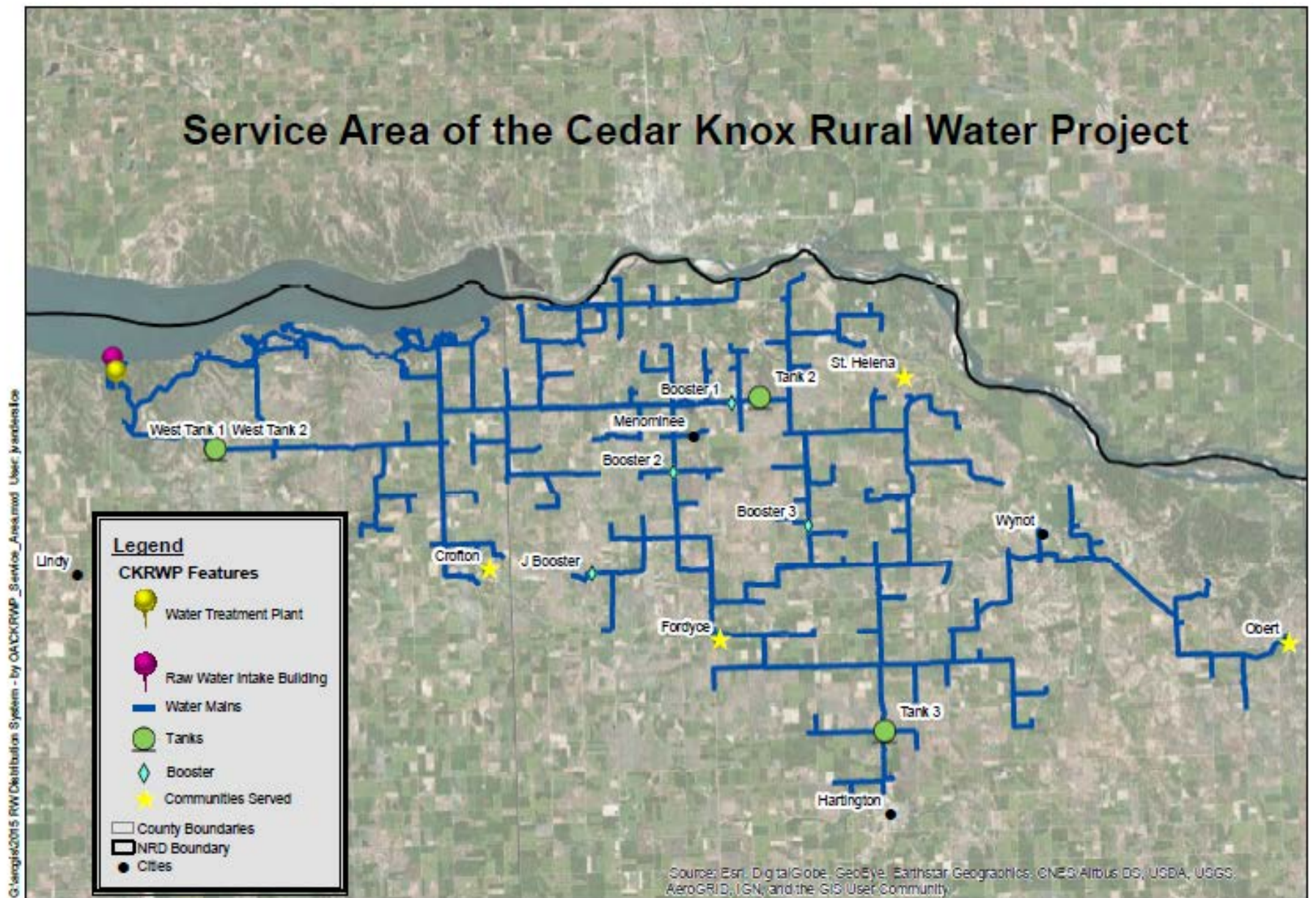


The background features a white upper-left quadrant and a blue lower-right quadrant, separated by a diagonal line. An orange triangle is positioned in the bottom-left corner, and a teal triangle is in the bottom-left corner, overlapping the orange one.

CEDAR-KNOX RURAL WATER PROJECT

Service Area of the Cedar Knox Rural Water Project



DATE: October 31, 2017

Sources:
Hillshade - Developed from DNR DEM

0 1.25 2.5 5 7.5 10 Miles

1:236,098







CEDAR-KNOX RURAL WATER PROJECT

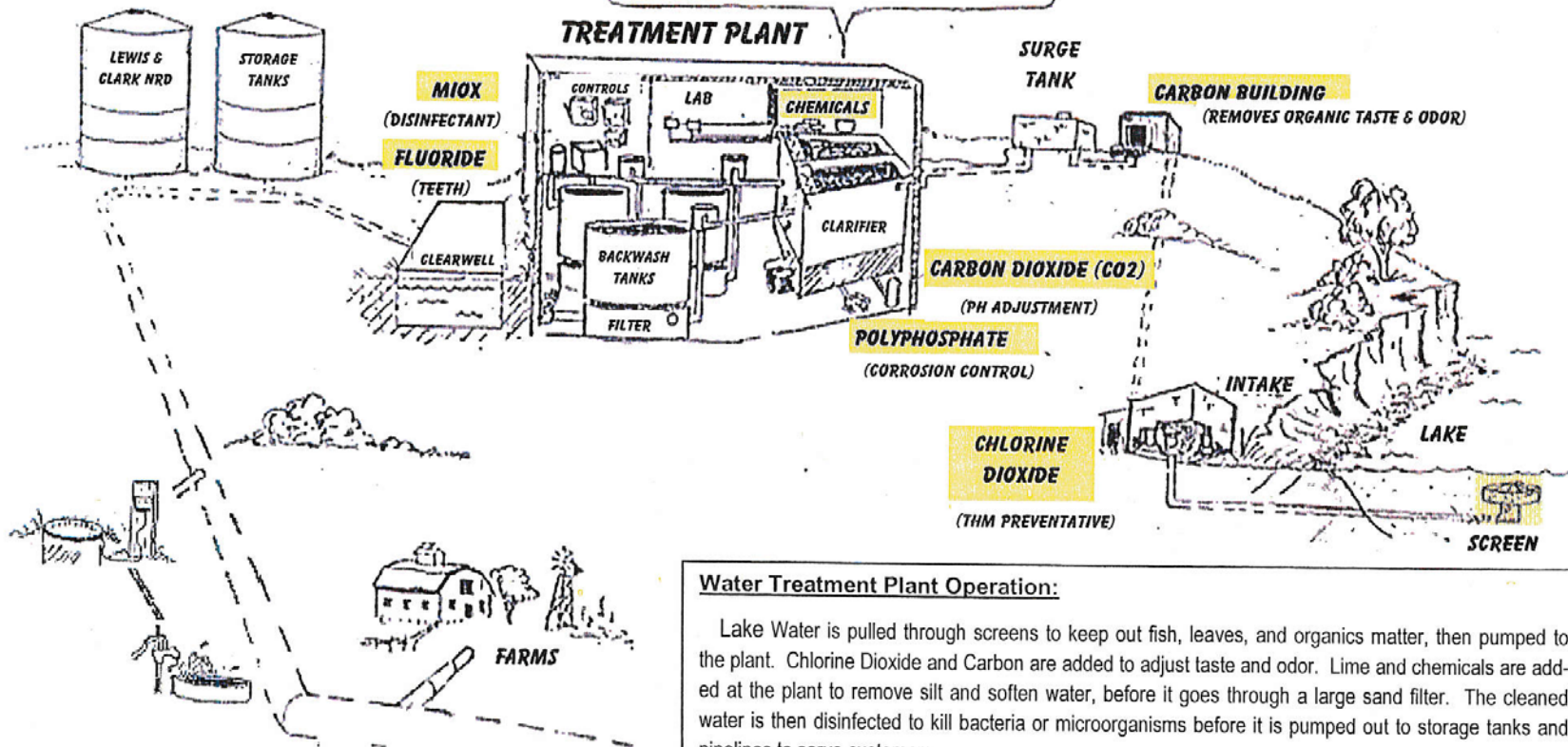
LEWIS & CLARK NATURAL RESOURCES DISTRICT

CHEMICAL ADDITIVES

LIME ... (WATER SOFTENER)

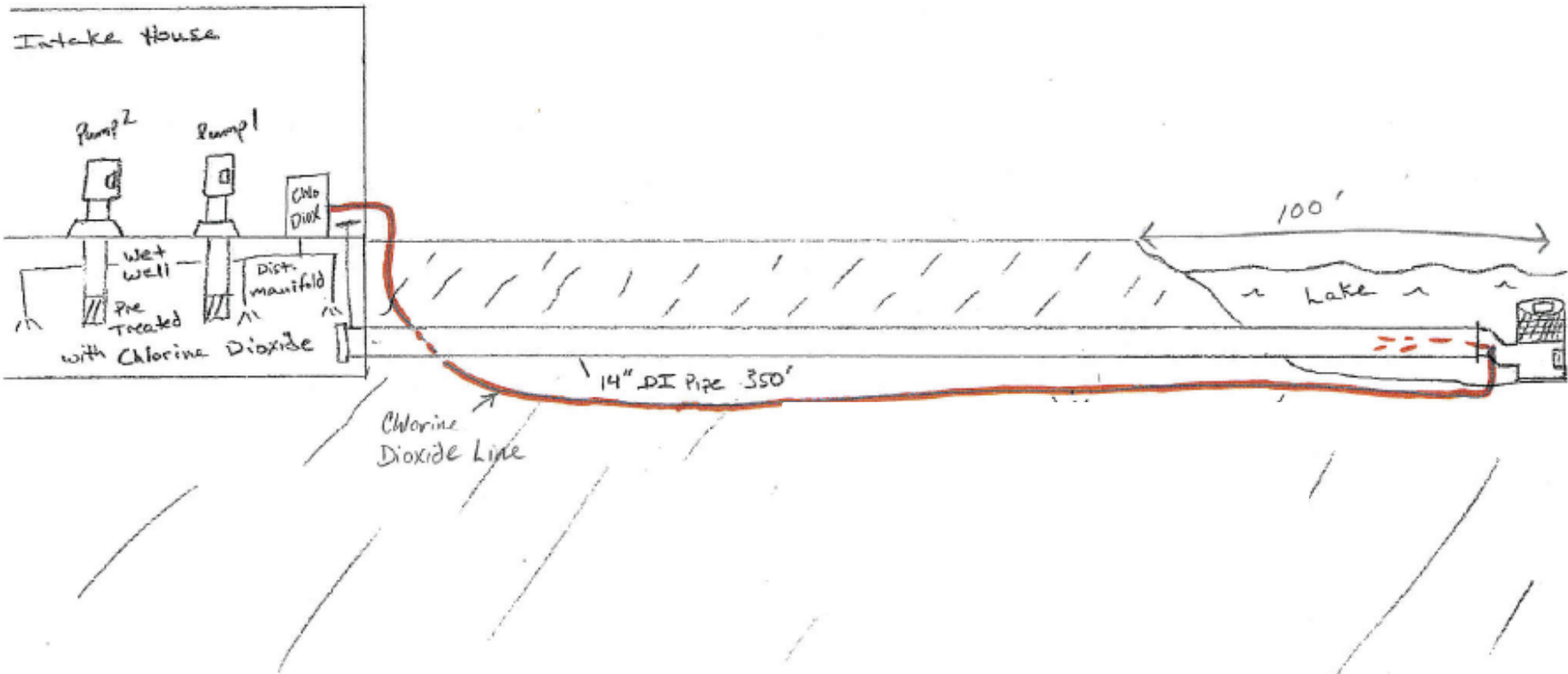
FERRIC CHLORIDE ... (COAGULANT—REMOVES SILT)

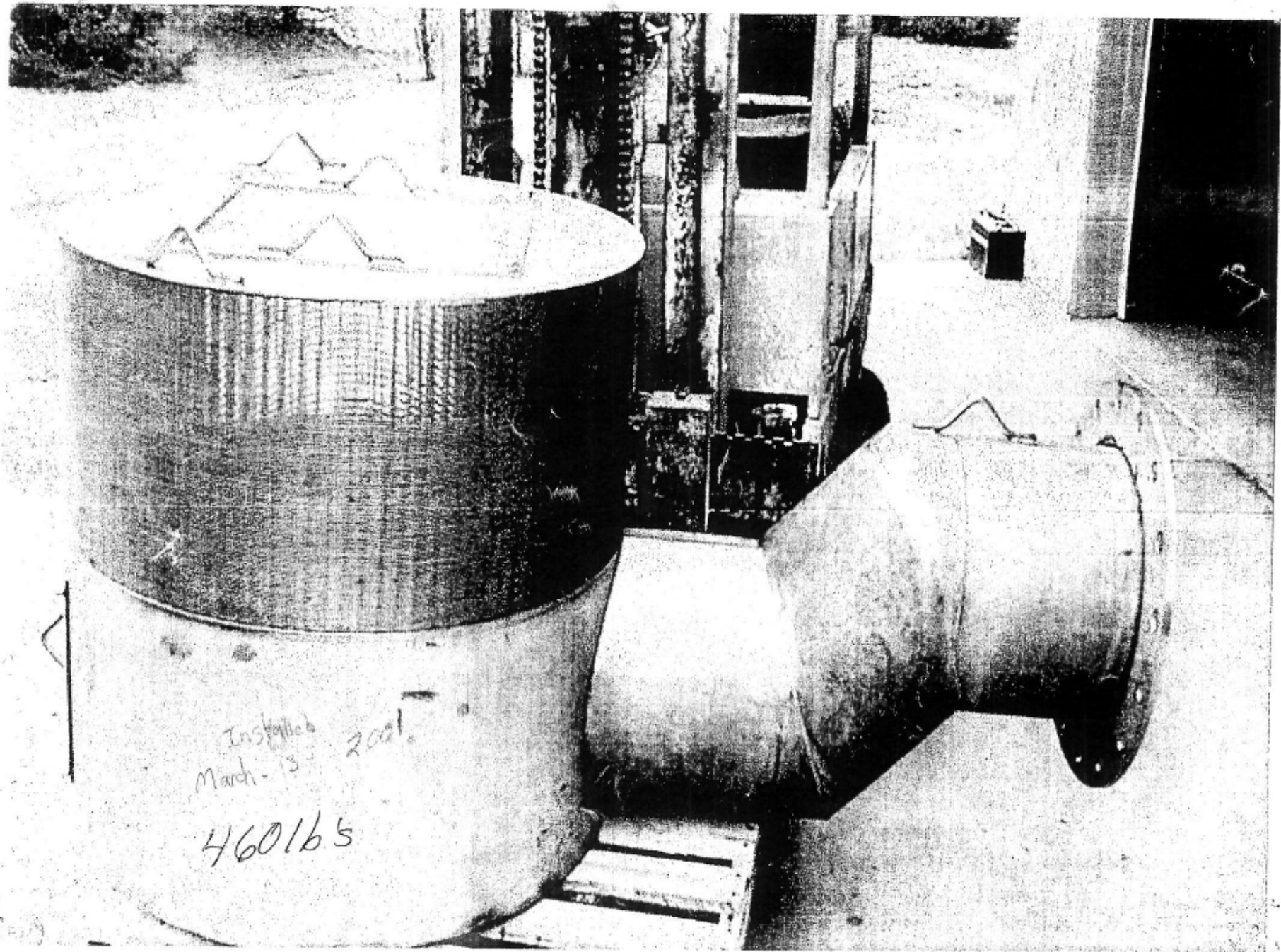
POLYMER ... (COAGULANT AID)



Water Treatment Plant Operation:

Lake Water is pulled through screens to keep out fish, leaves, and organics matter, then pumped to the plant. Chlorine Dioxide and Carbon are added to adjust taste and odor. Lime and chemicals are added at the plant to remove silt and soften water, before it goes through a large sand filter. The cleaned water is then disinfected to kill bacteria or microorganisms before it is pumped out to storage tanks and pipelines to serve customers.





Installed
March - 13 2001

460165













ERDC/EL TR-00-1

Environmental Laboratory



**US Army Corps
of Engineers®**

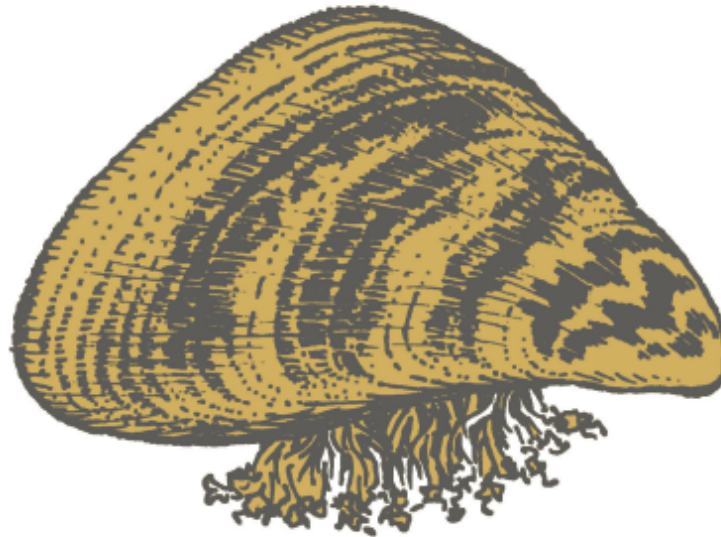
Engineer Research and
Development Center

Zebra Mussel Research Program

Zebra Mussel Chemical Control Guide

Susan L. Sprecher and Kurt D. Getsinger

January 2000





**DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NEBRASKA REGULATORY OFFICE
8901 SOUTH 154TH STREET, SUITE 1
OMAHA, NEBRASKA 68138-3635**

<http://www.nwo.usace.army.mil/missions/regulatoryprogram/nebraska.aspx>

October 16, 2017

DEPARTMENT OF THE ARMY NATIONWIDE PERMIT VERIFICATION

Permittee:

Mr. Chad Reifenrath
Cedar Knox Rural Water Project
608 North Robinson
Hartington, Nebraska 68739

Permit No: NWO-1600-00203-WEH-WEH

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the U.S. Army Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions of Department of the Army (DA) Nationwide Permit (NWP) No. 7 found in the January 6, 2017, Federal Register (82 FR 1860), Issuance and Reissuance of Nationwide Permits. You must comply with all special, regional and general conditions attached herein.

Project Waterway and Location:

Lewis & Clark Lake
Section 19, Township 33 North, Range 3 West
42.825556°, -97.716886°
Knox County, Nebraska

Project Name: Cedar Knox Rural Water Intake Pipe Zebra Mussel Treatment Project