

Summary of the Special Meeting of SLCWD on January 11th 2008

By Catherine Gortner

A special meeting of the Sierra Lakes County Water District (SLCWD) was held on January 11, 2008 to present the findings of SLCWD's research on water supply. In this forum Royal Gorge also presented their water supply demand and their perspectives on water supply. It was a standing-room only meeting which shows that water – specifically, our lakes – are a topic of deep concern to many. It is also not surprising that the district's research resulted in different conclusions about available water than Royal Gorge.

The President of SLCWD, Wade Freedle, began the meeting and went through a slide presentation detailing the results of the district's water supply studies:

- Current usage is about 800 EDUs (equivalent dwelling units)
- With the build out of the existing Serene Lakes subdivision, consumption will be about 1081 EDUs
- Royal Gorge's proposal is for an additional 950 EDUs
- The drainage basin is about 2 square miles
- Average precipitation from July through September is about 2"
- Average snowfall is 391 inches
- Average snow depth on April 1st is 82"
- The spillway elevation is 6873 feet
- The volume of the lakes is 780 acre-feet
- The surface area of the lakes is 79 acres (Lake Serena is about 25 acres and Lake Dulzura about 54 acres)
- The depth of Lake Serena is 24.5 feet
- The depth of Lake Dulzura is 33.5 feet
- In drought year the lowest level reach is minus 2.8 feet (a drought year is averaged 54% of normal)
- The lake level drops below the dam from mid-June to mid-July

- In a computer simulation, SLCWD looked at a Placer County's requirement to address water demand for 4 consecutive drought years. Current pumping rates can be maintained during a four-year drought and the lakes will remain connected with the lake surface area reduced to about 70 acres. An increased pumping to meet the build out of the existing Serene Lakes subdivision will lower the water depth an additional 4 inches and reduce the surface area of both lakes to about 67 acres.

- Placer County also has a requirement in the general plan that requires 1 acre-foot (893 gallons) per EDU for a new development. If SLCWD applies this to the current usage of 800 EDUs, the more stringent requirement of 893 gallons per EDU will isolate the lakes, lower the depth of both lakes about 15 feet and reduce the surface area of Lake Serena from about 25 acres to about 7 acres and will reduce Lake

Dulzura surface to about 13 acres. In other words, with current usage but more rigid planning requirements, both lakes will be reduced to mud puddles.

- In another simulation, an increased pumping to 345 acre-feet to cover current usage plus Royal Gorge's projected usage (but not at the more stringent Placer County requirement of 893 gallons per EDU) will isolate the lakes (meaning boaters will be confined to a single lake and restricted to paddling around a bit near the center of the lake where there might be enough water depth) and lower the depth of Lake Serena about 5 feet.

Ben Swann, hydrogeologist for Royal Gorge then presented:

- The volume of the lakes is 798 acre-feet
- Current usage is 120 acre-feet
- From May through June 2007 the lake outflow is 516 acre-feet over the spillway
- From January through June 2007 the lake outflow exceeds 1000 acre-feet over the spillway
- 2 SLCWD groundwater wells were tested in December 2007 and produced 11 acre-feet / month. Usage of 50% yield would provide 5.5 acre-feet per month.
- Regarding water rights downstream or the fact that the North Fork of the American River is a federally designated Wild and Scenic River, Royal Gorge will not comment. They said those issues would be addressed by the CEQA process.
- Royal Gorge also believes SLCWD's are not just paper water rights, they are viable water rights and are not an over-allocation.

Mr. Swann presented three tiers of water sources for the proposed development:

Tier 1: use available groundwater: new wells, Serene Lakes, East Lake (a new lake just west of Serene Lakes and to be filled by "spillage" from Serene Lakes), current SLCWD wells (now used only for emergency supply), raising the dam six inches, and lowering the lakes in "off-season" by an additional two inches per month.

Tier 2: use existing wells at Rainbow Lodge and pipe the water to Serene Lakes along old Highway 40.

Tier 3: Construct a reservoir about a mile down Serene Creek.

Although not presented at the water district meeting, the documents filed with the County include dredging Serene Lakes in tier 3.

The developers say that tier 1 solutions are probable, tier 2, possible, and tier 3, are not probable. Tiers 2 and 3 would only be done as necessary.

Interestingly, the water source for the proposed West Lake recreational lake in Lake Camp was not addressed. Mr. Livak said the developers had really given no thought to that.

- Rainbow Lodge wells produce 6 acre-feet per month
- If the Serene Lakes' dam was raised 6 inches:
 - It would raise the lake level 6 inches above the current spillway and create an additional 37 acre-feet of storage
 - Mr. Swan showed only 2 data points per year showing "spillage" over the dam. The reader should also take note that Royal Gorge uses the term "spillage" over the dam to connote "excess that should be contained" whereas that "spillage" is actually a vital and natural flow which travels down Serena Creek and feeds the North Fork of the American River, a protected river. Joe Gray from Serene Lakes commented that only 2 data points in an entire year does not give an accurate representation of patterns. And by raising the dam 6", instead of a few days of raised lake levels in mid May, when snow is still on the ground and trees and vegetation are dormant, trees and vegetation will remain flooded through mid July. The trees on the two islands on Serene Lakes will be flooded and most likely will die. As the trees and shrubs die in the area affected by the raised water level, we will be left with areas of muck and mud, and our access to and enjoyment of our lakes will be impacted.
- If East Lake was created on Royal Gorge property ("Lake Camp")
 - Total capacity would be 85 acre-feet
 - Useable capacity would be 40 acre-feet
 - Water would be used July through December
 - Water would be filled with water "spilling" from Serene Lakes
- If a large dam was constructed on Serena Creek ("Serena Creek Reservoir"):
 - Total capacity would be 300 acre-feet
 - This would be a third priority and probably wouldn't be needed
- If Royal Gorge drilled new wells:
 - They have 3 wells north of Serene Lakes at 150 gallons per minute (242 acre-feet per year)
 - At 50% yield they would produce 121 acre-feet per year

After covering their perspective on water supply first, Royal Gorge then presented their water demand:

- Royal Gorge estimates 500 gallons / day (GPD) for a Single Family Residence (SFR) and 300 gallons / day for a Condo or Employee Housing
- In Northstar, Placer County approved 46% initial occupancy increasing to 76%. This is an average, not a peak

SFR	500 GPD / unit	457 units
Condo/Employee	300 GPD / unit	803 units
HQ, Interpretive Ctr, Old Summit Station	250 GPD / restroom stall	26 stalls
Sales Pavilion, Post Office, Library	250 GPD / restroom stall	10 stalls
Restaurants	1.8 GPD / square feet	22,500 s.f.
Swimming pools, Ice rink, Sports Complex, Wellness Center	250 GPD / restroom stall	48 stalls
Ski Camp restrooms	250 GPD / restroom stall	10 stalls
TOTAL DEMAND	216,163 GPD at 46% occupancy	
	240 acre-feet per year at 46% occupancy	
	395 acre-feet per year at 75% occupancy	

After Royal Gorge’s presentation, many questions were asked, primarily by Serene Lakes homeowners concerned with preserving the recreational and aesthetic values of the lakes, which could be severely impacted by the Royal Gorge demand. There was also concern about damage to the trees, vegetation and even foundations and structures of lake-front homes.

The atmosphere of the meeting was tangibly charged. Royal Gorge enjoyed no allies in the audience, which speaks to fact most homeowners are expressing concerns over this project. If there are summit homeowners that are in favor of the development, one would think they would have attended the meeting. They were noticeably absent in the packed room.

I spoke with Wade Freedle after the meeting about the discrepancies between the district’s water supply and what Royal Gorge believes might be made available to them. He said, “Both of these presentations are preliminary. The district has not had the opportunity to analyze the Royal Gorge proposal in depth. The district will transmit the RG proposal to our environmental engineers, Jones and Stokes, and they will make the determination as to the adequacy of our water supplies to meet Royal Gorge’s projected demand.” At least we are in diligent hands with our district board members.