

Region WCR County Eau Claire Report Date 9/1995 Classification LFF
Water Body: Bridge Creek, Trib to
Discharger: Bush Bros.

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:

Historical Reports in file:

9/22/95 - Paul LaLiberte

Additional Comments/How to improve report:

classification is supported by data.
→ what is limiting an FAL class'n?

7/2005: NOT enough data - DO not add to catc, how

DETERMINATION OF AQUATIC USE DESIGNATION AND WATER QUALITY STANDARDS
FOR AN UNNAMED STREAM TRIBUTARY TO BRIDGE CREEK IN EAU CLAIRE COUNTY -
RECEIVING WATER FOR DISCHARGE FROM BUSH BROTHERS

September 22, 1995

PAUL LA LIBERTE

The unnamed stream receiving noncontact cooling water discharge from Bush Brothers in Augusta, WI was evaluated for the purposes of assigning an appropriate aquatic use designation pursuant to NR104, Wisconsin Administrative Code. The facility processes and cans dried beans year-round. Process wastewater is disposed via spray irrigation. The cooling water comes from the municipal water supply and is routed through a heat exchanger at a rate of about 20,000 gpd. There is no contact of the cooling water with process waste or can cooling water. The facility has operated under a WPDES permit for over 20 years. The existing permit is being replaced by one which recognizes the installation of the heat exchanger.

The stream, which is only 1000' long, does not appear on the USGS map. Streamflow, consisting entirely of effluent under base flow conditions, originates at a storm sewer outfall 1300' from the Bush Brothers facility. The upper reach of the stream is 1-3 feet wide and less than 3" deep with a sand bottom and lacking pool or significant riffle habitat. Within 300 feet of it's mouth, the stream picks up additional groundwater and increases slightly in size. Small pools 3-4' wide exist in this last 300 foot reach and provide some aquatic habitat. However, a habitat rating of the lower reach was still in the "poor" category. The stream drains into First Trestle Creek which, in turn, drains into Bridge Creek after traveling about 50'. The flow of First Trestle Creek is listed as continuous on the USGS map and was measured by DNR at 1.43 cfs on 5-4-82.

Aquatic use of the Bush Brothers Tributary was assessed by backpack electrofishing in a 100' reach of small pools 50' upstream from the mouth. Eight species of fish were found, with the most abundant species being creek chub, common shiner, sand shiner and mudminnow. These species are all tolerant to poor water quality conditions and are consistent with the poor habitat available at the site. A few intolerant fish were also found, but are considered to be temporary upstream migrants from Beaver Creek, a trout stream.

RECOMMENDED AQUATIC USE DESIGNATION

Location?

Based on the uses being supported at the time of the evaluation and the available habitat, the recommended aquatic use classification for the stream is Limited Forage Fish.

RECOMMENDED CRITERIA AND LIMITS

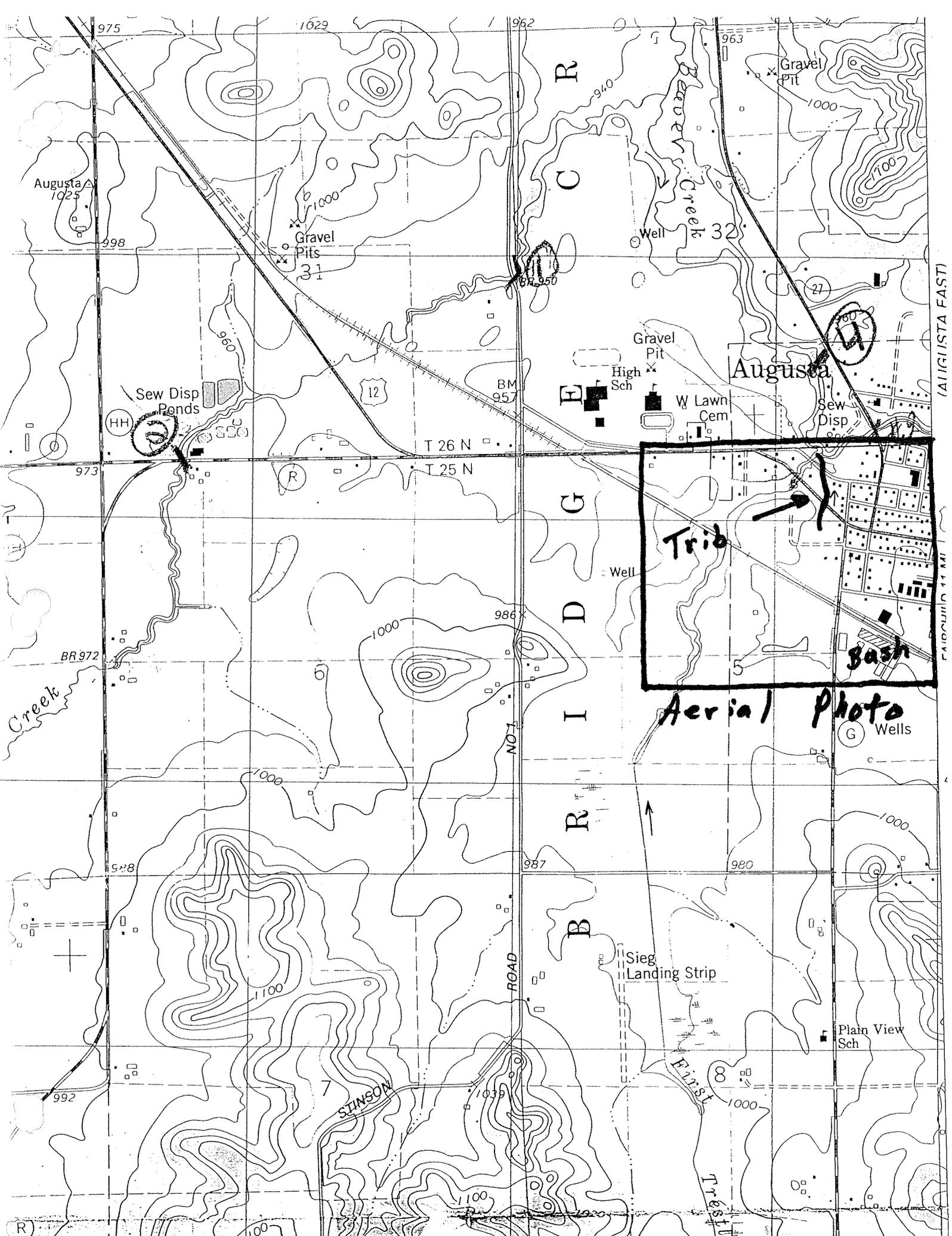
The effluent limits for the Bush Brothers permit should be based on both a classification of Limited Forage Fish in the unnamed tributary and the trout classification associated with Bridge Creek. It was estimated that water from the unnamed tributary did not completely mix with First Trestle Creek prior to entering Bridge Creek. For this reason, an evaluation of standards compliance at the edge of the mixing zone in First Trestle Creek is not appropriate.

cc

J. Ball - WR/2

P. Troughlell - WR/2

S. Thon



Augusta
1025

Gravel
Pits
31

Augusta

Sew Disp
Ponds

Trib

Sash

Aerial Photo

STINSON

Sieg
Landing Strip

Plain View
Sch

11 (R) 11 (E) 11 (S) 11 (W) 11 (N)

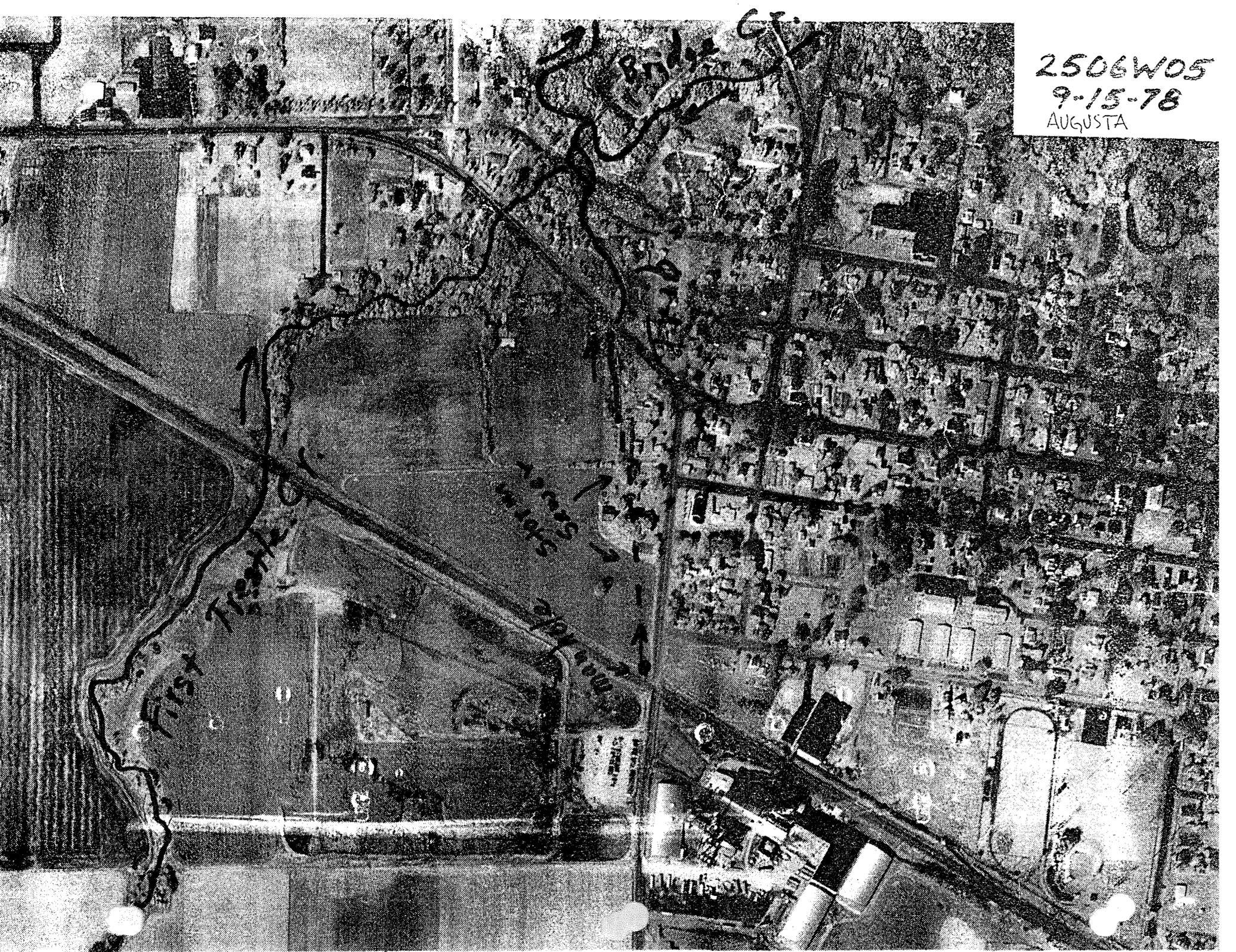
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11 (R) 11 (E) 11 (S) 11 (W) 11 (N)

11 (R) 11 (E) 11 (S) 11 (W) 11 (N)

2506W05
9-15-78
AUGUSTA



Stream Bash Bros Trib Reach Location Augusta Reach Score/Rating 219
 County E.C. Date 8-22-94 Evaluator LaLiberte Classification Poor

Rating Item	Category			
	Excellent	Good	Fair	Poor
Watershed Erosion	No evidence of significant erosion. Stable forest or grass land. Little potential for future erosion. 8	Some erosion evident. No significant "raw" areas. Good land mgmt. practices in area. Low potential for significant erosion. 10	Moderate erosion evident. Erosion from heavy storm events obvious. Some "raw" areas. Potential for significant erosion. 14	Heavy erosion evident. Probable erosion from any run off. 16
Watershed Nonpoint Source	No evidence of significant source. Little potential for future problem. 8	Some potential sources (roads, urban area, farm fields). 10	Moderate sources (small wetlands, tile fields, urban area, intense agriculture). 14	Obvious sources (major wetland drainage, high use urban or industrial area, feed lots, impoundment). 16
Bank Erosion, Failure	No evidence of significant erosion or bank failure. Little potential for future problem. 4	Infrequent, small areas, mostly healed over. Some potential in extreme floods. 8	Moderate frequency and size. Some "raw" spots. Erosion potential during high flow. 16	Many eroded areas. "Raw" areas frequent along straight sections and bends. 20
Bank Vegetative Protection	90% plant density. Diverse trees, shrubs, grass. Plants healthy with apparently good root system. 6	70-90% density. Fewer plant species. A few barren or thin areas. Vegetation appears generally healthy. 9	50-70% density. Dominated by grass, sparse trees and shrubs. Plant types and conditions suggest poorer soil binding. 15	<50% density. Many raw areas. Thin grass, few if any trees and shrubs. 18
Lower Bank Channel Capacity	Ample for present peak flow plus some increase. Peak flow contained. W/D ratio <7. 8	Adequate. Overbank flows rare. W/D ratio 8-15. 10	Barely contains present peaks. Occasional overbank flow. W/D ratio 15-25. 14	Inadequate, overbank flow common. W/D ratio >25. 16
Lower Bank Deposition	Little or no enlargement of channel or point bars. 6	Some new increase in bar formation, mostly from coarse gravel. 9	Moderate deposition of new gravel and coarse sand on old and some new bars. 15	Heavy deposits of fine material, increased bar development. 18
Bottom Scouring and Deposition	Less than 5% of the bottom affected by scouring and deposition. 4	5-30% affected. Scour at constrictions and where grades steepen. Some deposition in pools. 8	30-50% affected. Deposits and scour at obstructions, constrictions and bends. Some filling of pools. 16	More than 50% of the bottom changing nearly year long. Pools almost absent due to deposition. 20
Bottom Substrate/ Available Cover	Greater than 50% rubble, gravel or other stable habitat. 2	30-50% rubble, gravel or other stable habitat. Adequate habitat. 7	10-30% rubble, gravel or other stable habitat. Habitat availability less than desirable. 17	Less than 10% rubble gravel or other stable habitat. Lack of habitat is obvious. 22
Avg. Depth Riffles and Runs	Cold >1' 0 Warm >1.5' 0	6" to 1' 6 10" to 1.5' 6	3" to 6" 18 6" to 10" 18	<3" 24 <6" 24
Avg. Depth of Pools	Cold >4' 0 Warm >5' 0	3' to 4' 6 4' to 5' 6	2' to 3' 18 3' to 4' 18	<2' 24 <3' 24
Flow, at Rep. Low Flow	Cold >2 cfs 0 Warm >5 cfs 0	1-2 cfs 6 2-5 cfs 6	.5-1 cfs 18 1-2 cfs 18	<.5 cfs 24 <1 cfs 24
Pool/Riffle, Run/Bend Ratio (distance between riffles ÷ stream width)	5-7. Variety of habitat. Deep riffles and pools. 4	7-15. Adequate depth in pools and riffles. Bends provide habitat. 8	15-25. Occasional riffle or bend. Bottom contours provide some habitat. 16	>25. Essentially a straight stream. Generally all flat water or shallow riffle. Poor habitat. 20
Aesthetics	Wilderness characteristics, outstanding natural beauty. Usually wooded or un-pastured corridor. 8	High natural beauty. Trees, historic site. Some development may be visible. 10	Common setting, not offensive. Developed but uncluttered area. 14	Stream does not enhance aesthetics. Condition of stream is offensive. 16

Column Totals: _____ 29 _____ 58 _____ 132

Column Scores E _____ +G _____ +F _____ +P _____ = 219 = Score

<70 = Excellent, 71-129 = Good, 130-200 = Fair, >200 = Poor

Shocked about 100'
 starting 50' above mouth

		Lions Tot	Ball Tot
Stickleback	present	-	T
Mudminnow	common	T	VT
<u>Dace</u>			
Longnose Dace (1)	present	-	I
Creek chub	abundant	T	T
Common Shiner	abundant	-	T
Sand Shiner	common	-	T
Sucker mouth minnow or $1\frac{3}{4}$ " Sucker	present	-	
stone roller (maybe) (1) (very small)	present	-	I