



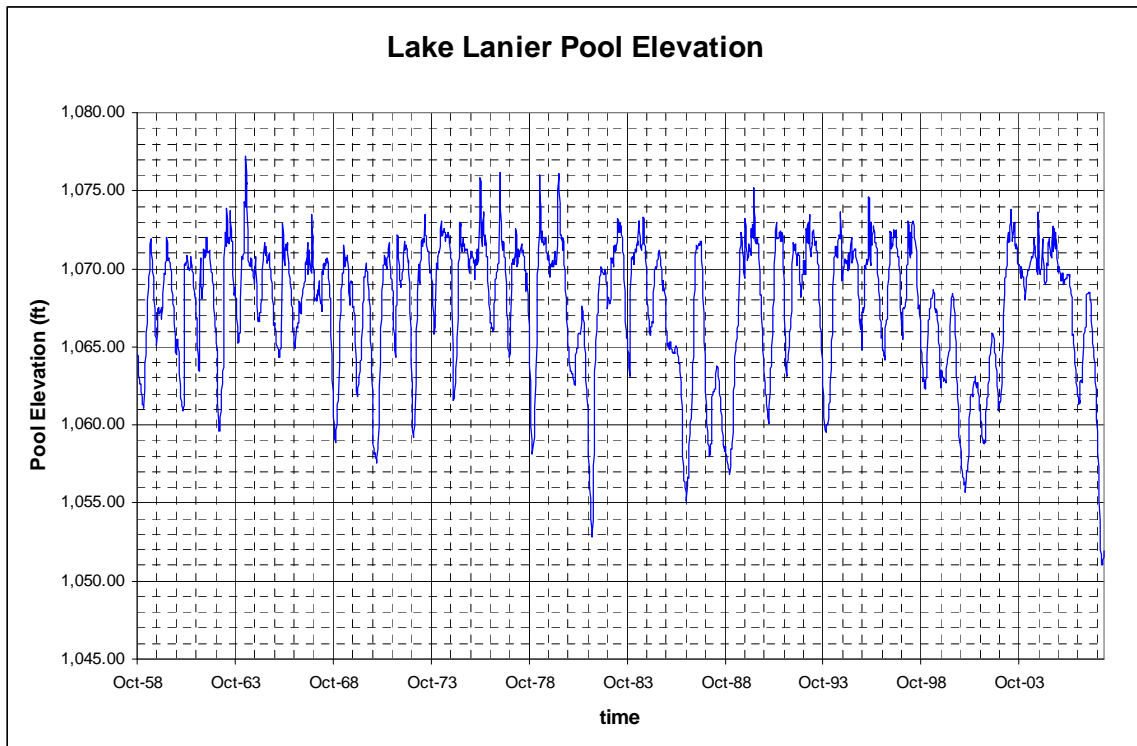
Lake Lanier Update – Seasonal Recharge Statistics

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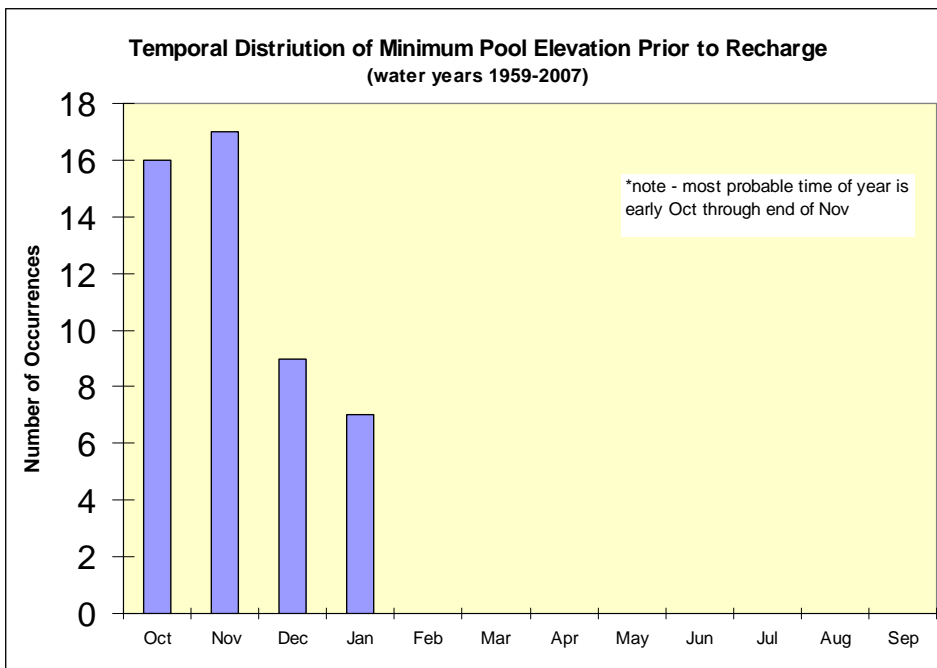
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Key Points:

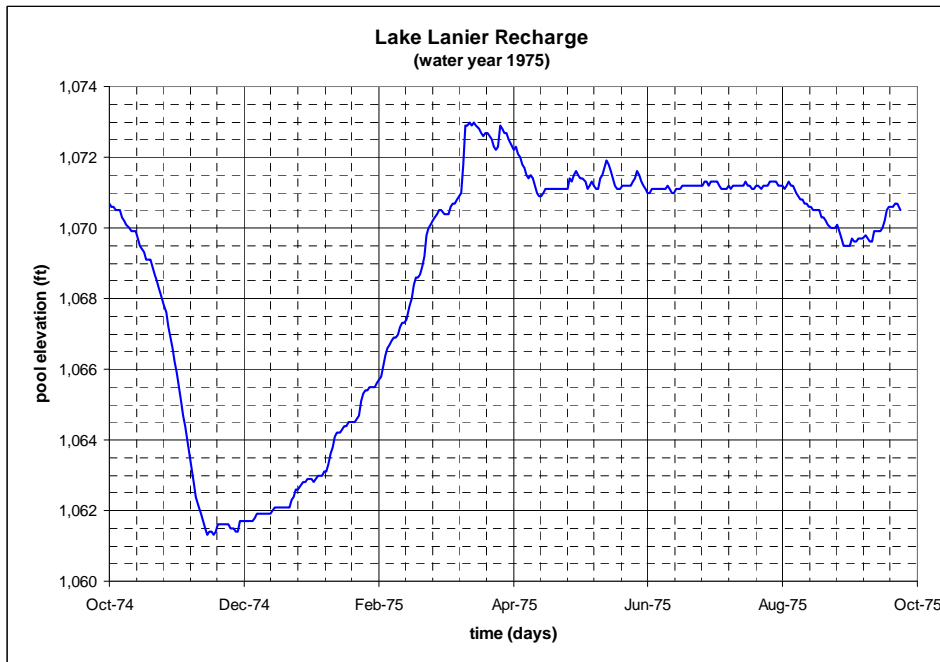
- Lake Lanier Rises An Average of 9 Feet Over the Winter and Early Spring
- Late Winter / Early Spring Recharge Critical



Lake Lanier rises and falls annually. It typically reaches its **lowest level sometime between the beginning of October and the end of November**. This is shown in the following histogram.



One also notices a sharp rebound from the annual lowest level. This corresponds to the typical increase in winter and spring rains. The recharge of 1975 is a good example:



So, looking at statistics alone, what can we gather from past years?

- If there are heavy, repeated rains, **the lake can recharge quickly and significantly**. The maximum recharge was 18 feet when the lake rose from 1058 feet in November of 1978 to 1076 feet in April of 1979.

- On the other hand, there has been **one instance when there was nearly no recharge**. This happened from the fall of 1985 through the spring of 1986. During this timeframe, the lake was in fairly good shape coming out of the fall months (above average pool level). Virtually no recharge occurred that following winter/spring, which resulted in the third lowest pool elevation in the fall of 1986, 1054 feet. There have also

been a few other years where there was less than 5 feet of recharge. However, these instances happened during years when the reservoir level was fairly high in the fall months.

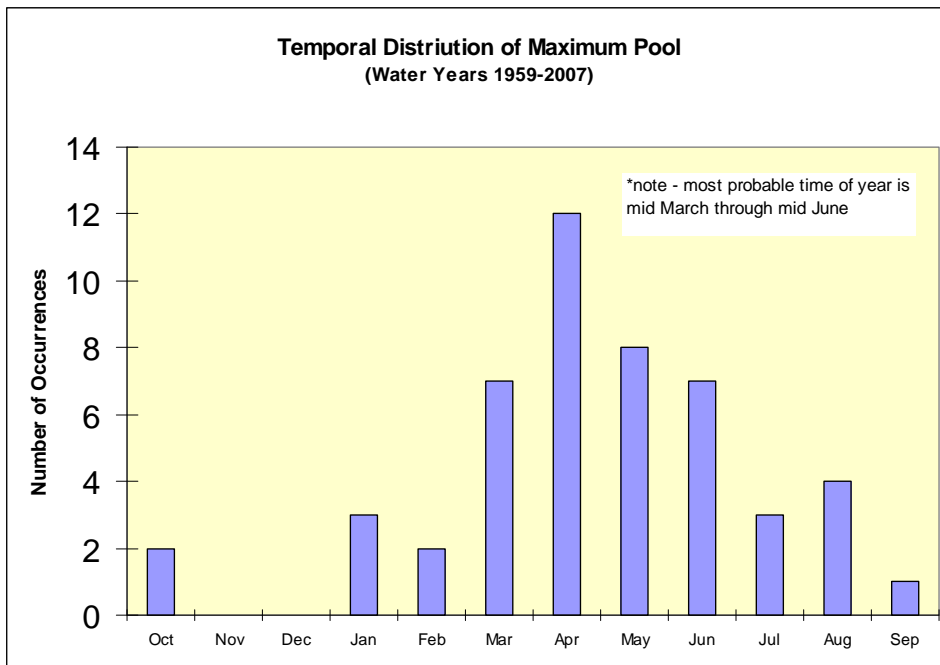
- The average winter/spring recharge is 8.9 feet. So, in a **“typical” year the lake will rise about 9 feet.**

But this is anything but a typical year. The winter/spring recharge of 2007 was below normal. This has been followed by another below-normal winter 2008, resulting in a record low pool elevation of 1050.8 feet. The lake has risen only about 1.6 feet through mid February. This is better than what occurred during the 1985-86 zero recharge event. However, this year the lake’s recharge starting elevation is about 15 feet lower than that period.

Let’s look at other years in which the lake has been unusually low (years when the lake started below average – 1063 msl).

- **The average recharge during these low pool level years is 11.4 feet.** So, typically, the lake will actually rise a bit more during a year when it starts off low than when it is in a normal or high range.

When is the most likely time for this recharge to occur? Typically, the **maximum pool levels are reached sometime between mid March and mid June.** The following histogram shows the temporal distribution of when maximum levels are reached.



Past years show a high probability of some degree of recharge through the rest of the winter and into spring.

Rise from Lowest Level	% of Time
0 or greater	100
2 feet or greater	96
4 feet or greater	90
6 feet or greater	73
8 feet or greater	55
10 feet or greater	37
12 feet or greater	24
14 feet or greater	16
16 feet or greater	6

There are a number of variables to consider as we head into spring. One such variable are future outflows from the lake. However, **the most important factor is the amount of future rain.**

With minimal releases and repeated heavy rainfall, significant rises are still possible on Lake Lanier. However, we are experiencing an atypical year, where we are starting our recharge from the lowest pool elevation on record coupled with a below-normal recharge to date. If rainfall continues to be below normal, the lake will head into the summer with record low conditions.