

Parity: An Issue of Fairness

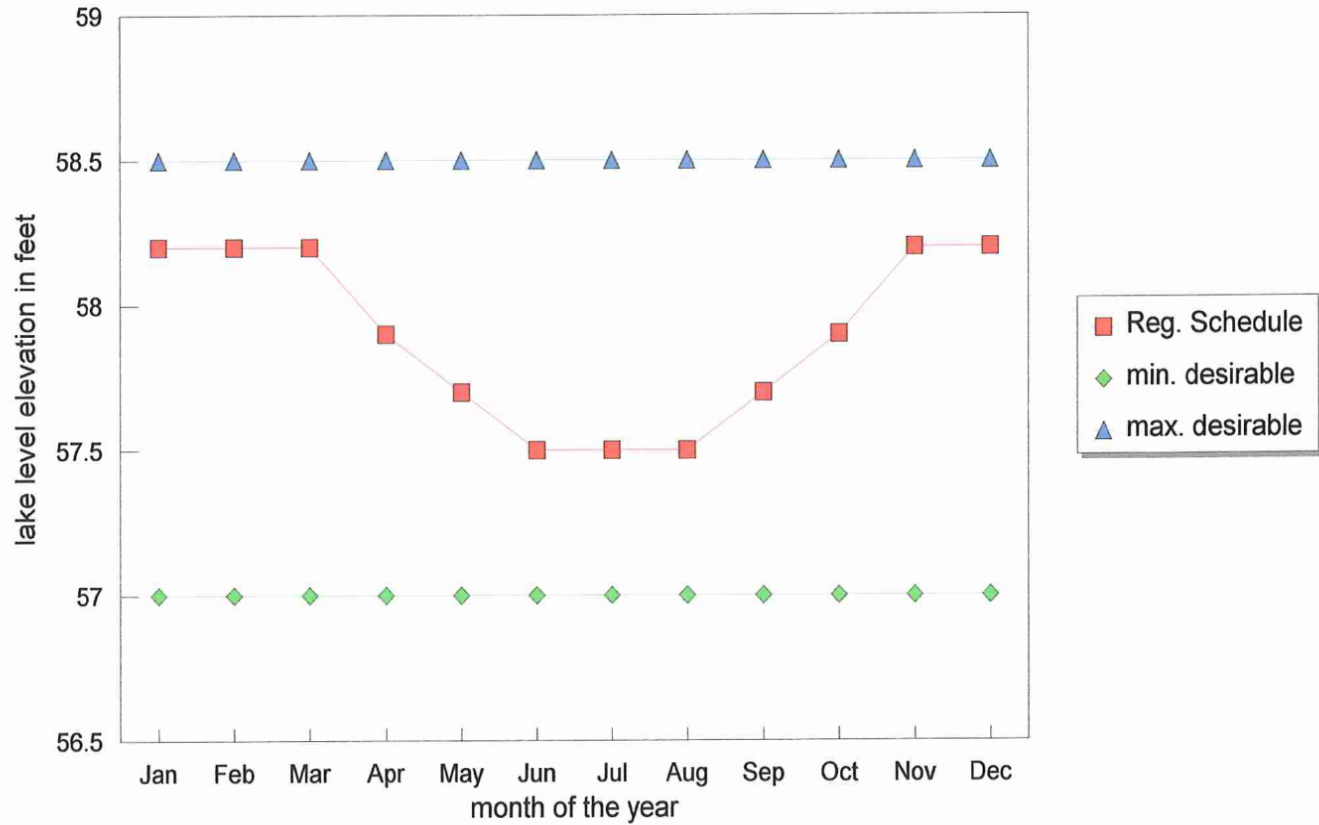
or

If there must be pain, let's at least suffer it equally

Parity: The levels at which two or more lakes in a system are equidistant from their respective regulation schedules.

Parity can be achieved by controlling flows through the dams.

Lake Level Reg. Schedule, Min. & Max. Desirable

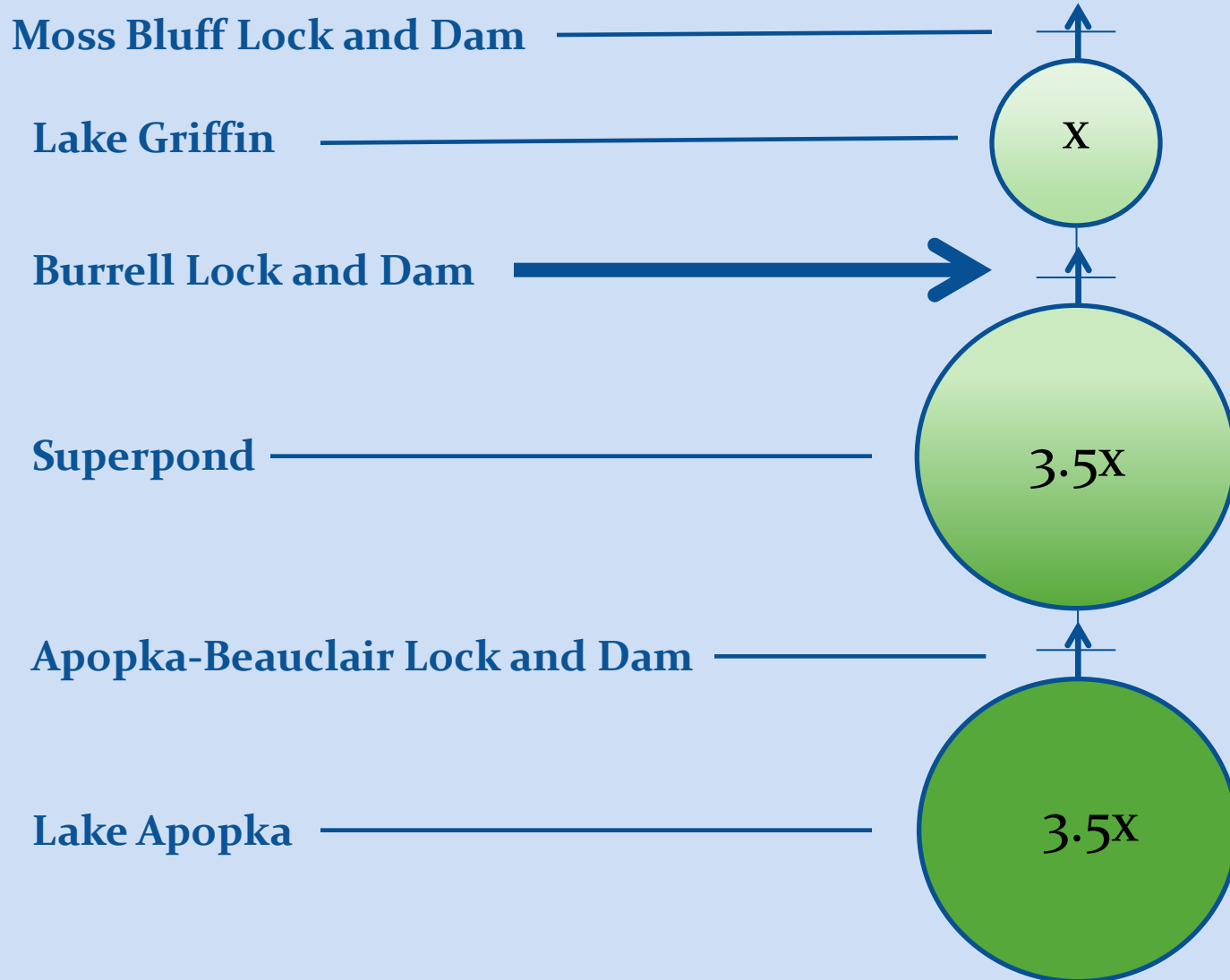


Factors Influencing Lake Levels

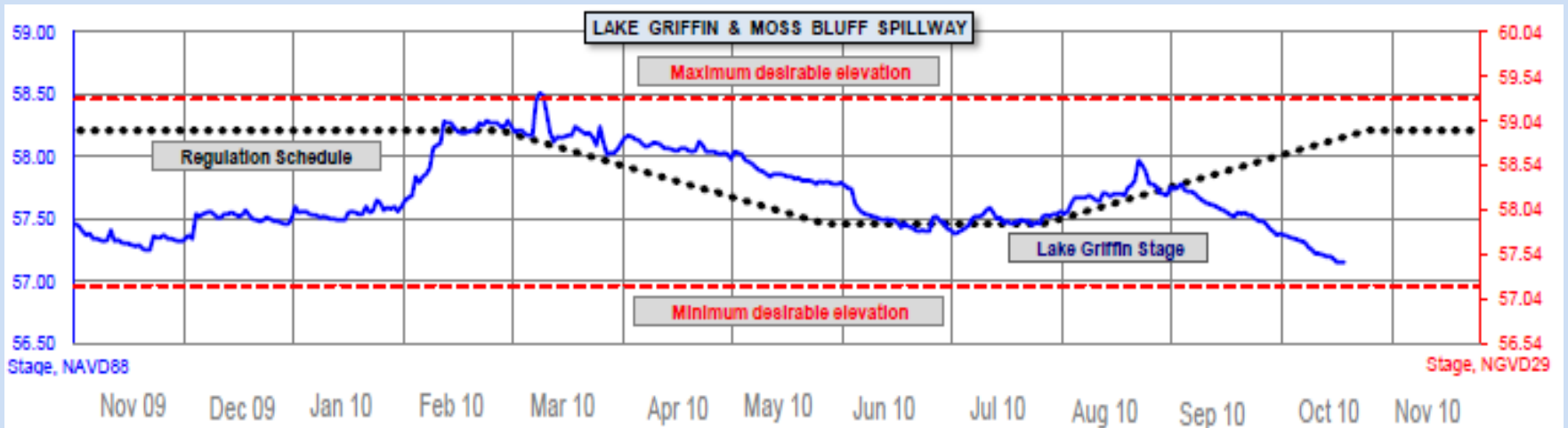
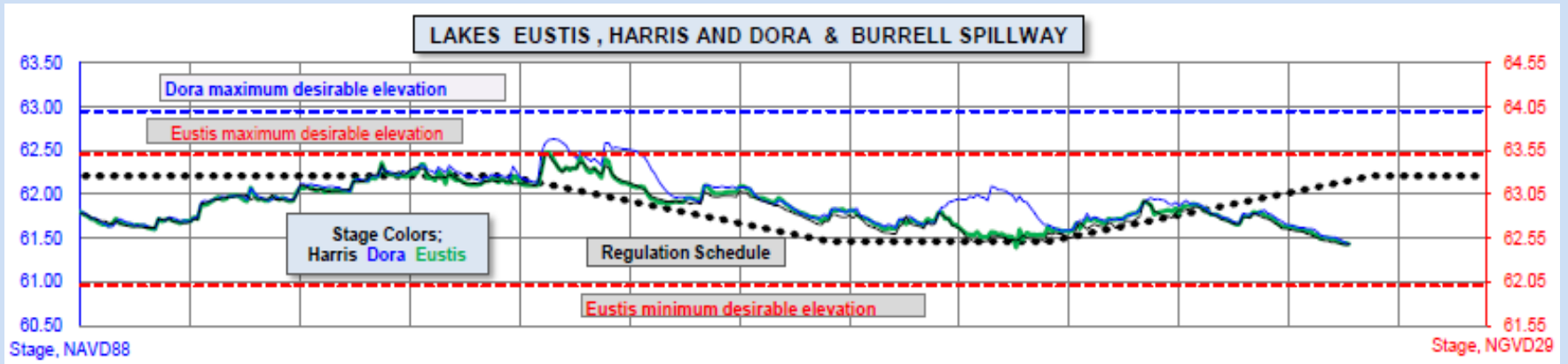
1. Rainfall
2. Evaporation
3. Basin Size
4. Misc. (springs, leakage to aquifer, etc.)
5. Inflow and outflow (controlled by dams)

Only #5 is controlled by SJRWMD. These can be, and should be, managed to compensate for differences in #s 1,2,3, and 4.

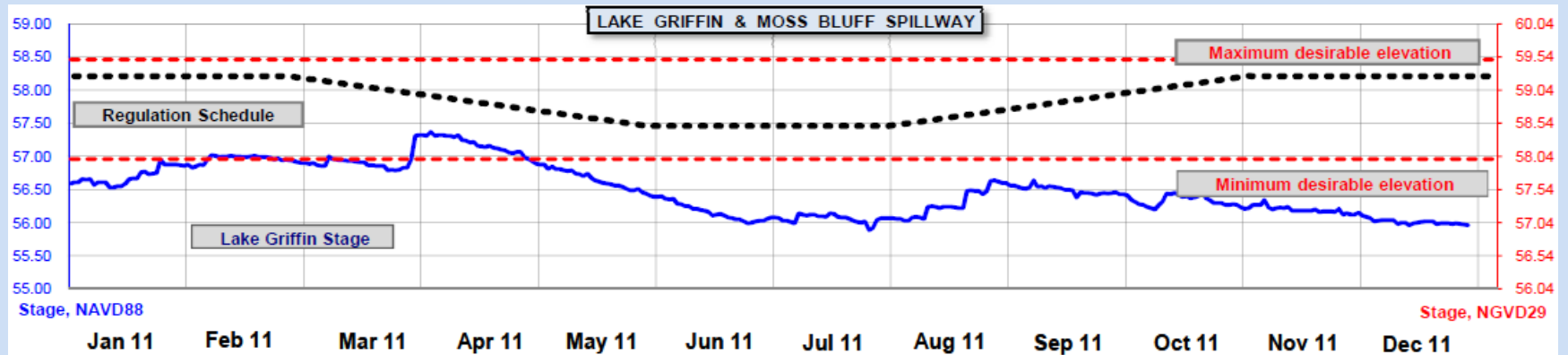
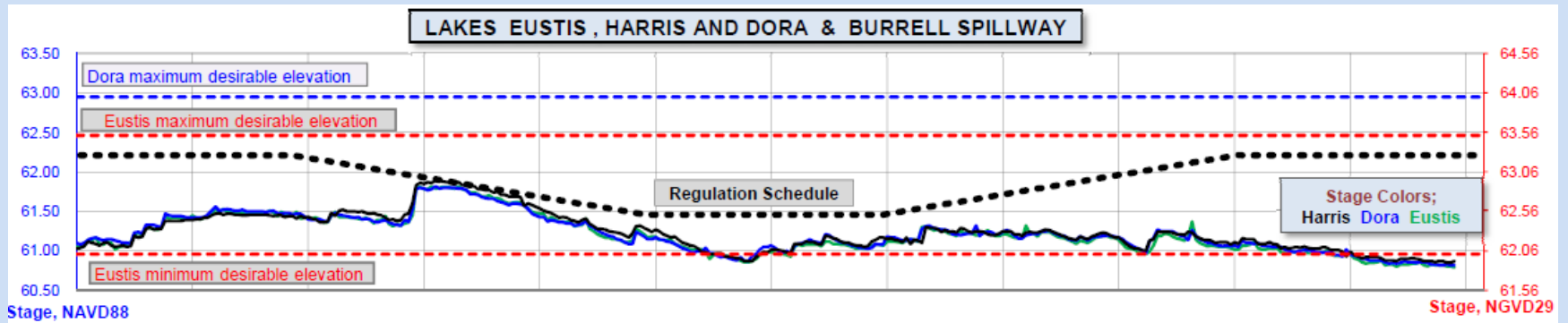
Harris Chain of Lakes and Their Control Structures



Nov 2009 - Nov 2010

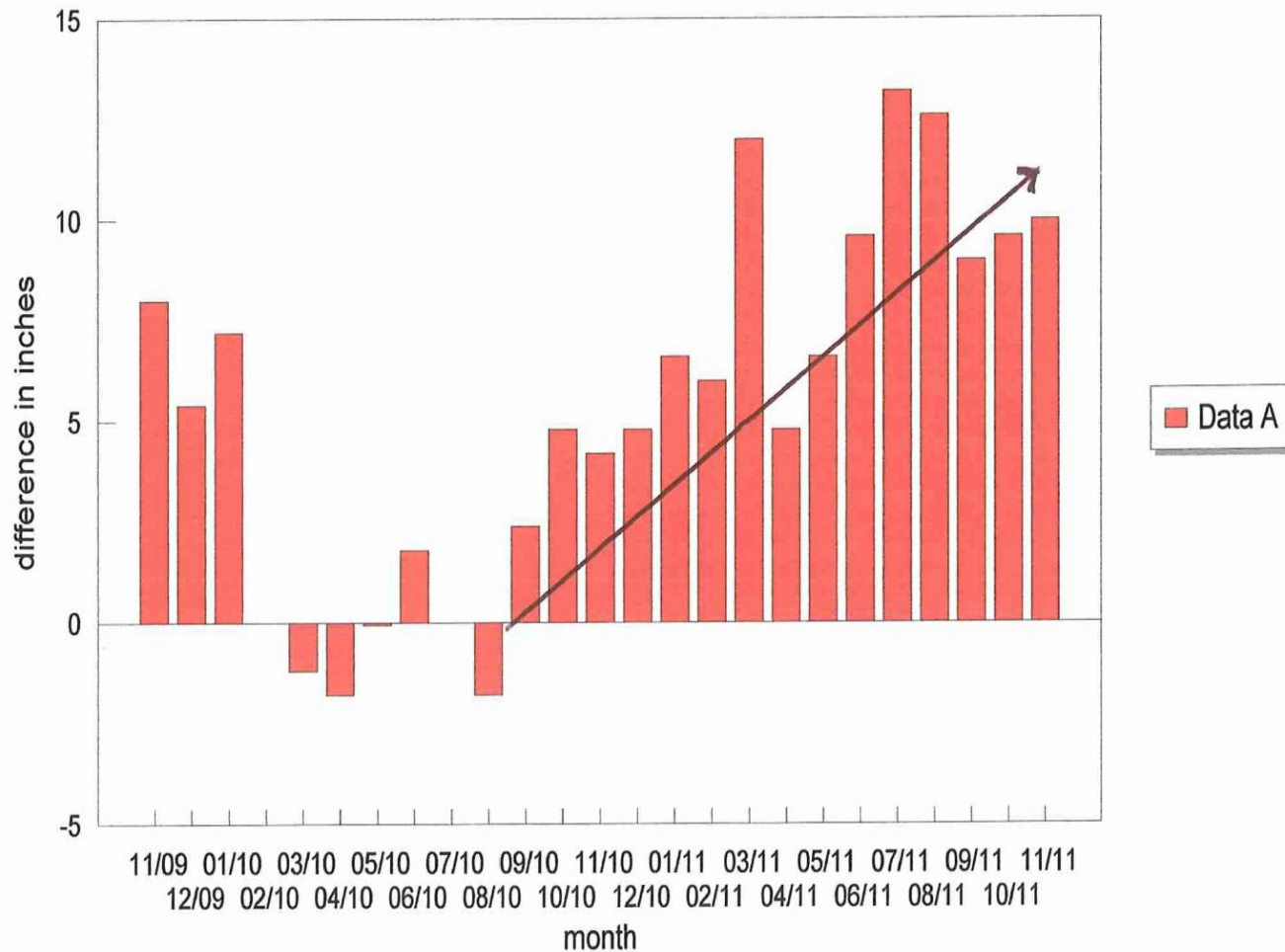


Dec 2010 - Dec 2011



Difference Between Their Respective Reg. Schedules

(Superpond - Lake Griffin)

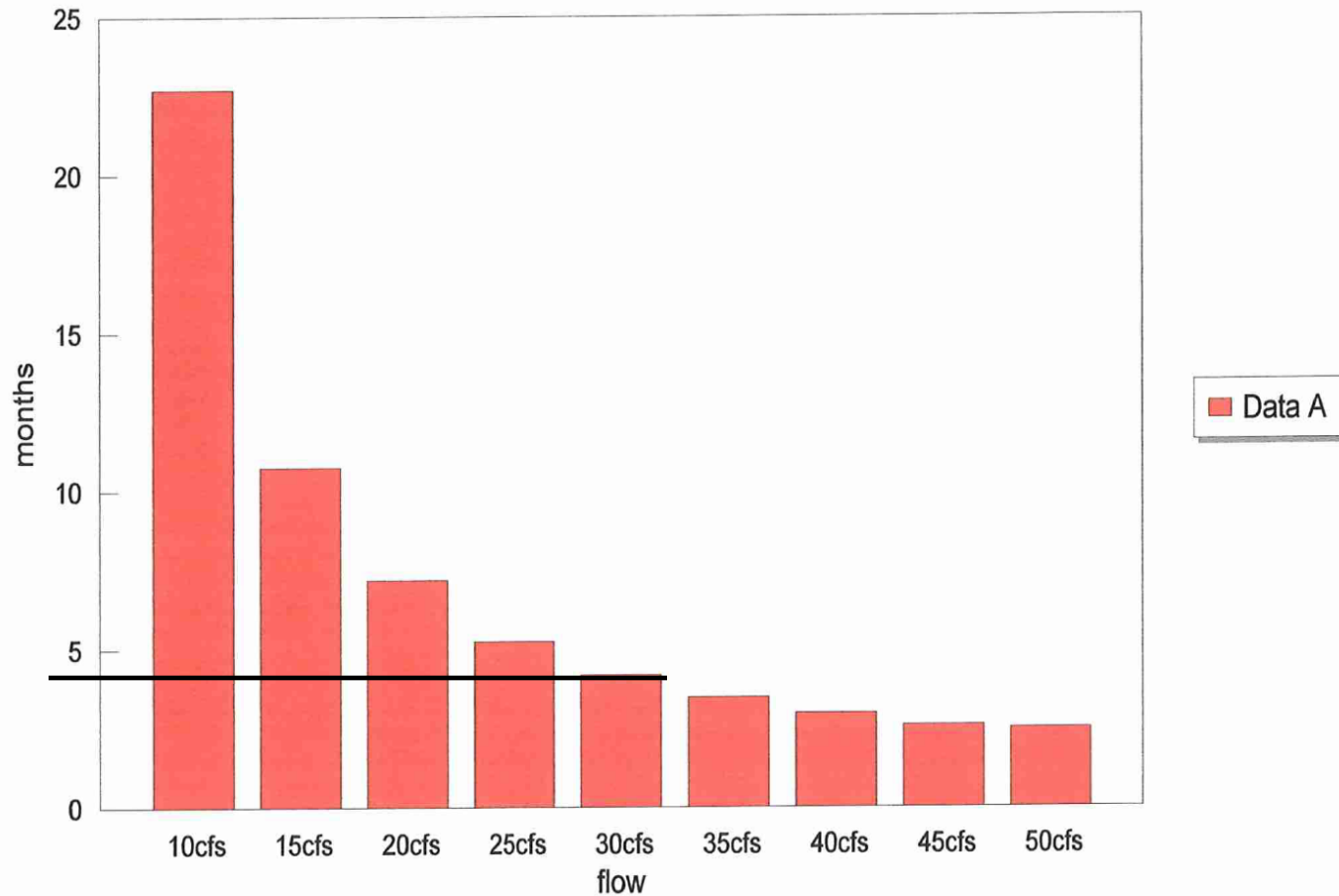


Four Month Change in Lake Water Levels Due to Discharges at the Apopka-Beauclair Canal Dam, Burrell (Haynes Creek) Dam and the Moss Bluff Dam

	Flow Regimen			
	0,0,10	0,5,7	10,10,10	25,25,25
Lake Apopka	0	0	-0.95 in.	-2.4 in.
Superpond	0	-0.43 in.	0	0
Lake Griffin	-3.0 in	-0.61 in.	0	0

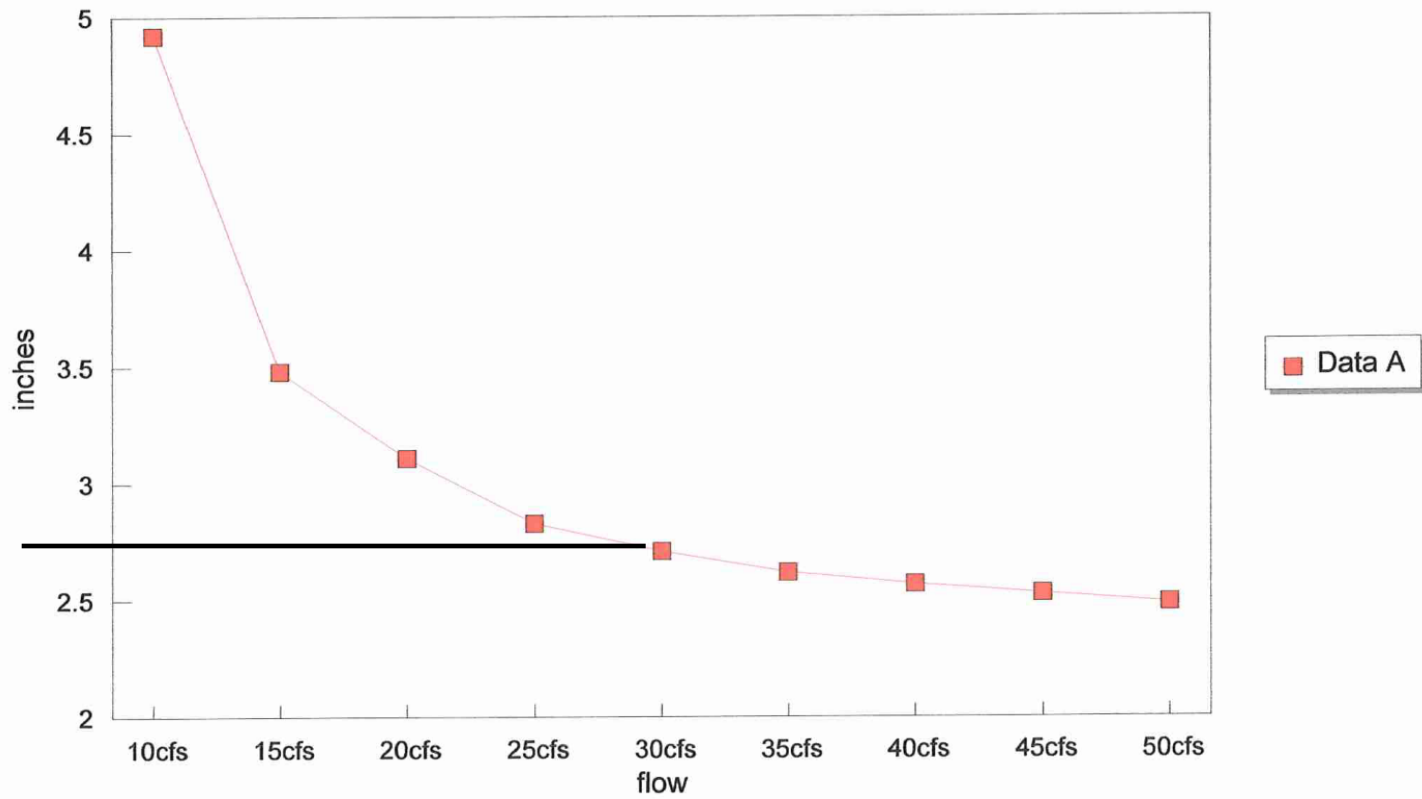
Time Required for Parity vs. Flow at Burrell

A-B Canal flow = 0, Moss Bluff flow = 7



Superpond Loss vs. Burrell Flow

A-B Canal flow = 0, Moss Bluff flow = 7



Conclusions

1. Parity should be established between Lake Griffin and the Superpond without withdrawing water from Lake Apopka.
2. Flow through the Moss Bluff structure should be held at 7 cfs.
3. Flow through the Burrell structure should be increased to 30 cfs until parity is achieved between the Superpond and Lake Griffin.

When parity is achieved, neglecting effects due to uncontrollable events, both the Superpond and Lake Griffin will be 17 inches **below** their respective regulatory schedules.

Time to Achieve Parity Between the Superpond and Lake Griffin and the Results to Their Respective Water Levels

Flow Regimen	Time to Parity	Change (Griffin)	Change (Superpond)
0,30,7	4.11 months	+7.15 in.	-2.85 in.
0,30,0	3.38 months	+7.66 in.	-2.34 in.