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# Addition of Release Stock Origin

|  |
| --- |
| **Proposal ID**: 9 |
| **Affected Version**: 4.1 |
| **Affected Chapters**: 2.22 |
| **Proposed Version**: 5.0 |
| **Significance**: Minor |
| **WG-Status**: Recommended |
| **TC-Status**: Approved |
| **Type**: Exchange Specification |
| **Created**: 20151001 |
| **Subsequent Proposal ID(s)**: |

## Background

From the minutes of the DSWG meeting held February 2014 in Vancouver BC.

## Description

There was a request for a method of identifying the parental stock origin of a release group.

## Proposal

Add a field to Chapter 2 - Release Data to identify “Stock Origin Type”. Make the field required to raise the profile of the new field.

## Format and Document Impact(s)

### Chapter 2 - Release Data

| Field # | Max Cols | Reqd | Format /Use | Description & Validation Rules\ |
| --- | --- | --- | --- | --- |
| 22 | 1 | Yes | ‘U’ ‘H’ ‘M’ ‘N’ ‘C’ ‘W’ ‘O’ | Code indicating parental stock origin =Unknown =Hatchery Origin Parents =Mixed Parents (H and N or W) =Natural Origin Parents =Captive Brood Parents =Wild Origin Parents =Other stock origin ‘See comments for details’  **If ‘O’ then a comment is required.** |

## Data Migration Method

Automatically populate the new field with a ‘U’ value for unknown stock origin type.

## Discussion and Action Items

### October 2015 Data Standards Work Group - Seattle, WA

What is the definition of “Wild”? Is it spawned “in the ground”? It is an important [legal/political] question. Some lawyers say that there is the need to have multi-generational spawning in order to be considered “Wild”. How is this different from Rearing Type? Rearing Type (field 22) has to do with the environment, not the [origin] of the fish.

The defn. of “Wild” should be clarified in the Blue Book.

Agreed - Add a new code ‘W’ for ‘wild origin parents’. Agencies are encouraged to define Natural/Wild origin salmon with a future release document.

### CDFO Modification (April 2016)

Change the description of “Mixed Parents (H and N)” to “Mixed Parents (H and N or W)” to reflect the potential for Wild or Natural Origin parents within the Mixed Parents stock origin field.

### 2021 Coho Technical Committee Feedback

No specific feedback with this proposal.

### May 2022 Chinook Technical Committee - Virtual

Possibly have clearer definitions around Natural and Wild parents. Suggested adding “O”ther to the list with a need for a comment. Suggest that the blue book have definitions of natural versus wild stocks by agency.

### August 10, 2022 Technical Committee on Data Sharing - Virtual

* need edit under description from a ‘paternal’ to ‘parental’ to ‘
* need data management principles developed (and communicated) to guide when we required an ‘unknown’ versus leaving blank. For analysis need to know if a ‘u’ is the same as ‘blank’, so need to know if we go back and clean up the data system that we document what is meant by a blank or an unknown so the usage is clear from the data consumer. We need to developed a guidance for data management so clear that when data providers submit a ‘blank’ it means what we expect it to mean.
* Should add the data mgmt. principles to the Blue Book TCDS 89-1 when we revise it.
* Need to provide a guide to data management, so we can provide a common language
* requires adding a new field

## Recommendation

DSWG recommends implementation in next version of the specifications. TCDS approved this proposal for implementation in version 4.2.

# Addition of Unresolved Reason

|  |
| --- |
| **Proposal ID**: 12 |
| **Affected Version**: 4.1 |
| **Affected Chapters**: 3.29 |
| **Proposed Version**: 5.0 |
| **Significance**: Minor |
| **WG-Status**: Recommended |
| **TC-Status**: Approved |
| **Type**: Exchange Specification |
| **Created**: 20151001 |
| **Subsequent Proposal ID(s)**: 23 |

## Description

There is a desire by some agencies that the reporting agency identify the reason for an unresolved recovery (Tag Status = 7). This allows the releasing agency to possibly take corrective action.

## Proposal

Add a new field to Chapter 3 - Recovery Data to identify “Unresolved Reason”. Make the field required if “Tag Status = 7”.

## Format and Document Impact(s)

### Chapter 3 - Recovery Data

Add the following field:

| Field # | Max Cols | Reqd | Format Use | Description & Validation Rules\ |
| --- | --- | --- | --- | --- |
| 29 | 1 | No |  | Code indicating the reason for identify the recovery as unresolved |
|  |  |  | ‘0’ ‘1’  ‘2’  ‘3’  ‘4’ ‘5’ ‘9’ | =Not Specified =Unresolved Tagcode (i.e. no release exists) =Mismatched Species (i.e. difference between release and recovery) =Unreasonable Age: Recovery Year - Brood Year (e.g. negative age) =Multiple Uses of Tagcode (reused tagcode) =Destroyed Tag Release =Multiple reasons **Field is required if Tag Status (Field 28) = ‘7’** **Field must be blank if Tag Status (Field 28) <> ‘7’** |

## Data Migration Method

Automatically populate the new field “Unresolved Reason” with value ‘0’ when Tag Status is ‘7’.

## Discussion and Action Items

TCDS needs to provide input on maximum ages by species for identifying “Unreasonable Ages”.

### October 2015 Data Standards Work Group - Seattle, WA

Add a qualifier that age is recovery year minus brood year. Further discussion, do we need the ‘5’ = Destroyed Tag Release value? [When would it be used?]

### 2021 Coho Technical Committee Feedback

The “Unreasonable Age” could also be a too large a value (not just negatives), but this would require additional clarification of criteria.

In addition, additional clarification of criteria for “Unreasonable Location” would need to be defined, as CWT recoveries can occur in very unexpected locations.

### May 2022 Chinook Technical Committee - Virtual

No concerns with the additional value. This would be a helpful field in communicating data quality concerns between agencies.

### August 10, 2022 Technical Committee on Data Sharing - Virtual

No concerns with the additional value.

### October 12, 2022 Technical Committee on Data Sharing - Virtual

There was concerns if the original proposed value for “Unreasonable Location” was unneed, so it was removed. Furthermore, an additional value was specified if multiple reasons for the unresolved recovery was identified. This proposal should be implemented in version 5.0 of the data specification.

## Recommendation

DSWG recommends implementation in next version of the specifications. TCDS approved this proposal for implementation in version 5.0.

# Catch/Sample Period Ranges

|  |
| --- |
| **Proposal ID**: 16 |
| **Affected Version**: 4.1 |
| **Affected Chapters**: |
| **Proposed Version**: 5.0 |
| **Significance**: Moderate |
| **WG-Status**: Recommended |
| **TC-Status**: Approved |
| **Type**: Exchange Specification |
| **Created**: 20151002 |
| **Subsequent Proposal ID(s)**: |

## Description

Two methods are currently in use to identify pooling periods in Catch/Sample files. For each pool period, Canada reports individual records for each period in the pool but field 27 - “Number Estimated” cannot be directly calculated without summing the set of records. For each pool period, Alaska reports a single record with summary results for all periods in the pool using a custom value in Field 10 - “Period ID”. Both methods are difficult to interpret.

The use of a custom value on Alaskan catch/sample records may also be prone to interpretation error because it is not consistent with the Period ID format identified by Field 9 - “Period Type”.

## Proposal

As period pooling is common practise for both Canada and Alaska, references in the specification to it being “…non-standard estimated number calculations…” should be removed.

Add a field to Chapter 4 - Catch/Sample Data to identify an optional “Pool ID”.

## Format and Document Impact(s)

### Chapter 4 - Catch/Sample Data

| Field # | Description & Validation Rules |
| --- | --- |
| 10 | Make this field *Not Required* |
| 11 | Modify the following rule: *If present, must define a valid period* to: *If present, must define a valid period represented by the* ***Period Type*** |
|  | Add the following rule: *If Period is absent, first period must have a value less than or equal to last period* |
|  | Remove the phrase *Applies to non-standard estimated number* *calculations only* as the method of using period ranges is standard practice for both Canada and Alaska. |
| 12 | Modify the following rule: *If present, must define a valid period* to: *If present, must define a valid period represented by the* ***Period Type*** |
|  | Add the following rule: *If Period is absent, last period must have a value greater then or equal to first period* |
|  | Remove the phrase *Applies to non-standard estimated number* *calculations only* as the method of using period ranges is standard practice for both Canada and Alaska. |

Add the following field:

| PSC Fld # | PSC Common Name Data Field Name | Max Cols | Reqd | Format /Use | Description & Validation Rules\ |
| --- | --- | --- | --- | --- | --- |
| 13 | Pool ID | 6 | No | Text | Agency-specific pooling code that identifies a temporal pool |

## Data Migration Method

Canada and Alaska must re-publish catch/sample files based on the new period range reporting format.

## Discussion and Action Items

### November 2014 Technical Committee on Data Sharing - Seattle, WA

| Minutes Item | Discussion |
| --- | --- |
| Discussion 3.4 | Agreed there are pros and cons of both methods are acceptable. Agencies can decide which method they prefer to use. Suggestion to resolve Alaskan issues - add new code to Field 9 - “Period Type” for agency-defined pool and new field “Pool Period Type”. Suggestion to improved interpretation of records for Canadian method - create new field “Pool ID”. |
| Action Item 3.4 | Assigned to DSWG to develop requirements for both methods and to develop documentation to support agencies for data exchange and interpretation. |

### Canadian Proposal (October 2015)

To reduce confusion, the catch/sample record should clearly represent a range of periods and not appear to represent a single period as defined by the period type. To do this, it is recommended that Field 10 - “Period ID” be optional if both Fields 11 and 12 - “First Period” and “Last Period” are provided.

#### Proposed Change (Chapter 4 - Catch/Sample Data)

| Field # | Description & Validation Rules |
| --- | --- |
| 10 | Make this field *Not Required* |
| 11,12 | Modify the following rule: *If present, must define a valid period* to: \*If present, must define a valid period represented by the **Period Type** |

### October 2015 Data Standards Work Group - Seattle, WA

If period is absent, First and Last must be present. If First present, Last must be present. New field Pool ID - 6 character alpha.

### CDFO Comments (April 2016)

If Period ID is provided on a catch/sample records, it may not be between the first and last period IDs. Canada calculates CWT estimates based on data from time periods outside of the record’s time period in some circumstances.

### 2021 Coho Technical Committee Feedback

No specific feedback with this proposal.

### May 2022 Chinook Technical Committee - Virtual

No concerns with this change to the period reporting of catch/sample records. This change may require some modifications of analysis tools to importing this data.

### August 10, 2022 Technical Committee on Data Sharing - Virtual

Proposal approved.

* Proposal is to change the validation rule so that when entered PERIOD TYPE then we only require to fill PERIOD ID or Fist/Last PERIOD fields and not require both
* Troll fishery can span multiple weeks, which causes an issues for Canada and Alaska. Pooling type of sampled couldn’t fit so went unreported.
  + Period Type ‘6’ stats week; then Period is required as well as First Period and Last Period is required. Request that you make one or the other required not both. So allows to pool the 3 week range .
* In Alaska ‘period’ means a period to time, such as 1 week.
* In Canada: statistical weeks but we have 3 weeks so it doesn’t fit
* Gary: converting stats week back to accounting periods and aging protocols makes it challenging. Get into an expansion issue. Nick – perhaps the recovery dates are useful for this.
* Unclear what the spec defines as a ‘week’ since if the month starts on a Saturday is that week 1 of new month or last week of previous month?
* In RMIS statistical week is very specific and based on an algorithm for recovery for statistical week based on DSTC guidance
* Gary, chinook, Canada and alaska use accounting year that ends Sept 30. Aging we use for modeling is also Sept 30 for Canada and Alaska. And the others use end of December/January. Nick: no standard across PSC/PST regarding dates

### October 12, 2022 Technical Committee on Data Sharing - Virtual

This proposal should be implemented in version 5.0 of the data specification.

## Recommendation

DSWG recommends implementation in next version of the specifications. TCDS approved this proposal for implementation in version 5.0.

# Update Location Code Format

|  |
| --- |
| **Proposal ID**: 19 |
| **Affected Version**: 4.1 |
| **Affected Chapters**: 2.18, 2.19, 2.20, 3.17, 4.16, 6.5 |
| **Proposed Version**: 5.0 |
| **Significance**: Major |
| **WG-Status**: Recommended |
| **TC-Status**: Approved |
| **Type**: Exchange Specification |
| **Created**: 20151002 |
| **Subsequent Proposal ID(s)**: |

## Description

This proposal addresses several improvements identified for the location code format.

## Proposal

Location codes should no longer allow embedded spaces in the code and should be padded with the carat (^) character. Trailing spaces should be trimmed to the minimum length needed for a location code. If the location code does not require lower levels of the code, then the code should be shorter and **not** be padded out with unnecessary characters.

In addition to changing the padding character, level 6 (sub-location) should be expanded from 3 characters to 7. This will expand the overall code length from 19 characters to 23 characters.

## Format and Document Impact(s)

### Chapter 2 - Release Data

| Field # | Description & Validation Rules |
| --- | --- |
| 18-20 | Expand the Release, Hatchery, and Stock Location Code fields from 19 to 23 characters. |
|  | Add the following validation rule: *Location codes must not contain spaces and must be padded with “^”* |
|  | Modify the validation constraint: *Trailing blanks should not be included* to *Trailing periods should not be included* |

### Chapter 3 - Recovery Data

| Field # | Description & Validation Rules |
| --- | --- |
| 17 | Expand the Recovery Location Code field from 19 to 23 characters. Add the following validation rule: *Location codes must not contain spaces and must be padded with “^”* |
|  | Modify the validation constraint: *Trailing blanks should not be included* to *Trailing periods should not be included* |

### Chapter 4 - Catch/Sample Data

| Field # | Description & Validation Rules |
| --- | --- |
| 16 | Expand the Catch Location Code field from 19 to 23 characters. Add the following validation rule: *Location codes must not contain spaces and must be padded with “^”* |
|  | Modify the validation constraint: *Trailing blanks should not be included* to *Trailing periods should not be included* |

### Chapter 6 - Location Data

| Field # | Description & Validation Rules |
| --- | --- |
| 5 | Expand the Catch Location Code field from 19 to 23 characters.  Expand the definition of Level 6; Sub-Location from 3 characters to 7. Change the description to “…Characters 17 through 23…” |
|  | Add the following validation rule: *Location codes must not contain spaces and must be padded with “^”* |
|  | Modify the validation constraint: *Trailing blanks should not be included* to *Trailing periods should not be included* |

## Data Migration Method

To migrate existing location codes, the embedded spaces must be replaced with the carat character.

## Discussion and Action Items

### October 2015 Data Standards Work Group - Seattle, WA

Approved at this meeting.

### 2021 Coho Technical Committee Feedback

[As described: Location codes should no longer allow embedded spaces in the code and should be padded with the period (.) character.] I do NOT support this formatting change, as it would require an extensive amount of re-coding the post-processing mechanisms that have been built to analyze CWT data. I do not see a “functional” or logical reason why this would be needed for the cost of time/energy to re-write programs.

[As described: Trailing spaces should be trimmed to the minimum length needed for a location code. If the location code does not require lower levels of the code, then the code should be shorter and not be padded out with unnecessary characters.] I agree that this would be helpful. Currently many data analysts use functions to do this post-processing step regardless.

[As described: In addition to changing the padding character, level 6 (sub-location) should be expanded from 3 characters to 7. This will expand the overall code length from 19 characters to 23 characters.] Because the level 6 (sub-location) falls at the end of the CWT hierarchy of string characters in location codes, the current post-processing mechanisms could be utilized to accommodate this proposal. Additional definitions of how to post-process the longer character string in level 6 would need to be added, but the overall mechanism would remain the same.

### May 2022 Chinook Technical Committee - Virtual

No concerns with modifying the location format. This modification would require modification to analayistical tools to, primarly the fishery lookup table in CAMP.

### August 10, 2022 Technical Committee on Data Sharing - Virtual

Approved. The implementation will likely affect other technical committee analytical tools.

* Removing spaces can cause an issue as may not know if the value belongs to one part or another part.
* Approved just need to adjust implementation time-line and which character to use before we implement. Discuss implementation plan with technical committees

### September 2022 Regional Mark Processing Center Feedback

RMPC recommends: Per discussions by TCDS, August 10, 2022, there is an intent to re-evaluate the character that is to replace the embedded space (’ ‘). The RMPC still recommends use of the dot (’.’) character; however, acceptable alternatives might be: tilde (‘~’), or carat (‘^’).

### October 12, 2022 Technical Committee on Data Sharing - Virtual

There was concerns that the dot is not visually distinct and may conflict with other code values (e.g. coding latitude/longitude into the code). We modified the proposal to use th carat character (‘^’) to avoid conflict with other values and visually distinct. This proposal should be implemented in version 5.0 of the data specification.

## Recommendation

DSWG recommends implementation in next version of the specifications. The recommendation is to use the carat ‘^’ and implement with version 5.0.

# Define Maximum Species Age

|  |
| --- |
| **Proposal ID**: 23 |
| **Affected Version**: 4.1 |
| **Affected Chapters**: 3.29 |
| **Proposed Version**: 5.0 |
| **Significance**: Minor |
| **WG-Status**: Recommended |
| **TC-Status**: Approved |
| **Type**: Exchange Specification |
| **Created**: 20151009 |
| **Subsequent Proposal ID(s)**: |

## Description

To allow agencies to more clearly define the relationship between releases and recoveries, it is beneficial to define a maximum species age.

## Proposal

TCDS must determine species-specific maximum ages to help identify tag code recoveries that are unresolved against release records.

## Format and Document Impact(s)

### Chapter 3 - Recovery Data

When defining constraints on the *Unreasonable Age* (3) value of the Proposed 12 - *Unresolved Reason*, the upper age limit for each species should be stipulated in the specification. This upper age limit should only be used to enforce use of unreasonable ages above the age limit. Submitting recoveries with ages above the limit should be rejected unless the tag status is unresolved. Unreasonable ages less then the maximum are still appropriate based on other information about the indicator release group (e.g. life history).

## Data Migration Method

*The issue of data migration has not been discussed*

## Discussion and Action Items

### October 2015 Data Standards Work Group - Seattle, WA

A table from Wikipedia accepted by DSWG and will be delivered to CTC for acceptance, then TCDS. Add 1 year to each age to allow for some variability.

| Species | Maximum Age |
| --- | --- |
| Chinook | 10 (9 + 1) |
| Chum | 8 (7 + 1) |
| Coho | 6 (5 + 1) |
| Pink | 4 (3 + 1) |
| Sockeye | 9 (8 + 1) |
| Steelhead | 11 (10 + 1) |
| Masu | 4 (3 + 1) |

### 2021 Coho Technical Committee Feedback

This would assist in quality control of CWT data, as these types of data records are regularly encountered and often excluded from analysis. It would be helpful to identify them to the reporting agencies for quality control.

### May 2022 Chinook Technical Committee - Virtual

No concerns with this validation field.

### August 10, 2022 Technical Committee on Data Sharing - Virtual

Approved.

* Want to improve data quality. These are validation rules to avoid negative ages and max ages
* Some validation rule already in place to restrict negative age
* Example of a tag accidentally used in a year before it should have been used provided by Eric Keller

### Sep 2022 Regional Mark Processing Center Feedback

RMPC recommends: Re-locating the Wikipedia page reference for this, documenting it, and documenting the criteria that establishes this maximum age reference. Also, document: what is the basic formula? Is it Recovery Year minus Brood Year? Or Run Year minus Brood Year? Or Run Year minus Release Year? Plus or minus 1 year? Etc. Which is it?. TCDS should visit this and verify that all equations related to it are in the specification.

RMPC suspects Wikipedia source is <https://en.wikipedia.org/wiki/Salmon> that references FishBase, FAO, and ITIS. However this Wikipedia source doesn’t have maximum age for steelhead, so another source must have been consulted such as FishBase that cites maximum reported steelhead age of 11 <https://www.fishbase.se/summary/SpeciesSummary.php?ID=239&AT=steelhead>

NOTE: possible alternatives to the Wikipedia reference might be: <https://www.fisheries.noaa.gov/species-directory> or <https://www.fishbase.se/search.php> . See the related discussion on Proposal #12.

### October 12, 2022 Technical Committee on Data Sharing - Virtual

This proposal should be implemented in version 5.0 of the data specification.

## Recommendation

DSWG recommends implementation in next version of the specifications. TCDS approved this proposal for implementation in version 5.0.