Maj. David Guzman *is Deputy District Engineer, U.S. Army Corps of Engineers, Albuquerque District. He is a 1983 graduate of Texas A&M University, with a B.S. degree in civil construction eingineering. He earned an M.A. degree in business management from Webster University in 1997. Major Guzman was commissioned a second lieutenant in 1983 and is a graduate of the Engineer Basic and Advanced Courses at Fort Belvoir, Virginia. He is a native of San Antonio, Texas.*

The Upper Rio Grande Basin Water Operations Review and Environmental Impact Statement

The Upper Rio Grande Basin Water Operations Review and Environmental Impact Statement

A word to my fellow Texans who are here right now: As soon as Norm Gaume isn't looking, I'm coming home for Christmas and I'll try to carry over as much water as I can.

As Dick mentioned, I am the Deputy District Engineer and it's not often that I get the opportunity to speak to such forums as this. That privilege is usually reserved for the District Engineer, who in this case is Colonel Thomas Fallin. Unfortunately, his presence was required elsewhere, so I took his speech. I took his presentation; stayed in his comfy hotel room–this gorgeous, historical hotel. I ate his banquet dinner last night. I've enjoyed the conversation with the people who have been here during this conference. I'm starting to feel a little guilty here, though. I'll tell you what I'm going to do at the end of this presentation. I don't want to make Colonel Fallin feel left out, so what I'll do at the end of this presentation is put his e-mail address up on the screen. If you have any questions whatsoever, send them to him and he'll take care of them for you.

The Upper Rio Grande Basin Water Operations Review and Environmental Impact Statement is a cooperative effort led by the Bureau of Reclamation(Reclamation), the New Mexico Interstate Stream Commission(NMISC), and the U.S. Army Corps of Engineers(Corps). The goal is to develop an integrated plan that changes, within existing authorities, the operations of the river and reservoir system to increase efficiency and accommodate new requirements.

The success of this review will culminate with the continued use of our water resources for the purposes that we use them today, whether it's agriculture, recreation, environmental, emergencies, and so on. That's the goal.

Why do this review? It's very simple. The demand for water has increased through the years. It impacts on users as well as wildlife and our environment.

Why are we concerned? Because water is a limited resource, but most importantly, because it's our responsibility. It's our responsibility to leave this world in better condition than we found it when we first got here.

If we do things right, we'll succeed in improving system efficiency, improving flood control, enhancing conditions and accommodating our future diverse needs.

As I mentioned, there are three lead agencies, but each agency is responsible for different aspects of water management. The primary areas of responsibility for the Corps is flood loss reduction and sediment control (Figure 1), prima-

rily at Abiquiu, Cochiti, and Jemez Canyon reservoirs. At Platoro, only flood control will be reviewed. Reclamation will focus on irrigation, municipal and industrial use, recreational use, and fish and wildlife (Figure 2). The NMISC will concentrate on Rio Grande Compact deliveries and the timing of San Juan/Chama releases (Figure 3).

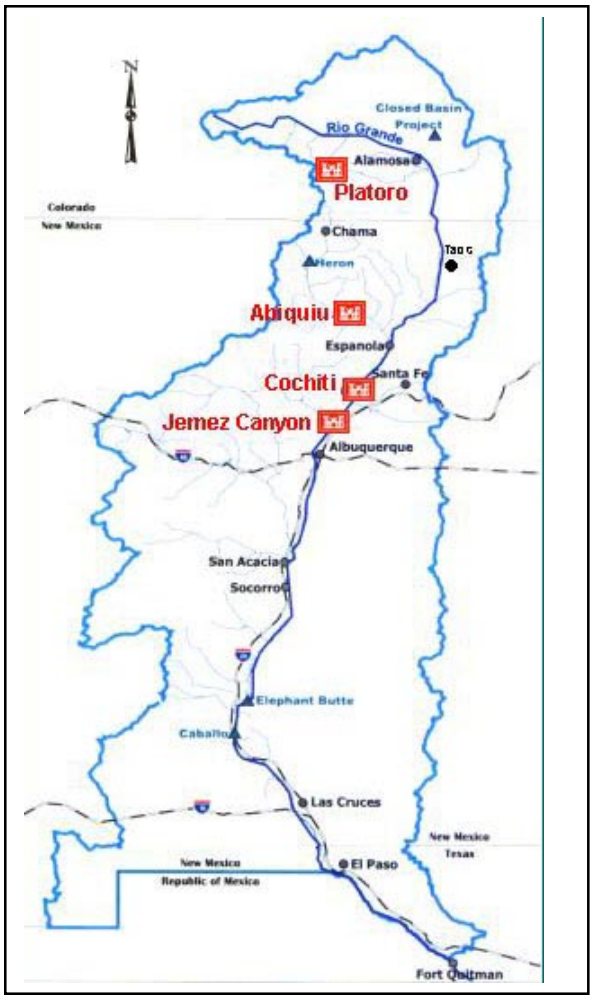

Figure 1. Responsibilities of the Corps of Engineers.

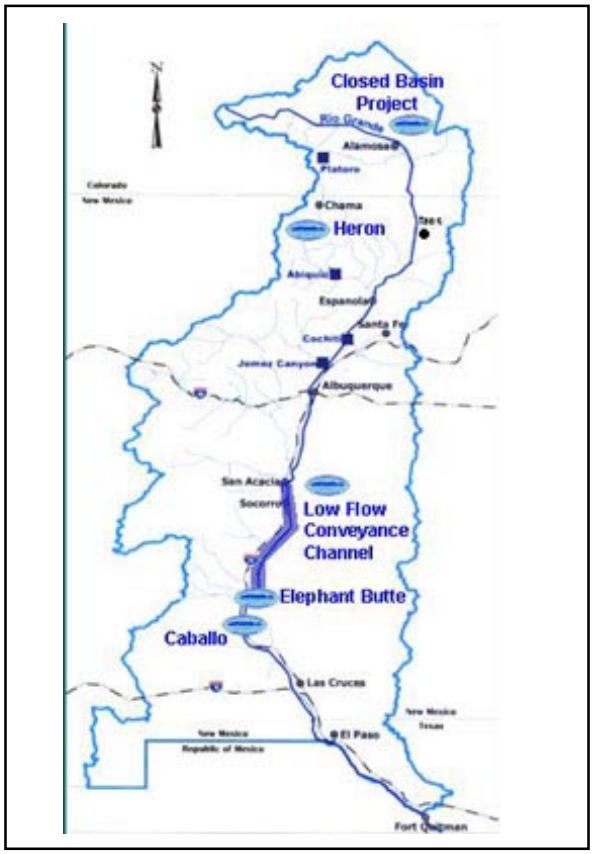

Figure 2. Responsibilities of the Bureau of Reclamation.

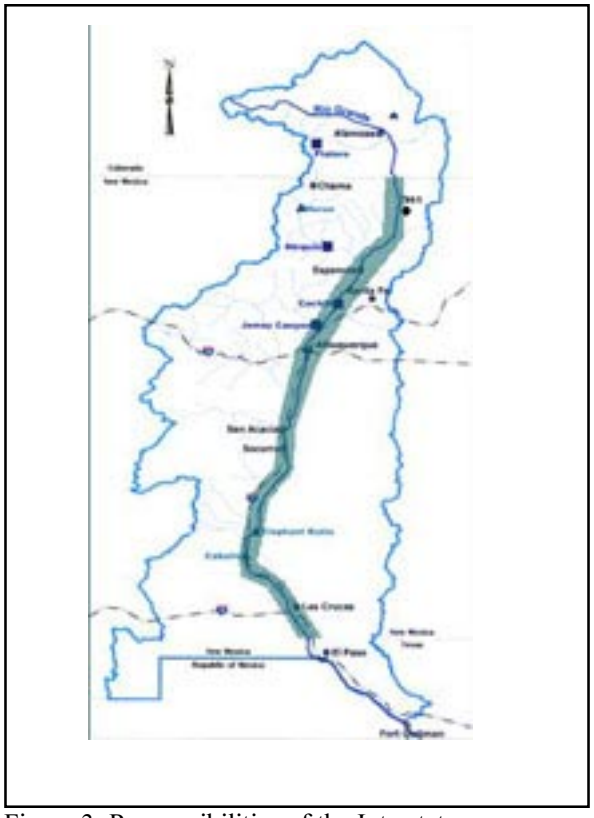

Figure 3. Responsibilities of the Interstate Stream Commission.

We need to keep in mind that this basin is an interconnected unit and as we work through this process, one part can affect another part. We know it won't be easy. Differences in laws, standards, and special interests will all present formidable challenges as we move through this review. As the Sci-Fi movie saying goes "we are not alone."

The review will take all this into consideration and develop alternate water operations or options, and evaluate them. In conjunction with the review, we will prepare an Environmental Impact Statement (EIS), which I'll discuss later.

One tool utilized to develop the review is URGWOM, a model that will track flow at any point on the river or volume in the reservoirs. The hydraulic model(s) will translate flow into depth and velocity. These will be used in the aquatic and riparian models to determine effects or changes due to variations in operation. Geographical Information System (GIS) tools will also be used for analysis and to provide illustrations to detect effects.

Alternative operations have been discussed earlier in this conference. They include developing safe channel capacity to determine releases from Cochiti and Jemez Canyon dams; looking at storage at Abiquiu; and improving flood protection below Caballo Dam. It is possible that other options may come out of the scoping process.

Each option, obviously, will have its own unique issues that must be addressed individually as they pertain to that option. It's not a stand-alone process. You heard Lee Wilson yesterday mention one reach of the Rio Grande where there's been 25 feet of sediment accumulated in the last nine years. Figure 4 is a picture of the San Marcial Rail Road Bridge. Figure 5 depicts a healthy riparian area that thrives on substantial flow. Currently, the San Marcial Railroad Bridge limits the ability to increase the flow. As you can see, the water is almost up to the bridge.

Figure 4. San Marcial Railroad Bridge.

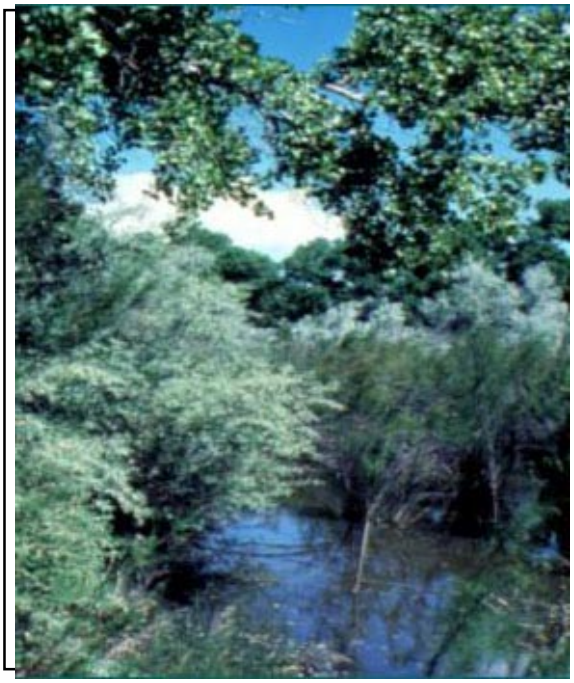

Figure 5. Riparian area

The review will also seek balance. As I mentioned before, what happens in one specific area may impact negatively or positively in another. All of that must be taken into consideration. A thorough analysis of the whole basin is necessary.

Most importantly, working in a vacuum must be avoided. Public participation is key. Input from everyone–agencies, pueblos and tribes, water organizations, users, special interest groups, and the general public–is vital. Throughout the review, cultural and tribal considerations must be respected. Public meetings for the last half of 2000 are as follows:

July 26, 2000	Espanola, NM
August 9, 2000	Chama, NM
August 17, 2000	Albuquerque, NM
September 20, 2000	Santa Fe, NM
September 27, 2000	El Paso, TX
October 17, 2000	Las Cruces, NM
October 18, 2000	Socorro, NM

Figure 6 shows the general organization for conducting the review. The Executive Steering Committee will focus on bringing various groups together for communicating and exchanging information and concerns. The timeline for the project is shown on Figure 7.

The Notice of Intent to prepare the EIS will be published soon. We'll follow through with public scoping meetings, develop the alternatives, collect data, draft and revise the EIS, finalize the EIS, and record the decision by the end of 2004.

How are we planning to keep everyone informed? We will do so through mailings, public meetings, newsletters, fact sheets, web page, and so on. This is not an exhaustive list. There will be other areas added as we proceed with the review.

I've noticed that we have some pretty smart folks attending this conference. I'm sure some of you have been watching that show "Who Wants

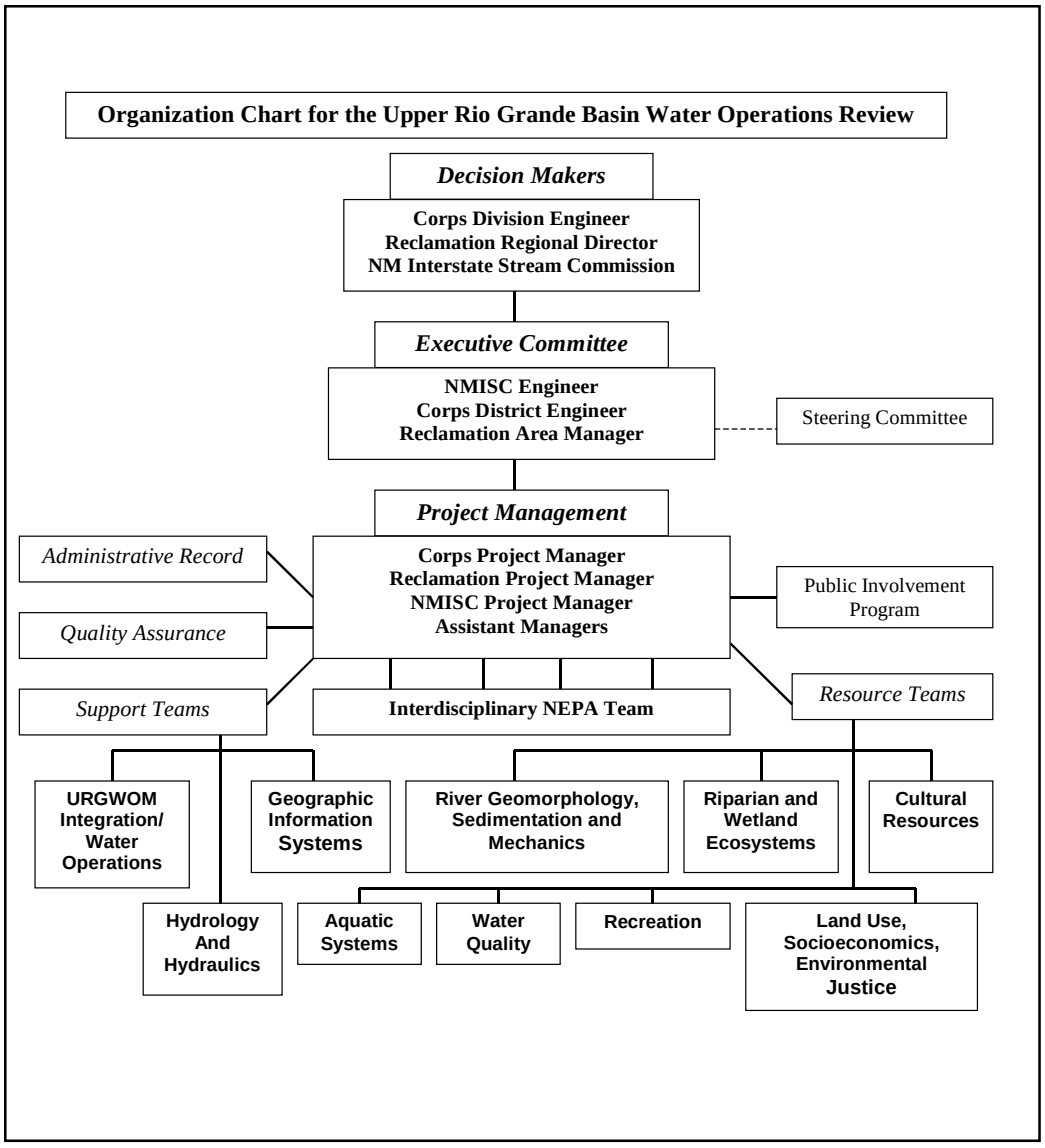

Figure 6. Water Operations Review Organizational Chart

Overview of Master Schedule

	Task Name	Duration	Start	Finish
1.0	Internal Scoping	590d	7/1/98	9/30/00
2.0	Executive Committee	1307d	1/1/00	12/31/04
3.0	Steering Committee	1307d	1/1/00	12/31/04
4.0	Public Involvement	1647d	9/15/98	12/31/04
5.0	NOI and Public Scoping	197d	1/31/00	10/31/00
6.0	ID NEPA Team and Technical Team Development	482d	8/1/99	6/1/01
7.0	Develop Alternatives	458d	11/1/99	7/31/01
8.0	Implement Coordination & Consultation Protocol	1263d	3/1/00	12/30/04
9.0	Finalize Integrated Plan of Study	175d	1/1/01	8/31/01
10.0	Data Assessment and Collection	1155d	8/1/99	12/31/03
11.0	Impact Assessment	413d	10/1/01	4/30/03
12.0	Select Prefered Alternative	132d	5/1/03	10/31/03
13.0	Write Draft EIS	217d	5/1/03	2/28/04
14.0	Public Review of DEIS and Documentation	45d	3/1/04	4/30/04
15.0	Final EIS	153d	5/1/04	11/30/04
16.0	Records of Decision	23d	12/1/04	12/31/04
17.0	Prepare Action Plan	174d	4/1/04	11/29/04

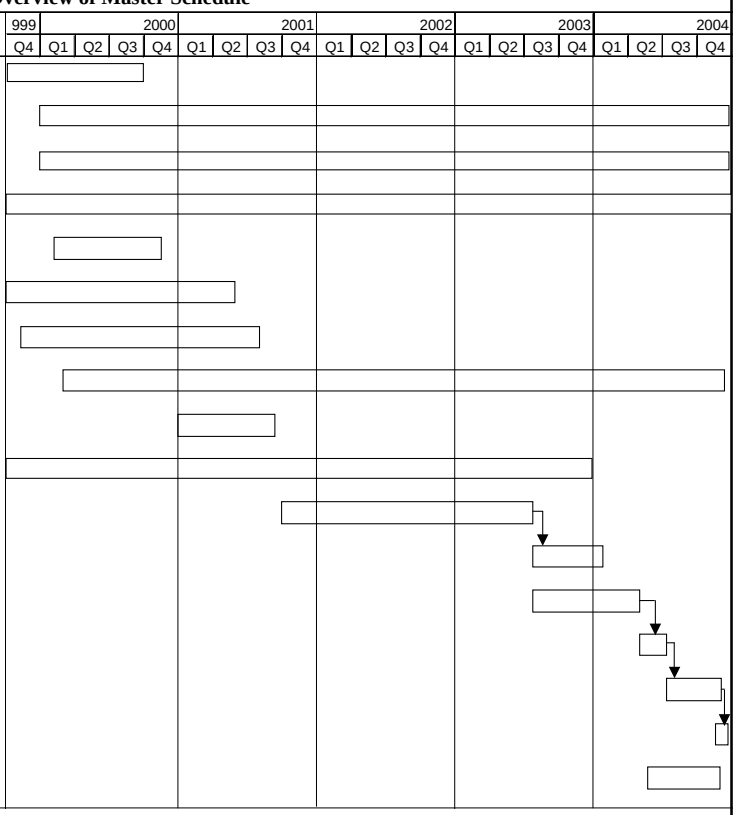

Figure 7. Timeline.

to be a Millionaire ?" and they have a lot of smart folks that appear on that show, too. As smart as they are, they all still get three lifelines. I'm not the smartest guy in the world, but I'm smart enough to know that if I'm going to come here to speak to you, I'm going to come with my own three lifelines as well. If you need technical information, or have any questions about the review, these are the folks to call:
Gail Stockton, Corps of Engineers, 505-342-3348
Chris Gorbach, Reclamation, 505-248-5379
Rhea Graham, NM Interstate Stream Commission, 505-841-9480

I know a lot of difficult challenges will come up during this review and there will be frustrations. I want to leave you with a short story:

In a small town one day, there was an old donkey walking around. The donkey falls into a dry, old well. Folks gathered around and looked down in the well and said, "You know, this donkey's dumb enough to fall in there. Why go to the effort to save him ?" They decide, "Let's just bury him in place."

The old donkey is down at the bottom of the well when all of a sudden he feels this "thump-thump" of dirt hitting him on his back. He starts freaking out. He starts shaking off the dirt and stamping on it. Dirt continues to "thump" and continues to fall. The donkey continues to shake it off and steps up, shakes it off, and steps up again. The donkey soon realizes that the more he shakes off the dirt, the more he can step up. The more he steps up, the closer he gets to coming out of the well. Finally, the donkey was able to shake it off, step up, and step out.

Now a pessimist would just say that that was just dumb luck, but the optimist will say that was a story of determination, perseverance, and the essence of survival. The reason I brought up this story is because I want to challenge all the participants who will be working on this review. When the regulations, the conflicts, the special interests, and everything else starts "thumping" you on your back, don't throw your arms up in frustration. I challenge you to shake it off and step up.