

# **Town of Cary Water Supply**

**Wake County Sustainability Task  
Force**

**June 17, 2010**

# Outline

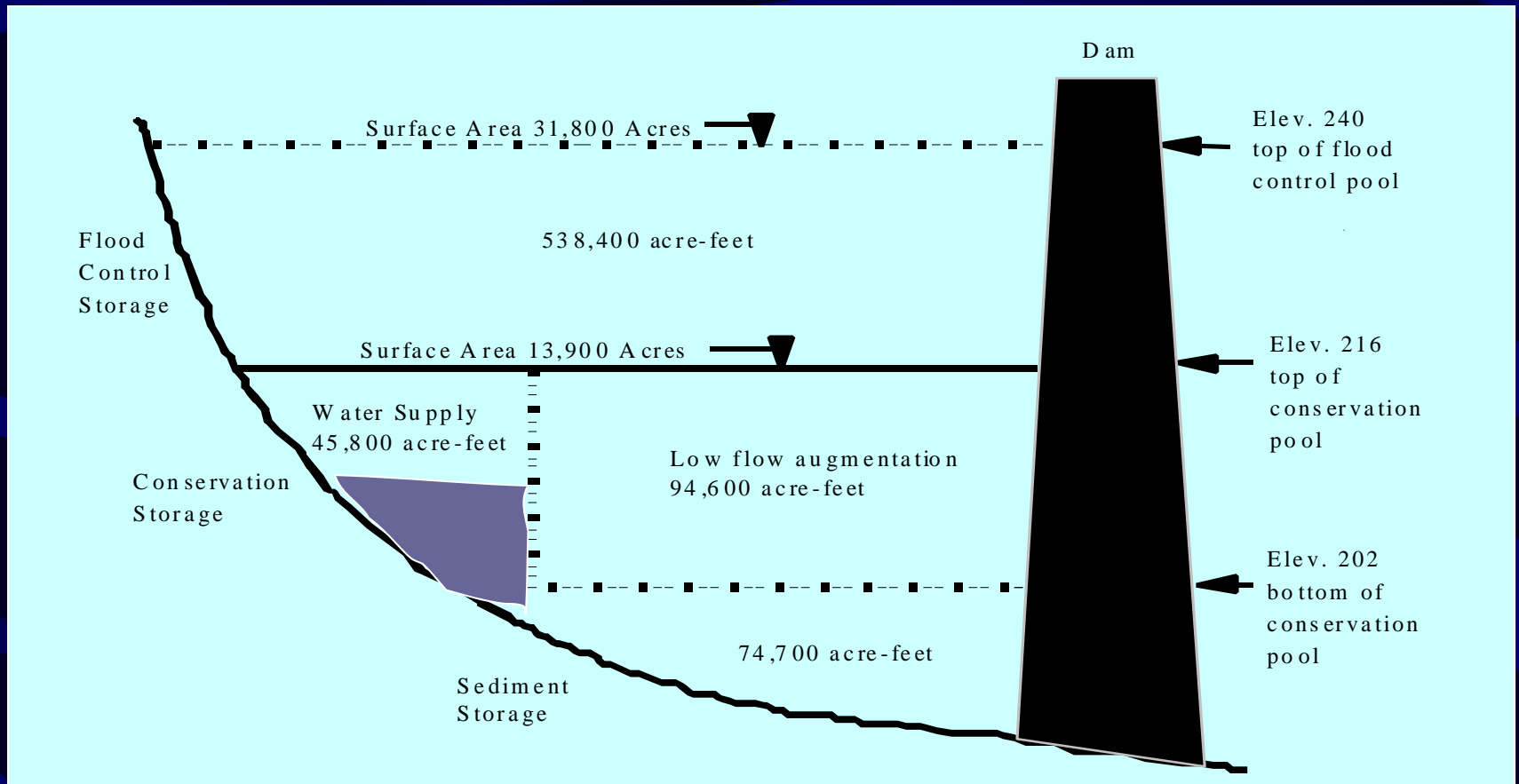
- **Current water supply sources**
- **Current water demand and use patterns**
- **Current water conservation strategies and effectiveness**
- **Future water demands**
- **Future water supply sources**
- **Critical water supply issues**

# Where we get our water: Jordan Lake

- Corps of Engineers manages the lake for:
  - Flood control
  - Water supply
  - Low flow augmentation
  - Recreation
- State owns water supply (est. 100 mgd)
- EMC controls allocations
- DWR manages allocations



# Where we get our water: Jordan Lake

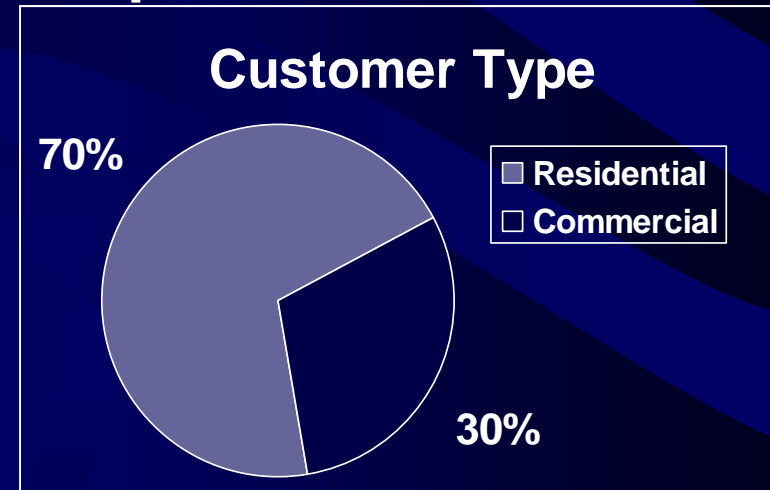


- Cary/Apex/Morrisville/ Wake Co (RTP South) allocation is 39% (to meet 2030 needs)
- Elevation is most impacted by low flow augmentation

# Who uses water from Cary

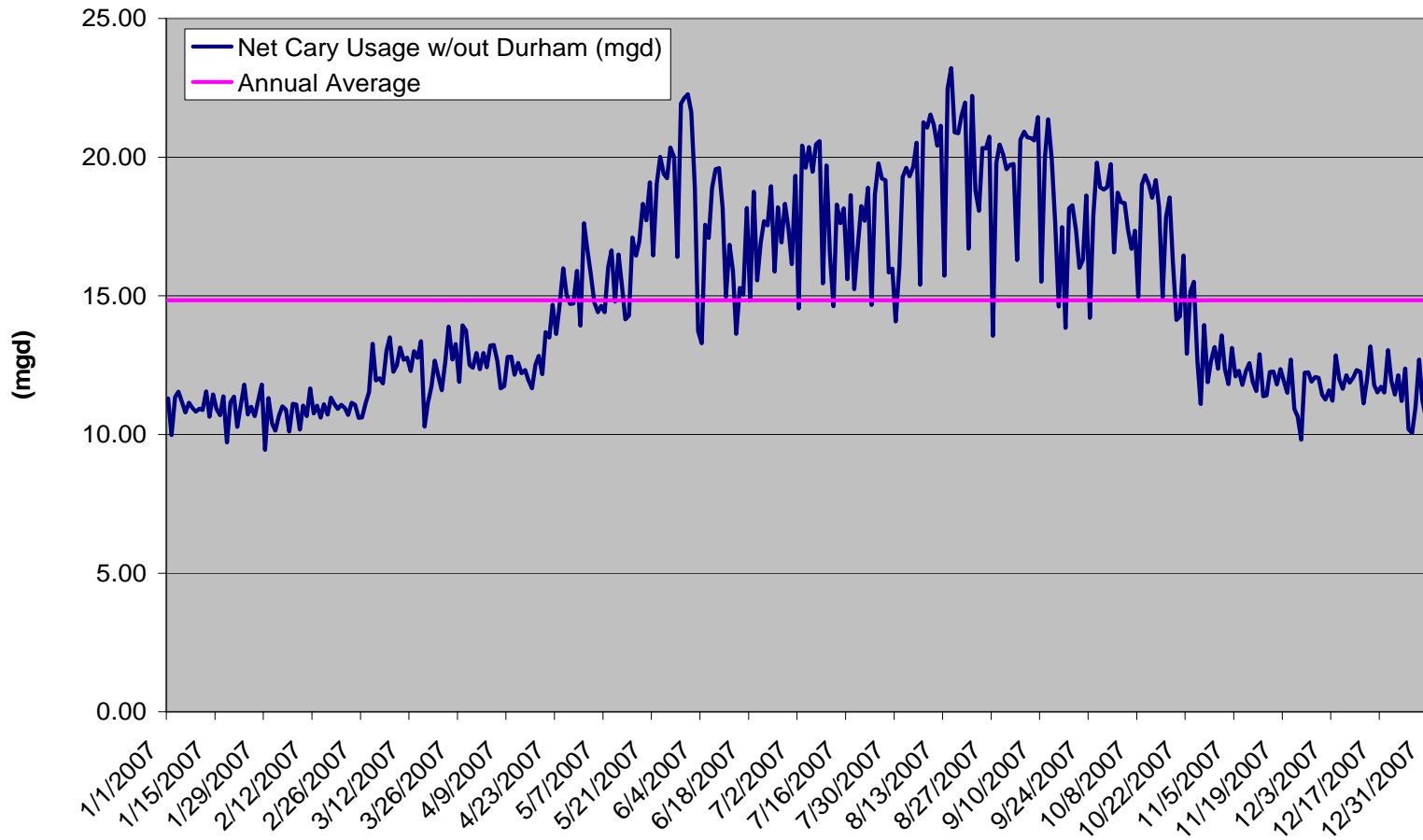


- Cary serves over 50,000 accounts:
  - Cary
  - Morrisville
  - RTP South
  - RDU Airport
- WTP shared with Apex



# Water use patterns: 2007 example

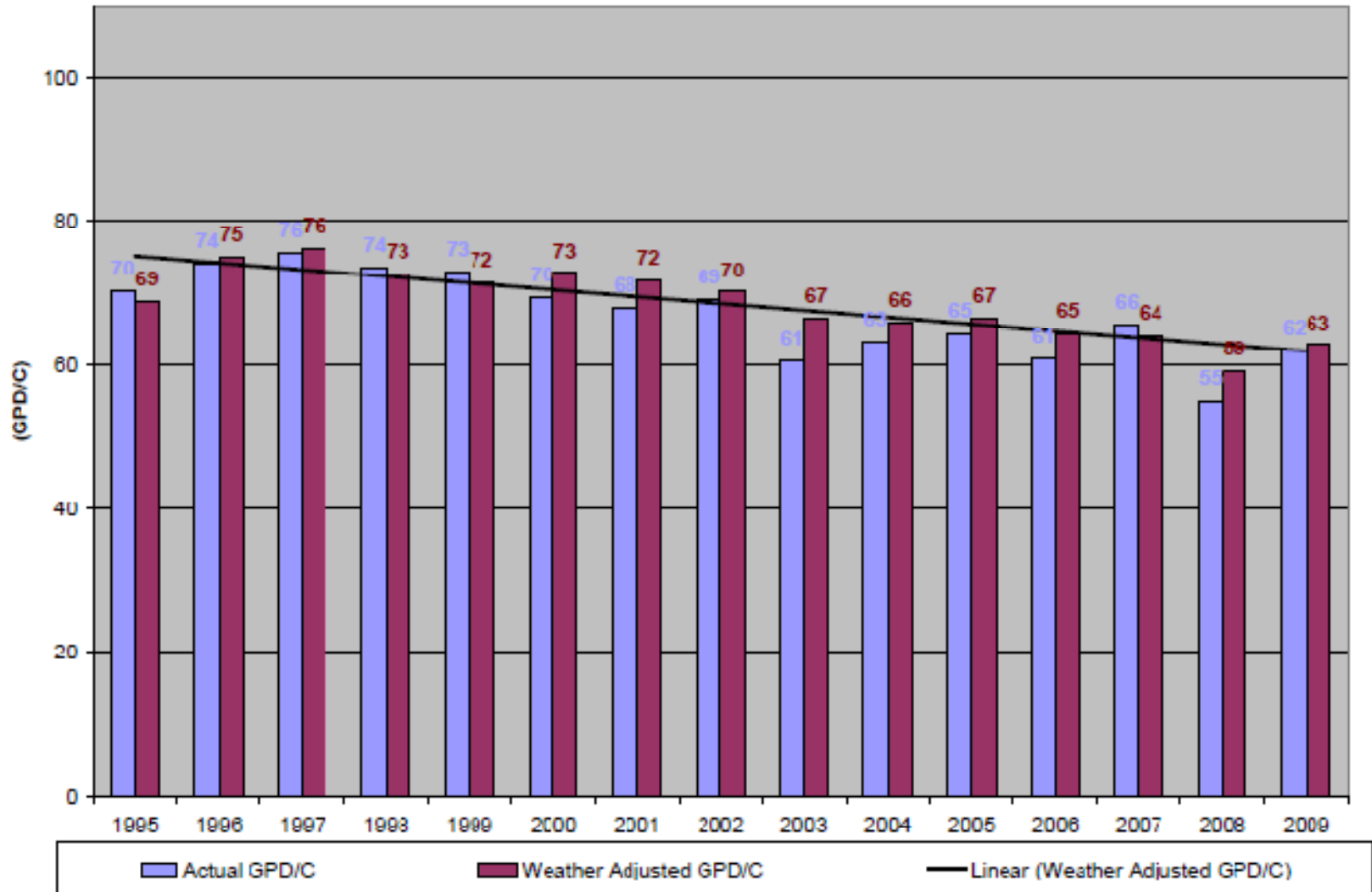
2007 Finished Water Used - Cary, Morrisville, RTP South



# Estimated water savings for 10 sample homes that replaced three HETs (Dec 07 - Feb 08 minus Dec 08 - Feb 09)

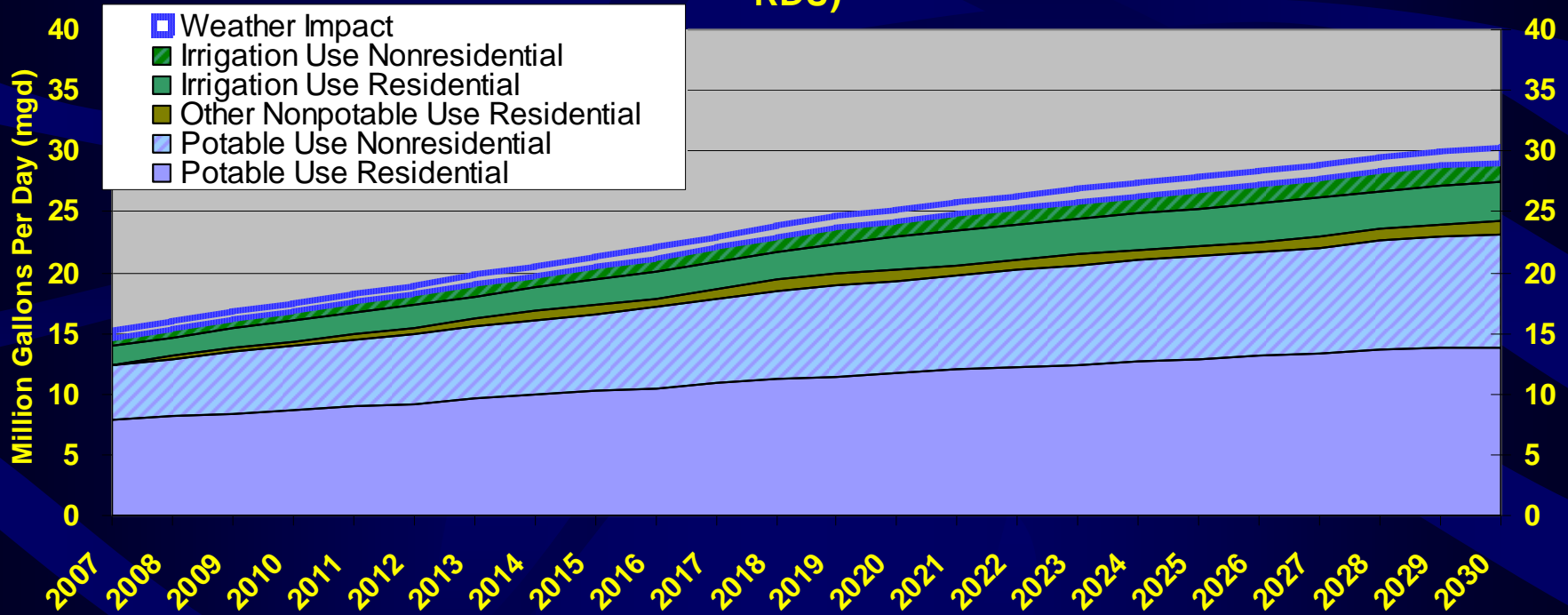


### Yearly Average Residential Gallons Per Day/Capita



# How much water we need: average annual

Annual Average Water Demand Projections (Cary, Morrisville, RTP South, RDU)





# Jordan Lake Partnership

- Apex
- Cary
- Chatham County
- **Durham**
- Hillsborough
- Holly Springs
- Morrisville
- Orange County
- OWASA
- Pittsboro
- Raleigh
- Wake County



# Goals of the Partnership

- Sustainability, conservation, and efficiency
- Case study in cooperation and communication
- Provide a forum for collective interests and efforts
- Ensure regional/basin-wide ability to meet long term water supply needs

## The Partnership does not...

- Make ANY policy decisions
- Prepare individual applications for allocation

# Critical Water Supply Issues

- Irrigation
- Increasing complexity due to competing objectives, public expectations, regulations
- Length of time to implement new projects: targets, people, rules change
- Potential for future changes in streamflow amounts or timing
- Long-range planning