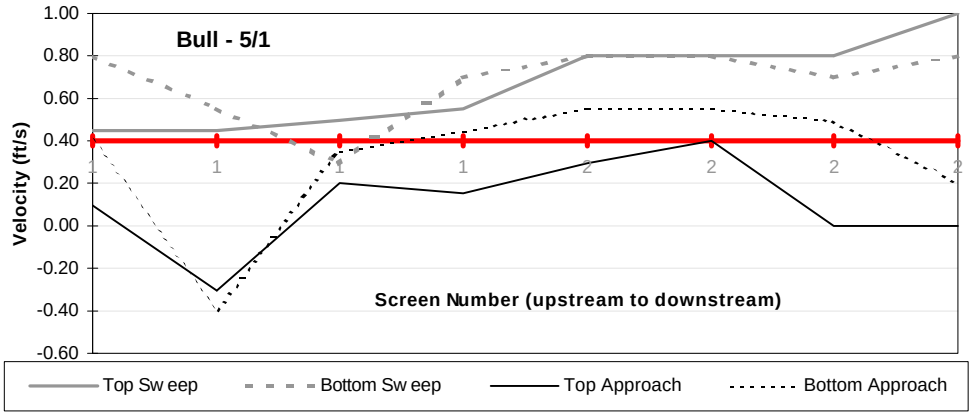
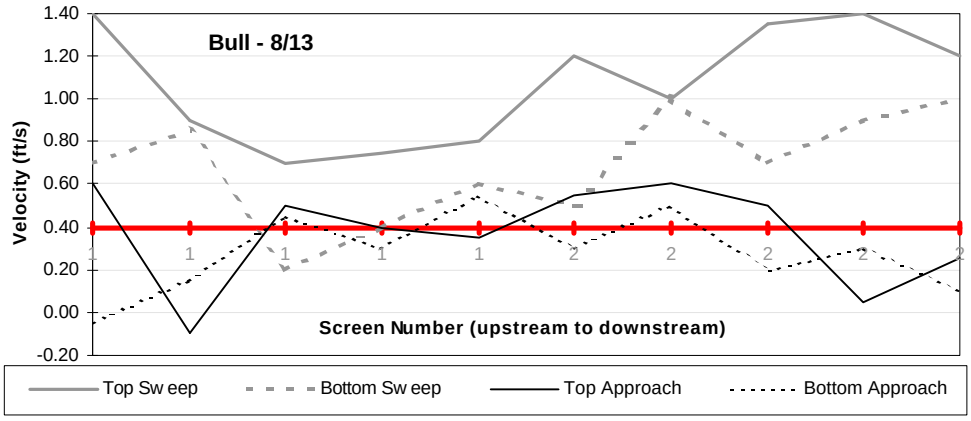
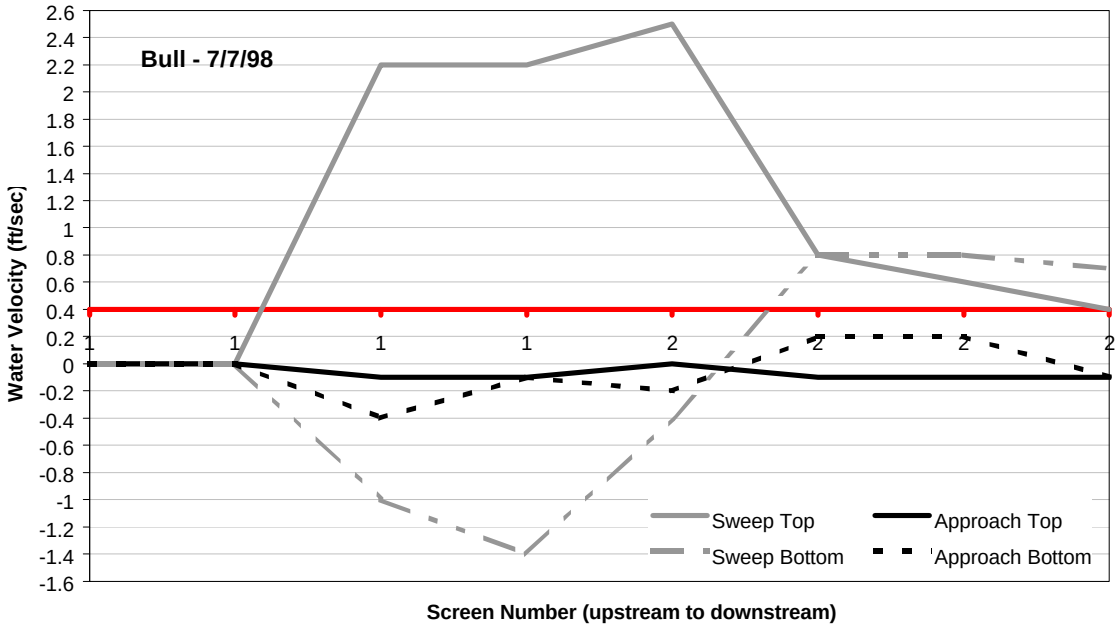
Water Velocities: Bull

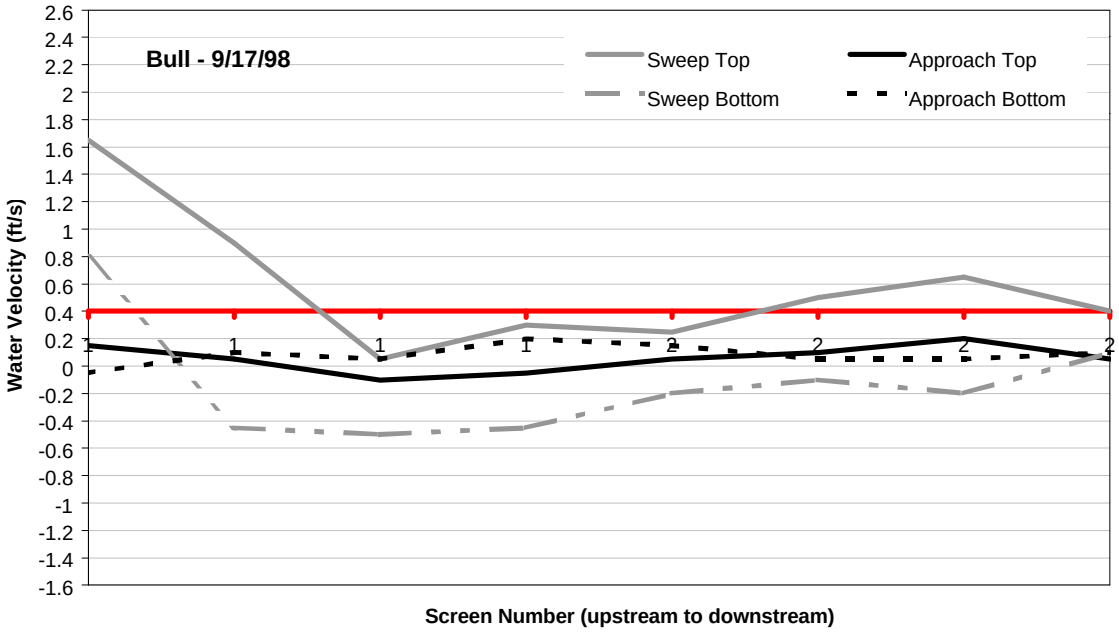
1997



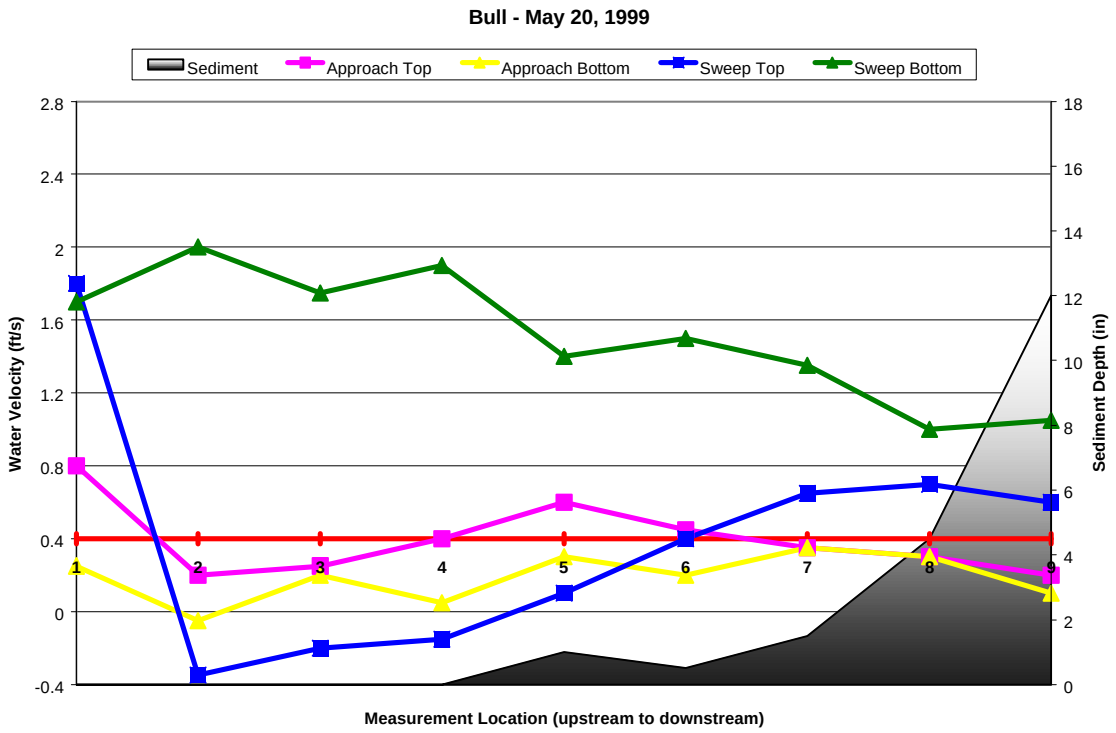


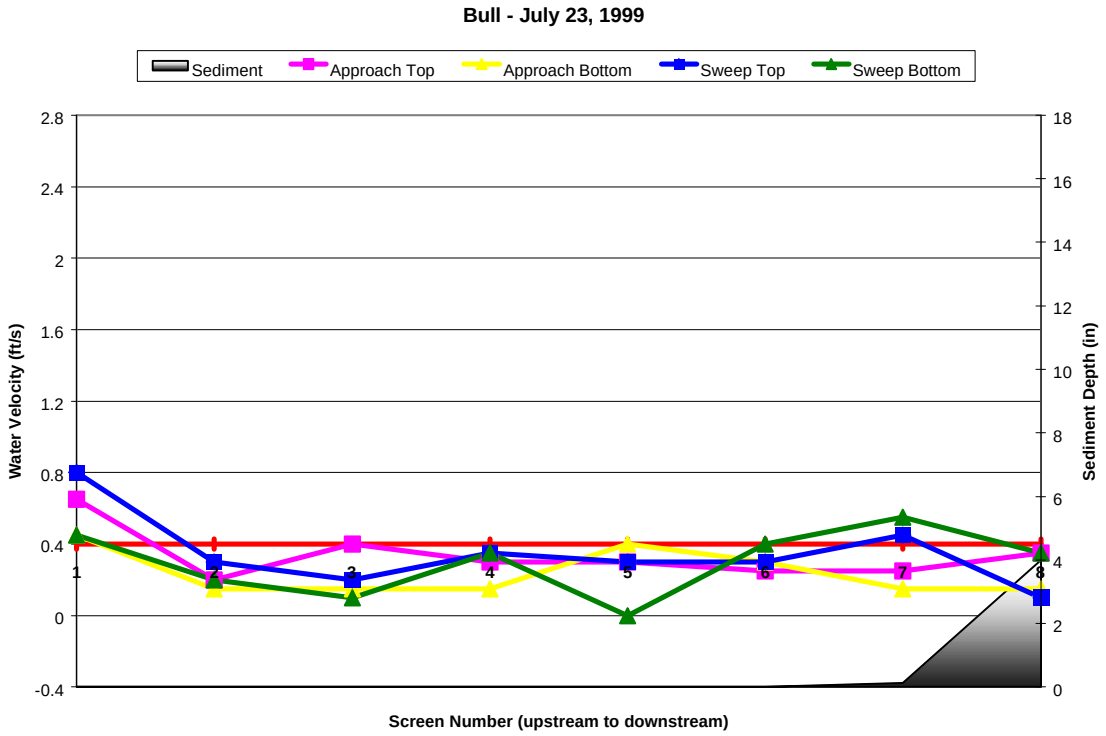
1998


Bull - 7/7/98
Water Velocity (ft/sec)
Screen Number (upstream to downstream)
Sweep Top
Approach Top
Sweep Bottom
Approach Bottom


Bull - 9/17/98
Water Velocity (ft/s)
Screen Number (upstream to downstream)
Sweep Top
Approach Top
Sweep Bottom
Approach Bottom

1999


Bull - May 20, 1999
Sediment
Approach Top
Approach Bottom
Sweep Top
Sweep Bottom
Water Velocity (ft/s)
Sediment Depth (in)
Measurement Location (upstream to downstream)
2.8
2.4
2
1.6
1.2
0.8
0.4
0
-0.4
18
16
14
12
10
8
6
4
2
0
1
2
3
4
5
6
7
8
9


Bull - July 23, 1999
Sediment
Approach Top
Approach Bottom
Sweep Top
Sweep Bottom
Water Velocity (ft/s)
Sediment Depth (in)
Screen Number (upstream to downstream)
2.8
2.4
2
1.6
1.2
0.8
0.4
0
-0.4
18
16
14
12
10
8
6
4
2
0
1
2
3
4
5
6
7
8

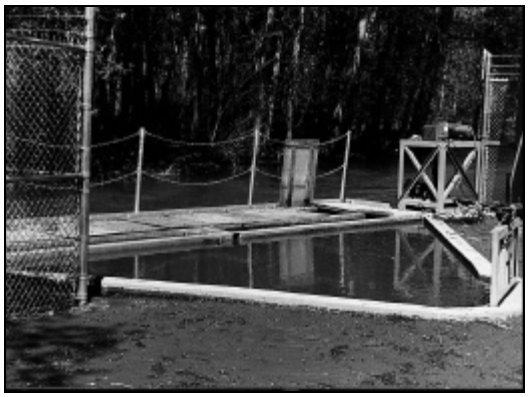
General Observations: Bull

Date	Bull 5/11/97	Bull 6/26/97	Bull 8/13/97	Bull 5/13/98	Bull 7/7/98	Bull 9/17/98	Bull 5/20/99	Bull 7/23/99
Staff Gages?	no, or were submerged	aftbay = 3.2	aftbay = 3.82	aftbay=4.1	aftbay=2.6	aftbay=1.9	Aftbay=2.74 Canal=.6_(other side of road, down canal)	aftbay=26 Canal on other side of road=.9
Submergence Marks?	no	no	no	no	no	no	no	no
Stoplogs?	no	NA	NA	no	no	NA	NA	NA
Louvers?	under water	under water		Closed at upstream end, and wide open at the downstream end. Halfway open in between.	NA	Wide open downstream (where flow is slow), closed midway, and ~10" open upsream. Not the best for the flow conditions.	see picture	see picture
Head Loss?	no	no	no	0.5 inches	no info	0.75 inches	No. 1/2"	No, none.
Screen Material Condition	under water	under water	under water		good	OK from above	~4" seen, looks okay.	Lots of leaf matter through video, can't see from above.
Seal Condition	under water	under water	under water		good	Can't see much from above.	Can't see.	Can't see from above.
Drums Turning Evenly?	NA	NA	NA	NA	NA	NA	NA	NA
Debris Anywhere?	no	no	some leafy debris on perf plate	no	No debris in the forebay. Lots of debris underwater at downstream corner of screen 2.	Lots of leaves in the forebay and stuck in the cleaning brushes.	Sticks caught. 4" sticks/twigs in trashrack	Lots of sticks and leaves at end and at trashrack.
Cleaning System Working?	brushes operating	brushes are operating	No information.	No information.	yes	The cleaning brushes aren't really effective because of the leaves in the water.	Not totally, not very visable.	No. Leaving debris behind and causing accumulation.
Submergence (% of 48")	100, screen overtopped, but metal on top blocking water from canal…almost sumberged though & can tell the whole thing was underwater earlier	100	100	100	100	91.7	94%	
Flow over Weir? How much?	NA	NA	NA	NA	NA	NA	NA	NA
Gage to Measure Weir Crest?	NA	NA	NA	NA	NA	NA	NA	NA
Weir Full Open? If not, how many inches to go?	NA	NA	NA	NA	NA	NA	NA	NA
Water Running Freely behind Weir?	NA	NA	NA	NA	Yes	NA	NA	NA
Depth of water in outfall pipe	NA	NA	NA	NA	NA	NA	NA	NA
Outfall Running Smooth?	NA	NA	NA	NA	NA	NA	NA	NA
Debris at End of Pipe?	NA	NA	NA	NA	NA	NA	NA	NA
Discharge Area ³ 1 ft?	NA	NA	NA	NA	NA	NA	NA	NA

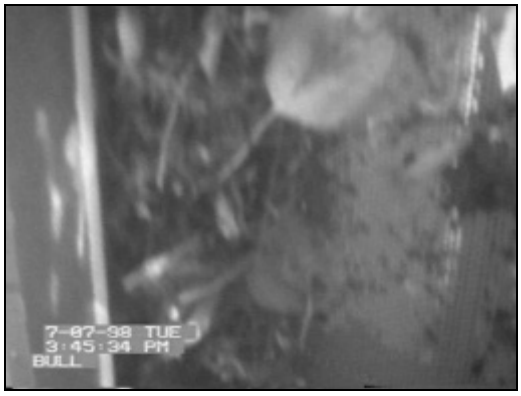
General Observations, continued

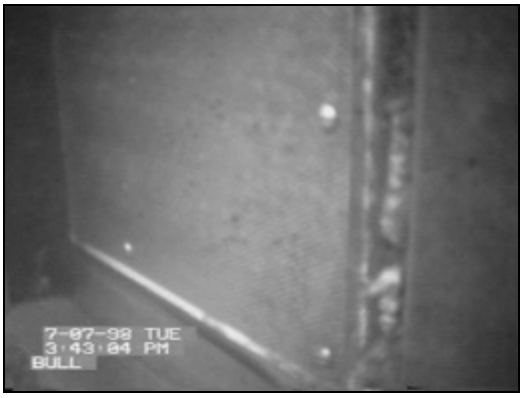
Date	Bull 5/11/97	Bull 6/26/97	Bull 8/13/97	Bull 5/13/98	Bull 7/7/98	Bull 9/17/98	Bull 5/20/99	Bull 7/23/99
Silt	no info	no info	no info	no info	4" in front of Screen 2; not much in front of #1	Up to 1" of gravelly silt at the upstream end and some leaf matter on the bottom, little sediment at the downstream end, except at the very end where there were at least 5" of sand and leaves.	Build up from 0" to 12".	None but a trace at the end.
Comments	too turbid for video.	too turbid to video tape; no velocity taken either.		There are flat metal plates on the trashracks in front of the screen that help somewhat with flow & submergence. It would be nice to have hinges installed so we can raise the gates over the screen and not just over the louver handles. The site has been sandbagged to keep water from overtopping the whole site. Flows looked good even with high water.	none.	Lots of fish in front of the screen. Some were salmonids. None were observed behind the screen. Some fish were evidently filmed.	No bypass or outfall. No camera shots taken.	Debris stuck in brushes. Large panels at beginning and end of screen. Fish swimming around.

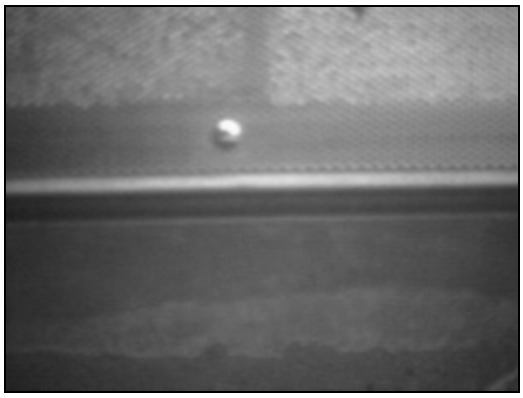
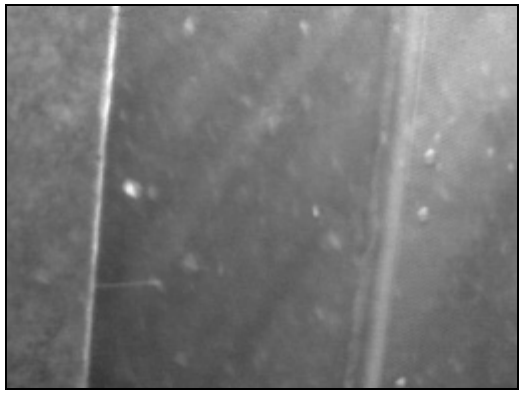
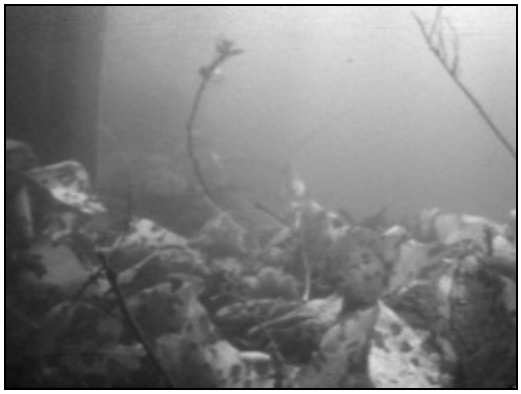
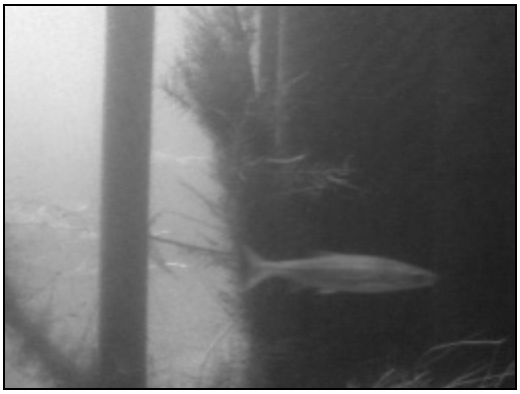
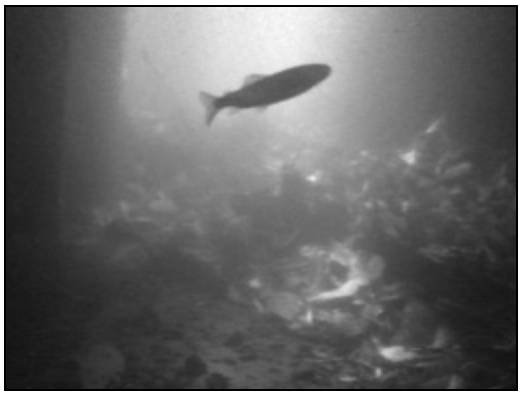
1997 Photos: Bull



1998 Photos: Bull





1999 Underwater Video: Bull

Screen Site	Date (Tape #)	Location (screen # & VCR counter)	VCR Counter	Notes	Photos	Descriptor
Bull	7/23/99 (3)	(# by panels lifted)		*brush continuous run		
		1 1:27:06				
		2 1:28:43				
		3 1:29:51	1:30:34	fish in front of screen		
		4 1:32:11				
		5 1:32:36				
		6 1:35:44				
		7 1:36:41	1:36:46	debris from brush in back eddy		
		8 1:39:02	1:39:35	large stick in brush, large debris pile at corner end		

1999 Photos: Bull