

Region <u>WCK</u>	County <u>Clare</u>	Report Date <u>4/1990</u>	Classification <u>LAL</u>
Water Body: <u>Yellow River, Tribto</u>			
Discharger: <u>Chili WWTP</u>			

If stream is classified as Limited Forage Fish (LFF) or Limited Aquatic Life (LAL), check any of the following Use Attainability Analysis factors that are identified in the classification report:

- Naturally occurring pollutant concentrations prevent the attainment of use
- Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met
- Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place
- Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or operate such modification in a way that would result in the attainment of the use
- Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses
- Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact

Supporting Evidence in the report (include comments on how complete/thorough data is)

- Biological Data (fish/invert)
- Chemical Data (temp, D.O., etc.)
- Physical Data (flow, depth, etc.)
- Habitat Description
- Site Description/Map
- Other: PHOTOS

Historical Reports in file:

- 4/9/80 - Paul Laliberte
- 6/17/80 - Paul Laliberte

Additional Comments/How to improve report:

LAL = wetland default class'n.

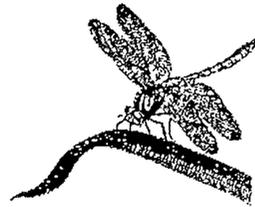
CORRESPONDENCE/MEMORANDUM

Date: April 9, 1990

File Re 8200

To: Chili Sanitary District Facility File

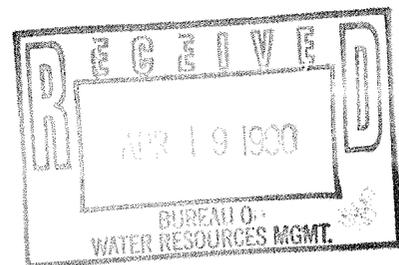
From: Paul LaLiberte *Paul*



Subject: Water Quality Standards Review

Since the last water quality standards review for the Chili tributary to the Yellow River (1986), no additional information has been collected. The stream classification for the receiving water of the Chili Sanitary District POTW therefore should remain the same. No changes in applicable water quality standards are needed.

cc Duane Schuettpelz WR/2 *←*
Mike Blodgett



Date: June 17, 1986 File Ref: 3200

To: Chili Sanitary District Facility File

From: Paul LaLiberte *PL*

Subject: Review of Stream Classification for Chili Sanitary District

The Chili tributary appears to be accurately classified as a wetland to its confluence with the Yellow River. The Yellow River probably supports intermediate or full fish and aquatic life based on presence of a significant amount of water, minnows, and aquatic macrophytes (Potamogeton³, Elodea and water lily) at the Highway "Y" bridge and the two town road bridges in Section 23. These observations were made on a day when regional stream flow was about 10 times $Q_{7,10}$ values. Flat topography likely results in significant retention of Chili's effluent in the wetlands of the Chili tributary, provided the discharge rate is not too great. Therefore, continued application of marginal effluent limits is probably appropriate, regardless of the classification of the Yellow River, provided the discharge rate is not too great.

Chili Sanitary District currently operates as a fill-and-draw with spring and fall discharges. A memorandum from Tom Harpt dated 2/5/81, gives minimum spring and fall discharge rates for a discharge of secondary effluent directly to the Yellow River. Modifying Harpt's figures for a discharge meeting marginal effluent limits gives a maximum fall discharge rate of 0.165 MGD. Storing Chili's wastewater at design flow (0.05 MGD) for six months and discharging over one and one-half months (as is currently the practice), yields a maximum discharge rate of 0.2 MGD. Considering that some waste assimilation will occur as the effluent passes through one mile of wetland, it is suggested that a maximum discharge rate of 0.2 MGD be added to the permit when it expires. This will not alter the current operation of the system but will prevent any future attempts to discharge at a rate which may adversely affect the Yellow River.

Recommendations

The stream classification for Chili Sanitary District should be marginal-wetland (use class E) in the Chili Tributary upstream from its confluence with the Yellow River. A maximum discharge rate of 0.2 MGD should be added to the WPDES permit when it expires.

PL:dd
cc: Jon Bugenhagen
Duane Schuettpelz - WRM/2
John Paddock
PLT254

CHILI, CLARK COUNTY

WASTEWATER RECEIVING STREAM CLASSIFICATION

Receiving stream - Drainage area tributary to South Branch Yellow River.

Chili WWSP are operated on a "fill and draw" basis. Discharge from the second cell is piped about 100 feet into a cattail swamp.

At the time of inspection, the cattail swamp was dry. Alder borders the cattail swamp to the north and northwest followed by mixed hardwoods. Land use beyond the hardwoods is agricultural and flow from the wetland when present, is through crop and pastureland.



Lagoons from NW
corner of second
cell



In swamp at
point of outfall



Area to which
discharge would
flow

RECOMMENDATIONS:

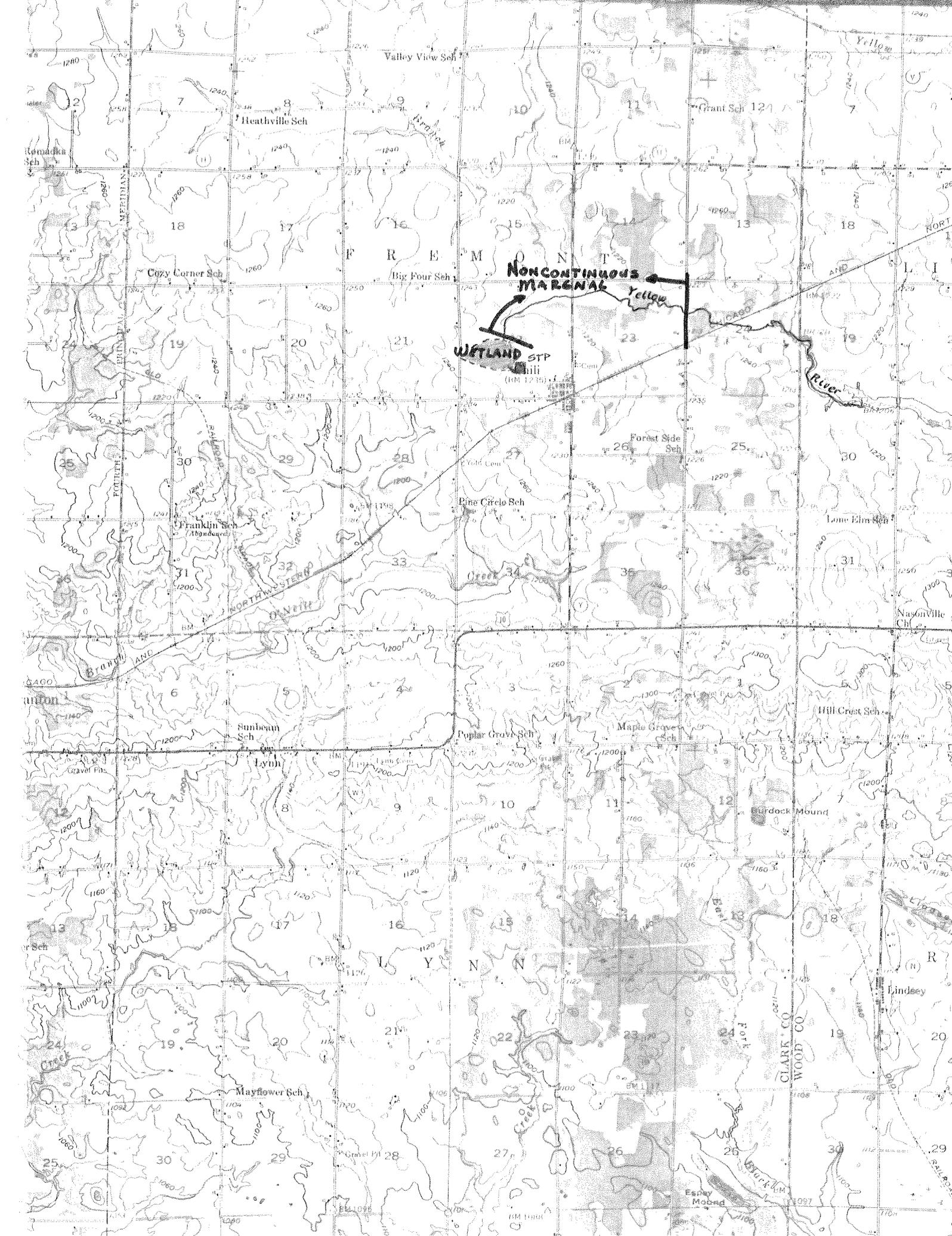
The cattail swamp at Chili WWSP discharge point shall be classified a wetland. Beyond the wetland the classification shall be noncontinuous, marginal at least into section 24 two miles downstream.

EVALUATION DATE: October 11, 1976.

PERSONNEL:

Terry A. Moe - Water Pollution Biologist - WCD
Alan Lulloff - District Engineer - WCD





WETLAND STP
(M 1734)

NONCONTINUOUS MARGINAL

Yellow

Valley View Sch

Reathville Sch

Grant Sch 121

Cozy Corner Sch

Big Four Sch

Forest Side Sch

Franklin Sch
(Abandoned)

Pine Circle Sch

Lone Elm Sch

Sunbeam Sch

Poplar Grove Sch

Maple Grove Sch

Hill Crest Sch

Burdock Mound

Mayflower Sch

Esney Mound

MERIDIAN

POLITY

NORTHWEST

LYNN

CLARK CO
WOOD CO

LINDSEY

ESNEY

CLARK

WOOD

CLARK

WOOD