

- LEGEND:
- RIFFLE
 - RUN
 - SLACK
 - POOL
 - DEPOSITIONAL FEATURE

0 40' 80'

GRAPHIC SCALE

DRAFT

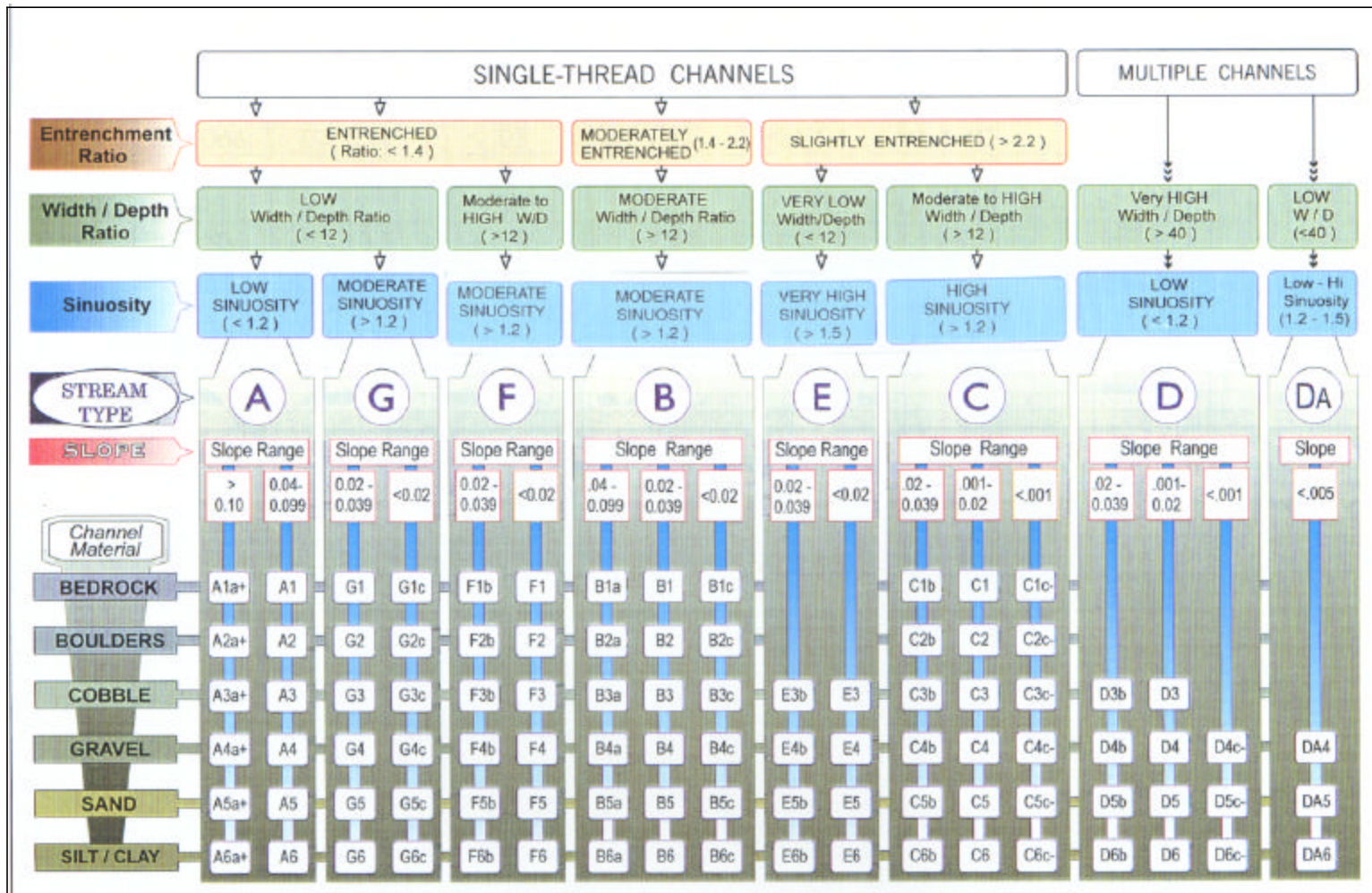
GENERAL ELECTRIC COMPANY
PITTSFIELD, MASSACHUSETTS
REMOVAL ACTION WORK PLAN—
UPPER 1/2-MILE REACH OF HOUSATONIC RIVER

AQUATIC HABITAT BASE MAP

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engineers & scientists

FIGURE
5-1

X: 20197X01.DWG, 20197X02.DWG, 20197X03.DWG, HISTRI.V01.TIF THROUGH HISTRI.V19.TIF
L: LARGE.PCT, 4810CL.RCP
01/13/99 SWI-54-NES KLN RLP
01/17/00 HSB R/L 2/01/07BLO.DWG



From Rosgen (1996).

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 UPPER ½-MILE REACH OF HOUSATONIC RIVER

**CLASSIFICATION SCHEME FOR
 NATURAL RIVERS**

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**FIGURE
 5-2**



The B5 stream types are moderately entrenched systems with channel gradients of 2-4%. B5 stream types are typically established on stable, well vegetated alluvial fans, colluvial deposits and relatively narrow, moderately sloping valleys. Landforms are observed as areas with gentle, rolling slopes in relatively narrow, colluvial valleys, and soils derived from residual materials including gneissic granite, eolian sand deposits, and colluvial deposits. Valley types that contain B5 stream channels are types II, III, and VII. The channel bed morphology is dominated by sand-sized materials and characterized as a series of rapids with irregular spaced scour pools.

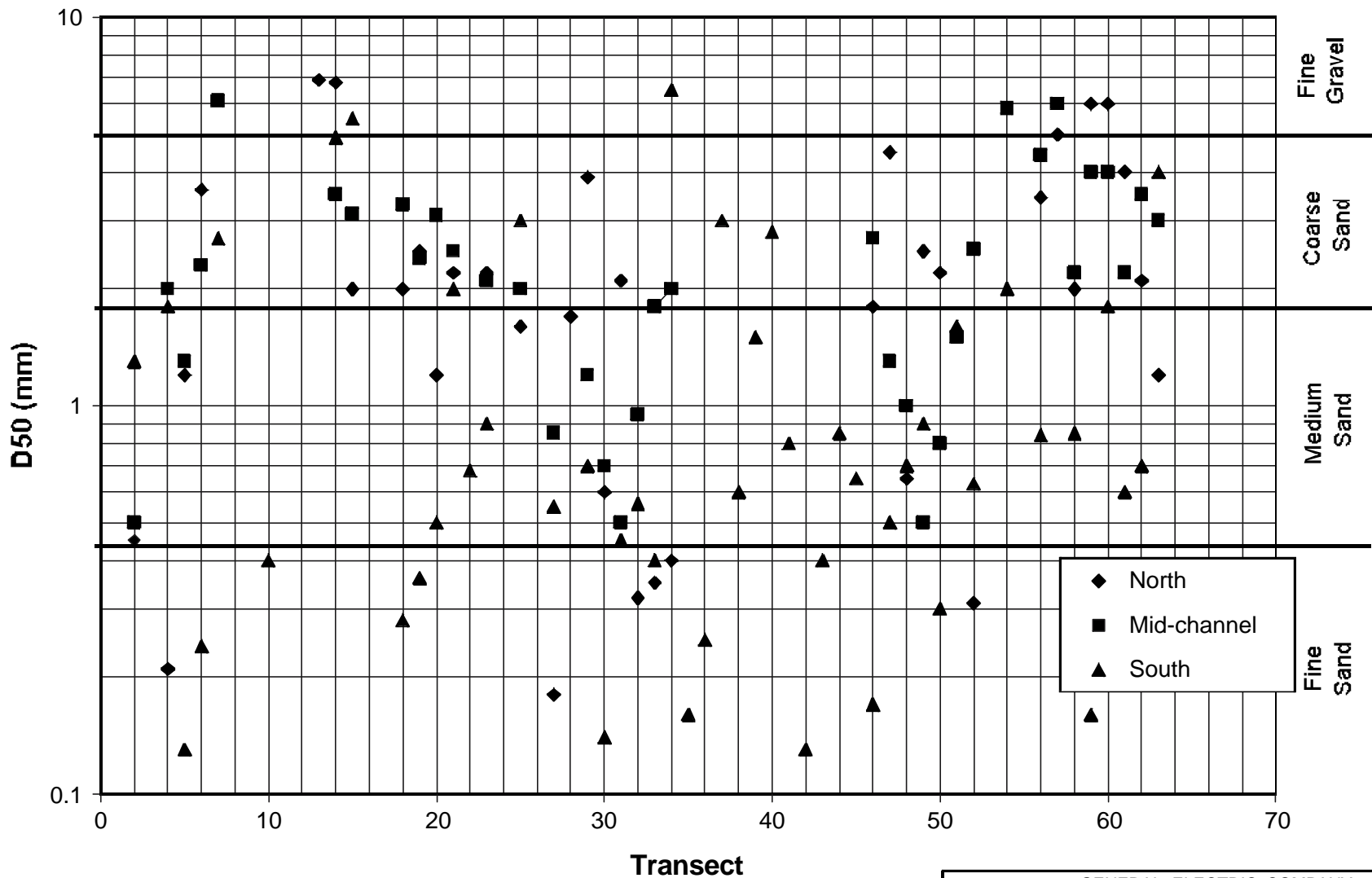
The average pool-to-pool spacing for the B5 stream type is 3-4 bankfull channel widths. Pool to pool spacing for the B5c (<2% slope) is generally 4-5 bankfull channel widths. Pool to pool spacing adjusts inversely with stream gradient. The B5 stream type has a moderate width/depth ratio and a sinuosity greater than 1.2. The channel materials are composed predominantly of sand and small gravel with occasional amounts of silt/clay. The B5 stream type is relatively stable where the presence of dense riparian vegetation is noted. Large, woody, organic debris is an important component of fisheries habitat where sources are available.

5-76

From Rosgen (1996).

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DESCRIPTION OF A TYPICAL B5 STREAM TYPE



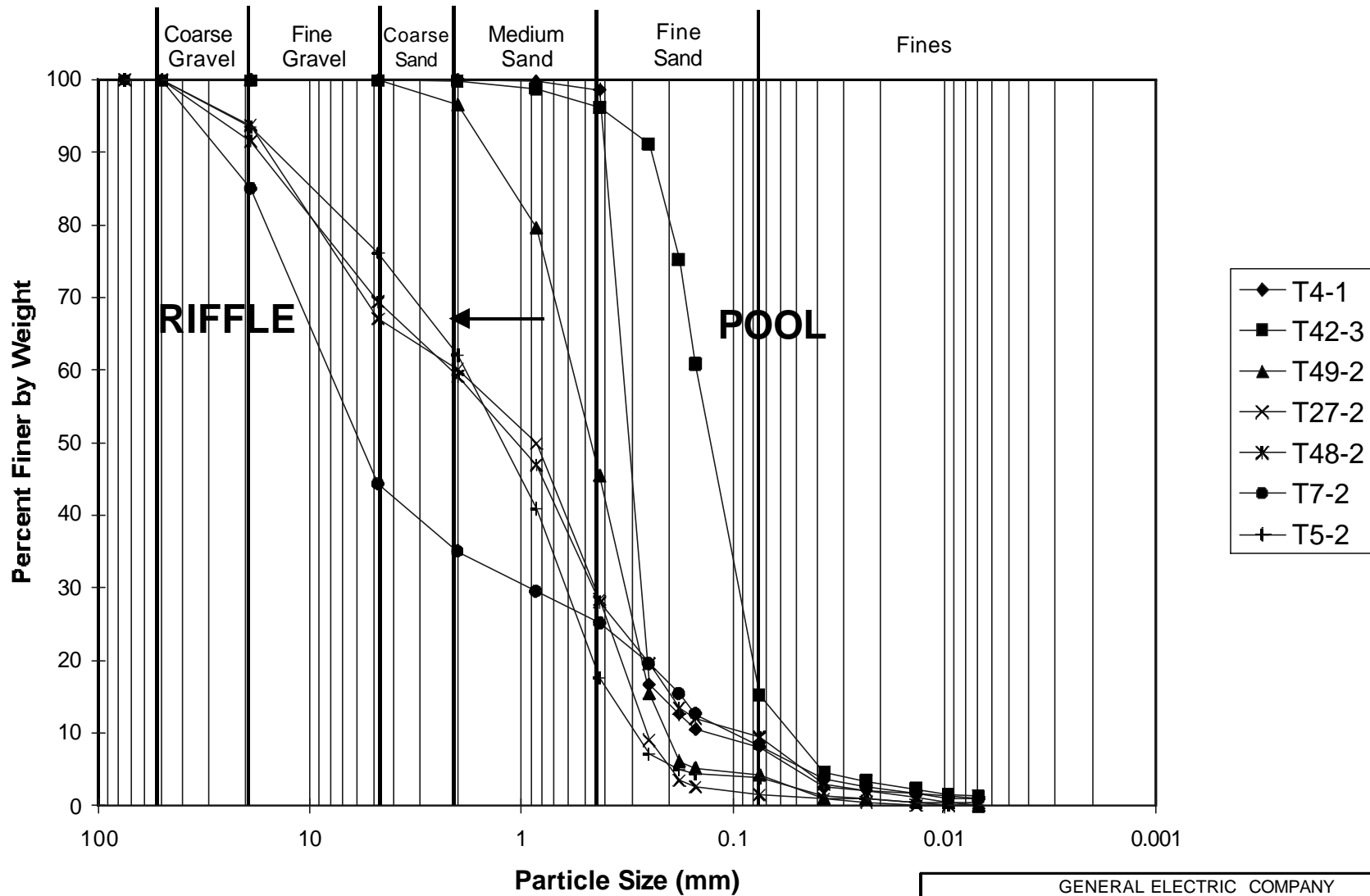
◆ North
 ■ Mid-channel
 ▲ South

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SEDIMENT SURFACE PARTICLE SIZE

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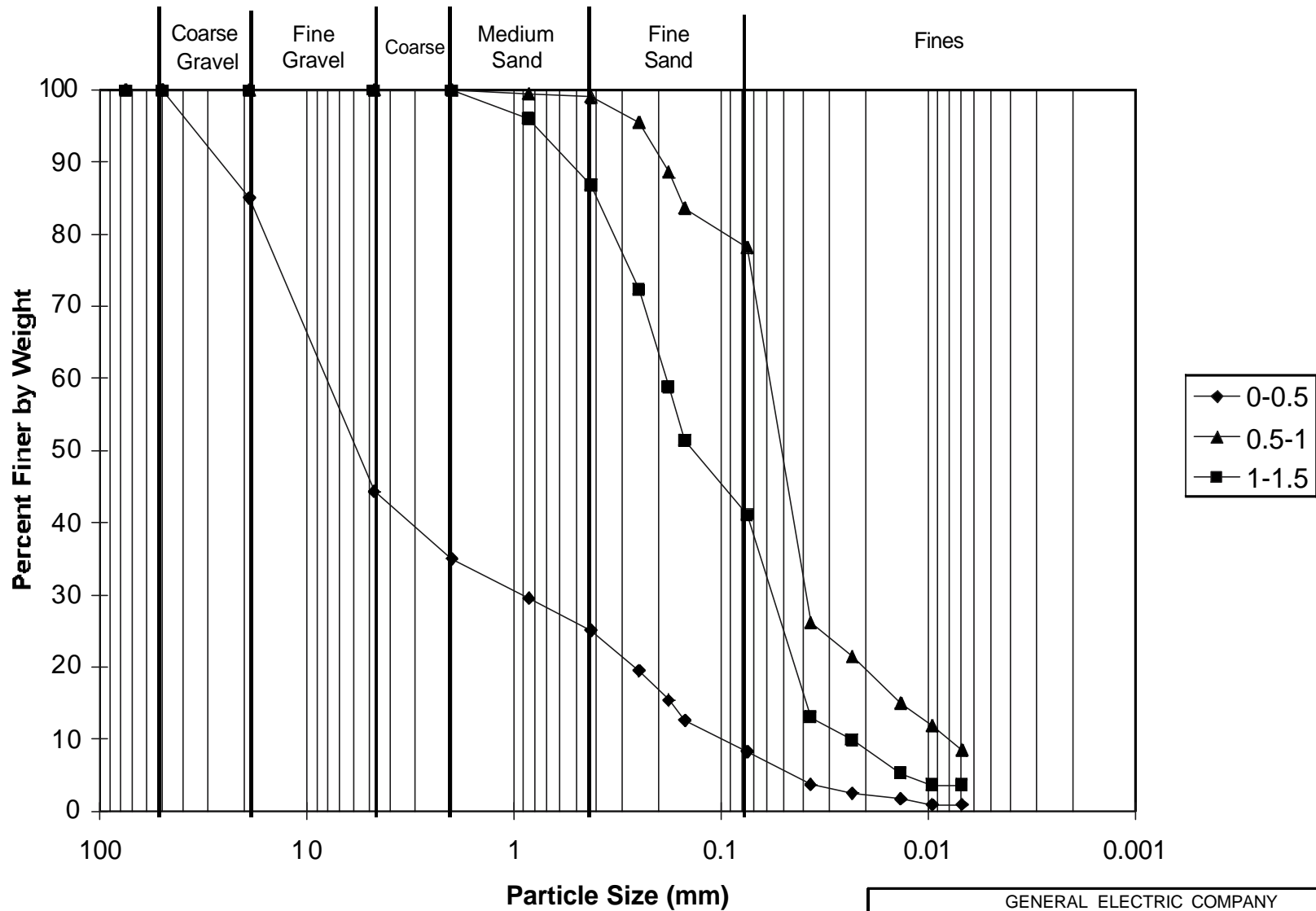
FIGURE
5-4



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**PARTICLE SIZE DISTRIBUTION
 IN POOL AND RIFFLE AREAS**

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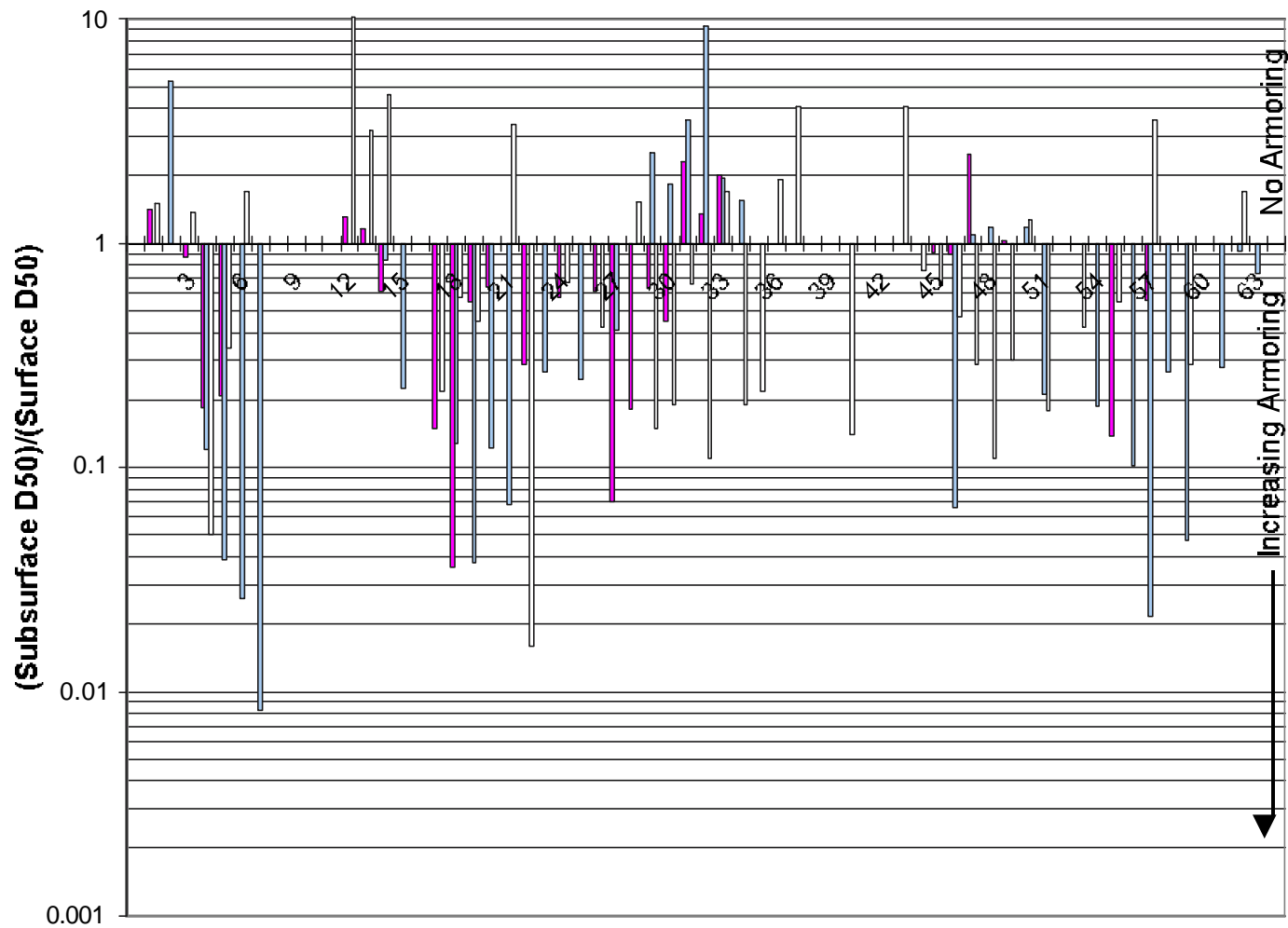


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**PARTICLE SIZE DISTRIBUTION IN
 RIFFLES WITH DEPTH**

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**FIGURE
 5-6**



Transect

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**NORTH, MID-CHANNEL, AND SOUTH
 SEDIMENT NORMALIZED WITH
 DEPTH 0.0-0.5 FEET**

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**FIGURE
 5-7**



Plot 4

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	3	25.1	1.8
Black cherry	<i>Prunus serotina</i>	2	16.7	1.2
Norway spruce	<i>Picea canadensis</i>	1	8.3	0.5
White pine	<i>Pinus strobus</i>	1	8.3	0.5
Red pine	<i>Pinus resinosa</i>	1	8.3	0.5
White spruce	<i>Picea canadensis</i>	1	8.3	0.5

Plot 5

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Norway spruce	<i>Picea canadensis</i>	2	22.2	1.1
Black cherry	<i>Prunus serotina</i>	1	11.1	0.5
White pine	<i>Pinus strobus</i>	1	11.1	0.5
Red pine	<i>Pinus resinosa</i>	1	11.1	0.5
White spruce	<i>Picea canadensis</i>	1	11.1	0.5

- LEGEND:**
- VEGETATION INVENTORY PLOT
 - SPECIFIC VEGETATION AREA
 - HIGH FLOOD PLAIN/MIXED DECIDUOUS HARDWOODS
 - ANIMAL TRACES
 - TOP OF BANK

Plot 1

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

Plot 2

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

Plot 7

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

Plot 6

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

Plot 3

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

PLOT 10

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

PLOT 9

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

Plot 8

Common Name	Scientific Name	# Stems	Rel. Stem Density (%)	Avg. DBH (in.)
Black willow	<i>Salix nigra</i>	10	33.3	1.8
Black cherry	<i>Prunus serotina</i>	4	13.3	1.2
Norway spruce	<i>Picea canadensis</i>	2	6.7	0.5
White pine	<i>Pinus strobus</i>	2	6.7	0.5
Red pine	<i>Pinus resinosa</i>	2	6.7	0.5

DRAFT

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**RIPARIAN HABITAT
BASE MAP**

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