

DATE: 6/24/2005

FILE REF: [Click [here](#) and type file ref.]

TO: Laura Bub – Madison  
Paul LaLiberte – Eau Claire  
Pat Oldenburg – Eau Claire  
Eric Donaldson - Wausau

FROM: Mark Hazuga

SUBJECT: Dorchester Stream Classification

Laura,

I recently inherited Clark County for completing Use Designations. The Village of Dorchester is a Use Designations I inherited and is listed on your spreadsheet as lacking documentation. The current NR 104 listing for the North Fork Popple River Tributary is Limited Forage Fish with a proposed seasonal classification of WWSF during the months of March through June. I recently received the stream classification file for the facility and found relatively recent data collected in 1997.

When I applied the criteria contained in the new Use Designation Document to the data collected in 1997, this unnamed tributary has an existing fishery use of Full Fish and Aquatic Life or Diverse Fish and Aquatic Life. I intend to submit a stream classification report this winter using the 1997 data and recommend the classification of Diverse Fish and Aquatic Life.

Since the facility's discharge limits are based on the existing NR 104 classification of Limited Forage Fish, a classification change to Diverse Fish and Aquatic Life in this green sheet would force an upgrade. This would be considered a Phase II action or whatever it is called now.

It probably doesn't make sense to promulgate the proposed seasonal classification in the Green Sheet and then submit the Diverse Fish and Aquatic Life Phase II classification shortly after; this winter. Therefore, the most appropriate action seems to be removing the green sheet seasonal classification of WWSF and submitting the appropriate classification this winter for Phase II.

Region WCK County Clark Date 8/1/80 4/14/88 Classification LFF/WWSE

Water Body: North Fork Popple River Trib

Discharger: Dorchester WWTP

If classified as Limited Forage Fish (LFF) or Limited Aquatic Life (LAL), check any of the following Use Attainability Analysis factors that apply:

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 included**

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

- low flow  
- habitat (minimal)

**Comments:**

? - is low flow + minimal habitat the primary limiting factors?  
- check w/ region on this class'n

4/14/88 - Paul Laliberte  
8/1/80 - Stuart Hagen, et. al  
8/27/85 - Terry Moe, et. al

CORRESPONDENCE/MEMORANDUM

Date: April 14, 1988

File Ref: 3200

To: Duane Schuettpelz - WR/2

From: Paul La Liberte *Paul*

Subject: Dorchester Stream Survey

Attached are the results from a stream survey conducted per our work plan. This facility is in violation of their NR 104 ammonia limits. It is our intent to use this information along with NR 105 & 106, when promulgated, to issue a permit and start the facilities planning process. Effluent limits generation may be necessary, depending on wording in the codes.

PL:sz  
Attach.  
c: M. Blodgett  
PLT380

*E*  
*4-15*

DORCHESTER, CLARK COUNTY

WASTEWATER RECEIVING STREAM CLASSIFICATION - ADDENDUM

At the request of Duane Schuettpelz, Assistant Water Quality Evaluation Section Chief, a re-evaluation of the stream classification for the Dorchester wastewater stabilization ponds (WWSP) receiving system was conducted on August 1, 1980. The objective was to determine the fishery status of the North Fork of the Poplar River and if a fish and aquatic life classification could be extended to the Dorchester tributary. The request was made because the Village can economically meet effluent limits for ammonia-nitrogen by modifying the pond's holding and release regime and still protect warm water fishery spring spawning activities. The stream classification must be revised from intermediate to full fish and aquatic life to accommodate modified WWSP operation.

Little information is available on the fishery of the North Fork of the Poplar River except near its downstream end where bass, panfish, and northern pike are known to be present. The upstream extent of this fishery is not known. In fact, the fishery classification of the upper reaches has never been documented by survey techniques and classification for wastewater effluent limits (8/27/75) was based upon downstream fishery and suitable upstream habitat to support spring spawning for that downstream fishery.

During the August 1, 1980 evaluation, Stuart Hagen, District Fish Biologist, and Terry Moe, District Surveillance and Planning Leader, inspected the Dorchester Tributary at three locations and the North Fork Poplar River at a minimum of six locations within six stream miles.

Flow in the tributary was composed of standing water above the WWSP and effluent below the ponds. Although minimal, emergent vegetation suitable for northern pike spawning is present in and adjacent to the stream. Measured springtime flow values of 5-6 cfs are adequate to cause flooding of the small tributary. Minnows up to four inches long were frequently observed below the stabilization ponds. The picture attached shows inspection points and characterizes the area. Also to be noted are small pools in the stream.

During summer low flow conditions, the North Fork Poplar River is best described as a series of lake-like pools connected by shallow gravel/rock bottom rivulets with less than 1 cfs of flow. Pool bottom substrate is rubble, rock, gravel, sand, and silt. Vegetation includes bullrush, cattail, arrowhead, pondweed, waterweed, coontail, and duckweed. The conditions described apply to the entire North Fork Poplar River. Collectively, the emergent vegetation and pool habitat which are from 50 to 100 feet wide and up to a quarter of a mile long represent a significant fishery resource.

Forage fish were abundant at all road crossings inspected. Stuart Hagen believed game fish to be present in the first river pool one-half mile below the Dorchester tributary. Young fishermen confirmed Stuart's belief by proudly producing three smallmouth bass caught from the river at the CTH "A" road crossing between Sections 7 and 18 (T29N, R1E) about five stream miles below the Dorchester tributary.

Recommendation:

The North Fork Poplar River is classified fish and aquatic life. The Dorchester Tributary is classified fish and aquatic life based upon the potential for spring spawning by game fish in the tributary. Both streams near Dorchester are non-continuous based upon 0.0 cfs 10-year mean monthly low flow values for June - February provided by U.S.G.S.

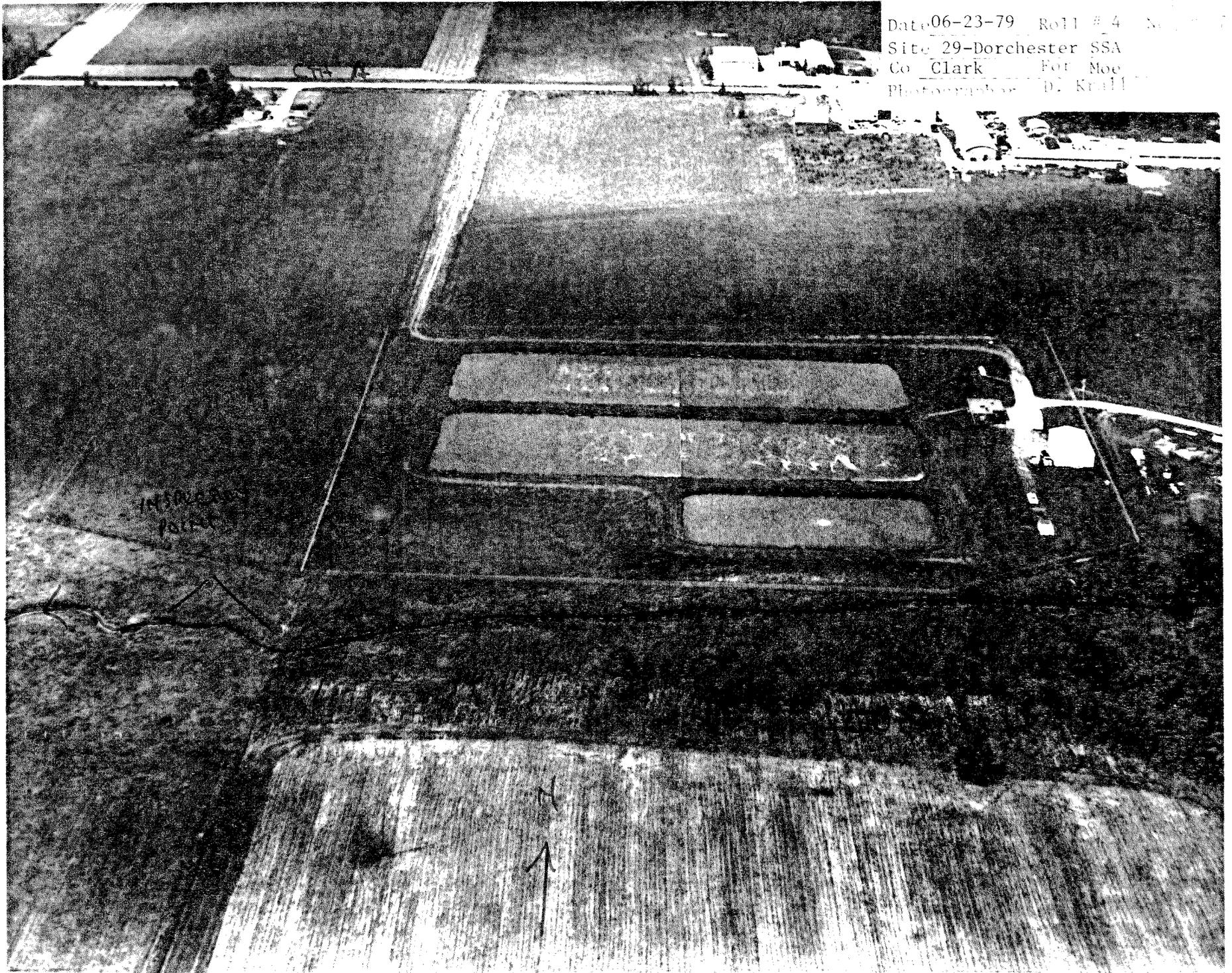
Re-Evaluation Date; August 1, 1980.

Personnel:

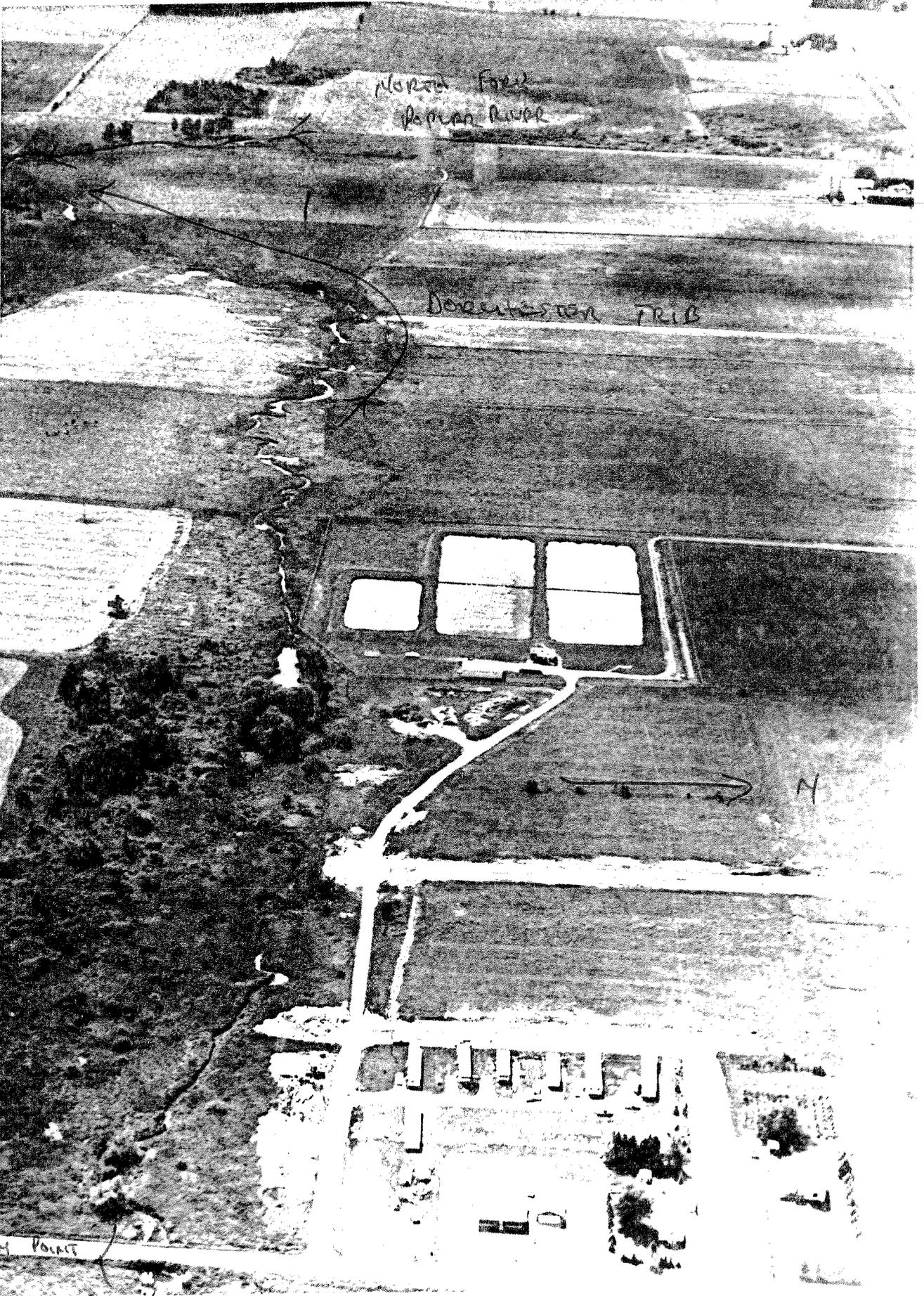
Stuart Hagen - District Biologist - Fish Management  
Terry A. Moe - Surveillance and Planning Unit Leader

*Seasonal -  
fish & A.L. in spring  
for fill & draw calc.*

Date 06-23-79 Roll # 4  
Site 29-Dorchester SSA  
Co Clark For Moo  
Photographer D. Krall



Date 06-23-79 Roll #4 Neg #5  
Site 28-Gurtis SSA D. J. J.  
Co Clark For Moe  
Photographer D. Krall



North Fork  
Roman River

DORCHESTER TRIB

INSPECTION POINT

Date 06-23-79 Roll # 4 exp # 6  
Site 29-Dorchester SSA  
Co Clark For Moe  
Photographer D. Krall  
DORCHESTER, MASS



N

DORCHESTER  
MASS →

Normal Fork Potomac River.

DORCHESTER, CLARK COUNTY

WASTEWATER RECEIVING STREAM CLASSIFICATION

Receiving stream - Discharge to tributary of North Fork Poplar River, Q<sub>7,10</sub> at discharge site = 0.01 CFS.

Dorchester utilizes a WWSP type sewage treatment system. Discharge from the ponds enters an intermittent flow tributary of North Fork Poplar River. Quality of effluent is good and the receiving stream is considered suitable for intermediate aquatic life. Minnows occur above the lagoon outfall in ponded water.

North Fork Poplar River above the confluence with the tributary (CTH "A") is ponded and slow moving with a well defined channel. Weeds are abundant. Agricultural land borders the stream. Below the confluence the river is also low flow and bordered in pasture land. Weeds are abundant. Waterfowl and muskrat inhabit the area. The river should serve as a spawning area for northern pike.



Tributary of North Fork  
Poplar River at Sec. 13-14  
N/S town road above WWSP  
discharge facing west

Dorchester WWSP



North Fork Poplar River at  
Sec. 14-23, E/W town road  
below confluence with  
Dorchester tributary

RECOMMENDATIONS:

*Re-evaluated  
8/1/80*

The North Fork Poplar River tributary is classified noncontinuous, intermediate aquatic life. North Fork Poplar River is continuous, fish and aquatic life.

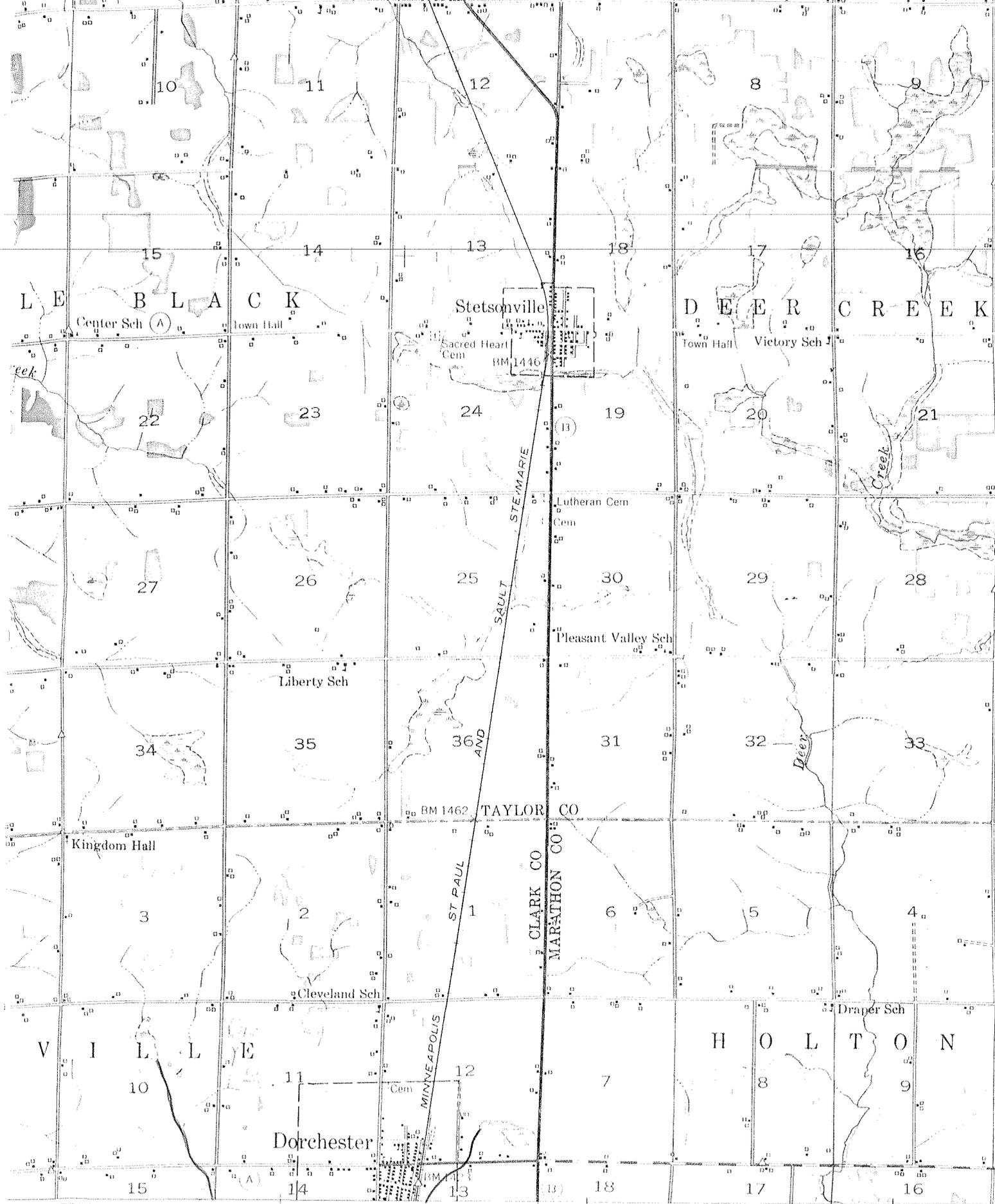
EVALUATION DATE: August 27, 1975

PERSONNEL:

Terry A. Moe - Water Pollution Biologist - WCD  
Lewis A. Seymour - Environmental Engineer - WCD  
Stuart A. Hagen - Area Fish Manager - WCD  
Ron Martin - Biologist - Water Quality Evaluation - Madison

*72946*

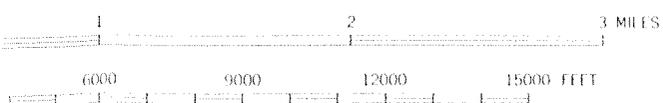




(ABBOTSFORD)

ABBOTSFORD 16 MI  
 MARATHON 11 26 MI  
 INTERIOR GEOLOGICAL SURVEY, WASHINGTON, D. C. 1954  
 M R 4600

SCALE 1:48000



ROAD CLASSIFICATION

