	A	В	С	D	E	F	G	Н	Ι	J	K	L	М	N
1				Stream Miles, Edited Since the H	ydro Mode	l, broken oı	ut by Explan	ation Code	and Ver	rification C	Code			
2	ode ()	В	Determination of water type ch	ange was based on a completed Biological Survey	. This includes bu	ut is not limited t	o: Electrofishing I	Protocol Survey,	Interdiscipli	nary Team sur	vey, and Visual	observation of	f fish.	
3	ation Co Initions /ER)_CE	Р	Determination of water type ch	ange was based on physical characteristics. This ir	ncludes but is not	t limited to: Rand	dom measurment	s, Incremental n	neasuremen	ts, physical cha	aracteristics, an	d no fish found	l.	
4	erifica Defi (FP_\	N	Some other means of determination	ation of water type was used that did not involve	biological or phy	sical characterist	tics.							
5	ž	U	Remains undetermined or uncla	assified										
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
7	State ( Shorelines 1.030)	S1	Shorelines Management Act (SMA): Shorelines of the State designation	Lines in hydro that represent shorelines protected by the Shorelines Management Act of 1971. http://app.leg.wa.gov/rcw/default.aspx?cite=90.58.0 20. These streams are rarely edited and when they are it is usually at the direction of the Department of Ecology to correct an error. These are never downgraded or deleted except in the case of corrections.	93.3	1.4%	29.9	6,766.4		4.3	225.3	3 14.4	6,522.4	6,766.4
8	ated Shoreline of the State (SMA): RCW 90.58	S2	Shorelines of Statewide Significance (Shoreline Management Act (SMA); RCW 90.58.030). "S+" Waters	designated to be important to the State. http://app.leg.wa.gov/rcw/default.aspx?cite=90.58.0 30 - RCW 90.58.40 (i)-(vi). These streams are rarely edited, but when they are it is usually at the direction of the the Department of Ecology and due to a correction or upgrade of the stream to the type S water.	35.6	0.9%	27.7	3,936.8		0.8	71.2	2 1.7	3,863.7	3,936.9
9	ype S water type: Designa Management <i>I</i>	S0	Artificial line segment within a double-banked stream (ST [400,401,412]), or reservoir (IM [101]), connecting a lateral watercourse to a type S centerline water course. Has [ WC_FLOW_PATH_CD of 2] and [FP_LINE_TYPE_CD = 21]		0.6	0.5%	0	120.3						
10		<b>S</b> 3	Interior arc of type "S" lake (LA [402,421])		6.7	0.3%	1.3	2,232.1						
11	ļ			Total Type S Miles	128.9	1.2%	57.6	10,703.2		5.1	296.5	16.1	10,385.6	10,703.3
12	1			(FP_VER_CD) - B	5.1	100.0%		5.1	В					
13	1			P!	15.4	5.2%		296.5	Р					
14	4			N	13.8	85.7%		16.1	N	4				
15	4			U	5,451.1	52.5%	ļ'	10,385.6	U	4				
16	1			'	5,485.4			10,703.3		]				

	А	В	С	D	E	F	G	Н	Ι	J	К	L	М	Ν
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
18		F1	Modeled as fish habitat, occurring downstream of a modeled "end of fish habitat" point.	Streams the Hydro model determined might have fish habitat. (Note: the model did not add any new stream segments it only tried to predict what water type the stream should be) The F1 streams were originally type 4, 5 or 9 streams prior to the model and the model determined, based on the model criteria, that there should be fish habitat there. Also, any stream that had been downgraded to a Type N, and then, at a later date through a protocol survey, was changed back to a type F, would revert to an F1.	570.0	1.5%	252.8	38,898.6		241.5	1,372.7	85.6	37,198.8	38,898.6
19		F2	Stream existing prior to "fish model" implementation but was unable to be modeled. Assigned "F" water type because former water type indicated fish use/fish habitat (type 3) or a post-model DNR approved field survey data indicates fish.	Streams that used to be Water Type 3 (prior to the model) These were coded directly to fish habitat (Type F). These streams also went through the model process, but it was determined that the original type 3 should stay as fish habitat. Also, if a type U stream is changed to a Type F stream, it converts to an F2 because it is confirming, outside the model, that it was fish habitat from a previously unknown stream (typically former type 9) that the model could not predict.	201.3	17.5%	9.1	1,150.6		145.2	53.4	7.7	944.2	1,150.5
20	ined in WAC 222-16-031	F4	Mapping anomaly prevented normal model/coding implementation. Former water type indicated "fish use" or is associated with other fish use/fish habitat waters. Most common occurrences were in channelized streams (e.g. irrigation ditches, canals) or un- modeled streams with former water typing inconsistencies.	Streams where the model couldn't determine, because of how the lines were drawn in the data, what water type it should be, but it was originally coded as a Type 3 water (prior to the model). Most of these were manmade channels (i.e., irrigation ditches, canals, etc) where the model couldn't predict a water type. Therefore, they were manually coded it as fish habitat (Type F) with an F4 explanation code.	0.1	0.1%	9.2	113.5		0.0	6.4	0.0	107.1	113.5
21	type: Fish use as defi	F5	Fish hatchery or campground diversion waters and former type 2 water courses as defined by WAC 222-16-031(2).	Streams that used to be Water Type 2 (prior to the model) and were identified as fish hatcheries or campground diversions. These were coded as fish habitat (Type F). These are not added anymore and are kept only for maintaining a legacy of uniquely identified stream segments that don't fit the description of basic streams.	19.3	0.9%	1.9	2,171.5		3.5	24.6	8.1	2,135.2	2,171.4

	А	В	С	D	E	F	G	Н	Ι	J	К	L	М	Ν
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
22	Type F wate	F6	Fish bearing/fish habitat stream being added after water type model implementation or survey confirmation of F water type on stream added after fish model implementation.	NEW (Type F) fish habitat streams added AFTER the model. Whenever a new stream is shown as being added on the WTMF and it's initial water type is F (Fish habitat), this code is used. The model did not add any new streams, but only attempted to identify existing streams as to their water type. These are new streams since the model.	166.0	93.7%	1	177.1		95.9	71.5	7.6	2.1	177.1
23		F7	Model Override: Approved post 1996 hydro updates from field surveys submitted on Water Type Modification Forms or other approved field survey data that place fish-bearing/fish habitat waters upstream of modeled end of fish habitat point.	UPGRADE - Streams later changed to type F to correct the model's prediction of Type N. This code is used to show that the site survey submitted with the WTMF identified the modeled stream as incorrectly coded as water type N. This code shows a model override and means that it was determined after the model to be fish habitat.	400.5	43.3%	7.8	925.9		277.2	134.5	12.8	501.4	925.9
24		F0	Artificial line segment within a double-banked stream (ST [400,401,412]), or reservoir (IM [101]), connecting a lateral watercourse to a type F centerline water course. [ WC_FLOW_PATH_CD of 2];		0.1	0.1%	0	70.5						
25		F3	Interior arc of type "F" lake, pond or certain impoundments: (LA [402,421]; IM [106])		6.3	0.7%	1.4	912.7						
26		F8	Outside of modeled area in Eastern WA. Classified previously as having fish use (e.g. type 3).	Total Type F Miles	0.0	0.0%	0	41.8		763.3	1.663.1	2 426 4	40 888 8	45,741,6
		<u> </u>		Total Type S Miles by Verification Code	690.4	90.4%	20012	763.3	<u> </u>		_,		,	
28				(FP_VER_CD) - B P	387.6	23.3%		1,663.1	<u>В</u> Р	4				
30				N	113.1	4.7%		2,426.4	N	]				
31				U	87.9	0.2%		40,888.8	U	-				
32					1,279.0			45,741.6		J				

	А	В	С	D	E	F	G	Н	Ι	J	K	L	М	N
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
34		N1	Modeled as non-fish habitat. N1's occuring upstream of m odeled end point may or may not have a matching DEM- modeled stream. N1 lateral tributaries have DEM-modeled counterparts.	Streams the Hydro model determined probably doesn't have fish habitat. (Note: the model did not add any new stream segments it only tried to predict what water type the stream should be) The N1 streams were originally type 3 or 9 streams prior to the model and the model determined, based on the model criteria, that there should be non-fish habitat there. Also, any stream that had been upgraded to a Type F, and then, at a later date - through a protocol survey - was changed back to a type N, would revert to an N1.	2.060.8	3.9%	445.9	53.061.3		902.9	842.1	148.7	51.167.6	53.061.3
35		N2	Stream existing prior to "fish model" implementation but was unable to be modeled. Assigned "N" water type because former water type indicated no fish use (type 4/5), or a post-model DNR approved field survey data indicates non-fish.	Streams that used to be Water Type 4 or 5 (prior to the model) These were coded directly to non-fish habitat (Type N). These streams also went through the model process, but it was determined that the original type 4 or 5 should stay as non-fish habitat. Also, if a type U stream is changed to a Type N stream, it converts to an N2 because it is confirming, outside the model, that it was non-fish habitat from a previously unknown stream (typically former type 9) that the model could not predict.	908.0	7.0%	149.4	13,035.9		549.7	280.7	45.8	12,159.8	13,036.0
36	WAC 222-16-031 ר	N4	Mapping anomaly prevented normal model/coding implementation. Former water type indicated "no fish use" or is associated with other non-fish use/non-fish habitat waters. Most common occurrences were in channelized streams (e.g. irrigation ditches, canals) or unmodeled streams with former water typing inconsistencies.	Streams where the model couldn't determine, because of how the lines were drawn in the data, what water type it should be, but it was originally coded as a Type 4 or 5 water (prior to the model). Most of these were manmade channels (i.e., irrigation ditches, canals, etc) where the model couldn't predict a water type. Therefore, they were manually coded it as non-fish habitat (Type N) with an N4 explanation code. None have been added since the model.	0.0	0.0%	0.5	605.9		0.0	0.0	0.0	605.9	605.9
37	-fish use as defined in	N5	Non-fish bearing/non-fish habitat stream being added after model implementation or survey confirmation of N water type on stream added after fish model implementation.	NEW (Type N) non-fish habitat streams added after the model. Whenever a new stream is shown as being added on the WTMF and it's initial water type is N (Non-fish habitat), this code is used. The model did not add any new streams, but only attempted to identify existing streams as to their water type. These are new streams since the model.	577.2	94.0%	9	614.3		243.7	322.5	38.2	9.9	614.3

	А	В	С	D	E	F	G	Н	Ι	J	K	L	М	N
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
38	Type N water type: Non	N6	Former untyped/unknown hydrographic stream feature (type 9) occurring upstream of a modeled end point. May or may not have a matching DEM- modeled stream. May not exist on ground.	Streams that used to be Water Type 9 (unknown or unverified) and remained uknown or unverified after the model was run. However, because they are connected upstream to a modeled type N stream, they were changed, by default, to a water type N with an N6 explanation code (Note: These streams may or may not actually exist on the ground). Once these type N streams are verified on the ground by a WTMF, their water type will change to reflect either a verification of the type N (with an N1 explanation code) or a change to a different water type.	109.8	0.2%	567.9	56.997.5		15.6	34.6	22.8	56.924.4	56.997.4
39		N7	Model Override: Approved post 1996 survey/hydro update submitted on Water Type Modification Forms or other approved surveys indicate end of fish-bearing/fish habitat waters downstream of modeled end of habitat point.	DOWNGRADE - Streams later changed to type N to correct the model's prediction of Type F. (Note: this can only be done if some form of Biological Survey (i.e., electro-shocking, ID team, etc) was done to verify it). This code is used to show that the site survey submitted with the WTMF identified the modeled stream as incorrectly coded as water type F. This code shows a model override and means that it was determined, after the model, to be non-fish habitat.	916.9	72.1%	6.3	1.272.5		752.8	192.1	25.6	302.0	1.272.5
40		NO	Artificial line segment within a double-banked stream (ST [400,401,412]), or reservoir (IM [101]), connecting a lateral watercourse to a type N centerline water course. [ WC FLOW PATH CD of 2];		0.1	2.6%	0	3.9		75210	13211	2310	30210	1,272.5
41		N3	Interior arc of type "N" lake, pond or certain IM (impoundments): (LA [402,421]; IM [106)		2.9	2.8%	0.1	104.8						
42		N8	Outside of modeled area. Classified previously as having no fish use (type 4,5). (For use in Eastern Washington only).		0.0	0.0%	0	864.2						
43				Total Type N Miles	4,575.7	3.6%	1,179.1	126,560.3		2,464.7	1,672.0	281.1	121,169.6	125,587.4
44 45 46				Total Type S Miles by Verification Code (FP_VER_CD) - B P N	2,240.8 1,595.6 268.6			2,464.8 1,671.9 281.1	B P N					
47				U U	324.3			121.169.4	U					
48					4,429.3			125.587.2						
49				II	.,									

	А	В	С	D	E	F	G	Н	Ι	J	K	L	М	Ν
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
50	ic feature	U1	Un-modeled stream that was formerly untyped/unknown and remains unverified (type 9). Stream may or may not exist on ground, and water type has not been assigned.	Streams that used to be Water Type 9 (unknown or unverified) and remained uknown or unverified after the model was run because the model could not determine what water type the stream should be. These are also not connected downstream to other modeled, water typed streams in the same line (Note: These streams may or may not actually exist on the ground). These streams may be connected to typed water, but that would be due to segments downstream being changed (post model) via the WTMF process.	86.9	0.5%	240.6	19,048.3		12.2	11.9	36.1	18,988.1	19,048.3
51	ed, un-modeled hydrograph	U2	Reserved for Sewall connectors [FTR_ORG_CD = "SEWALL"] that are unverified. Cartographic stream link that connects a typed stream, stream network or water body to a hydrographic source feature.	Unverified stream segments with no apparent surface flow added by a contractor - Sewall - to connect networks of typed streams for cartographic reasons (Note: many of these segments may or may not have a subsurface flow and may not exist on the ground). When these are verified to exist via the WTMF process, they convert to the new water type with a explanation code of F2 or N2 as appropriate.	6.8	0.4%	24	1,850.9		3.4	8.9	0.7	1,838.0	1,851.0
52	water type: Unknown, untype	U3	Verified stream addition, or confirmation of former untyped/unknown mapped stream (type 9). Stream exists on ground, but water type has not been assigned.	NEW (Type U) untyped/unknown streams added after the model. Stream exists on the ground, but the water type has not been verified yet. These are normally added via the WTMF process when new streams are identified, but have not had a water type determination. Therefore, they remain untyped or unverified. When these are verified to exist via the WTMF process, they convert to the new water type with a explanation code of F2 or N2 as appropriate.	174.8	97.6%	0.9	179.1		8.3	77.6	12.8	80.4	179.1
52	Type U v	114	Outside of modeled area. Classified previously as untyped/unknown (type 9). (For use in Eastern Washington only ).	Streams outside of the modeled area, predominantly in non-forested lands, in Eastern Washtington and originally classified as Type 9 (unknown or unverified). Many of these streams will remain unchanged if no WTMF is submitted because they rarely are associated with some form of Forest Practice. If, however, a WTMF is submitted for a change, they will be changed to either a type F with an explanation code of F2 or type N with and N2	0.1	0.0%	0	22 152 0					23 152 0	22 152 0
55	-	0+			268.6	0.0%		55,135.9		22.0	0.0 4	40.0	53,153.9	55,155.9
54				Total Type S Miles by Verification Code	208.0	0.5%	205.5	54,232.2		23.9	98.4	49.6	54,060.4	54,232.3
55	_			(FP_VER_CD) - B	19.2	80.3%		23.9	В	-				
56	4			P	93.3	94.9%		98.3	P	-				
57	4			N	46.1	92.9%		49.6		-				
58	4				44,301.2	81.9%		54,060.4		4				
60	-			L	44,459.8	<u> </u>	<u> </u>	54,232.2	<u> </u>	1				
100	1													

	А	В	C	D	E	F	G	Н	Ι	J	К	L	М	Ν
6	Water Type	Explanati on Code	Explanation Code Official Definition	Explanation Code Definition Explanation	Total Miles edited since the model	% Total Miles Edited*	Total Miles DELETED since the model	Total Miles	Verificatio n Code (FP_VER_ CD)	Total Miles by VER_CD = B	Total Miles by VER_CD = P	Total Miles by VER_CD = N	Total Miles by VER_CD = U	Total Miles by EXP_CD
(1	iption	¥1	Mapped hydrographic feature having no water type designation; or artificial	A feature that exists on the ground, but does not meet the definition of a stream, yet is still mapped to	927.0	63.8%	22.6	1 217 4		91 4	F3F 3	08 5	602.2	1 217 4
61	ng descr ow		Stream segment deleted via a WTMF, but kept in map for	A stream that was deleted due to a WTMF, but kept in the GIS database in order to show connectivity as a	20.2	100.0%	0.1	20.2		10.1	10.1	98.5	10.0	1,317.4
63	ee Type X codi belc	X3	Steam segment has no surface channel, but WTMF indicates sub-surface flow	A stream defined as a sub-surface stream and shown in the data and on the WTMF for connectivity. This code allows for GIS to select sub-surface streams separately for display purposes	10.8	54.8%	0.1	36.1		10.1	18.8	2.7	10.0	36.1
64	Š			Total X Miles	878.0	63.4%	23.0	1 383 8		93.1	564.2	101 3	625.2	1 383 8
65		I		Total Type S Miles by Verification Code (FP_VER_CD) - B	89.7	96.3%		93.1	B		50412	101.5	02312	1,505.0
67					101.1	99.8%		101.3	N					
68				U	551.1	88.1%		625.2	U					
69					1,302.7			1,383.7						
70										<u>.</u>				
71 72			Type X coding: Mapped hydrograph impoundments (IM [107, 109, 110], 16-031(5); or stream segments hav	hic feature having no water type designation (e.g. pipel ; wet areas associated with type S waters; streams that ring no surface channel but kept in map for connectivity	ines, certain irriga do not meet defir y purposes)	tion ditches and ca	anals; certain eams (WAC 222-							
73									1					