

Final 1998 Section 303(d) List - WRIA 47

Water Name	CHELAN LAKE		
Parameter	Total Phosphorus	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed <input type="checkbox"/> None
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	22E	Grid Latitude	
Section	13	Grid Longitude	
Basis for Consideration of Listing	Patmont, et al. 1991.;Pelletier, 1991.;R.W. Beck and Associates, 1991.		
Remarks	TMDL for antidegradation lake to remain at ultra-oligiotrophic conditions based on the Water Quality Management Plan submitted 3/9/92. EPA approved the TMDL on 1/26/93.		

Water Name	CHELAN LAKE		
Parameter	4,4'-DDE	Mediu	Tissue
Place on 1998 List?	<input checked="" type="checkbox"/> Yes	Listed in 1996	<input checked="" type="checkbox"/> Yes Action Needed <input type="checkbox"/> TMDL
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	4712011H6
Range	22E	Grid Latitude	47.875
Section	13	Grid Longitude	120.165
Basis for Consideration of Listing	Davis and Johnson, 1994. , excursions beyond the criterion of edible fish tissue samples.;		
Remarks			

Water Name	CHELAN LAKE		
Parameter	PCB-1254	Mediu	Tissue
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	47120I1H6
Range	22E	Grid Latitude	47.875
Section	13	Grid Longitude	120.165
Basis for Consideration of Listing	Davis and Johnson, 1994. , excursions beyond the criterion of edible fish tissue samples.		
Remarks			

Water Name	CHELAN LAKE		
Parameter	pH	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> Yes Action Needed None
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	47120I0D1
Range	22E	Grid Latitude	47.835
Section	13	Grid Longitude	120.015
Basis for Consideration of Listing	1 excursion beyond the criterion out of 12 samples (<1%) at Ecology ambient monitoring station 47A070 (RM 4.8) between 9/91 and 9/96.		
Remarks	A single excursion does not meet the Water Quality Program policy for listing		

Water Name	CHELAN LAKE		
Parameter	PCB-1260	Mediu	Tissue
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	4712011H6
Range	22E	Grid Latitude	47.875
Section	13	Grid Longitude	120.165
Basis for Consideration of Listing	Davis and Serdar, 1996 , excursions beyond the criterion in edible fish tissue of Kokanee and Rainbow Trout during 1994.		
Remarks			

Water Name	CHELAN LAKE		
Parameter	4,4'-DDE	Mediu	Tissue
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	4712011H6
Range	22E	Grid Latitude	47.875
Section	13	Grid Longitude	120.165
Basis for Consideration of Listing	Davis and Serdar, 1996 , excursions beyond the criterion in edible fish tissue of Kokanee, Rainbow Trout, and Smallmouth Bass during 1994.		
Remarks			

Water Name	CHELAN LAKE		
Parameter	PCB-1254	Mediu	Tissue
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	292NWR	Old Segment ID #	WA-47-9020
Stream Route #		Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	47120I1H6
Range	22E	Grid Latitude	47.875
Section	13	Grid Longitude	120.165
Basis for Consideration of Listing	Davis and Serdar, 1996 , excursions beyond the criterion in edible fish tissue of Kokanee, Rainbow Trout, and Smallmouth Bass during 1994.		
Remarks			

Water Name	CHELAN RIVER		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed None
New Segment ID #	J123XG	Old Segment ID #	WA-47-1010
Stream Route #	5.98	Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	22E	Grid Latitude	
Section	13	Grid Longitude	
Basis for Consideration of Listing	3 excursions beyond the criterion out of 12 samples (25%) at Ecology ambient monitoring station 47A070 (RM 4.8) between 9/91 and 9/96.		
Remarks	The Ecology ambient monitoring station 47A070 is located at the mouth of Lake Chelan and represents lake conditions. Therefore, state lake criteria should be applied. Solar heating of the surface layer of the stratified lake will cause outflow water temperature to be high. This judgement was recommended by Gordon Congdon of Chelan County PUD and agreed upon by Brad Hopkins (Dept. of Ecology) on 1/96.		

Water Name	CHELAN RIVER		
Parameter	Fecal Coliform	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> Yes Action Needed <input type="checkbox"/> None
New Segment ID #	J123XG	Old Segment ID #	WA-47-1010
Stream Route #	5.98	Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	22E	Grid Latitude	
Section	13	Grid Longitude	
Basis for Consideration of Listing	<p>0 excursions beyond the criterion out of 12 samples (0%) at Ecology ambient monitoring station 47A070 between 9/91 and 9/96.</p> <p>Listed in 1996 based on 3 excursions beyond the criterion at Ecology ambient monitoring station 47A070 in 12/85, 9/86 and 10/89.</p>		
Remarks	The segment now meets water quality standards for fecal coliform.		

Water Name	CHELAN RIVER		
Parameter	pH	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> No Action Needed <input type="checkbox"/> None
New Segment ID #	J123XG	Old Segment ID #	WA-47-1010
Stream Route #	5.98	Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	22E	Grid Latitude	
Section	13	Grid Longitude	
Basis for Consideration of Listing	<p>1 excursions beyond the criterion out of 12 samples (8%) at Ecology ambient monitoring station 47A070 (RM 4.8) between 9/91 and 9/96.</p>		
Remarks	<p>A single excursion does not meet the Water Quality Program policy for listing. The Ecology ambient monitoring station 47A070 is located at the mouth of Lake Chelan and represents lake conditions. Therefore, state lake criteria should be applied. Epilimnetic productivity is the likely cause of these excursions beyond the pH criterion. This judgement was recommended by Gordon Congdon of Chelan County PUD and agreed upon by Brad Hopkins (Dept. of Ecology) on 1/96.</p>		

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name

Parameter **Mediu**

Place on 1998 List? **Listed in 1996** **Action Needed**

New Segment ID # **Old Segment ID #**

Stream Route # **Water Resource Inventory Area**

Township **Waterbody Grid #**

Range **Grid Latitude**

Section **Grid Longitude**

Basis for Consideration of Listing

Remarks

Water Name	COLUMBIA RIVER		
Parameter	pH	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> Yes Action Needed <input type="checkbox"/> None
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1040
Stream Route #	798.896	Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	23E	Grid Latitude	
Section	29	Grid Longitude	
Basis for Consideration of Listing	<p>0 excursions beyond the criterion out of 12 samples (0%) at Ecology ambient monitoring station 47B070 between 9/91 and 9/96.</p> <p>Listed in 1996 based on 2 excursions beyond the criterion at Ecology ambient monitoringstation 47B070 on 1/15/91 and 4/9/91.</p>		
Remarks	The segment now meets water quality standards for pH.		

Water Name	COLUMBIA RIVER		
Parameter	Total Dissolved Gas	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed <input type="checkbox"/> TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1040
Stream Route #	817.194	Water Resource Inventory Area	47
Township	28N	Waterbody Grid #	
Range	24E	Grid Latitude	
Section	07	Grid Longitude	
Basis for Consideration of Listing	<p>20 excursions beyond the criterion at the Douglas County PUD station WEL in 1993.;</p> <p>7 excursions beyond the criterion at the Douglas County PUD station WEL in 1994.;</p>		
Remarks			

Water Name	COLUMBIA RIVER		
Parameter	Temperature	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	NN57SG	Old Segment ID #	WA-CR-1050
Stream Route #	819.059	Water Resource Inventory Area	47
Township	28N	Waterbody Grid #	
Range	24E	Grid Latitude	
Section	06	Grid Longitude	
Basis for Consideration of Listing	Washington Dept. of Fish and Wildlife data show numerous excursions beyond the criterion at the inflow to the Wells Hatchery.		
Remarks	The likely cause of these excursions beyond the criterion are due to stratification behind impoundments. Remedies to the problem may not be available.		

Water Name	FIRST CREEK		
Parameter	Dissolved Oxygen	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	CH30BE	Old Segment ID #	WA-47-1012
Stream Route #	0.719	Water Resource Inventory Area	47
Township	27N	Waterbody Grid #	
Range	21E	Grid Latitude	
Section	04	Grid Longitude	
Basis for Consideration of Listing	Patmont, et al. 1989. , 2 excursions beyond the criterion, at the mouth, between 12/86 and 11/87.		
Remarks			

Water Name	MITCHELL CREEK		
Parameter	pH	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> Yes	Listed in 1996	<input type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	QF17YZ	Old Segment ID #	WA-47-1014
Stream Route #	0	Water Resource Inventory Area	47
Township	29N	Waterbody Grid #	
Range	21E	Grid Latitude	
Section	34	Grid Longitude	
Basis for Consideration of Listing	Patmont, et al. 1989. , 2 excursions beyond the criterion out of 13 samples (15%) , at the mouth, on 7/28/87 and 6/16/87.		
Remarks			

Water Name	RAILROAD CREEK		
Parameter	Arsenic	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input type="checkbox"/> Yes Action Needed None
New Segment ID #	DD44JV	Old Segment ID #	WA-47-1020
Stream Route #	0	Water Resource Inventory Area	47
Township	31N	Waterbody Grid #	
Range	10E	Grid Latitude	
Section	10	Grid Longitude	
Basis for Consideration of Listing	Patmont, et al. 1989. , 4 excursions beyond the criterion at the mouth between 3/87 and 9/87. Johnson, et al. 1997., exceedance of the acute water quality occur upstream of the holden Mine site and decrease in concentrations going downstream to the mouth.		
Remarks	The analysis by Johnson, et al. 1997, show that natural background concentrations exceed the standard, and therefore is not a violation of the water quality standards and the segment should not be listed. The new analysis shows that concentrations of Arsenic actually decrease as the water flows past the Holden Mine site. The high arsenic levels are most likely due to the geology of the area.; There is significant uncertainty regarding the accuracy of the current arsenic criteria for human health. Even EPA is reluctant to impose the criteria (62 FR 42179, August 5, 1997) that they promulgated on Washington State through the national toxic rule. Ecology is currently considering revising the arsenic standard.		

Water Name	ROSES (ALKALI) LAKE		
Parameter	4,4'-DDE	Mediu	Tissue
Place on 1998 List?	<input checked="" type="checkbox"/> Yes	Listed in 1996	<input checked="" type="checkbox"/> Yes Action Needed TMDL
New Segment ID #	370XQC	Old Segment ID #	WA-47-9037
Stream Route #		Water Resource Inventory Area	47
Township	28N	Waterbody Grid #	
Range	21E	Grid Latitude	
Section	26	Grid Longitude	
Basis for Consideration of Listing	Serdar, et al. 1994. , excursions beyond the criterion in edible fish tissue.		
Remarks			

Water Name	STEHEKIN RIVER		
Parameter	Arsenic	Mediu	Water
Place on 1998 List?	<input type="checkbox"/> No	Listed in 1996	<input checked="" type="checkbox"/> Yes Action Needed None
New Segment ID #	HW13SG	Old Segment ID #	WA-47-1030
Stream Route #	0	Water Resource Inventory Area	47
Township	33N	Waterbody Grid #	
Range	17E	Grid Latitude	
Section	36	Grid Longitude	
Basis for Consideration of Listing	Patmont, et al. 1989. , 5 excursions beyond the criterion, at the mouth, between 12/86 and 11/87.		
Remarks	<p>The analysis by Johnson, et al. 1997, show that natural background concentrations exceed the standard, and therefore is not a violation of the water quality standards and the segment should not be listed. The new analysis shows that concentrations of Arsenic actually decrease as the water flows past the Holden Mine site on Railroad Creek. The high arsenic levels are most likely due to the geology of the area.;</p> <p>There is significant uncertainty regarding the accuracy of the current arsenic criteria for human health. Even EPA is reluctant to impose the criteria (62 FR 42179, August 5, 1997) that they promulgated on Washington State through the national toxic rule. Ecology is currently considering revising the arsenic standard.</p>		