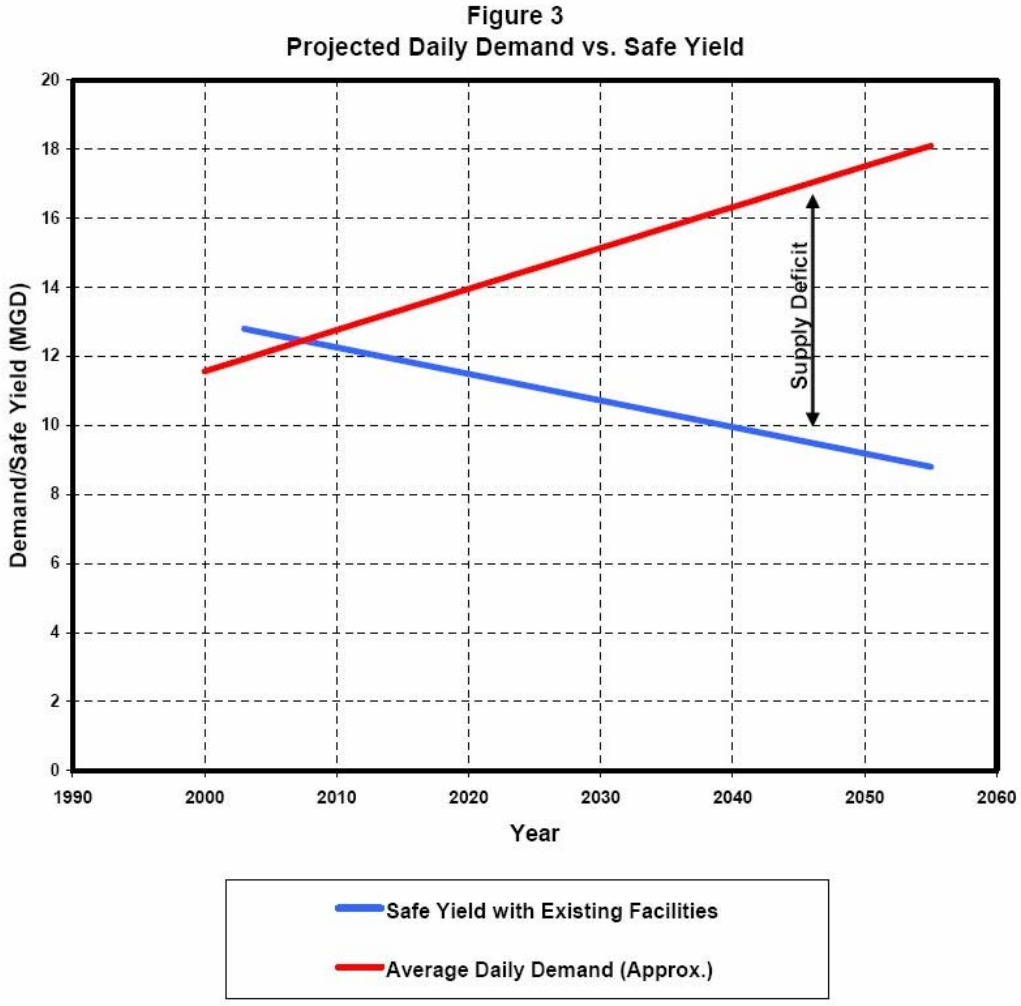
This is the supply/demand graph from Rivanna's permit support document. It shows a projected deficit of 9.9mgd for 2055



Now we know better!

Thanks to City Council's insistence on a study of the actual condition of the reservoir, we know that most of the assumptions that went into this supply/demand curve were wrong

Today - HDR estimates the existing volume of SFRR at 1,389 million gallons of total storage, with 988 million gallons usable storage.

That is 239 million gallons *MORE* total storage and 188 million gallons more usable storage than reported by the previous 2001 survey.

Furthermore, the HDR analysis shows that the rate of sedimentation is 12.5 million gallons per year, not 15 million gallons as previously reported.

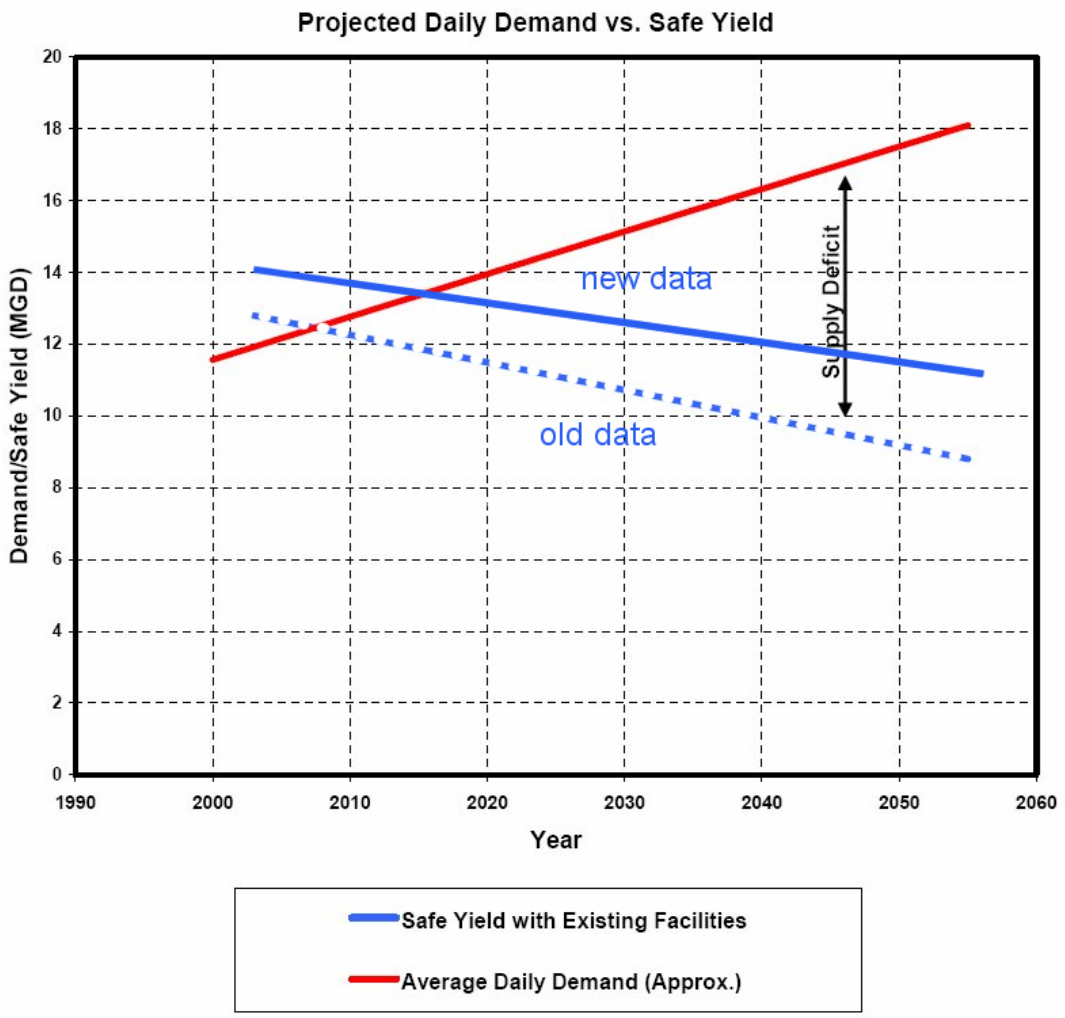
So the reservoir has more water and is losing capacity more slowly than previously reported by Gannet Fleming

Furthermore the 2001 survey projected that by now (2010), we would have lost an additional 135 million gallons due to sedimentation. Not only did we not lose 135 million gallons – we actually gained 188 million gallons of usable storage

So - we actually have 323 million gallons more usable water than Gannet Fleming projected for 2010.

190 million gallons of storage = 1mgd, so this increase in volume amounts to an extra 1.7mgd of supply that we currently have now, compared to what Gannet Fleming projected

Using what we now know are the actual reservoir volume and sedimentation rates, the true supply graph looks like this:

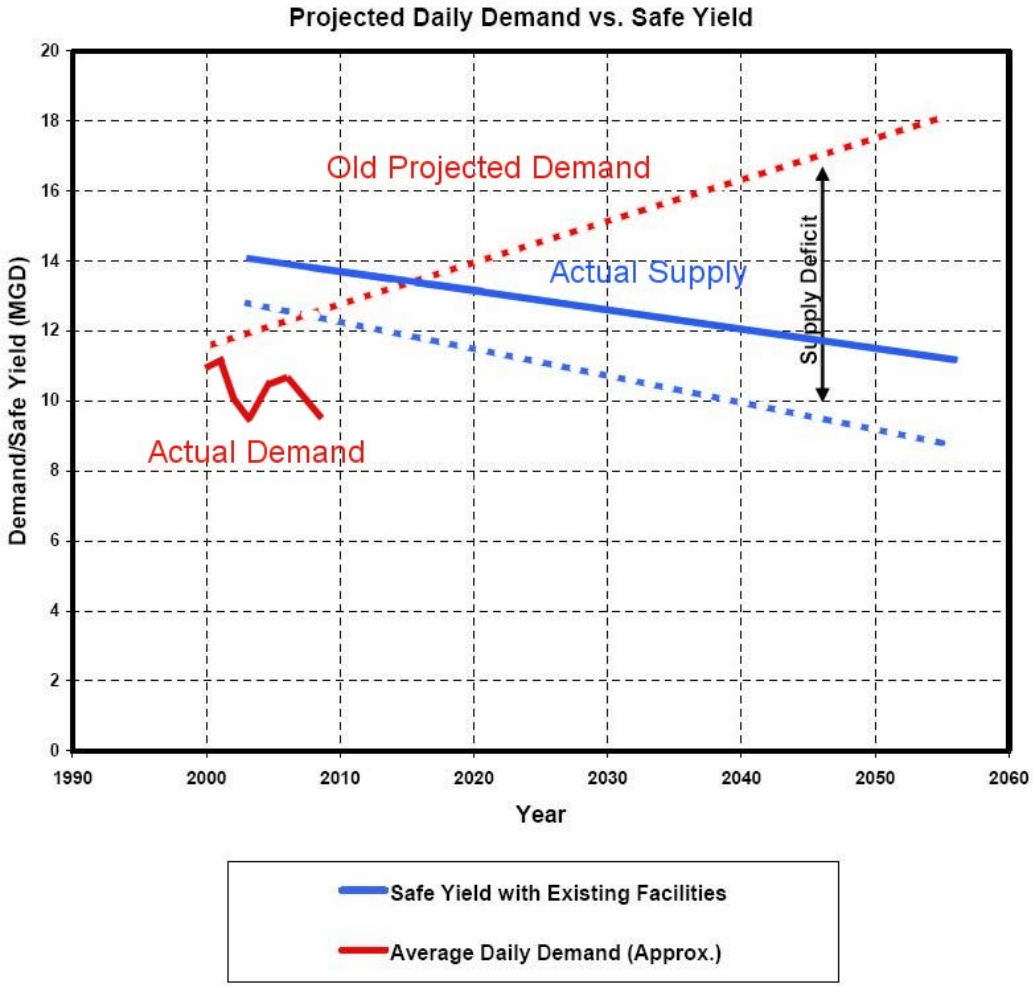


We also now know that Rivanna's previous demand projections were wildly wrong

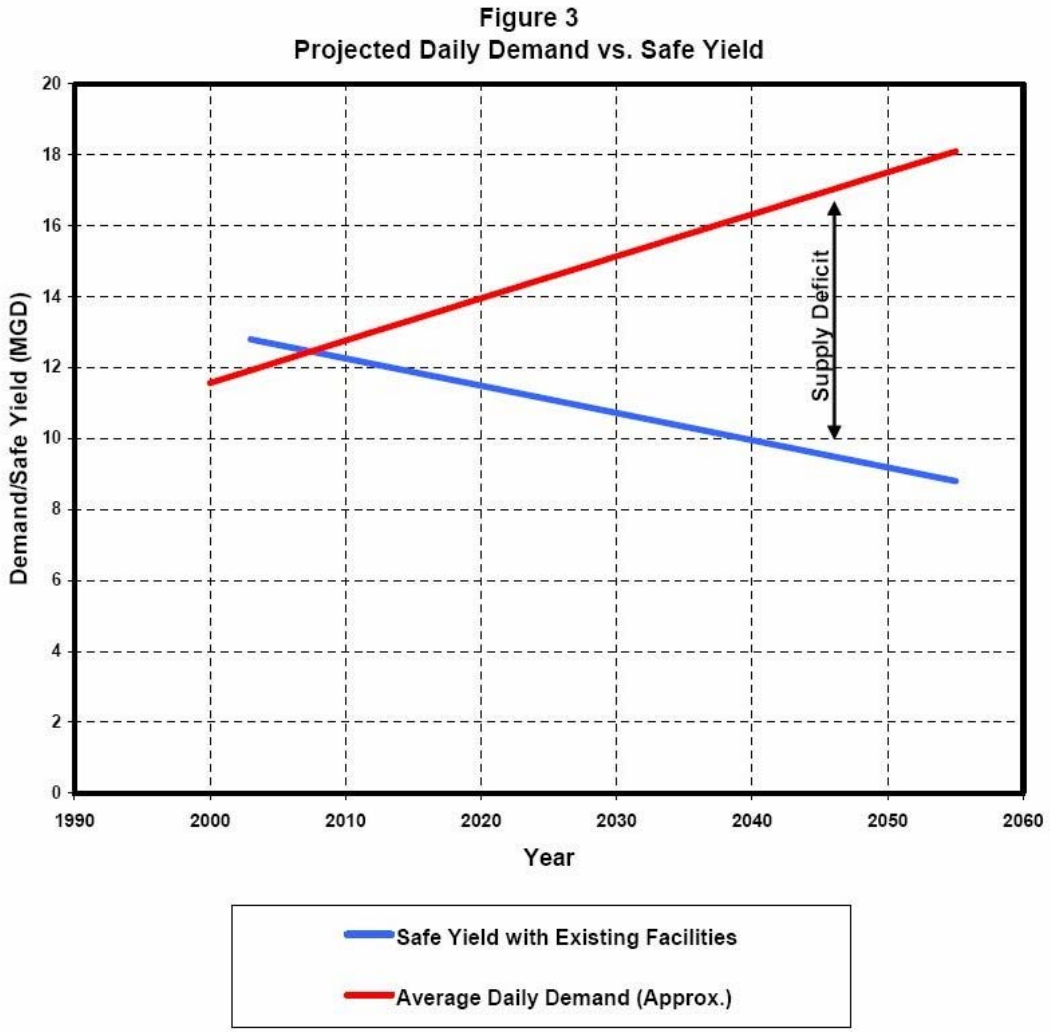
Due to water conservation by area residents, water demand is *MUCH* lower than it was in 2000

Water saving technologies such as low flow appliances and front loading washers have the potential to reduce water usage further, even as our population continues to grow

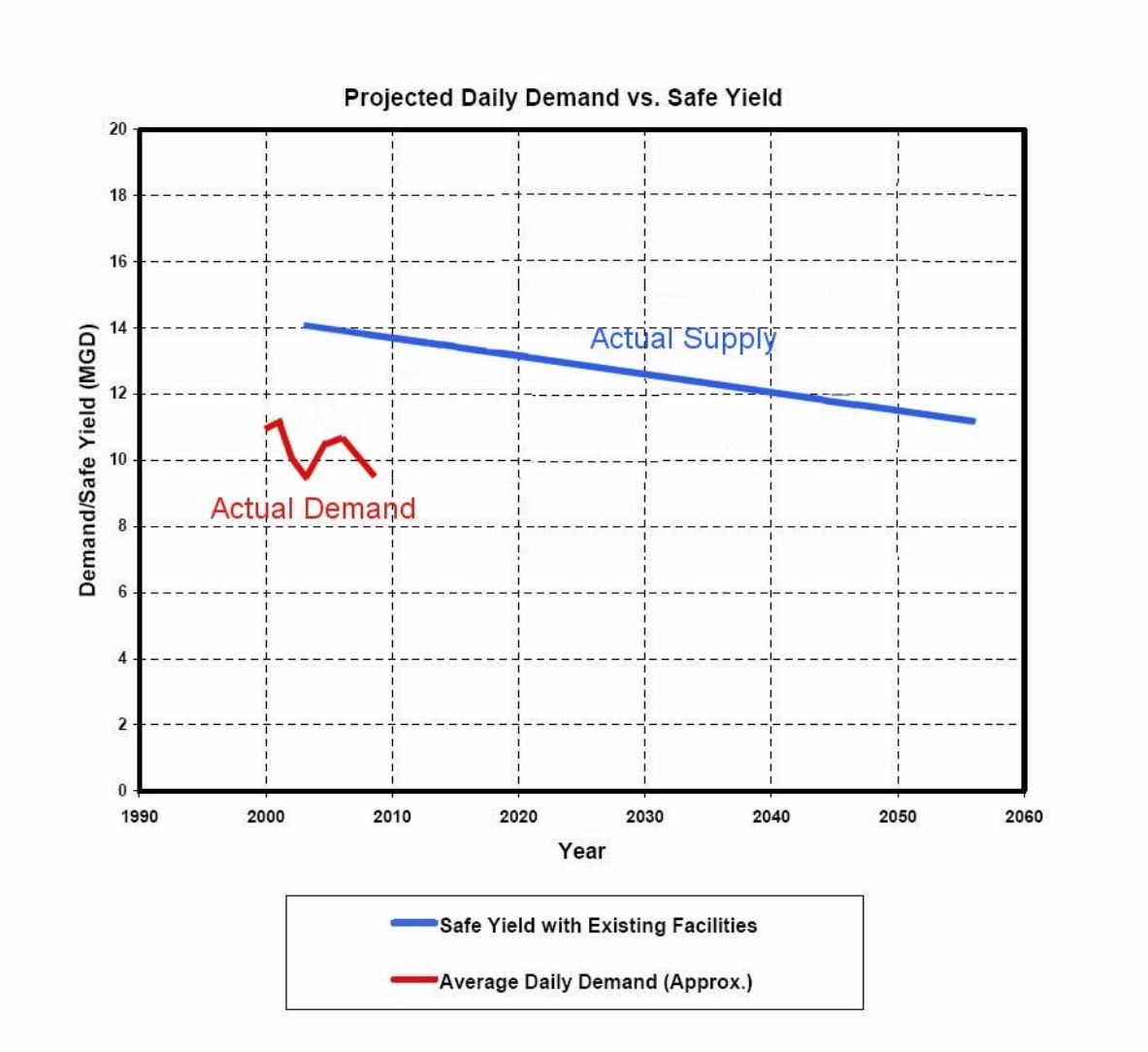
Actual demand is shown below (using numbers presented by Charlottesville Tomorrow at the Chamber luncheon). As you can see the Actual Demand is trending in the **OPPOSITE** direction as the projected demand



This is the picture that was used to scare everyone



This is the true picture – based on actual data instead of fear mongering



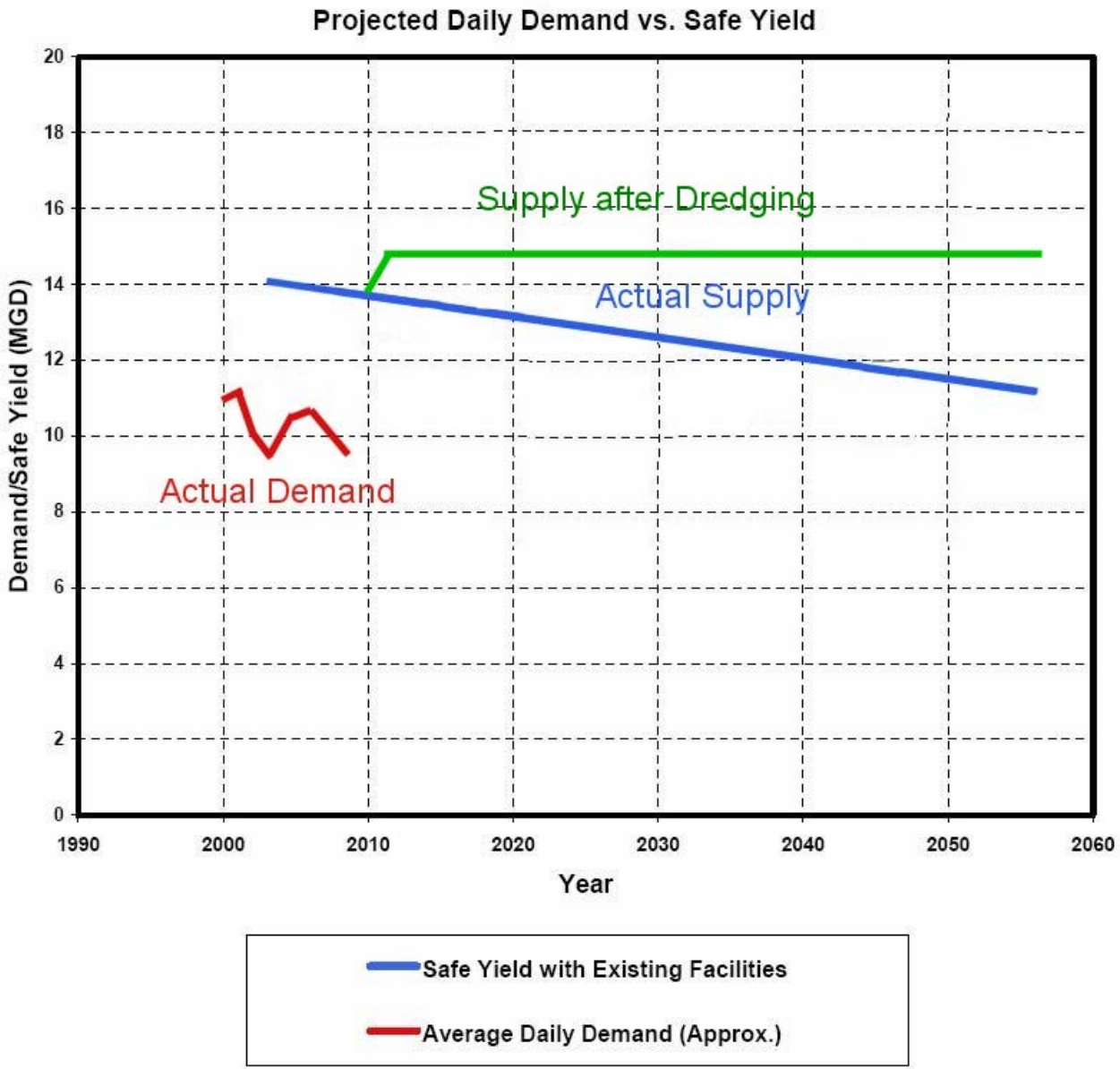
What about the future?

Thanks to the HDR survey, we now know that we only need to remove less than 1 million cubic yards to restore the reservoir to its original usable storage.

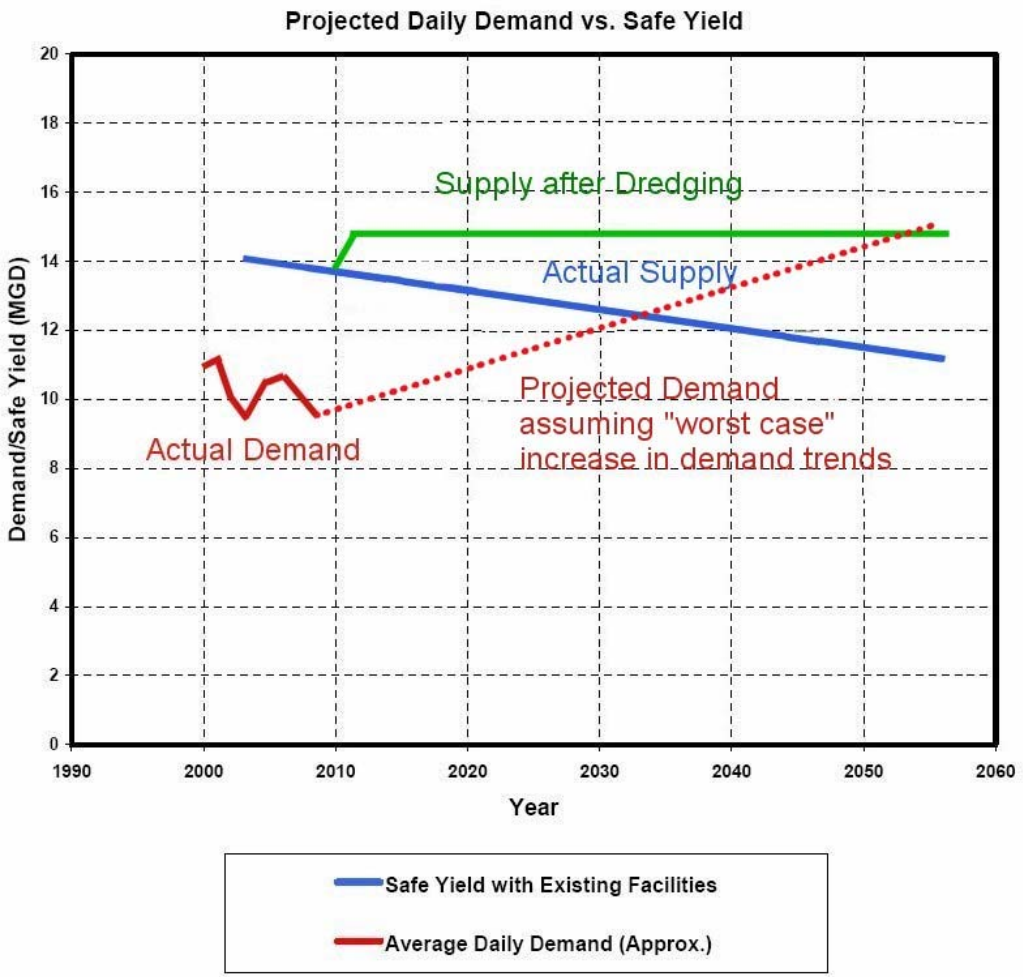
This is less than half the volume that we previously thought would need to be removed.

This results in less material to be removed, less space required to handle the material, and much less cost

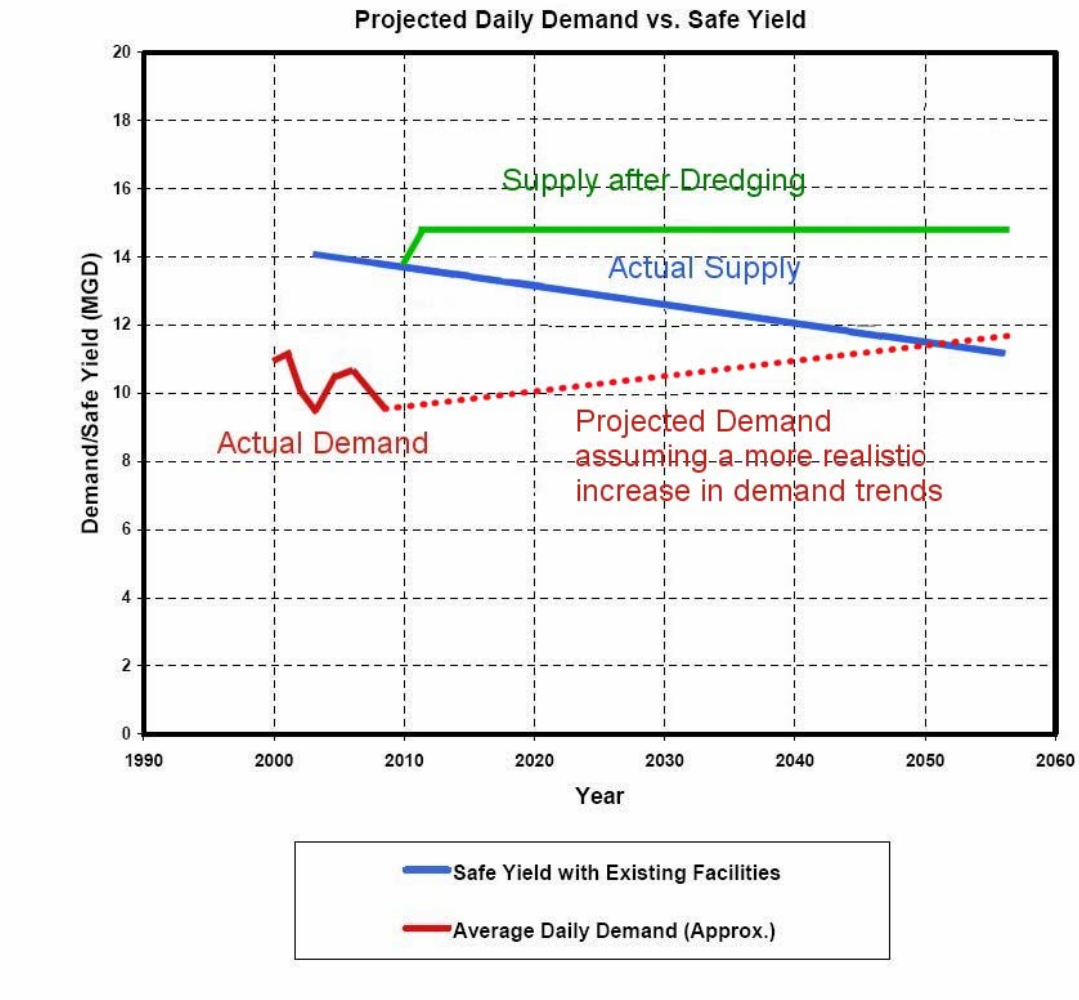
Dredging the reservoir now will add approximately 1mgd to our safe yield. Keeping it dredged will prevent the decline in safe yield.


Projected Daily Demand vs. Safe Yield
Demand/Safe Yield (MGD)
20
18
16
14
12
10
8
6
4
2
0
1990
2000
2010
2020
2030
2040
2050
2060
Year
Supply after Dredging
Actual Supply
Actual Demand
Safe Yield with Existing Facilities
Average Daily Demand (Approx.)

Even if demand were to suddenly increase to 1990's rates of growth, which is **HIGHLY UNLIKELY**, dredging provides us with plenty of water for the foreseeable future



If we continue our water conservation efforts at a reasonable level, dredging provides **MORE** water than we will need for the foreseeable future



How much will it cost to dredge?

- HDR estimated that 918,391 cubic yards must be dredged to restore the reservoir to its original usable storage.
- This is less than half the amount of material we had previously been told.
- In May of 2004, Blue Ridge Sand offered to dredge 695,000 cubic yards for $4.6 Million dollars. They were rebuffed by Rivanna – partly on the grounds that this was not “enough” material.
- Allowing for an increase in material to be dredged and for inflation, we expect that it will cost less than $10M to restore the reservoir to its original usable storage

What about the RMR dam?

- In 2003, Gannet Fleming did an extensive study of the feasibility of repairing the RMR spillway and concluded that the dam could be made safe for another 100 years, for $3.5M dollars.
- Based on Gannet Flemming's track record of estimating costs, we will triple this. We expect that the dam can be repaired for approximately $10M dollars.

How does this impact water rates?

- In 2003, Rivanna started increasing water rates in order to pay for a water supply expansion, which at the time was expected to cost 30 million dollars.
- Since then, the costs of the dam and pipeline alone have mushroomed to well over 150 million dollars and counting, with much of the costs still unknown.
- At the same time Rivanna has built up a cash surplus of over 30 million dollars by overcharging water users now, in anticipation of massive spending increases later. Out of every dollar Rivanna collects for water, 25 cents goes into building cash reserves.
- Rivanna can pay for dredging and repair of the RMR dam out of cash reserves that they have already set aside for water supply expansion - without having to raise your rates another dime.
- Rivanna's new dam and pipeline dreams were based on increasing water rates by 5 percent every year for 13 years – and that was before the price of the new RMR dam tripled. They currently have no idea what their scheme will cost you. However, we can confidently predict that your water bill will triple by the time their pipeline is completed (assuming they ever manage to complete it)