

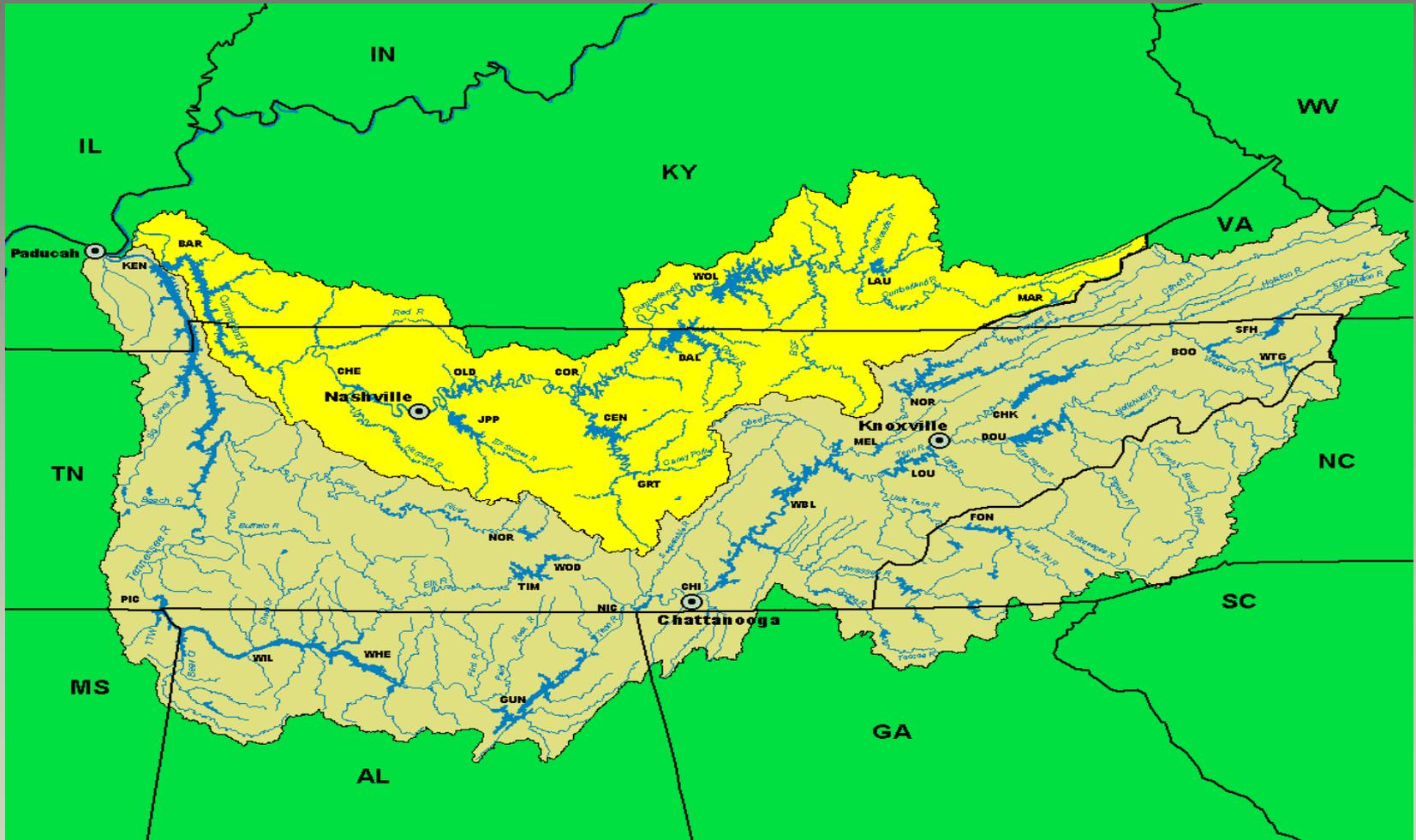


Nashville District Water Supply

- Primary responsibility for water supply belongs to state and local government
- Ben Rohrbach or Parvathi Gaddipati
Water Supply Point of Contact
Water Resources Section, Hydrology & Hydraulics Branch
(615) 736-7497 – Ben Rohrbach
(615) 736-7496 – Parvathi Gaddipati



Nashville District Boundaries

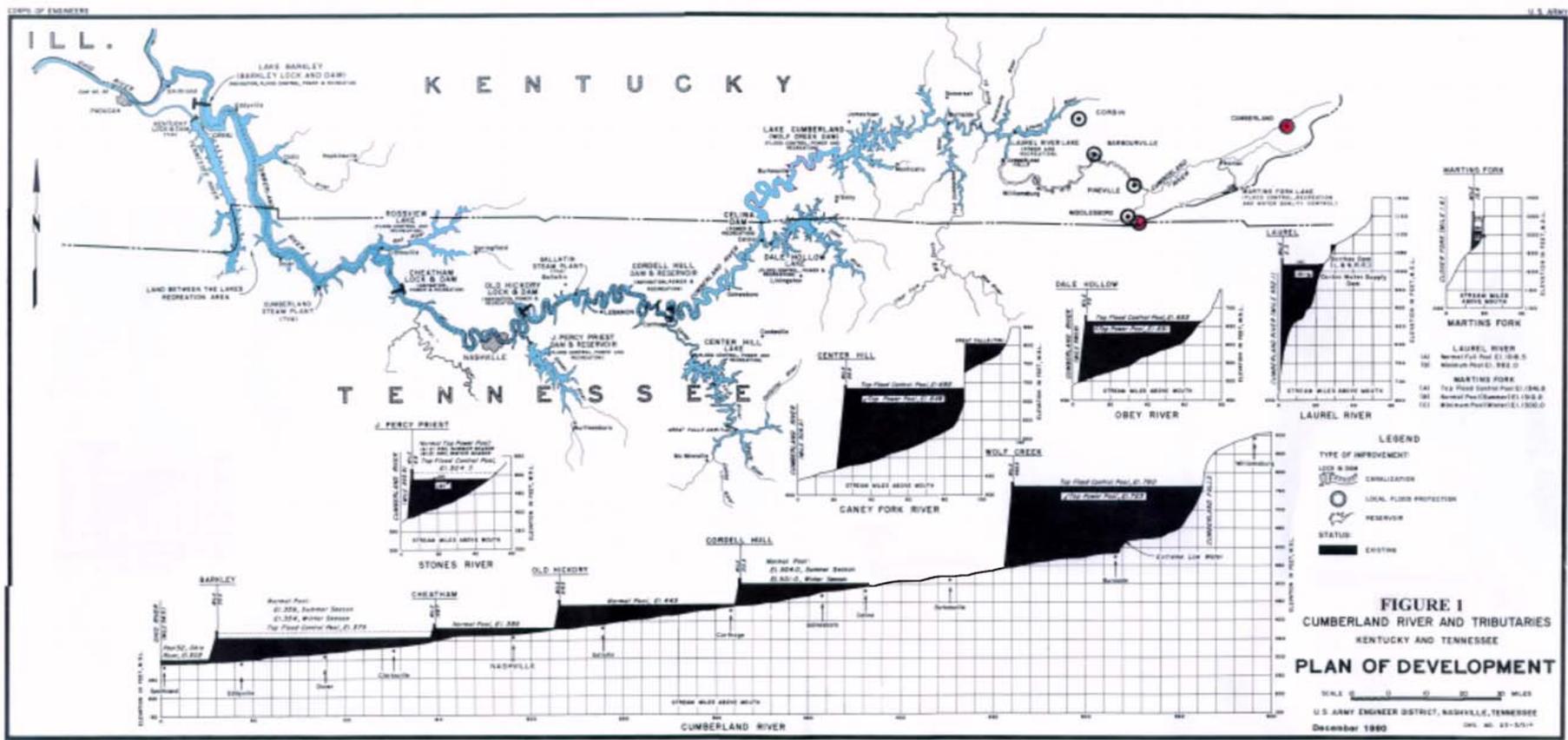




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Concept of Storage in the Cumberland River Basin





Cumberland River System

- 6 Multi-purpose Dam and Reservoir projects
- 4 Multi-purpose Lock and Dam projects
- Drainage area - 17,913 mi²
- Total length - 694 miles
- Navigable length - 380 miles
- Hydropower system
 - 28 turbines
 - 914 MW capacity



Operating Objectives

- Authorized Project Purposes
 - Flood Control
 - Navigation
 - Hydropower

- Additional Project Purposes
 - Recreation
 - Fish & Wildlife
 - Water Supply
 - Water Quality



Water Supply Policy at Dam and Reservoir Projects

➤ Storage is needed to meet the need of a municipal and industrial user:

- A water supply agreement is needed
- A one-time fee for storage is assessed
- The M&I user pays an annual portion of the operation and maintenance on the project
- The M&I user is responsible for a portion of any major replacement or rehabilitation
- Permit and easement decisions will be approved based upon impacts to authorized purposes and to the environment
- The Corps is obligated to operate its dam and reservoir projects for the benefit of M&I users, but will not guarantee quantity or quality



Dam and Reservoir Projects

J. Percy Priest	7 Storage Contracts
Center Hill	3 Storage Contracts
Dale Hollow	3 Storage Contracts
Laurel River Lake	1 Storage Contract (2 non-compliant Users)
Lake Cumberland	10 Users (all non-compliant)



Water Supply Policy at Lock and Dam Projects

- If no releases are being intentionally made at dam and reservoir projects to meet the need of municipal and industrial users with intakes in lock and dam pools:
 - No water supply agreements are needed
 - There will be no fees for storage
 - Permit decisions will be based upon impacts to navigation and to the environment
 - No obligation for the Corps to operate its projects for the benefit of M&I water supply users at lock and dam projects
- If releases are being intentionally made, a water supply agreement will be needed for storage out of Wolf Creek, Dale Hollow, or Center Hill

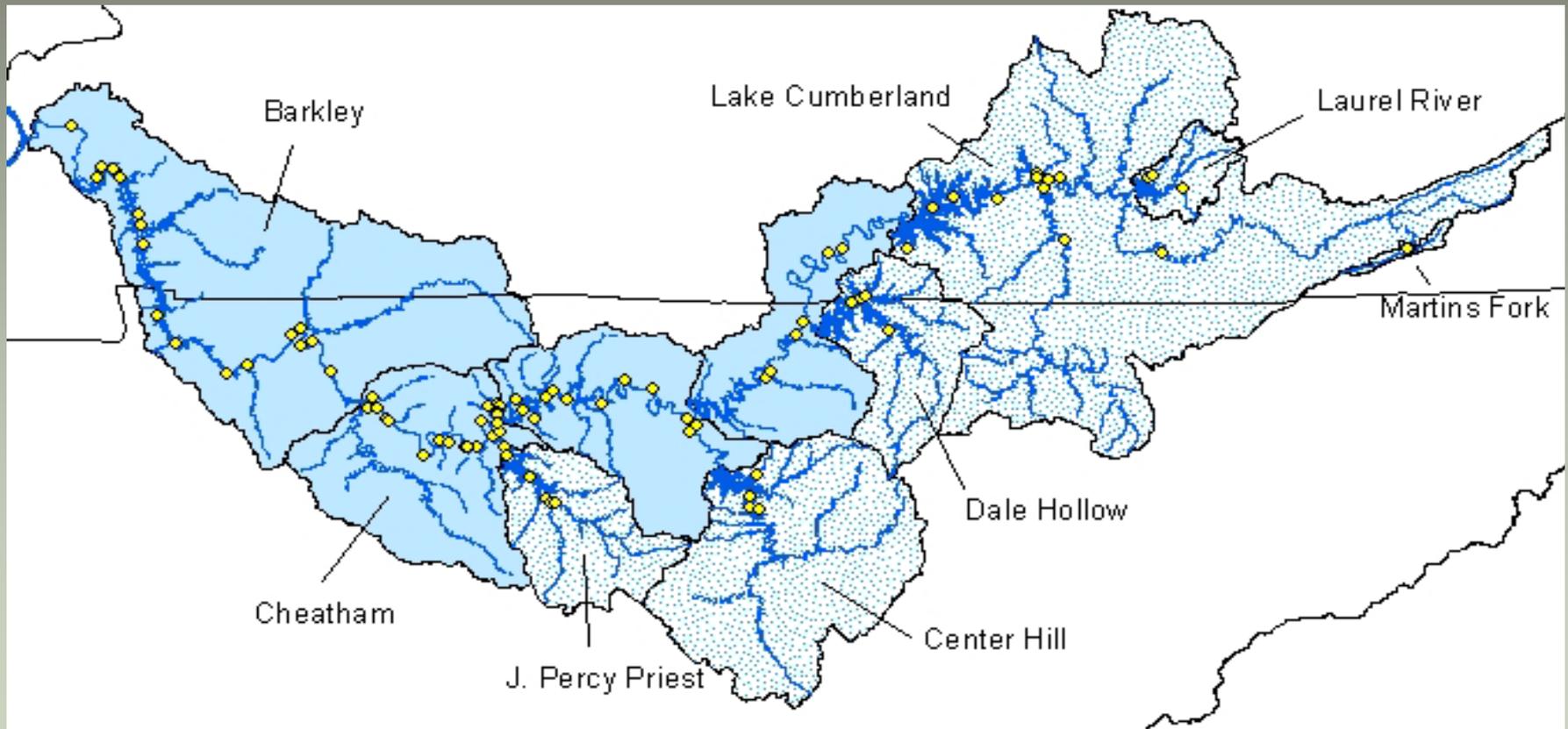


Lock and Dam Projects

Cordell Hull	4 Users (3 MGD withdrawal)
Old Hickory	15 Users (1051 MGD withdrawal)
Cheatham	17 Users (144 MGD withdrawal)
Barkley	16 Users (2122 MGD withdrawal)



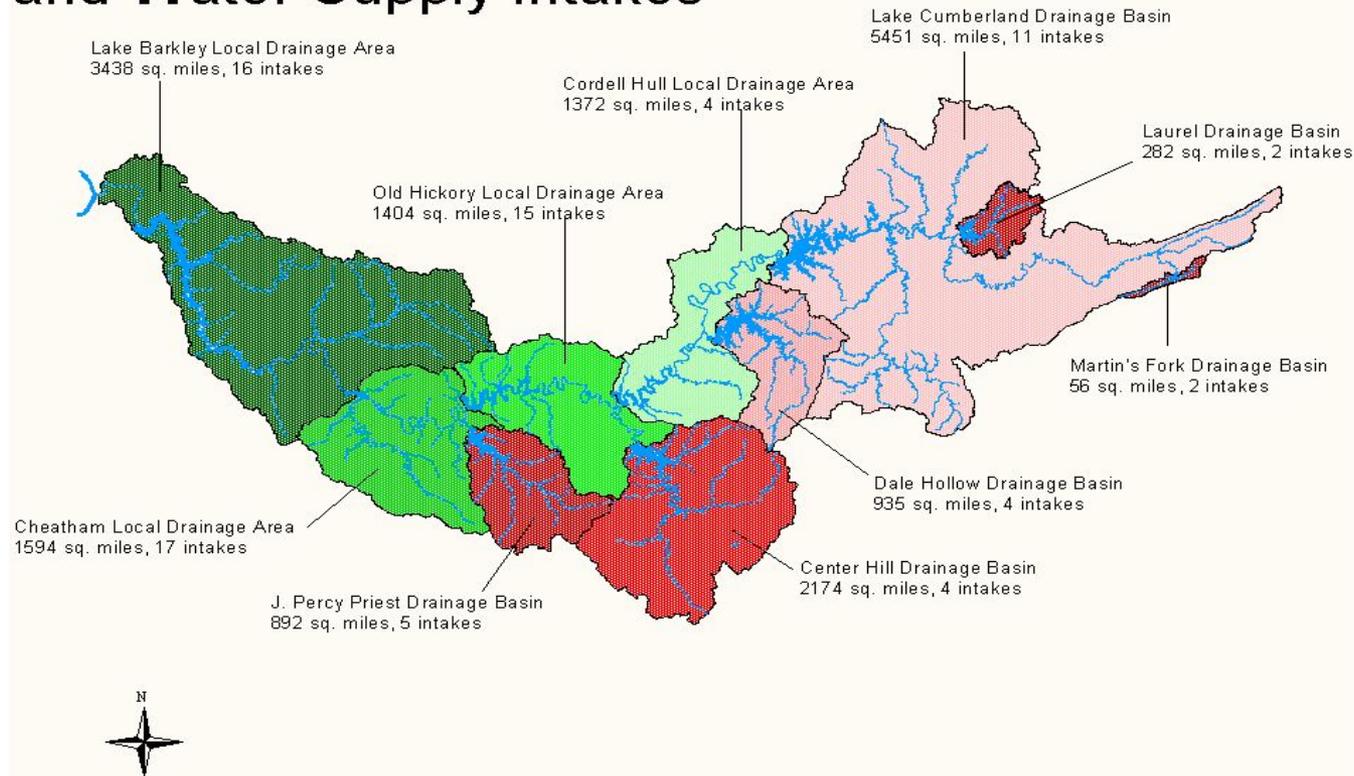
Cumberland River Basin Water Supply Intakes





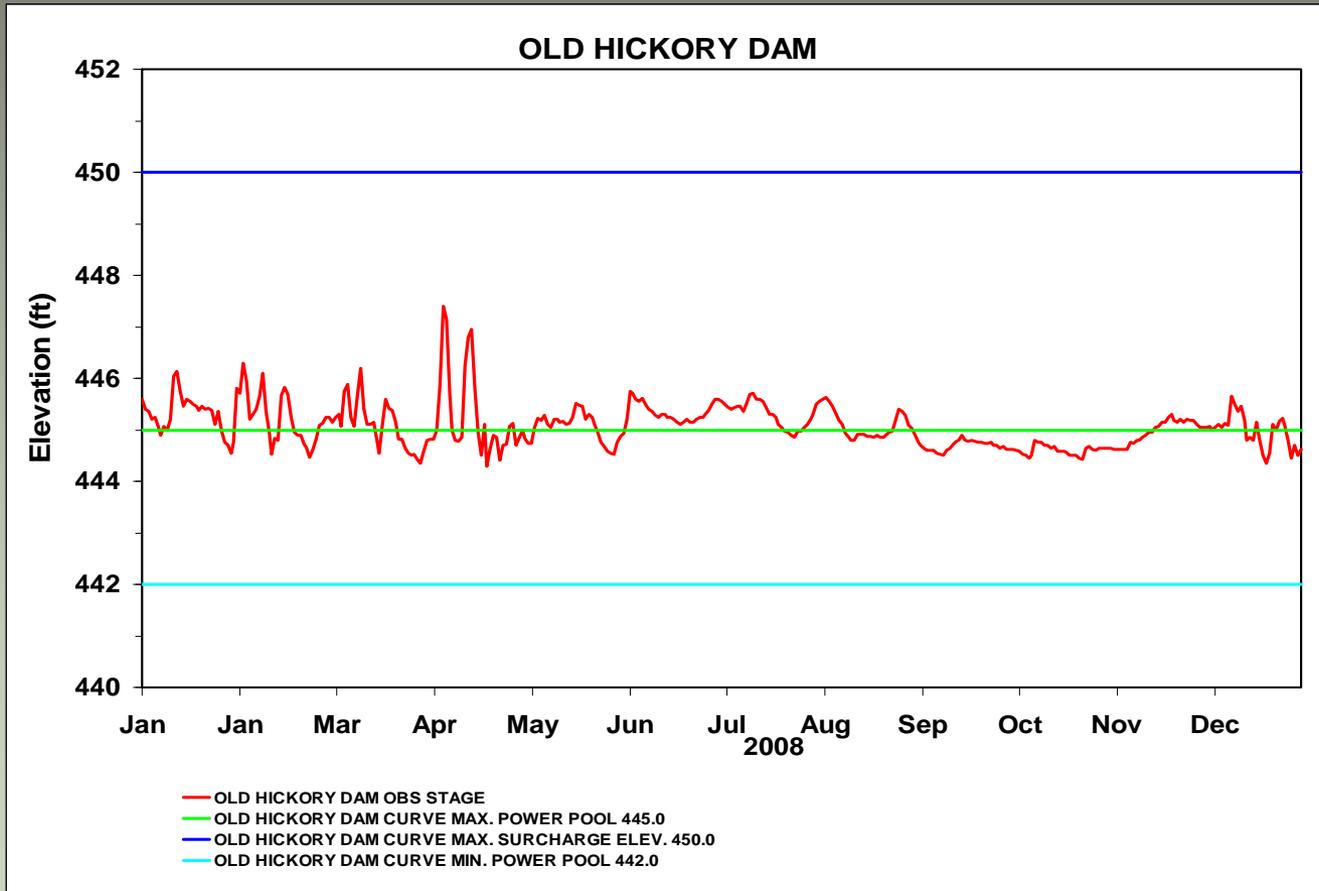
Dam and Reservoir vs. Lock and Dam

Cumberland River Basin Drainage Map and Water Supply Intakes





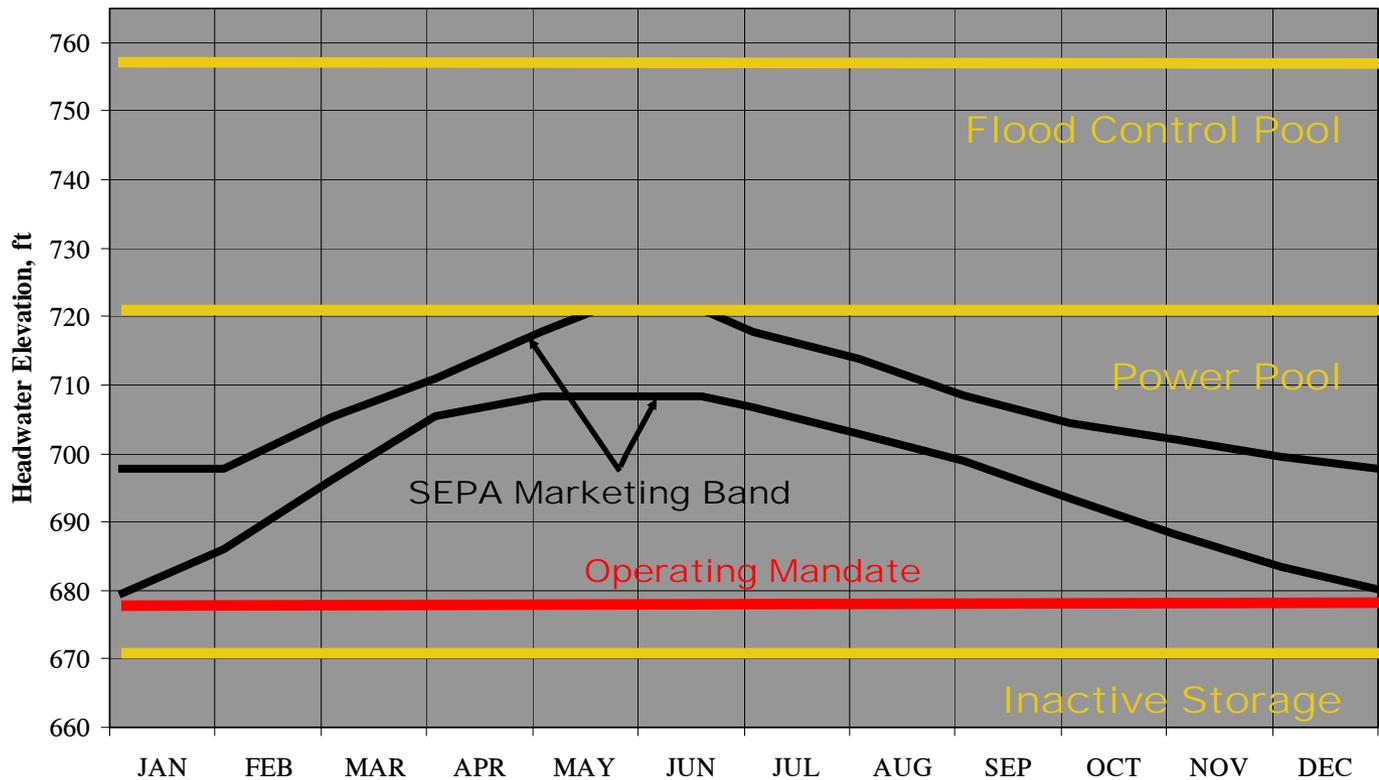
Lock and Dam Project – Old Hickory





Dam and Reservoir Project – Wolf Creek

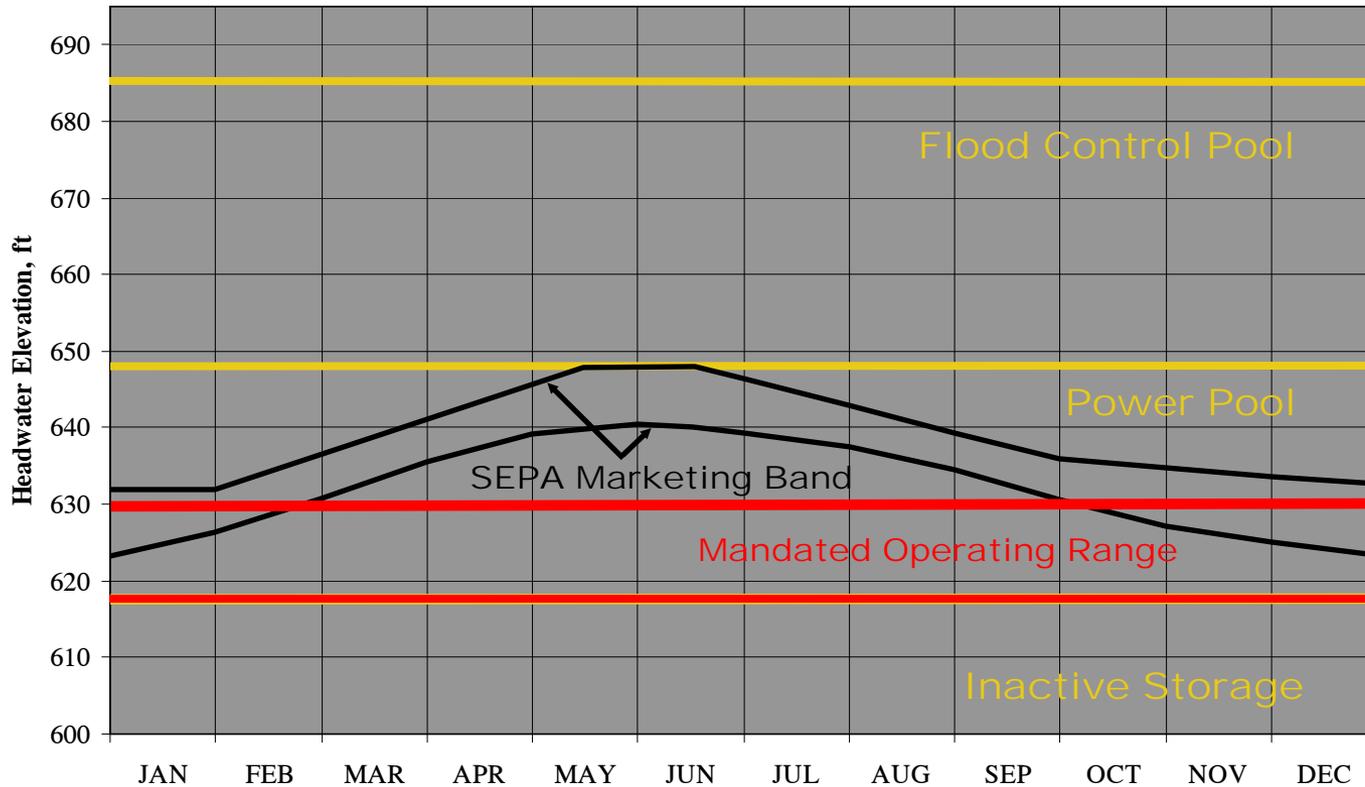
Wolf Creek Project
Guide Curve





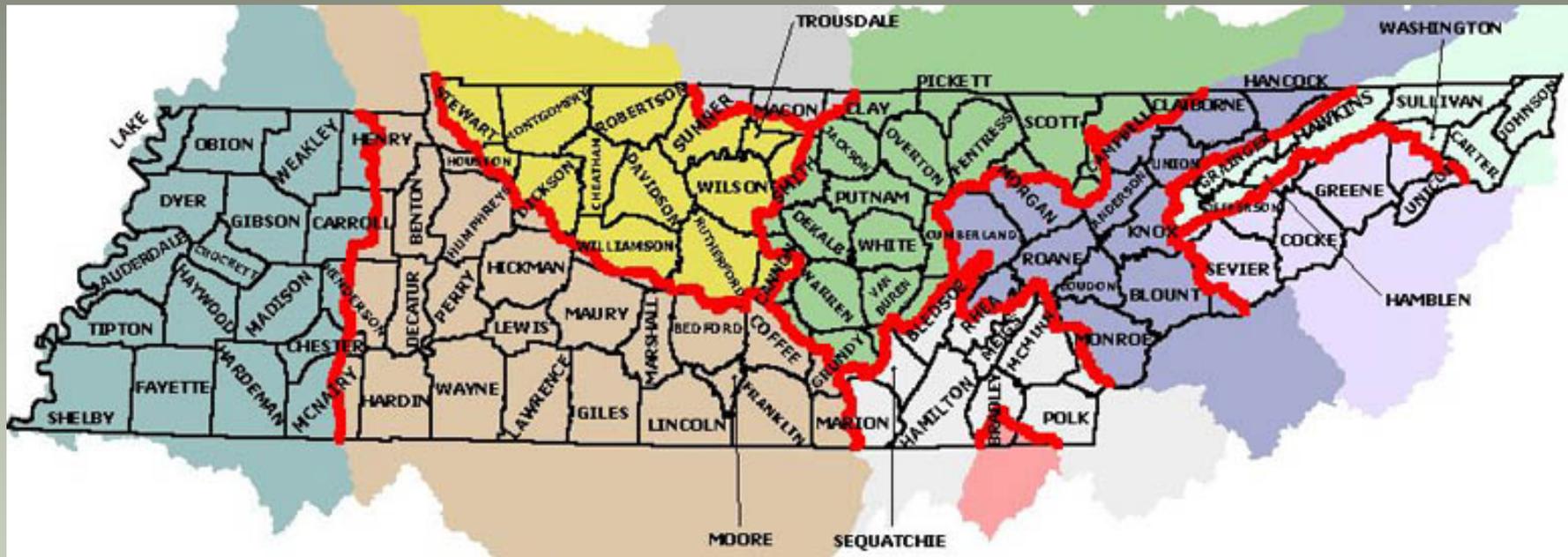
Dam and Reservoir Project – Center Hill

Center Hill Project
Guide Curve



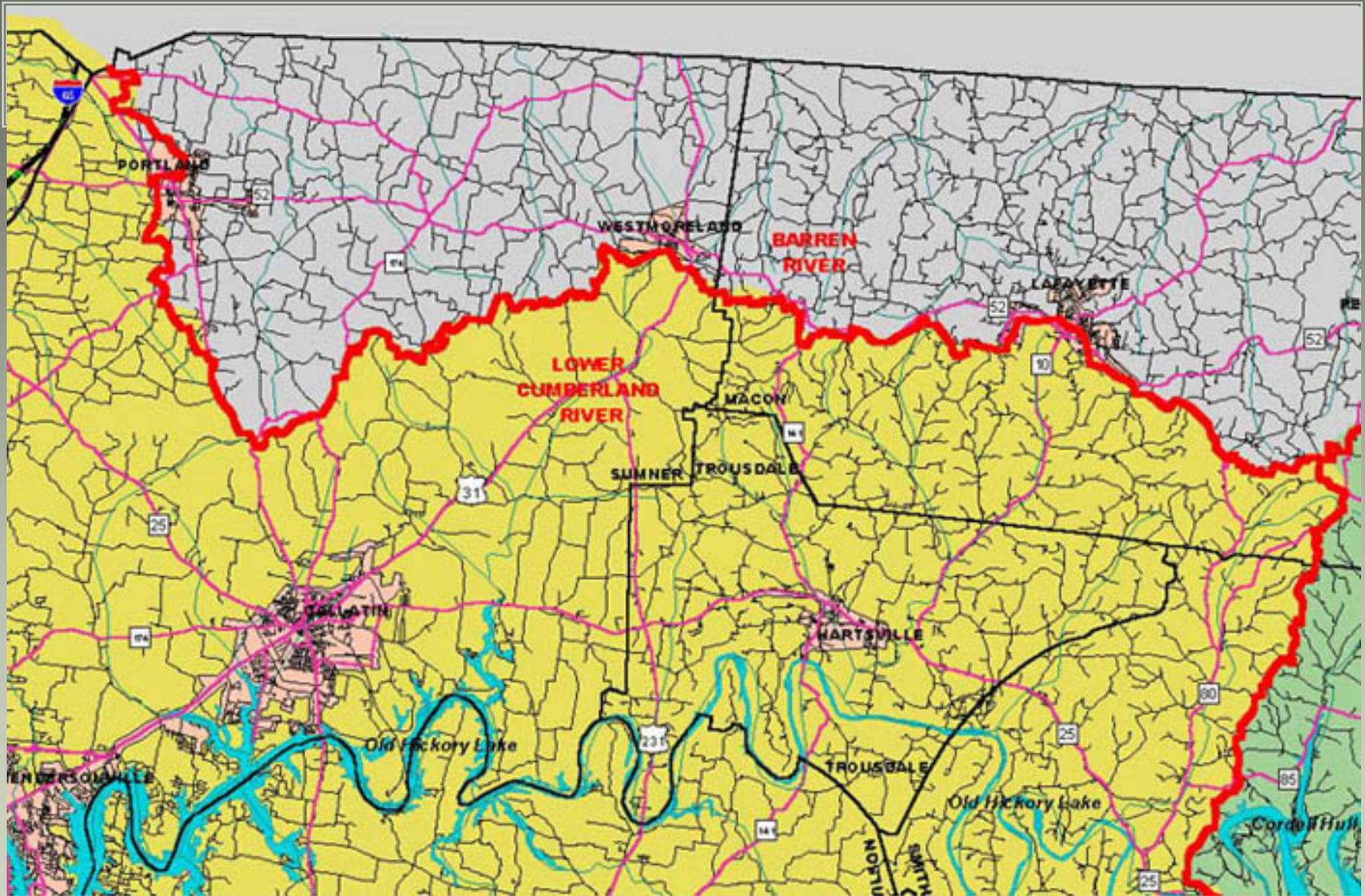


Inter-basin Transfer Boundaries





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Major Issues

- Once in – always in and more, more, more . . .
- Unlimited growth/Sprawl
- Unplanned or poorly planned growth
- Water going outside the basin, never returning
- Being used to reduce prices
- Wolf Creek Water Supply Legislation
- Permanent pool restrictions at DSAC I Projects?



Proposals Under Consideration

- No approvals for intakes for communities outside of the Cumberland River Basin
- No approvals for new intakes on Old Hickory and Cheatham Lakes.
- No approvals of increased withdrawals on Old Hickory and Cheatham Lakes.
- No approvals for increases or new intakes for users in the Cumberland River Basin who are selling water outside of the basin.
- No approvals for golf courses at any projects.
- No approvals for irrigation.
- Increased review requirements on all water supply requests.
- Increased inspection and data collection of existing intakes on Old Hickory and Cheatham.
- Possible reallocation agreements with some users on Lock and Dam projects.
- Letters to M&I users on Old Hickory and Cheatham.
- Allow all individual residence permits to lapse.
- Reevaluate locking of single recreational boats.



Items for Discussion

- Methods for Reallocating Storage from Dam and Reservoir Projects for Lock and Dam Projects Users
- Reallocation from Recreation Pool or Flood Control Pool
- Changes in Critical Drought Affecting Existing Reallocations
- Significant Impacts to Authorized Purposes
- Inter-basin Transfer of Yield from Storage Reallocated from Dam and Reservoir Projects
- Personal Use/Individual Licenses
- Processes for Tracking Water Use/Users



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