1,227 miles

Dep via Es

DEP Stream Code: 29259

Burgess Brook

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PA Fish & Boat Commission
Division of Environmental Services

PA FISH AND BOAT COMMISSION
COMMENTS AND RECOMMENDATIONS
February 27, 2002

WATER: North Fork Mehoopany Creek Basin (404G)

EXAMINED: July and August 2001

BY: Moase, Wnuk, and Gearhart

Bureau Director Action: [illegible] - okay Date: 3-14-02

Division Chief Action: Richard A Snyder - concurs Date: 3-1-02

WW Unit Leader Action: _____ Date: _____

CW Unit Leader Action: R. Thomas Greene Date: 2/27/02

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CWU COMMENTS:

The Mehoopany Creek, North Fork, Basin (404G), was examined during July and August 2001 to update inventory information on Mehoopany Creek, North Fork, Sections 01 and 02 and to collect baseline inventory information on 10 named tributary streams.

Mehoopany Creek, North Fork

Section 01

Section 01 can be characterized as a small, coldwater stream. A total of 11 fish species were captured during the 2001 examination, including a single wild brook trout and four brown trout of hatchery origin.

Section 02

Section 02 can be characterized as a small, transitional stream. Historically, this segment has been managed with the planting of PFBC catchable trout. A total of 21 fish species were captured over five sample sites in 2001. Aside from the capture of some hatchery trout, the fish community was typical of an assemblage found in transitional streams.

Burgess Brook

Section 01 can be characterized as a small, coldwater stream. A total of five fish species were captured during the 2001 survey, including an excellent Class A wild brook trout fishery estimated at 43.35 kg/ha.

Tributary Streams

Sampling was also attempted on nine tributary streams in the basin. Fish sampling was conducted on four of these streams, Wolf Run, Miller Brook, Douglas Hollow, and Farr Hollow. Collectively, a total of 12 fish species

DEP Stream Code: 29259 Burgess Brook

were captured from these streams during the 2001 survey. Both Douglas Hollow and Farr Hollow supported sparse populations of wild brook trout.

CWU RECOMMENDATIONS:

1. Mehoopany Creek, North Fork, (404G), Section 02, should continue to be managed with the planting of PFBC catchable trout. Stocking rate and frequency should be determined by classification according to program guidelines.

2. Burgess Brook (404G), Section 01, should be managed as a Class A wild brook trout fishery. Conventional statewide regulations should apply with no stocking.

3. Mehoopany Creek, North Fork, (404G), Section 01 and nine tributary streams should be managed as biomass Class D fisheries under the Natural Yield option. Conventional statewide regulations should apply with no stocking.

4. Due to the presence of a Class A wild brook trout fishery, the DEP Chapter 93 Water Quality Standards should be upgraded to HQ-CWF for Burgess Brook. The special protected use classification should apply to the Burgess Brook basin. A copy of this report should be forwarded to DEP via Environmental Services.

Publication made possible by funding from the Sport Fish Restoration Act Project F-57-R Fisheries Management

Pennsylvania Fish & Boat Commission
Bureau of Fisheries
Division of Fisheries Management

North Fork Mehoopany Creek Basin (404G) Fisheries Management Report

Prepared by:
Robert Wnuk, Robert Moase, and Matthew Gearhart

Fisheries Management Database Name: Mehoopany Ck N Fk
Lat/Lon: 413205760721

Date Sampled: July and August 2001 Date Prepared: November 2001

Introduction

There is a substantial fishery resource in the 40,000+ miles of flowing water throughout Pennsylvania. To realize the potential of this resource the Pennsylvania Fish and Boat Commission (PFBC) has established a policy of resource examination and classification. The primary objectives of the examination are to document a stream's fish populations and to collect social, physical, and chemical data that influence the way we manage its fishery. Establishing relationships among these parameters allows us to place each individual stream section into a resource category. Once we've assigned a section to a resource category we can implement a management program that is consistent with statewide goals and objectives.

The Area 4 fisheries management office has been conducting stream examinations on a drainage basin level to facilitate management by resource classification. We selected the North Fork Mehoopany Creek basin for investigation in 2001 because we'd never previously surveyed any of its tributary streams and because the most recent information we had on the North Fork of Mehoopany Creek was at least 24 years old. Thus, the objectives of this examination were: 1) to collect baseline data on the fishery in tributary streams which had never been surveyed so that we could assign them to a resource category and 2) to evaluate past management practices on the North Fork of Mehoopany Creek and implement new management strategies where appropriate.

Study Area

The North Fork of Mehoopany Creek originates from the outlet of Saxe Pond in Wilmot Township, Bradford County, just upstream from

the Bradford/Sullivan County border. The stream flows generally East for 22 km to its confluence with Mehoopany Creek at River Mile (RM) 6.60, 41°32'05" Latitude and 76°07'21" Longitude (Figure 1). The North Fork of Mehoopany Creek drains an area of approximately 104 km^2 in Bradford, Sullivan, and Wyoming Counties. The Colley, Jenningsville, Dutch Mountain, and Meshoppen United States Geological Survey's (USGS) 7.5 minute Quadrangles provide topographic coverage for the drainage. Routes 87 and 187 provide major road access.

The North Fork Mehoopany Creek watershed lies in the glaciated low plateau physiographic province. It contains 11 named streams (Table 1) and numerous unnamed tributaries, wetlands, farm ponds, and small glacial lakes. Sandstones, siltstones, and shales are the dominant geological formations in the area (Woods and Omernik 1996). Additionally, small amounts of anthracite coal are present on the south side of the watershed near the headwaters of Catlin and Coffee Brooks. Land use is a mixture of woodlots, agriculture, and single family rural residences. State Game Lands (SGL) Numbers 57 and 66 are the only major pieces of public land in the basin.

Historic Perspective

Daniels et al. (1977) conducted the only previous survey we have on file in the North Fork Mehoopany Creek basin. These investigators examined six sites throughout the length of the North Fork and found that, in contrast to the acidic main stem of Mehoopany Creek, overall water quality in the North Fork was moderately fertile. Total alkalinity, total hardness, pH, and specific conductance values were higher in the headwaters than in downstream areas because of pond discharges. Transitional species dominated fish communities except near the mouth where some hatchery brown trout *Salmo trutta*, white catfish *Ameiurus catus*, smallmouth bass *Micropterus dolomieu*, and largemouth bass *Micropterus salmoides* were present.

Current Management Strategies

The Pennsylvania Department of Environmental Protection (DEP) classifies the entire North Fork Mehoopany Creek basin as a coldwater fishery (CWF) in its Chapter 93 water quality regulations. There are no exceptions to specific criteria. The CWF designation requires that all National Pollution Discharge Elimination System (NPDES) permitted discharges in the basin meet water quality standards designed to protect reproducing trout populations and associated flora and fauna. Currently, we know of two NPDES discharges in the basin (United States Environmental Protection Agency 2001.). Both are privately owned discharges to an unnamed tributary of the North Fork of Mehoopany Creek and have minimal design flows.

With the exception of the North Fork, the PFBC manages all of the basin streams as a single section extending from the headwaters downstream to the mouth. We manage the North Fork of Mehoopany Creek as two separate sections. Section 01 extends from the headwaters downstream to the confluence with Smith Cabin Run and Section 02 extends from Smith Cabin Run downstream to the mouth. We manage Section 02 with hatchery trout under the Optimum Yield 2 - Rural program. Special remarks require the hatchery to complete inseason stockings by May 1 due to water temperature concerns. We do not stock trout in any of the other basin streams and there are no special regulation areas.

Methods

We examined the North Fork Mehoopany Creek basin between July 27 and August 2, 2001. All procedures of the survey followed Marcinko et al. (1986). We surveyed all of the named streams in the basin and collected physical and some social data for all stream sections. We did not evaluate parking or ownership characteristics.

We assessed physical, chemical, and biological characteristics at 15 sampling stations (Table 2). We used visual methods to assess physical characteristics and field methods to assess chemical characteristics. Chemical methods involved a mixed indicator for alkalinity, a colorimetric method for pH, and EDTA titration for hardness. We used backpack electrofishing gear to assess fish populations. Backpack setups included a Coffelt unit (Model BP 1C, alternating current) and a Smith-Root unit (Model 12-A POW, pulsed direct current) with a single anode and a rat-tail cathode. The choice of backpack electrofishing gear generally depended on station width. In this work we used the Coffelt unit at six sites and the Smith-Root unit at five sites. Low stream flows prohibited electrofishing operations at four of our sampling sites. We identified the fish we captured at each site to species with the exception of sculpins. We only identified sculpins to genus because it was difficult to accurately separate mottled sculpins *Cottus bairdi* from slimy sculpins *Cottus cognatus* in the field. The scientific and common names of the fish species we captured follow Robins et al. (1991).

We classified all of the trout we captured as being of wild or hatchery origin based on species, coloration, size, and fin wear. We measured the wild trout 25 mm length groups and gave them an upper caudal fin clip, while we noted the hatchery trout but excluded them from further analysis. When we captured at least 30 wild trout at an individual site we made a second electrofishing pass to obtain a Chapman modified Petersen population estimate (Ricker 1975). At all other sites we considered the number of wild trout captured to be the total population present. We obtained wild trout population abundance and biomass estimates for stream sections by expanding the estimated number and weight of trout at a site to number and kilograms per hectare using

state average weights. We calculated angler expectation rankings for stream sections according to Moase et al. (1993).

Results and Discussion

In general, the tributary streams of the North Fork Mehoopany Creek basin were relatively short, most possessed steep gradients, and all flowed through rural areas (Table 3). Chemically they were moderately fertile and possessed sufficient buffering capacity against the effects of acid precipitation. According to the criteria established by Johnson (1983), streams become vulnerable to acid precipitation when total alkalinity drops below 10 mg/l. Total alkalinity values in the North Fork Mehoopany Creek basin, however, ranged from 12 to 72 mg/l during our work (Table 4). With the exception of Burgess Brook, total alkalinity in all of the basin's tributary streams was greater than 25 mg/l.

We documented the presence of 23 fish species in the North Fork Mehoopany Creek basin (Table 5). Blacknose dace *Rhinichthys atratulus* were the most common fish we encountered as we captured this species at all 11 sites we electrofished (Table 6). The next most common species were creek chubs *Semotilus atromaculatus* (10 sites) and central stonerollers *Campostoma anomalum*, longnose dace *Rhinichthys cataractae*, and white suckers *Catostomus commersoni* (9 sites each). The gamefish species we captured were rainbow trout *Oncorhynchus mykiss* (3 sites), brown trout (6 sites), and brook trout *Salvelinus fontinalis* (6 sites). Wild brook trout were abundant enough at RM 0.00 of Burgess Brook to conduct a population estimate (Table 7).

Historically we had documented the presence of 19 fish species in the North Fork Mehoopany Creek basin. Those species present historically but absent during the 2001 work were rosyface shiners *Notropis rubellus*, white catfish, smallmouth bass, and largemouth bass. The disappearance of these species from the North Fork Mehoopany Creek basin fish assemblage was not surprising. They were only present at RM 0.00 during the historic work and their abundance was low.

Those fish species present in the North Fork Mehoopany Creek basin during the 2001 work but not documented historically were rainbow trout, brook trout, golden shiners *Notemigonus crysoleucas*, spottail shiners *Notropis hudsonius*, swallowtail shiners *Notropis procne*, brown bullheads *Ameiurus nebulosus*, greenside darters *Etheostoma blennioides*, and yellow perch *Perca flavescens*. The presence of greenside darters in the North Fork Mehoopany Creek basin represented a range expansion for this species.

Water quality, fish species occurrence, and wild trout abundance varied among the North Fork Mehoopany Creek basin streams. We

will next discuss specific findings for each stream and section individually, as the PFBC currently manages on a stream/section basis. This approach will facilitate presenting the resource classifications (Table 8) needed to generate management plans (PFBC 1987).

North Fork of Mehoopany Creek

We divided the North Fork of Mehoopany Creek into two sections for fisheries management purposes. Section 01 extended 5.3 km from the headwaters downstream to the confluence with Smith Cabin Run. Section 02 extended 16.3 km from the confluence with Smith Cabin Run downstream to the mouth. Road access to both sections was excellent as at least 90% of each section was within 300 m of a road.

Section 01

We sampled at a single station (RM 10.50) in Section 01 that was approximately the same station as Daniels et al. (1977) sampled during the historic work. Total alkalinity at our station was 62 mg/l and pH was 7.4. Daniels et al. (1977) recorded a total alkalinity of 40 mg/l and a pH of 7.4 at this site.

We captured 11 fish species at RM 10.50 but the gamefish community was limited to a single wild brook trout and four hatchery brown trout. Daniels et al. (1977) captured 10 species at this station but gamefish were absent. Bluegill *Lepomis macrochirus* was the only species present in 1977 but absent in 2001. Those species present in 2001 but absent in 1977 were brook and brown trout.

Section 01 did not qualify for the statewide trout stocking program because of posting concerns and was too warm to support wild trout. Thus, the best management option for Section 01 is Natural Yield.

Section 02

We sampled at five stations in Section 02 (RM 8.60, RM 6.50, RM 4.60, RM 2.90, and RM 0.00). All of these stations were approximately the same as those Daniels et al. (1977) sampled during the historic work. Total alkalinity at our stations ranged from 38 to 56 mg/l, total hardness ranged from 43 to 66 mg/l, and specific conductance ranged from 44 to 134 umhos. Our water chemistry values at each site were generally higher than those reported by Daniels et al. (1977) but the trend in values was similar. That is, water chemistry values at the upstream stations were usually higher than those at the downstream stations. Additionally, as was the case in 1977, specific conductance at RM 6.50 was much lower than at all other sites.

We captured 21 fish species in Section 02 while Daniels et al. (1977) captured 18. During both surveys, however, gamefish populations were sparse. The gamefish community in Section 02 consisted of 17 hatchery trout during the 2001 work and 3 hatchery trout, 11 fingerling smallmouth bass, and 1 largemouth bass during the 1977 work. Those fish species present in 1977 but absent in 2001 were rosyface shiners, white catfish, smallmouth bass, and largemouth bass. Those fish species present in 2001 but absent in 1977 were rainbow trout, brook trout, spottail shiners, swallowtail shiners, pumpkinseeds *Lepomis gibbosus*, greenside darters, and yellow perch.

Section 02 was too warm to support wild trout and lacked sufficient habitat to support substantial warmwater gamefish populations. We currently manage this section with hatchery trout under the Optimum Yield 2 - Rural program and we recommend that this management continue to provide at least a seasonal recreational fishery in the area.

Wolf Run

Wolf Run is a 3.8 km long, low gradient tributary to the North Fork of Mehoopany Creek. Wolf Run originates from the outlet of an unnamed pond in Wilmot Township, Bradford County, and flows generally south. Land use in the drainage is a mixture of agriculture and woodlots. Access to Wolf Run is very good as 75% of its length is within 300 m of a road.

We sampled at a single station on Wolf Run. Total alkalinity at RM 0.73 was 38 mg/l and pH was 7.2. We captured seven fish species at RM 0.73 but gamefish were absent. Wolf Run was too warm to support a wild trout population and too narrow to qualify for the statewide trout stocking program. Thus, the best management option for this stream is Natural Yield.

Smith Cabin Run

Smith Cabin Run is a 2.6 km long, high gradient tributary to the North Fork of Mehoopany Creek. Smith Cabin Run originates from the outlet of an unnamed pond on Briskey Mountain and flows generally east through forested lands. The drainage contains two unnamed tributaries and a portion of SGL 66. Access to Smith Cabin Run is excellent as 100% of its length is within 300 m of a road.

We sampled at a single station on Smith Cabin Run. Total alkalinity at RM 0.62 was 29 mg/l and pH was 7.0. We did not electrofish in Smith Cabin Run because the only water we found in the stream was in the pool where we sampled. Considering its lack of fish habitat, the best management option for Smith Cabin Run is Natural Yield.

Barnes Brook

Barnes Brook is a 2.9 km long, high gradient tributary to the North Fork of Mehoopany Creek. Barnes Brook originates on Bartlett Mountain and flows generally northwest through mostly forested lands. The Barnes Brook drainage contains Coffee Brook and a portion of SGL 57. Access to Barnes Brook is good as 51% of its length is within 300 m of a road.

We sampled at a single station on Barnes Brook. Total alkalinity at RM 0.00 was 40 mg/l and pH was 6.6. We did not electrofish in Barnes Brook because the stream was dry except for some water remaining in stagnant pools. Considering its lack of fish habitat, the best management option for Barnes Brook is Natural Yield.

Coffee Brook

Coffee Brook is a 1.8 km long, high gradient tributary to Barnes Brook. Coffee Brook originates from Crane Swamp and flows generally north. The forested drainage is primarily within private, heavily posted lands. Access to Coffee Brook is poor as no portion of its length is within 500 m of a road.

We did not sample Coffee Brook because, despite several attempts, we were unable to gain access across the heavily posted lands surrounding the stream. Considering this stream's short length and the fact that Barnes Brook, its receiving stream, had very little flow, it was likely that Coffee Brook was dry. Thus, the best management option for Coffee Brook is Natural Yield.

Sciota Brook

Sciota Brook is a 2.2 km long, moderate gradient tributary to the North Fork of Mehoopany Creek. Sciota Brook originates at the confluence of two unnamed tributaries in Colley Township, Sullivan County, and flows generally south. Land use in the drainage is a mixture of agriculture and woodlots. Access to Sciota Brook is excellent as 100% of its length is within 300 m of a road.

We sampled at a single station on Sciota Brook. Total alkalinity at RM 0.28 was 48 mg/l and pH was 7.2. We did not electrofish in Sciota Brook because of low stream flow. Considering its lack of fish habitat, the best management option for Sciota Brook is Natural Yield.

Catlin Brook

Catlin Brook is a 1.9 km long, high gradient tributary to the North Fork of Mehoopany Creek. Catlin Brook originates from the outlet of an unnamed pond on SGL 57 and flows generally north

through mostly forested lands. Access to Catlin Brook is fair as 46% of its length is within 300 m of a road.

Catlin Brook was dry when we attempted to sample it on July 31, 2001. Thus, the best management option for this stream is Natural Yield.

Miller Brook

Miller Brook is a 2.4 km long, low gradient tributary to the North Fork of Mehoopany Creek. Miller Brook originates at the confluence of two unnamed tributaries in North Branch Township, Wyoming County, and flows generally southeast through a mixture of agricultural and forested lands. Access to Miller Brook is very good as 83% of its length is within 300 m of a road.

We sampled at a single station on Miller Brook. Total alkalinity at RM 0.03 was 64 mg/l and pH was 7.4. We captured eight fish species at this station but the only gamefish present was a single hatchery brook trout. Miller Brook was too warm to support a wild trout population and too narrow to qualify for the statewide trout stocking program. Thus, the best management option for this stream is Natural Yield.

Burgess Brook

Burgess Brook is a 2.0 km long, high gradient tributary to the North Fork of Mehoopany Creek. Burgess Brook originates on Bartlett Mountain near the SGL 57 border and flows generally north. The drainage is a mixture of forested lands in the headwaters and agricultural lands towards the mouth. Access to Burgess Brook is poor as only 9% of its length is within 300 m of a road.

We sampled at a single station on Burgess Brook. Total alkalinity at RM 0.00 was 12 mg/l and pH was 6.4. We captured five fish species at this station including wild brook and brown trout. We captured 41 individual wild brook trout ranging from 50 to 199 mm total length (Figure 2) and a single wild brown trout measuring between 150 and 174 mm total length. Despite the low number of fish present, wild brook trout biomass was 43.35 kg/ha (Class A) because of this station's narrow (0.8 m) average width. The angler expectation rating was poor.

The most appropriate management option for Burgess Brook is statewide angling regulations under the Wild Trout Waters option. Special regulations would not be appropriate because of the limited fish habitat available in this stream. Additionally, the DEP should upgrade the Chapter 93 water quality classification of Burgess Brook from CWF to high-quality coldwater fishery (HQ-CWF).

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Douglas Hollow

Douglas Hollow is a 2.8 km long, high gradient tributary to the North Fork of Mehoopany Creek. Douglas Hollow originates in North Branch Township, Wyoming County, and flows generally south through a mixture of forested and agricultural lands. Access to Douglas Hollow is excellent as 100% of its length is within 300 m of a road.

We sampled at a single station on Douglas Hollow. Total alkalinity at RM 0.06 was 58 mg/l and pH was 7.2. We captured four fish species at RM 0.06 including two wild brook trout ranging from 75 to 149 mm total length. Restricted physical habitat was the primary factor limiting the wild brook trout population in Douglas Hollow. The stream at RM 0.06 was only 0.9 m wide and was dry or nearly so between some of the small pools. Thus, the most appropriate management option for Douglas Hollow is Natural Yield.

Farr Hollow

Farr Hollow is a 5.0 km long, moderate gradient tributary to the North Fork of Mehoopany Creek. Farr Hollow originates from the outlet of an unnamed pond in Windham Township, Wyoming County, and flows generally southeast through a mixture of agricultural and forested lands. Access to Farr Hollow is good as 57% of its length is within 300 m of a road.

We sampled at two stations (RM 3.00 and RM 0.14) on Farr Hollow. Total alkalinity at our stations ranged from 66 to 72 mg/l and pH ranged from 7.0 to 7.4. We did not electrofish at RM 3.00 because of low stream flow. At RM 0.14 we captured 11 fish species including three wild brook trout ranging from 125 to 174 mm total length and a single hatchery brook trout that was stocked by local landowners. As was the case with Douglas Hollow, restricted physical habitat was the primary factor limiting the wild brook trout population in Farr Hollow. Thus, the most appropriate management option for Farr Hollow is Natural Yield.

MANAGEMENT RECOMMENDATIONS

1. The Pennsylvania Fish and Boat Commission should continue to stock adult trout in Section 02 of the North Fork Mehoopany Creek under the Optimum Yield 2 - Rural program. Stocking rates should be determined according to program guidelines.

2. The Pennsylvania Fish and Boat Commission should manage Burgess Brook with conventional, statewide angling regulations under the Wild Trout Waters option. This section supported a Class A wild brook trout population.

3. The Pennsylvania Department of Environmental Protection should upgrade the Chapter 93 water quality classification of Burgess Brook from coldwater fishery to high quality coldwater fishery.

4. The Pennsylvania Fish and Boat Commission should manage the remaining stream sections in the North Fork Mehoopany Creek basin for their existing fish populations under the Natural Yield option.

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Table 1. Named streams of the North Fork Mehoopany Creek basin (404G) listed in hierarchical order.

North Fork Mehoopany Creek Section 01
Wolf Run
North Fork Mehoopany Creek Section 02
Smith Cabin Run
Barnes Brook
Coffee Brook
Sciota Brook
Catlin Brook
Miller Brook
Burgess Brook
Douglas Hollow
Farr Hollow

Table 2. Station number, river mile, downstream limit, length electrofished, and voltage for stations sampled during 2001 in the North Fork Mehoopany Creek basin (404G).

Stream	Station Number	River Mile	Downstream Limit	Length (m)	Volt
North Fork Mehoopany Creek	0101	10.50	T-409	150	100 AC
	0201	8.60	3.4 km upstream from county line	160	125 AC
	0202	6.50	Confluence Sciota Brook	150	125 AC
	0203	4.60	T-423	150	125 AC
	0204	2.90	Confluence Burgess Brook	150	125 AC
	0205	0.00	Mouth	180	200 AC
Wolf Run	0101	0.73	SR 1009	150	300 DC
Smith Cabin Run	0101	0.62	Second T-409 bridge upstream from mouth	NA	NA
Barnes Brook	0101	0.00	Mouth	NA	NA
Sciota Brook	0101	0.28	SR 87	NA	NA
Miller Brook	0101	0.03	90 m downstream from SR 87	150	200 DC
Burgess Brook	0101	0.00	Mouth	300	300 DC
Douglas Hollow	0101	0.06	SR 87	150	200 DC
Farr Hollow	0101	3.00	SR 3001	NA	NA
	0101	0.14	T-306	150	200 DC

NA = Not Available.

Table 3. Physical and social data for stream sections in the North Fork Mehoopany Creek basin (404G).

Stream (Section)	Length (km)	Width (m)	Gradient (m/km)	USGS Quadrangle(s)	Road Access % of Section Within: 100 m	300 m	500 m	2000 Human Population Density (# Persons/km^2)
North Fork Mehoopany Ck (01)	5.3	5.3	7.1	F35	65	92	100	9
North Fork Mehoopany Ck (02)	16.3	8.1	13.1	F35, F36, F37	66	99	100	3
Wolf Run (01)	3.8	1.9	13.1	F35	18	75	98	7
Smith Cabin Run (01)	2.6	NA	89.2	F35	69	100	100	4
Barnes Brook (01)	2.9	NA	102.1	F36	4	51	64	4
Coffee Brook (01)	1.8	NA	141.4	F36, G36	0	0	0	4
Sciota Brook (01)	2.2	NA	37.1	F36	39	100	100	4
Catlin Brook (01)	1.9	NA	193.5	F36	20	46	52	3
Miller Brook (01)	2.4	2.5	7.7	F36	39	83	100	3
Burgess Brook (01)	2.0	0.8	90.6	F36	0	9	22	3
Douglas Hollow (01)	2.8	0.9	60.0	F36	55	100	100	3
Farr Hollow (01)	5.0	0.6	23.4	F36	36	57	85	5

USGS Quadrangles: F35 = Colley; F36 = Jenningsville; F37 = Meshoppen; G36 = Dutch Mountain.

NA = Not Available.

Table 4. Physical-chemical data collected at sampling stations in the North Fork Mehoopany Creek basin (404G) during 2001.

Stream	River Mile	Date	Time	Air Temp. °C	Water Temp. °C	pH	Total Alkalinity (mg/l)	Total Hardness (mg/l)	Specific Conductance (umhos)
North Fork Mehoopany Creek	10.50	7/30	0940	21.0	18.2	7.4	62	82	142
	8.60	7/27	1340	23.0	23.5	7.4	56	66	134
	6.50	7/27	1220	23.0	21.3	7.4	38	46	44
	4.60	7/27	1130	21.0	19.6	7.2	38	43	98
	2.90	7/27	1040	19.0	18.8	7.4	38	48	114
	0.00	7/27	1020	19.0	19.2	7.4	42	50	121
Wolf Run	0.73	7/30	1025	21.0	17.0	7.2	38	46	60
Smith Cabin Run	0.62	7/30	1010	21.0	16.7	7.0	29	41	81
Barnes Brook	0.00	7/31	1415	25.0	17.8	6.6	40	48	111
Sciota Brook	0.28	7/30	1340	25.0	17.8	7.2	48	60	84
Miller Brook	0.03	7/31	1320	30.0	20.6	7.4	64	76	146
Burgess Brook	0.00	8/02	0930	26.0	16.7	6.4	12	20	40
Douglas Hollow	0.06	8/02	1030	25.0	17.1	7.2	58	74	136
Farr Hollow	3.00	8/02	1120	28.0	19.1	7.0	72	132	266
	0.14	8/02	1130	28.0	17.4	7.4	66	84	135

Table 5. Scientific and common names of fish species captured in the North Fork Mehoopany Creek basin (404G) during the 2001 and historic surveys.

Scientific name	Common name	2001	Historic
Oncorhynchus mykiss	Rainbow trout	X	
Salmo trutta	Brown trout	X	X
Salvelinus fontinalis	Brook trout	X	
Campostoma anomalum	Central stoneroller	X	X
Exoglossum maxillingua	Cutlips minnow	X	X
Notemigonus crysoleucas	Golden shiner	X	
Luxilus cornutus	Common shiner	X	X
Notropis hudsonius	Spottail shiner	X	
Notropis procne	Swallowtail shiner	X	
Notropis rubellus	Rosyface shiner		X
Rhinichthys atratulus	Blacknose dace	X	X
Rhinichthys cataractae	Longnose dace	X	X
Semotilus atromaculatus	Creek chub	X	X
Nocomis micropogon	River chub	X	X
Catostomus commersoni	White sucker	X	X
Hypentelium nigricans	Northern hog sucker	X	X
Ameiurus catus	White catfish		X
Ameiurus nebulosus	Brown bullhead	X	
Noturus insignis	Margined madtom	X	X
Lepomis gibbosus	Pumpkinseed	X	X
Lepomis macrochirus	Bluegill	X	X
Micropterus dolomieu	Smallmouth bass		X
Micropterus salmoides	Largemouth bass		X
Etheostoma olmstedi	Tessellated darter	X	X
Etheostoma blennioides	Greenside darter	X	
Perca flavescens	Yellow perch	X	
Cottus spp.	Sculpins	X	X
	Total Species:	23	19

Table 6. Fish species captured at electrofishing sites in the North Fork Mehoopany Creek basin (404G) during 2001.

Common name	North Fork Mehoopany Creek RM 10.50	RM 8.60	RM 6.50	RM 4.60	RM 2.90	RM 0.00	Wolf Run RM 0.73	Miller Brook RM 0.03	Burgess Brook RM 0.00	Douglas Hollow RM 0.06	Farr Hollow RM 0.14	Total Sites
Rainbow trout			X	X		X						3
Brown trout	X	X	X	X		X			X			6
Brook trout	X		X					X	X	X	X	6
Central stoneroller	X	X	X	X	X	X	X	X			X	9
Cutlips minnow					X	X						2
Golden shiner											X	1
Common shiner	X	X				X	X	X			X	6
Spottail shiner						X						1
Swallowtail shiner						X						1
Blacknose dace	X	X	X	X	X	X	X	X	X	X	X	11
Longnose dace	X	X	X	X	X	X		X	X		X	9
Creek chub	X	X	X	X	X		X	X	X	X	X	10
River chub					X	X						2
White sucker	X	X	X	X	X	X	X	X			X	9
Northern hog sucker						X						1
Brown bullhead											X	1
Margined madtom	X	X	X	X		X						5
Pumpkinseed	X	X		X			X				X	5
Bluegill		X										1
Tessellated darter	X	X		X		X	X	X				6
Greenside darter						X						1
Yellow perch		X										1
Sculpins					X	X				X	X	4
Total Species:	11	12	9	10	8	16	7	8	5	4	11	

RM = River Mile.

Table 7. Estimated population abundance and biomass of wild brook trout captured at River Mile 0.00 of Burgess Brook (404G) in August 2001.

Length Group (mm)	Population Estimate	Number Per Kilometer	Number Per Hectare	Kilograms Per Hectare
0 - 174	47	158	2,370	40.20
≥ 175	1	3	50	3.15
Totals	48	161	2,420	43.35

ANGLER EXPECTATION RATING: POOR

Table 8. Pennsylvania Fish and Boat Commission (PFBC) and current Pennsylvania Department of Environmental Protection (DEP) classifications, recommended DEP classification upgrades, and recommended PFBC management programs for stream sections in the North Fork Mehoopany Creek basin (404G).

Stream (Section)	Classification		Recommended DEP Upgrade	Recommended PFBC Management Program
	PFBC	DEP		
North Fork Mehoopany Creek (01)	D R3	CWF	None	Natural Yield
North Fork Mehoopany Creek (02)	DGR3	CWF	None	Optimum Yield 2 - Rural
Wolf Run (01)	D R4	CWF	None	Natural Yield
Smith Cabin Run (01)	R	CWF	None	Natural Yield
Barnes Brook (01)	R	CWF	None	Natural Yield
Coffee Brook (01)	R	CWF	None	Natural Yield
Sciota Brook (01)	R	CWF	None	Natural Yield
Catlin Brook (02)	R	CWF	None	Natural Yield
Miller Brook (01)	D R4	CWF	None	Natural Yield
Burgess Brook (01)	A R4	CWF	HQ-CWF	Wild Trout Waters
Douglas Hollow (01)	D R4	CWF	None	Natural Yield
Farr Hollow (01)	D R4	CWF	None	Natural Yield

CWF = Coldwater Fishery; HQ-CWF = High Quality Coldwater Fishery.

Figure 2. Length-frequency distribution of wild brook trout captured at River Mile 0.00 of Burgess Brook (404G) in August 2001.

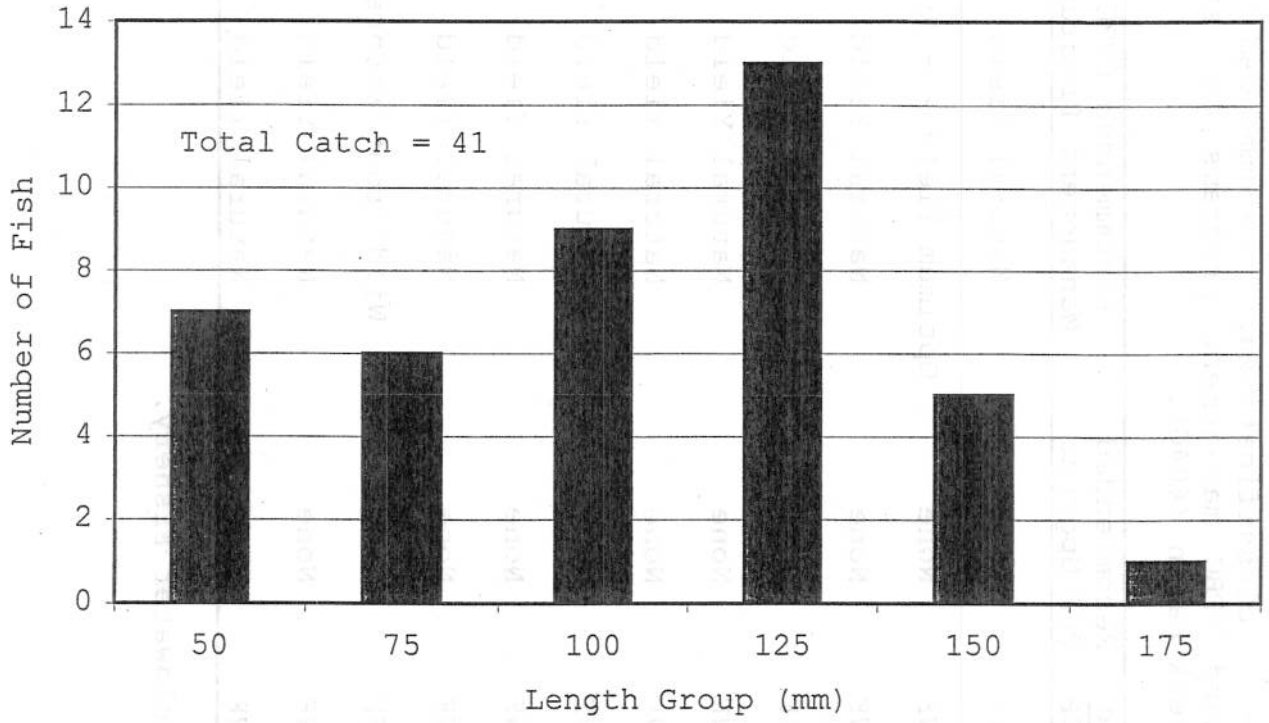
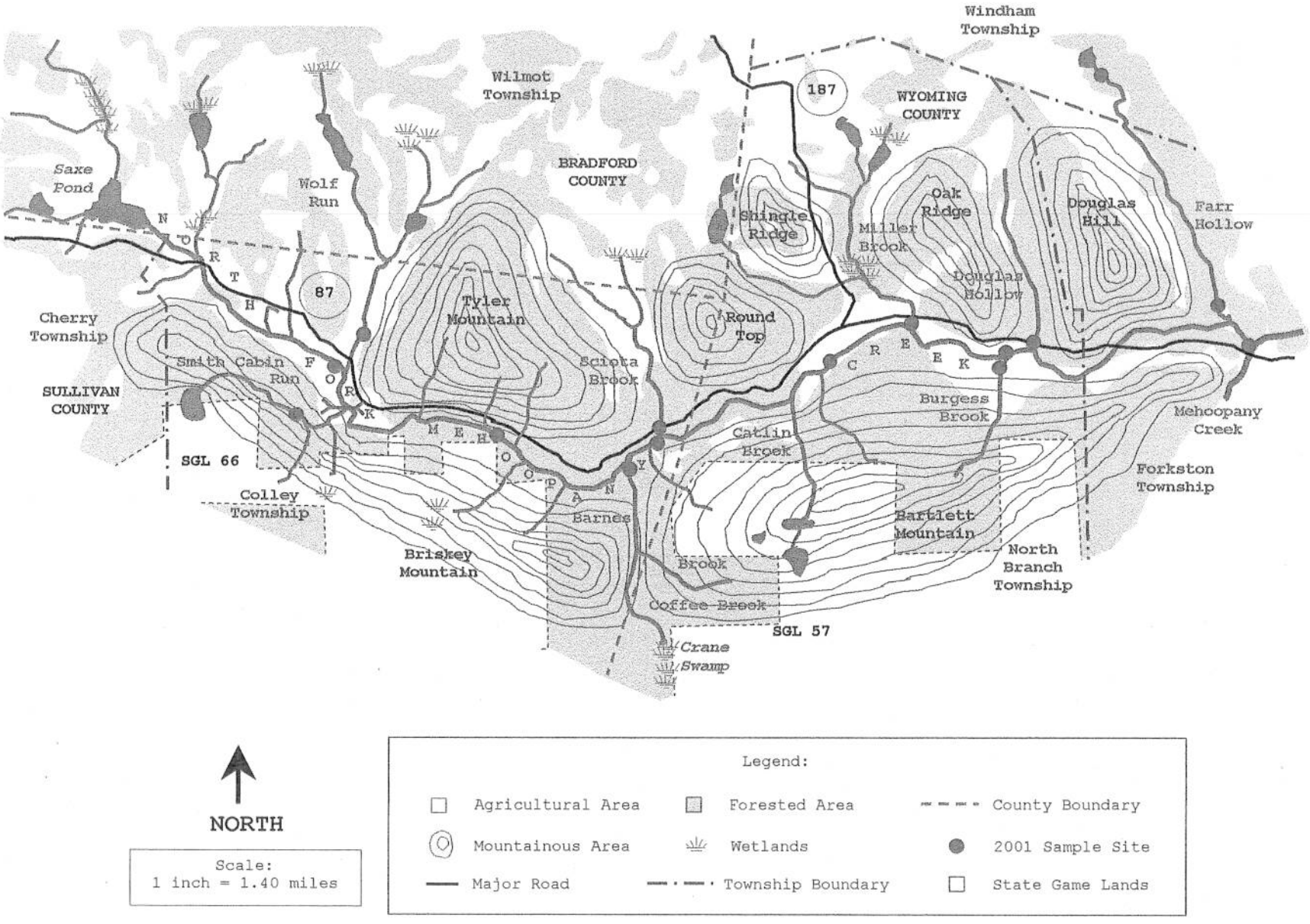


Figure 1. North Fork Mehoopany Creek Basin (404G).



DEP Stream Code: 29259

Burgess Brook