



Water Level Management - Lake Red Rock and Saylorville Lake

U.S. ARMY CORPS OF ENGINEERS

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Location

Lake Red Rock and Saylorville Lake (Central Iowa)

State(s)

IA

Congressional District(s)

IA-3

Status

No additional funds are needed to implement the water level management strategy. However, annual MVD approval is necessary due to a slight deviation in the Regulation Plans for each reservoir. In 2003, the Iowa DNR suggested a spring water level management regime, which was successfully implemented once at Saylorville Lake in May 2006 due to favorable weather patterns. The Iowa DNR will be surveying fish by species and size class over the coming years to determine if the species age class has improved as a result of the May 2006 effort. The results will not be known for several years because the fish must grow to a size capable of being caught in the DNR survey nets. Further study has shown that a spring rise of only 3' is not viable at Saylorville. However, studies continue at Lake Red Rock to determine if a 3' rise increases productivity of the fishery. Continued studies may prove that natural spring rises effectively do the job.

Description

In Dec 2003, the Iowa Department of Natural Resources requested consideration of 3 different water level management scenarios for improved fish spawning during the spring at Lake Red Rock and Saylorville Lake. After inter-district and division discussion and subsequent meetings with the Iowa DNR fisheries and wildlife staff, we concluded that the Corps could implement Option 2 (hold pool at the target elevation) or Option 3 (release water to achieve the target elevation) at either reservoir subject to appropriate weather and inflow conditions. The target elevation is 839 NGVD at Saylorville and 745 NGVD at Lake Red Rock. In other words, if the reservoir was at or above the target on May 5th, the pool would be held or water would be released to get to the target elevation. If the reservoir was below the target elevation on May 5th, the reservoir water level would not be raised to achieve the target elevation. The target period for the implementation of Option 2 or 3 would be from May 5th until May 28th. After May 28th, water would be released by no more than 0.5 foot per day to achieve an elevation of 836 at Saylorville and 742 at Lake Red Rock, by June 4th. The May timeframe affords an opportunity to increase fish spawning and egg/young survival due to appropriate water temperature and increased acres of inundation. Rapid decreases in water level must be avoided during this time period for the management regime to be successful. The DNR understands that the opportunity to manage water levels in this fashion will likely occur only one year in fifteen based on historic records. Secondly, implementation at both reservoirs in any one season is unlikely due to hydraulic factors and potentially different weather patterns. The DNR's proposed Option 1 of raising the lake level to the targeted elevation from April 15th to June 14th, was eliminated from consideration because it is not consistent with the existing regulation plans. Additional funds, NEPA compliance, and public meetings would be required prior to implementing the Option 1 scenario.



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Major Work Item (This Fiscal Year)

FY 2015: Fall water level raise targets were achieved this FY.

Major Work Item (Next Fiscal Year)

FY 2016: Fall water level targets will be implemented if possible. Spring water level management could include implementation of option 2 or 3 at Lake Red Rock. The target elevation is 745 at Lake Red Rock. Implementation timeframe is from May 5th to May 28th, dependant on weather conditions and inflow to the reservoir. MVD approval will be requested prior to implementation.

Authority Details

Flood Control Act, Fish and Wildlife Coordination Act; Water Resource Development Acts, Environmental Operating Principles

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