



## REGIONAL MARK PROCESSING CENTER

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### Summary of PSC Format V4.1 Changes

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The Data Standards Working Group met in Portland, Oregon on Jun 3-4, 2008. From this meeting, the following changes are identified here for the principal data exchange document: [CWT Data File Definition, Specification, and Validation](#). If you have any questions or comments regarding this summary, please visit the RMIS PSC Data Exchange Forum at: <http://www.rmhc.org/forums.html>. You may also contact PSMFC–RMPC at 503-595-3100 or email <mailto:rmhc.admin@psmfc.org>.

Notes on this summary of proposed changes:

- The order of items presented here is by data file type.
- At the time that any changes are adopted and take effect the RMPC will have the validation program modified as needed for the new requirements.
- Any text for V4.1 which has had substantial changes or additions from the version 4.0 specification will appear as grey text .
- Any text for V4.1 which is being deleted from the version 4.0 specification will appear as ~~strikethrough~~ text .

**RELEASE FILE CHANGES:**

**Release fields 16,17; First Release Date, Last Release Date :**

render \*both\* dates required by striking text in requirement rules as follows...

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
16	First Release Date	8	No	YYYYMMDD	Date in which releasing began for this release group
	first_release_date				If the release occurs on a single day, report that date for both <b>first</b> and <b>last</b> date fields. <del>If a release occurred over more than one day but only one date is known, then leave the unknown date field (<b>first</b> or <b>last</b>) absent</del>
					If present, must be of the form 'YYYYMMDD' where:
					MM must be in the range '01' through '12'. May be absent
					DD must be in the range '01' through the last day of the month referenced by MM. Must be absent if MM is absent. May be absent when MM is present
					This date must be less than or equal to today
					first_release_date must be less than or equal to last_release_date
					<del>Required if last_release_date is absent and study_integrity is not 'D'</del> If present, YYYY portion of date is required.
17	Last Release Date	8	No	YYYYMMDD	Date in which releasing ended for this release group
	last_release_date				If the release occurs on a single day, report that date for both <b>first</b> and <b>last</b> date fields. <del>If a release occurred over more than one day but only one date is known, then leave the unknown date field (<b>first</b> or <b>last</b>) absent</del>
					If present, must be of the form 'YYYYMMDD' where:
					MM must be in the range '01' through '12'. May be absent
					DD must be in the range '01' through the last day of the month referenced by MM. Must be absent if MM is absent. May be absent when MM is present
					This date must be less than or equal to today
					last_release_date must be greater than or equal to first_release_date
					<del>Required if first_release_date is absent and study_integrity is not 'D'</del> If present, YYYY portion of date is required.

**Release fields 28, 30, 32, 34; CWT 1-st Mark , CWT 2-nd Mark, Non CWT 1-st Mark, Non CWT 2-nd Mark :**

add (highlighted) text as follows...

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
28	CWT 1 <sup>st</sup> Mark cwt_1 <sup>st</sup> _mark	4	No	Lookup	Mark(s) on CWT fish corresponding to count value in cwt_1 <sup>st</sup> _mark_count
					If present, must match a mark code from Mark Coding table in chapter 11
					Required if record_code is 'T'
					Must be absent if record_code is 'N'
					Required if corresponding cwt_1 <sup>st</sup> _mark_count is present
					Must be absent if corresponding cwt_1 <sup>st</sup> _mark_count is absent
					Must not begin with '9' if brood_year greater than 1994
					See chapter 15 for further discussion of the use of this field.
30	CWT 2 <sup>nd</sup> Mark cwt_2 <sup>nd</sup> _mark	4	No	Lookup	Mark(s) on CWT fish corresponding to count value in cwt_2 <sup>nd</sup> _mark_count
					If present, must match a mark code from Mark Coding table in chapter 11
					Must be absent if record_code is 'N'
					Required if corresponding cwt_2 <sup>nd</sup> _mark_count is present
					Must be absent if corresponding cwt_2 <sup>nd</sup> _mark_count is absent
					Must not contain the same value as cwt_1 <sup>st</sup> _mark
					Must not begin with '9' if brood_year greater than 1994
					See chapter 15 for further discussion of the use of this field.

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
32	Non CWT 1 <sup>st</sup> Mark non_cwt_1 <sup>st</sup> _mark	4	No	Lookup	Mark(s) on Non-CWT fish corresponding to count value in non_cwt_1 <sup>st</sup> _mark_count
					If present, must match a mark code from Mark Coding table in chapter 11
					Required if record_code is 'N'
					Required if corresponding non_cwt_1 <sup>st</sup> _mark_count is present
					Must be absent if corresponding non_cwt_1 <sup>st</sup> _mark_count is absent
					Must not begin with '9' if brood_year greater than 1994
					See chapter 15 & 16 for further discussion of the use of this field.

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
34	Non CWT 2 <sup>nd</sup> Mark	4	No	Lookup	Mark(s) on Non-CWT fish corresponding to count value in non_cwt_2 <sup>nd</sup> _mark_count
	non_cwt_2 <sup>nd</sup> _mark				If present, must match a mark code from Mark Coding table in chapter 11
					Required if corresponding non_cwt_2 <sup>nd</sup> _mark_count is present
					Must be absent if corresponding non_cwt_2 <sup>nd</sup> _mark_count is absent
					Must not contain the same value as non_cwt_1 <sup>st</sup> _mark
					Must not begin with '9' if brood_year greater than 1994
					See chapter 15 & 16 for further discussion of the use of this field.

**Release field-12; Related Group ID :**

add notes:

Within a new dataset, if Related Group Type (field 11) is 'D' then, at least 1 record must exist with the "Ad Clip" condition where:

1) cwt\_1st\_mark starts with '5' OR cwt\_2nd\_mark starts with '5';

AND 2) (cwt\_1st\_mark\_count + cwt\_2nd\_mark\_count) > 0

AND at least 1 record must exist with the "no Ad Clip" condition where:

1) cwt\_1st\_mark starts with '0' OR cwt\_2nd\_mark starts with '0';

AND 2) (cwt\_1st\_mark\_count + cwt\_2nd\_mark\_count) > 0

AND all records involved must have the same Related Group Id (field 12), Species (field 13), and Brood Year (field 15).

**Release field-35; Non CWT 2-nd Mark Count :**

strike out text in 5<sup>th</sup> line...

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
35	Non CWT 2 <sup>nd</sup> Mark Count	9	No	Numeric	Number with No CWT Tag
	non_cwt_2 <sup>nd</sup> _mark_count				Corresponds to mark code value in non_cwt_2 <sup>nd</sup> _mark
					Required if corresponding non_cwt_2 <sup>nd</sup> _mark is present and study_integrity is not 'D'
					Must be absent if corresponding non_cwt_2 <sup>nd</sup> _mark is absent

					Must be absent if non_cwt_1 <sup>st</sup> _mark_count is zero or absent
					If present, must be numeric in the range: '0' through '999999999'

**Release field-37; Tag Loss Rate; field-38, Tag Loss Days; field-39, Tag Loss Sample Size :**

add phrases to text, other changes as follows...

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
37	Tag Loss Rate	6	No	Numeric	Proportion of fish which shed the CWT from the tag loss sample (expressed as a decimal)
	tag_loss_rate				If present, must be numeric in the range: '0' through '1'
					No implied decimal. Decimal optional with up to 4 digits after the decimal point
					Must be absent if record_code is 'N' and tag_type is not '16'
					May be present if record_code is 'N' and tag_type is '16'
38	Tag Loss Days	3	No	Numeric	Number of days fish held to measure tag loss; Fish tagged and released the same day are assigned '0'
	tag_loss_days				If present, must be numeric in the range: '0' through '999'
					Must be absent if record_code is 'N' and tag_type is not '16'
					May be present if record_code is 'N' and tag_type is '16'
39	Tag Loss Sample Size	5	No	Numeric	Number of fish sampled to calculate tag loss rate
	tag_loss_sample_size				If present, must be numeric in the range: '0' through '99999'
					Must be absent if record_code is 'N' and tag_type is not '16'
					May be present if record_code is 'N' and tag_type is '16'

**Release field-8 (and Recovery field 30); Tag Type :**

add phrases to text..

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
8	Tag Type	2	No	Lookup	Code to indicate type of tag used for release group; If present, must match one of the following:
	tag_type			'0'	=Standard binary (1mm)

			'1'	=Half tags (H type)
			'2'	=Half tags (B type)
			'3'	=6 word half length tags
			'4'	=X-ray binary ( tag_code_or_release_id must be 'XX0500')
			'5'	=Standard color
			'6'	=Solid color (##)
			'7'	=Striped color (\$\$)
			'8'	=Rare Earth
			'9'	=Repeating series
			'10'	=Sequential 6 word binary;
			'11'	=length & ½ Binary (1.5mm)
			'12'	=Standard Alphanumeric, includes Decimal (1 mm)
			'13'	=length & ½ Alphanumeric, includes Decimal (1.5 mm)
			'14'	=Sequential Alphanumeric, includes Decimal
			'15'	=Half length Alphanumeric, includes Decimal (0.5mm)
			'16'	=Pseudo tag, blank wire
				If tag_type = '10', then first_sequential_number is required and last_sequential_number is required
				Required if record_code is 'T'
				If tag_type = '0' thru '15' then record_code must be 'T'
				If tag_type = '16' then record_code must be 'N'
				See chapter 16 for further discussion of the use of this field.

## CHAPTER 15 CHANGES:

These are proposed changes to Chapter 15 (Release Count and Mark Code Fields) to reflect the decisions from the meeting on June 3,4. All references to '4.0' are to be changed to '4.1'.

### Section 'F'; Version 3.2 Release Count and Mark Code Fields:

Remove this section (F) and 'Figure 1' as version 3.2 is now historic (i.e. 2 revisions in the past). Rename 'Figure-2' to 'Figure-1'.

### Section 'G'; Version 4.0 Release Count and Mark Code Fields:

excerpt shown here with proposed new wording as follows..

The intention of the version 4.0 count and mark code fields is to provide a physical view of release counts and marks. Changes to the method of reporting release counts and marks were necessary due to the desequestering of the adipose clip to indicate a coded-wire tagged fish. The changes enable the user to calculate the number of adipose clipped fish in a release group, whether or not they are coded-wire tagged. The changes also permit the reporting of up to two different marks for CWT or Non-CWT (fish that do not contain a CWT) fish in a release.

Each Reporting Agency may have a different usage for each release count and mark code field. The agency may determine the particular order of usage of count and mark code fields; therefore no information is implied by the ordering of values in count and mark code fields.

Under version 4.0 specifications, the following fields are used to report release counts and mark codes (Figure 2):

...<Figure-2:>...

### Section 'H'; Version 3.2 / Version 4.0 Mark and Count Fields - Examples:

Remove 'Table 1' from this section as version 3.2 is now historic (i.e. 2 revisions in the past). Rename 'Table 2' to 'Table 1'.

**RECOVERY FILE CHANGES:**

**Recovery field-24; Length:**

add rule and changes as follows:

Fid #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
24	Length	4	No	Numeric	Length in millimeters
	length				If present, must be numeric in the range: '1' through '1600'
					Must not be greater than 1600mm if Species (field 7) is '1' (Chinook)
					Must not be greater than 1300mm if Species (field 7) is not '1'
					These fields must all have values or must all be absent:
					- length
					- length_code
					- length_type

**Recovery field-27; Detection Method:**

add rule and changes as follows:

Fid #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
27	Detection Method	1	No	Lookup	Code indicating the method used to detect the presence of a tag on the fish; If present, must match one of the following:
	detection_method			'E'	=Electronic; used only when all fish in the sample pass through electronic detection, regardless of clip status
				'V'	=Visual; used when all fish in the sample are first identified for adipose fin clip, regardless of the use or timing of electronic detection
					Required if catch_sample_id is present
					If present, must match the value of detection_method in corresponding Catch/Sample file



**Recovery field-28; Tag Status**

Rescind the added value: '5' = Unclipped, positive-signal, head not taken  
I.e. the value '5' which had been added to Tag Status on a provisional basis is now removed.

**Recovery field-29; Tag Code:**

add rule: Required if Tag Status is '1' or '9'

**Recovery field-41; Estimated Number:**

add rule: If present and greater than zero, then catch\_sample\_id should be present and, if present, must match an existing catch\_sample\_id in the Catch/Sample file.

**Recovery field-35; Sample Type:**

change text by striking some phrases and adding other phrases...

Fid #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
35	Sample Type	1	Yes	Lookup	Must match one of the following:
	sample_type			'1'	=In-sample recoveries from a sampled fishery with known catch; <del>estimated_number is non-zero. Also used to report unsampled catch</del>
					estimated_number must be absent or greater than '0'
				'2'	=Voluntary recoveries from a sampled fishery with known catch; Awareness estimates are available; estimated_number must be absent or greater than '0' (e.g., Puget Sound Sport)
				'3'	=Voluntary recoveries from an unsampled fishery. Awareness approximations may be possible yielding non-zero estimated_number otherwise estimated_number should be absent. (e.g., Hoh River freshwater sport fishery)
				'4'	=In-sample or voluntary recoveries from a sampled fishery with unknown catch; estimated_number must be absent. (e.g., Stream Survey)
				'5'	=Voluntary or select recoveries from a sampled fishery with known catch and no awareness estimates available; <u>Use of these recoveries leads to double counting</u> ; see also Note #3 to follow

				estimated_number must be equal to '0'. (e.g., commercial voluntary recoveries);
			'6'	=Mark Incidence – Indirect Sample: Voluntary recoveries from indirectly sampled sport fishery; estimated_number are calculated from sport_mark_inc_sampl_obs_ads in sport_mark_incidence_sampl_size from the corresponding Catch Sample record
			'7'	=Pass-Through Sample: Recoveries that are selectively removed from certain in-river sampling programs; The migrant fish are subject to subsequent destination sampling.
				number_caught must equal number_sampled in corresponding Catch Sample record. see also Note #3 to follow
Notes for sample_type:				
1) Four keys are used to distinguish the type of sample:				
a) Sample: In-sample or Voluntary				
b) Fishery: Sampled or Unsampled				
c) Catch: Known or Unknown				
d) Awareness: Available or Unavailable				
2) Awareness estimates (Sample Type Code 2) are based on current year's data, while awareness approximations (Sample Type Code 3) are based on extrapolations of data from other periods or locations.				
3) "Pass-through" Sampling (Sample Type Code 7) In certain sampling programs, some fish are released while selected fish are killed and snouts removed. The non-sampled fish are subject to subsequent destination sampling and the lack of reporting would result in underestimation of the tag codes. In this sampling situation the number of fish pulled out of the pass-through equals the number sampled and generally gives an estimated number of 1.				
4) Any associated Catch/Sample and Recovery records must have the same value for sample_type.				

**Recovery field-6; Recovery ID**

add rule:

Fid #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
6	Recovery ID	10	Yes	Primary	Unique ID's assigned to each recovery record by the recovery agency
	recovery_id			Lookup	Once reported, must remain the same forever for this snout recovery
					Must be unique for a given reporting_agency and run_year
					Must not contain embedded blanks

**Recovery field-15; Adclip Selective Fishery**

introduce new values; (At the point of adoption of version 4.1, the RMPC will change all existing blank values to 'N' where Run Year < 1998)

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
15	Adclip Selective Fishery	1	No	Lookup	Flag to indicate whether this <recovery> came from a fishery where only adipose clipped fish were allowed to be harvested.
	adclip_selective_fishery				Required if Run Year (field 8) > 2007
					Must match one of the following:
				'S'	= Yes /adclip selective fishery
				'M'	= Yes /mixed selective fishery (ad-clipped plus unclipped fish) ; see note below
				'N'	= Not selective
					Must have the value 'S' or 'M' if fishery is selective for ad-clips
NOTE for adclip_selective_fishery 'M': Refers to ad-clipped and unclipped catch. For example: a bag limit of 1 unclipped but multiple clipped fish.					

**CATCH / SAMPLE FILE CHANGES:**

**Catch/Sample field-18; Sample Type:**

add value '7', other changes to notes

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
18	Sample Type	1	Yes	Lookup	Must match one of the following:
	sample_type			'1'	=In-sample recoveries from a sampled fishery with known catch; estimated_number is non-zero. Also used to report unsampled catch
					estimated_number must be absent or greater than '0'
				'2'	=Voluntary recoveries from a sampled fishery with known catch; Awareness estimates are available;
					estimated_number must be absent or greater than '0' (e.g., Puget Sound Sport)

			'4'	=In-sample or voluntary recoveries from a sampled fishery with unknown catch; estimated_number must be absent. (e.g., Stream Survey)
			'6'	=Mark Incidence – Indirect Sample: Voluntary recoveries from indirectly sampled sport fishery; estimated_number are calculated from sport_mark_inc_sampl_obs_ads in sport_mark_incidence_sampl_size from the corresponding Catch Sample record
			'7'	=Pass-Through Sample: Recoveries that are selectively removed from certain in-river sampling programs; The migrant fish are subject to subsequent destination sampling. number_caught must equal number_sampled. see also Note #3 to follow

Notes for sample\_type:

1) Four keys are used to distinguish the type of sample:

- a) Sample: In-sample or Voluntary
- b) Fishery: Sampled or Unsampled
- c) Catch: Known or Unknown
- d) Awareness: Available or Unavailable

2) Awareness estimates (Sample Type Code 2) are based on current year's data, while awareness approximations (Sample Type Code 3) are based on extrapolations of data from other periods or locations.

3) "Pass-through" Sampling (Sample Type Code 7) In certain sampling programs, some fish are released while selected fish are killed and snouts removed. The non-sampled fish are subject to subsequent destination sampling and the lack of reporting would result in underestimation of the tag codes. In this sampling situation the number of fish pulled out of the pass-through equals the number sampled and generally gives an estimated number of 1.

4) Any associated Catch/Sample and Recovery records must have the same value for sample\_type.

**Catch/Sample field-14; Adclip Selective Fishery**

introduce new values; (At the point of adoption of version 4.1, the RMPC will change all existing blank values to 'N' where Catch Year < 1998)

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
14	Adclip Selective Fishery	1	No	Lookup	Flag to indicate whether this <recovery> came from a fishery where only adipose clipped fish were allowed to be harvested.
	adclip_selective_fishery				Required if Catch Year (field 8) > 2007

					Must match one of the following:
				'S'	= Yes /adclip selective fishery
				'M'	= Yes /mixed selective fishery (ad-clipped plus unclipped fish); see note below
				'N'	= Not selective
					Must have the value 'S' or 'M' if fishery is selective for ad-clips
NOTE for adclip_selective_fishery 'M': Refers to ad-clipped and unclipped catch. For example: a bag liimit of 1 unclipped but multiple clipped fish.					

## CATCH & EFFORT FILE CHANGES:

### Catch&Effort field-21; Effort Quantity

change from required (Yes) to not required (No)

### Catch&Effort; Add new field; Field title: "Adclip Selective Fishery"

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
<22>	Adclip Selective Fishery	1	No	Lookup	Flag to indicate whether this record came from a fishery where only adipose clipped fish were allowed to be harvested.
	adclip_selective_fishery				Required if Catch Year (field 8) > 2007
					Must match one of the following:
				'S'	= Yes /adclip selective fishery
				'M'	= Yes /mixed selective fishery (ad-clipped plus unclipped fish); see note below
				'N'	= Not selective
					Must have the value 'S' or 'M' if fishery is selective for ad-clips
NOTE for adclip_selective_fishery 'M': Hatchery plus wild catch. For example: a bag liimit of 1 unclipped but multiple clipped fish.					

**DESCRIPTION FILE CHANGES:**

**Description field-10; Line:**

Eliminate this field since the Description value (see below) is being changed to contain the entire data description in one line.

**Description field-11; Description:**

Change the field number from 11 to 10 and change length from 54 characters to 2000 characters.

Fld #	PSC Common Name	Max Cols	Reqd	Format/Use	Description & Validation
10	Description	2000	Yes	Alpha-Numeric	Textual description to further explain meaning of data for a file_type and one consecutive span of file years
	description				May span multiple lines (up to 999) in which case fields 1-9 must be repeated for each line
					May contain leading blanks