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Falls Lake Drought Forecast:
Condition as of 12-07-2012

Initial Conditions and Assumptions

- The Initial Lake Conditions :
  - Little River Reservoir = 352.7 ft (355 full)
  - Lake Michie = 338.3 ft (341 full)
  - West Fork Eno Reservoir = 630.2 ft (633 full)
  - Falls Lake Elevation = 250.48 ft (251.5 full)
    - Falls Lake Water Quality Remaining = 88.4%
    - Falls Lake Water Supply Remaining = 88.1%
- Annual Average Demand Assumptions
  - Hillsborough - 3 month rolling average demand = 1.17 MGD
  - Durham - 3 month rolling average demand = 27.5 MGD
  - Raleigh - 3 month rolling average demand = 47.75 MGD
    - Constant Withdrawal from DE Benton WTP [Swift Creek] = 8.5 MGD
- Discharge Assumptions
  - Cary Return Flow – as % of Cary withdrawal from Jordan Lake
    - 78% total returned = 57% to Neuse basin / 21% to Haw basin
      - 26% to South Cary WRF / 31% to North Cary

USACE Lake Status Link

http://epec.saw.usace.army.mil/falls_summ.htm

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Date	As of 12-07-2012 Probability of Being Below				
	Falls Elevation: Guide Curve	Falls Elevation:	Falls Lake Water Supply Pool		
	251.50 ft	249.5 ft	80% WS Pool	90% WS Pool	100% WS Pool
Jan 1	66%	above	above	21%	69%
Feb 1	13%	above	above	8.4%	15%
Mar 1	4.8%	above	above	1.2%	6%
Apr 1	3.6%	above	above	above	3.6%
May 1	25%	above	above	above	27%
June 1	54%	above	above	1.2%	57%

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Date	As of 12-07-2012 Probability of Being Below				
	Falls Elevation: Guide Curve	Falls Elevation:	Falls Lake Water Quality Pool		
	251.50 ft	249.5 ft	80% WQ Pool	90% WQ Pool	100% WQ Pool
Jan 1	66%	above	above	17%	67%
Feb 1	13%	above	above	6%	13%
Mar 1	4.8%	above	above	1.2%	4.8%
Apr 1	3.6%	above	above	above	3.6%
May 1	25%	above	above	above	28%
June 1	54%	above	1.2%	6%	57%

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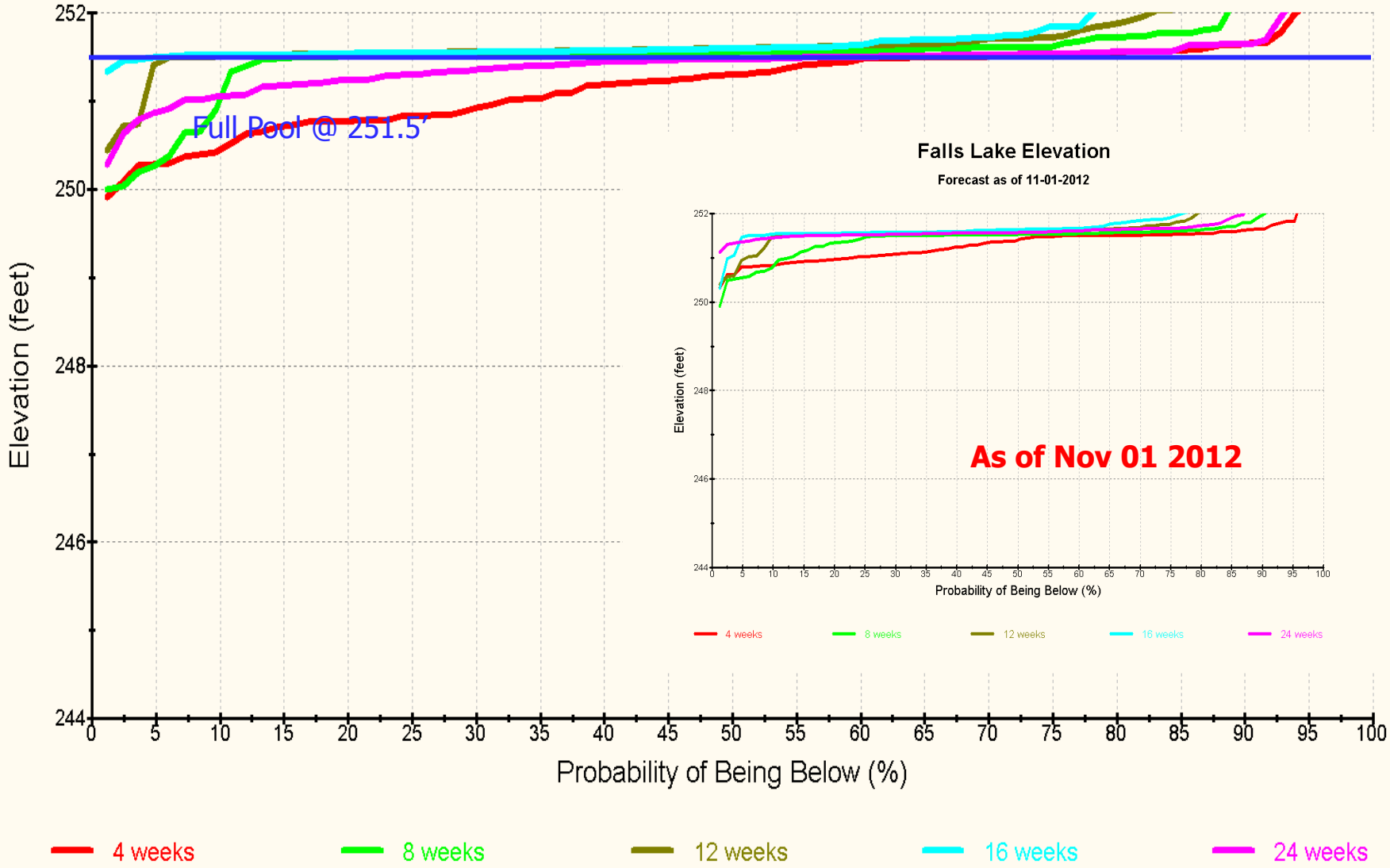
Falls Lake Elevation

Forecast as of 12-07-2012



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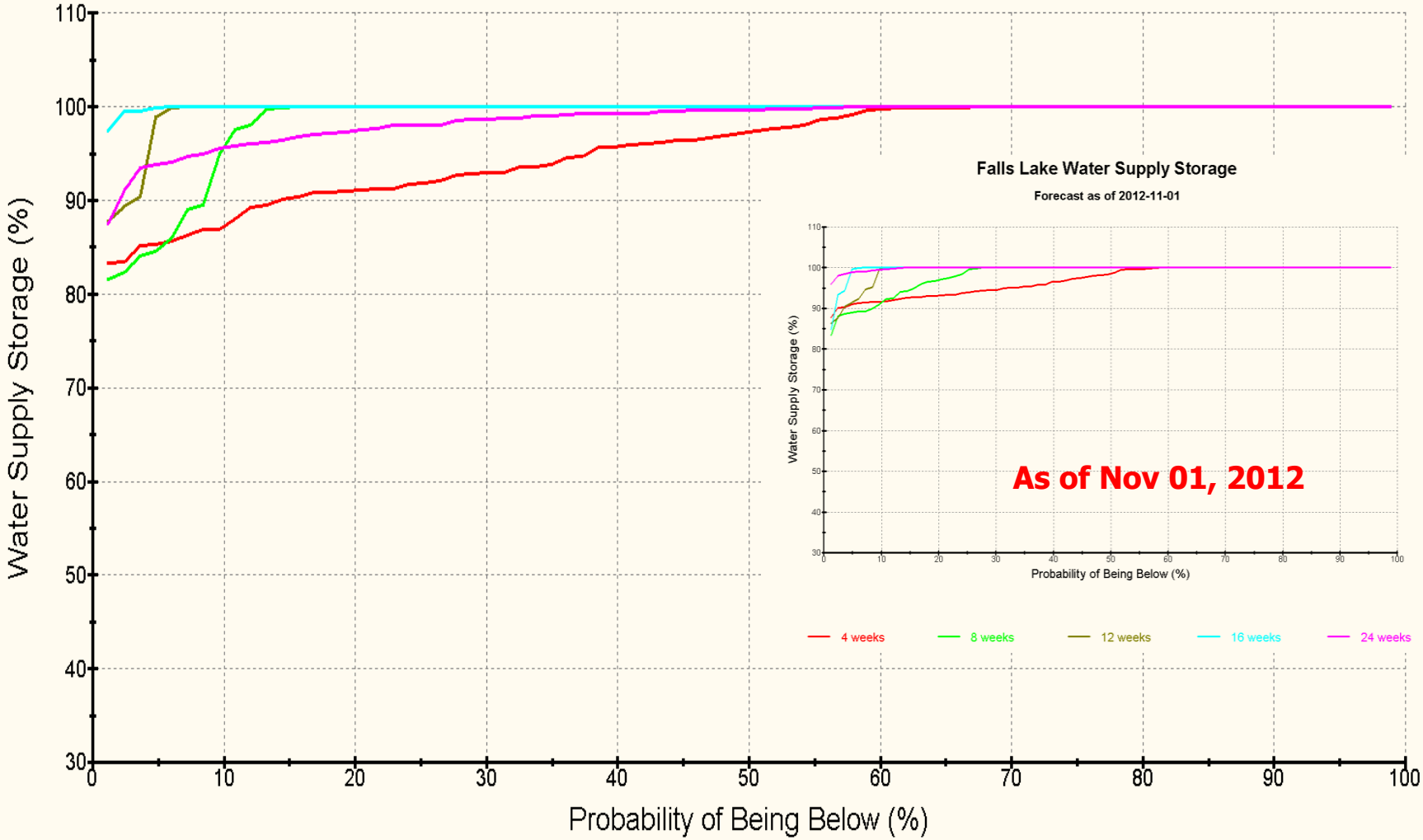
Falls Lake Water Supply Storage

Forecast as of 2012-12-07



4 weeks 8 weeks 12 weeks 16 weeks 24 weeks

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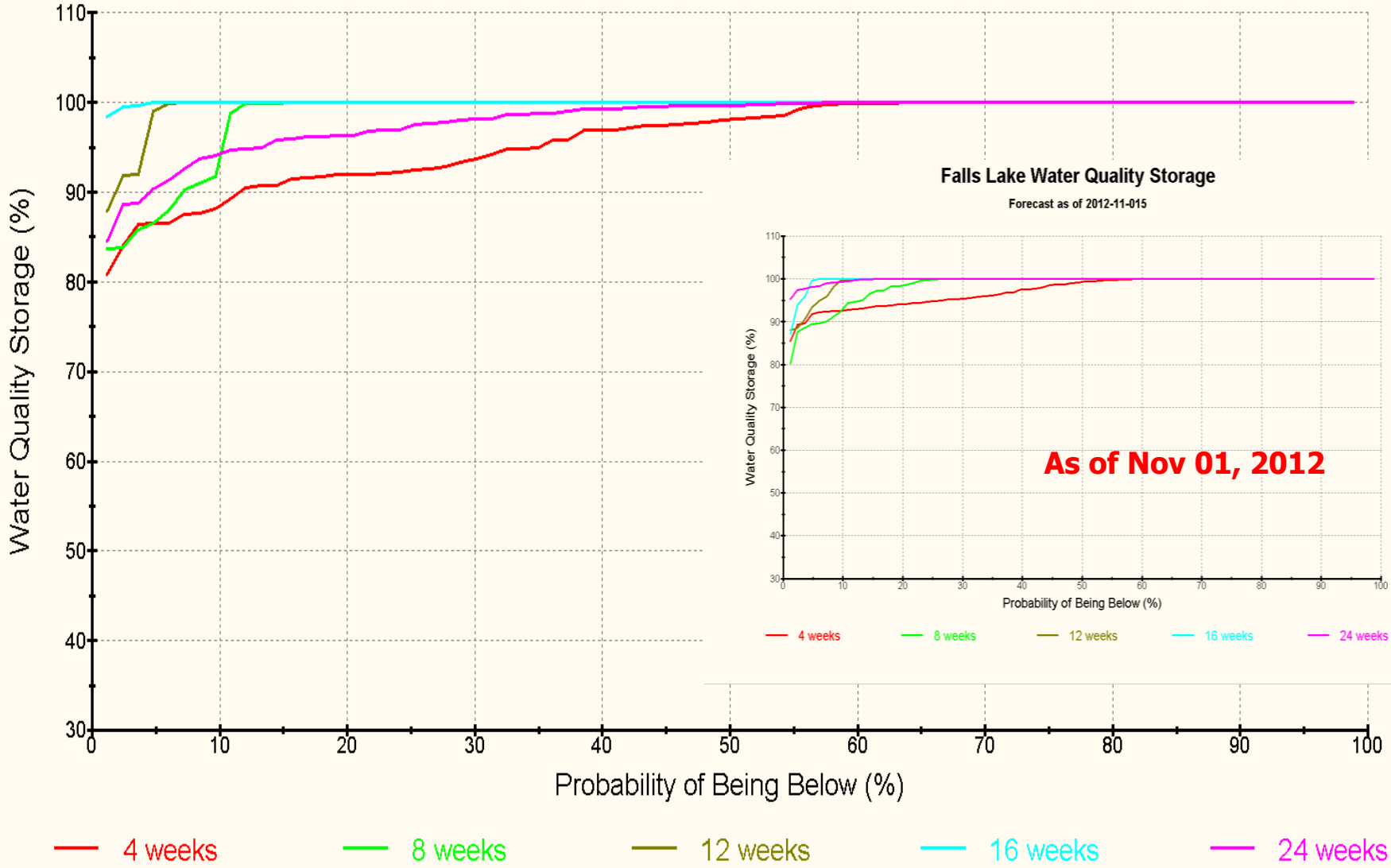
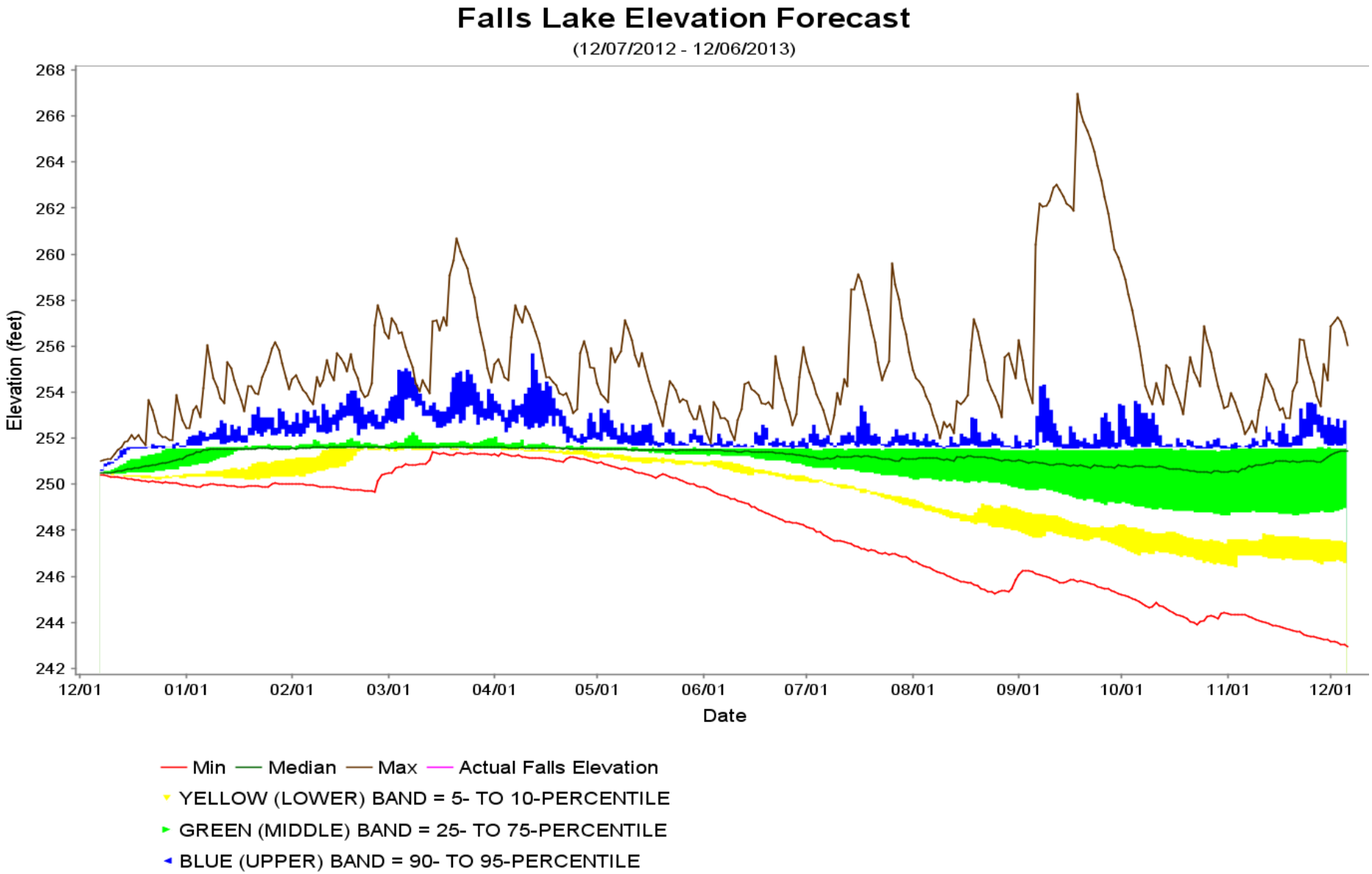
Falls Lake Water Quality Storage

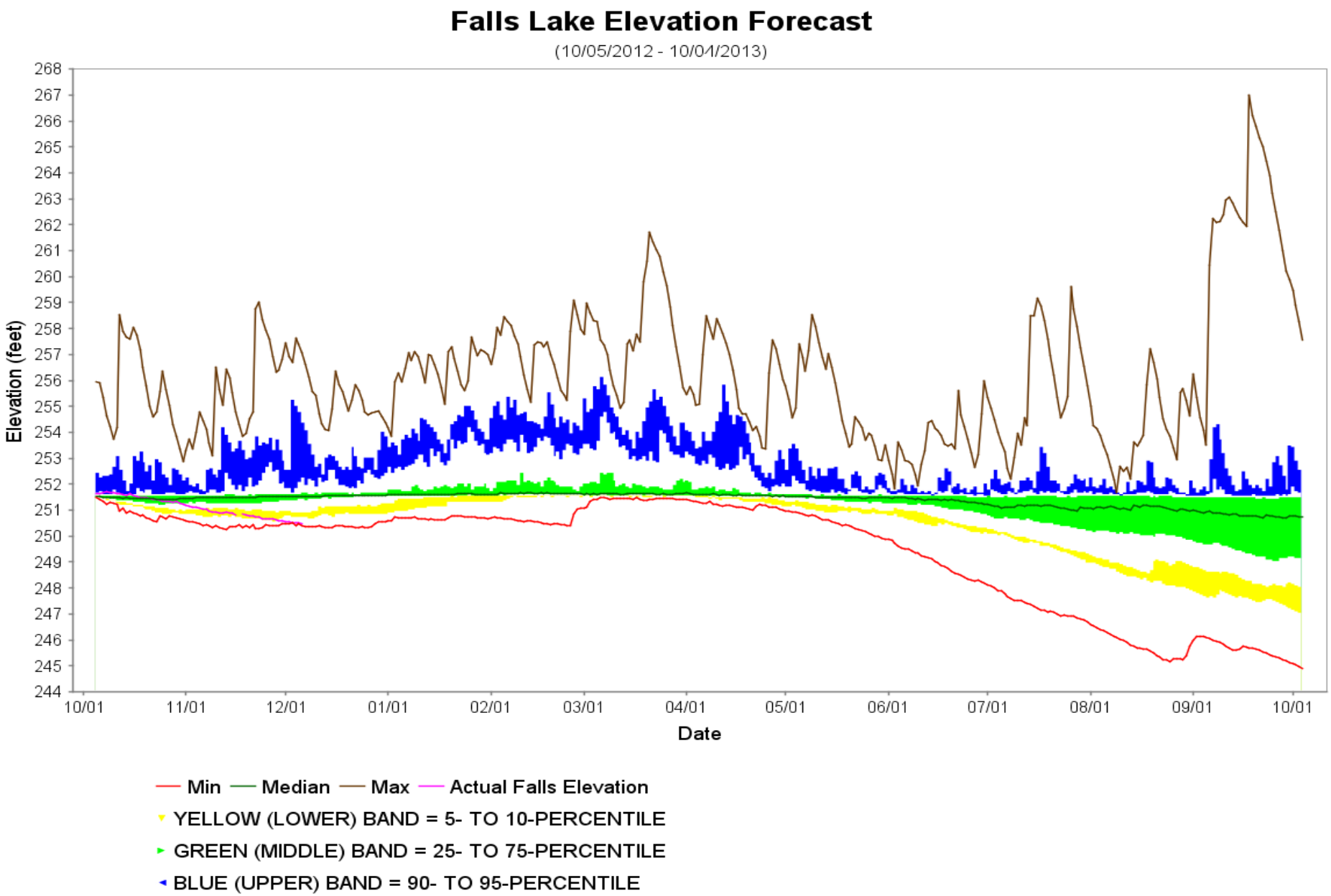
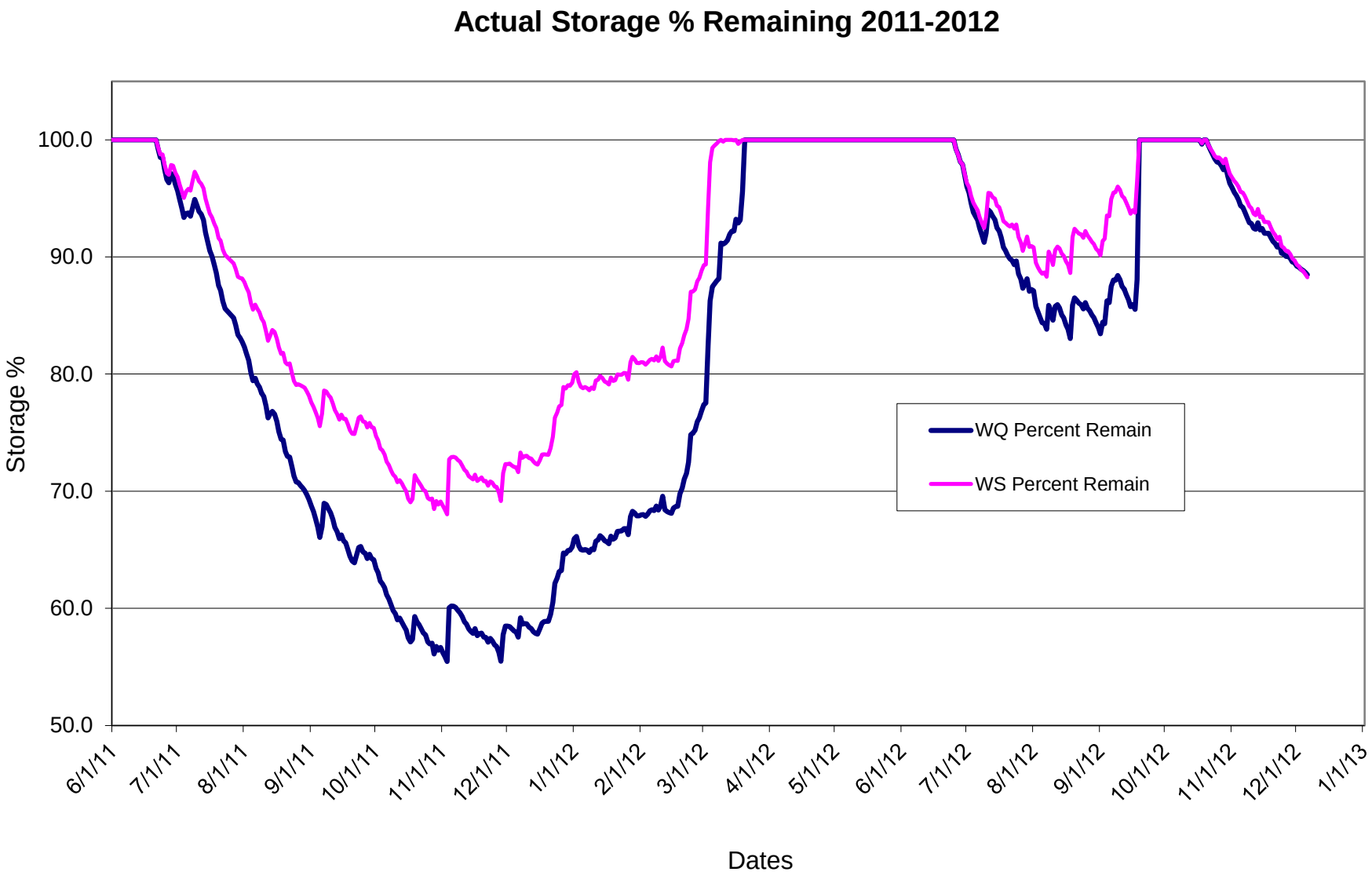
Forecast as of 2012-12-07



December 07, 2012 Forecast – Lake Elevation Percentile Plots



October 05, 2012 Forecast – and Current Lake Elevation Plots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