# USACE REALLOCATION INFORMATION AND OVERVIEW

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#### **AGENDA**

- The what, where and how of a Reallocation Study
- Overview of Milford and Perry
- Pool raise evaluation and USACE policy





#### **AUTHORITY**

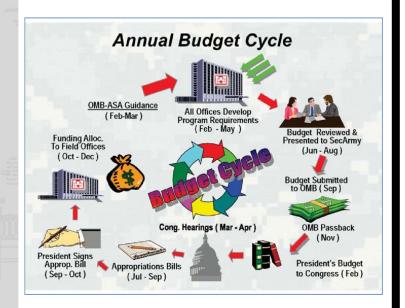


- Authority for the Corps to reallocate existing storage space to M&I water supply is contained in Public Law 85-500, Title III, Water Supply Act of 1958, as amended.
- Section 301(a), established a policy of cooperation in development of water supplies for domestic, municipal, industrial and other purposes.
- Section 301(b) is the authority of the Corps to include municipal and industrial (M&I) water storage in reservoir projects, and/or reallocate storage in existing projects to M&I water supply (post construction).
- States and non-Federal entities responsible for the development and management of their water supplies.
   Financial burden of applied to users.



US Army Corps of Engineers.

## WHAT IS THE PROCESS TO INITIATE A REALLOCATION STUDY?



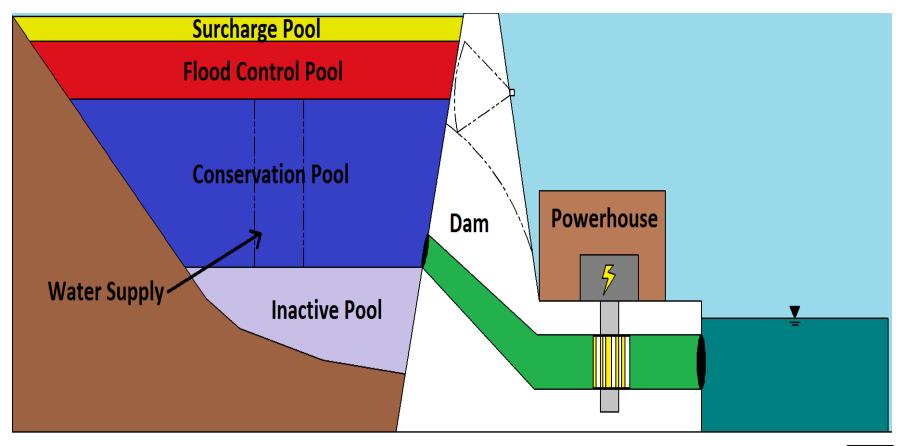
The district creates a budget request for Reallocations to be funded one of 3 ways

- Federally funded using O&M account
- Cost shared via "Investigations" account
- Can be funded solely by a water user through "contributed funds"





## WHAT DOES REALLOCATED STORAGE MEAN?







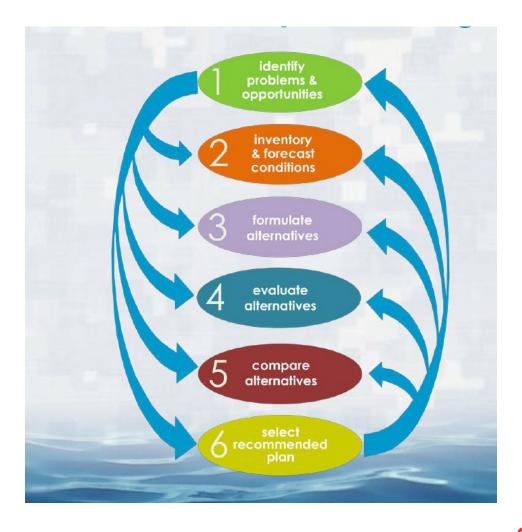
#### REALLOCATION OBJECTIVE

The objective of this reallocation study is to determine if reallocation at XXX Lake is a viable option to meet immediate and future municipal and industrial water supply storage needs for the next 50 years.





## **PLAN FORMULATION PROCESS**







## NATIONAL ECONOMIC DEVELOPMENT PLAN

Benefits of a reallocation are measured by the cost of the most likely alternative to be implemented in the absence of a Federal project (i.e. reallocation of storage).





## **APPROVAL AUTHORITY**



- Previously, depending on the amount of storage being requested - HQUSACE, Chief of Engineers
- Current guidance is that all reallocations, no matter the amount - Assistant Secretary of the Army for Civil Works or the ASA(CW).
- Public Law 85-500, Title III, Water Supply Act of 1958, as amended. Sect 301(d) states that if modifications pertaining to a reallocation that would involve major structural or operational changes of significantly affect other authorized purposes, requires Congressional approval



## **Overview of Milford and Perry**





## **WRRDA 2014, Section 1046(d)**

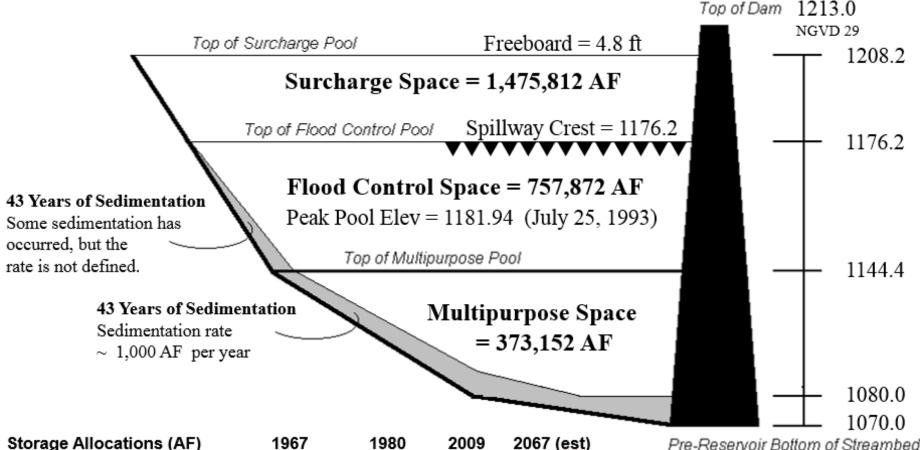
KWO submitted a package pursuant to this law; however, since the request did not meet the criteria outlined in the law, the ASA(CW) did not recommend the package for the 7001 Main Report, instead it was placed in the appendix of the 7001 Report.





## Milford Lake Storage Allocations

Storage Began January 1967 Last Sediment Survey October 2009

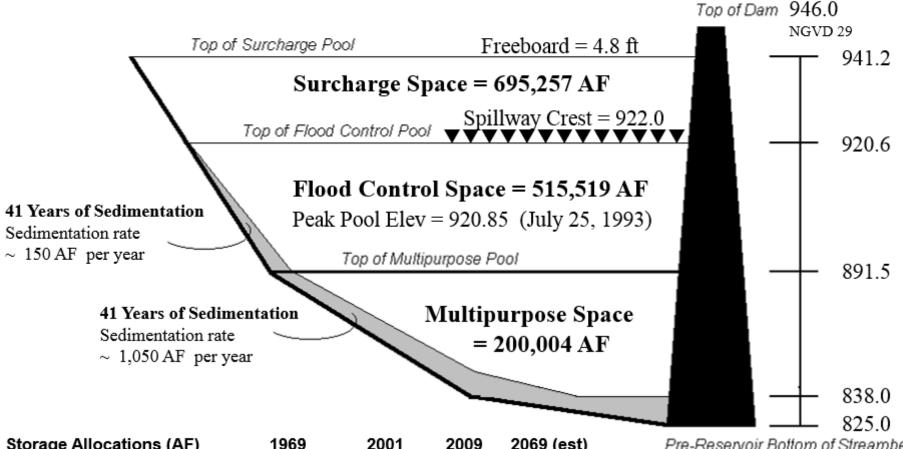


Storage Allocations (AF)	1967	1980	2009	2067 ( <u>est</u> )
Total Flood Control Pool	757,746	756,601	757,872	700,000
Exclusive Flood Control	700,000	700,000	700,000	700,000
FP Sediment Reserve	57,746	56,601	57,872	0
Total Multipurpose Pool	415,352	388,608	373,152	300,000
In-Service Water Supply	<b>415,352</b> 0	388,608 101,650	373,152 101,650	300,000
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In-Service Water Supply	0	101,650	101,650	300,000

2009 tables now used for lake ops. State of Kansas (KWO) contracted for water supply allocation in 1974. The initial in-service increment of 101,650 AF is subcontracted to the Kansas River Water Assurance District and KP&L. Until called into service, the future use space is operated for other MP uses.

## **Perry Lake Storage Allocations**

Storage Began January 1969 Last Sediment Survey August 2009



ļ	Storage Allocations (AF)	1969	2001	2009	2069 (est)
Ġ	Total Flood Control Pool	521,880	515,397	515,519	480,000
١	Exclusive Flood Control	480,000	480,000	480,000	480,000
	FP Sediment Reserve	41,880	35,397	35,519	0
	Total Multipurpose Pool	243,220	206,682	200,004	150,000
	In-Service Water Supply	0	25,000	25,000	150,000
79	Future Use Water Supply	150,000	125,000	125,000	0
	MP Sediment Reserve	93,220	56,582	50,004	0

Pre-Reservoir Bottom of Streambed

2009 tables now used for operations. The State of Kansas (KWO) contracted for the water supply allocation in 1977. The initial 25,000 AF increment is contracted to the Kansas River Water Assurance District. Valley Falls has a separate water withdrawal contract.

# How to Evaluate Water Supply Storage to Water Quality Storage?

- This type of preliminary evaluation could be included as part of the KS River Basin Watershed Study
- Planning Assistance to States could also be an avenue





# Pool raise evaluation and USACE policy





## **USACE DAM SAFETY ENGINEERING REGULATION**

ER 1110-2-1156-Safety of Dams, Policy and Procedures

- All USACE dams have a Dam Safety Action Classification rating or DSAC rating.
  - A reallocation that would require raising the conservation pool is not permitted while a project is classified a DSAC 1, 2, or 3.
  - A reallocation from a DSAC 4 will be considered by HQUSACE on a case-by-case basis.





## **DAM SAFETY PROCESS**

If sponsor pursues pool raise at DSAC 3 or lower rated project

DAM SAFETY STEPS	STEP 1.	STEP 2.	STEP 3.	STEP 4.
Type of Study	Updated/ Refined Probable Maximum Flood	Semi- Quantitative Risk Assessment	Issue Evaluation Study (Refine uncertainties with hydrologic loading and probability of failure)	Dam Safety Modification Study (similar to Pre-Engineering and Design and Construction)
Study timeframe	9 months	1 year	2 years	3 years
Cost	\$150,000	\$500,000	\$1,500,000	\$3,000,000 + (depending on recommended fix)





## **QUESTIONS?**





