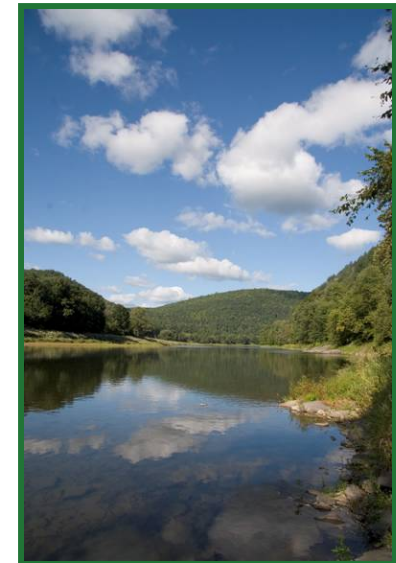


# Delaware River Basin Commission

## Water Supply Planning

Water Management  
Advisory Committee

October 16, 2014



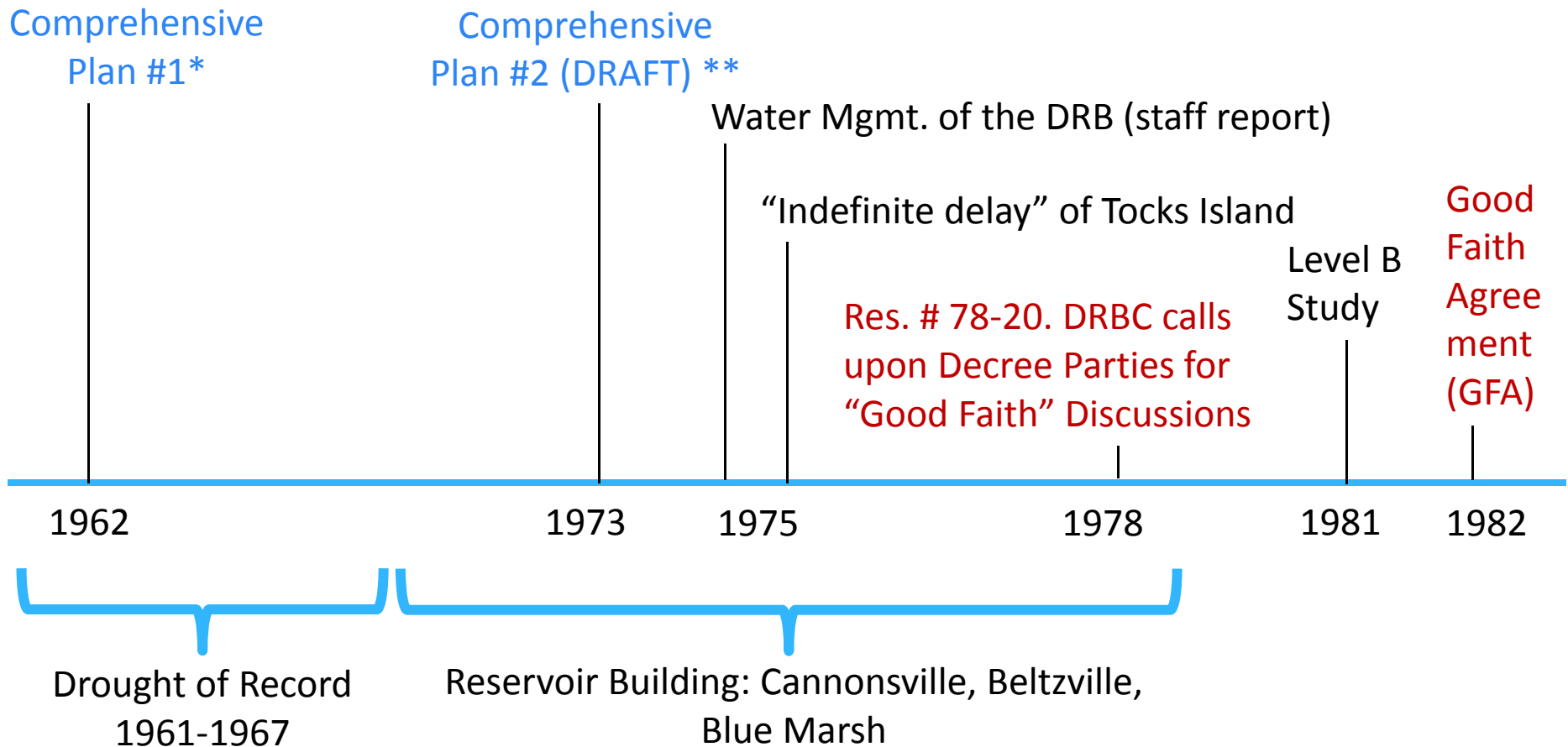
# DRBC Planning Authority

- > Compact – Planning Powers and Duties (Section 3.2)
- > Comprehensive Plan (Section 13.1)
  - > Water Resources Program (Section 13.2)
    - > Annual Work Plan/Budget (Section 13.3)
    - > Annual Report (Section 14.12)

# DRBC Comprehensive Plan

- Specific projects and facilities and statements of policy and programs may be incorporated, deleted or modified to reflect changing conditions, research and new technology.
- Versions
  - ✓ 1<sup>st</sup> CP – March 28, **1962**; approved by Resolution 62-4. 21 (proposed) Reservoir/Storage Projects.
  - ✓ 2<sup>nd</sup> CP (draft) – September **1973** – Never adopted via Resolution (reliance upon Tocks Island).
  - ✓ 3<sup>rd</sup> CP – July **2001**, adopted by Resolution No. 2001-27.
- Resolution No. 2001-27 recognized an ongoing “Comprehensive Plan” related effort by the Watershed Advisory Council (1999-2004). That effort ultimately resulted in goal-based plan (vs. an updated CP).

# Highlights of DRBC Supply/Demand Planning History (1962-1982)



\* ~20 Proposed Reservoirs / Watershed Plans 4

\*\* Large multi-year effort, identified Trenton shortfalls and largely relied on Tocks Island

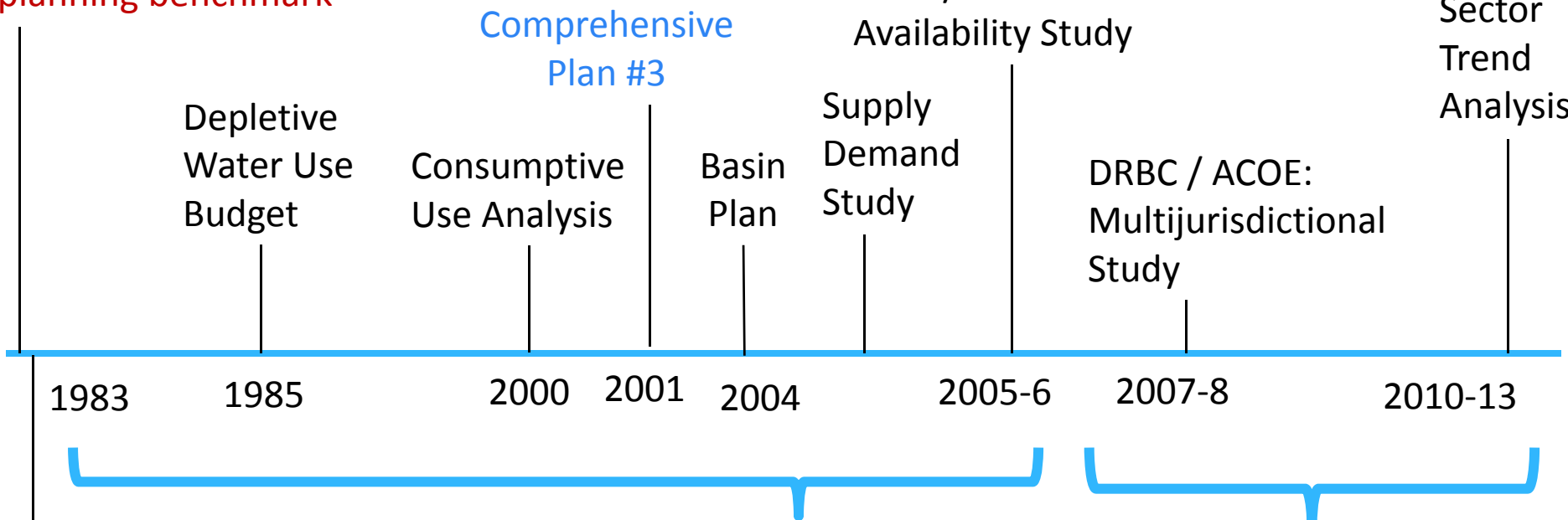
# Highlights of DRBC Supply/Demand Planning History (1983-2013)

Resolutions Updating the Comprehensive Plan (Water Code) with GFA recommendations; defines DOR as planning benchmark

DRBC/USGS: Water Budgets for (5) Selected Watersheds

DRBC/USGS: Est. GW Availability Study

Key Sector Trend Analysis



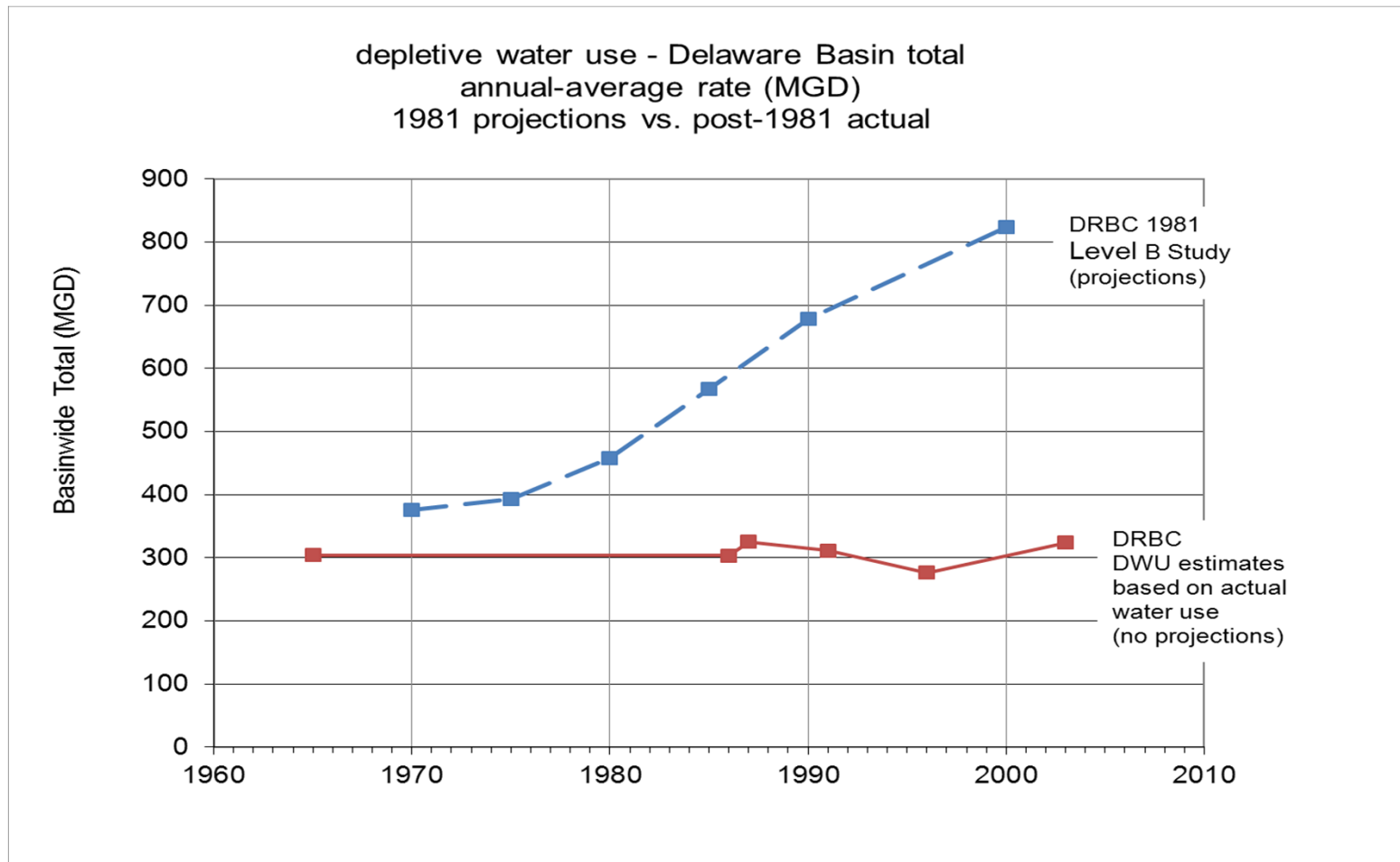
FMTAC Interim Report – With repeat of DOR; Montague & Trenton flow targets and NYC & NY diversions cannot be met. 14 BG deficit

GFA & REV's

FFMP

Act 220 Support

# TRENDS IN DEPLETIVE USE IN THE DELAWARE RIVER BASIN



The Delaware Basin total DWU shown in the above figure:

- corresponds to the whole basin and includes DWU from surface water and groundwater sources
- does not include out-of-basin diversions to NYC (via Rondout reservoir) and NJ (via the Delaware & Raritan Canal)

# “Current” Planning Activities

Plan	Lead	Purpose
Blue Marsh Reservoir White Paper	DRBC	Relate storage to downstream needs and existing commitments
Water Use Key Sector Trend Analysis	DRBC	Determine trends for PWS, Industry and Power for future demands
Evaluate OASIS PST in sub-area of DRB	DRBC	See if OASIS can be platform for basin-wide model
Water Census	USGS	Evaluate whether DRB can meet current and future demands
Salinity 3-D Model	USACE	Evaluates salinity conditions for PWS and estuary ecosystems (considers SLR and dredging scenarios)

# Looking Ahead: Water Supply Planning Focus Areas

Plan	Lead	Purpose
Reservoir White Papers (Beltzville, Merrill Creek, F.E. Walter, Brandywine)	DRBC	Relate storage to downstream needs and existing commitments
Basin-wide model	DRBC	Identify/develop adequate evaluation tool (spatial and temporal capabilities)
Use and Availability Analysis	DRBC	Update water supply and demand forecasts
Consumptive Use Analysis	DRBC	Update consumptive use basin-wide
Scenario Identification	DRBC	Define critical water supply variables: water efficiency, climate change (drought frequency and intensity), ecological flows