# Permanent Storage at Elephant Butte: Meeting the Needs of Recreationists

Neal B. Brown, President, Lago Rico, Inc. and Operator of Marina Del Sur, Rock Canyon Marina and Damsite Resort

*Neal is President of Lago Rico, Inc. and Operator of Marina Del Sur, Rock Canyon Marina and Damsite Resort. Originally from California, he has lived in New Mexico since the early 1970s and has been at Elephant Butte Lake since 1994. Neal's interests include restoring wetlands and fresh water ecology.*

There is a story of a man who was traveling across the southwestern desert when his car overheated. In need of water, he walked to a nearby ghost town and found an old hand pump. Under the hand pump there was a jug of water with a note instructing him to pour the water into the pump to prime it. The note further instructed him to refill and then replace the jug. I ask the question: should he just take the jug of water and use it up? Or should he follow the advice of the note and use the jug of water to prime the pump? You have heard the expression "have your cake and eat it too." It's just not possible with most commodities to have something, enjoy using it, and then still have it to be used again. But that is the scenario of recreation on the lakes and reservoirs. People enjoy the water, use the water, and we still have the water to be used again. As a matter of fact, recreation, because it does not consume the water, is the most profitable water user. And going to the lake is just plain fun.

Standing just over 300 feet tall and more than 1,600 feet long, the dam at Elephant Butte is a phenomenal structure. The dam was built for water storage to be used primarily for irrigation. In addition to water storage, it provides flood protection to cities and farmlands downstream and it generates electricity. The reservoir provided by the dam has been used for recreation since the completion of the dam back in 1916.

Prior to that time, the Rio Grande was just a great big arroyo. Snowmelt and rains would fill the channel and it would run unchecked—destroying homes and farmlands and sweeping away livestock. Flash floods were a common occurrence with the unharnessed river. During hot times in the middle of the summer, or during droughts like we are experiencing now when the water was most needed, areas of the river would be completely dry. For hundreds of years, people living along the river would try to build dams either to keep water around a little longer or to divert it into irrigation canals. These dams had to be rebuilt at least annually because of flooding and were difficult to use given the diversity of flow rate and unpredictable volume and frequency of water flow.

Around the turn of the century when the civil engineers started looking at the project of building a dam, it was a monumental task. Its completion resulted in the world's largest man-made reservoir of that time. The idea of building a dam was that it would hold enough water in the "good times," or wet years, to sustain farmers in the dry years. The dam also provided safety so people could build homes near the river and their farmland would not be threatened with washing away. Having a dam allowed water to flow at a regulated rate over a greater period of time, which is a huge boon to civilization. People were no longer victims of the river but rather partners with the river. This partnership works really well, most of the time.

With the water came recreation. In the 1930s and 40s, less than 20 years after the dam was completed, the United States government used the Civilian Conservation Corps for lake improvements. The Corps was put to work to make the lake more usable. Usable for what? Recreation, of course. Cabins, an RV park, and a restaurant were built along the old railroad bed. A boat repair shop was built along with a gas station, a hotel, and a number

of other buildings. Several homes were also constructed.

Just as the dam was built to hold water, the U.S. government had recreational structures built to capitalize on the water that was being held. They recognized the importance of recreation so they poured money into some infrastructure. Private enterprise also capitalized on the water. A marina facility and boat moorings were built. People's interest in recreation motivated these structures. After all, going to the lake is fun. Swimming, boating, fishing, and camping around the lake were a major draw to people. In the early 1940s, the water went over the spillway and the lake was the place to be. Houses dotted the hillsides around the dam site area. It was a great time and a great place to live. The dam site area was a thriving community. Enough children lived there that they filled the school bus every morning. Farmlands downstream were fully developed and being irrigated and they received full water allocations. Boats on the lake were getting bigger and faster. About 70 rental boats were available along with rooms to rent and places to eat. On weekends they were all full. An observation deck was built on the roof of the restaurant to watch the boat races. The recreation at the Butte was in full swing. The water in the reservoir made it all happen.

Then things changed. The upper Rio Grande Basin went into a drought in the late 1940s. The drought intensified in the 1950s. The full irrigation demand was more than the Rio Grande could deliver. Allocations were cut and farmers had to adapt to get their fields irrigated. The lake was spent. The water level reached its lowest point in 1954. Recreation was gone. People's lives changed and they moved away. Stories from people living out there at the time recount how miserable things were. They tell how the lake bed was covered with dead fish and rotting algae. The smell was horrible and parents would not let their children go out there because they were afraid they would catch some disease. People left the area and they never returned. The whole community disappeared. In spite of the dam, there was just not enough water to carry irrigation through the drought. Although the dam had immensely improved the farmers' ability to have water, it was not a guarantee to always have water. The lake elevation vacillated but remained low for a number of years.

As a matter of fact, it was 25 years before the storage in Elephant Butte Reservoir was able to recover so that farmers could have full allocations again for irrigation. Even though the lake came back, the dam site recreation area never returned to the bustling community it once was. There were no children to ride the school bus. When the precipitation came, we saw the wettest period in the lakes history. The lake came up 70 feet in one year. This wet period started in the late 1970s, went through the 80s, and into the mid- 90s. It was in 1985 that for just the second time, the water went over the spillway. It remained full and spilling through 1988. After a short dry period, Elephant Butte Lake filled and spilled again in 1994 and 1995. There were over 16 years of abundance. There was a feeling of comfort and well being; a feeling of prosperity.

Then came the poor runoff in the late 1990s. It was a precursor to the tremendous drop in the first few years of the new century. The fact that the water was dropping was discouraging. The discouragement was made worse by negative publicity. Morale was shattered, any feeling of security or optimism was gone. I know the farmers felt it just like those of us in recreation did. There was a push to get the pumps running to save the crops. With the drop in water came a drop in visitation to Elephant Butte. Visitation dropped to only 800,000 visitors—half of what it used to be. Most other parks would brag about 800,000 people coming, but to Elephant Butte it meant a real hardship. Numerous businesses closed their doors or sold out.

Since then, the area has been in a drought. It appears that we will be starting on our fifteenth year of drought. This will be another year of reduced allocations. Only three out of the last 14 years have had above-normal spring runoff measured at San Marcial at the north end of Elephant Butte. The battle to have a business has been a long one and it's one battle we have had to work together to win. Fortunately, we have been able to overcome the bad press and the fears that were prevalent in the first half of this decade. Visitation has increased to over a million again and the trend is moving upward. With the state and national economic situation depressed, people are in need of a recreational outlet. Elephant Butte is on the increase because it fills this recreation need. It is inexpensive, wholesome fun.

The lake went from being full in the 1980s and 90s to short allotments a few years later. The great dam has improved life for all of us in the Southwest. It has given us quite a bit but it is not big enough to average out the water flow over

the length of a drought. If it were twice the size, it still would not be big enough. We need to exercise wisdom and prudence in using this resource. In the past, prolonged drought has been the primary threat to the lake. That is not the case anymore. There are new issues attacking the reservoir.

Some people feel that the river should be kept running all year long. Others would remove the Dam. There are concerns that if the lake fills up, a few of a certain species of bird believed to be endangered will be displaced. Current law may be interpreted such that preserving salt cedars (the new found habitat for the willow fly catcher) may be more important than water storage; more important than the people who use that water.

These factors will determine how much water is available for irrigation. In other words, they will determine when the lake is full or when it is empty. Remember, the reservoir was built primarily for irrigation. Farmers are the ones who create the financial economy that the rest of us are trying to spread around. Anything that is going to be done that impacts the farmers needs to have the farmers' input taken into consideration; the impact on farmers must be accessed before it is implemented. All too often, decisions are made based on false science spewed out by eloquent orators. We are all aware of ridiculous laws that have been passed that are impractical and regressive. These decisions are frequently made by well-meaning but disconnected government officials and result in huge expense and misery for mankind. There is a fable about a chicken who was hit on the head by an acorn. The chicken then gathers as much support as it can from the other animals and gets them all stirred up in a frenzy in its cause to save the world. Just like in the story of Chicken Little, there are times when someone has a perceived issue (such as the sky is falling) and they are willing to sacrifice the well-being of everyone else to solve their imaginary problem.

In these cases, the solution is to the detriment of mankind. We need to get rid of these ridiculous laws and we need to be careful not to write or allow to be written any more ridiculous, unreasonable laws. People will—and do—suffer the consequences of these bad laws. With all that said, right now, in our community, there are people using good judgment in preserving the reservoir. We applaud the efforts and wisdom in channeling the north end of Elephant Butte. Another great idea to support is water banking. The eradication of water-wasting salt cedar trees has been profitable and should continue, especially along the Rio Grande corridor. Can you see how recreation fits into all of this? Just like the farmers, recreation is impacted by the amount of water available.

When the lake is full, there are no water costs for recreation. All that is needed for recreation is water to play on. As I said before, people who play at the lake use the water but they don't consume it. Only when the lake is at its lowest point is there a cost associated with the water to play on. That cost is minimal and it is worth it to keep some water in the lake. Recreation allows us to make money on the same water twice. This means more businesses in our community, more people working, more money in the economy, and an improved quality of life. There are a lot of benefits manifest by people coming to the lake.

Did you know that tourism is the number one employer in the state, providing more jobs than any other industry? After oil and gas extraction, the tourism industry is also number one in bringing in revenue.

As a recreation destination, the Rio Grande corridor has millions of visitors each year. Elephant Butte Lake is by far the most visited state park in New Mexico. With between one and two million people coming annually, Elephant Butte makes up almost 25 percent of all of the visitors to the state parks. In other words, almost one fourth of the state park visitors throughout the whole state visit Elephant Butte Lake. Consequentially, Elephant Butte generates more money than any other State Park. Elephant Butte provides more than 20 percent of the revenue that State Parks take in statewide. Money derived from Elephant Butte helps support the rest of the state park system. In addition to fishing and water sports, the lake is used for numerous other activities such as biking, hiking, bird watching, and camping. Locals are not the only ones who use the lake. We see people from around the world. It draws people from all over the Southwest who make regular visits.

Remember, going to the lake is fun. It lifts your spirits. There are a lot of reasons why people go to the lake but underlying all of them is the fact that it is enjoyable and affordable for everyone. And it just makes you feel good.

In addition to all of the people, the lake area is visited by about 300 species of birds, some of which are waterfowl that depend on Elephant Butte for a winter home. Because the Rio Grande corridor is in a principle route on the central migratory flyway,

it provides a safe stopping point for waterfowl and other migrating birds traveling across the continent. Additionally, the lake is an ecosystem that supports numerous species of fish and animals in the area.

Keeping water in the lake makes sense, economically and environmentally. Like keeping water around to prime the pump, having water around also keeps the economy primed.

Let me share a couple of analogies of what happens when the lake is drained to its lowest point. In relationship to the environment: You can compare running all the water out of the lake to driving your car until it runs out of gas. It may be very inconvenient, but you can go get a gas can, put gas in the car, and get down the road. Other than the trouble caused by the inconvenience, it is an easy fix. If the water is drawn out of the lake, most of the pelicans and other birds will go somewhere else, but they will probably survive as a species. Some of each of the species of fish will survive to repopulate and those that don't survive can always be restocked. Although a lot of plants will die, there will still be a seed base. Even though it will be a stinking, rotting mess of algae and fish, nature will take care of it. Although it will take years and it won't ever be quite the same, environmentally speaking, the lake can be environmentally fixed by simply filling it back up with water when the drought is over.

Now consider the economic consequences. Draining the lake is like driving your car and running out of oil. It is not only inconvenient, it is very, very expensive. Putting oil back in the car will not fix the engine. Economically speaking, pulling all of the water out of the lake is much more difficult to fix. First, there is the loss of millions and millions of dollars that have been invested by small businesses in the area. There is the huge loss of revenue to the state through taxes and fees. Think of all the boat and RV dealers in the Southwest who will be negatively impacted. The marinas and many of the motels, restaurants, gas stations, boat dealers, and boat repair shops will go into bankruptcy and lose their businesses. It will be a catastrophic event to the cities of Elephant Butte and Truth or Consequences just like it was to the dam site area 60 years ago. The impact on the state in lost revenue and increased unemployment will cost every one of us. The negative effect on the millions of visitors who have fun there is harder to measure. The more than 400 people who have boats moored on the lake will certainly be put out. Losing the destination place for all of the people and families that vacation there will be very significant. Morale was low six years ago but it will really be bad if the lake is allowed to dry up. A minimum pool could have a predetermined elevation that would keep the lake viable for recreational activities.

Another factor that affects allocations is who owns the water. Right now I believe about 200,000 acre-feet of water in the reservoir are promised to someone and are not available for irrigation. That amount of water can vary up or down. Having a predetermined elevation would minimize storage capacity impact and allow us to take advantage of that stored water. When you go to the bank and open an account, they ask you to put a hundred dollars in your account. That hundred dollar deposit won't make or break you. Put that hundred dollars in the hands of the bank and it gets invested and benefits the whole community. It may help your kid buy a car or your neighbor buy a house. A permanent pool of water for recreation is only a bucket full of water to irrigate each field. It is not going to make or break anyone, but in the hands of recreation it will provide hundreds of jobs, bring money into the area, and provide recreational services to everyone. Having a minimum elevation point means greater stability and sense of security for the whole Southwest.

It is easy to avoid running your car out of gas or oil. It is just as easy to keep from running the lake out of water. Remember, the man who was stranded in the desert? I ask the question again, do we just use up the last of the water? Or should we use the water in the jug to keep the pump primed?

For the benefit of all, we need to establish a minimum pool or minimum water elevation—before the water is gone.