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LITTLE ROCK DISTRICT STUDIES AFFECTING FEDERAL HYDROPOWER

Hydropower Conference June 8, 2006

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Current Studies/Projects



- 303(d) Listing – Bull Shoals, Norfork, Dardanelle – Districts Position
- Table Rock Auxiliary Spillway
- White River Minimum Flows
- Arkansas River Navigation
- White River Basin Comprehensive Study
- Norfork Stilling Basin Aeration
- Water Supply Storage Reallocations

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Impaired Waterbody Listing 303 (d)

Dardanelle, Bull Shoals, Norfolk District's Position

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Current Issue

- ADEQ has 303(d) listed:
 - the first 2.0 miles below Dardanelle
 - the first 3.0 miles below Bull Shoals
 - the first 4.2 miles below Norfolk
- Impairment is dissolved oxygen
- Source is hydropower

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Current Status

- Comments provided to ADEQ by USACE and SWPA during public comment period.
- USACE, SWPA, others attended public hearing.
- ADEQ awaiting 303(d) list approval from EPA.

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District Position



- SWL Comments
- Work of the WRDO Committee.
- TMDL process.

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Table Rock Auxiliary Spillway

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Project Purpose

- Table Rock Dam did not have adequate capacity and could only pass 65% of the Probable Maximum Flood (PMF).
- The PMF would have overtop the dam by more than 5 feet causing catastrophic damages downstream and to the City of Branson.
- Construction of the gated spillway structure alleviated these damages.

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Current Status

- Construction was completed in 2005, no restrictions or impacts to hydropower.

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WHITE RIVER MINIMUM FLOWS STUDY

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WRDA 1999/WRDA 2000



Directed the Corps of Engineers to study Reallocating storage within each of the White River Lakes to be used to maintain minimum flows for the downstream trout fishery in the following amounts:

Beaver Lake	1.5 feet
Table Rock Lake	2 feet
Bull Shoals Lake	5 feet
Norfork Lake	3.5 feet
Greers Ferry Lake	3 feet

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WRDA 1999/WRDA 2000



Reallocation Report Complete

July 2004

Chiefs Report signed

August 2004

Neither the Reallocation Report nor the Chief's Report made recommendations.

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FY06 Energy & Water Development Act



The specified:

- Implementation of BS-3 and NF-7
- 100% Federally Funded as Fish & Wildlife Enhancement.
- FERC License No. 2221 will be fully compensated by the Corps of Engineers.
- SWPA will be provided a reduction in it's costs allocated to the Federal Hydropower purpose at Norfolk and Bull Shoals.

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Current Status



	<u>Current Schedule</u>
Draft EIS	2 June 06
Public meeting Mtn Home	19 June 06
Public Meeting Bentonville	20 June 06
End of 45 Day Review	18 July 06
EIS complete	15 Sep 06
ROD Signed	29 Sep 06

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IMPLEMENTATION



The following are needed for implementation:

- 1) ROD must be signed.
- 2) Funding must be secured, not in FY07 Presidents budget.
- 3) PED completed including Park Relocations.
- 4) Construction and Capture Storage.

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Arkansas River Navigation Study

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Study Purpose/ Background



- Feasibility study began in March 2000.
- 100% federally funded.

Study is examining two opportunities:

- ✓I - Improve navigation by improving the efficiency and effectiveness of evacuating high flows out of Oklahoma reservoirs.
- ✓II – Improve navigation by deepening the channel on the entire system and widening the Verdigris River.

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Current Status

- **Director's Report & Record of Decision** 29 Sep 05
- **Start PED & Construction** 01 Oct 05
- **\$3M in Design, Construction, & Mitigation** to date

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White River Basin Comprehensive Study

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Study Purpose



A basin wide study will:

Inventory & forecast critical resources in the basin
(existing, future & natural ecosystem conditions)

Identify water resources related problems & opportunities

Propose solutions & identify benefits and impacts

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Current Status

- Groundwork for Phase I of the Rec Study is complete, but ERDC still has to compile the data. ECD Sept 06.
- SWL is proceeding with Phase II of the Rec Study. We are currently developing the SOW and will initiate this FY. This phase will target resort owners - large and small - and permitted boat dock owners.

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Norfolk Stilling Basin Aeration

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Project Purpose

Implementation of the floating aeration plant could provide improved dissolved oxygen during periods of non-hydropower generation below the Norfolk Dam.

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Current Status

- The Project Delivery Team has completed the design of the plant.
- Draft MOU complete
- The Arkansas Game and Fish Commission will be responsible for O&M
- No Funds for installation.

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Water Supply Storage Reallocations

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Current Status

- Carroll/Boone and Beaver Water Districts (Beaver Lake, 31,153 AF)– Approved
- Carroll/Boone Water District (Beaver Lake, 11,504 AF)– EA Being Prepared at SWL
- Benton/Washington County Water Association (Beaver Lake, 15,258 AF) – Under Review @ SWD/HQ
- City of Mountain Home (Norfork Lake, 3,158 AF) – Being Prepared at SWL
- City of Clinton (Greers Ferry Lake, 2.5 MGD) – New Request Being Prepared at SWL
- City of Heber Springs (Greers Ferry Lake, 3,538 AF) – Approved, Agreement Sent to City for Signature

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Current Status

(cont'd)

- **City of Clinton** (Greers Ferry Lake, 2,175 AF) – Approved
- **Greers Ferry, MAWA** (18,730 AF) – Being Prepared at SWL
- **Lake Ouachita, MAWA** (~33,303 AF) – Being Prepared at SWL
- **Beaver Trout Hatchery** (21,972 AF) – Pending at HQUSACE
- **Baxter County Water Works Facilities Board** (Norfork Lake, 5.8MGD) being prepared at SWL
- **Searcy County Regional Water District** – Greers Ferry Lake, 5,000 AF) – Being prepared at SWL

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Interior Least Tern



- Estimates show approximately 300 adult birds and 75 fledglings per season on the Arkansas River, Arkansas (Little Rock District) portion
- U.S. Fish and Wildlife Service issued a new Biological Opinion (BO) for the USACE (Little Rock and Tulsa Districts) and SWPA in June 2005
- BO requires intensive monitoring beginning in summer 2006 and sampling protocols similar to Tulsa District in place by January 2007

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Interior Least Tern



- Intensive monitoring will require a significant increase in \$\$\$ for 2007 budget forward
- USFWS believes that island habitat on the MKARNS is gradually declining
- The MKARNS channel deepening project will attempt to construct and/or enhance at least one island per pool with dredge spoil
- Deepening project has the potential to increase the Tern population

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Questions?

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