Preliminary VARQ Rule Curves for Yellowtail Dam

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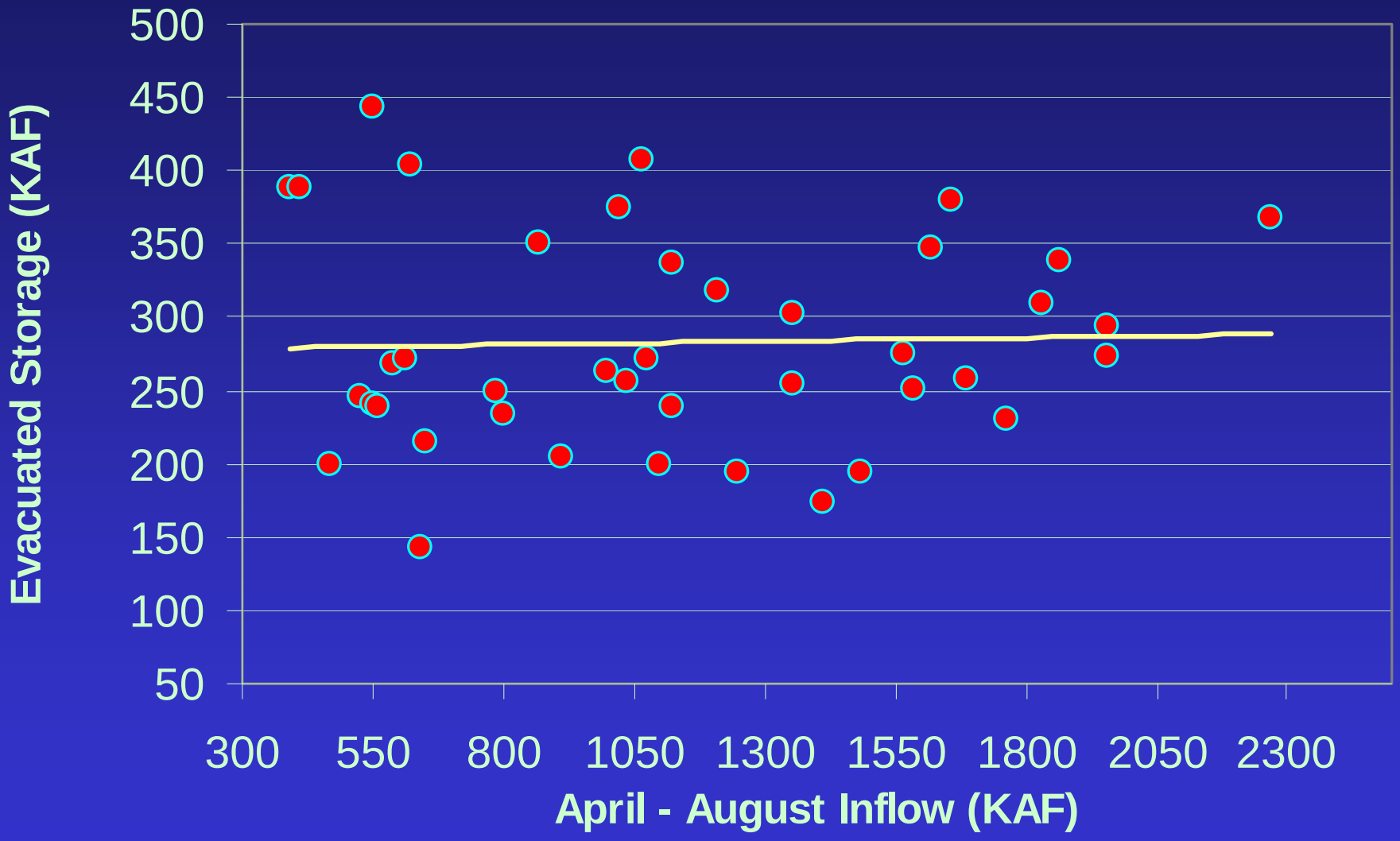
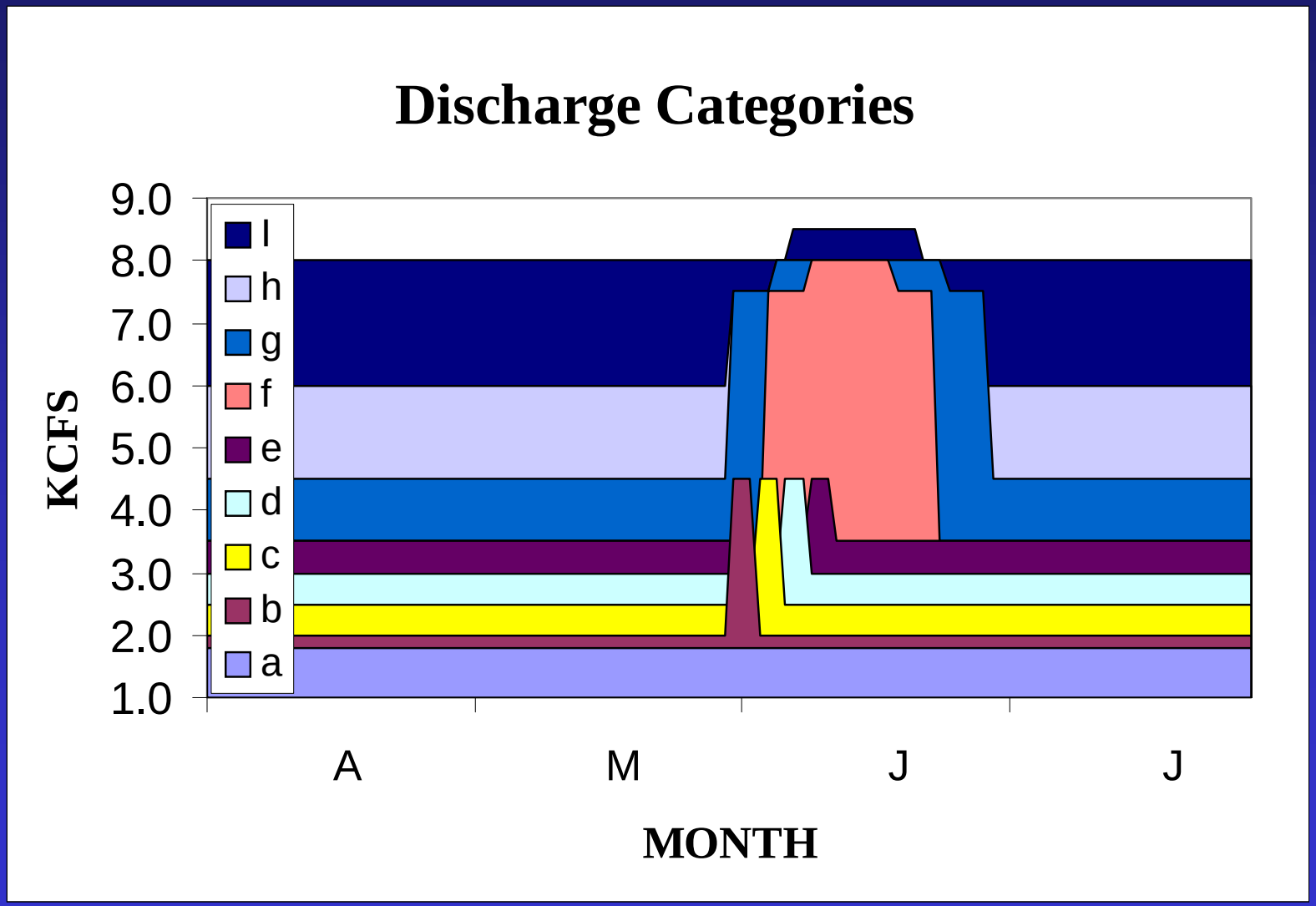
Assumptions for this analysis

- Attempt to refill to full pool, elevation 3640, annually during July
- Avoid elevations in the Flood Pool above 3640
- Provide stable fisheries flows for primary species
- Draft targets for each month, April, May, and June were based on April through July inflow volume
- Flows during the period August through the first inflow forecast in January were set based on previous year's water supply
- Flows from April through July were stabilized based on water supply (called "flow categories")

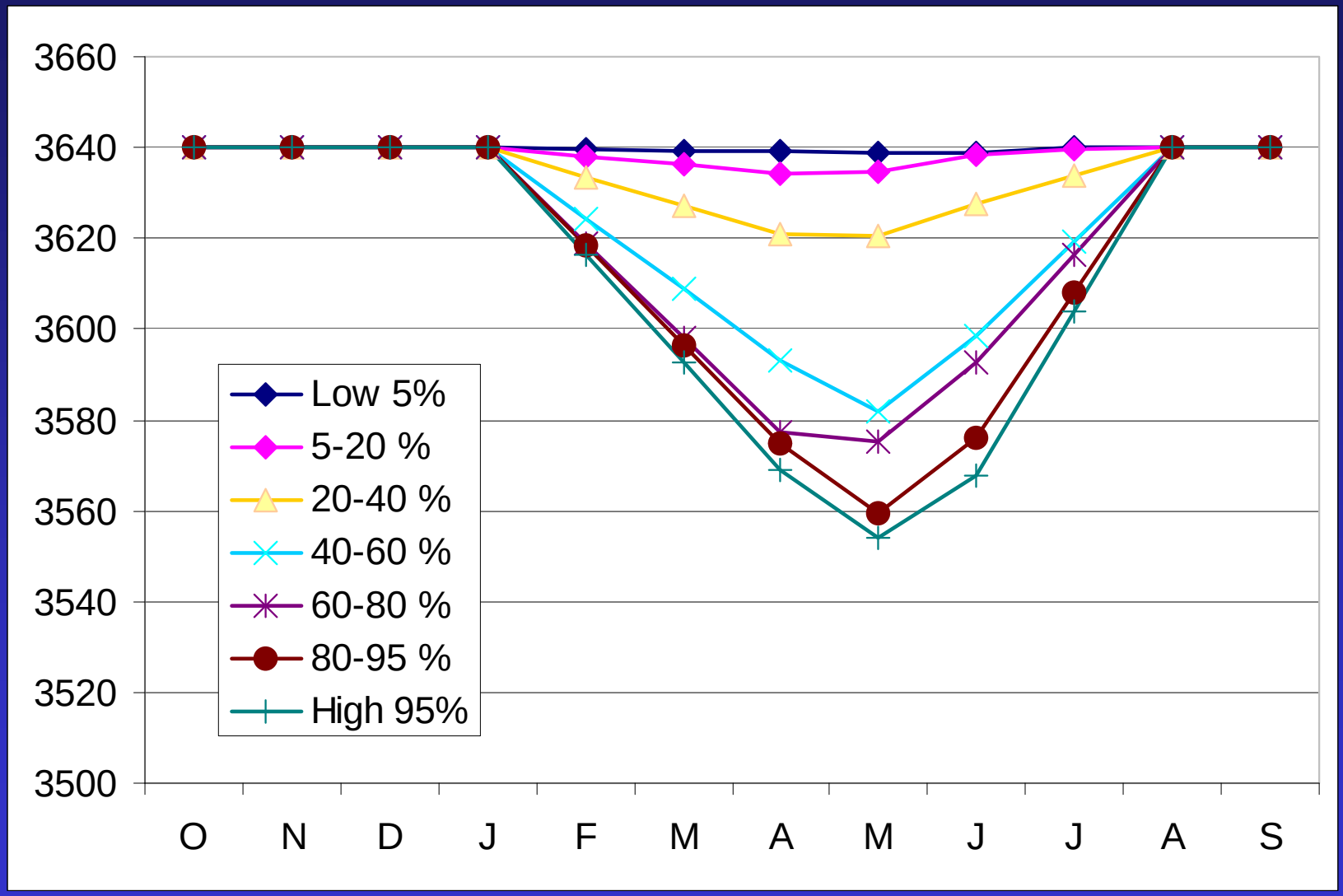
Inflow Water Supply compared to Bighorn Reservoir drawdown



Discharge categories, based on water supply, include a spring flushing flow for channel maintenance



Preliminary Rule Curves based on water supply



Results

- Reservoir did not refill 6 of 42 years due to low water supply
- Reservoir filled into flood pool 2 of 42 years due to high water supply
- Fisheries flows were 1800 cfs during the driest 5% wateryears
- Springtime flushing flows could be scheduled or adjusted to avoid conflicts with downstream flood control
- Results indicate that success criteria could be met more frequently if a portion of the flood pool could be used in above average wateryears