ACF BASIN STATUS & DROUGHT LEVEL RESPONSE

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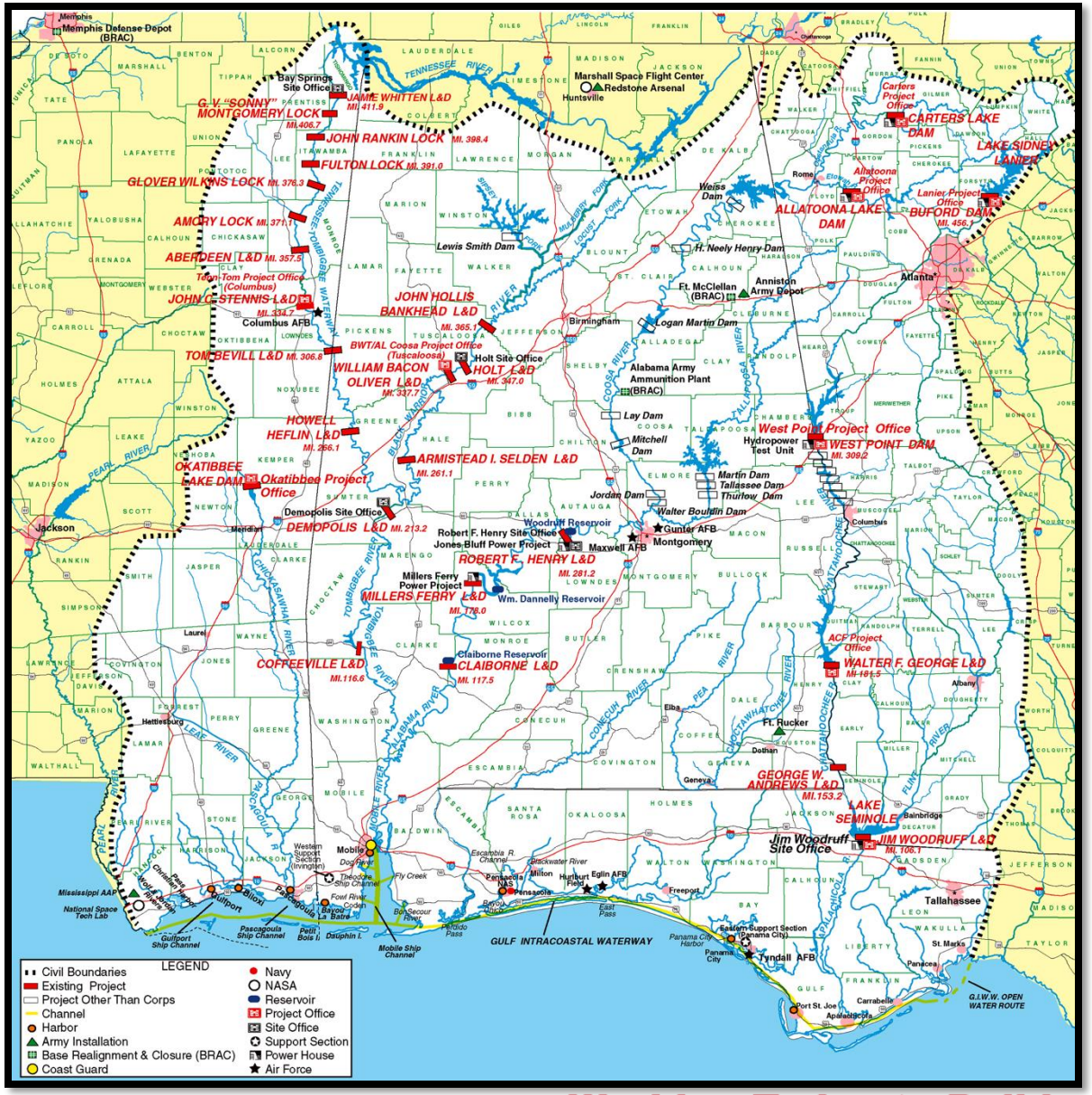
MANAGING THE MOBILE DISTRICT WATER BASINS



Water Management Goals:

- Meet the federal authorized project purposes
- Support public health and safety throughout the basin
- Protect the structural integrity of the projects

Projects

- 27 multipurpose projects
- 5 major river basins (ACF, ACT, BWT, Tenn-Tom, Okatibbee)

Purposes

- Flood Control
- Hydropower
- Recreation
- Fish and Wildlife
- Navigation
- Water Supply
- Water Quality

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APALACHICOLA CHATTAHOOCHEE FLINT BASIN
(5 USACE PROJECTS, 8 GPC DAMS, 1 COUNTY DAM)

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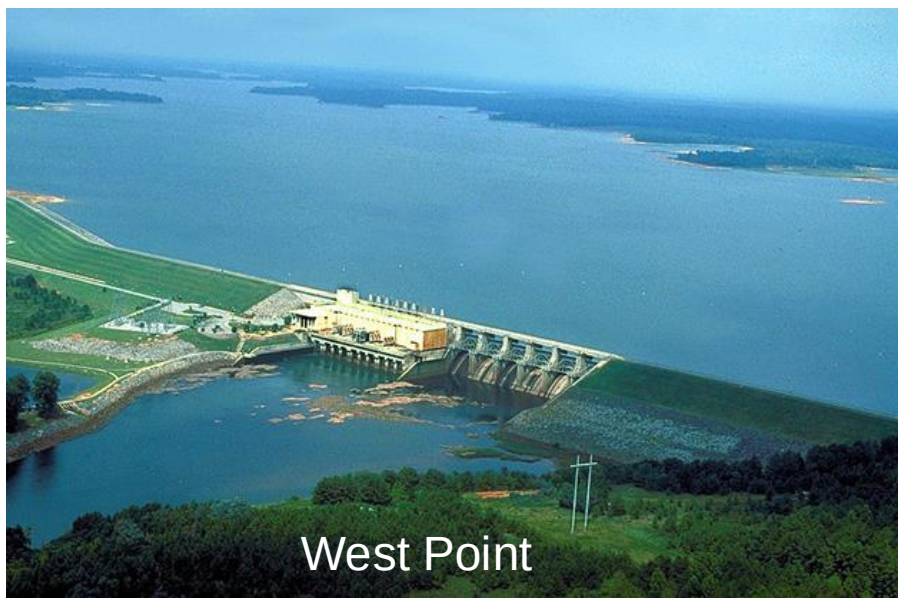
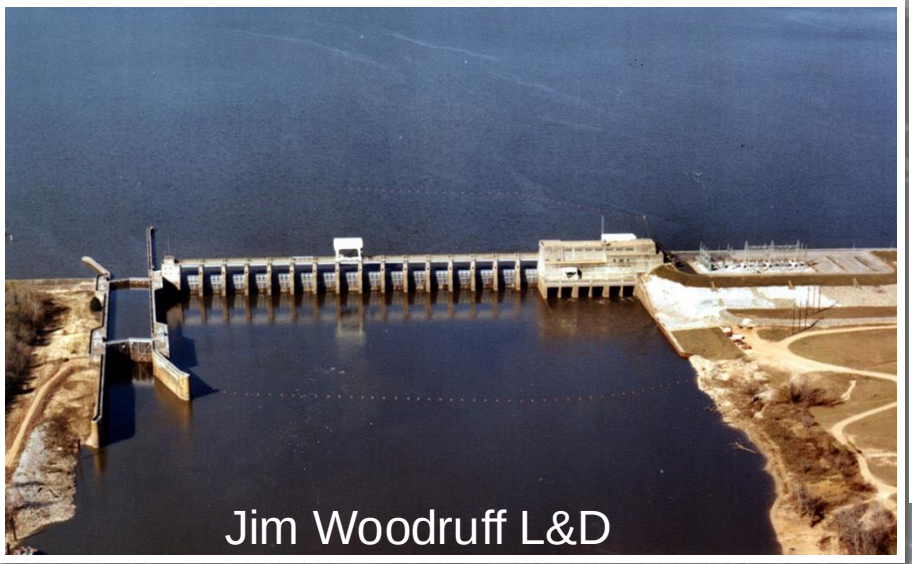
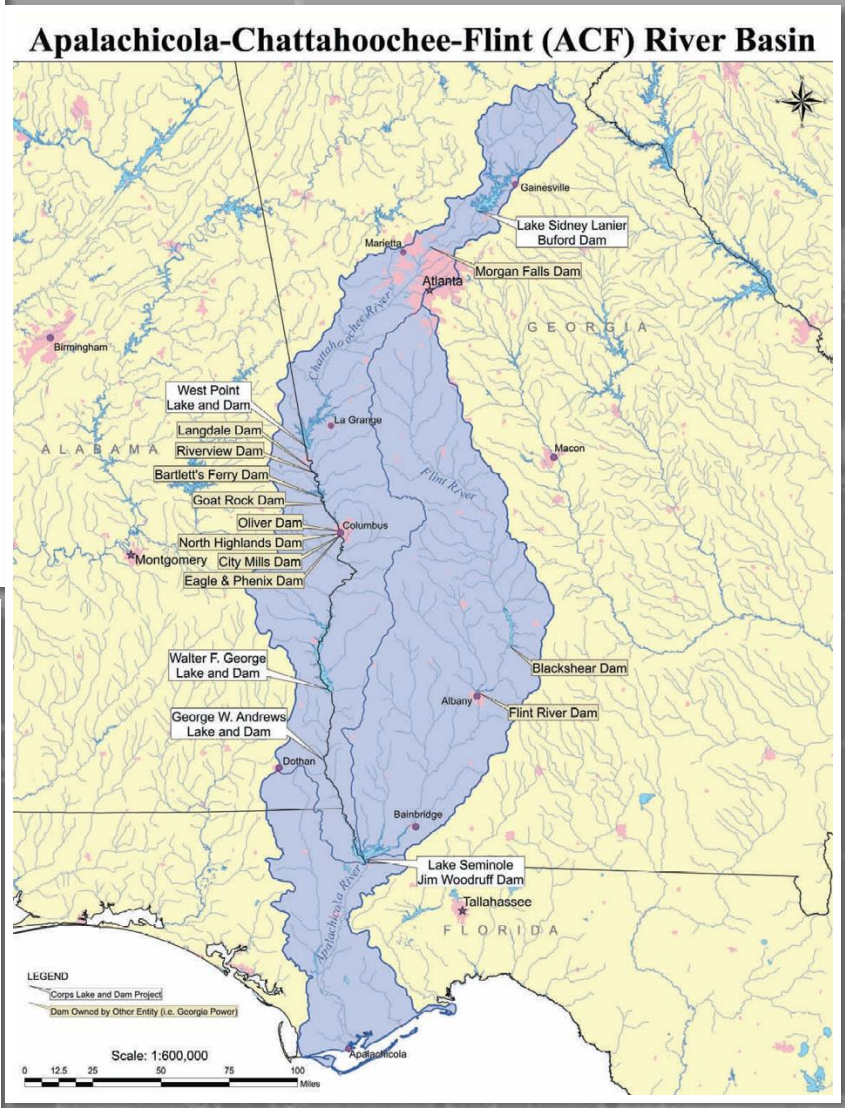
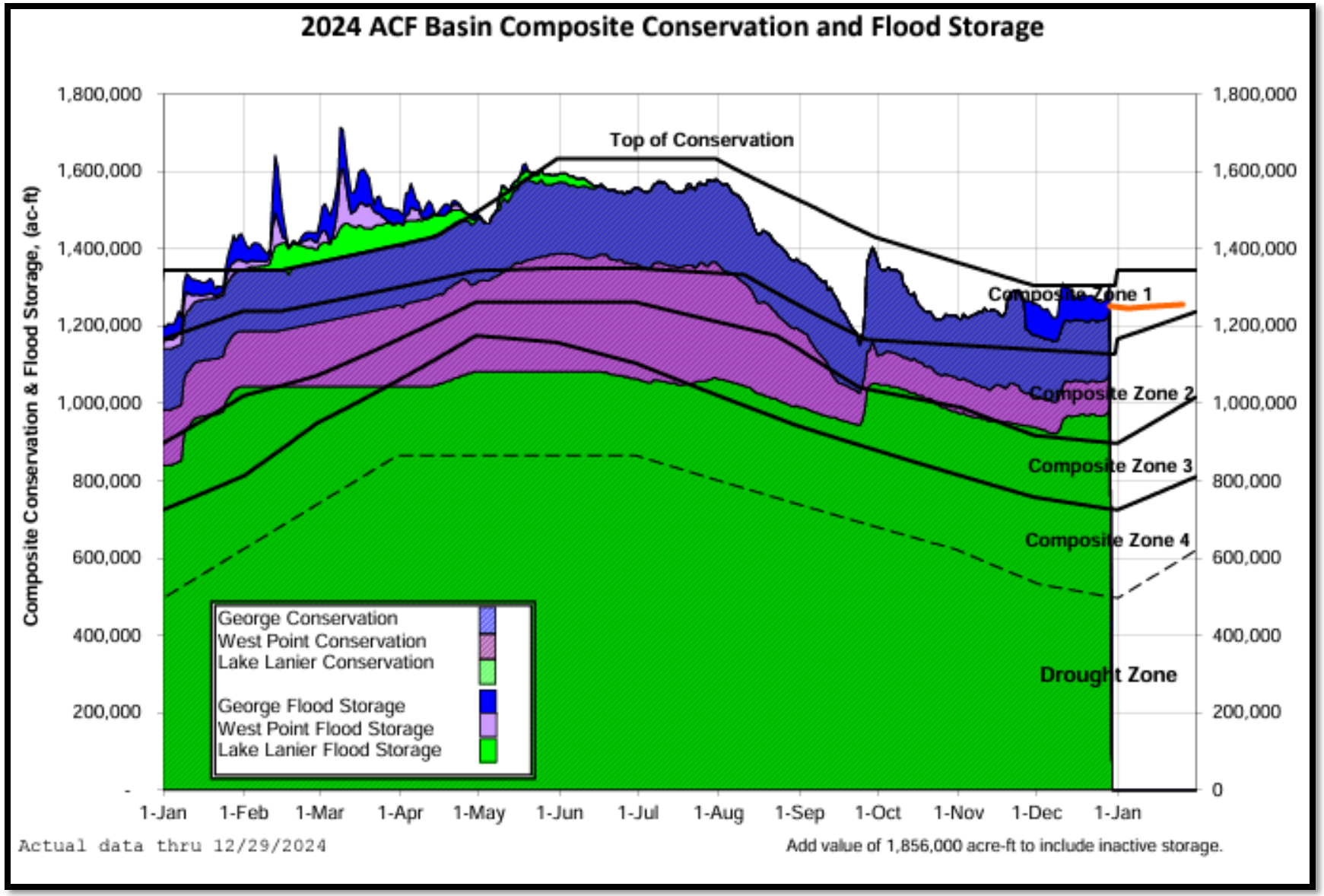
- 5 USACE multipurpose project located on the Chattahoochee River. George Andrews L&D is the only project without hydropower.
- 7 GPC hydro projects are run-of-river and pass the USACE releases.
- Daily coordination with GPC to meet minimum flow and water supply needs.
- Greatest challenge is balancing the reservoir storage to meet system demands and comply with ESA flow requirements in the Apalachicola River.
- 2017 WCM update included reallocating 22% Buford's conservation storage to water supply for Metro Atlanta.


West Point

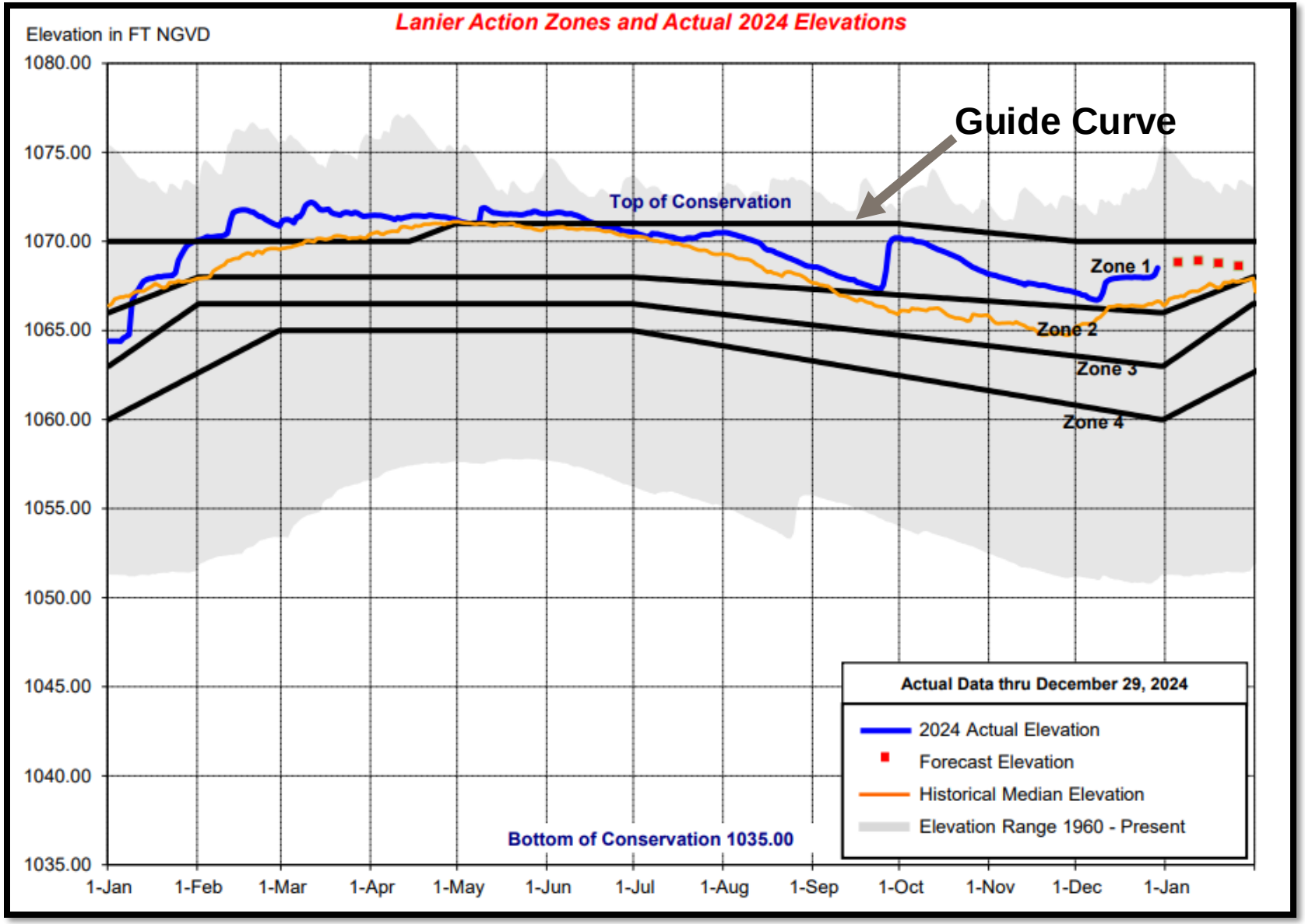

Jim Woodruff L&D



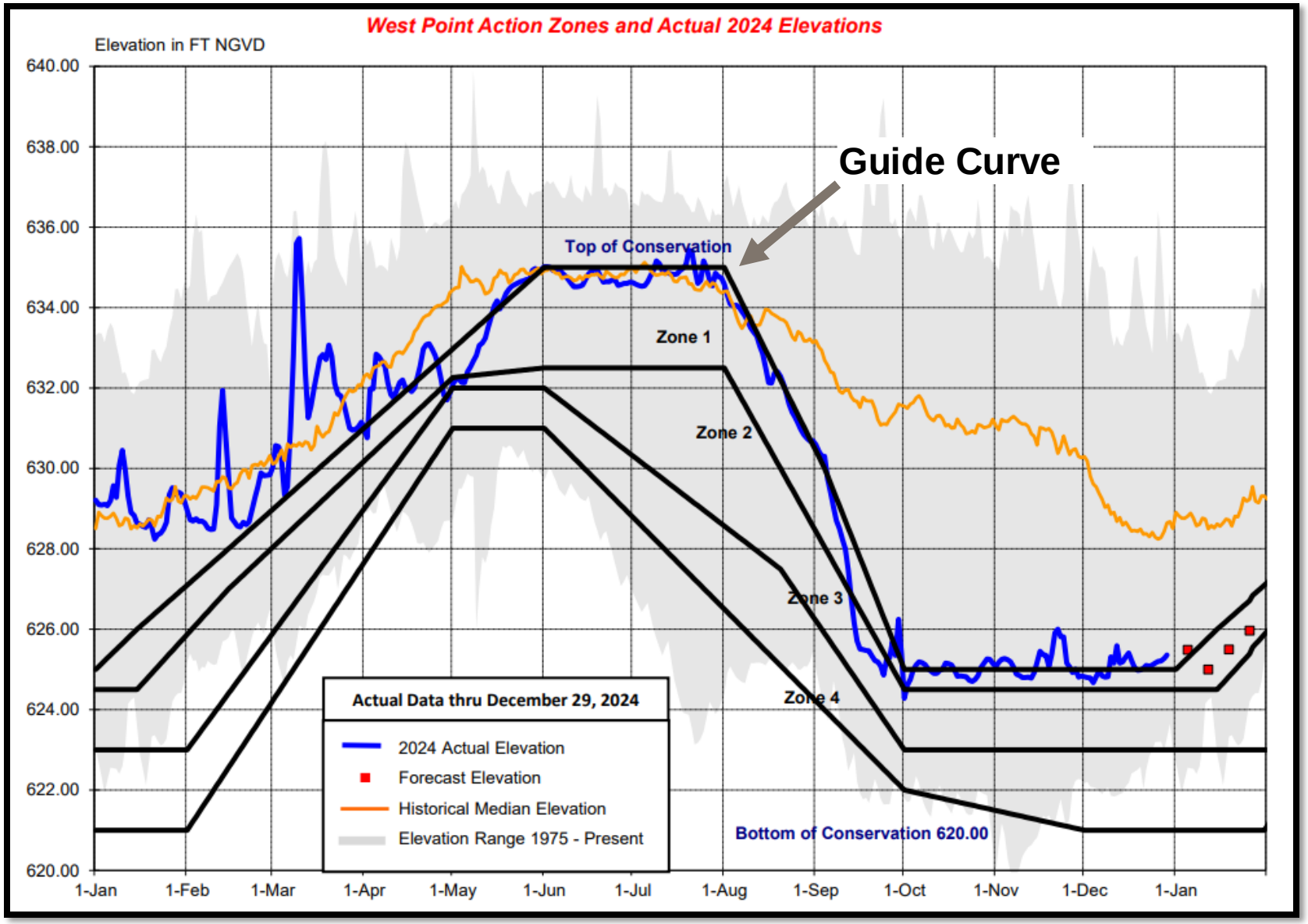
ACF BASIN COMPOSITE STORAGE



BUFORD DAM – LAKE LANIER



WEST POINT DAM AND RESERVOIR



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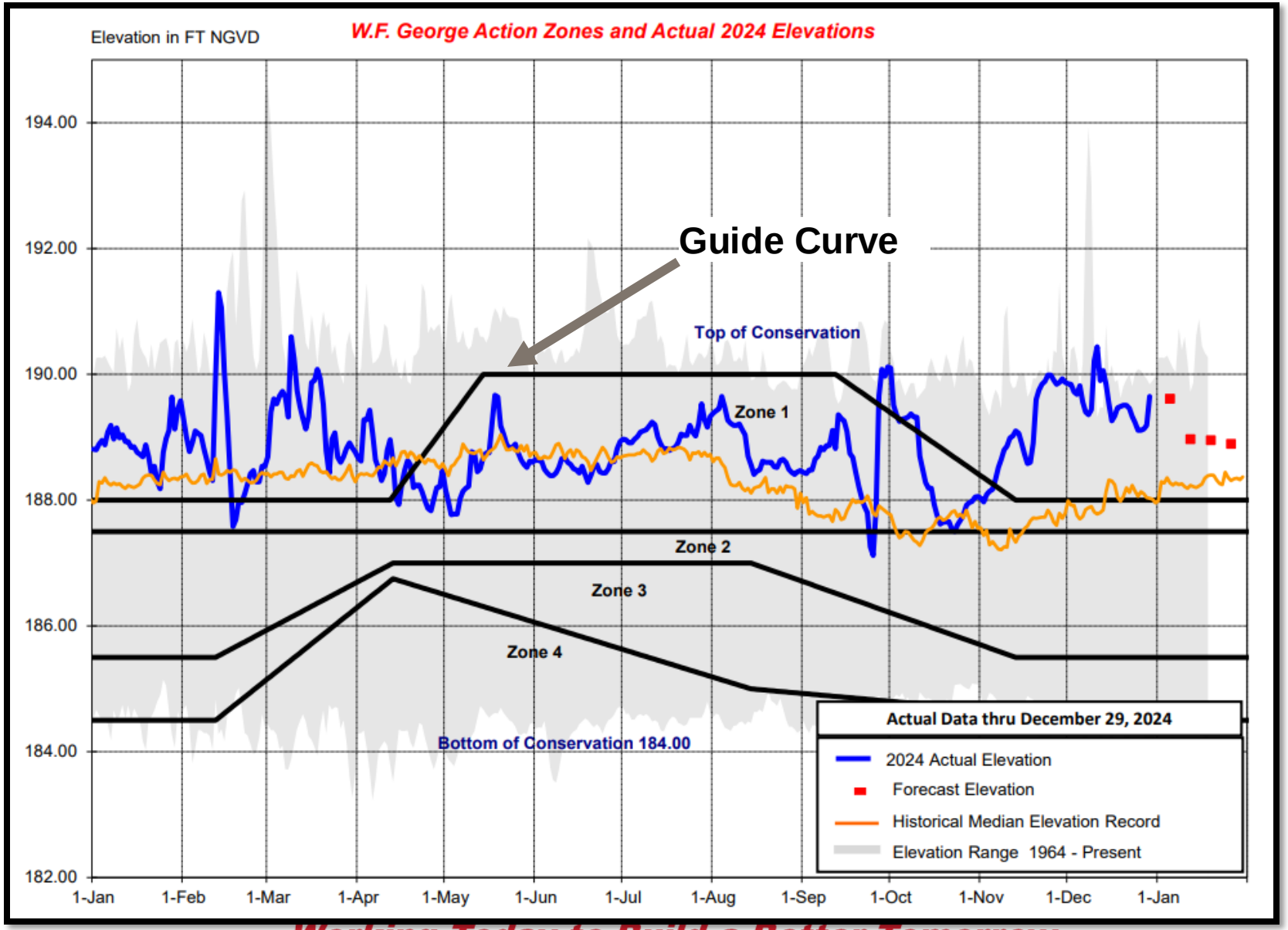
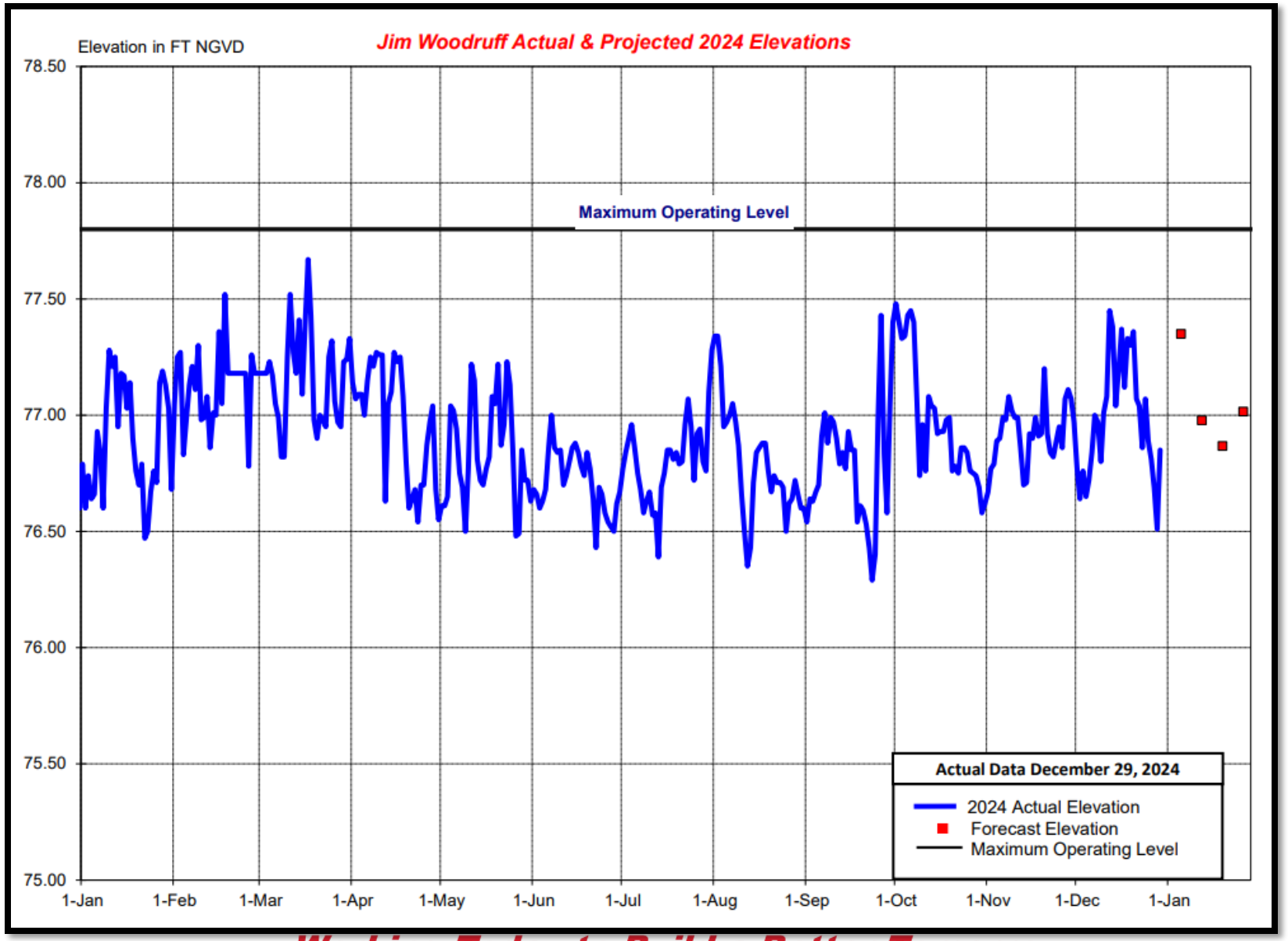
WALTER F GEORGE DAM AND RESERVOIR



JIM WOODRUFF DAM AND LAKE SEMINOLE

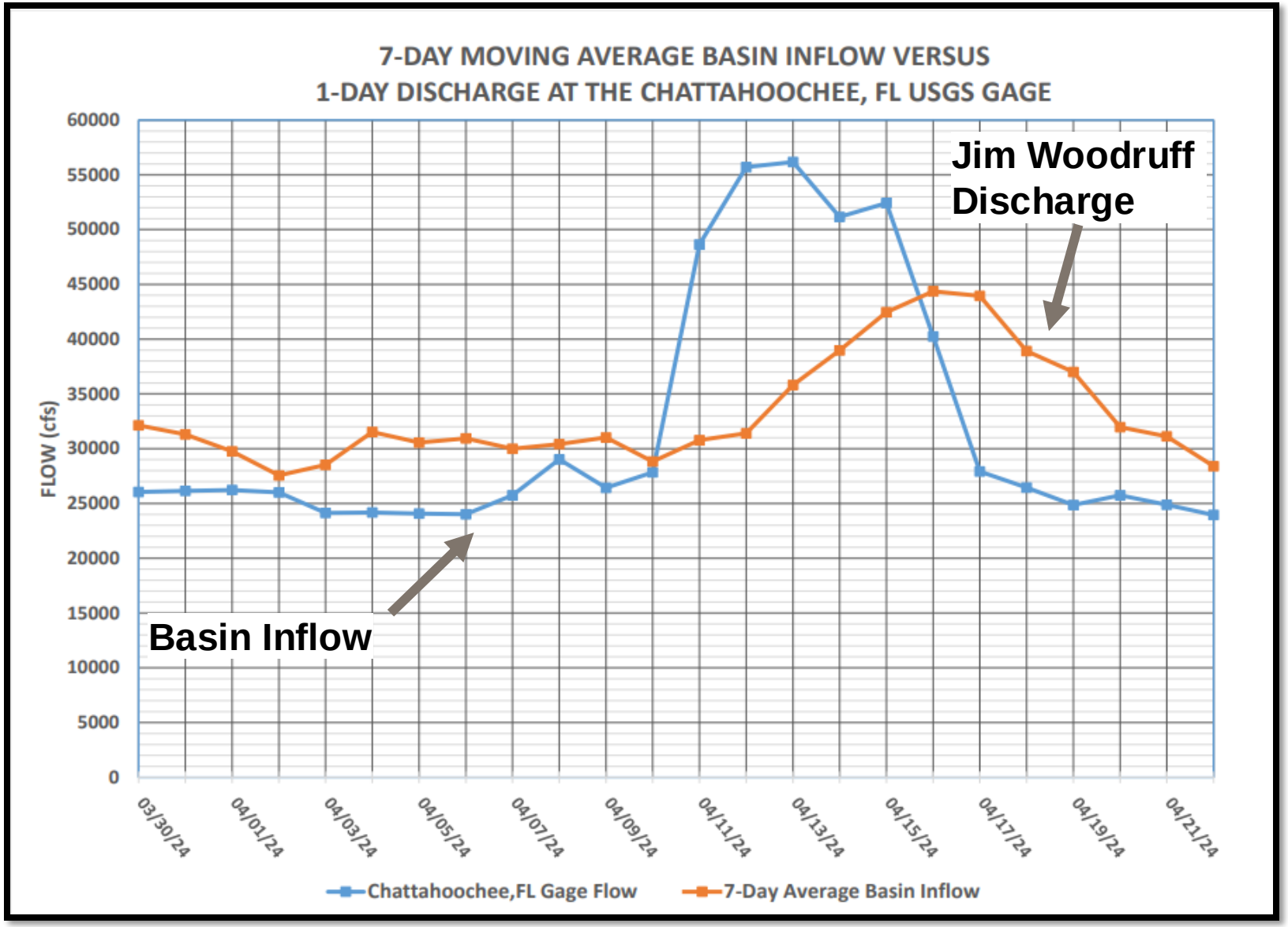


A MAIN DRIVER IN OUR SYSTEM OPERATION

Basin Inflow – unregulated total flow into federal reservoirs.

Chattahoochee Q – total discharge from Jim Woodruff.

Required flow from Jim Woodruff is function of Basin Inflow and time of year, highest demand during spawning season Mar-May.



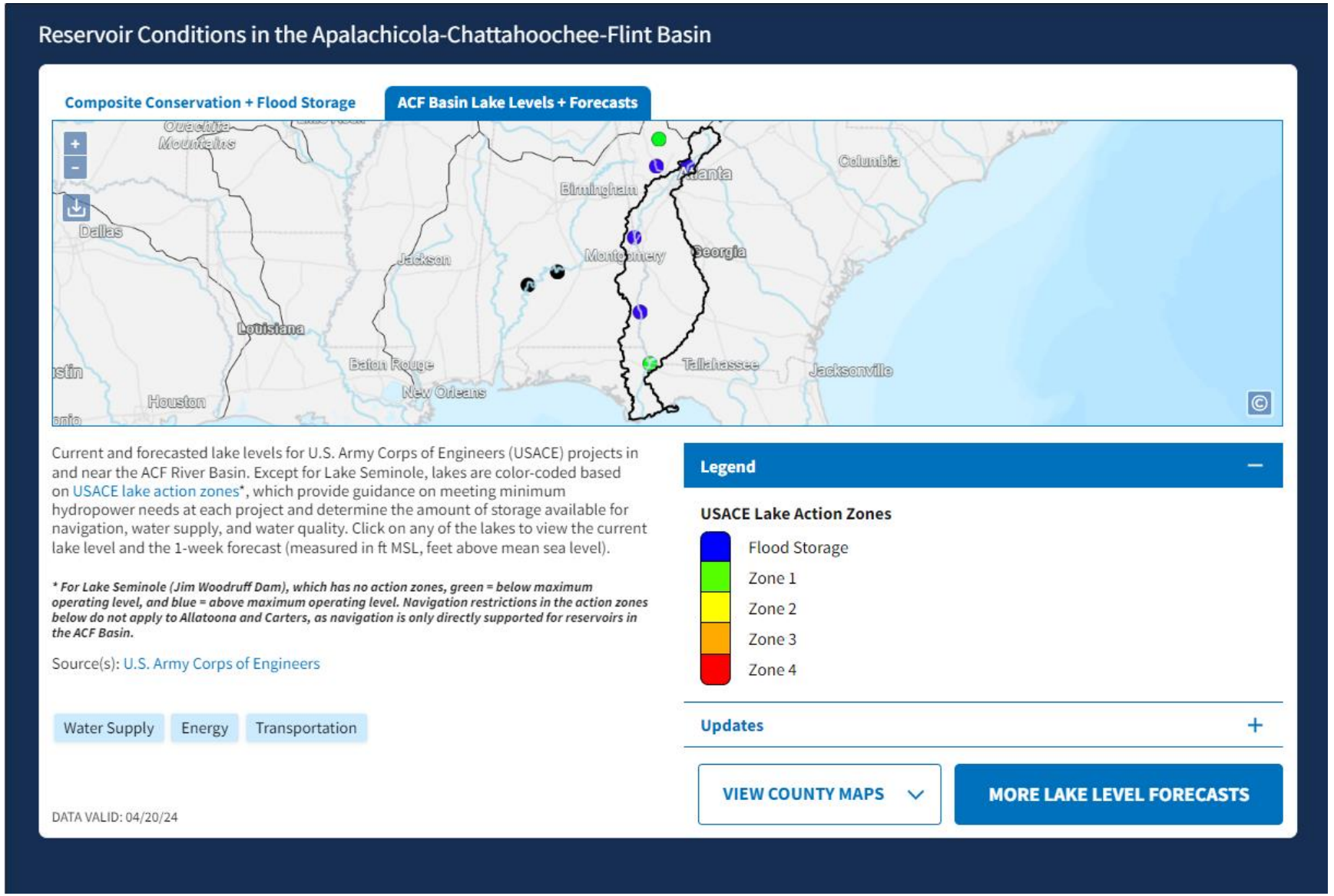
ACF FEDERAL RESERVOIR STATUS

ACF Drought & Water Dashboard

Provides quick visual status of reservoir storage.

Blue and Green indicates no shortage of water.

Utilized to tell our story.



2006 – 2008 DROUGHT

The 2006 - 2008 drought was the most devastating recorded in Alabama and western Georgia.

Winter 2006 – 2007 & Spring 2007: driest winter and spring in the recorded period of record.

- North Georgia received less than 75 percent of normal precipitation (30-year average).
- New record low monthly streamflows occurred at 80 of 101 stations with 20 or more years of record.
- New record low 7-day-average streamflows occurred at 21 of 101 stations with 20 or more years of record (USGS 2007)

2007: D-4 Exceptional Drought Intensity (the worst measured) throughout Summer 2007.

- Rainfall at Gainesville, Georgia, (Lake Sidney Lanier) was only about 20 inches (the annual average precipitation there is 54.75 inches) for the entire year.
- Lake Sidney Lanier recorded its daily record low lake elevations each day from 11 December 2007 through 10 December 2008. Furthermore, from 1 March 2008, through 1 August 2008, the Lake was three to five feet lower than the previous low for that day.

DROUGHT MANAGEMENT

Drought Contingency Plan

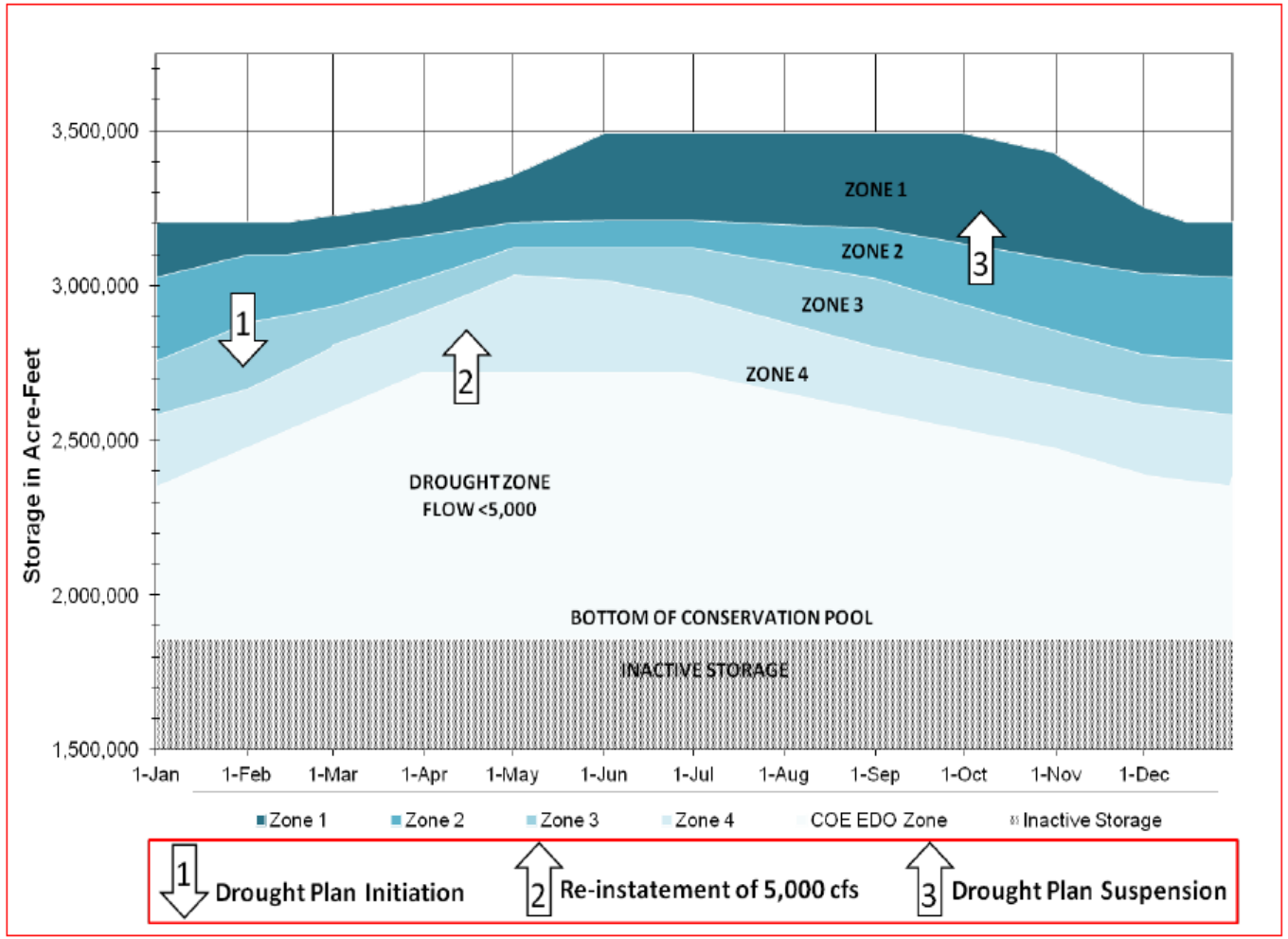
Specifies a minimum release from Jim Woodruff Lock and Dam.

- Temporarily suspends the normal minimum release/maximum fall rate provisions until composite conservation storage in the basin is replenished.
- Minimum discharge is determined in relation to the composite conservation storage and not the average basin inflow.

The drought plan is triggered when the composite conservation storage falls below the bottom of Zone 2 into Zone 3.

- Zone 4 minimum release from JW L&D is 5,000cfs.
- Drought Zone minimum release from JW L&D is 4,500cfs.

Drought provisions remain in place until conditions return to composite Zone 1.



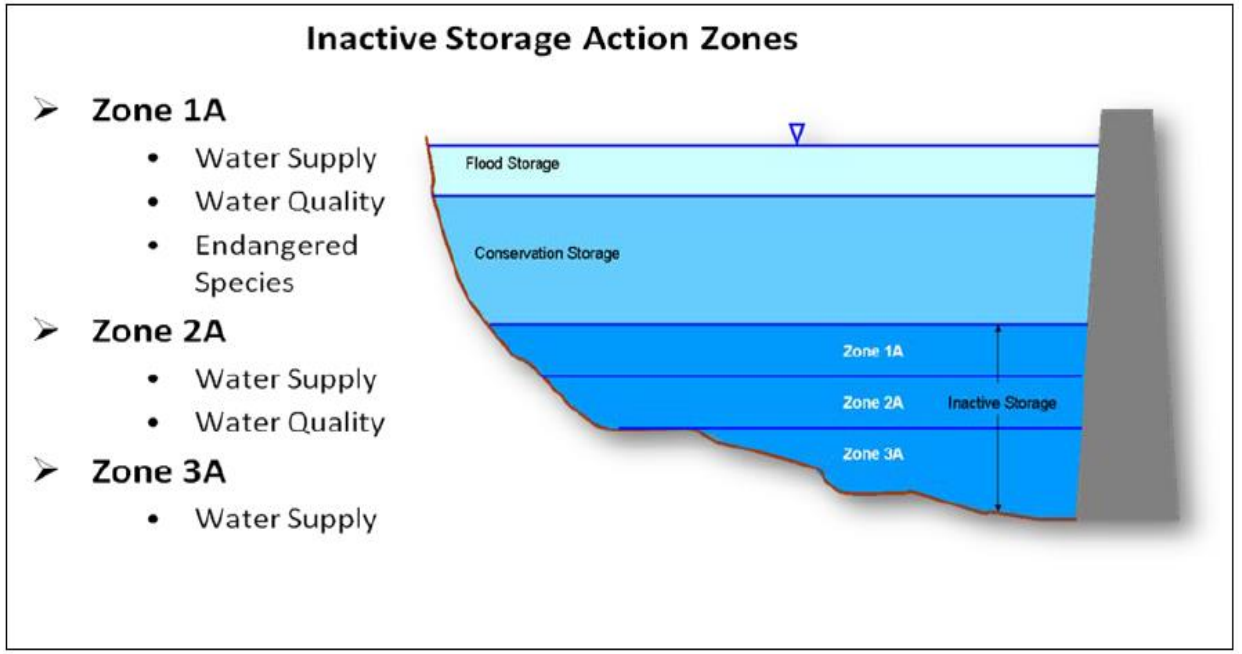
In Zone 4 and Drought Zone, all basin inflow *ABOVE* 4,500cfs capable of being stored may be stored.

DROUGHT MANAGEMENT

Extreme Drought Conditions

Total composite storage drops to about 10 percent, utilization of inactive storage to be considered.

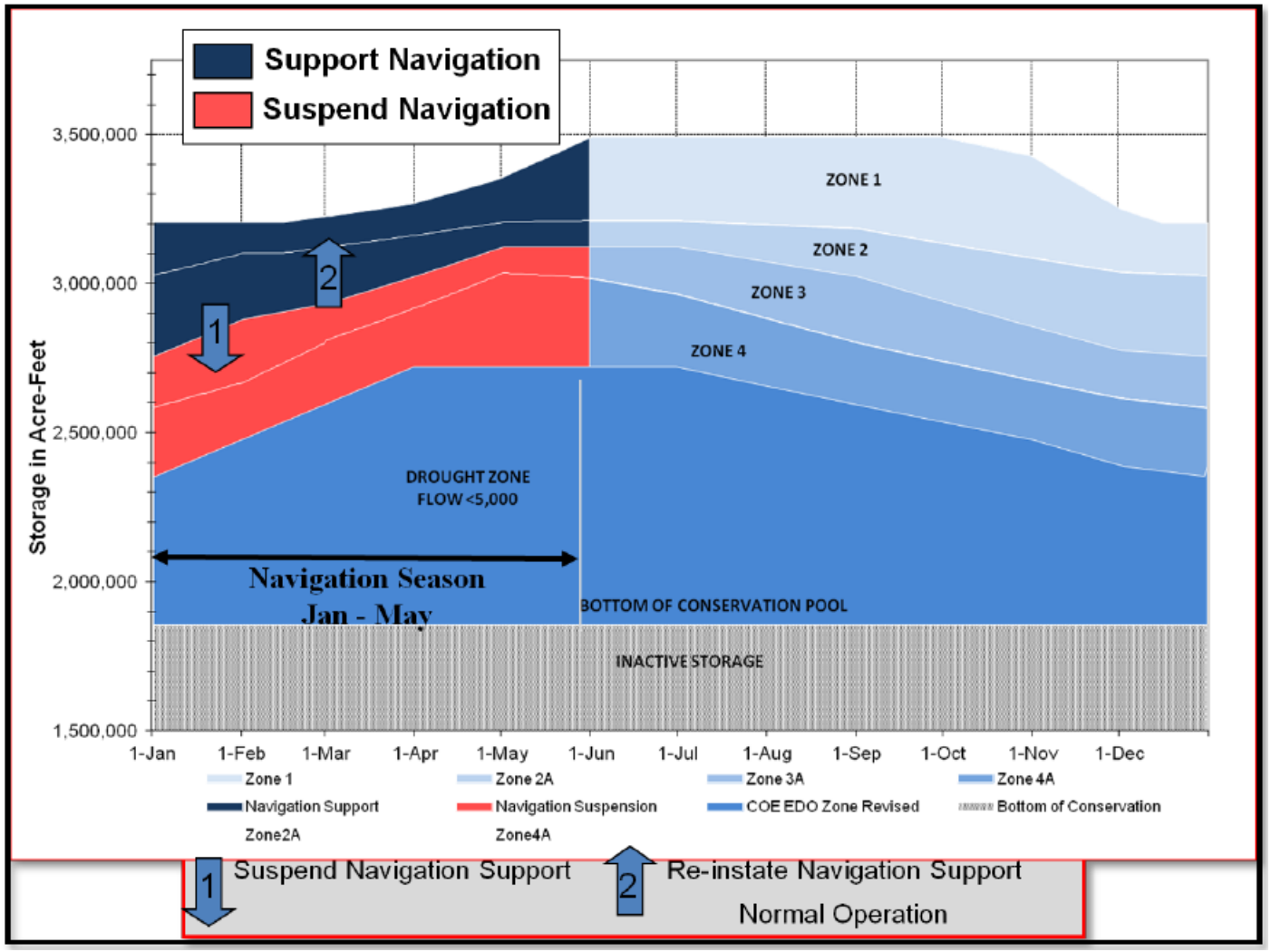
- Inactive storage availability is identified to meet specific critical water use needs.
- Emergency uses will be identified in accordance with emergency authorizations. Typical critical water use needs are associated with public health and safety.
- Weekly projections of the inactive storage water availability to meet the critical water uses will be used when making water control decisions regarding withdrawals and water releases.
- The inactive storage action zones will be instituted as triggers to meet the identified priority water uses (releases will be restricted as storage decreases).
- Dam safety considerations will always remain the highest priority.



ACF NAVIGATION

Assuming basin hydrologic conditions allow, a typical navigation season would begin in January of each year and continue for 4 to 5 consecutive months

The determination to extend the navigation season beyond April will depend on ACF Basin inflows, recent climatic and hydrologic conditions, meteorological forecasts, and basin-wide model forecasts. Based on an analysis of those factors, determination will be made if the navigation season will continue through part or all of May.



WATER MANAGER FOR A DAY

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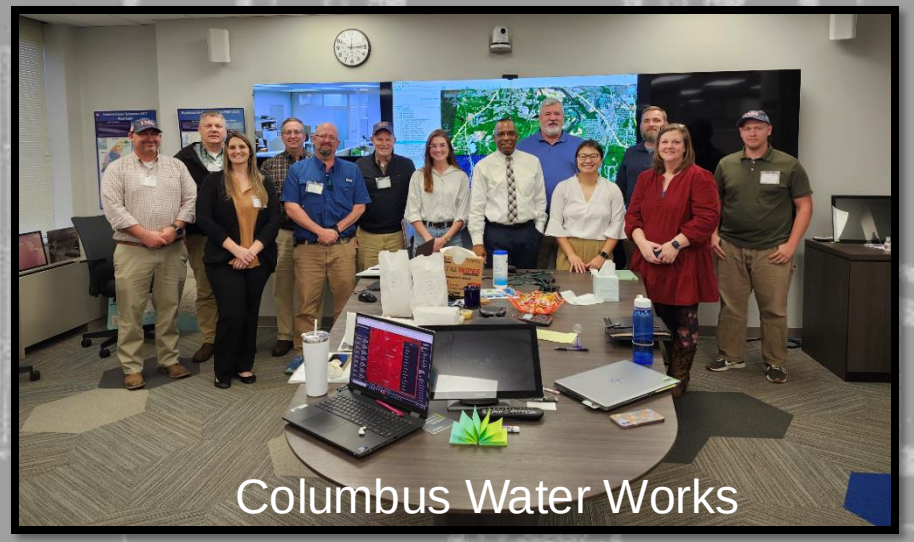
- We open the to door for anyone to walk in the shoes of a water manager for a day.
- ‘Water Management 101’ for the public
- Overview of the water management office; staff, mission and history.
- Scheduled to coincide with our weekly water management meeting
- One on One with a basin manager
- Our goal is for the individual to understand the multiple factors that are considered in the reservoir release or non-release.


Columbus Water Works

Riverkeeper Groups


SERFC


Park Rangers

THANK YOU FOR THE INVITATION!

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