
Public Information Session

September 5, 2006
Purcellville Town Hall



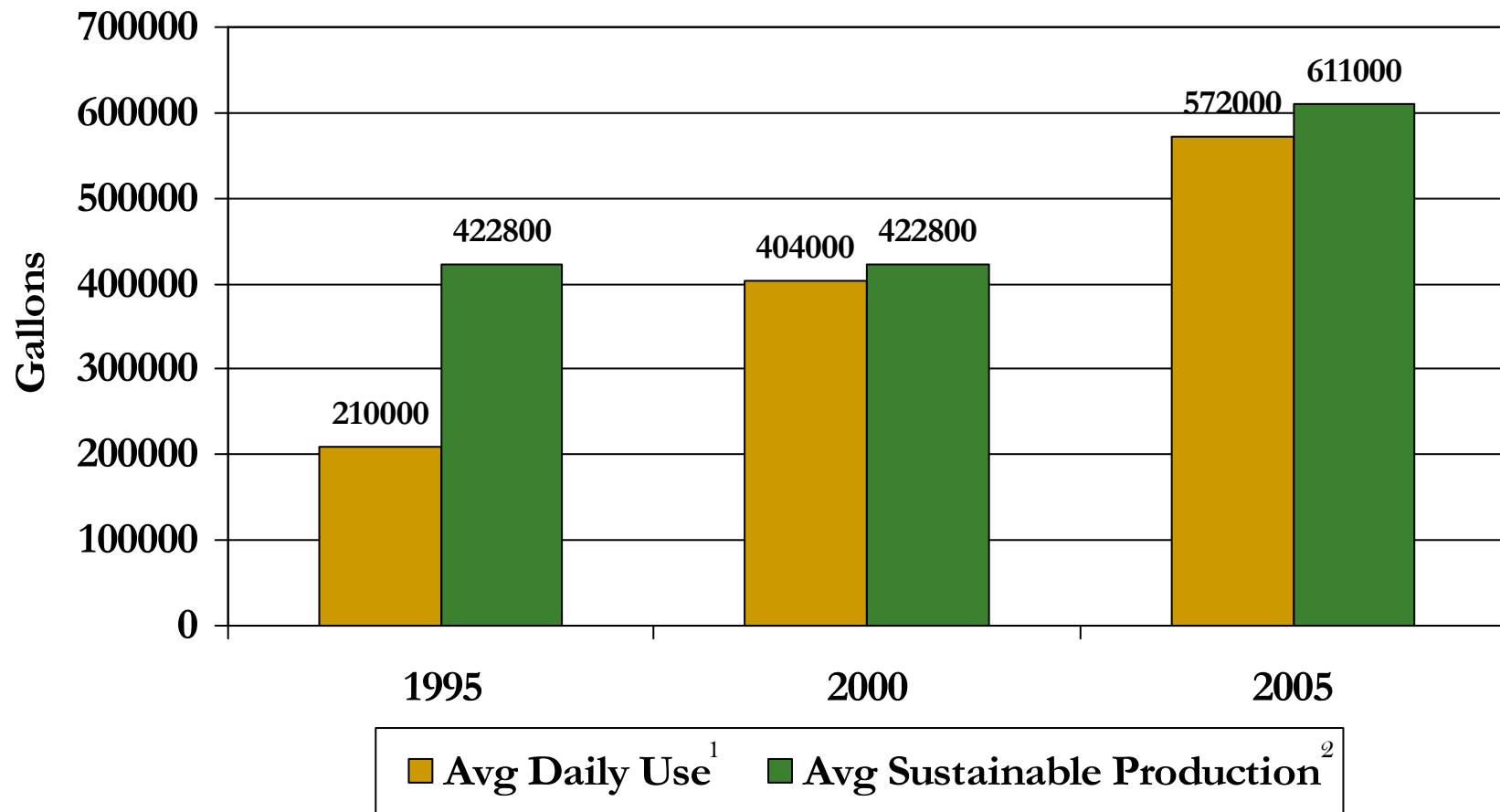
Our Water System

- Hirst Reservoir
- 6 developed and operational wells

Maximum Theoretical Yield: 746,000 gallons per day (VDH Permitted)

Average Sustainable Production: 668,000 gallons per day (approximate)

Average Daily Water Use & Sustainable Production

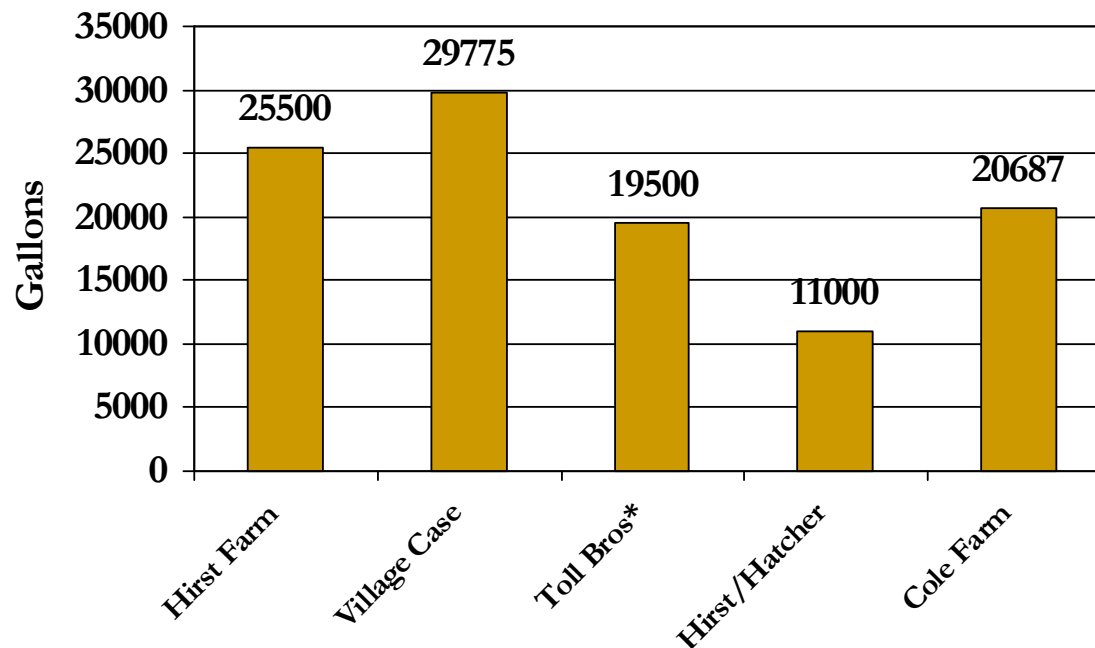


¹ Includes the quantity of water used for flushings, fires and backwashing

² Includes water produced and used for backwashing

The Challenge

- Under present day zoning taking into consideration 300 gallons per household* and 2,000 gallons per acre for non-residential the Town would need to supply 2.89[#] million gallons of water a day



These projects when completed will require up to 106,462 gallons of water per day.

*requested

* VDH standard # Dewberry & Davis 2005

Water Resource Planning

Underway

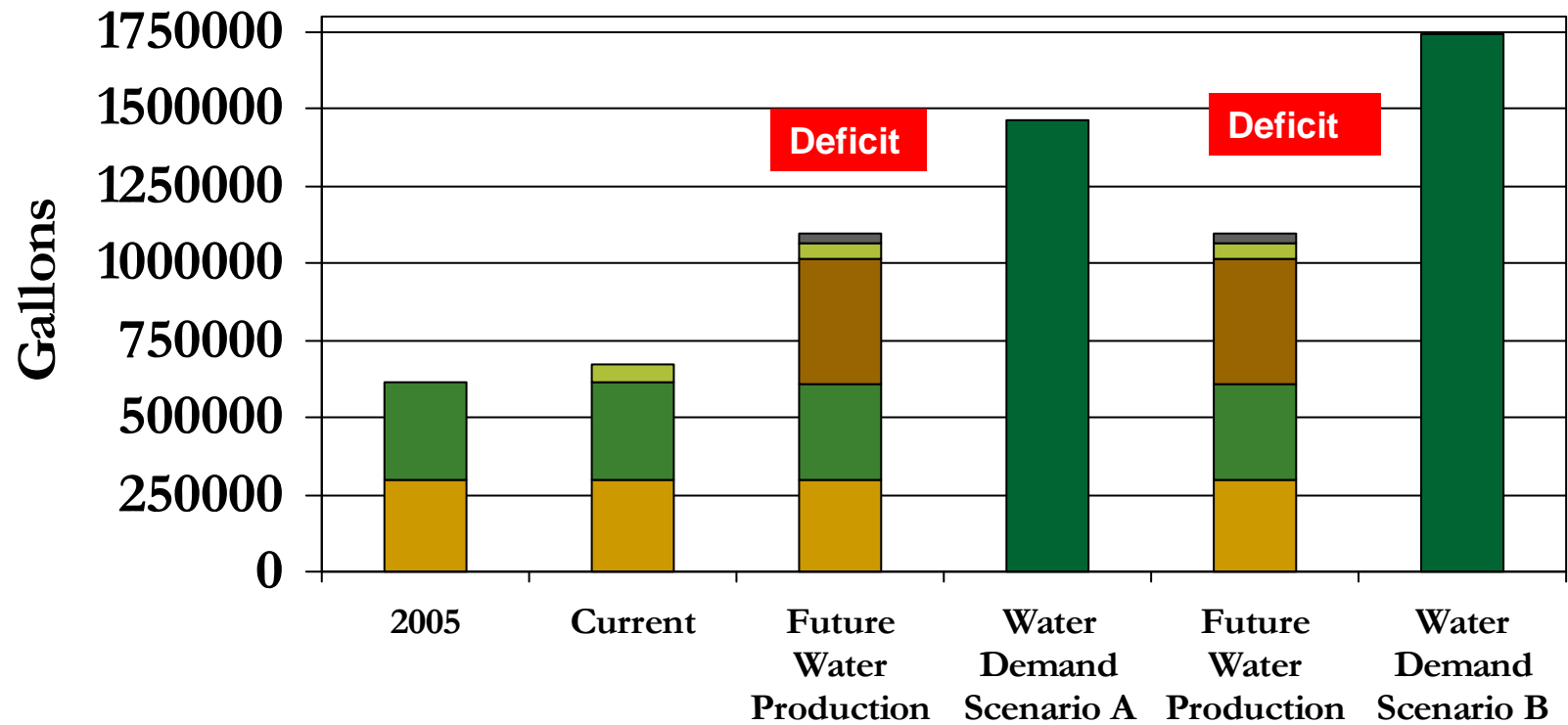
- 2 new wells (Jeffries property under exploration)
 - Second Reservoir (permitting process)
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Under Consideration

- Municipal Well Field
- Private Sources

Potential Capacity of Projects Underway: 428,000 to 528,000 gallons per day

Reality



Water Resources Study

Recommendations for Additional Water Resources

- New Wells
- New Reservoir
- Use Water from Sleeter Lake

Recommended Groundwater Exploration Areas – Water Resources Study

“The first four potential groundwater exploration areas are considered favorable to groundwater development due to the presence of several of the hydrogeologic factors that are known to have a positive influence on the development of high-yielding water supply wells, while minimizing potential water quality concerns relevant to the study area and potential impacts to existing groundwater users. The last two are not considered feasible for the development of groundwater resources due to water quality concerns and the greater likelihood of impacting existing wells.” WRS page 41

1. Short Hill Mountain
2. Purcellville’s Hirst Reservoir
3. Reservoir to WTP
4. Northern UGA
5. Southern UGA
6. Town Limits

New Reservoir

- June 2003 Public Works Committee unanimously approves implementation of reservoir
- August 2003 Town Council unanimously approves implementation of reservoir
- Permitting from DEQ and Corps of Engineers not yet approved
- Encumbrances on property complicate acquisition, cost and use
 - Working through legal issues
- If approved today we have been advised that it would take 24 to 36 months to bring on line
 - 18 - 24 months to complete construction
 - 6 - 12 months to fill up

Sleeter Lake

- Privately owned body of water
 - Based on WRS the cost to obtain, transport and treat water was not favorable
 - Residential development on the lake poses runoff and other environmental issues
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Taking Action

- Comprehensive Plan proposes to bring land use and water demand closer to current and planned water resource sustainable availability – a deficit still exists
- Newly adopted Water Rate scenario encourages conservation
- Reorganize utility management with respect to capital planning
- Updating Water Resources Study made Council priority for FY06/07 – Council action expected September 12
 - Will re-examine past decisions to determine viability
 - Will include need for enhanced conservation component e.g. rebates on water efficient clothes washing machines; rain barrels
 - Will examine feasibility of re-use
- Directed staff to take action to improve electrical reliability to Hirst Well
- Town working to acquire additional water resources as outlined in Water Resources Study adopted in 2000
 - 2nd Reservoir
 - Jeffries Well
 - Fields Farm (Public Hearing – 9/12)
 - Water Transmission Line Runs through property; excellent access
 - Publicly owned
 - Storage location

Questions and Answers