

12-4-2009

Ex. 280-US-418

Unknown

Follow this and additional works at: <https://digitalcommons.law.uidaho.edu/klamath>

Recommended Citation

Unknown, "Ex. 280-US-418" (2009). *In re Klamath River (Klamath Tribe)*. 150.
<https://digitalcommons.law.uidaho.edu/klamath/150>

This Expert Report is brought to you for free and open access by the Hedden-Nicely at Digital Commons @ UIdaho Law. It has been accepted for inclusion in In re Klamath River (Klamath Tribe) by an authorized administrator of Digital Commons @ UIdaho Law. For more information, please contact annablaine@uidaho.edu.

FISHCRV.06

Habitat SUITABILITY Criteria CURVES FOR KLAMATH IFIM/PHABSIM PROJECT												
H	10101	5	3	2	0	REDBAND TROUT						
V	10101	0.00	0.40	0.25	1.00	2.00	1.00	3.00	0.00	100.00	0.00	
D	10101	0.00	0.00	1.00	1.00	100.00	1.00					
S	10101	0.00	1.00	100.00	1.00							
H	10102	4	4	2	0	REDBAND TROUT						
V	10102	0.00	1.00	1.40	1.00	3.00	0.00	100.00	0.00			
D	10102	0.00	0.00	0.20	0.00	1.20	1.00	100.00	1.00			
S	10102	0.00	1.00	100.00	1.00							
H	10103	8	12	2	0	REDBAND TROUT						
V	10103	0.00	1.00	0.49	0.78	0.98	0.19	1.48	0.04	1.97	0.01	
V	10103	2.95	0.00	100.00	0.00							
D	10103	0.00	0.00	0.10	0.11	0.50	1.00	1.64	1.00	2.46	0.29	
D	10103	4.10	0.04	4.92	0.02	5.74	0.01	7.38	0.01	8.20	0.00	
S	10103	0.00	1.00	100.00	1.00							
H	10104	8	10	8	0	REDBAND TROUT						
V	10104	0.00	0.00	0.50	0.00	0.75	1.00	2.00	1.00	2.50	0.70	
V	10104	3.00	0.00	100.00	0.00							
D	10104	0.00	0.00	0.30	0.00	0.45	0.30	0.50	0.50	0.55	0.84	
D	10104	0.70	1.00	8.20	1.00	8.30	0.00	100.00	0.00			
S	10104	0.00	0.00	2.90	0.00	3.00	0.10	3.90	0.10	4.00	1.00	
S	10104	7.00	0.00	100.00	0.00							
H	10105	8	19	10	0	REDBAND TROUT						
V	10105	0.00	0.00	0.50	0.00	0.75	1.00	2.00	1.00	2.50	0.70	
V	10105	3.00	0.00	100.00	0.00							
D	10105	0.00	0.00	0.30	0.00	0.45	0.30	0.50	0.50	0.55	0.84	
D	10105	0.70	1.00	2.00	1.00	2.05	0.96	2.15	0.86	2.20	0.80	
D	10105	2.70	0.31	3.00	0.16	3.15	0.12	3.35	0.08	3.60	0.04	
D	10105	100.00	0.00									
S	10105	0.00	0.00	2.90	0.00	3.00	0.10	3.90	0.10	4.00	1.00	
S	10105	6.00	0.75	6.90	0.75	7.00	0.00	100.00	0.00			
H	10201	6	3	2	0	BULL TROUT						
V	10201	0.00	0.50	0.25	1.00	2.00	1.00	3.00	0.10	4.00	0.00	
D	10201	0.00	0.00	1.00	1.00	100.00	1.00					
S	10201	0.00	1.00	100.00	1.00							
H	10202	5	3	2	0	BULL TROUT						
V	10202	0.00	1.00	2.00	1.00	3.00	0.10	4.00	0.00	100.00	0.00	
D	10202	0.00	0.00	0.50	1.00	100.00	1.00					
S	10202	0.00	1.00	100.00	1.00							
H	10203	7	6	10	0	BULL TROUT						
V	10203	0.00	0.00	0.20	0.00	0.75	1.00	1.90	1.00	3.20	0.20	
V	10203	100.00	0.00									
D	10203	0.00	0.00	0.20	0.00	0.60	1.00	1.40	1.00	3.00	0.00	
S	10203	0.00	0.00	2.90	0.00	3.00	0.30	3.90	0.30	4.00	1.00	
S	10203	6.00	0.30	6.90	0.30	7.00	0.00	100.00	0.00			
H	10401	4	4	10	0	CHINOOK SALMON						
V	10401	0.00	1.00	3.25	1.00	6.00	0.00	100.00	0.00			
D	10401	0.00	0.00	0.20	0.00	6.50	1.00	100.00	1.00			
S	10401	0.00	0.10	4.90	0.10	5.00	0.30	6.90	0.30	7.00	1.00	
S	10401	8.00	0.30	8.90	0.30	9.00	0.10	100.00	0.10			
H	10402	4	4	2	0	CHINOOK SALMON						
V	10402	0.00	1.00	0.90	1.00	3.00	0.00	100.00	0.00			
D	10402	0.00	0.00	0.20	0.00	1.20	1.00	100.00	1.00			
S	10402	0.00	1.00	100.00	1.00							
H	10403	8	12	2	0	CHINOOK SALMON						
V	10403	0.00	1.00	0.49	0.78	0.98	0.19	1.48	0.04	1.97	0.01	
V	10403	2.95	0.00	100.00	0.00							
D	10403	0.00	0.00	0.10	0.11	0.50	1.00	1.64	1.00	2.46	0.29	
D	10403	4.10	0.04	4.92	0.02	5.74	0.01	7.38	0.01	8.20	0.00	
S	10403	0.00	1.00	100.00	1.00							
H	10404	6	7	8	0	CHINOOK SALMON						
V	10404	0.00	0.00	0.64	0.00	1.75	1.00	3.25	1.00	4.00	0.00	
D	10404	0.00	0.00	0.50	0.00	1.00	0.75	1.20	1.00	8.20	1.00	
D	10404	100.00	0.00									
S	10404	0.00	0.00	3.90	0.00	4.00	0.30	4.90	0.30	5.00	1.00	
S	10404	7.00	0.00	100.00	0.00							
H	10601	5	3	2	0	KLAMATH LARGESCALE SUCKER						
V	10601	0.00	1.00	1.00	1.00	3.00	0.10	6.00	0.00	100.00	0.00	
D	10601	0.00	0.00	2.00	1.00	100.00	1.00					
S	10601	0.00	1.00	100.00	1.00							

FISHCRV.06

H	10602	4	3	2	0	KLAMATH LARGESCALE SUCKER								JUVENILE
V	10602	0.00	1.00	1.00	1.00	3.00	0.00	100.00	0.00					
D	10602	0.00	0.00	1.00	1.00	100.00	1.00							
S	10602	0.00	1.00	100.00	1.00									
H	10603	3	5	10	0	KLAMATH LARGESCALE SUCKER								LARVAE/Fry
V	10603	0.00	1.00	0.75	0.00	100.00	0.00							
D	10603	0.00	0.00	0.50	1.00	1.25	1.00	2.25	0.00	100.00	0.00			
S	10603	0.00	0.50	1.90	0.50	2.00	0.60	2.90	0.60	3.00	1.00	3.90	1.00	
S	10603	4.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00					
H	10604	5	3	12	0	KLAMATH LARGESCALE SUCKER								SPAWNING
V	10604	0.00	0.00	0.50	1.00	2.00	1.00	3.00	0.00	100.00	0.00			
D	10604	0.00	0.00	1.00	1.00	100.00	1.00							
S	10604	0.00	0.00	1.90	0.00	2.00	0.50	2.90	0.50	3.00	1.00	3.90	1.00	
S	10604	4.00	0.50	4.90	0.50	5.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00	
H	10701	4	3	8	0	LOST RIVER SUCKER								HOLDING
V	10701	0.00	1.00	4.00	1.00	6.00	0.00	100.00	0.00					
D	10701	0.00	0.00	1.00	1.00	100.00	1.00							
S	10701	0.00	0.00	5.90	0.00	6.00	0.50	6.90	0.50	7.00	1.00	8.90	1.00	
S	10701	9.00	0.00	100.00	0.00									
H	10702	3	3	10	0	LOST RIVER SUCKER								JUVENILE
V	10702	0.00	1.00	1.20	0.00	100.00	0.00							
D	10702	0.00	0.00	1.75	1.00	100.00	1.00							
S	10702	0.00	0.46	1.90	0.46	2.00	0.50	2.90	0.50	3.00	1.00	3.90	1.00	
S	10702	4.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00					
H	10703	3	5	10	0	LOST RIVER SUCKER								LARVAE/Fry
V	10703	0.00	1.00	0.75	0.00	100.00	0.00							
D	10703	0.00	0.00	0.50	1.00	1.25	1.00	2.25	0.00	100.00	0.00			
S	10703	0.00	0.50	1.90	0.50	2.00	0.60	2.90	0.60	3.00	1.00	3.90	1.00	
S	10703	4.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00					
H	10704	6	3	12	0	LOST RIVER SUCKER								SPAWNING
V	10704	0.00	0.00	1.00	1.00	2.30	1.00	3.60	0.40	5.00	0.00	100.00	0.00	
D	10704	0.00	0.00	1.00	1.00	100.00	1.00							
S	10704	0.00	0.00	3.90	0.00	4.00	0.10	4.90	0.10	5.00	0.50	5.90	0.50	
S	10704	6.00	1.00	6.90	1.00	7.00	0.30	7.90	0.30	8.00	0.00	100.00	0.00	
H	10801	4	3	10	0	SHORTNOSE SUCKER								HOLDING
V	10801	0.00	1.00	4.00	1.00	6.00	0.00	100.00	0.00					
D	10801	0.00	0.00	1.75	1.00	100.00	1.00							
S	10801	0.00	0.00	5.90	0.00	6.00	0.50	6.90	0.50	7.00	1.00	7.90	1.00	
S	10801	8.00	0.50	8.90	0.50	9.00	0.00	100.00	0.00					
H	10802	3	3	10	0	SHORTNOSE SUCKER								JUVENILE
V	10802	0.00	1.00	1.20	0.00	100.00	0.00							
D	10802	0.00	0.00	1.75	1.00	100.00	1.00							
S	10802	0.00	0.46	1.90	0.46	2.00	0.50	2.90	0.50	3.00	1.00	3.90	1.00	
S	10802	4.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00					
H	10803	3	5	10	0	SHORTNOSE SUCKER								LARVAE/Fry
V	10803	0.00	1.00	0.75	0.00	100.00	0.00							
D	10803	0.00	0.00	0.50	1.00	1.25	1.00	2.25	0.00	100.00	0.00			
S	10803	0.00	0.50	1.90	0.50	2.00	0.60	2.90	0.60	3.00	1.00	3.90	1.00	
S	10803	4.00	0.00	8.90	0.00	9.00	1.00	100.00	1.00					
H	10804	6	3	8	0	SHORTNOSE SUCKER								SPAWNING
V	10804	0.00	0.00	0.50	1.00	2.00	1.00	2.50	0.10	4.00	0.00	100.00	0.00	
D	10804	0.00	0.00	1.00	1.00	100.00	1.00							
S	10804	0.00	0.00	3.90	0.00	4.00	0.20	4.90	0.20	5.00	1.00	6.90	1.00	
S	10804	7.00	0.00	100.00	0.00									

□

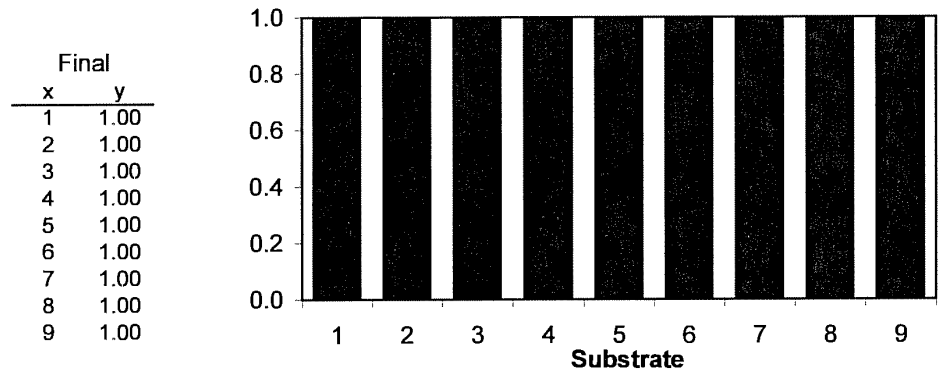
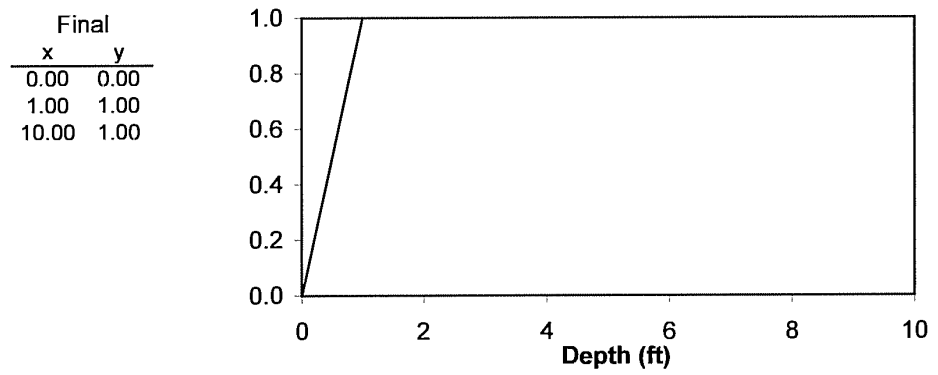
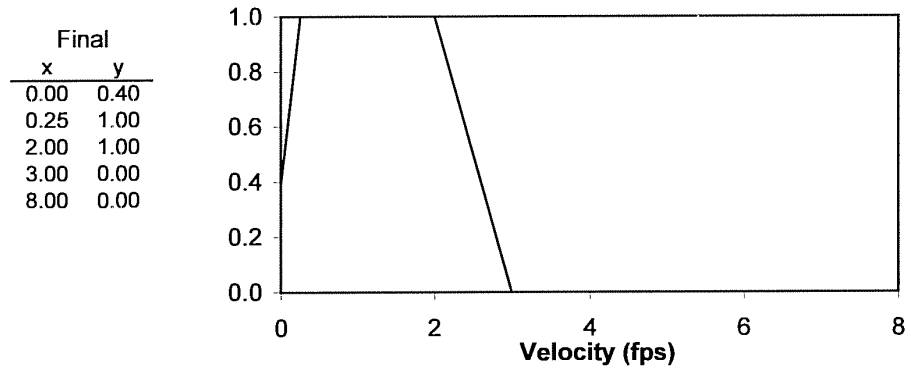
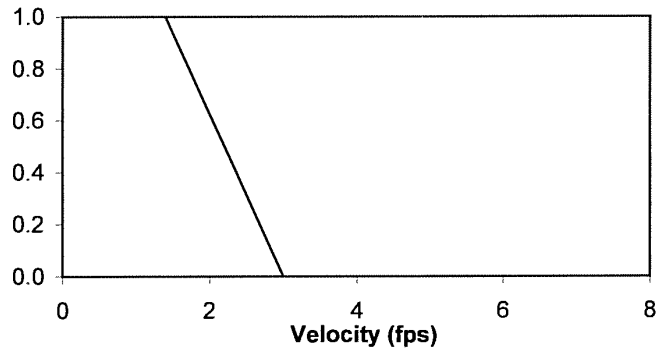


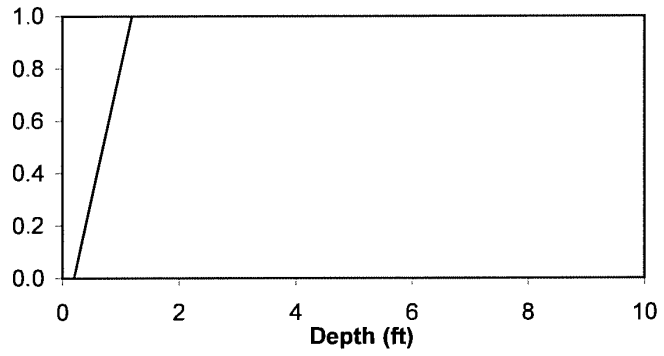
Figure RT-1. Species: Redband Trout

Lifestage: Adult (Large & Small)

FINAL	
x	y
0.00	1.00
1.40	1.00
3.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.20	0.00
1.20	1.00
10.00	1.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

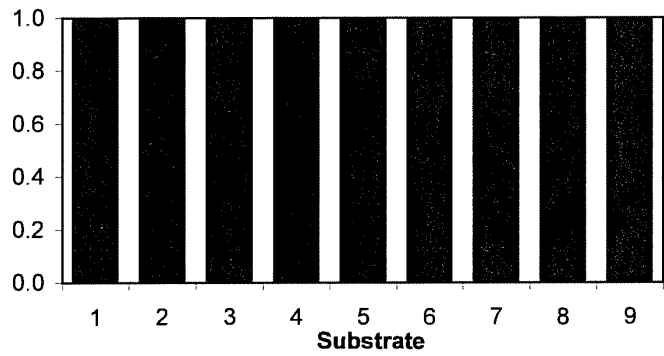
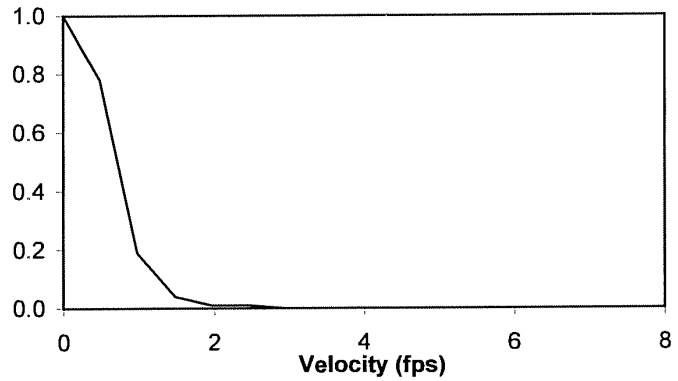


Figure RT-2.

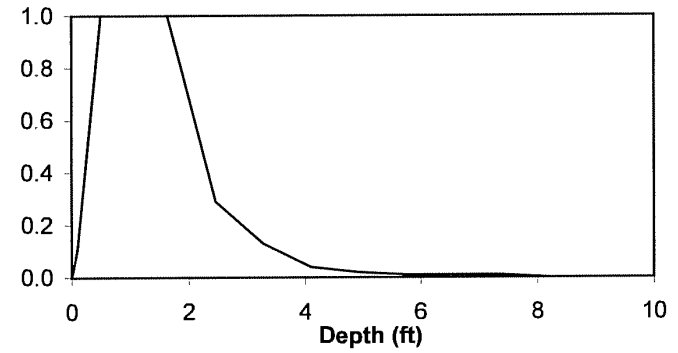
Species: Redband Trout

Lifestage: Juvenile (Large & Small Rivers)

FINAL	
x	y
0.00	1.00
0.49	0.78
0.98	0.19
1.48	0.04
1.97	0.01
2.46	0.01
2.95	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.10	0.11
0.50	1.00
1.64	1.00
2.46	0.29
3.28	0.13
4.10	0.04
4.92	0.02
5.74	0.01
7.38	0.01
8.20	0.00
10.00	0.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

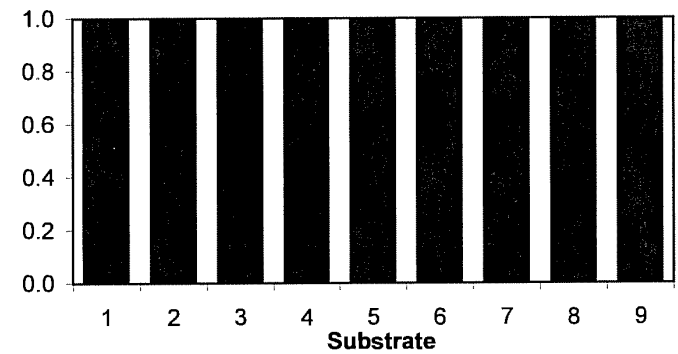


Figure RT-3.

Species: Redband Trout

Lifestage: Fry (Large & Small Rivers)

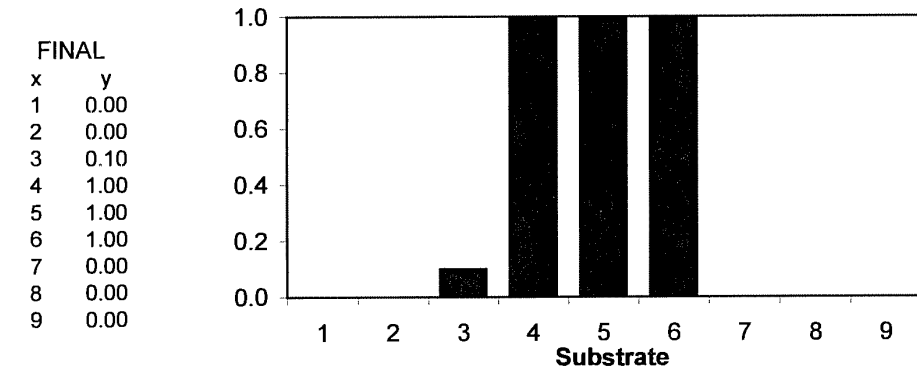
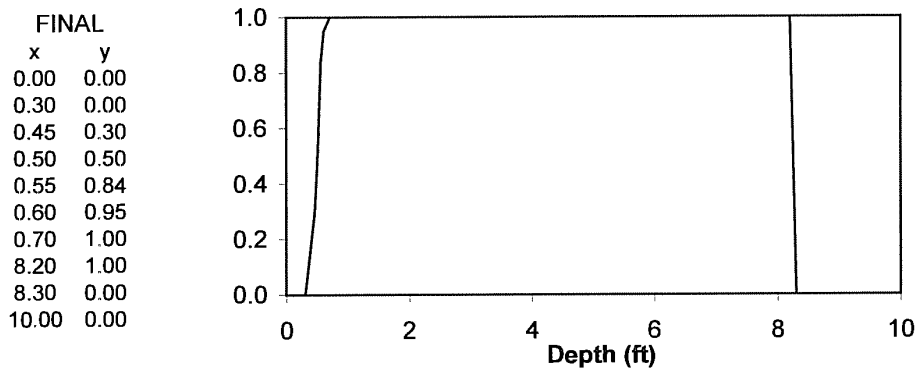
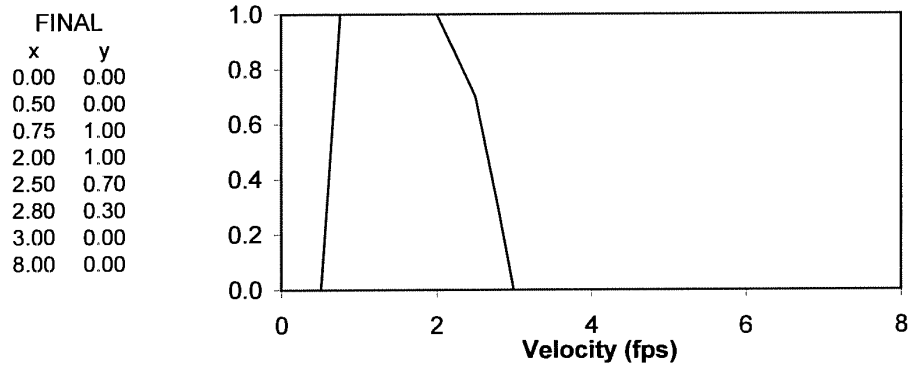
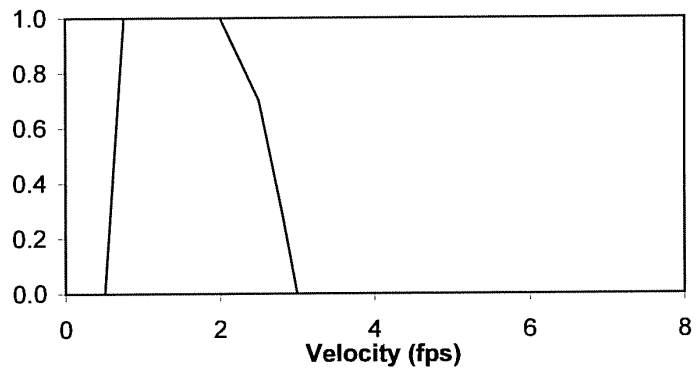


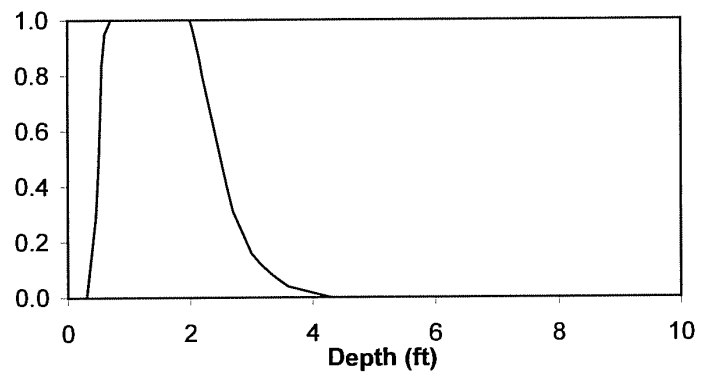
Figure RT-4. Species: Redband Trout

Lifestage: Spawning (Large Rivers)

FINAL	
x	y
0.00	0.00
0.50	0.00
0.75	1.00
2.00	1.00
2.50	0.70
2.80	0.30
3.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.30	0.00
0.45	0.30
0.50	0.50
0.55	0.84
0.60	0.95
0.70	1.00
2.00	1.00
2.05	0.96
2.15	0.86
2.20	0.80
2.60	0.40
2.70	0.31
3.00	0.16
3.15	0.12
3.35	0.08
3.60	0.04
4.30	0.00
10.00	0.00



FINAL	
x	y
1	0.00
2	0.00
3	0.10
4	1.00
5	1.00
6	0.75
7	0.00
8	0.00
9	0.00

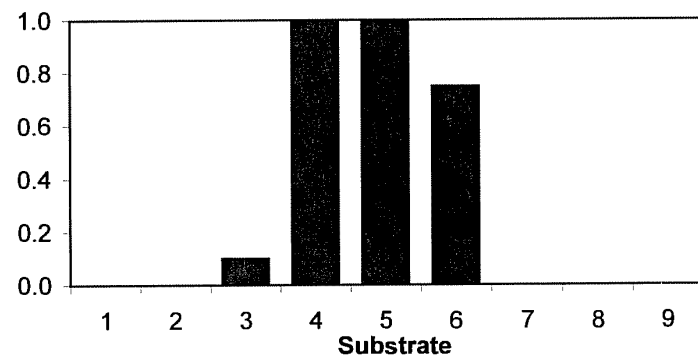
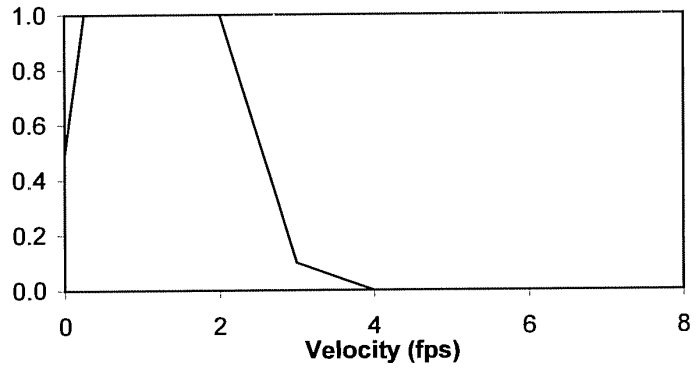


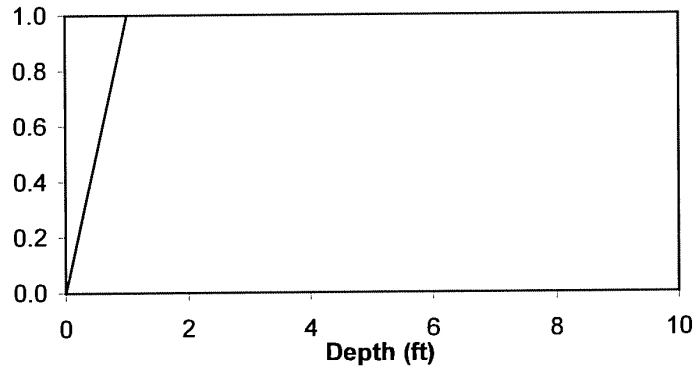
Figure RT-5. Species: Redband Trout

Lifestage: Spawning (Small Rivers)

FINAL	
x	y
0.00	0.50
0.25	1.00
2.00	1.00
3.00	0.10
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.00	1.00
10.00	1.00



FINAL			
x	y		
1	1.00		
2	1.00		
3	1.00		
4	1.00		
5	1.00		
6	1.00		
7	1.00		
8	1.00 </tr <tr> <td>9</td> <td>1.00</td> </tr>	9	1.00
9	1.00		

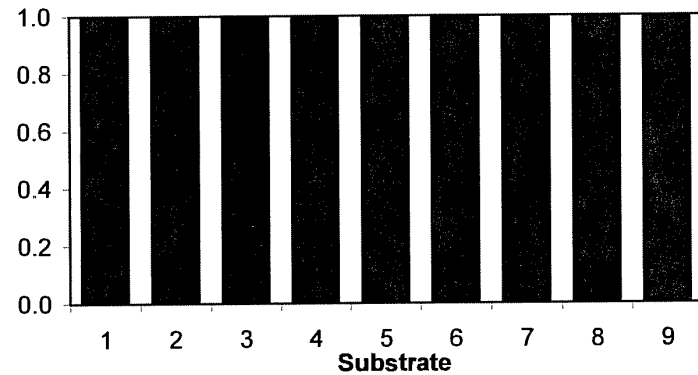
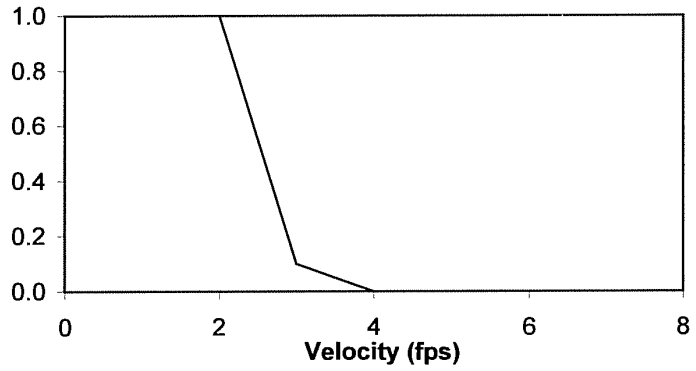


Figure BT-1.

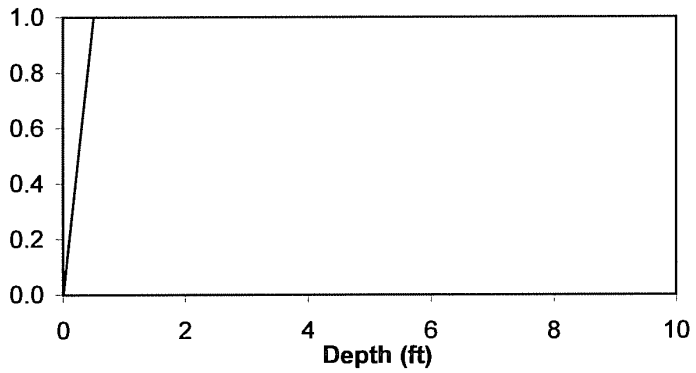
Species: Bull Trout

Lifestage: Adult

FINAL	
x	y
0.00	1.00
2.00	1.00
3.00	0.10
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.50	1.00
5.00	1.00
10.00	1.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

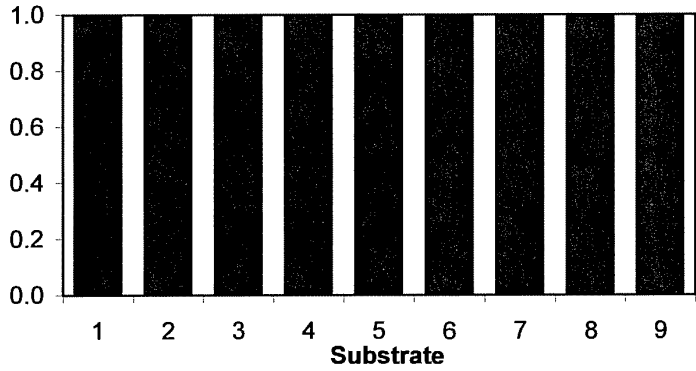
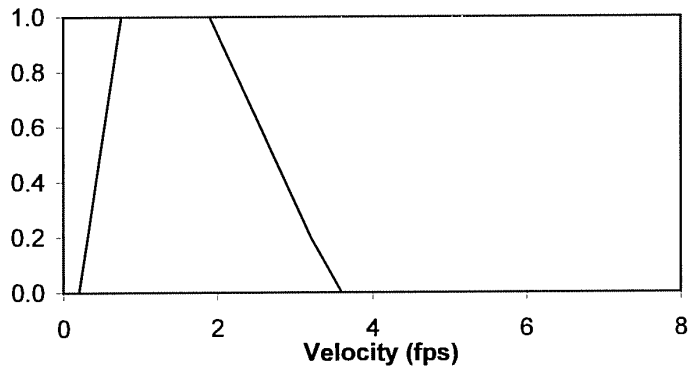


Figure BT-2

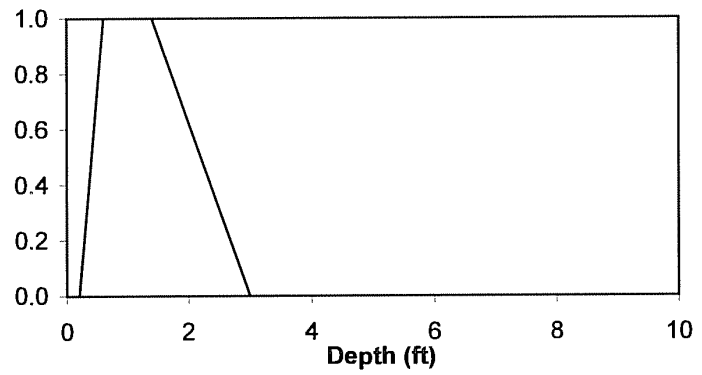
Species: Bull Trout

Lifestage: Juvenile/Fry

FINAL	
x	y
0.00	0.00
0.20	0.00
0.75	1.00
1.90	1.00
3.20	0.20
3.60	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.20	0.00
0.60	1.00
1.40	1.00
3.00	0.00
10.00	0.00



FINAL	
x	y
1	0.00
2	0.00
3	0.30
4	1.00
5	1.00
6	0.30
7	0.00
8	0.00
9	0.00

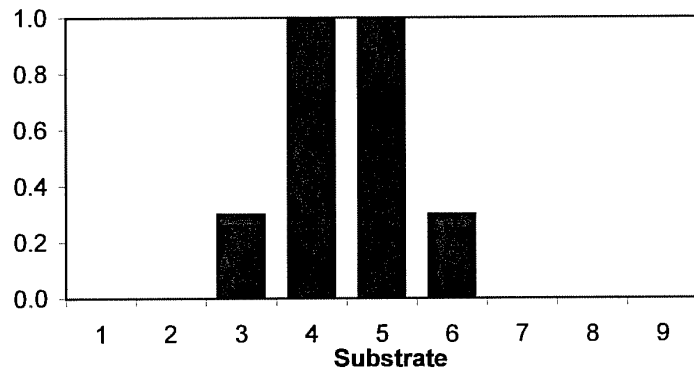
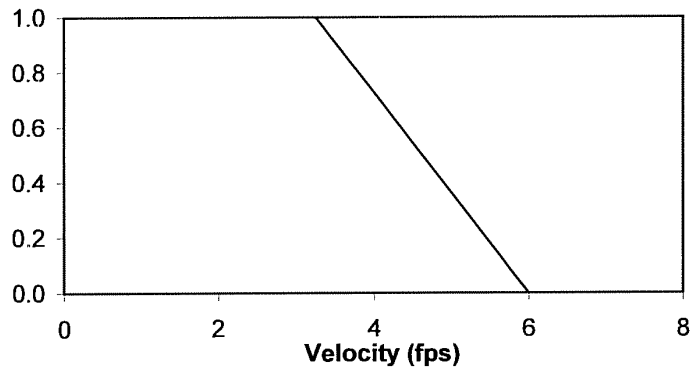


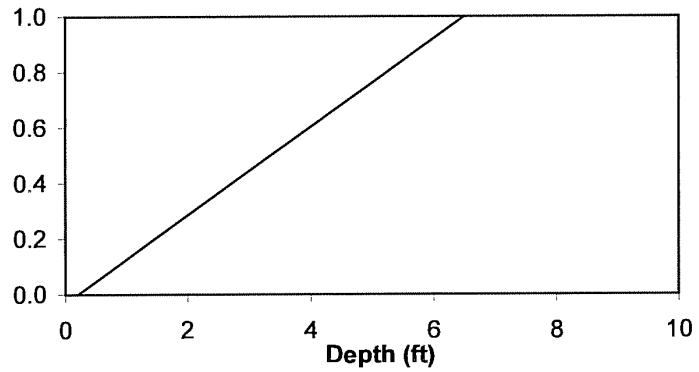
Figure BT-3. Species: Bull Trout

Lifestage: Spawning (Large and Small Rivers)

FINAL	
x	y
0.00	1.00
3.25	1.00
6.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.20	0.00
6.50	1.00
10.00	1.00



FINAL	
x	y
1	0.10
2	0.10
3	0.10
4	0.10
5	0.30
6	0.30
7	1.00
8	0.30
9	0.10

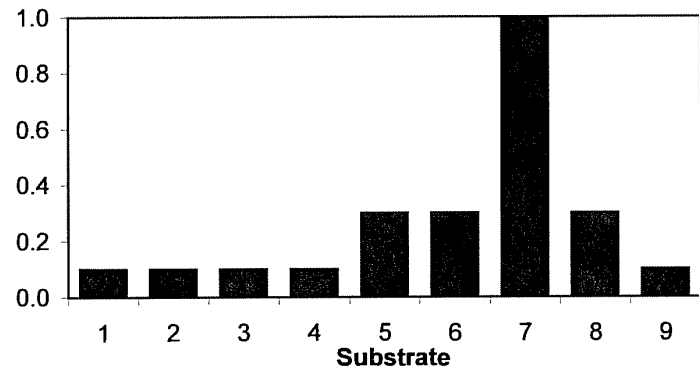
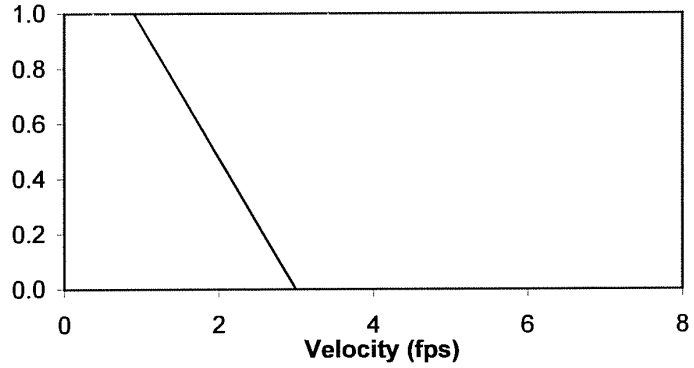


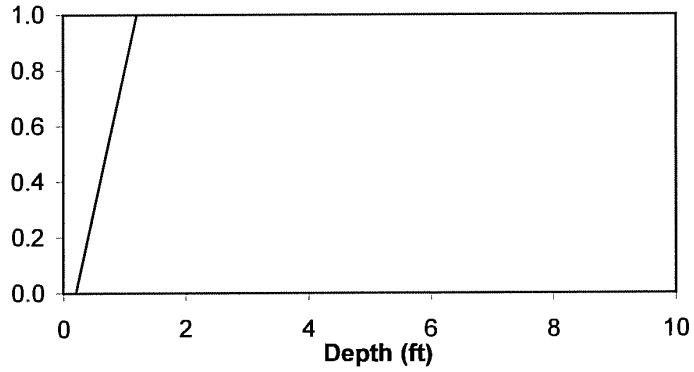
Figure CH-1. Species: Chinook Salmon

Lifestage: Holding

FINAL	
x	y
0.00	1.00
0.90	1.00
3.00	0.00
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.20	0.00
1.20	1.00
8.00	1.00
10.00	1.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

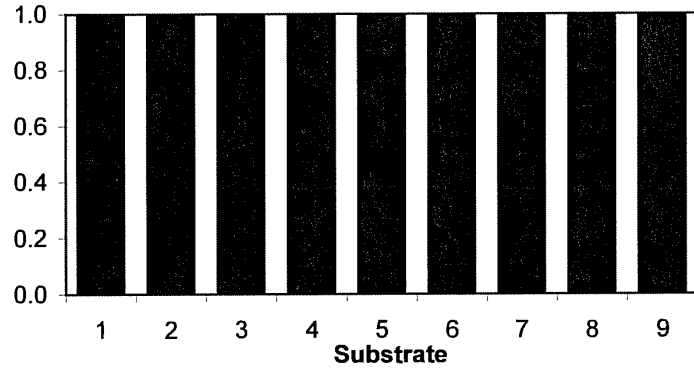
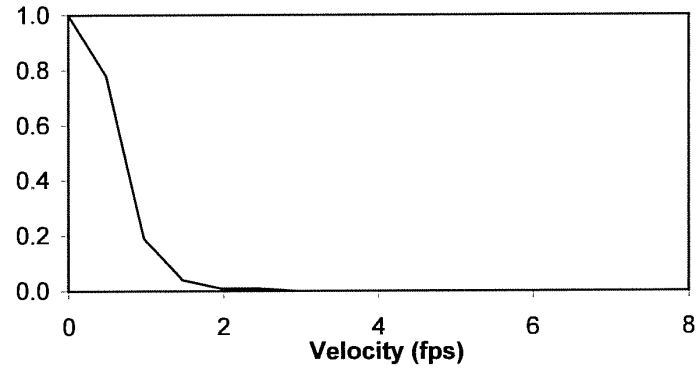


Figure CH-2.

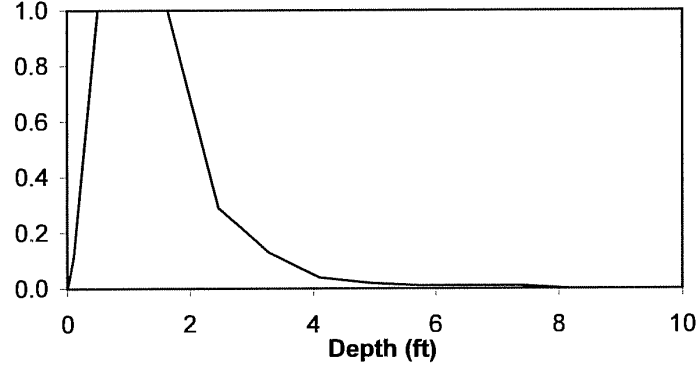
Species: Chinook Salmon

Lifestage: Juvenile

FINAL	
x	y
0.00	1.00
0.49	0.78
0.98	0.19
1.48	0.04
1.97	0.01
2.46	0.01
2.95	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.10	0.11
0.50	1.00
1.64	1.00
2.46	0.29
3.28	0.13
4.10	0.04
4.92	0.02
5.74	0.01
7.38	0.01
8.20	0.00
10.00	0.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

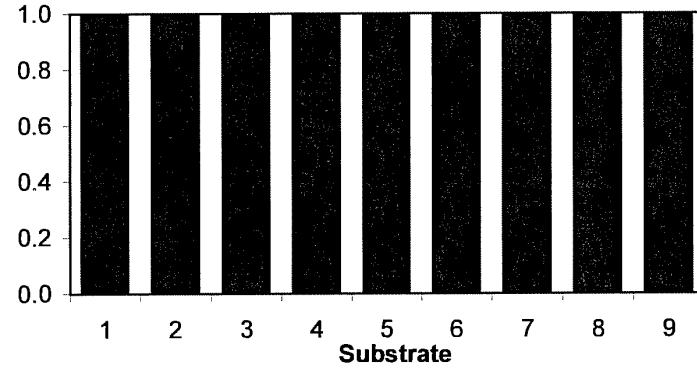
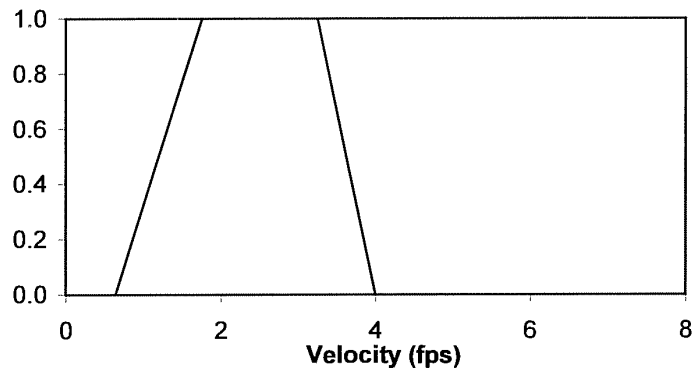


Figure CH-3.

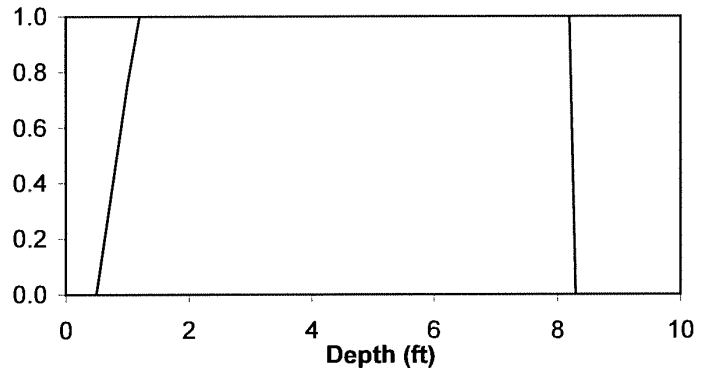
Species: Chinook Salmon

Lifestage: Fry

FINAL	
x	y
0.00	0.00
0.64	0.00
1.75	1.00
3.25	1.00
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.50	0.00
1.00	0.75
1.20	1.00
8.20	1.00
8.30	0.00
10.00	0.00



FINAL	
x	y
1	0.00
2	0.00
3	0.00
4	0.30
5	1.00
6	1.00
7	0.00
8	0.00
9	0.00

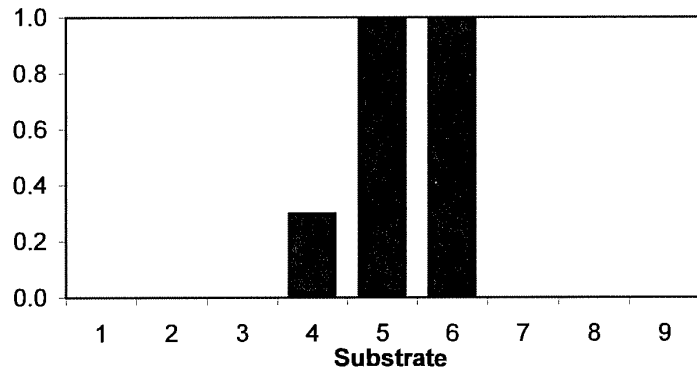
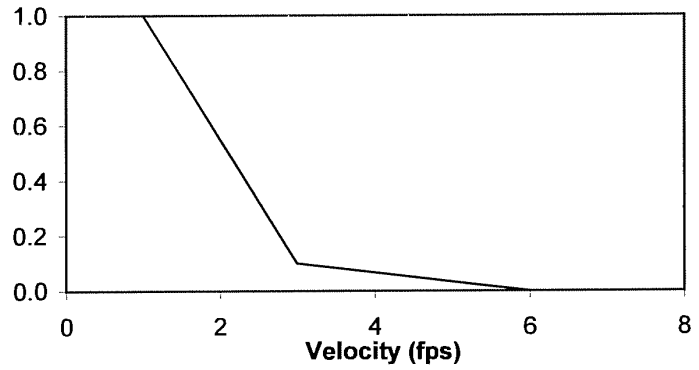


Figure CH-4.

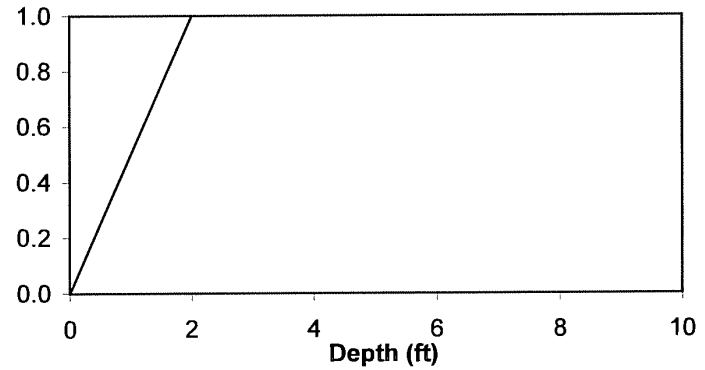
Species: Chinook Salmon

Lifestage: Spawning

FINAL	
x	y
0.00	1.00
1.00	1.00
3.00	0.10
6.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
2.00	1.00
10.00	1.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

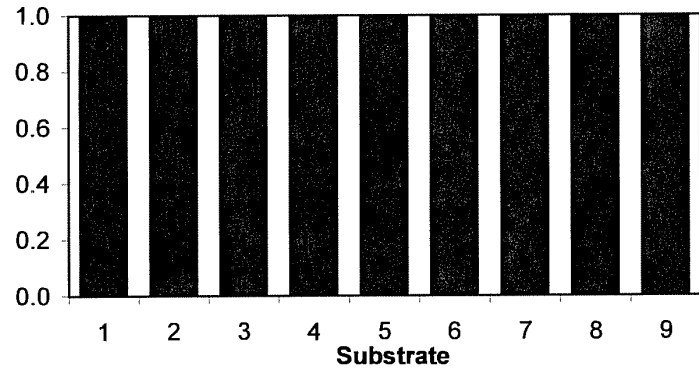
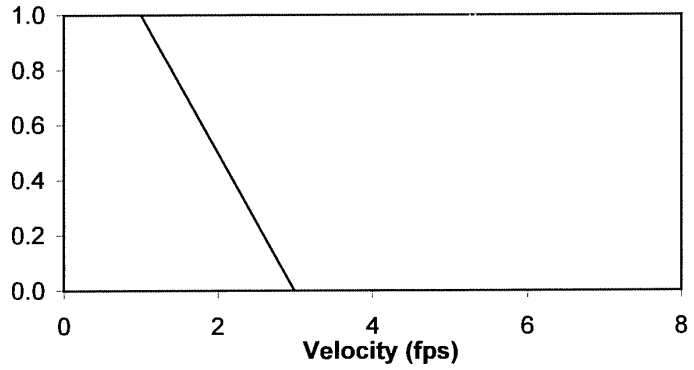


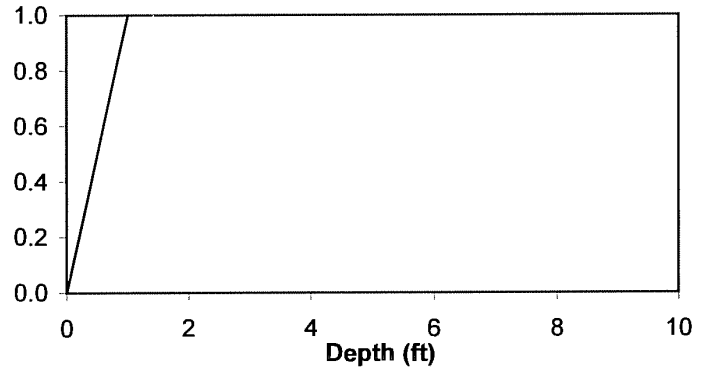
Figure KL-1. Species: Klamath Largescale Sucker

Lifestage: Holding

FINAL	
x	y
0.00	1.00
1.00	1.00
3.00	0.00
6.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.00	1.00
10.00	1.00



FINAL	
x	y
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00

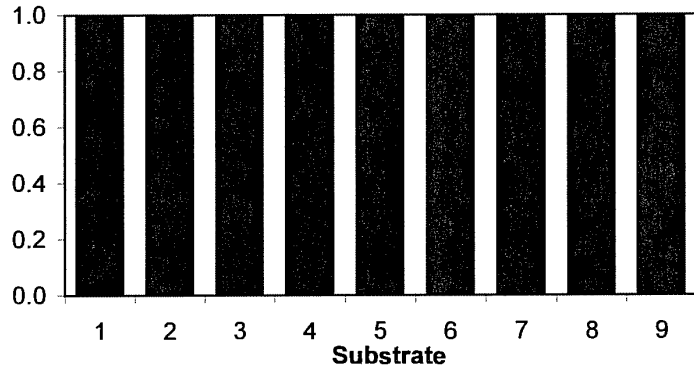
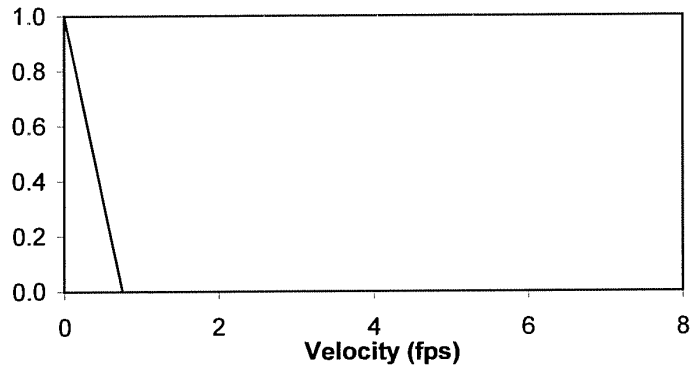


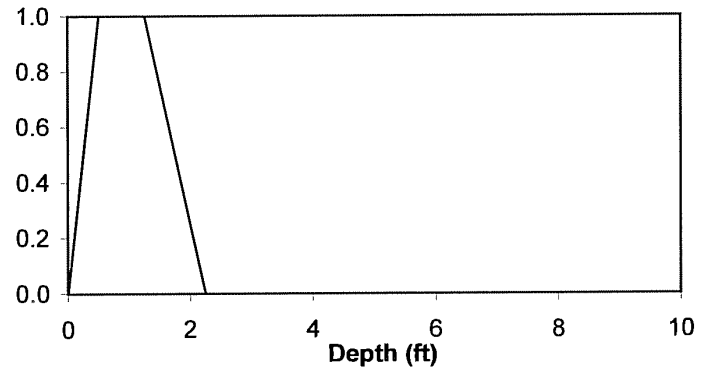
Figure KL-2. Species: Klamath Largescale Sucker

Lifestage: Juvenile

FINAL	
x	y
0.00	1.00
0.75	0.00
3.00	0.00
6.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.50	1.00
1.25	1.00
2.25	0.00
10.00	0.00



FINAL	
x	y
1	0.50
2	0.60
3	1.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	1.00

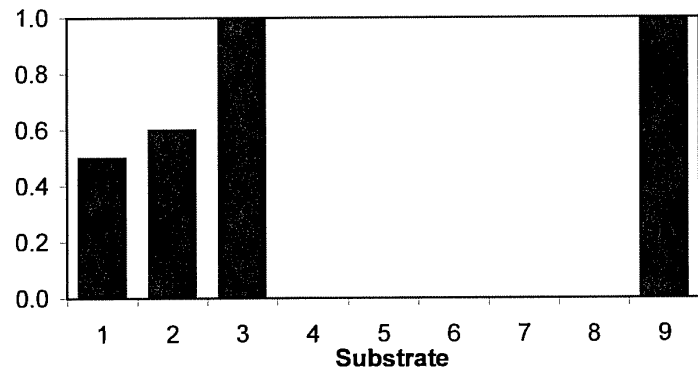
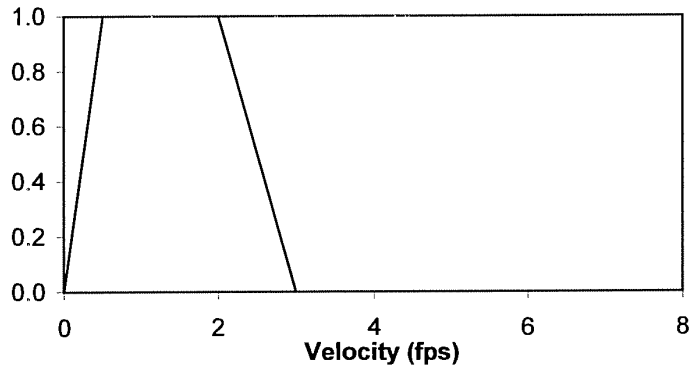


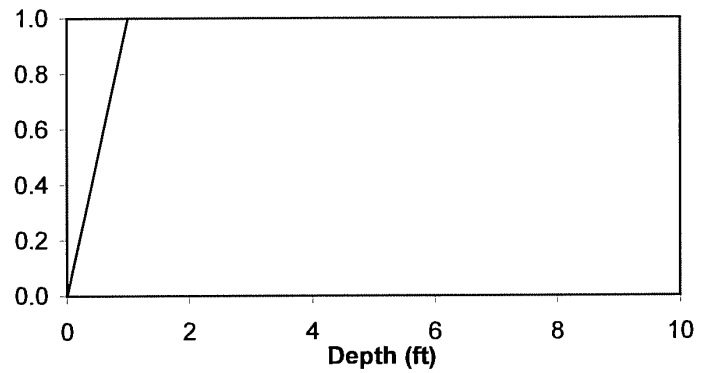
Figure KL-3. Species: Klamath Largescale Sucker

Lifestage: Larvae/Fry

FINAL	
x	y
0.00	0.00
0.50	1.00
2.00	1.00
3.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.00	1.00
10.00	1.00



FINAL	
x	y
1	0.00
2	0.50
3	1.00
4	0.50
5	0.00
6	0.00
7	0.00
8	0.00
9	1.00

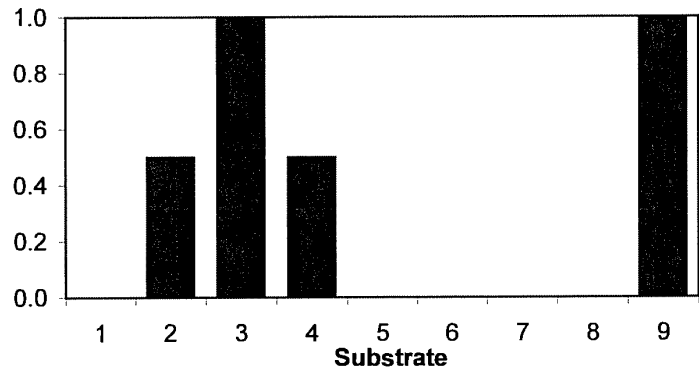
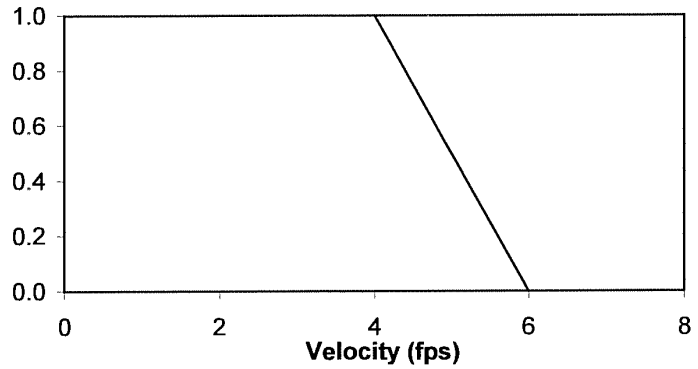


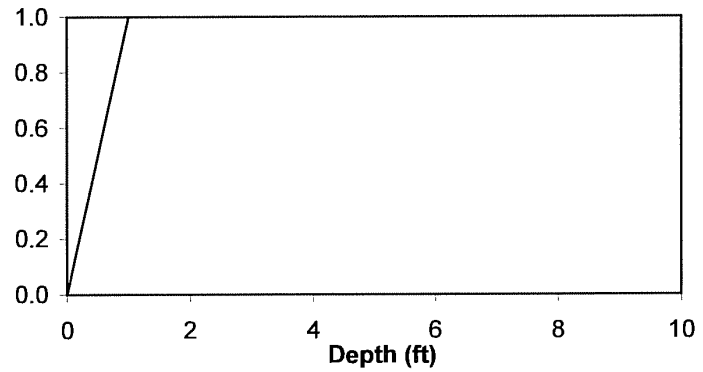
Figure KL-4. Species: Klamath Largescale Sucker

Lifestage: Spawning

FINAL	
x	y
0.00	1.00
1.00	1.00
2.00	1.00
4.00	1.00
6.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.00	1.00
3.00	1.00
10.00	1.00



FINAL	
x	y
1	0.00
2	0.00
3	0.00
4	0.00
5	0.00
6	0.50
7	1.00
8	1.00
9	0.00

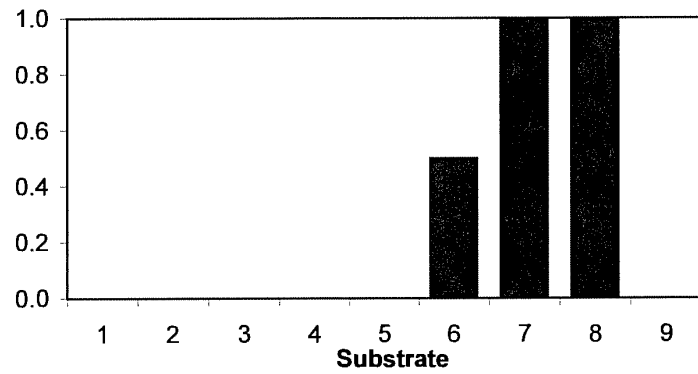
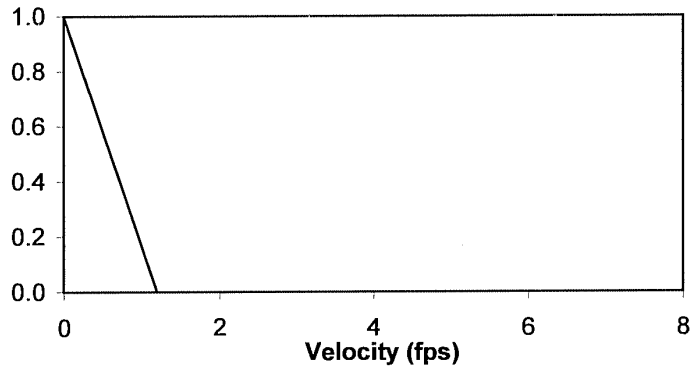


Figure LR-1.

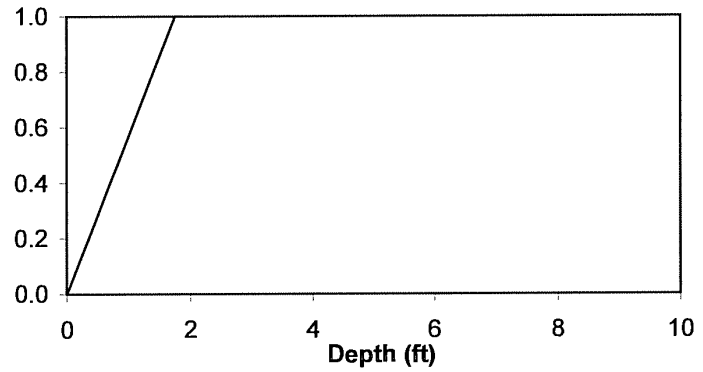
Species: Lost River Sucker

Lifestage: Holding

FINAL	
x	y
0.00	1.00
1.20	0.00
2.00	0.00
5.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.75	1.00
3.00	1.00
10.00	1.00



FINAL	
x	y
1	0.46
2	0.50
3	1.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	1.00

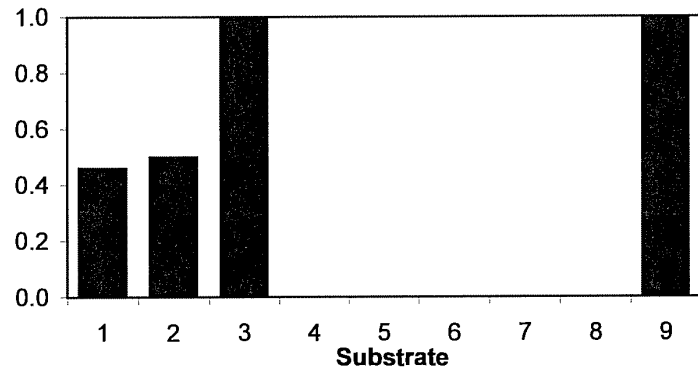
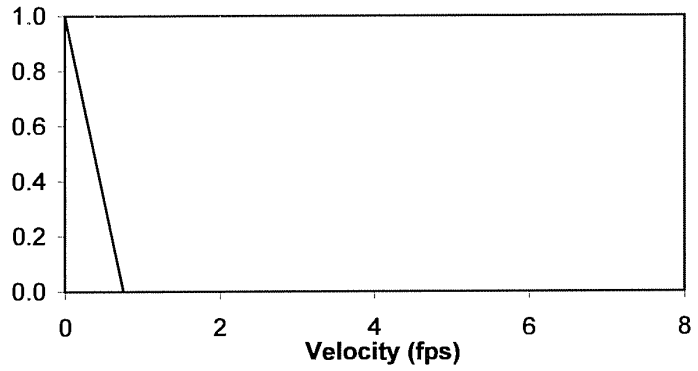


Figure LR-2.

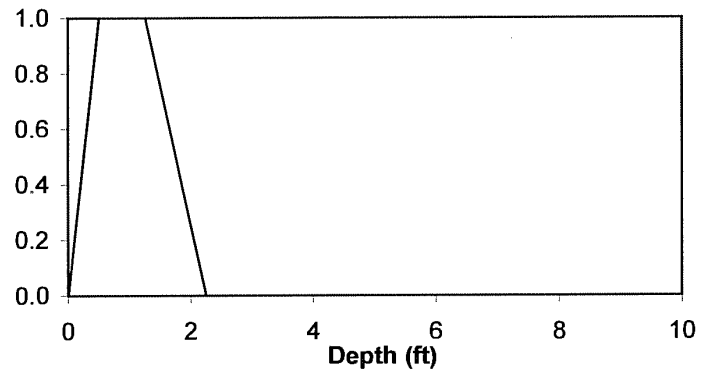
Species: Lost River Sucker

Lifestage: Juvenile

FINAL	
x	y
0.00	1.00
0.75	0.00
2.00	0.00
5.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.50	1.00
1.25	1.00
2.25	0.00
10.00	0.00



FINAL	
x	y
1	0.50
2	0.60
3	1.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	1.00

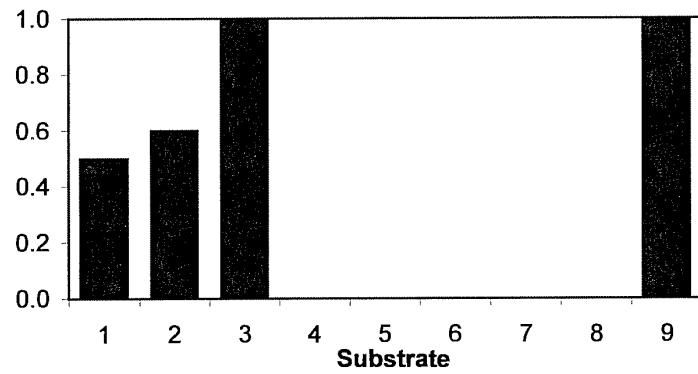


Figure LR-3.

Species: Lost River Sucker

Lifestage: Larvae/Fry

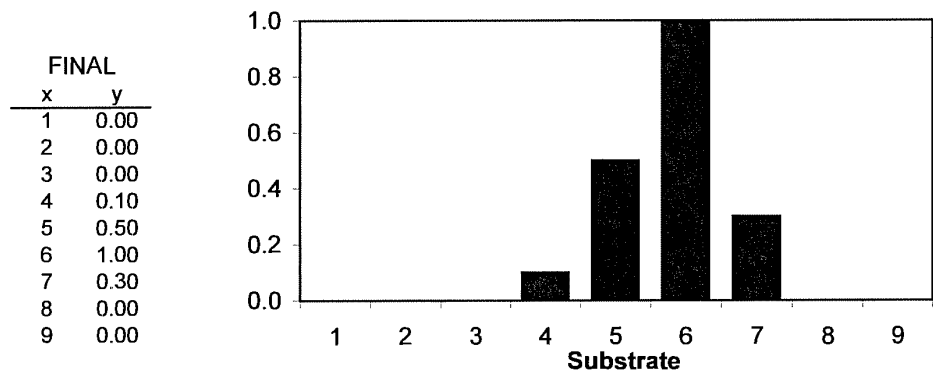
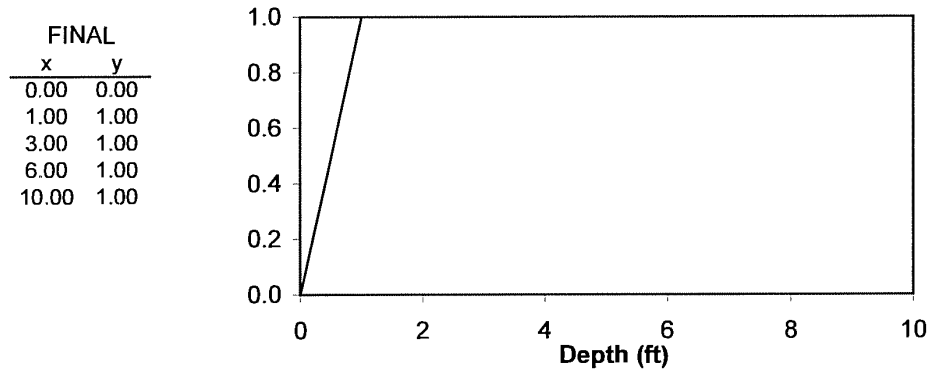
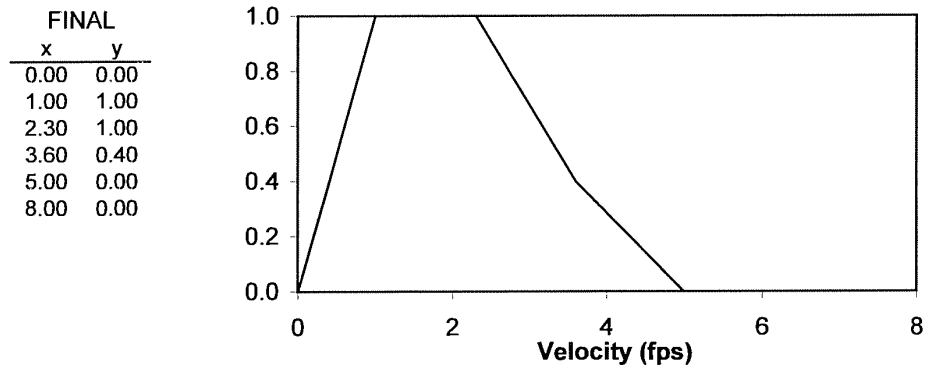


Figure LR-4. Species: Lost River Sucker Lifestage: Spawning

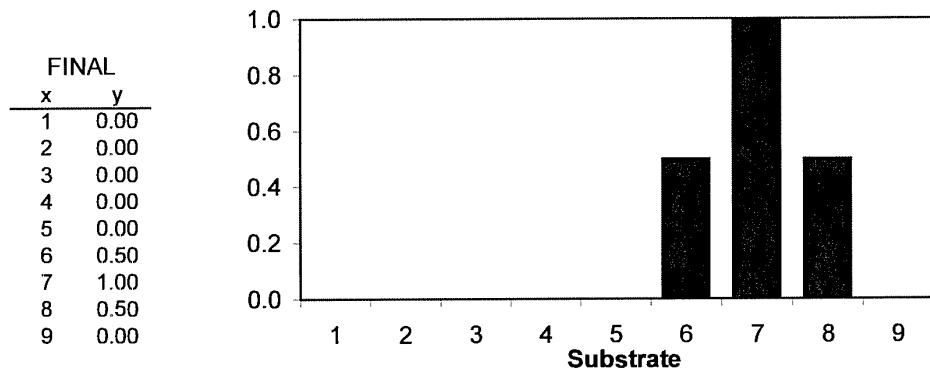
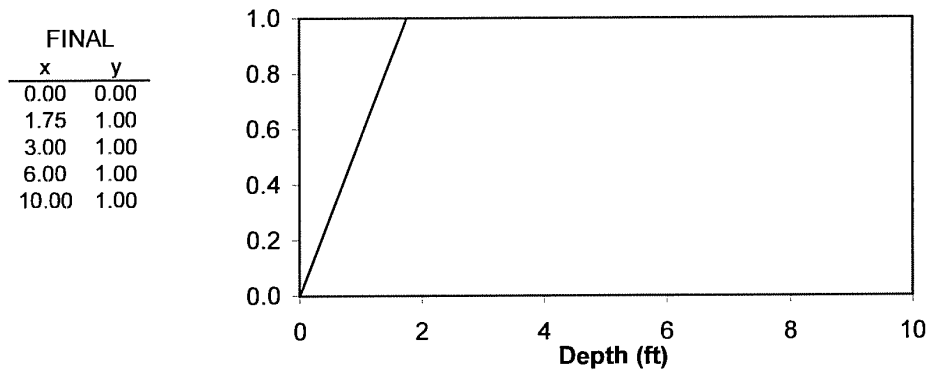
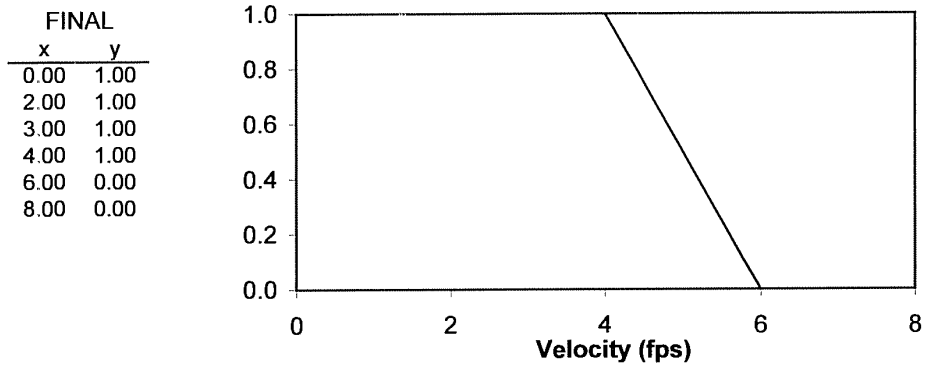


Figure SN-1.

Species: Shortnose Sucker

Lifestage: Holding

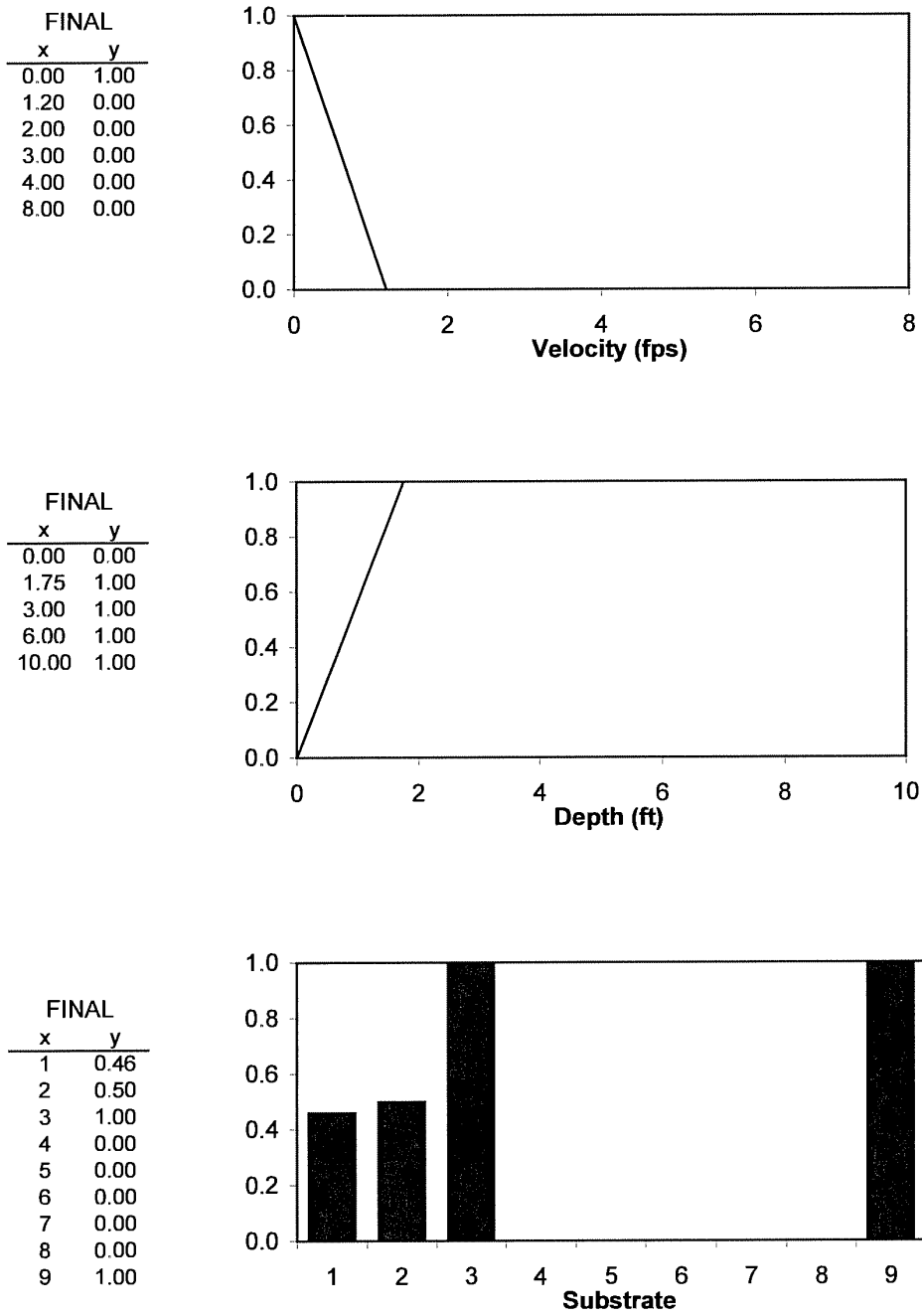
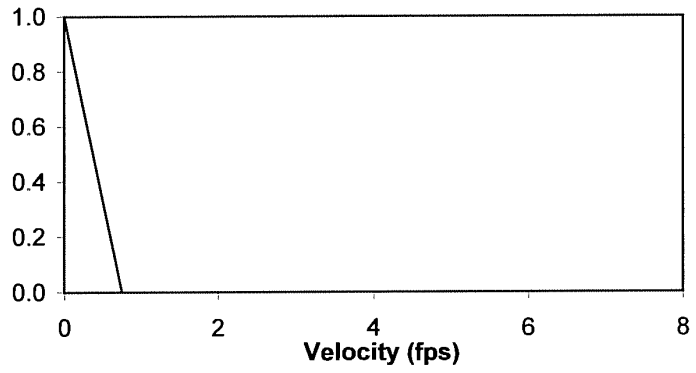


Figure SN-2.

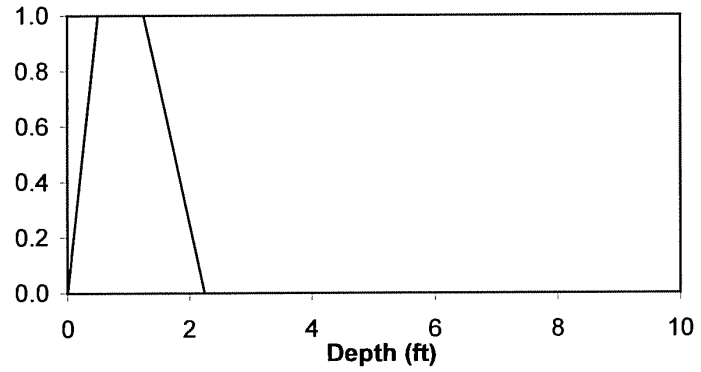
Species: Shortnose Sucker

Lifestage: Juvenile

FINAL	
x	y
0.00	1.00
0.75	0.00
2.00	0.00
3.00	0.00
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
0.50	1.00
1.25	1.00
2.25	0.00
6.00	0.00
10.00	0.00



FINAL	
x	y
1	0.50
2	0.60
3	1.00
4	0.00
5	0.00
6	0.00
7	0.00
8	0.00
9	1.00

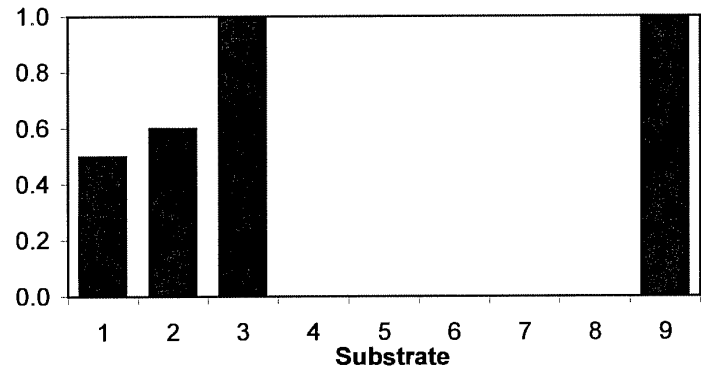
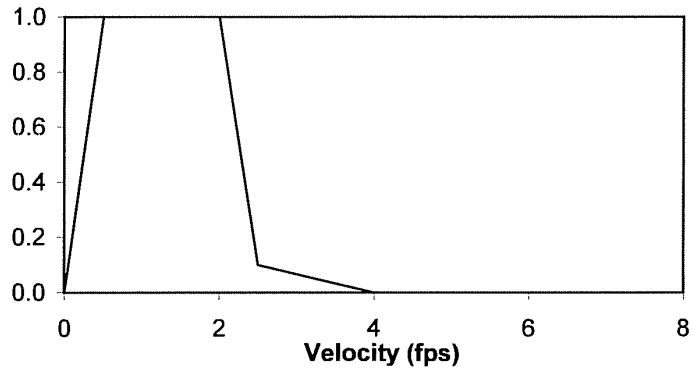


Figure SN-3.

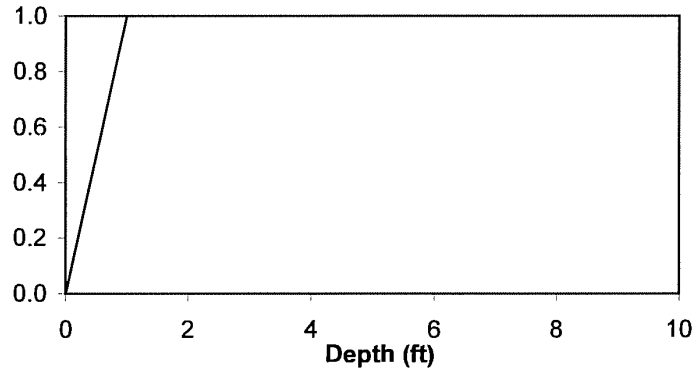
Species: Shortnose Sucker

Lifestage: Larvae/Fry

FINAL	
x	y
0.00	0.00
0.50	1.00
2.00	1.00
2.50	0.10
4.00	0.00
8.00	0.00



FINAL	
x	y
0.00	0.00
1.00	1.00
3.00	1.00
6.00	1.00
10.00	1.00



FINAL	
x	y
1	0.00
2	0.00
3	0.00
4	0.20
5	1.00
6	1.00
7	0.00
8	0.00
9	0.00

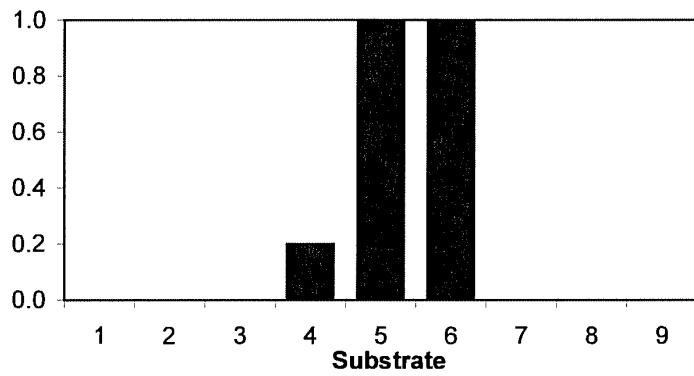


Figure SN-4.

Species: Shortnose Sucker

Lifestage: Spawning