

**Lake McConaughy Environmental Account**

Source: Appropriated water Score: 70,000 AF (combined with the Pathfinder Reservoir EA) Operations started: 2007 Mechanism: Storage

History

The Lake McConaughy Environmental Account (EA) was established pursuant to the 1998 FERC relicensing requirements for the Central Nebraska Public Power and Irrigation District (CNPPID) and Nebraska Public Power District (NPPD) and is one of the Program’s three initial state projects. An Environmental Account Committee (EAC) and the Reservoir Coordinating Committee (RCC) were formed for operational purposes and basin coordination. The EAC is chaired by an EA Manager, staffed at the USFWS, who prepares an Annual Operating Plan. The Program stores water in the EA from several sources, including Storable Natural Inflows (SNI), Wyoming EA water from Pathfinder Reservoir, the Pathfinder Municipal Account lease, the No-Cost Net Controllable Conserved Water (NCCW), and the CNPPID irrigator lease pilot program. Once Program water has entered Lake McConaughy, it is accounted for as storage in the EA and not distinguishable from other sources of water.

Operations

The EA receives 10% of SNI to Lake McConaughy during the months of October through April, up to an annual maximum of 100,000 AFY. Water remaining in the EA after September 30, minus evaporation and seepage losses, can be carried over and added to the following year’s contribution to the EA. The dedicated annual capacity of the EA is 100,000 AF, but if space is available, the EA can expand to a maximum volume of 200,000 AF.

**Lake McConaughy near Outlet, May 2018**

Should Lake McConaughy fill to regulatory capacity and the EA exceeds 100,000 AF, the EA is reduced to

100,000 AF. However, if Lake McConaughy fills and the EA is less than 100,000 AF, CNPPID and NPPD will contribute additional water to increase the EA to 100,000 AF regardless of the releases that have already occurred during the water year.

The EA Manager is responsible for making requests to CNPPID for releases of EA water while the RCC provides a forum to coordinate annual EA operations with other water projects in the basin. Releases are made to provide improvements to the magnitude and duration of Platte River flows in the Lexington to Chapman stream reach and to contribute to the effectiveness of achieving Program habitat objectives. Monthly and daily EA operational data are provided by the CNPPID.

Yield and Score

A total of 506,000 AF was released from the Lake McConaughy EA over the period 2007-2017, an average of 46,000 AFY. Approximately 34,100 AFY (74% of releases) reached Grand Island, and 27,000 AFY (59% of releases) counted towards reduction of deficits to USFWS target flows. The annual recharge and yield are provided in Table 1. Based on releases originating from SNI to the Lake McConaughy EA and storable inflows to the Pathfinder EA under a 1904 Wyoming water right, the two EA projects are credited with a combined score of 70,000 AF at Grand Island.

Financials

The creditable SNI represent Nebraska’s contribution to the Program at no cost to the Program. The Program incurs annual expenses associated with the operation of the EA.

**Table 1: Lake McConaughy EA Yields**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year of Operation** | **Storable Natural Inflows (AFY)1** | **Total Inflows from Other Projects**  **(AFY)2** | **Total EA Releases (AFY)** | **Yield at Grand Island (AFY)****3** | **Reduction to Target Flow Deficits (AFY)** |
| 2007 | 34,500 | 300 | 34,400 | 24,400 | 13,000 |
| 2008 | 37,400 | 300 | 30,100 | 17,800 | 13,600 |
| 2009 | 39,700 | 300 | 23,000 | 13,300 | 8,200 |
| 2010 | 37,500 | 0 | 0 | 0 | 0 |
| 2011 | 27,200 | 0 | 0 | 0 | 0 |
| 2012 | 43,800 | 24,300 | 81,000 | 40,900 | 40,600 |
| 2013 | 39,600 | 17,800 | 74,600 | 56,100 | 29,000 |
| 2014 | 45,000 | 37,600 | 45,800 | 37,600 | 37,600 |
| 2015 | 49,300 | 38,700 | 51,500 | 43,500 | 42,600 |
| 2016 | 53,700 | 33,700 | 23,300 | 18,200 | 15,700 |
| 2017 | 57,100 | 38,100 | 142,300 | 123,300 | 97,200 |
| **Total** | **464,800** | **191,700** | **506,000** | **375,100** | **297,500** |
| **Average** | **42,300** | **17,400** | **46,000** | **34,100** | **27,000** |

1 Amount of natural inflow into the reservoir.

2 Amount of inflows into Lake McConaughy EA from the Pathfinder EA, Pathfinder Municipal Account lease, No-Cost NCCW and CNPPID irrigator lease pilot program. All sources of water into the Lake McConaughy EA are viewed as a combined volume for operational purposes, but Water Action Plan projects contributing to the EA are scored independently.

3 Accounts for transit losses between Lake McConaughy releases to Grand Island.

Note: Values are preliminary and subject to change.



**Lake McConaughy, May 2015**