

LAKE LEVEL MANAGEMENT

Fact Sheet No. 10

April 2004

Kansas Water Office

Background

The U.S. Army Corps of Engineers and the Bureau of Reclamation have constructed 24 federal lakes within the State of Kansas. These lakes were built for a variety of uses including flood control, water supply, water quality, irrigation, and recreational use. The original documentation and authorization generally specified a certain elevation or quantity for the conservation or "normal" pool.

While recreation is a defined project purpose for almost all of the federal lakes in Kansas, management of wildlife was not directly incorporated. Wildlife managers began to push for varying pool levels at different times of the year to increase habitat for waterfowl and fishery support.

The Corps of Engineers formulated and implemented the first lake level management plan in 1970 on Council Grove Lake. Currently, lake level management plans have been implemented on 21 Kansas federal lakes.

The lake level management plan coordination process involves review of the agencies' recommendations, resolution of conflicts and evaluating the benefits and adverse effects of operating a lake under the proposed plan.

are responsible for the operation and maintenance for the state's 24 federal lakes.

Proposed lake level management plans are initiated by the Kansas Department of Wildlife and Parks and other water-related agencies. The Kansas Water Office reviews these proposed plans to insure key parameters are met and coordination is accomplished. The proposed plans with necessary changes are then sent to the appropriate federal agency for their review and approval. If approved, the plan becomes part of the annual operating plans for the reservoirs.

The key parameters for all management plans are storage requirements for flood control and, when applicable, storage requirements for water supply. Management plans for reservoirs in the Kansas River system also evaluate the effect on threatened and endangered species. Of particular importance in the review process is consideration of planned lake level changes on state-owned water supplies. Drawdowns that might threaten the state's ability to meet contract obligations are not allowed.

Within these basic parameters a typical management plan is based upon a seasonal schedule.

Purpose

The purpose of lake level management is to increase the benefits to recreational users and increase wildlife and aquatic habitat while protecting the flood control, water supply and water quality purposes of the lake.

Overview

The Kansas Water Office is charged by the State Water Planning Act with negotiating and entering into agreements with the Corps of Engineers and the Bureau of Reclamation regarding operation or releases of water from federal projects. These two federal agencies

General Lake Level Management Plan

1. Spring - Rise to inundate shoreline vegetation. Benefits: Enhanced spawning habitat, increased forage, and fish production.
2. Late Spring to Summer - Stable water level. Benefits: Additional spawning area, protective cover for young, boat ramp access, and reduce shoreline erosion.
3. Mid to Late Summer-Draw down. Benefits: Re-vegetation and control of rough fish.
4. Fall - Gradual rise. Benefits: Food and cover for waterfowl season.
5. Winter – Draw down. Benefits: Reduced ice and wave damage, and additional storage capacity for spring inflows

Schedule for Development and Implementation of Lake Level Management Plans

Date	Activity
January	Kansas Water Office, Kansas Department of Wildlife & Parks, Division of Water Resources, both Corps districts, and U.S. Bureau of Reclamation meet to establish limiting parameters for Water Level Management Plans for the next water year.
15-Feb	Guidance on Water Level Management Plans provided to Corps lake project managers.
Feb-Apr	Corps lake project managers meet with local interested parties, develop Water Level Management Plans, and hold public meetings if needed.
1-May	Corps lake project managers submit proposed Water Level Management Plans to Kansas Water Office.
15-May	Kansas Water Office, Kansas Department of Wildlife & Parks, Division of Water Resources, Corps, and U.S. Bureau of Reclamation meet to review the proposed Water Level Management Plans.
1-Jun	Kansas Water Office submits proposed Water Level Management Plans to Corps and U.S. Bureau of Reclamation.
1-Jul	Corps districts submit Water Level Management Plans to their respective divisions.
1-Oct	Begin Water Level Management Plan implementation.

24 Federal Lakes	Lakes with Lake Level Management Plans
Big Hill	X
Cedar Bluff	
Cheney	
Clinton	X
Council Grove	X
Elk City	X
El Dorado	X
Fall River	X
Hillsdale	X
John Redmond	X
Kanopolis	X
Keith Sebelius	X
Kirwin	X
Lovewell	X
Marion	
Melvern	X
Milford	X
Perry	X
Pomona	X
Toronto	X
Tuttle Creek	X
Waconda	X
Webster	X
Wilson	X

Additional Information

Further information on this subject or on other *Kansas Water Plan* related programs can be obtained from: Kansas Water Office, 901 S. Kansas Avenue, Topeka, KS 66612-1249, phone (785-296-3185), toll free (888-KAN-WATER) or check our WEB site at www.kwo.org.