

Restoring the Everglades: Lessons in Team Planning

Kenneth D. Orth, U.S. Army Corps of Engineers
Agnes R. McLean, South Florida Water Management District

ABSTRACT

In 1993, the US Army Corps of Engineers (Corps), in partnership with the South Florida Water Management District (District) and other stakeholders, initiated the Comprehensive Review Study of the Central and Southern Florida Project. Commonly called the “Restudy,” this effort investigated solutions that integrate restoration of critical ecological functions of the Florida Everglades along with water supplies and flood damage reduction for future populations in south Florida. The Restudy was one of the most visible, precedent-setting, difficult, and expensive water resources studies ever conducted by the Corps or the District. One of the major reasons for the Restudy’s success in meeting deadlines and building consensus to date has been the use of a team approach to planning and decision-making. The full primary Restudy team consisted of over 150 individuals from thirty different public entities representing over twenty different, professional disciplines. That team grew, both in numbers and as a functioning professional family, and was joined by other teams over its six-year history. The team’s successes and failures offer rich lessons to future water resources planning, especially watershed planning and ecosystem restoration planning. This presentation will highlight some of the lessons learned and observations from key Restudy participants. These lessons should be a useful guide in forming and working in future teams throughout the nation.

INTRODUCTION

South Florida lies on the lower end of a peninsula that Marjory Stoneman-Douglas, author of “River of Grass” and lifelong Everglades advocate, called “the most recognizable feature on the map of the United States.” It covers about 18,000 square miles and stretches from Orlando in the center of the state southward to the Florida Keys. The upper region is dominated by dairy, citrus, and sugar farming, while the lower region contains remnants of the historic Everglades ecosystem, the largest wetland and subtropical wilderness in the United States. These remnants are primarily in public ownership. Most people live in a very narrow band concentrated along the lower east coast that includes the metropolitan areas of West Palm Beach, Fort Lauderdale, and Miami. The lower west coast, however, is now one of the fastest growing areas in the state.

Water unites south Florida. It is naturally a very wet, warm, and flat place. For hundreds of years, it supported a vast mosaic of wetland communities and animal life – diversity not found anywhere else in the world. Over about the past one hundred years, people have undertaken extensive efforts to control the region's water to make it more hospitable for urban and agricultural development and to protect against deadly hurricanes and droughts. These efforts culminated in the mid-twentieth century with the construction of the Central and Southern Florida (C&SF) Project.

The C&SF Project is one of the world's most extensive “plumbing” systems and is the backbone of south Florida's system of water management. The Project includes about one thousand miles each of levees and canals, 150 gates and other water control structures, and sixteen major pump stations. It was built by the federal Army Corps of Engineers (Corps), and is now largely operated and maintained by the local sponsor, the South Florida Water Management District (District).

The Project is multi-purpose and provides flood protection and water supply to over six million people and almost one million acres of agricultural lands, facilitates navigation and recreation, prevents salt water

intrusion into the fresh groundwater supply, provides water to Everglades National Park, and protects fish and wildlife resources. It has been immensely successful doing what it was designed to do because it significantly changed the way water had naturally flowed in the region. This engineering success has caused substantial degradation of the Everglades ecosystem by altering the quantity, distribution, and timing of fresh water entering the natural system. This decline in ecosystem health will continue unless actions are taken to structurally and operationally modify the way water flows through the system. Furthermore, if modifications are not made, related economic activities will suffer, water supplies could be threatened, and harmful flooding in both the natural and built systems could worsen. Today, south Florida is not on a sustainable course for the future.

In 1992, and again in 1996, the United States Congress directed the Corps to review the C&SF Project and determine if it should be changed to restore and preserve south Florida's natural ecosystem while improving water supplies and maintaining flood protection. The resulting C&SF Project Comprehensive Review Study - commonly called the Restudy - has been an ambitious partnership to meet those objectives. The Restudy followed the Corps' two-phased planning process. The opening reconnaissance phase ran from June 1993 to November 1994, and focused on defining the study area's problems and opportunities. The follow-on feasibility phase started in August 1995 and will conclude in July 1999 when the final feasibility report is sent to Congress. The draft report (October 1998) recommended modifications to the C&SF Project that will enlarge the region's supply of fresh water through the physical construction of water resources projects and will operationally improve how water is delivered to and through natural areas, both using a variety of technologies and locations. With an estimated implementation cost of \$7.8 billion dollars, the recommended plan of Project changes is, by far, more than the Corps or the District has ever before recommended spending on one project in one place at one time.

From its first day, almost everything about the Restudy was different. The investigation of "the Everglades" carried immediate national and even international name-recognition. Political visibility was high as the Clinton Administration, supported by national environmental interest groups, made Everglades restoration one of its key environmental initiatives. South Florida's residents often had definite ideas and opinions about whether or not the ecosystem was "dying" or "thriving," and what should or should not be done about it. There were "upstream" and "downstream" interests; "inland" and "coastal" interests; "environmental," "agricultural," and "urban" interests - all with seemingly different and competing needs and desires for ecosystem restoration and the region's supply of fresh water. The problems at hand were many, interrelated, and seemingly intractable. After all, how could one even measure the value of an ecosystem, much less attempt to correct the many complex problems with it? Everything seemed to be big - big area, big number of people involved, big number and complexity of problems to be solved, and big consequences of failure. The Restudy was never at risk of being approached as "business as usual."

RESTUDY TEAMS

"Business as usual" would have meant that the Restudy would have been conducted largely by professionals in the Corps and the District, and that other stakeholders and the public would have had selected and probably limited opportunities to participate, mostly in a reactive mode, over the course of the study. This is especially true of those Federal and state agencies whose traditional roles were providing National Environmental Policy Act or other state and agency review. While this more-or-less traditional approach may not have failed, it would probably have been very difficult to follow to a successful conclusion. It was not followed for a number of reasons.

First, as noted above, the diversity of interests with strongly held ideas made it necessary to involve all of them early in defining the problems and opportunities at the first steps of planning. Failure to at least offer

all interests the opportunity to participate from the very beginning would have eventually led to the need to retrace many steps to account for their concerns. As a result, a variety of agencies and groups signed up for the Restudy team at the start. Second, the technical complexity of the Everglades problems and opportunities required an array of professional disciplines to understand the many factors and interrelationships involved. No one technical discipline possessed all of the knowledge, skills and abilities needed to address the situation. Technical problem solving could only proceed when the views of all disciplines were brought to bear through cooperative teamwork. Finally, the very bigness of the area, the problems, the number of interests involved, and every other aspect of the situation demanded a team approach. No matter how you looked at it, the situation was bigger than one entity – public or private – could manage alone. A team approach was the only approach that made sense.

Due to the high visibility, size, and complexity – not only on an ecological / engineering scale but also on a political scale – of the project, a number of teams evolved over the course of the Restudy. In general, the teams can be grouped into “internal” and “external” teams. Internal teams were composed of public agency staff assigned by their respective agencies to work on the study. The initial make up of the study team included state and Federal agencies, and two tribal governments. As the study progressed, participation was extended to local governments as well. External teams were composed more of policy or political representatives. In one case, the team was appointed by the Governor of Florida, in the other members were assigned by their respective agencies. There were also “decision-making” teams at both the Corps and District levels.

As the study progressed and work became more specialized, many - actually most - team members on both levels became involved in multiple sub-teams, which in turn developed their own sub-teams. In effect, the work of the study was carried out by “teams-within-teams.” A team member who was a “leader” on one team was not necessarily a leader on a different team. To a great extent this kind of fluidity in roles depended upon expertise, team function, and team dynamics. Most of the Restudy sub-teams were ad-hoc; they were formed to carry out a particular task and disbanded when that task was completed. The Restudy team itself, at the end of the study, evolved into a smaller “RECOVER” team to oversee and facilitate project implementation. The major Restudy teams and how they functioned are described below and profiled in Table 1. External and Decision-making teams are also described below.

Internal Teams

Team Leaders. The Corps and the District were the two agencies responsible for the Restudy. The chief of the Ecosystem Restoration Section and the study manager from the Corps and the project manager and project coordinator from the District formed the nucleus of what could be called the “management” team of Restudy leaders. This small team directed the course of the study, had the responsibility for seeing it was completed on time, provided guidance to the full team, and set schedules and milestones. Membership in this group grew to include the two chairs of the major Restudy sub-teams, and later a policy and outreach coordinator.

Full Team. The full Restudy team performed the “work” of the study. Table 2 lists the affiliations of professionals who participated in the full study team. Multi-agency staffing was considered essential in order to facilitate the flow of needed information among agencies, and, more importantly, to achieve concordance and ownership by the key public agency stakeholders. While most of the interagency study team personnel were located in their respective organization's offices, some agencies placed personnel in the Corps' Jacksonville District office. Representatives from the Florida Department of Environmental Protection, U.S. Department of Agriculture, U.S. Environmental Protection Agency, and U.S. Fish and Wildlife Service were relocated to the Corps' Jacksonville office for the duration of the study.

In addition to being multi-agency, the study team consisted of an interdisciplinary professional staff from several technical disciplines. These disciplines included civil engineers, hydraulic engineers, cost engineers, biologists, ecologists, resource managers, community planners, economists, geographic information system specialists, public involvement specialists, real estate specialists, and technicians.

Public Involvement Team. The Public Involvement Team prepared the Strategic Communications and Public Outreach Plan for the Restudy. The team coordinated and gathered input into the problems, opportunities, and alternative solutions of the plan, arranging for regular stakeholder involvement, informing the media, developing a public information/awareness program, and coordinating public meetings. The team included communications experts, policy analysts, and planners from the Corps and the District and met monthly over the course of the study.

Alternative Evaluation Team. The Alternative Evaluation Team (AET) was formed from the full team in August 1997 as a vehicle for evaluating alternative plans. Membership on this team and the Alternative Development Team (below) was self-selecting. The AET was charged with evaluating the different alternative plans using an AET-predetermined set of performance measures. The AET divided itself into ten sub-teams based upon expertise and either geographic region (e.g., Lake Okeechobee) or topic (e.g., water quality). The AET met in two- and three-day working sessions 28 times between September 1997 and January 1999.

Alternative Development Team. The Alternative Development Team (ADT) was formed from the full team in August 1997. The ADT was charged with formulating successive alternatives using the AET's evaluation of the preceding alternative. A smaller subset of the ADT did the design and engineering and modeling work after the larger group identified new components or modifications to components intended to correct performance shortfalls. The ADT met a dozen times between September 1997 and January 1999.

Implementation Plan Team. Between the time that the draft feasibility report was released for comment and the final report was completed, an Implementation Plan Team was formed to substantially improve that section of the draft. The team met extensively over a two-month period that included both team and public meetings. This team was also self-selecting.

INTERNAL RESTUDY TEAM

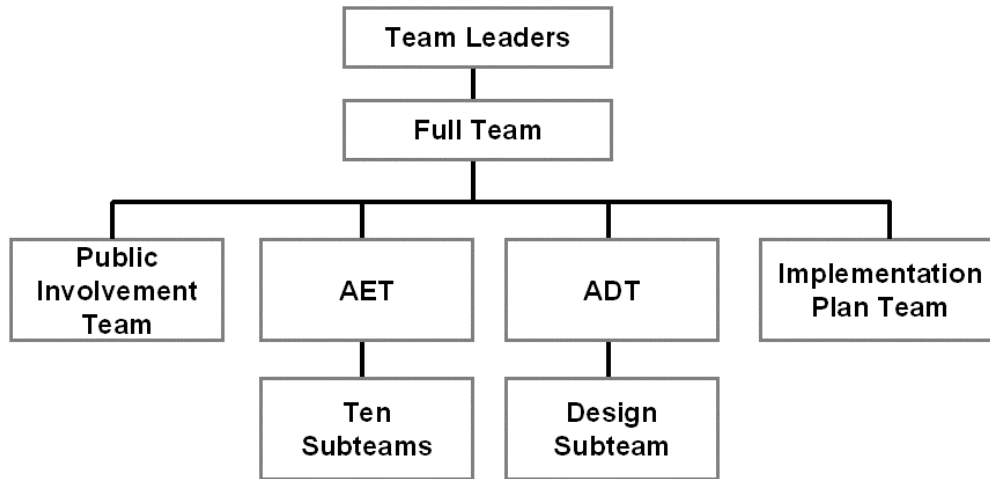


Figure 1.

Restoration, Coordination, and Verification Team. The Restoration, Coordination, and Verification Team (RECOVER) is being established to provide system-wide evaluations and analyses as the project moves into implementation and monitoring. The RECOVER Team represents the evolution of the full Restudy Team and will be responsible for identifying the overall regional contributions provided by individual project components. Following this evaluation, RECOVER will determine whether or not revisions to the Restudy Comprehensive Plan are necessary, on an ongoing basis.

The RECOVER Team will not be as large as the study team, but it will form sub-teams for specific technical evaluations as needed. Examples of currently anticipated sub-teams include: Regional Evaluation; Performance Measure Refinement and Development; Implementation Plan; Water Quality; Adaptive Assessment and Monitoring; and Public Involvement and Outreach.

RECOVER TEAM

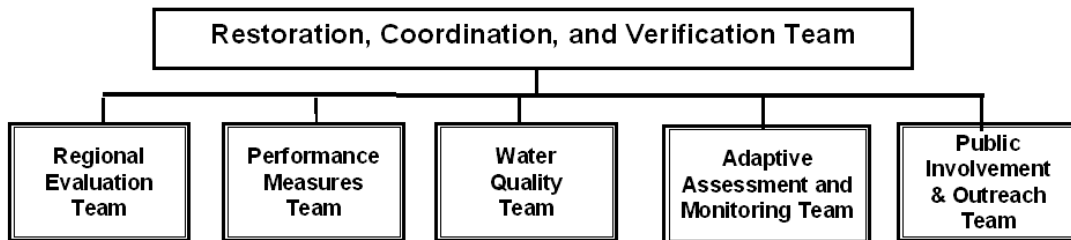


Figure 2.

Table 1 profiles the major Restudy teams, their purpose, the expertise of their members, and approximate number of members.

Table 1
Internal Restudy Teams

Team	Purpose	Expertise included	Number of members
Team leaders	To direct the study	Planning, engineering, ecology, hydrology, policy	6-8
Full team	To perform the work necessary to accomplish the study	Planning, engineering, biology, ecology, economics, GIS, hydrology, hydrogeology, ecological modeling, real estate, public involvement, resource management	150
Alternative Evaluation Team	To evaluate the performance of alternative plans, identify strengths and weaknesses, and recommend areas of improvement	Planning, biology, ecology, hydrology, ecological modeling, engineering	48
Alternative Development Team	To formulate, design, and model alternatives based upon input from AET	Planning, ecology, hydrology, engineering	35
Public Involvement Team	To coordinate outreach activities and media events	Planning, communications, policy analysis	5-10
Implementation Plan	To develop an implementation plan for the final feasibility report	Planning, ecology, economics, engineers, resource management	20
RECOVER	To provide system-wide analyses and monitoring of the implementation of plan components	This team will have a similar make-up as the full team	Unknown

External Teams

Governor's Commission for a Sustainable South Florida (GCSSF). On March 3, 1994, the late Governor Lawton Chiles created the Governor's Commission for a Sustainable South Florida through executive order. The Commission's charge was to make recommendations that will move south Florida toward a healthy ecosystem that can co-exist with, and be mutually supportive of, a sustainable south Florida economy and quality communities. This commission consists of 49 members of the business, agriculture, government, public interest, and environmental communities. A number of Federal agencies are represented on the Commission as non-voting members. The Commission formed two standing committees, the Natural Resource Committee, and the Quality Communities Committee. All work products of the Commission represented consensus agreement among members. The Governor's Commission was officially designated by memorandum as an advisory body to the South Florida Ecosystem Restoration Task Force (below) in August 1997. Member organizations of the Commission can be found in Table 2.

The Commission's Initial Report (October 1, 1995) contained 110 recommendations with a central theme of sustainability – meeting the needs of the present without endangering the ability of future generations to meet their needs – revolving around the management of water. Consequently, the Commission began to develop preferred alternatives for the Restudy and in August 1996 completed a Conceptual Plan for the Restudy. Restudy Team members provided the Commission with monthly briefings as its work on Restudy guidance progressed. In addition, several Restudy Team members served as staff to the Commission, assisting in the development of draft Commission documents. In July 1998, the Governor's Commission unanimously adopted an "Interim Report on the C&SF Project Restudy," and in March 1999 completed their guidance on the Restudy with the adoption of a report on the Implementation Plan and possible funding mechanisms for implementing the project. The early work on these documents was done by as many as ten ad-hoc issue teams, before coming before the full Commission for discussion and adoption.

South Florida Ecosystem Restoration Task Force and Working Group (SFERWG). In 1993, in an effort to ensure the coordination of Everglades restoration efforts at the Federal level, U.S. Interior Secretary Bruce Babbitt created the South Florida Ecosystem Restoration Task Force through an interagency agreement. Establishment of the Task Force at the Cabinet level led in turn to the formation of a local, Federal manager-level South Florida Ecosystem Restoration Working Group to assist the Task Force in technical issues and actual implementation of restoration efforts. There are 14 Task Force members and 32 Working Group members. Subsequently, the Task Force and Working Group were expanded to include Tribal and state members and were formally established by the Water Resources Development Act of 1996. The Working Group has a standing science coordination team and a public outreach team. There are also six project coordination teams that are organized by geographic region and include multi-disciplinary representation from Working Group members. Member organizations can be found in Table 2.

In accordance with the provisions of the Water Resources Development Act of 1996, one of the duties of the Task Force includes consulting with, and providing recommendations to the Secretary of the Army during the development of the Comprehensive Plan. As part of its charter, the Working Group was charged with generally supporting and assisting the Task Force in undertaking the development of the Comprehensive Plan. Restudy Team members consistently briefed the Task Force and Working Group as work on the feasibility report progressed. At the July 1998 meeting of the Task Force, the Initial Draft Comprehensive Plan was presented. In response to this presentation and as a result of many meetings during which complex technical and policy issues were considered by the Task Force and Working Group,

the Task Force adopted its initial recommendations on the Restudy and transmitted them to the Secretary of the Army.

EXTERNAL RESTUDY TEAM

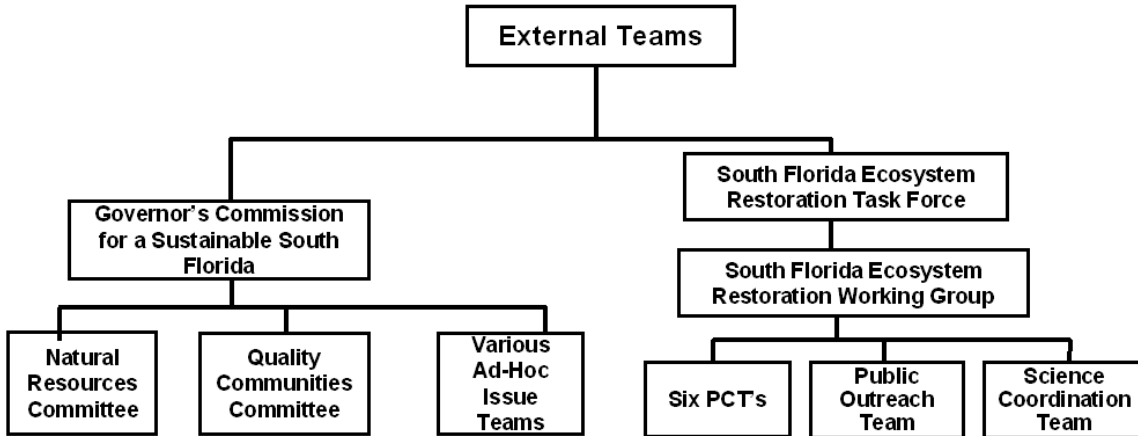


Figure 3.

Table 2 depicts the affiliations of Restudy Team, Governor’s Commission for a Sustainable South Florida, and South Florida Ecosystem Restoration Working Group members.

Table 2
Internal and External Team Member Affiliations

Affiliation	Restudy Team	GCSSF	SFERWG
Arvida / JMB Partners		x	
Bermello, Ajamil & Partners		x	
Berry Holding Company		x	
Broward County Commission		x	
Broward County Department of Natural Resource Protection	x	x	x
Broward County Office of Environmental Services	x		
Bureau of Indian Affairs			x
City of Cooper City		x	
City of Fort Myers		x	
City of Homestead		x	
City of Riviera Beach		x	
Collier County Commission		x	
Economatrix, Incorporated		x	
Enterprise Florida		x	
FAU/FIU Joint Center for Environmental and Urban Problems		x	
Florida Department of Agriculture and Consumer Services	x	x	x
Florida Department of Community Affairs		x	x

Affiliation	Restudy Team	GCSSF	SFERWG
Florida Department of Environmental Protection	x	x	x
Florida Department of Transportation		x	x
Florida Game and Fresh Water Fish Commission	x	x	x
Florida Keys Guide Association		x	
Florida Legislature		x	
Florida International University	x		
Florida Wildlife Federation		x	
Governor's Commission for a Sustainable South Florida			x
Governor's Office, State of Florida		x	x
Hendrix Farms		x	
Lee County Water Utilities	x		
Lehtinen, O'Donnell, Vargas & Reiner		x	
Miami-Dade & Broward League of Women Voters		x	
Miami-Dade County Commission		x	
Miami-Dade County Community College		x	
Miami-Dade County Environmental Resources Management	x		x
Miami-Dade County Water and Sewer Department	x		
Miccosukee Tribe of Indians of Florida	x	x	x
Monroe County Commission		x	
National Audubon Society		x	
National Oceanic and Atmospheric Administration	x	x	x
National Park Service, Biscayne National Park	x		
National Park Service, Everglades National Park	x	x	x
Palm Beach County Commission		x	
Palm Beach County Environmental Resources Management	x		
Palm Beach County Planning Department			x
Palm Beach County Water Utilities Department	x		x
Seminole Tribe of Florida	x	x	x
South Florida Ecosystem Restoration Working Group		x	
South Florida Water Management District	x	x	x
Southeast Banking Corporation		x	
Southwest Florida Regional Planning Council		x	x
Sunshine State Milk Producers		x	
Treasure Coast Regional Planning Council		x	
US Army Corps of Engineers, Jacksonville District	x	x	x
US Army Corps of Engineers, Institute for Water Resources	x		
US Department of Agriculture, Natural Resources Conservation Service	x		x
US Department of Justice			x
US Department of Transportation			x
US Environmental Protection Agency	x	x	x
US Fish and Wildlife Service	x	x	x
US Geological Survey	x		x
United States Sugar Corporation		x	
University of Tennessee	x		
World Wildlife Fund		x	

Decision-making Teams

South Florida Water Management District Governing Board. The Governing Board of the District is a nine member appointed board, and as local sponsor of the C&SF Project, functions as the decision-making body at the local level. While not a “team” in the same sense as the Restudy Team, the Board was nonetheless integrally important to the course of the study. The Board is appointed by the Governor of Florida to staggered, four-year terms and provides policy direction to the District as the governmental body charged with water resources development and management in south Florida.

Periodically after the Restudy began and monthly since October 1997, the Restudy Team briefed Governing Board members on the progress of the study. In April 1998, the Governing Board held a workshop with a panel of stakeholder representatives from their environmental, agriculture, and urban utilities advisory committees. The workshop provided the opportunity to the advisory committees to express their views on the Restudy to the Governing Board. The workshop also provided committee members and the Governing Board with the ability to engage in a question and answer dialogue with a panel of Restudy Team members. In February 1999, the Board approved and signed the letter of intent supporting the Restudy, which is included in the final feasibility report. In the future, it will be the Board’s decision to act as local sponsor to Restudy project modifications.

Federal Hierarchy. Another governmental team was the Federal hierarchy of entities that reached from the local Corps office in Jacksonville to the U.S. Congress in Washington. This is a decision-making hierarchy in which a recommendation – in this case changes to the C&SF Project – is progressively sent through a well-defined chain of review and approval. The chain begins with the U.S. Army Corps of Engineers. The Corps’ local Jacksonville District office conducted the planning work, in cooperation with the non-Federal sponsor and other stakeholders, and will later conduct design and implementation of approved project changes. The Jacksonville District’s recommendations were forwarded to the Corps’ regional South Atlantic Division office in Atlanta, and then to the Washington-level Corps’ Headquarters. The Headquarters provides recommendations to the Office of the Secretary of the Army, which in turn coordinates with the Office of Management and Budget. Following clearance by that Office, the recommendations leave the executive branch when the Secretary of the Army sends them on to the Congress. The Congress considers the administration’s recommendations in both congressional committees and the full House and Senate.

This highly structured chain in fact acts much like a team in that each party understands its role in the process and how it relates to the other parties. However, the Federal team never meets as a full group and individuals may be only vaguely aware of whom the team members are in other parts of the hierarchy. Federal team membership was achieved by virtue of being assigned (bureaucrats at all levels), appointed (high ranking administration officials), or elected (Congresspersons).

LESSONS LEARNED

As a first step in capturing the rich experiences and lessons learned from the Restudy, the authors conducted a limited survey of members of the full study team in early 1999. The survey consisted of eight questions designed to identify team qualities and observations that are important to pass along to future teams. We received responses to our survey from ten team members. Their full responses are largely anecdotal and wide-ranging, and we made no attempt to conduct sophisticated analyses of the results. However, we found the responses to be insightful, and we believe they are probably fairly representative of the larger group of study participants. The eight questions and summaries of the respondents’ answers are as follows:

1. **What is the team's greatest strength?** By far, the quality most often cited by respondents as the team's greatest strength was the diversity and inclusiveness of the team's membership. Two types of diversity were identified. First, the team had a diversity of knowledge in the many professional disciplines represented in its members. The Restudy Report lists over twenty different professions in its list of preparers, representing a wide range of natural and social sciences, engineers and planners. Second, team members also represented a diversity of interests, with over thirty different Federal, state and local agencies, Tribes and others participating in the full study team alone. Other team strengths noted by respondents were: a clear, shared goal; equality among members; striving for consensus; commitment to the team; high level of expertise; motivation to work together; and leadership.
2. **What is the team's greatest weakness?** While respondents agreed on the team's greatest strength, they did not at all agree on its greatest weakness. In fact, the size and diversity of the team were cited by several respondents as a weakness that "made rapid progress difficult." "False consensus" was noted where "there was too much emphasis on achieving agreement, to the exclusion of necessary debate." Other weaknesses included: inability to "see the big picture"; not everyone "bought in to" the process; lack of an objective third party; strain due to the rapid study pace; lack of trust; accountability; and members not necessarily representing their agencies.
3. **What is the most difficult thing about working with a large study team?** Three general points emerged from the responses to this question. First, communication was "laborious" and required "considerable attention." Second, the size of the study team increased the amount of time it took to present and discuss study issues. "Discussions ended up going all over the place, jumping from one point to another," and "the same topic [was] debated several times by different participants on different occasions." Finally, turnover of team members "made it difficult to keep everyone on the same level." One respondent even noted difficulties when they got a new boss who never bought in to the team process.
4. **If it could be done over again, what about the team would you do differently?** In hindsight, respondents noted a wide variety of things that they would do differently. Several would improve communication and participation by using a "third party coordinator/facilitator," getting "everyone involved upfront," and employing "more formal meetings, more formal codification of consensus." Several respondents also suggested that the early teambuilding exercises should have been continued throughout the course of the study to "help later arrivals to feel more a part of the team." Other things that may have been done differently included: more explicitly defining "the scope and limits of team authority," "better review of others' work," and recognizing and confronting the symptoms of trouble earlier in the process.
5. **What aspect of the team should be repeated elsewhere in other teams?** Respondents again generally identified the Restudy team's strengths as worth repeating elsewhere. They strongly recognized the need for "interdisciplinary team membership," as well as a "multi-agency" approach with "broad participation" and a "membership open to all interests." Other aspects that should be repeated included: "strong, creative, inspiring leadership"; motivating and rewarding team members; "having a deadline"; the "initial team building" session; and the "co-location" of team members from various agencies in one office.
6. **What one word or phrase best describes the team?** The responses to this question repeat now familiar themes about the Restudy team:
 "Diverse." (two respondents)

“Well-rounded.”
“Dedication.”
“Committed.”
“Committed, although ‘somewhat burned out’ also comes to mind.”
“Effective.”
“Essential; improved way of doing business.”
“They did a great job with the information and tools available.”
“Be there...or beware!!”

7. **Is there another question you think should have been asked about working on the team? If so, what is the question and what is your response?** Six respondents offered additional questions concerning success, individuals’ roles on the team, assuring effectiveness, rewards, and the following:

Q: “What skills have I gained either from my personal experience or from watching others on the team?”

A: Among other things, “I learned to work in large groups, to speak up, to lead meetings...to shut up and listen when appropriate...to do my homework ahead of time and not go to meetings and expect them to stop and catch me up...” and “that interrelationships between the people on teams is actually more important than the project.”

8. **Please list any other important lessons learned or observations that you would like to make about teams and teamwork based on your Restudy experience.** The final question elicited a wide set of responses ranging from the specific to fairly universal truths. Specific lessons learned included: “Pick the team members carefully...Cultivate an environment where people can argue ‘safely’” and “Not all meetings end up accomplishing something. Don’t sweat it.” In the larger sense, one response generally sums up an overarching observation made by many respondents:

“A team of well-trained people, working to achieve a common set of objectives over time, unquestionably is the most effective and efficient way of successfully implementing complex, large scale land-management programs.”

OBSERVATIONS AND CONCLUSIONS

Expertise and Interests. The limited team survey results underscore the importance of having both the right expertise and the right interests involved in the team. Each has its unique role over the course of the decision making process. Professional expertise brings rational explanations and identifies the range of what is possible. Different interests bring public values to bear in choosing “the best” among the possibilities. Those were difficult roles for the various Restudy teams – for any team - to keep separate and balanced. But there is no substitute for including a diverse set of technical skills and public values early and throughout the planning process.

The diversity and inclusion that went into the makeup of the Restudy Team had the effect of blurring the traditional distinction between the notions of an “interdisciplinary team” (with professional expertise) and “public involvement” (providing the values of public interests). Restudy Team meetings were not only gatherings of the professional disciplines necessary to solve technical problems, but also a form of “public meeting” by virtue of the many different agencies and groups that the professionals represented. Conversely, public workshops and meetings were often attended by technical experts – some of whom were also team members and some of whom were not affiliated with the Restudy – and addressed scientific and engineering issues. We can probably expect to see more of this integration of the “team” and the “public” in future planning efforts.

Individual Qualities. The interdisciplinary and interagency nature of the Restudy pointed out the variety of unique personal qualities that each individual brings to the team:

- Expertise - The technical background we began learning in school and now practice professionally.
- Talent – Skills and abilities not necessarily related to our technical expertise, such as leadership and writing and speaking.
- Affiliation – The group, or groups, that we are formally associated with and represent, usually including employers.
- Personal Values – What we believe is right and wrong, good and bad, the answer or not the answer.
- Personality – The essence of what makes each of us individuals – are we introverts or extroverts...logical or more intuitive...just how does each of us approach each day?

Teambuilding. The team survey results also point to the importance of active and continuing teambuilding activities in having a successfully functioning team. In case of the Restudy, the importance of teambuilding began even before the study was authorized, when the study team leader attended the intensive two-week Organizational Leadership for Executives training. This class emphasizes the critical role of developing and sustaining teams, and provided the team leader with the knowledge and confidence to begin the Restudy team approach. In the early Reconnaissance phase, the team leader used frequent team meetings and the Myers-Briggs survey to explore the preferences, tendencies and characteristics of the individual members. During the later feasibility phase, a retreat for team members early on again utilized the Myers-Briggs survey and served as an “ice-breaker” for the larger team to begin to know one another. A partnership agreement was signed by those present that committed team members to “...open communication, joint problem-solving, and teamwork...”

Learning Curve. Never underestimate the time needed to build understandings among different professional disciplines and interest groups about what each of them does. It often takes considerable time for individuals to understand how their piece of the puzzle fits with others (the hydrology-ecology interrelationship, for example). Much team time was spent in some form of educational process that was frequently difficult for most team members and threatening to some. Learning is an expensive but necessary process for the team to truly function as a team rather than a collection of individuals.

Good teamwork requires that we see others as more than just an ecologist, or the team leader, or an obstructionist. Good teamwork requires that we recognize all of an individual’s qualities to overcome shortfalls and draw on the group’s collective strengths. It also requires patience, a sense of humor, a shared sense of mission, and the recognition that once you start planning in a fishbowl, you can never go back.