

Tables  
Tucannon River Programmatic Report  
Project #: 2010-077-00

Annual Report  
(Reporting Period January 2015 to December 2015)  
Contract: # 68810

**Tables 1-6**

**Table 1: Habitat restoration objectives as they are list in the Salmon Recovery Plan for South Eastern Washington for the Tucannon River from the mouth of Pataha Creek upstream above Panjab Cr. The objectives are listed by level of priority as identified in the 2012 plan. Imminent threats are always considered the highest priority when identified in project rounds.**

<b>Upper Tucannon River MSA (from Pataha Creek upstream to Tucannon headwaters)</b>	
<b>Imminent Threats: Fish Screens, Low Stream Flows</b>	
I.	Riparian: > 40 to 75% of maximum
II.	Large Woody Debris: >1 key piece per channel width
III.	Channel Confinement: < 25 to 50% of stream bank length
IV.	Temperature: < 4 days > 72°F

**Table 2: Programmatic project metric table displaying # of LWD key pieces (>6m long and 0.3m dia) and side channel improvements for project complete under the programmatic between 2012 and 2015.**

Project #	# of Key Pieces			Miles of Side Channel			Increase in Perennial Reach Length (Miles)		
	Pre Project	Post Project	% Increase	Pre Project	Post Project	% Increase	Pre Project	Post Project	% Increase
1	44	250	468%	0.19	0.55	65%	0.78	1.14	31.58%
3	101	393	289%	0.4	0		1.76	1.76	0.00%
10	100	468	368%	0.62	1.83	66%	2.18	2.68	18.66%
11	96	657	584%	1.1	1.39	21%	2.66	2.86	6.99%
14	64	697	989%	0.23	1.61	86%	1.87	2.64	29.17%
15	55	472	758%	0.2	0.46	57%	0.36	0.62	41.94%
24	43	354	723%	0.1	0.54	81%	0.96	1.25	23.20%

**Table 3: Tucannon Programmatic habitat restoration action accomplishments 2011-2015, including the project completed by Columbia Conservation District that the Programmatic was a technical partner. Key for symbols in table; bb - # of Key LWD Pieces >6m long & > 30cm dia, cc - # of multiple log structure added, ccc - # of multiple log structures present in recent survey, dd - total number of post project wood in reach >6m long & >30cm dia, ee - # of medium LWD >6m long & 15-30cm dia, \* Miles of main channel treated based on Anchor QEA 2011 Nov Conceptual Report reported project lengths, \*\* Miles of LWD Key Piece placed including main and side channel, \*\*\* Only placed wood counted during survey and visible, \*\*\*\* This includes the natural wood survey from 2014 plus the 10 natural key pieces in Phase II 2015, ~ This includes the natural wood survey from 2014 plus the 10 natural key pieces in Phase II 2015, ~~ Estimated in CHaMP Table Sheet Summary Piece Per BF-Width. The project column also indicates the primary funding source for the project with blue indication the Programmatic, green indicating the Columbia Conservation District and yellow the proposed project to be completed 2016-18.**

Project Area	Build Year	River Mile		Main Channel (mile) *	Pre-project LWD Key Pieces (bb)	Placed LWD As-built (mile) **	LWD Key Pieces added (bb) ***	Placed wood Visible in Survey (bb) ****	Med LWD Debris Added (ee)	# Structures		# of single logs added (bb)	Natural Key Pieces Visible in Survey (bb)**	Natural Medium (ee)	Rapid Hab/Post Survey Visible (#of key pieces) (dd)	Current # of key piece/width (BF)	Debris Added (CY)	Length Treated for Floodplain Conect. (mile) (ff)	Levees/Riprap (ft)		Side Channels (mile)			New Floodpain (ac)	Rapid Habitat Survey Pre/Post	Notes	
		From	To							Added (CC)	Pre-Existing (CCC)								Remove	Set Back	Enhance	New	Reconnect				
1	2014	50.1	49.5	0.59	44	0.81	231	231	37	38		13	17	9	248	3.42	0	0.59	0	0	0.06	0.36	0.00	1.5	Pre/Post		
3	2014	48.1	46.8	1.36	101	1.36	324	324	21	42		4	117	50	441	2.62	?	1.36	0	0	0.04	0.00	0.00	0.59	Pre/Post		
4	2018-19	46.8	46.4	0.40												0.32											
5	2018-19	46.4	46.0	0.40												0.21											
6	2017	46.0	45.3	0.51												0.59										Designed Partially funded	
7	2019-20	45.3	44.9	0.40												0.70											
8	2017	44.9	44.4	0.57												0.97										Designed Partially funded	
9	2017	44.4	44.0	0.70												0.42										Designed Partially funded	
10	2012	44.0	42.4	1.47	100	1.94	300	445	312	69	87	13	23	8	468	2.61	170	1.47	1305	0	0.00	0.74	0.47	5.83	Post 2015	2015 rapid survey identified additional .22 miles of side channel created. A preproject survey was completed by WDFW and CTUIR	
11	2015	42.3	40.7	1.56	96	2.35	582	582	255	96		17	75	30	657	3.66		1.56	0	0	1.10	0.06	0.23	0	Pre/Post 2015	structure count includes 19 floodplain structures: 0.25 acrs of new wetland created	
13	2018	40.0	39.2	0.80												0.16										10% design	
14	2014	39.2	37.2	1.64	64	1.64	712	647	65	71		17	50	28	697	3.96	200	1.64	0	0	0.15	1.22	0.17	17.77	Pre/Post 2014		
15	2014	37.2	36.4	0.63	55	0.89	597	417	79	46		37	55	18	472	6.98	100	0.63	192	0	0.20	0.32	0.00	5.94	Pre/Post 2015	floodplain area est in field	
17	2016	34.9	34.3	0.60																							
18	2016	34.3	32.1	2.20																		0.23		2.2		Designed Partially funded	
22	2014	30.3	29.3	1.01	10	0.63	36	36	0	8		0	10	42	46	0.71		0			-	-	-	0	Pre/Post 2014		
23	2015	29.3	28.3	0.98	35	0.75	51			12			35	35	86	1.14		0.98	520						Pre/		
24	2015	28.3	27.5	0.86	43	0.99	498	354	32	28		33	23	53	377	4.36	200	0.86	380	0	0.13	0.19	0.13	5.04	Pre/Post 2015	Access to floodplain enhanced through levee removal and wood placement	
26	2011-2014	26.9	23.7	3.20		0.76	78	84	19	17	2		7	33	91	1.02		3.2	8305	12218	-	-	-	130	partial post	8305 ft levee removed	
27	Set back done	23.7	22.9																266	2819.5	-	-	-	-		Designed Partially funded	
28	2016-17																										
<b>Sum Programmatic 2011-15</b>				8.11		9.98	3244			390					3360			8.11	1877	0	1.68	2.89	1.00	36.67			
<b>Sum Partners 2010-15</b>				5.19		2.14	165			37					223			4.18	8825	23866	0				130		
<b>Sum All 2010-15</b>				13.30		12.12	3409			427					3583			12.29	10702	23866	1.68	2.89	1.00	166.67			

**Table 4: Habitat actions completed in the Tucannon River in 2015 by the Programmatic, during the entire Programmatic and during the time period by all funding sources.**

	<b>2015 Programmatic</b>	<b>Programmatic Total 2012-15</b>	<b>SpCH Reach 30 miles</b>
*Main Channel Treated (mile) (bb)	2.73	8.2	13.39
**Placed LWD (mile) (bb)	3.65	10.07	12.36
LWD Key Pieces added (bb)	1355	3244	3409
*** Number of Structures added (cc)	131	390	427
# of single logs added (bb)	87	134	134
Natural Key Pieces (bb)	108	337	405
****Rapid Hab/Post Survey bb) (dd)	1259	2983	3406
Levee Removed (ft)	572	1496.93	10967.75
Levee Set Back (ft)			17631.15
Side Channel Enhance (mile)	1.23	1.68	1.68
Side Channel Created (mile)	0.25	2.89	3.12
Side Channel Reconnect (mile)	0.36	1	1
New Floodplain (ac)	10.98	31.63	168.87

bb - # of Key LWD Pieces >6m long & > 30cm dia  
cc - # of multiple log structure added  
\* Miles of main channel treated based on Anchor QEA 2011 Nov Conceptual Report  
\*\* Miles of LWD Key Piece placed including main and side channel.  
\*\*\* Key piece wood used in the as built condition including that which is not visible  
\*\*\*\* Only placed key piece wood counted during survey "above grade"

**Table 5: Tucannon River Programmatic Habitat budget for the period of the programmatic 2011-2016. Funding has been broken into three categories, administrative (cost of running the program), monitoring support and projects. The increase cost in administration reflects the creation of a full time program manager in 2013. The increase in monitoring support in 2014 and 2015 reflect subcontracts to conduct feasibility analysis for a two projects with the USFS and the rerunning of the EDT model. In 2016, the programmatic will complete a LiDAR RFP and analysis with is reflected in 2016 monitoring budget.**

<b>Fical Year</b>	<b>Programmatic Administrative Contracts</b>	<b>Programmatic Monitoring Support</b>	<b>Programmatic Implementation Contracts</b>
<b>2011</b>	\$70,217	\$0	\$492,778
<b>2012</b>	\$106,720	\$33,000	\$1,129,994
<b>2013</b>	\$128,934	\$39,588	\$1,115,880
<b>2014</b>	\$120,334	\$39,872	\$1,304,053
<b>2015</b>	\$142,303	\$131,429	\$1,103,140
<b>2016</b>	\$142,191	\$149,314	\$1,077,690
	\$710,699	\$393,203	\$6,223,535

**Table 6: Tucannon River Programmatic project budgets for the performance period of the programmatic. Project costs are broken into BPA expenses, matching \$\$s from grants acquired by the project sponsors and the programmatic from the SRFB, and materials donated by the landowner and USFS.**

<b>Project</b>	<b>BPA Project Cost to Date</b>	<b>Project Match Grants</b>	<b>Donated Trees</b>	<b>Total Project Costs</b>
PA-10*	\$492,778	\$400,000	\$100,000	\$992,778
PA-14*	\$1,170,960	\$412,023	\$100,000	\$1,682,983
PA-15 Design	\$72,199	\$64,571		\$136,770
PA-15	\$1,043,648	\$3,600		\$1,047,248
PA-3**	\$495,815	\$3,000	\$50,000	\$548,815
PA-1**	\$400,000		\$70,000	\$470,000
PA-11	\$688,969	\$200,000	\$100,000	\$988,969
PA-24 Design	\$86,405	\$64,571		\$150,976
PA-24	\$677,071	\$234,000		\$911,071
PA-6-9 Design	\$19,000	\$200,000^		\$19,000
PA-6-9 ***	\$108,690	\$400,000		\$1,150,000
PA-17 & 18	\$600,000			
PA-28 ***	\$215,000	\$200,000		\$900,000
PA-13 Design	\$50,000			
	\$6,120,535	\$2,181,765	\$420,000	\$8,998,610

\* Project design was fully or partially completed under matching grants which are included in total project cost but not BPA's cost

\*\* Project design costs are not part of the BPA Programmatic cost or shown in the total project cost

\*\*\* These projects are being phased over 1-3 yrs due to budget limitations

^ In 2015, WDFW received a \$400,000 SRFB grant to complete PA-6 9 and it is anticipated ~\$200,000 of that will be spent in 2016.