



Susquehanna River Basin Commission

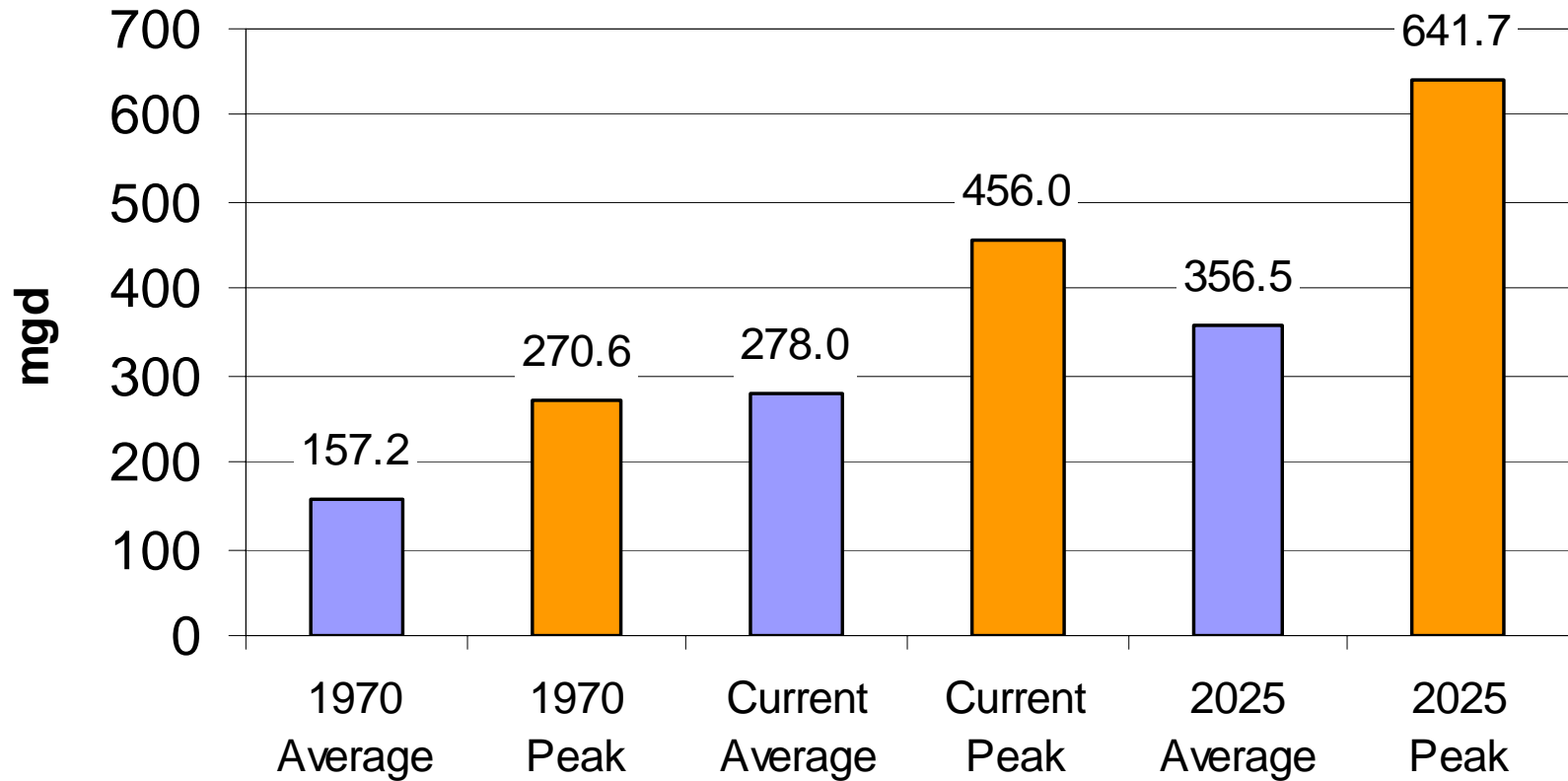
Consumptive Water Use Trends and Management

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Consumptive Water Use

- Use of water in such a way that it is not returned to the Susquehanna River system
- Examples:
 - Evaporative losses
 - Incorporation into product
 - Diversion of water into another river basin

Growth in Consumptive Water Use



Consumptive Use Analysis

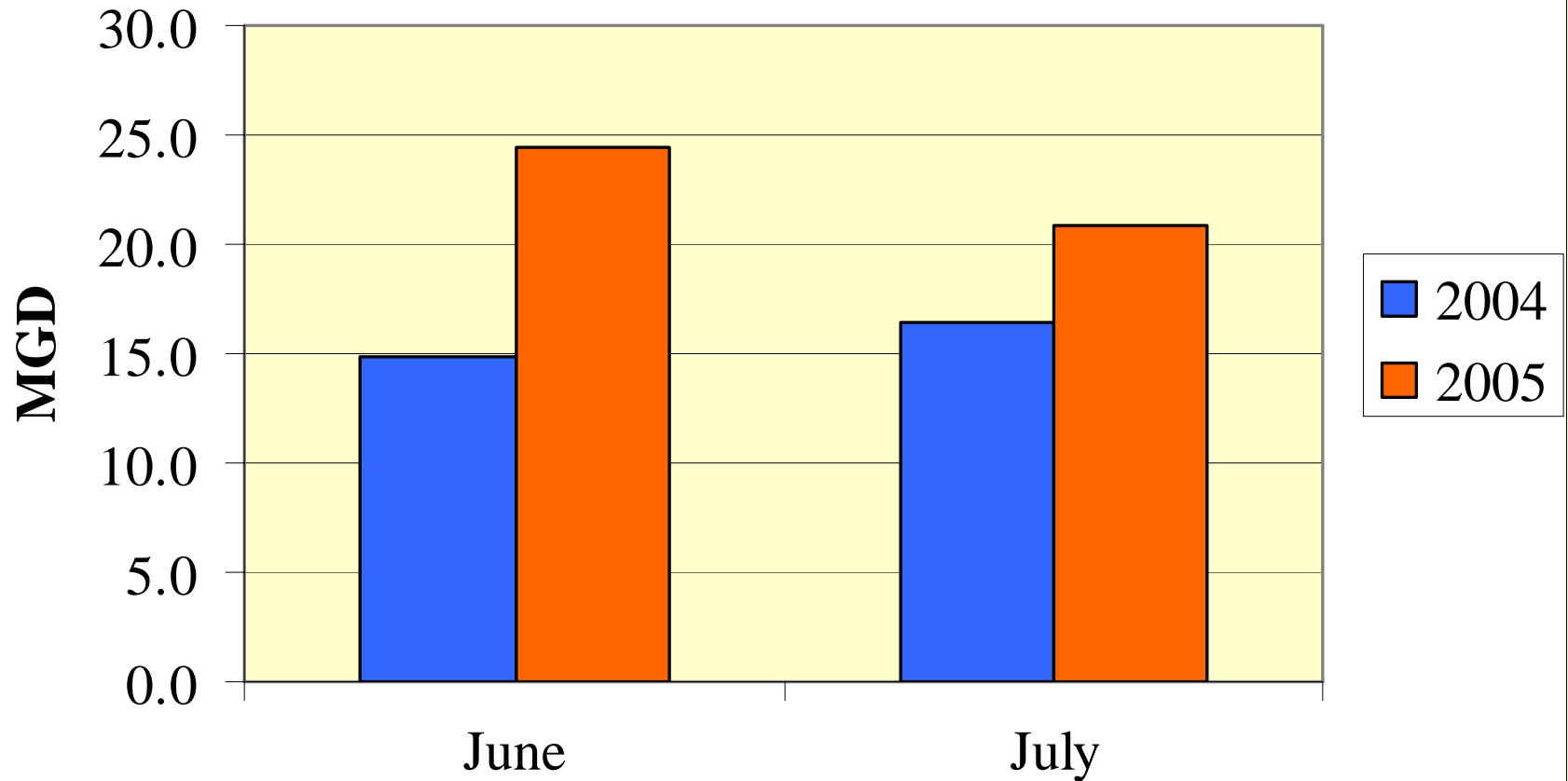
- Estimates for present use (no diversions)
 - 278 mgd average, 456 mgd peak (entire basin)
 - 239 avg., 399 peak above Marietta gage
- Projected demand (2025)
 - 357 mgd average; 642 mgd peak (entire basin)
 - 306 avg., 560 peak above Marietta gage
- Potential impacts
 - Record low flow at Marietta ~ 1250 mgd
 - Current peak is about 35% of that
 - Projected peak is over 50% of that



Consumptive Use Analysis

- Breakdown by location
 - 4% Chemung 8% Upper Susquehanna
 - 12% West Branch 18% Middle Susquehanna
 - 5% Juniata 53% Lower Susquehanna
- Breakdown by category (peak use)
 - 30% Public Water Supply
 - 30% Power Generation
 - 18% Agriculture
 - 11% Industrial
 - 11% Other

Average Daily Consumptive Water Use*



* Reported by selected facilities in operation both years; does not include power plants

Management Activities

- Drought Management Coordination
 - Track hydrologic conditions in the basin
 - Coordinate management activities of member states (drought watch, warning, etc.)
- Consumptive Use Regulation
 - Effective Date – January 23, 1971
 - Applies to consumptive uses of water exceeding a consecutive 30-day average of 20,000 gallons per day

Compliance Options

- Cease consumptive use during critical low flow periods (Q7-10)
- Release water from storage
 - Own storage
 - Purchase storage
- Use alternate water supply
- Pay consumptive use fee for the SRBC to purchase storage

Pooled Water Storage Program

Reservoir releases
can benefit main
stem Susquehanna
and major
tributaries



Management Activities

- Whitney Point Environmental Restoration Project
 - Environmental and recreational benefits
 - Storage dedicated for release during low flows
- Agricultural Consumptive Use Study
 - Alternate surface water storage
 - Aquifer storage and recovery
 - Underground mine pool storage