

The Dalles Dam Fishway Status Report

2/4/2017

Inspection Period: 02/26/2017 - 03/04/2017

THE DALLES DAM



US Army Corps
of Engineers
Portland District

Fishways are inspected once daily during winter

The Dalles Dam	Inspections Out of Criteria	Criteria Limit	Total Number of Inspections: 7	Temperature: 38.7 °F
			Comments: Snow conditions subsided	Secchi: 3.3 feet
NORTH FISHWAY				
Exit differential	0	≤ 0.5'	1.3	
Count station differential	0	≤ 0.3'		
Weir crest depth	0	1.0' ± 0.1'		
Entrance differential	0	1.0' - 2.0'		
Entrance weir N1	0	depth (≥ 8')	9.1	
Entrance weir N2	0	Closed		
PUD Intake differential	0	≤ 0.5'		
EAST FISHWAY				
Exit differential		≤ 0.5'		
Removable weirs 154-157		Per forebay		
Weir 158-159 differential		1.0' ± 0.1'		
Count station differential		≤ 0.3'		
Weir crest depth		1.0' ± 0.1'		
Junction pool weir JP6		depth (≥ 7')		
East entrance differential		1.0' - 2.0'		
Entrance weir E1		No criteria		
Entrance weir E2		depth (≥ 8')		
Entrance weir E3		depth (≥ 8')		
Collection channel velocity		1.5 - 4 fps		
Transportation channel velocity		1.5 - 4 fps		
North channel velocity		1.5 - 4 fps		
South channel velocity		1.5 - 4 fps		
West entrance differential		1.0' - 2.0'		
Entrance weir W1		depth (≥ 8')		
Entrance weir W2		depth (≥ 8')		
Entrance weir W3		No criteria		
South entrance differential		1.0' - 2.0'		
Entrance weir S1		depth (≥ 8')		
Entrance weir S2		depth (≥ 8')		
JUVENILE PASSAGE				
Sluiceway operation	2	Units 1, 18	Unit 18 return late Mar 1. Delayed gate adjustment from unit 19 to unit 18.	
Turbine trashrack drawdown	NA			
spill	NA		Spill for high river flows	
Turbine 1% Efficiency	NA	per FPP	Out of fish passage season	
Turbine Unit Priority	NA	per FPP	Out of fish passage season	

*Out for winter maintenance and AWS
backup construction. Expected RTS
03/07*

Birds/Sea lions:

No sea lions observed. All bird numbers low.

Bird observation data collected once daily. Refer to Avian Zone map and bird count.

Spillway avian lines repair planned. Awaiting USDA signatures for work plan. USDA prework site tour occurred Mar1.

Operations:

North Fishway in full operation. East fishway return delayed to Mar 7 due to AWS contract delays.

Sluiceway intermittent operation in conjunction with Feb involuntary spill per Fish Passage Plan. Open for fish passage Mar 1.

Current Outages;

T8 (MU15 & MU16) out due to transformer failure. Transformer replacement scheduled for spring 2018.

MU21 out for exciter failure, return Feb23

MU3 out for governor oil level failure, return Feb24

Awaiting tailrace crane completion to resume turbine maintenance schedule. ETR end of March.

Maintenance:

Additional temperature monitoring probe being deployed at east junction pool and south entrance prior to water up

Rubber seal installed to bottom of east count station crowder for lamprey exclusion.

New east exit weir electrical panel FCQ7 installation on hold awaiting funding. Approx 50% completed.

Maintenance status; East exit weirs 154 and 159 coupler/seal replacement complete, ladder expansion joint repair complete

N1 weir rehab and spare swap complete, W1 weir repair/wheel replace complete/install after fishway returns.

Other repair maintenance plans; 154 -157 rehab/weir wheel replace, diffuser valve overhaul (rehab or decommission).

Fish related /non-fish funded items; Spillway crane and spillgate 9, both awaiting funding.

All spillway items on Critical Infrastructure list and Unfunded Requirement list.

Research/Construction/Contractors:

Lamprey minor mods - Tribal trap hoist improvements and rounded entrance weir caps designs underway. Fab in-house '17. Install next winter.

North fishladder rehab/rock wall stabilizing - Awaiting funding. Possible 2018/19.

East fishladder AWS emergency backup - Forebay diving saw cutting continues. Junction pool 7' pipe valve room start. Demob junction pool scaffold.

Jackhammering hole complete season 1. Excavation 10' valve room to occur in March per FPOM approval. EFL outage extension FPOM approved

Railroad track removal - West powerhouse tailrace deck ~100' track removed. Intake deck start west end. Crane rail replace 2021.

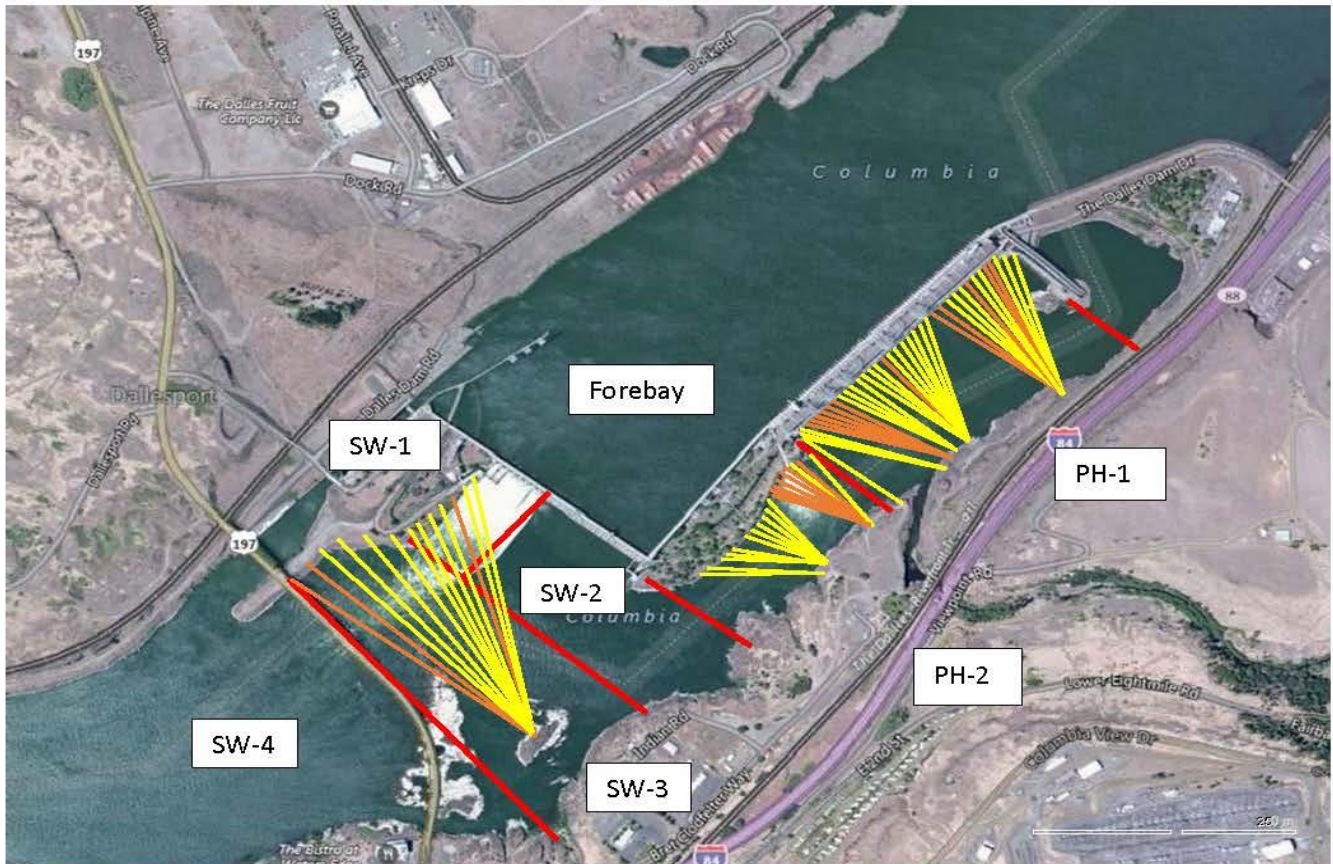
Tailrace crane rehab - Work resumed. Completion March?

Fish unit breaker replace.- Work start fall 2017. Switch over Jan 2018.

Fish unit rehab - Weekly coordination meetings. Phase 1A report Jan 2018. Award 2020. Completion 2022. Investigating possible increase flow capacity.

Transformer replacement - Install start May 2018. Coordinated through FPOM.

Approved by: Ron Twiner
Operation Project Manager The Dalles Dam



Red lines = avian zones

Yellow lines = current wires

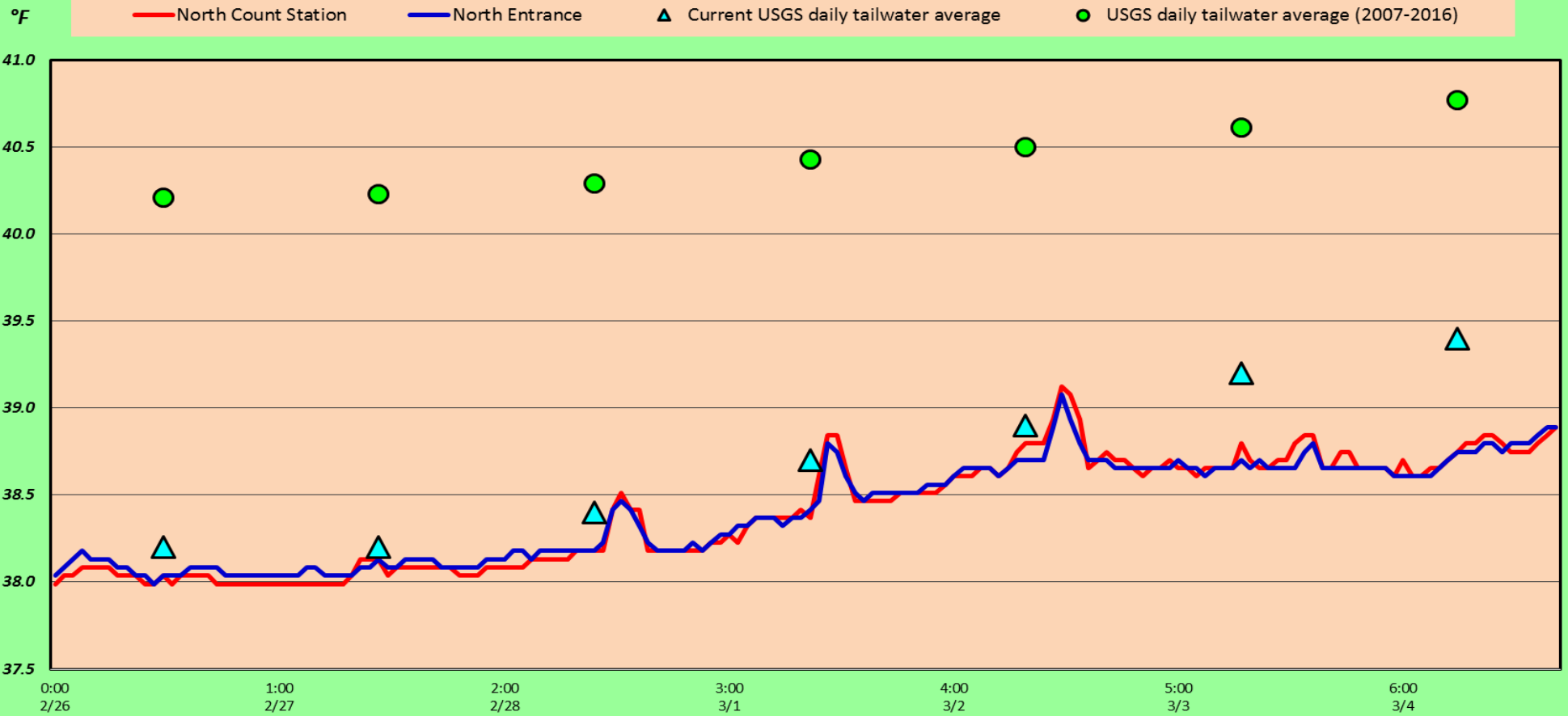
Orange lines = down or missing wires

2017 Bird Counts

F=foraging, NF=non-foraging

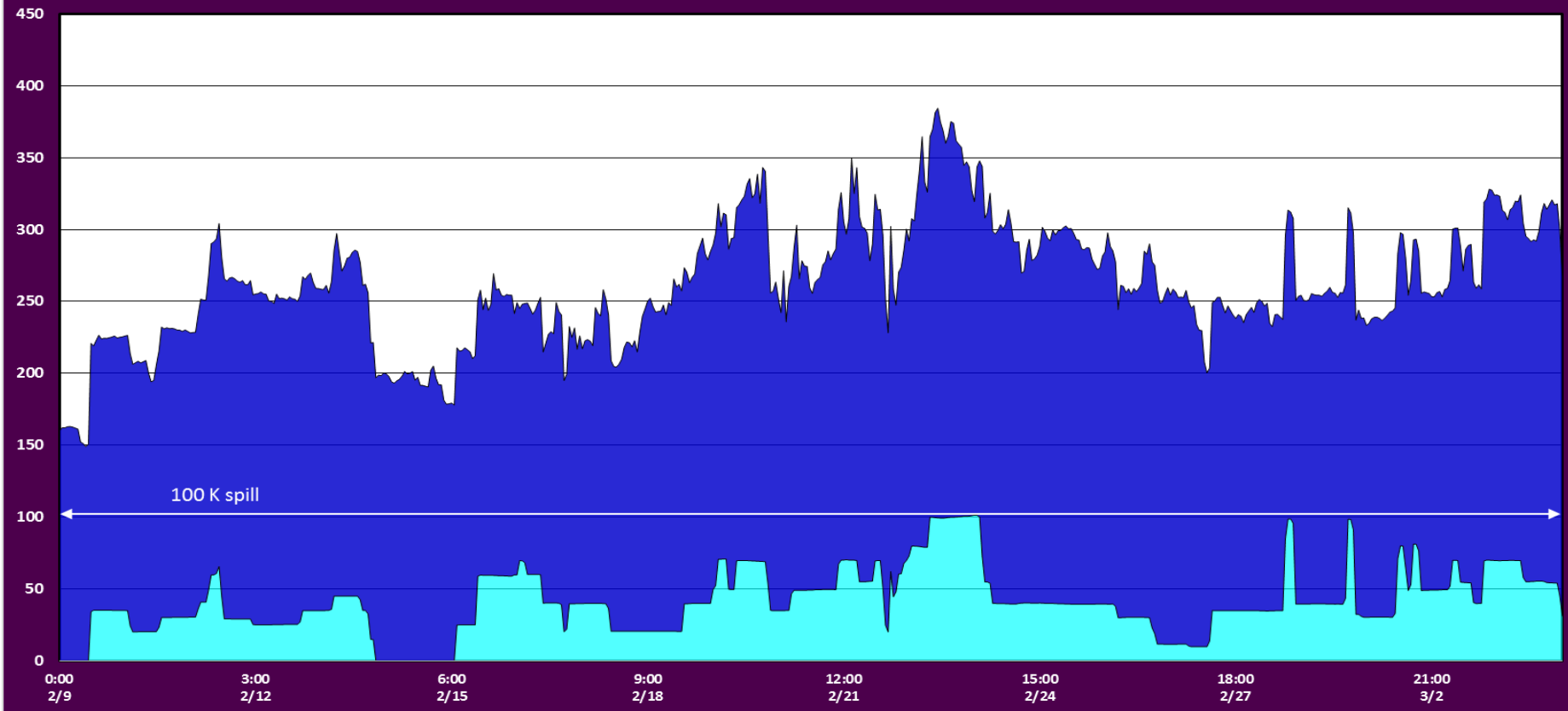
Date	Observer	AM/PM	Zone	Gull		Cormorant		Caspian tern		Grebe		Pelican		Other		Total birds in zone	Notes		
				F	NF	F	NF	F	NF	F	NF	F	NF	F	NF				
2/26		PM	FB	0	1	0	0	0	0	0	0	0	0	0	0	0	1	GBHE	
			PH1	0	0	0	2	0	0	0	0	0	0	0	0	0	0		2
			PH2	0	0	1	0	0	0	0	0	0	0	0	0	4	5		
			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
			SW2	0	0	1	0	0	0	0	0	0	0	0	0	0	0		1
			SW3	0	0	0	20	0	0	0	0	0	0	0	0	0	0		20
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2/27		AM	FB	0	1	1	0	0	0	0	0	0	0	0	0	0	2	GBHE GBHE	
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
			SW1	0	2	0	0	0	0	0	0	0	0	0	0	1	3		
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
			SW3	0	0	0	5	0	0	0	0	0	0	0	0	0	0		5
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
2/28		PM	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	COME GBHE	
			PH1	0	0	1	1	0	0	0	0	0	0	0	0	3	5		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	2	2		
			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW2	0	0	1	0	0	0	0	0	0	0	0	0	0	0		1
			SW3	0	0	0	14	0	0	0	0	0	0	0	0	0	0		14
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3/1		AM	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	COME	
			PH1	0	0	0	1	0	0	0	0	0	0	0	1	0	2		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW1	0	0	0	1	0	0	0	0	0	0	0	0	0	0		1
			SW2	0	0	2	0	0	0	0	0	0	0	0	0	0	0		2
			SW3	0	0	1	31	0	0	0	0	0	0	0	0	0	0		32
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3/2		PM	FB	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW3	0	0	0	37	0	0	0	0	0	0	0	0	0	0		37
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3/3		AM	FB	0	0	0	0	0	0	0	0	0	0	0	0	1	1	BAEA	
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW3	0	0	0	36	0	0	0	0	0	0	0	0	0	0		36
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
3/4		PM	FB	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
			PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
			SW3	0	1	0	33	0	0	0	0	0	0	0	0	0	0		34
			SW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
Average-week				0.0	0.1	0.2	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	4.2			

The Dalles Dam Adult Fish Ladder-River/Water Temperatures



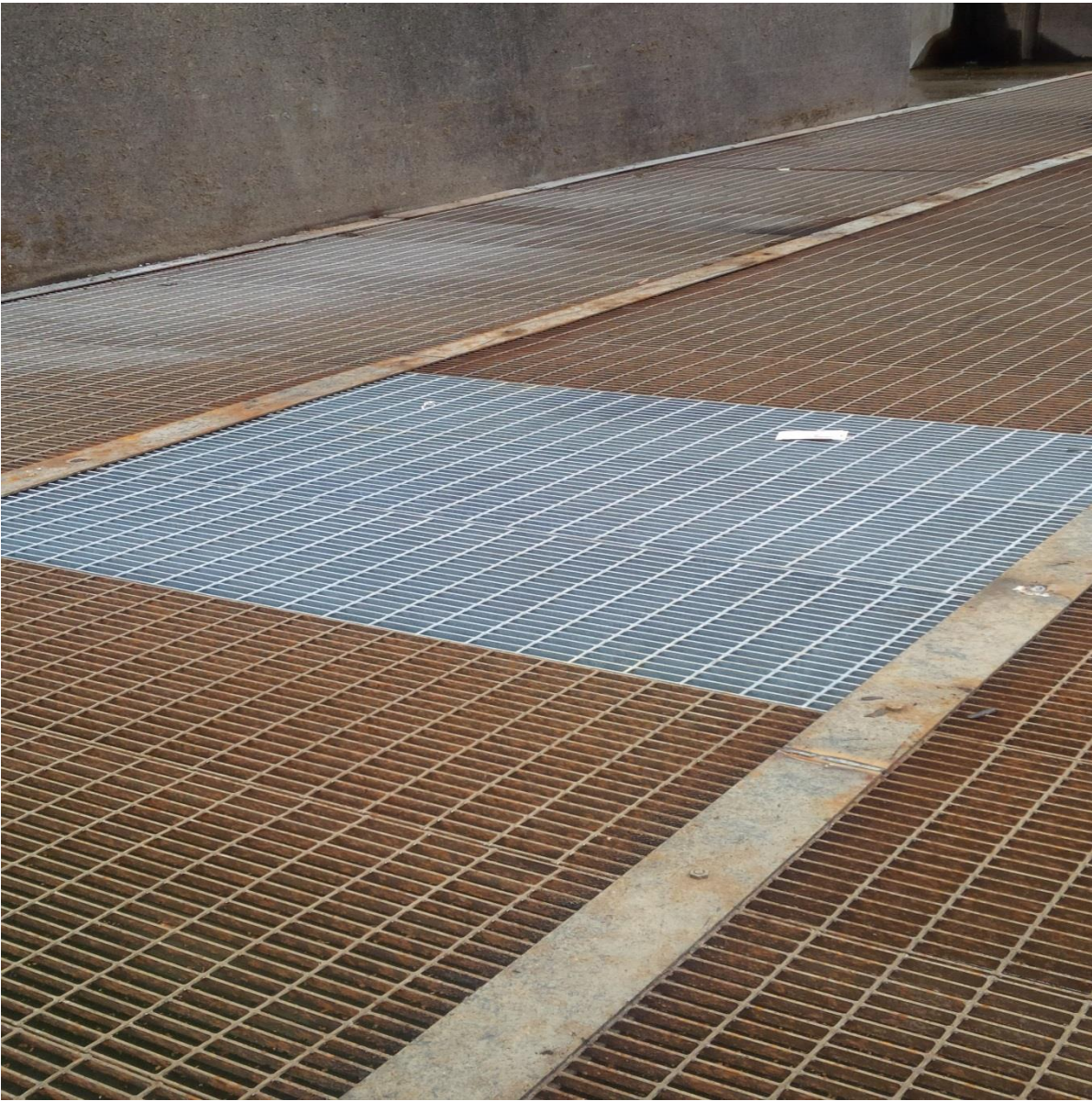
The Dalles Dam River-Spill KCFS

Spill kcfs Total Outflow kcfs





Footing poured for 7' valve room



Damaged diffuser grating from contractor work platform replaced