both inductively (from the transcript and notes) and deductively (based on information the 2009 focus groups, theories of motivation and theories of bureaucratic control). Since the discussion in the focus group organically switched back and forth from disincentives and incentives for conflict prevention and conflict mitigation, each count for a code was also associated with one of seven topics: 1) disincentive for conflict prevention, 2) incentive for conflict prevention, 3) incentive for conflict mitigation, 4) general disincentive (i.e., applies to both conflict prevention and mitigation), 5) general incentive, 6) cause of conflict, and 7) potential solution for conflict. The sixth and seventh topics (cause of conflict and potential solution)

_

³ The first focus group was not recorded as IRB approval had not yet been obtained for recording the session—approval had only been obtained to conduct the focus group. Approval for recording was secured in time for the second focus group.

were added to the analysis of incentives and disincentives since the focus group participants spent a fair amount of time discussing the topics and the causes/solutions that are closely linked with the incentives and disincentives analyzed. While both focus group discussions were coded, counts were not taken for the Sacramento focus group as the focus group session was not transcribed. General themes were pulled from the notes taken during the discussion.

3 Results

3.1 Surveys

Survey respondents were asked to rate the degree to which they agreed or disagreed that a particular factor served as an incentive or disincentive for conflict prevention or mitigation (Table 3). They were also asked to rate the importance of these factors in decisions made in Reclamation. An opportunity was given for the survey participants to list additional incentives and disincentives not mentioned in the survey as well as an opportunity to note how important the factors they listed were in the decision making process at Reclamation. When presented the opportunity to list additional incentives and disincentives for conflict prevention and mitigation, some respondents repeated the incentives and disincentives listed previously (e.g., litigation). Others offered factors that encompassed the specific incentives and disincentives analyzed in the survey. Some of the factors identified by one or two survey respondents were addressed by the focus groups and, thus, will be discussed in greater detail in the results of the focus group analysis in the subsequent section.

Table 3. Incentives and disincentives rated by Bureau of Reclamation employees

- I a	Table 5. Incentives and disincentives rated by Bureau of Reclamation employees				
	Conflict Prevention	Conflict Mitigation			
Incentives	 Consideration of conflict prevention experience in career advancement Awards (e.g., merit bonuses, merit pay increases, & other recognition) Pressure from higher management Promotion of collaboration with others outside of Reclamation Allocation of financial resources to conflict prevention efforts Allocation of human resources to conflict prevention efforts 	 Consideration of conflict mitigation experience in career advancement Awards Pressure from higher management Allocation of financial resources to conflict mitigation Allocation of human resources to conflict mitigation 			
Disincentives	 Lack of recognition for conflict prevention efforts Consideration of experience mitigating conflicts in career advancement Awards for conflict mitigation Limited availability of funding Reallocation of financial resources (e.g., resources from projects with conflict prevention efforts to projects with conflict Reallocation of other resources (e.g., resources from projects with conflict prevention efforts to projects with conflict 	Rating on disincentives for conflict mitigation was not studied in this survey ⁴			

⁴ In the work done by Brown et al. (2009), no disincentives for conflict mitigation were identified and thus are not rated. However, respondents were given the opportunity to report disincentives.

A majority of respondents disagreed or strongly disagreed that consideration of conflict prevention in career advancement (14 respondents or 67%), awards for prevention efforts (12, 57%) and allocation of human resources (14, 67%) and financial resources (13, 62%) incentivized conflict prevention (Figure 2). However, a majority agreed or strongly agreed that pressure from higher management (11, 55%) and the promotion of collaboration within Reclamation (14, 67%) served as an incentive for conflict prevention.

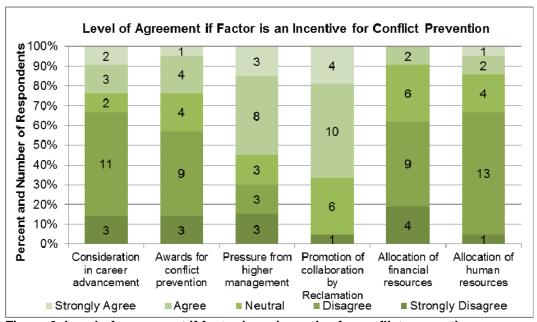


Figure 2. Level of agreement if factor is an incentive forconflict prevention

No distinct overarching themes were found in the analysis of the open ended question asking for incentives for conflict prevention within Reclamation (Table 4). However, if the various incentives are categorized as personal (i.e., factors tied to an individual rather than coming from the agency), organizational, or both it appears that the survey respondents were aware of a number of additional organizational incentives.

Table 4. Other factors that encourage conflict prevention

Code	Detail Code	Category Code	Category Count
Leadership pursues/encourages conflict prevention	2		13
Desire to avoid litigation	2		
Official policy dictates action	2		
When resources are available	1	Organization/	
Have time to pursue conflict prevention	1	agency	
Improves public relations	1	Tolatoa	
Politics - political players favor conflict prevention	1		
Training available to build skillset	1		
Personal desire to prevent conflict	1	Personal	3
Reduces workplace stress	1	reisonai	3
Efforts build trust	2		
Efforts lead to agreement	2	Both	4
Way of postponing decision making	1		

In regards to disincentives for conflict prevention, an overwhelming majority of respondents either agreed or strongly agreed that reallocation of financial (16, 76%) and human resources (17, 81%) to conflict mitigation was a disincentive for conflict prevention (Figure 4). Likewise a majority of Reclamation employees also considered lack of recognition for prevention efforts (14, 67%) and limited funding for these efforts (14, 67%) to be a disincentive for conflict prevention. Yet it is also important to note that a large number of respondents had no opinion/were neutral on whether awards for conflict mitigation (7, 38%) or consideration of experience with mitigation in career advancement (9, 43%) served as a disincentive for conflict prevention.

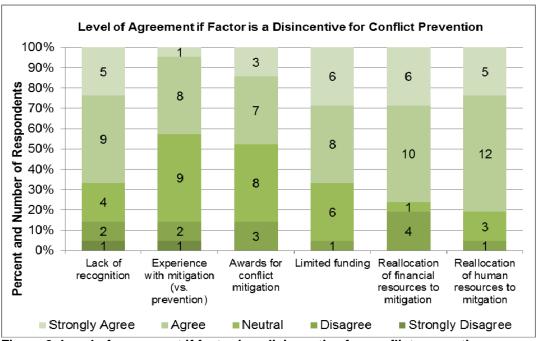


Figure 3. Level of agreement if factor is a disincentive for conflict prevention

The primary additional disincentive for conflict prevention provided by the survey respondents was a lack of resources, which included a lack of funding, time, staff, and authorization to pursue the conflict prevention effort proposed (Table 5). In addition to over half of the respondents noting a lack of resources, almost a quarter of the respondents also noted that resources were redirected from conflict prevention efforts. This reaffirms the respondents' high rating of reallocation of resources as a disincentive for conflict prevention. The culture within Reclamation was also cited frequently as a disincentive for conflict prevention. Comments on culture as a disincentive included explanations of how Reclamation is reactive rather than proactive and that employees often try too much to please others outside of Reclamation at the expense of Reclamation's mission/goals.

Table 5. Other factors that discourage conflict prevention

Code	Count
Lack of resources	13
Culture of Bureau	9
Resources redirected from conflict prevention to conflict mitigation	4
Hard to see the benefit and questions as to whether it is really beneficial	3
Politics (interfere at last minute, change direction of agency, etc.)	3
Existing adversarial relationships	1
Lack of official policy	1
Limited alternative efforts/options available	1
Reclamation's desire to be in control	1

In regards to the importance of factors in Reclamation's decision to pursue conflict prevention, level of funding, possibility of litigation, and pressure from national management were considered "extremely important" by a majority of respondents (14 respondents or 67%) (Figure 5). Pressure from the regional offices as also had a majority of respondents reporting that they thought it was extremely important in decision making (11, 52%); pressure from area offices was rated by most employees as slightly important (8, 38%) or somewhat important (9, 43%). The importance of awards in decision making was rated the lowest of the factors investigated. Forty-three percent of respondents (9 participants) rated it as not important and 33% (7 participants) as only slightly important. Similarly fewer respondents thought career advancement was an important motivating factor (29% or 6 respondents thought it was not important); however 48% (10 respondents) thought it was slightly important (Figure 5).

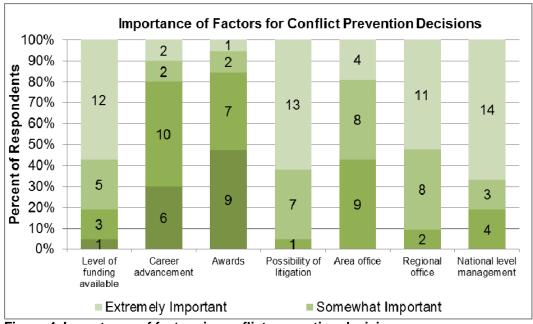


Figure 4. Importance of factors in conflict prevention decisions

A number of respondents also noted that pressure from outside of Reclamation also incentivized conflict mitigation—not just pressure from Reclamation (Table 6). A desire to stop litigation proceedings was also cited as an incentive to pursue conflict mitigation. Other factors noted by respondents included the fact that conflict mitigation is necessary to accomplish Reclamation's mission, that it improves public relations, and that resources were available.

Table 6. Other factors that encourage conflict mitigation

Code	Count
Pressure from outside Bureau	6
Pressure from within Reclamation	3
Litigation (desire to address/stop)	3
Resources available	2
Necessary to accomplish mission	2
Improves public relations and builds trust	2
Recognition for effort	1
Authorized to pursue action	1
Cheaper than resolution in short term	1
Employee learns by doing	1
Allows delay of tougher decisions	1

In regards to incentives for conflict mitigation, a majority of participants agreed or strongly agreed that pressure from higher management (17, 81%), allocation of financial resources (14, 67%), and allocation of human resources (15, 71%) were an incentive for conflict mitigation (Figure 6). There was disagreement amongst respondents about whether consideration of mitigation efforts in career advancement and awards for conflict mitigation were incentives. Almost equal proportions of respondents had no opinion (8, 38%) as did agree or

strongly agree (7, 33%) or disagree (5, 24%) that consideration of conflict mitigation in career advancement served as incentives for mitigation. Likewise the responses rating awards as an incentive were split with a high rating of neutral (9, 43%), though the number that agreed that awards were an incentive was double that of those who disagreed (8, 38% and 4, 19%, respectively).

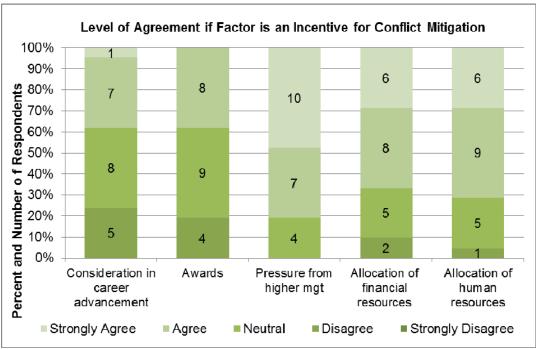


Figure 5. Level of agreement if factor is an incentives for conflict mitigation

Several of the disincentives for conflict mitigation mentioned above were also cited as disincentives for conflict prevention, including Reclamation's culture and lack of resources (Table 7). A few respondents also noted that the difficulty and discomfort associated with pursuing conflict mitigation was a deterrent.

Table 7. Other factors that discourage conflict mitigation

Code	Count
Culture of Bureau	5
Lack of resources	5
Difficult to do/discomfort involved	4
Lack ability to pursue mitigation	2
Legal constraints	2
Politics	2
Lack of recognition	1
Lack of an official Policy	1

Respondents rated the importance of factors in Reclamation's decision to pursue conflict mitigation in a similar fashion to the importance rating for conflict prevention (Figure 6). A majority of respondents rated the level of funding available (11, 52%), possibility of litigation (12, 57%), and pressure from national

management (12, 57%) as extremely important in choosing conflict mitigation. As with conflict prevention, respondents reported pressure from management as increasingly important as you move up in levels of management.

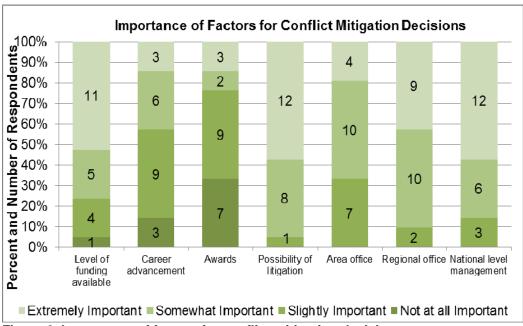


Figure 6. Importance of factors for conflict mitigation decisions

3.2 Focus Groups

The majority of both conversations focused on disincentives for conflict prevention. In Boise the most frequently referenced disincentive was the lack of available resources (Table 7). The resources in question included, time, money, and staff or referred to a general lack of resources (Table 9). In addition to the discussion about a lack of resources for conflict prevention, it was also mentioned a few times that resources were redirected from conflict prevention efforts to projects needing conflict management. The culture of Reclamation as a disincentive was another common theme (Table 7). The primary disincentive within Reclamation's culture was the viewpoint that Reclamation is a reactive agency that is crisis management driven (Table 10). A lack of planning or forward thinking was also cited frequently as a disincentive for conflict prevention in both Boise and Sacramento (Table 7). While no one ever specifically referenced a disincentive for conflict mitigation during the Boise focus group discussion, general disincentives were discussed that may apply to both conflict prevention and mitigation (Table 7). Two primary general disincentives emerged during the discussion: lack of leadership and legal constraints associated with the fact that in order to do something (i.e., devote money and other resources to a project) Reclamation must have authorization from Congress to pursue that path.

Table 8. Counts for disincentives from Boise, ID focus group

Primary Code	Disincentive for Conflict Prevention	General Disincentive	Total
Lack of resources	12	0	12
Culture	7	3	10
Lack of leadership	3	5	8
Legal/authorization related constraints	3	5	8
Lack of planning and looking into the future	8	0	8
Confusion about mission/vision	2	2	4
Difficult to do/hard to measure	4	0	4
Organizational structure	3	1	4
Resources redirected	3	0	3
Reclamation/employees trying to please others or play it safe	2	1	3
Collaborative competency	2	0	2
Lack ability/tools	1	1	2
Lack of recognition	2	0	2
Politics	2	0	2
Cost	1	0	1
Lack of official guidance or policy	1	0	1
Litigation	1	0	1
Organization is disjointed and efforts are piecemeal	1	0	1

Table 9. Subcodes for lack of resources as a disincentive

Secondary code (Lack of Resources)	Disincentive
Lack of time	4
Lack of funding	3
Lack of staff	2
General lack of resources	2

Table 10. Subcodes for culture as a disincentive

Secondary code (Culture)	Disincentive
Reactive and driven by crisis management	5
Slow to change	3
Engineering focus	2
Not collaborative	1

A lack of resources and Reclamation's organizational culture were also the dominant themes that emerged from the Sacramento focus group regarding disincentives for conflict prevention and the specifics of those themes mirrored what was discussed in Boise. In addition to noting similar factors as Boise, the participants in Sacramento also discussed how there was an "acceptable bandwidth" of conflict that would allow you to gain recognition for managing/mitigating the conflict but also avoid pressure or pushback from higher management. Conflict was also seen as something that was, for better or worse, an unavoidable or entrenched part of Reclamation's projects. Another factor that

Results

kept coming up in the Sacramento focus group discussion was the disjointed and piecemeal nature of Reclamation's policies. A final theme that emerged from the Sacramento focus group was the role of politics and higher management. Participants expressed frustration that they would work towards laying the foundation for conflict prevention or would be mitigating conflict when a decision would come down from Congress or the national office of Reclamation that would overrule their previous work and findings.

In regards to incentives for conflict prevention and collaboration, no strong themes emerged in Boise (Table 11). In both Boise and Sacramento it was noted that the presence of strong leadership promoting conflict prevention and mitigation served as an incentive for those decisions. The collaborative competency requirement for all Reclamation employees was also referenced as was the fact that pursuing conflict prevention and mitigation helped build trust and better relationships with stakeholders (Table 10).

Table 11. Coding counts for incentives for conflict prevention and mitigation

Code	Incentive for Conflict Prevention	Incentive for Conflict Mitigation	General Incentive	Total
Strong leadership	2	0	2	4
Build trust/relationships	1	0	2	3
Collaborative competency	2	0	0	2
Personal desire	1	0	0	1
Recognition	0	1	0	1
Saves money	1	0	0	1

In the Sacramento discussion of recognition of conflict mitigation, there was disagreement amongst the focus group participants if mitigation would earn you a promotion or award. Some said that it would while others said it might get you noticed or be necessary to advance in Reclamation, but there was not a strong relationship between mitigating conflict and getting an award or promotion. Recognition for conflict mitigation was only briefly mentioned once in Boise.

In addition to discussing various incentives and disincentives for conflict mitigation and prevention, focus group participants in Boise also offered insights into the source or cause of conflict within Reclamation as well as provided ideas for possible solutions to conflict and ways to promote conflict prevention and collaboration (Table 12 and Table 13). The culture and organizational structure/process for Reclamation decision making were both seen as causes of conflict. Proposed solutions for conflict or ways to promote conflict prevention included doing more planning, meetings with stakeholders, and other actions that help Reclamation look forward and anticipate problems that may arise in the future in order to address them before they become a problem. Other solutions mentioned were providing additional resources to conflict prevention and mitigation as well as promoting strong leadership and leaders that are willing to pursue conflict prevention.

Table 12. Counts for causes of conflict identified in Boise, ID focus group

Code	Cause of Conflict
Culture	2
Organization is disjointed and efforts are piecemeal	2
Different customer base	1
Lack ability/tools	1
Lack of planning and looking into the future	1

Table 13. Counts for solutions proposed in Boise, ID focus group

Code	Solution
Do more planning, meet with stakeholders, and looking into the future	4
Provide additional resources	2
Promote strong leadership and leaders focused on collaboration	2
Address legal/authorization related constraints	2
Change culture	1

4 Discussion

4.1 Findings

These results indicate that there are more disincentives for conflict prevention than incentives for it (Table 14). However, it is important to note that simply the presence of a greater number of disincentives than incentives does not necessarily translate to a greater influence on Reclamation decision making. The following is a discussion of the incentives and disincentives identified in this study and how they may influence decision making regarding conflict prevention and mitigation.

Table 14. Summary of incentives and disincentives identified

Tab	Table 14. Summary of incentives and disincentives identified		
	Incentives	Disincentives	
Conflict Prevention	 Pressure from higher management Promotion of collaboration with others outside of Reclamation Desire to avoid litigation 	 Culture of Reclamation (i.e., crisis-driven, water delivery focused, slow to change) Limited availability of funding, time, and staff Reallocation of financial resources (i.e., from projects with prevention efforts to projects with conflict) Reallocation of other resources (i.e., from projects with prevention efforts to projects with conflict) Politics Acceptable bandwidth of conflict Perception that conflict is unavoidable or entrenched in all projects 	
Conflict Mitigation	 Allocation of financial resources Allocation of human resources Pressure from higher management Pressure from outside Reclamation (e.g., Congress or stakeholders) Desire to resolve ongoing litigation 	 Culture of Reclamation (i.e., crisis-driven, water delivery focused, slow to change) Discomfort associated with actions needed and lack of skills to pursue those actions Limited availability of funding, time, and staff 	
General	 Trust/relationships created from collaboration, conflict prevention, and conflict mitigation efforts 	Legal authorization and other legal constraintsLack of strong leadership	

The two dominant disincentives identified in the survey and discussed in the focus groups were a lack of resources and Reclamation's organizational culture. The two are linked in a cyclical fashion. The reactive culture in Reclamation which relies on crisis management leads to a lack of resources for Discussion

more proactive initiatives. Without proactive efforts geared toward conflict prevention, conflicts will continue to arise and consume time, money, and human resources.

The results of this survey and these focus groups affirm some of the findings of previous Reclamation studies on Reclamation decision making. Despite the efforts since 2008, Reclamation employees still feel that the agency over-relies on crisis management. While these results do not speak to whether decision making is decentralized to the point where offices and individuals interpret Reclamation's mandates (a finding of a previous Reclamation study), they do indicate that direction from higher management is an important factor in decision making (Bureau of Reclamation, 2004). In the surveys pressure from management at the area, regional, and national level was rated as important, with higher levels of importance associated with the higher levels of management.

In general it seems that these employees were aware of Reclamation's desire to prevent and mitigate conflict, however, they do not feel like they have tools or resources to do so. Whether it be time, money, or staff these participants did not feel there were enough resources to proactively prevent conflict. The surveys found that resource availability was not a motivating factor for conflict prevention and the discussion groups reiterated the feeling that a lack of resources is what is keeping Reclamation from pursuing conflict prevention. However, the availability of funding for conflict prevention and mitigation efforts, is not necessarily something that Reclamation has much control over. As a federal agency, Reclamation receives funding based on allocation from Congress and can only offer its requests for funding through the presidential budget. While Reclamation lacks control over its budget in this regard it is also important to remember that Reclamation has discretion over reallocation of funds (within certain limits). A more detailed analysis of the role of budgets and funding allocation in conflict prevention and management is currently being conducted as a separate study at Oregon State University and will provide more insight into this issue when released.

Overall, employees had a hard time identifying factors that promote conflict prevention. From these results it appears that only pressure from higher management and Reclamation's promotion of collaboration serve to motivate Reclamation employees to pursue proactive prevention of conflict. While the results do not provide empirical evidence that conflict prevention is not rewarded, they do highlight the fact that a portion of Reclamation employees do not believe it is rewarded. If awards and other recognition are meant to serve as an incentive for conflict prevention, they are not serving their purpose if employees are not aware of them being awarded or do not consider them to be a sufficient incentive for conflict prevention.

In regards to conflict mitigation, pressure from management was seen as the strongest motivator (Figure 2 and Figure 5). While rewards for conflict Discussion

prevention were not viewed as a motivator (due to a perceived lack of a rewards or awareness of rewards as found in the focus groups), it is not as clear whether or not consideration of mitigation experience in career advancement was an incentive for conflict mitigation. In this survey, nearly as many disagreed with it being an incentive as agreed or were neutral on the issue. While more respondents agreed that awards for conflict mitigation were an incentive (8 respondents or 38%) than disagreed (4, 19%), a plurality of the respondents neither agreed nor disagreed. This matches the general trends in the discussion in the focus groups. Some participants felt that working in conflictive basins or projects was a way to gain experience and recognition for your work and then be promoted within the agency. Others disagreed that a simple direct correlation exists between working in a conflictive project and being promoted to a position with more authority.

Along these same lines there was no consensus regarding the collaborative competency skills required of all Reclamation employees. While 67% (14) of survey respondents felt that the promotion of collaboration within Reclamation was an incentive for conflict prevention there was no agreement how this personnel review requirement factored into decision making. In the focus groups it was discovered that some employees were not aware of the requirement while others who were aware of it did not understand how it was supposed to be implemented (i.e., how they were supposed to be evaluated on the requirement).

This disparity amongst participants also supports the findings of the previous reports on Reclamation decision making from 2004. Those reports note that because of decentralization of Reclamation information is not disseminated uniformly and individual offices and supervisors often vary in how they implement rules. At the same time it should also be noted that the strong agreement that pressure from higher management is an incentive for both conflict mitigation and prevention as well as its high importance in decision making, indicates that while decentralization has led to some variance in how rules are shared or implemented, there is cohesion in the overall message from the agency. Individuals are aware of the overall direction Reclamation would like to pursue in regards to conflict prevention and mitigation in its management of water in the western United States. However, they lack information on the details of how Reclamation is promoting that path and also lack the resources to pursue that path. This and the discussion in Sacramento over the role of politics in Reclamation decision making argue against the conclusion of the previous Reclamation decision making report and instead offers a view that certain policies from high up in the agency (or Congress) are clearly articulated and followed throughout the agency when resources are available.

4.2 Limitations of Research

The number of people surveyed is a distinct limitation of this research. With only 21 surveys statistical analysis is limited to basic statistics. This could be overcome in the future by recruiting more employees to take the survey and

Discussion

participate in focus groups at future training courses. While only 21 employees were surveyed, the results from those surveys are consistent with the findings of Brown et al. (2009) and previous Reclamation studies agency decision making (Bureau of Reclamation, 2004, 2006; National Research Council, 2006). In fact the study demonstrates that 5 years into the efforts to change and improve Reclamation decision making, the motivating factors that resulted in the trends identified in the Reclamation decision making studies remain within the agency.

While more in depth statistical analysis could not be conducted due to the low number of survey responses, it is important to note that the survey responses reveal consistent trends in what incentivizes or fails to incentivize conflict prevention and mitigation and offer internal validation of the results. As would be expected when participants disagreed that a factor encouraged conflict prevention or mitigation they also rated its importance in decision making as low (and vice versa, if they agreed it was an incentive it received a higher importance rating). One cannot claim any statistical significance for this observation, however, this internal testing of the results provides further support for the analysis.

The same issue of a small sample size applies to the focus groups. Conducing only two focus groups in two of the 5 regions in Reclamation may not have provided the opportunity to identify all incentives and disincentives. Different regions (or even areas) may have different incentives and disincentives at work in Reclamation decisions or those factors may have varying degrees of influence in different regions. Yet at the same time the focus groups in Boise, ID and Sacramento, CA offered similar views as those conducted previously by Brown et al. in Billings, Montana and Albuquerque, New Mexcio (2009).⁵

Another limitation of this piece of the study is the selection of Reclamation employees who were surveyed and participated in the focus groups. Employees self-selected participation in the training workshop at which the surveys and focus groups were conducted. This may have biased the data in that those who participate in such a workshop may view conflict as more prevalent in Reclamation (thus seeking training to deal with it). Employees who experience greater conflict at their job may also be biased toward feeling that Reclamation rewards conflict mitigation and fails to reward conflict prevention seeing more disincentives for conflict prevention and incentives for conflict mitigation.

The theoretical foundation of the incentives and disincentives included in the survey is another limitation of the survey and focus group portion of this study. It was assumed that Reclamation employees as bureaucrats were influenced by agency policy and their own preferences/needs. Also, only select personal motivators and select factors associated with bureaucratic control were included. Even within these two areas included not all factors were rated by survey participants. The decision of what factors to include was carefully considered and

⁵ Due to varied methodology and the set of questions asked the data from these two sets of focus groups cannot be combined and analyzed as one set of data.

based on the themes found by Brown et al. (2009), however, the omission of other factors such as job satisfaction, relationship with supervisor, and responsibility is a limitation nonetheless. Yet at the same time, the open ended questions provided the opportunity for respondents to add those incentives and disincentives to address the limitation of the quantitative rating questions.

4.3 Implications and Recommendations

4.3.1 Implications for the Bureau of Reclamation

Based on the feedback provided in the surveys and focus groups it appears that Reclamation is locked in a reactive, crisis management driven cycle of conflict and conflict management. When a conflict arises it often requires a large influx of resources. In the case of lawsuits these resources are required for several years or even decades. To address the issue and mitigate the conflict Congress provides funding. This action seems prudent, however, the allocation of large amounts of resources to conflict mitigation results in a lack of funds or staff available to look into the future, identify potential conflicts, and proactively address them before they develop into a bigger problem. Left unaddressed, those issues develop into full-blown conflicts requiring the allocation of large amounts of resources and the cycle continues. While this study finds anecdotal evidence of this cycle, a more formal analysis would determine empirically if such a cycle exists and the extent to which it impacts conflict prevention efforts. This study in concert with the previously mentioned study on funding allocations is recommended as future research for gaining a deeper understanding of how conflict is addressed and managed in Reclamation.

Another recommendation is the promotion and dissemination of information about the personnel review requirement. From the focus groups, it is evident that while the collaborative competencies are required for all Reclamation employees, often the employees and supervisors are either not aware of the requirement or unsure of what it means. No one could explain how the skill was evaluated. A clear explanation of how individuals should be evaluated would help supervisors promote collaboration and conflict prevention more effectively by providing a more tangible incentive for conflict prevention and mitigation. Having a more standardized evaluation also would allow the skill to be more easily considered in career advancement and promotions. It would also allow Reclamation to capitalize on the fact that different levels of higher management have influence over individual decision making and thus equipped with the information on how to implement the requirements, management can better promote the collaborative skills as desired by Reclamation. The same could be said about other awards for conflict prevention and mitigation. Increasing awareness and understanding of the personal benefits of pursuing conflict prevention and mitigation can help increase the motivating potential of the awards.

Reclamation might also consider the recommendations presented by the Boise focus group (Table 13, p. 24). Considering what currently serves as a barrier to conflict prevention (i.e., a lack of resources, planning, or strong leadership), these Reclamation employees voiced a need for Reclamation to do more planning with stakeholders in order to be looking to the future to identify and act to prevent conflicts. They also requested additional resources be devoted to prevention efforts as well as recommended that Reclamation promote employees who demonstrate strong leadership and a desire to lead collaborative and conflict prevention efforts. If Reclamation wants to prevent and mitigate conflict in the future these recommendations provide a means by which the agency can demonstrate its support for conflict prevention and mitigation.

4.3.2 Implications Beyond Reclamation and Water Management

While this study focuses on Reclamation, the findings have applicability beyond Reclamation. Understanding what motivates individuals in their jobs is important and some of the same motivating factors may be found across different water management agencies, or really any organization. Federal agencies often share characteristics and thus the findings of this study may also apply to other agencies.

As demonstrated in this study, organizational culture plays an important role in Reclamation's management of water. Thus when considering how to incentivize conflict prevention and mitigation within their own organization, other agencies should consider their own institutional culture. For example agencies that also underwent decentralization in the 1990s may also find that decentralization and the fragmentation of the agency may result in an uneven application of new policies as information is spread or interpreted differently in different branches of the agency. Other federal agencies may also face funding or authorization restrictions as experienced by Reclamation as they move through the same budget cycle or face similar pressure from Congress. However it is important to consider the unique characteristics of an agency when making an assumption that an agency may have similar incentives and disincentives for conflict prevention and mitigation.

While a natural application would be to other natural resource management agencies, the motivating factors identified in this study were not specific to water or natural resource management. Availability of funding, allocation of resources, organizational culture, and awards/career advancement are all issues employees in all government agencies and other organizations must deal with. While all of these factors may be incentives and disincentives for action in most agencies, the applicability of results regarding which is an incentive or disincentive is tied to those organizations and agencies whose funding situation, organizational culture, and promotion scheme are similar to those in Reclamation.

4.3.3 Future Research for Bureau of Reclamation

There are two primary tracks of future research that would complement this study. The first is a more extensive analysis of the research questions Discussion

examined here. This study only begins to scratch at the surface of understanding how to incentivize conflict prevention in water management. For a more comprehensive assessment of the incentives and disincentives experienced by Reclamation employees a larger survey effort would show what incentives and disincentives are present in different regions or areas and which are agency wide. A larger study would also allow for additional statistical analysis of the survey responses to statistically confirm the conclusions presented in the previous chapters of this report. Additional focus groups at each of the regions or areas would provide similar information and may also serve as a brainstorming session for solutions as best practices from each office could be gathered and shared with other offices.

The second research track that could serve as a follow up to this study would be an analysis to see if the perceived incentives and disincentives actually reflect the patterns of the agency's behavior, that is, is there empirical evident to support anecdotal evidence and perception. For example, a number of employees noted how resources are reallocated away from conflict prevention efforts to conflict mitigation. An analysis of the allocation of discretionary funds controlled by Reclamation (versus what is directly authorized for a project by Congress) would provide empirical evidence of how much money is taken from proactive projects to those dealing with conflict. A longitudinal study of the career paths of Reclamation water managers would provide insights into how managing conflict or leading conflict prevention efforts were correlated with awards and career advancement.

4.3.4 Other Agencies

If other agencies are interested in exploring the incentives and disincentives they provide for conflict prevention and mitigation, they could apply the methodology used here. Within the federal government it would be interesting to see if other agencies, particularly natural resource management agencies, face similar barriers to conflict prevention or if the agencies could learn from one another on how to incentivize conflict prevention. While the unique missions of each of the agencies might reveal different incentives or disincentives, they face similar challenges such as water supply shortages, declining budgets, and reduced staff resources. Other agencies might consider exploring funding or other resource trends to see if resources tend to flow towards conflict.

As organizational culture was found to have a strong influence on decision making the same may be true for other agencies. Agencies with some similarities to Reclamation in regards to culture would provide for an interesting comparison. For example, the ACE also emphasizes engineering and technology (though with a strong military connection). Therefore, one would expect that that aspect of the ACE culture would also influence how that agency pursues or incentivizes conflict prevention and mitigation. If they have different incentives and disincentives it may be to the benefit of the two agencies to consider learning from each other's strengths and weaknesses.

5 Conclusion

If agencies managing water want to pursue conflict prevention and mitigation, it is important to ask what motivates someone, as an organization or individual, to pursue conflict prevention, conflict mitigation, or no action? This study offers a look into how Reclamation motivates (or fails to motivate) its employees and itself as an agency to pursue conflict prevention and mitigation.

Several disincentives for conflict prevention and mitigation were identified through a survey and focus groups, including Reclamation's organizational culture (specifically a reliance on crisis management, focus on water delivery, and being slow to change), a lack of resources (i.e., time, staff, funding), a lack of forward planning, and limits due to legal authorization. The two dominant disincentives for conflict prevention (and to some extent mitigation), a lack of resources and Reclamation's organizational culture, are linked in a cyclical fashion. In the view of many study participants the reactive culture in Reclamation leads to a lack of resources for more proactive initiatives as resources were reallocated to conflict mitigation from conflict prevention. Without proactive efforts geared toward conflict prevention, conflicts will continue to arise and consume time, money, and human resources. Fewer incentives for conflict prevention and mitigation were identified, but those that were included pressure from higher management, the promotion of collaboration within Reclamation, and a desire to avoid litigation.

With this all in mind, when it comes to choosing a path forward in respect to conflict prevention and mitigation, the Bureau of Reclamation has its challenges. Limitations due to authorization, politics, and funding climates present outside challenges that may direct Reclamation down a path of continuous conflict mitigation efforts due to an inability to get out of the crisis and conflict management cycle. Similar internal characteristics are factors that work against conflict prevention and mitigation. At the same time, Reclamation has taken on conflict prevention and mitigation programs and while the culture of the agency may be slow to change (hampered by decentralization, engineering focus, and often crisis-driven) Reclamation has demonstrated that it can prioritize conflict prevention and mitigation and does have incentives for those actions. It simply needs to bolster and duplicate those efforts and/or find ways around the barriers for conflict prevention and mitigation.

6 References

- Bowersox, J. (2000). From Water Development to Water Management. *American Behavioral Scientist*, 44(4), 599 –613. doi:10.1177/00027640021956404
- Brown, B., Rancier, R., Pak, M., & Wolf, A. (2009). *Incentives and Disincentives for Conflict Prevention in the Bureau of Reclamation: Preliminary Report*. Corvallis, OR: Oregon State University.
- Bureau of Reclamation. (2004). *Decision Process Team Review of Decision Making in Reclamation*. Washington, D.C.: Bureau of Reclamation.
- Bureau of Reclamation. (2006). *Managing for Excellence: An Action Plan for the 21st Century* (p. 26). Bureau of Reclamation. Retrieved from http://www.usbr.gov/excellence/merweb.pdf
- Bureau of Reclamation. (2010, November 10). Bureau of Reclamation: About Us. *Bureau of Reclamation: About Us.* Retrieved February 1, 2011, from http://www.usbr.gov/main/about/
- Crowe, E., & Higgins, E. T. (1997). Regulatory Focus and Strategic Inclinations: Promotion and Prevention in Decision-Making. *Organizational Behavior and Human Decision Processes*, 69(2), 117–132. doi:10.1006/obhd.1996.2675
- Denhardt, R. (2010). *Theories of Public Organization* (6th ed.). Boston, MA: Wadsworth Publishing.
- Department of the Interior. (2012). Interior Organizational Chart. Retrieved March 27, 2012, from http://www.doi.gov/whoweare/orgchart.cfm
- Department of the Interior, & Bureau of Reclamation. (2003). *Water 2025:**Preventing Crises and Conflict in the West (p. 27). Dept. of Interior and Bureau of Reclamation. Retrieved from http://biodiversity.ca.gov/Meetings/archive/water03/water2025.pdf
- Department of the Interior, & Bureau of Reclamation. (2008). *Managing for Excellence: Concluding Report*. Retrieved from http://www.usbr.gov/excellence/Finals/concludingreport.pdf
- Eidem, N., Douglas, N., & Wolf, A. (2008). The Western Water Institutional Solutions-Western Water Information Network Collaboration: An Analysis of the Social, Economic, and Biophysical Environments Supportive of and the Historic Trends in Conflict and Cooperation in the Bureau of

- Reclamation's Upper Colorado Region 1970-2005 (p. 74). Denver, CO: US Bureau of Reclamation.
- Fesler, K. J. (2007, June 28). *An Analysis of Water Resource Conflict and Cooperation in Oregon Between 1990 and 2004* (Thesis). Oregon State University, Corvallis, OR. Retrieved from http://hdl.handle.net/1957/5700
- Golden, M. (1992). Exit, Voice, Loyalty and Neglect: Bureaucratic Responses to Presidential Control During the Reagan Administration. *Journal of Public Administration Research and Theory*, 2(1): 29-62
- Gorman, C. A., Meriac, J. P., Overstreet, B. L., Apodaca, S., McIntyre, A. L., Park, P., & Godbey, J. N. (2012). A Meta-Analysis of the Regulatory Focus Nomological Network: Work-Related Antecedents and Consequences. *Journal of Vocational Behavior*, 80(1), 160–172.
- Gruber, J. (1987). *Controlling Bureaucracies*. Berkeley, CA: University of California Press.
- Herzberg, F. (1959). *The Motivation to Work* (2nd ed.). New York, NY: Wiley.
- Maslow, A. (1943). A Theory of Human Motivation. *Psychological Review*, 50, 370–396.
- Maslow, A., & Frager, R. (1987). Motivation and Personality. Harper and Row.
- McClelland, D., Atkinson, J., Clark, R., & Lowell, E. (1953). The Achievement Motive. *Appleton-Century-Crofts*, 1953.
- National Research Council. (2006). *Managing Construction and Infrastructure in the 21st Century Bureau of Reclamation*. Washington, D.C.: The National Academies Press.
- Rahim, M. A. (1992). *Managing Conflict in Organizations* (2nd ed.). Westport, Connecticut: Praeger.
- Smith, K. B., & Frederickson, H. G. (Eds.). (2003). *Public Administration Theory Primer*. Boulder. Colorado: Westview Press.
- Steers, R., Mowday, R., & Shapiro, D. (2007). Introduction to Special Topic Forum: The Future of Work Motivation Theory. *The Academy of Management Review*, 29(3), 379–387.
- Wood, D. and R. Waterman. (1994). *Bureaucratic Dynamics: The Role of Bureaucracy in a Democracy*. Boulder. Colorado: Westview Press.

- Wright, B. (2001). Public-Sector Work Motivation: A Review of the Current Literature and a Revised Conceptual Model. *Journal of Public Administration Research and Theory*, 11(4), 559–586.
- Yoffe, S., Wolf, A. T., & Giordano, M. (2003). Conflict and Cooperation Over International Freshwater Resources: Indicators of Basins at Risk. *Journal of the American Water Resources Association*, 39(5), 1109–1126.

Appendix A – Glossary of Acronyms and Key Terms

Acronyms

Reclamation – Bureau of Reclamation DOI – Department of Interior OSU – Oregon State University US – United States USGS – United States Geological Survey WWIS – Western Water Institutional Solutions

Key Terms

Conflict is defined as "a process of social interaction involving a struggle over claims to resources, power and status, beliefs, and other preferences and desires" (Rahim, 1992). However for this study, conflict is limited to that between Reclamation and another entity (e.g., individual, state agency, etc.) and conflict within Reclamation is not be studied.

Conflict mitigation consists of actions taken to resolve, manage, or temper a conflictive situation and thus are pursued after conflict has occurred.

Conflict prevention consists of actions taken to avoid conflict and thus occur before a conflict develops. They can involve collaboration through communication between agency and stakeholders and public participation program. It is generally a proactive, ongoing process and may involve activities designed to address a specific issue in a basin, such as testing techniques for selenium removal or optimizing fish reproduction (Brown et al., 2009).

Incentives are defined as both material and non-material rewards for an action, decision, or behavior and can include increased funding for personnel, programs, and activities, job stability, promotions, publications, and awards, affirmations, or positive re-enforcements by superiors.

Institutional capacity is the components of the human system that help the entire system mitigate for change.

Disincentives can simply be a lack of incentives or can include can include consequences for an action, decision, or behavior such as withdrawing funding for programs and activities, job insecurity, and/or disapproval, discouragement, or sanctions by superiors (Brown et al., 2009).

Appendix B – Survey

Survey of Incentives and Disincentives for Conflict Prevention and Mitigation in the Bureau of Reclamation's Water Management

Instructions: Please read the definitions below and fill out the following survey to help the Bureau of Reclamation improve how it promotes conflict prevention and mitigation in its management of water. The survey is completely anonymous and should take about 15 minutes to complete. Thank you.

Definitions: The following terms appear in the survey and are needed to answer the questions:

- *Conflict* is tension, disagreement, or opposition between one or more parties. In this study it is limited to water-related conflict between Reclamation and other parties (e.g., individuals, organizations, etc.) and does not include conflict within Reclamation.
- *Conflict prevention* consists of actions taken to avoid or lessen conflict <u>before</u> it happens.
- *Conflict mitigation* consists of actions taken to resolve, manage, or temper a conflictive situation after it begins.

Survey Questions:

1. Rate (circle) the degree to which you agree or disagree with the following statements: Factors that promote *conflict prevention* in the Bureau of Reclamation include:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Consideration of conflict prevention experience in career advancement	1	2	3	4	5
Awards (including merit bonuses and other recognition)	1	2	3	4	5
Pressure from higher management	1	2	3	4	5
Promotion of collaboration with others outside of Reclamation	1	2	3	4	5
Allocation of financial resources to conflict prevention efforts	1	2	3	4	5
Allocation of human resources to conflict prevention efforts	1	2	3	4	5

2. Rate (circle) the degree to which you agree or disagree with the following statements: Factors that discourage *conflict prevention* in the Bureau of Reclamation include:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Lack of recognition of conflict prevention efforts	1	2	3	4	5
Consideration of experience mitigating conflict in career advancement	1	2	3	4	5
Awards for <i>conflict mitigation</i> efforts (e.g., merit bonuses, merit pay increases, recognition for work)	1	2	3	4	5
Limited availability of funding	1	2	3	4	5
Reallocation of financial resources from projects with conflict prevention efforts to projects with conflict	1	2	3	4	5
Reallocation of other resources (e.g., human resources) from projects with conflict prevention efforts to projects with conflict	1	2	3	4	5

³a. What other factors encourage or incentivize *conflict prevention* in Reclamation's water management?

3b. How influential are they?

4. Indicate (circle) the importance of the following factors is in Reclamation's decisions to pursue *conflict prevention*.

	Not at all Important	Slightly Important	Moderately Important	Extremely Important
Level of funding available	1	2	3	4
Career advancement (e.g., promotion)	1	2	3	4
Awards (including merit bonuses and other recognition)	1	2	3	4
Possibility of litigation	1	2	3	4
Pressure from management at the area office level	1	2	3	4
Pressure from management at the regional level	1	2	3	4
Pressure from management at the national level	1	2	3	4

5a. What other factors discourage *conflict prevention* in Reclamation's water management?

5b. How influential are they?

6. Rate (circle) the degree to which you agree or disagree with the following statements: Factors that promote *conflict mitigation* in the Bureau of Reclamation include:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Consideration of conflict mitigation experience in career advancement	1	2	3	4	5
Awards (including merit bonuses and other recognition)	1	2	3	4	5
Pressure from higher management	1	2	3	4	5
Allocation of financial resources to conflict mitigation	1	2	3	4	5
Allocation of human resources to conflict mitigation efforts	1	2	3	4	5

7. Indicate (circle) the importance of the following factors is in Reclamation's decisions to pursue *conflict mitigation*.

	Not at all Important	Slightly Important	Moderately Important	Extremely Important
Level of funding available	1	2	3	4
Career advancement (e.g., promotion)	1	2	3	4
Awards (including merit bonuses and other recognition)	1	2	3	4
Possibility of litigation	1	2	3	4
Pressure from management at the area office level	1	2	3	4
Pressure from management at the regional level	1	2	3	4
Pressure from management at the national level	1	2	3	4

8a. What other factors encourage or incentivize *conflict mitigation* in Reclamation's water management?

8b. How influential are they?

9a. What factors discourage *conflict mitigation* in Reclamation's water management?

9b. How influential are they?

Thank you for your time and effort.

(End of survey)

Appendix C – Focus Group Questions

Please note that these questions are suggestions. They may not necessarily be asked depending on the flow of the conversation in the focus group session. *The most important questions are italicized*. The primary goal of the session is to collect information on incentives and disincentives for the offices, projects, and basins that exist in Reclamation as well as how incentives and disincentives play into group decisions.

Incentives for Conflict Prevention

- 1. What encourages a Reclamation office or project (vs. an individual) to pursue conflict prevention? [focusing on more general incentives]
- 2. What specific incentives does Reclamation provide to offices and projects for cooperative activities and initiatives in water management? [focusing on Reclamation specifically]
- 3. How do these factors play into office/project level decision making?
- 4. Do certain incentives take priority over others?
- 5. Are certain conflict prevention efforts promoted over others? If so, which ones are promoted? How are they encouraged?

Disincentives for Conflict Prevention

- 6. What discourages or deters a Reclamation office or project from pursuing conflict prevention?
- 7. What impedes or prevents a Reclamation office or project from pursuing conflict prevention?
- 8. Do roadblocks arise at a particular stage in a project?
- 9. How do these factors play into office/project level decision making?
- 10. Do certain disincentives outweigh others when a team or office is making a decision?

Incentives for Conflict Management/Mitigation

- 1. What encourages a Reclamation office or project (vs. an individual) to pursue conflict management/mitigation?
- 2. What incentives does Reclamation provide to offices and projects for management of water-related conflict? [focusing on Reclamation vs. general influences]
- 3. Which conflict management/mitigation activities are promoted over others? How are they encouraged?
- 4. How do these incentives play into office/project level decision making?

Disincentives for Conflict Management/Mitigation

- 5. What discourages conflict management/mitigation in a Reclamation office or project?
- 6. What impedes or stops conflict mitigation efforts in a Reclamation office or project?
- 7. Do roadblocks arise at a particular stage in a project?
- 8. Do roadblocks arise for a particular type of conflict mitigation?
- 9. How do these factors play into office/project level decision making?
- 10. What disincentives have the most influence on office/project level decision making regarding conflict mitigation?