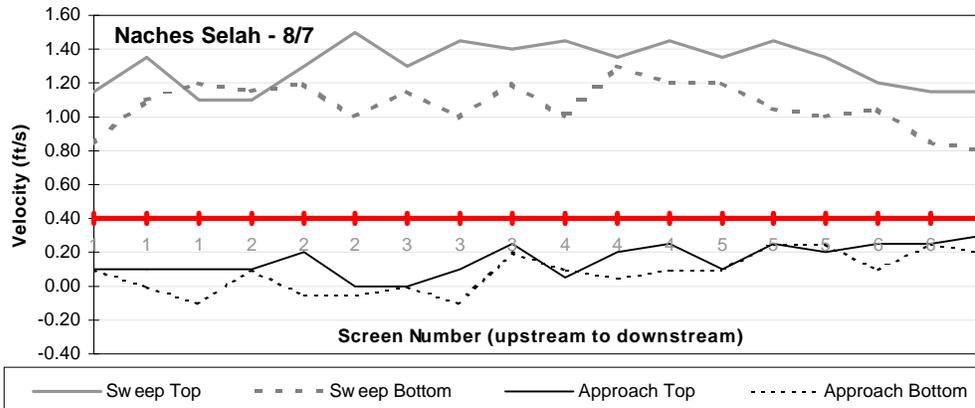
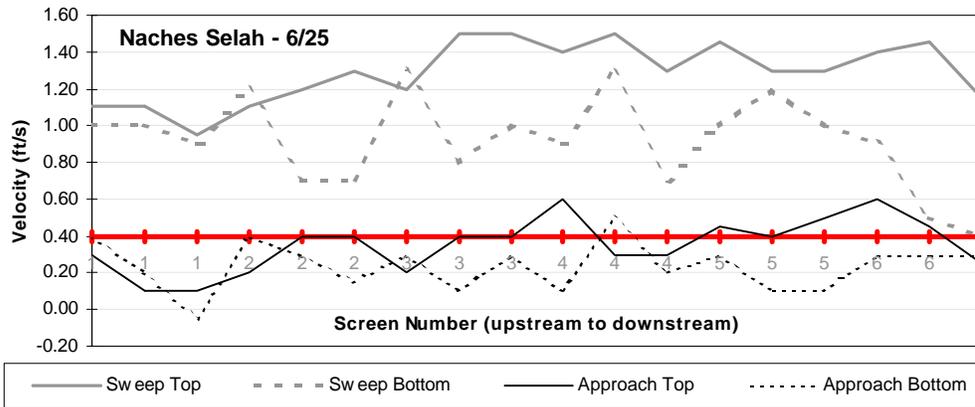
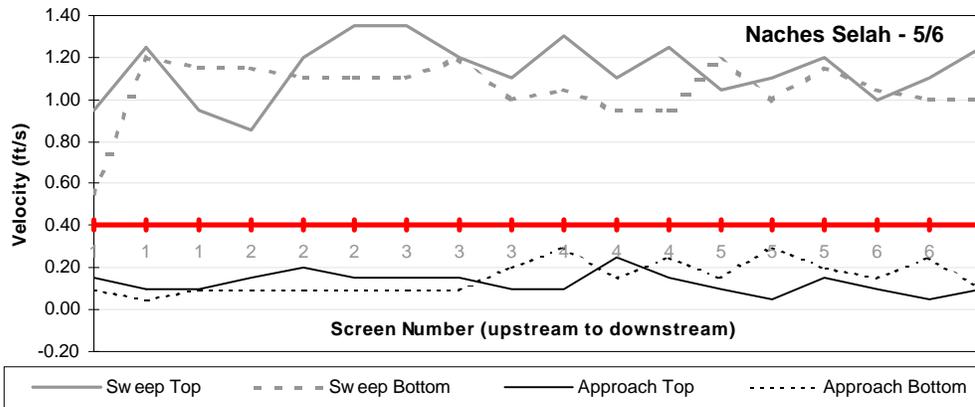
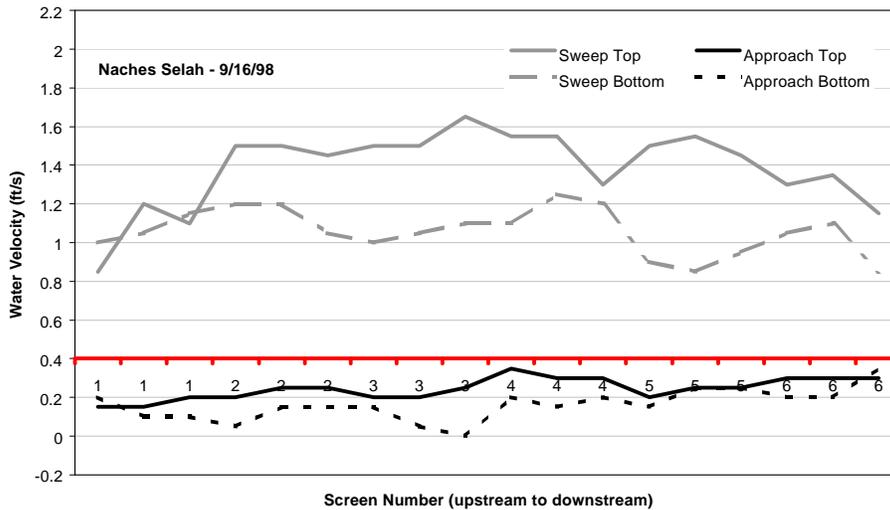
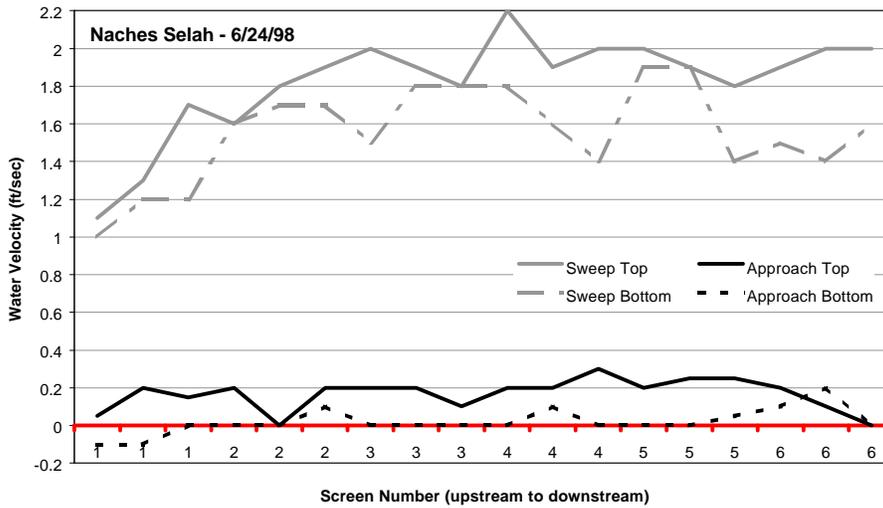
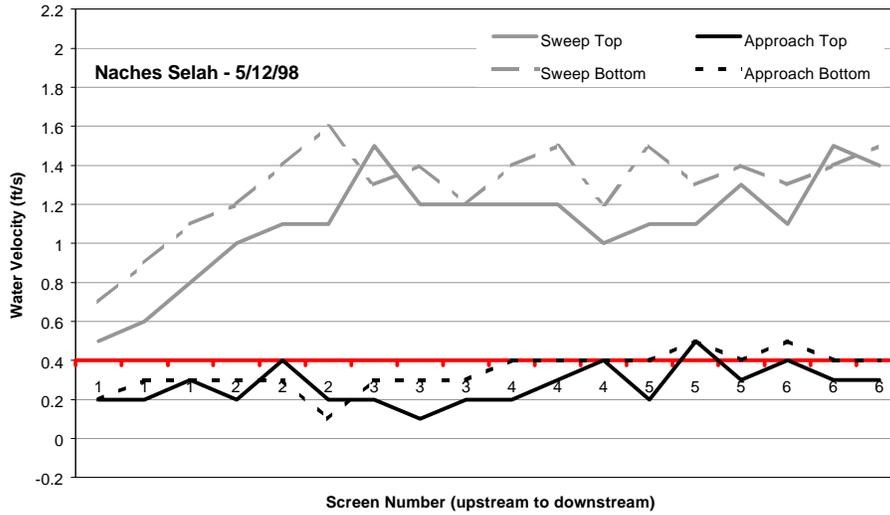


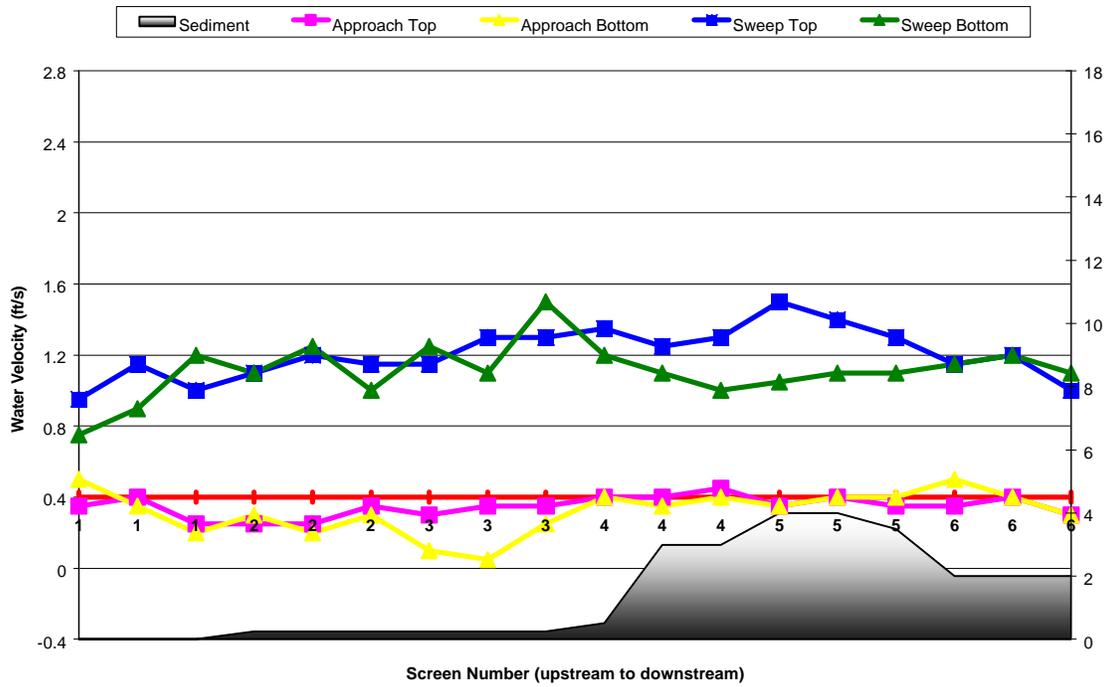
Water Velocities: Naches Selah

1997

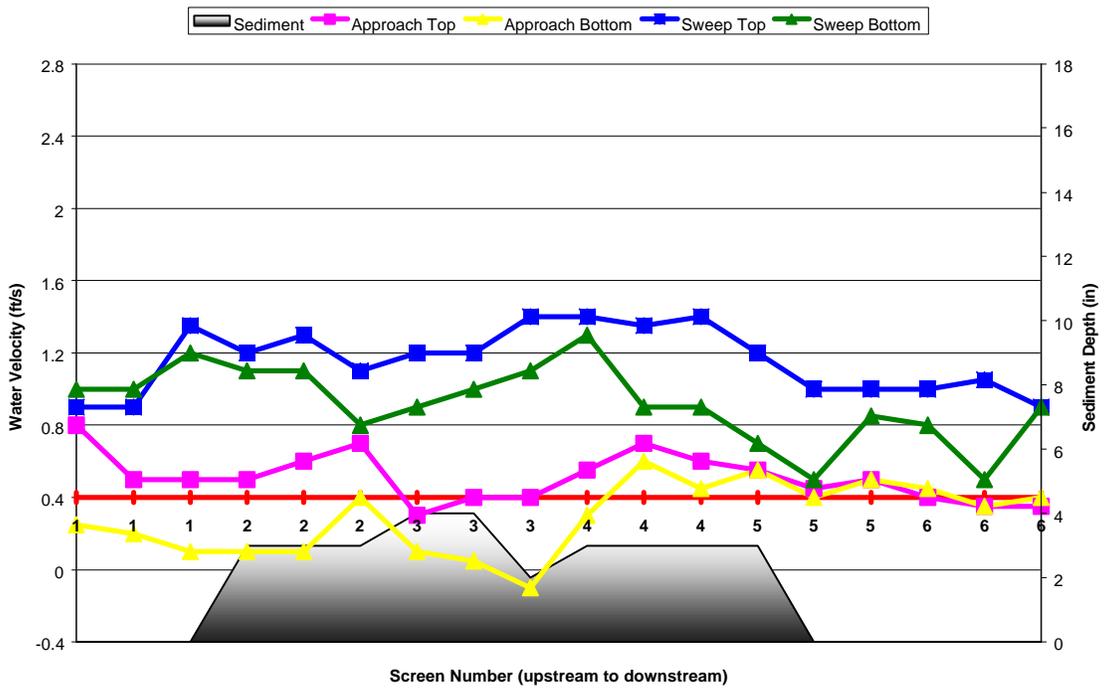




Naches Selah - May 17, 1999



Naches Selah - August 4, 1999



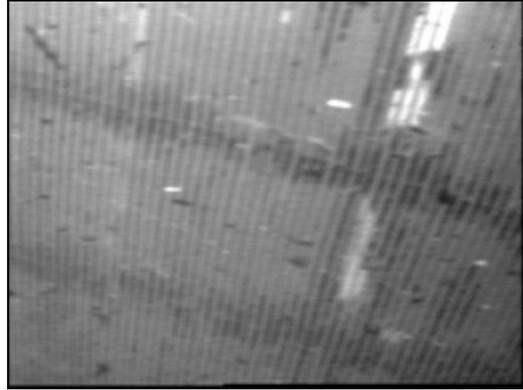
General Observations: Naches Selah

Date	Naches Selah 5/6/97	Naches Selah 6/25/97	Naches Selah 8/7/97	Naches Selah 5/12/98	Naches Selah 6/24/98	Naches Selah 9/16/98	Naches Selah 5/17/1999	Naches Selah 8/4/99
Staff Gages?	forebay=3.1 aftbay=3.1	forebay=3.06 aftbay=3.02	aftbay=2.92	forebay=3.05 aftbay=3.08	forebay=2.92 aftbay=2.88	forebay=2.90	forebay=2.58 aftbay=2.58	forebay=2.98 aftbay=2.9
Submergence Marks?	no	no	no	no	no	no	yes; at every 10%.	yes, faint.
Stoplogs?	no	NA	NA	NA	NA	NA	NA	NA
Louvers?	no info	no info	no info	Louvers all pointed downstream	no info	Most are about 6" open.	see picture	see picture
Head Loss?	no	no	no info	no	no	1"	No. 1/2"	No. 3/4"
Screen Material Condition	good	great	no info	no info	OK from above	OK, some algae looks (from above) like it's starting to grow between some of the spaces of the wedgewire.	Okay, some show rust. Smallish patch on scr.5.	Screen 3, perfect plate and accumulates leaf matter more.
Seal Condition	no info	great	no info	no info	OK from above. Noticed some possible gaps & loose sealant between #2&3, and #4&5.	OK from above. Some caulking coming undone when viewed underwater.	Caulking gaps between 3&4, 4&5, 5&6 and end of line.	good
Drums Turning Evenly?	NA	NA	NA	NA	NA	NA	NA	NA
Debris Anywhere?	no	not much; a little on screen at very upstream and downstream ends and a little in the bypass	no info	No, all removed yesterday. They cleared out 4 feet of silt near the forebay entrance and 3 feet closer to the screens 7 sloped in towards the screens.	Small log in forebay.	Some sandy silt and small gravel, but not too much. The forebay was cleaned last week.	No.	Some leaf matter on screen. Few branches on trashrack.
Cleaning System Working?	no info	yes, except for the little bit of debris accumulating at the very beginning and end of the screen	yes, but on time delay. It runs every hour unless there's a 2" head differential	now it is, but earlier the brush hadn't been reliable because of sediment stopping it.	Some debris accumulates on screen when brush is off.	Yes, brushes moving every 1/2 hour.	Running every 7 minutes, leaving small amount stuck behind.	Brush is not touching screen in all places.
Submergence (% of 48")	~90	~86.4	no info	86.8	94.4	84.7	82%	85%
Flow over Weir? How much?	yes, 22"	yes, 11"	yes, 10.5"	Yes, 7.5 "	Yes, 11"	Yes, 12"	Yes. 15"	Yes. 12"
Gage to Measure Weir Crest?	no info	no info	no	no	no	no	no	No. Silt gate has marks.
Weir Full Open? If not, how many inches to go?	no, ~80% open	no, ~60% open	no, 13" to go	No, 17" to go (out of ~33" total)	No, 11" to go	Not full open, no data on how much more needed.	yes	No. 9.75"
Water Running Freely behind Weir?	yes	yes	yes	yes	yes	yes	Yes. Some backwash turbulence.	yes

General Observations, continued

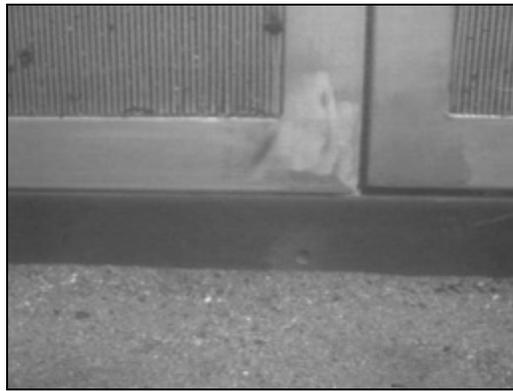
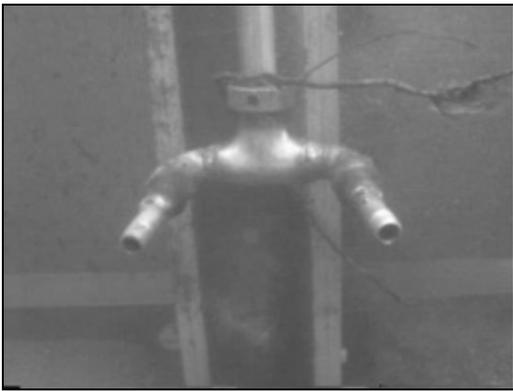
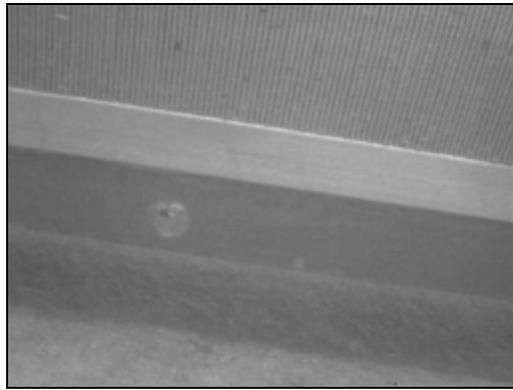
Date	Naches Selah 5/6/97	Naches Selah 6/25/97	Naches Selah 8/7/97	Naches Selah 5/12/98	Naches Selah 6/24/98	Naches Selah 9/16/98	Naches Selah 5/17/1999	Naches Selah 8/4/99
Depth of water in outfall pipe	10 ⁷ /18"	6 ⁷ /20"	9 ⁷ /24"	~1/2 full (~9 inches deep)	half full (~12")	~8", though not accurately measured.	No. 6"	15" not submerged.
Outfall Running Smooth?	yes	yes	yes	yes	Yes, fast with lots of whitewater	yes	yes	yes
Debris at End of Pipe?	no	no	no	no	no	no	no	no
Discharge Area = 1 ft?	yes	yes	yes	Questionable, but there is no doubt fish would make it to the river because the flow is so strong	yes	Not within the wingwalls (~6-8" deep), but >1ft where it meets the river.	yes	yes
Silt	less than 1" of silt anywhere	none recorded	none recorded	At the upstream end there is about 10" of silt behind the screens and in front of the louvers. 1" of silt noted immediately in front of screens 1 and 4; no other observations.	~1" in front of screens 2, 4, and 5. ~2" in front of screen 6. No silt immediately next to bypass though there was a buildup in front of it.	Generally 0.5-1" silt except at the upstream most screen and beginning of 2nd screen which were clean. Spot nearest bypass was also clean. One place in middle of #5 had 2" of silt.	None at 1 or 3. Small amount at 2. Scr.5 most w/4", 4&6 2-3".	Screens 2, 3, and 4 had 2-4" of silt.
Comments			potential gap at panel 3; fish in front of panel 6	A crew was working here yesterday and clearing out lots of silt (5/11/98).	We saw an attachment on the cleaning brush for the "bubbler". Looks like they fit an airhose to a pipe that extends to the bottom of the screen and blasts silt out of the way.	Jeff said he saw lots of fish inside the bypass. Cory observed 1 little fish on the wrong side of the screen. Fish on video (?) in bypass.	Several 2-4" trout in forebay, one also near trashrack.	Missing caulking at 2&3, 3&4, 4&5. Brush not touching whole way, grass/leaves on screen.

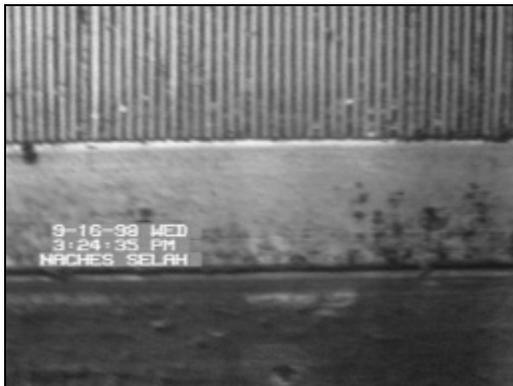
1997 Photos: Naches Selah





1998 Photos: Naches Selah





1999 Underwater Video: Naches Selah

Screen Site	Date (Tape #)	Location (screen # & VCR counter)	VCR Counter	Notes	Photos	Descriptor	
Naches Selah	5/17/99 (1)	1					
		1:54:33					
		2					
		1:55:37				1:55:50	AVG
				1:56:29	looks like screen has wear in corner	1:56:42	C1
		3					
		1:56:44		1:56:44	perfect plate screen		
		4					
		1:58:13		1:58:53	sediment pile	1:58:53	S1
		5			sediment pile		
		1:59:14		1:59:25	throughout (4")		
				2:00:54	patch on lower screen	2:00:54	R1
6							
2:01:10							
Bypass							
2:01:43							
			2:02:47, 52	missing seal 5 & 6			
			2:03:06	missing seal 4 & 5	2:03:08	C2	
			2:03:18	doesn't seem to have caulking 3 & 4			
			2:03:44	missing seal 1 & 2			
Naches Selah	8/4/99 (4)	1					
		0:00:09					
		2					
		0:01:41		0:01:59	sand piling up		
				0:02:55	no caulking in seam		
		3			could be missing		
		0:03:41		0:06:09	caulking in seam		
		4			leaves and grasses		
		0:06:50		0:07:52	on screen		
					missing caulking at		
				0:08:19	seam		
		5			missing caulking on		
0:09:11		0:09:44	bottom seal				
		0:09:56	patch on screen				
6							
0:10:35							
Bypass							
0:12:35		0:12:58	lots of sticks and leaf debris				

1999 Photos: Naches Selah

