



REQUEST FOR PROPOSAL

Boating Capacity Management Plan

Lake Advisory Committee
Town of Lake Lure, North Carolina
[2005]

Project Objective

Lake Lure is seeking consulting services to help address overcrowding on the water and to ensure the long-term use of a safe, enjoyable and peaceful lake environment. We expect to accomplish this by introducing limitations on the sale of non-commercial boat permits (commercial limits have already been imposed). We are looking for qualified professionals to help identify options and to formulate a plan that can both meet the town's objectives and be effective within our unique constraints. The town has budgeted for the study to be done this year.

Capacity Management Background

Boating on Lake Lure is a highly seasonal activity. While boaters and fishermen enjoy the lake year-round, it is during the summer season that peak boating volumes are experienced. The lake comprises 720 acres, approximately 220 of which are designated no-wake areas. Each year, around 2,400 boats apply for and receive permits for use on the lake. This includes motorized and non-motorized vessels; annual, weekly and daily permits; lakefront property owners, off-lake town residents and non-residents.

From this pool of boats, we believe we are currently reaching the maximum safe carrying capacity on some peak-season days (e.g. holidays) and peak-season weekends. We have had past seasons (e.g., 2001) where it was believed the lake's maximum carrying capacity was reached the entire week--not just the weekend. We believe we do have unused capacity during some peak weekdays and, most assuredly, during spring, fall and winter season days. While the volume of boat permit applicants has remained somewhat steady over the last few years, two factors are likely to generate increased demand for boating. First, a significant amount of undeveloped lakefront property is likely to become available for development. Secondly, we are experiencing tremendous growth in nearby off-lake communities.

The Town of Lake Lure is making every effort to be a responsible owner and manager of their lake. As owners of the artificial water body known as Lake Lure, the Town Council and Lake Lure Marine Commission have followed in the footsteps of previous town leaders with pro-active management of the community's most valuable resource - the lake. The town has been examining the lake's boating carrying capacity for nearly two decades. Because of the current building boom, the marine commission has now made the commitment to restrict the total number of boat permits available to commercial operations in 2005 and for recreational boaters in 2006. The marine commission has recently adopted commercial limitations based on management practices employed by other privately or publicly owned lakes and on data from studies performed by the U.S. Coast Guard, the EPA, the Army Corps of Engineers, the Department of the Interior and the Town's Lake Advisory Committee - which conducted the 2001 Lake Lure Lake Use Study. The study concluded from data and a survey of the citizens that action was needed to address the constraints of time and space and the impact of different boating activities in the current environment of dramatic growth.

The regulation and limiting of commercial boats is aided by a number of factors:

- The Marine Commission has restricted commercial boats to 30% of total lake carrying capacity
- There are a relatively small number of commercial businesses operating on Lake Lure
- The on-water impact of commercial operations can be fairly well modeled because the activities are easily classified and the usage patterns are predictable.

We anticipate a much greater challenge in modeling non-commercial lake usage because of greater variability in individuals and activities. It is for this reason that we are seeking the experience of consultants to assist in the capacity modeling and in the recommendation of resource allocation methods when demand exceeds capacity.

Lake Lure: Statement of Purpose

Since its construction, the impoundment known as Lake Lure has been utilized as a multi-purpose facility. Beyond the primary purpose of drawing potential real estate investors to the Hickory Nut Gorge region, it was an ingenious design that continues to serve the residents in these numerous ways (numbered in historic priority):

1. Recreation for both residents and visitors:

- Swimming: Due to its location near the continental divide and the incorporation of a sewer system in the original design, swimmers enjoy a class B trout water quality - better than most of the drinking water in the world.
- Boating: Thanks to the Town owning the lake, local regulations affecting access through boat permit fees and establishing safety standards not found on other lakes, Lake Lure has one of the safest boating records in the state.
- Fishing: Once heralded as one of the top fishing lakes in the country, Lake Lure's fishery suffered from neglect for many years. Current and proposed programs are starting to bring it back to its potential.
- Water Sports: Water skiing and other forms of water sports activities have been enjoyed on the lake since it was completed in 1927. Boating and water safety classes have helped educate participants in past years along with ski clubs that incorporated safety education into their programs of show and tournament skiing.

2. Hydroelectric Plant:

The purchase of the lake and the hydroelectric plant has been one of the most important chapters in the Town's history. The generation of electricity supplements the tax base and helps the town provide services and maintain the infrastructure.

3. Flood Control:

While this was not the main purpose of the construction of the dam as it is with other impoundments, the Lake Lure dam does serve this purpose for the residents around the lake and downstream.

Lake Management Objectives

1. Ensure continued safe and enjoyable use of the lake today and for the future. Have effective lake management strategies, policies, procedures, models, tools and regulatory mechanisms defined and in place to achieve this goal.
2. Ensure that the various uses of the lake (outlined in the statement of purpose) remain compatible, supported and balanced. This means balancing the impacts on the environment, the economy and the citizens.
 - Environment – effective lake management should protect the lake from undue impact to the ecosystem.
 - Economy – the lake and the surrounding Hickory Nut Gorge serves as the engine for a significant and far-reaching local economy. Effective lake management should acknowledge, support and protect this economy from undue impact.
 - Citizens – the lake is held in trust by the Town for the benefit of the citizens of Lake Lure. Effective lake management should support fair access to lake resources by the citizens and safeguard against preferential enjoyment by privileged groups.
3. Ensure lake use privileges enjoyed by current property owners and boat permit holders will continue to be available for future generations. Develop lake management policies and procedures that protect these privileges from both undue restriction and from the impacts of unrestricted growth.

Supporting Materials Available

- Demographics: *size of lake, shoreline, # of homes, population*
- 1999 Lake Management Plan
- 2001 Lake Use Survey – *defines what the community sees as the desired “uses” of the lake.*
- 2004: The Law of Lake Lure by Dr. G. W. (Jerry) Sherk – *outlines the unique legal status of the town’s ownership of the lake, implications on regulatory authority and management responsibility*
- 2005 Lake Management Press Release
- 2005 Lake Capacity Model for Commercial Operations
- Boat permit totals for the last decade
- Current boat permitting regulations

- Current lake use regulations
- Current lake structures regulations – *boat houses, slips, docks, etc.*

Expected Deliverables

1. Determine the non-commercial carrying capacity for lake...similar to what has been defined for commercial water activities. This will likely be reflected as the number of concurrent boats, of various types and engaged in various activities, that can safely operate on the lake.
2. Determine the maximum size of the pool of available boats (number of boats and/or boat slips) that will not exceed the carrying capacity of the lake. This will likely require assumptions about usage patterns, mix of boat types, etc.
3. Define options or approaches for allocating the available boating volume (permits or slips).
4. Recommend an allocation method (or combination of methods) that balance the town's objectives, citizen expectations, current privileges, issues of fairness and equity.

Proposal Contents

1. Qualifications, Experience and References (include comparable projects and/or deliverables)
2. Statement of Work containing (at least):
 - Approach and methodology
 - Deliverables
 - High-level schedule
 - Assumptions and requirements
 - Cost Proposal (fixed fee)