

**General Electric Company
Housatonic River - Rest of River
CMS Report**

Table 3-3 - Summary of Assumed Reach-/Alternative-Specific Production Rates

Alt.	Reach 5A	Reach 5B	Reach 5C	Reach 5	Reach 6	Reach 7	Reach 7	Reach 8	Reaches
				Backwaters	(Woods Pond)	Impoundments	Channel	(Rising Pond)	9-17
SED 1	NA	NA	NA	NA	NA	NA	NA	NA	NA
SED 2	NA	NA	NA	NA	NA	NA	NA	NA	NA
SED 3	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	NA	1.5 crews no removal TLC: 165 cy/d	NA	2 crews no removal TLC: 220 cy/d	NA	NA	NA	NA
SED 4	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1 crew removal: 110 cy/d eng. cap: 220 cy/d TLC: 110 cy/d bank removal: 110 cy/d	1.5 crews no removal eng. cap: 330 cy/d TLC: 165 cy/d	1.5 crews no removal TLC: 165 cy/d	2 crews removal: 550 cy/d eng. cap: 440 cy/d TLC: 220 cy/d	NA	NA	NA	NA
SED 5	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1.5 crews removal: 412.5 cy/d eng. cap: 330 cy/d	1.5 crews no removal TLC: 165 cy/d	2 crews removal: 550 cy/d eng. cap: 440 cy/d	NA	NA	2 crews no removal TLC: 220 cy/d	NA
SED 6	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1.5 crews removal: 412.5 cy/d eng. cap: 330 cy/d	1.5 crews removal: 412.5 cy/d eng. cap: 330 cy/d TLC: 165 cy/d	2 crews removal: 550 cy/d eng. cap: 440 cy/d	1 crew no removal TLC: 110 cy/d	NA	2 crews no removal eng. cap: 440 cy/d TLC: 220 cy/d	NA
SED 7	1 crew removal: 140 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1 crew removal: 110 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1.5 crews removal: 412.5 cy/d eng. cap: 330 cy/d	1.5 crews removal: 412.5 cy/d eng. cap: 330 cy/d TLC: 165 cy/d	2 crews removal: 700 cy/d eng. cap: 440 cy/d	1 crew removal: 275 cy/d eng. cap: 220 cy/d TLC: 110 cy/d	NA	2 crews removal: 550 cy/d eng. cap: 440 cy/d TLC: 220 cy/d	NA
SED 8	1 crew removal: 140 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1 crew removal: 140 cy/d eng. cap: 220 cy/d bank removal: 110 cy/d	1.5 crews removal: 525 cy/d eng. cap: 330 cy/d	1.5 crews removal: 525 cy/d eng. cap: 330 cy/d	2 crews removal: 700 cy/d eng. cap: 440 cy/d	1 crew removal: 275 cy/d eng. cap: 220 cy/d	NA	2 crews removal: 700 cy/d eng. cap: 440 cy/d	NA

Notes:

1. Average removal rates may increase in certain reaches for SED 7 and SED 8 to account for the somewhat faster production anticipated for increased removal volumes from within the same removal area. This results in higher removal rates in the following: Reach 5A and 6 in SED 7; Reach 5A, 5B, 5C, 5 Backwaters, 6, and 8 in SED 8.
2. cy/d = cubic yards per day
3. removal = rate of removal for mechanical excavation/hydraulic dredging
4. eng. cap = rate of placement of engineered cap
5. TLC = rate of placement of thin layer cap
6. bank removal = rate of bank removal/stabilization

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-5 - Construction Schedule Summary
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL ALTERNATIVE							
	SED 1	SED 2	SED 3	SED 4	SED 5	SED 6	SED 7	SED 8
5A	No Action Alternative	Monitored Natural Recovery	7.6	7.6	7.6	7.6	9.5	11.5
5B			0.4	2.9	4.7	4.7	5.8	6.5
5C (Upper Section)			0.0	0.5	1.3	1.3	1.3	2.5
5C (Lower Section)			0.5	1.4	1.4	2.4	2.4	4.5
5 Backwaters (Small)			0.0	0.2	0.2	0.4	0.4	1.4
5 Backwaters (Large)			0.0	1.3	1.3	1.6	2.0	8.2
6 Woods Pond (Shallow)			0.7	1.8	1.8	1.8	2.8	6.6
6 Woods Pond (Deep)			0.4	0.4	0.6	0.6	0.6	4.2
7 (Channel)			0.0	0.0	0.0	0.0	0.0	0.0
7 (Impoundments)			0.0	0.0	0.0	1.0	1.9	3.6
8 Rising Pond (Shallow)			0.0	0.0	0.4	0.4	0.5	4.1
8 Rising Pond (Deep)			0.0	0.0	0.4	0.4	0.4	4.7
9 to 17			0.0	0.0	0.0	0.0	0.0	0.0
Total			0.0	0.0	9.6	14.6	18.2	20.2

Notes:

1. Dark shading indicate those reaches in each SED alternative for which MNR is the anticipated remedial implementation.
2. Numbers shown in italics are not included in the alternative-specific assessment of project duration, as activities in Reach 5C and the Reach 5 backwaters will be performed concurrently.

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-6 - Construction Schedule - SED 3
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	6.2	--	0.6	--	--	0.8		7.6
5B	--	--	--	--	--	0.4	MNR	0.4
5C (Upper Section)	--	--	--	--	--	--	MNR	0.0
5C (Lower Section)	--	--	--	--	0.5	--	--	0.5
5 Backwaters (Small)	--	--	--	--	--	--	MNR	0.0
5 Backwaters (Large)	--	--	--	--	--	--	MNR	0.0
6 Woods Pond (Shallow)	--	--	--	--	0.7	--	--	0.7
6 Woods Pond (Deep)	--	--	--	--	0.4	--	--	0.4
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	--	--	--	--	--	--	MNR	0.0
8 Rising Pond (Shallow)	--	--	--	--	--	--	MNR	0.0
8 Rising Pond (Deep)	--	--	--	--	--	--	MNR	0.0
9 to 17	--	--	--	--	--	--	MNR	0.0

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-7 - Construction Schedule - SED 4
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	6.2	--	0.6	--	--	0.8	--	7.6
5B	1.8	--	0.2	--	0.6	0.3	--	2.9
5C (Upper Section)	--	--	--	--	0.5	--	--	0.5
5C (Lower Section)	--	--	--	1.4	--	--	--	1.4
5 Backwaters (Small)	--	--	--	--	0.2	--	MNR	0.2
5 Backwaters (Large)	--	--	--	--	1.3	--	--	1.3
6 Woods Pond (Shallow)	--	0.8	1.0	--	--	--	--	1.8
6 Woods Pond (Deep)	--	--	--	--	0.4	--	--	0.4
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	--	--	--	--	--	--	MNR	0.0
8 Rising Pond (Shallow)	--	--	--	--	--	--	MNR	0.0
8 Rising Pond (Deep)	--	--	--	--	--	--	MNR	0.0
9 to 17	--	--	--	--	--	--	MNR	0.0

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-8 - Construction Schedule - SED 5
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	6.2	--	0.6	--	--	0.8	--	7.6
5B	4.0	--	0.4	--	--	0.3	--	4.7
5C (Upper Section)	--	0.8	0.5	--	--	--	--	1.3
5C (Lower Section)	--	--	--	1.4	--	--	--	1.4
5 Backwaters (Small)	--	--	--	--	0.2	--	MNR	0.2
5 Backwaters (Large)	--	--	--	--	1.3	--	--	1.3
6 Woods Pond (Shallow)	--	0.8	1.0	--	--	--	--	1.8
6 Woods Pond (Deep)	NA	--	--	0.6	--	--	--	0.6
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	--	--	--	--	--	--	MNR	0.0
8 Rising Pond (Shallow)	NA	--	--	--	0.4	--	--	0.4
8 Rising Pond (Deep)	NA	--	--	--	0.4	--	--	0.4
9 to 17	--	--	--	--	--	--	MNR	0.0

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-9 - Construction Schedule - SED 6
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	6.2	--	0.6	--	--	0.8	--	7.6
5B	4.0	--	0.4	--	--	0.3	--	4.7
5C (Upper Section)	--	0.8	0.5	--	--	--	--	1.3
5C (Lower Section)	--	1.5	0.9	--	--	--	--	2.4
5 Backwaters (Small)	--	0.0	0.0	--	0.4	--	MNR	0.4
5 Backwaters (Large)	--	0.3	0.3	--	1.0	--	MNR	1.6
6 Woods Pond (Shallow)	--	0.8	1.0	--	--	--	--	1.8
6 Woods Pond (Deep)	NA	--	--	0.6	--	--	--	0.6
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	NA	--	--	--	1.0	--	--	1.0
8 Rising Pond (Shallow)	NA	--	--	--	0.4	--	--	0.4
8 Rising Pond (Deep)	NA	--	--	0.4	--	--	--	0.4
9 to 17	--	--	--	--	--	--	MNR	0.0

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-10 - Construction Schedule - SED 7
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	7.9	--	1.0	--	--	0.6	--	9.5
5B	5.0	--	0.5	--	--	0.3	--	5.8
5C (Upper Section)	--	0.8	--	0.5	--	--	--	1.3
5C (Lower Section)	--	1.5	--	0.9	--	--	--	2.4
5 Backwaters (Small)	--	0.1	--	0.1	0.2	--	MNR	0.4
5 Backwaters (Large)	--	0.6	--	0.7	0.7	--	MNR	2.0
6 Woods Pond (Shallow)	--	1.1	--	1.7	--	--	--	2.8
6 Woods Pond (Deep)	--	--	--	0.6	--	--	--	0.6
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	--	0.6	--	0.8	0.5	--	--	1.9
8 Rising Pond (Shallow)	--	0.1	--	0.2	0.2	--	--	0.5
8 Rising Pond (Deep)	--	--	--	0.4	--	--	--	0.4
9 to 17	--	--	--	--	--	--	MNR	0.0

General Electric Company
Housatonic River - Rest of River
CMS Report

Table 3-11 - Construction Schedule - SED 8
(Construction durations are shown in Years)

REACH	SEDIMENT REMEDIAL TECHNOLOGY							TOTAL
	REMOVAL		BACKFILL/CAPPING			BANK STABILIZATION	MONITORED NATURAL RECOVERY	
	Mechanical - Dry	Hydraulic/ Mechanical - Wet	Backfill	Engineered Capping	Thin-Layer Capping			
5A	9.7	--	1.2	--	--	0.6	--	11.5
5B	5.5	--	0.7	--	--	0.3	--	6.5
5C (Upper Section)	--	1.0	1.5	--	--	--	--	2.5
5C (Lower Section)	--	1.7	2.8	--	--	--	--	4.5
5 Backwaters (Small)	--	0.6	0.9	--	--	--	--	1.4
5 Backwaters (Large)	--	3.2	5.0	--	--	--	--	8.2
6 Woods Pond (Shallow)	--	2.5	4.1	--	--	--	--	6.6
6 Woods Pond (Deep)	--	1.6	2.6	--	--	--	--	4.2
7 (Channel)	--	--	--	--	--	--	MNR	0.0
7 (Impoundments)	--	1.6	2.0	--	--	--	--	3.6
8 Rising Pond (Shallow)	--	1.6	2.5	--	--	--	--	4.1
8 Rising Pond (Deep)	--	1.8	2.9	--	--	--	--	4.7
9 to 17	--	--	--	--	--	--	MNR	0.0

**General Electric Company
Housatonic River – Rest of River
CMS Report**

**Table 3-12 – Age Classes in FCM Corresponding to 120 mm Length, by Species
Used for Comparison of Model Results to IMPGs for Threatened and Endangered Species**

Species	Minimum Age Class	Maximum Age Class
Brown bullhead (bottom feeder)	2	6
Cyprinids (forage fish)	5	6
Largemouth bass (predatory)	2	10
Sunfish (forage fish)	3	6
White sucker (bottom feeder)	2	6

**Table 3-13 — FCM Species Weighting Factors in Each Subreach Used to
Compute Average Concentrations for Evaluation of Threatened and Endangered Species IMPGs**

Species	Subreach													
	5A	5B	5C	5D	WP	7A	7B	7C	7D	7E	7F	7G	7H	RP
BB	0	0.322	0.322	0.322	0.644	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322
WS	0.644	0.322	0.322	0.322	0	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322	0.322
LMB	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206
SF	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
CP	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075

Notes: BB = Brown Bullhead (bottom feeder); WS = White Sucker (bottom feeder); LMB = Largemouth Bass (predatory); SF = Sunfish (forage fish); CP = Cyprinids (forage fish)

**General Electric Company
Housatonic River – Rest of River
CMS Report**

**Table 3-14 – Age Classes in FCM Corresponding to 130 to 400 mm Length, by Species
Used for Comparison of Model Results to IMPGs for Piscivorous Birds**

Species	Minimum Age Class	Maximum Age Class
Brown bullhead (bottom feeder)	2	6
Cyprinids (forage fish)	6	6
Largemouth bass (predatory)	2	10
Sunfish (forage fish)	3	6
White sucker (bottom feeder)	2	6

**Table 3-15 – FCM Species Weighting Factors in Each Subreach Used to
Compute Average Concentrations for Evaluation of Piscivorous Bird IMPGs**

Species	Subreach													
	5A	5B	5C	5D	WP	7A	7B	7C	7D	7E	7F	7G	7H	RP
BB	0	0.2	0.2	0.2	0.25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
WS	0.25	0.2	0.2	0.2	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
LMB	0.25	0.2	0.2	0.2	0.25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SF	0.25	0.2	0.2	0.2	0.25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
CP	0.25	0.2	0.2	0.2	0.25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Notes: BB = Brown Bullhead (bottom feeder); WS = White Sucker (bottom feeder); LMB = Largemouth Bass (predatory); SF = Sunfish (forage fish); CP = Cyprinids (forage fish)