



Briefing Paper

DATE: 10 Feb. 2012

STATE: CA/OR

PREPARED BY: Ron Cole-Project Leader, KBNWRC

To: Klamath Basin Audubon Society

TITLE: Reduced water supplies to Lower Klamath National Wildlife Refuge (LKNWR) and impacts to wetland habitats and biological resources.

PURPOSE OF BRIEFING DOCUMENT: Water has not been delivered to the Refuge since Dec. 2, 2011 leaving the Refuge in the driest condition entering spring migration in over 70 years.

BACKGROUND: LKNWR was established as the Nation's first waterfowl refuge in 1908 by President Theodore Roosevelt. In addition, the Refuge was listed as a National Historic Landmark on January 12, 1965. Historically, the Klamath River fed the marshes of Lower Klamath Lake 365 days a year. In the early 1900's, the river was cut off from the wetlands when a railroad grade was constructed. Today, water for the refuge is provided by the U.S. Bureau of Reclamation's Klamath Project via a system of canals, drains and lift pumps.

LKNWR is the largest complex of managed, freshwater wetlands in the Refuge System. For a perspective, the entire Sacramento NWR Complex (5 refuges and 3 wma's), Modoc NWR, and Gray Lodge Wildlife Management Area could all fit within the boundary of LKNWR. The refuge provides more acres of native, freshwater wetland forage than any other managed wetland complex in the Flyway, perhaps anywhere.

LKNWR is one of the largest staging areas for fall and spring migrating waterfowl in the Pacific Flyway, winters the largest concentration of bald eagles in the Lower 48 states, and harbors over 80 species that are listed as sensitive, threatened, or endangered. Approximately 40% of the entire Pacific Flyway migratory waterfowl utilize LKNWR during spring and fall migration periods.

Over 180,000 visits are logged at the refuge for wildlife observation, photography, and waterfowl hunting. The annual Winter Wings Festival, the longest running bird festival in the United States, attracts some 500-600 visitors each year from all over North America.

The Klamath Project was constructed under the assumptions that

water from Upper Klamath Lake and the Klamath River would always be in sufficient supply, and that power rates with which to lift water through the Project would be affordable. The managed, freshwater wetlands of LKNWR were developed under these same assumptions, with the primary source of refuge water coming from return flow from Project irrigators.

Mandated ESA flows in the Klamath River and water levels in Upper Klamath Lake have reduced water allocations to the Project. Escalating power costs mean these limited supplies of water are too expensive for irrigators to pay pumping costs, causing them to reuse water many more times, rather than send return flow to LKNWR. From 1981- 2009, LKNWR averaged about 74K ac.ft. of return flow delivered through D-Plant. From 2009-2011, return flow has averaged about 15K ac.ft., a reduction of about 80%.

In the fall of 2011, an agreement between BOR and the FWS was signed so the Refuge could receive 10,000 acre feet of water to help meet migratory bird needs in the fall of 2011. Conditions of the agreement stipulated the Refuge must return 50% of the water back to the Klamath River during drought conditions. The Refuge may also have to pay to put this water back into the Klamath River.

ISSUES:

If the Refuge receives little to no additional water between now through May, it is estimated that LKNWR will be effectively dry by June, 2012. The amount of water needed to replenish and maintain LKNWR wetlands from now through the fall migration period is 40,000 ac.ft. Summer nesting birds including water birds, colonial birds, and waterfowl, along with mammals such as river otters, and amphibians and fish, will all be impacted. The ability to fill refuge wetlands in the fall of 2012 will be severely compromised. Since 2012 appears to be a drought year, there is little hope that the refuge will see water throughout the summer and fall.

**BUREAU
PERSPECTIVE:**

With an extremely dry year in front of us, and no legal mechanisms available for the refuge to get water, the only apparent option left for the refuge is that politically, parties agree it is in their best interests to provide water to the refuge. Tule Lake NWR (TLNWR) remains the only other wetland in the Basin capable of offsetting some of the wetland loss on LKNWR. Managing TLNWR lands for proper waterfowl and wetland management becomes ever more crucial.

CONTACT:

Ron Cole, Project Leader, Klamath Basin National Wildlife Refuge, (530) 667-2231.