REGIONAL MARK INFORMATION SYSTEM USER GUIDE

Pacific States Marine Fisheries Commission
Regional Mark Processing Center

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Chapter 1 Data Introduction and Overview

This user guide is intended for users of the Regional Mark Information System (RMIS) web application operated by the Pacific States Marine Fisheries Commission (PSMFC).

The Pacific States Marine Fisheries Commission hosts the Regional Mark Processing Center (RMPC). This office maintains RMIS to facilitate exchange of regional tagging and marking data between release agencies, sampling/recovery agencies, and other data users. The RMPC houses the regional Coded-Wire Tag (CWT) database.

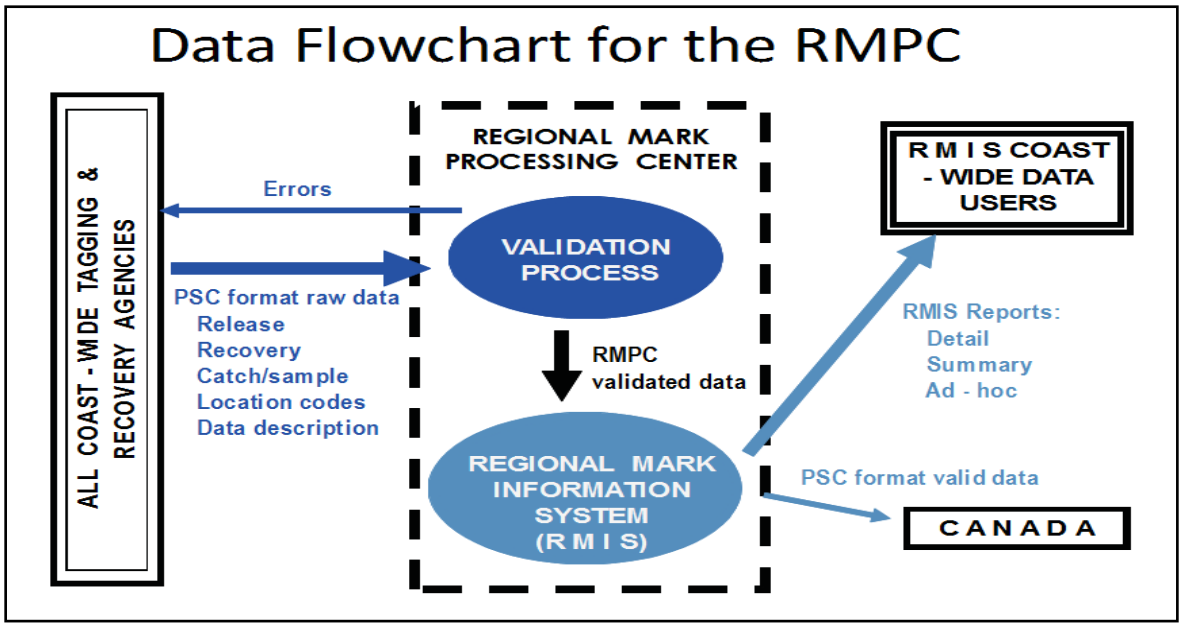


Figure 1: Flowchart showing flow of datasets at the PSMFC Regional Mark Processing Center

The data flow process of the RMPC is shown in Figure 1. The CWT data are submitted to the RMPC where they are loaded and validated against an extensive set of checks. These checks are to verify the integrity and accuracy of the data elements. The RMPC also serves as the U.S. site for exchanging U.S. CWT data with Canada for Pacific Salmon Treaty purposes. Canada also houses a complete copy of coastwide CWT data sets.

1.1 Document References

Users of the RMIS web site must be familiar with the principal CWT data specification reference named below. It is very important that users of CWT data understand the information contained in this document in order to perform conclusive, accurate and responsible analysis of these data. If you do not have a copy of this document you may download an electronic copy at the following URL: CWT Data File Definition, Specification, & Validation . In addition, users of RMIS may wish to consult the principal overview publication of the coast-wide CWT program located at this URL: Overview of the CWT Program .

1.2 Types (classes) of data

All types of data housed at the RMPC are described as follows.

Release (RL)

When a group of fish is released from a hatchery or other release site containing any number of coded wire tagged fish, the group is associated with a unique tag code. Any pertinent information from releasing agencies regarding the release group is submitted to the RMPC by the responsible state, provincial, or federal agencies. There are approximately 50,000 tagged release groups in the database dating back to 1968.

When groups of fish are released without coded wire tagged fish present, the release group is called an untagged/unassociated group. The release group is assigned a 12 character alpha-numeric identifier. This information is likewise submitted to the RMPC. There are approximately 100,000 untagged release groups in the database dating back to 1952.

Catch / Sample (CS)

Tagged fish are sampled at various commercial, recreational, tribal and escapement fisheries Pacific Coastwide by sampling agencies. These agencies usually record the sampling area, number caught, and percent of catch that was sampled and related information. This information is called Catch/Sample data and is collected by sampling agencies for submission to the RMPC on a yearly basis by specific reporting agencies. There are currently about 340,000 Catch/Sample records in the database.

Recovery (RC)

When tags are removed from fish and decoded, the tag is linked to the specific location of catch, date of catch, fishery, and other related biological data. Where possible, the ratio of the number of fish sampled to the total catch is multiplied by the total number of tags extracted to form the Estimated Number of fish. These data are collected by sampling agencies for submission to the RMPC on a yearly basis along with Catch/Sample data. Individual recovery records correspond to one observed (decoded) tag.

Each recovery record has an associated ‘Status of Tag’. This status is coded as follows:

- ‘1’ Tag read OK
- ‘2’ No tag
- ‘3’ Tag lost before read
- ‘4’ Tag not readable
- ‘7’ Unresolved discrepancy
- ‘8’ Head not processed
- ‘9’ Pseudo tag, blank wire

In addition to passing rigorous validation tests, the status ‘1’ recoveries must match by tag code with a tagged release group. There are currently about 6 million status ‘1’ recovery records in the database. Recoveries with a status other than ‘1’ are not included in most RMIS reports. There are currently about 1.5 million non-status ‘1’ recoveries in the database.

Catch-&-Effort (CE)

Catch effort is the amount of fish caught by a specified amount of effort. It can also be defined as the catch of fish, in numbers or in weight, taken by a defined unit of fishing effort. Typically, effort is a combination of gear type, gear size, and length of time gear is used. Catch per unit of effort is often used as a measurement of relative abundance for a particular fish. There are currently about 140,000 Catch & Effort records in the database.

Location (LC)

The geographic locations of release, sample, and specific recovery of fish are also assembled by specific location reporting agencies. Collectively, these are called Location data and are submitted to the RMPC along with all other classes of data.

There are five types of locations. Within each type of location, the location record is uniquely identified coastwide by a 19 character Location Code. That code is associated with a textual description of the location and a geographical reference to the location. Currently there are approximately 22,000 geographic locations referenced by the above classes of data (among a total of about 35,000 location codes maintained in the database).

The five types of locations are described as follows:

1. **Recovery Site**: Indicates as closely as possible the actual geographic place where a tagged fish was caught. They are usually specified within larger Catch Areas in the sampling stratum. This type of location is found only in Recovery data.
2. **Catch Area**: Corresponds to geographic areas where sampling occurred for a given fishery. They may encompass several recovery sites. This type of location is found in Catch/Sample and Catch & Effort data.
3. **Hatchery**: Specifies the name of the hatchery or rearing facility for non-wild release groups. This type of location is found only in Release data.
4. **Release Site**: Specifies the geographic release location of the release group. It may differ from the hatchery. This type of location is found only in Release data.
5. **Stock**: Differs from all other locations in that they identify the brood stock or morphology of a release group rather than a geographic location. Stocks usually correspond to the name of a stream or if the stock was mixed, a composite of stream names. This type of location is found only in Release data.

Description (DD)

In addition to the above classes, the CWT database contains Description data (e.g. metadata). that is intended to help maintain a permanent centralized record of changes made over time to the data values in the database (i.e. among the 5 data classes). Descriptions are intended to indicate what data is new or what changes have occurred to the data itself since the last submission of a given data type. Description data are all publicly available on the following RMPC web page: RMPC News & Data Status (see § below).

Chapter 2 RMIS Elements, Definitions, and Setup

2.1 RMIS Web Site Elements

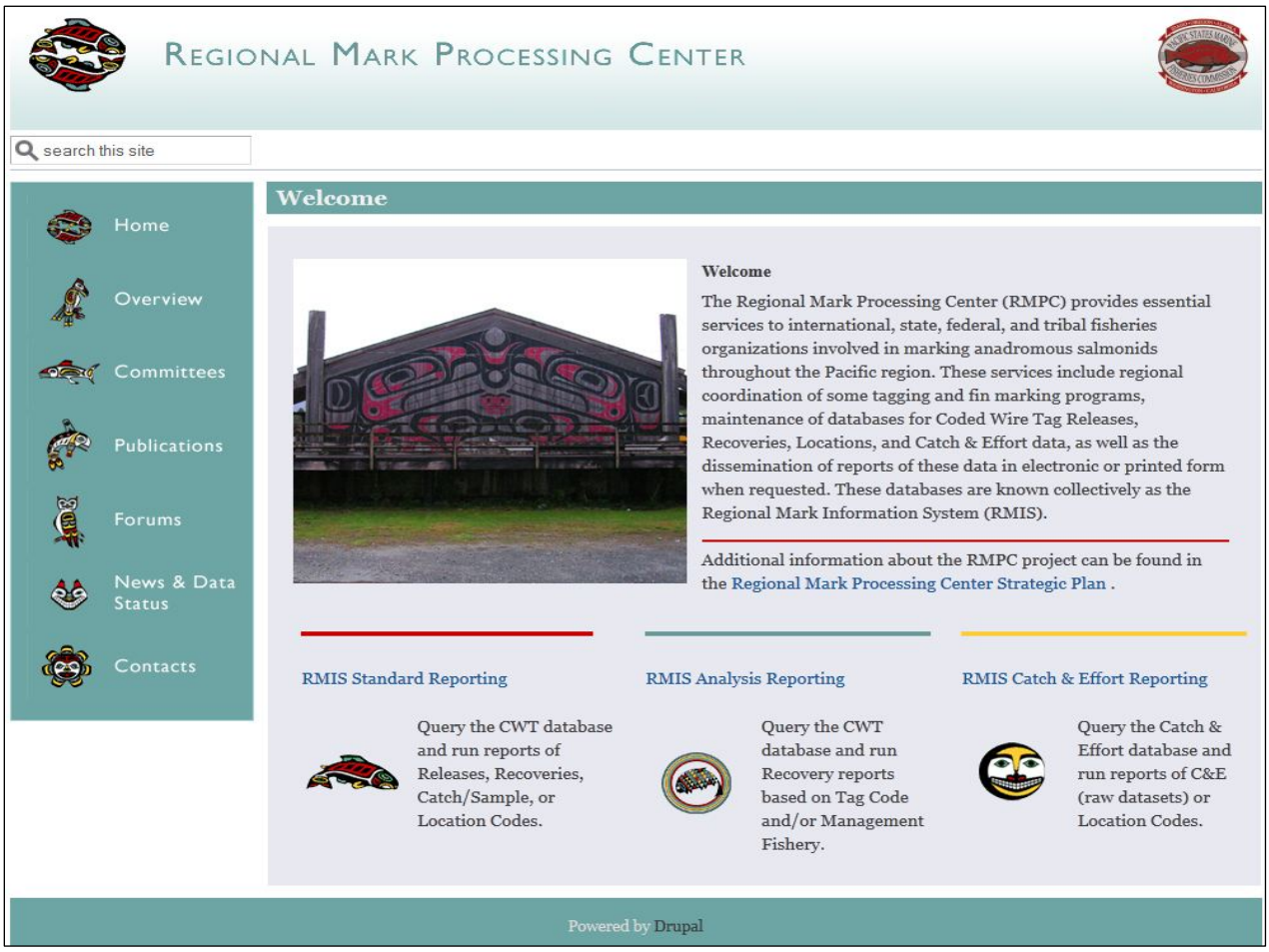


Figure 2: RMPC Home Page: http://www.rmpc.org

RMIS Home Page & Query Systems

RMIS is comprised of three principal Internet based reporting systems for public download of CWT and related datasets (see Figure 2). They are:

1. **RMIS Standard Reporting System (RSR)**
2. **RMIS Analysis Reporting System (RAR)**
3. **RMIS Catch-&-Effort Data Reporting System**

The **RMIS Standard Reporting System** is an application that allows the user to build a query, select, and optionally preview the result set row by row, and then run a formatted report of their choice using the result set. The report may then be returned to the browser, or sent to their email address. Data retrieval includes selection by location or by tag code as well as many other data elements.

All classes of data are available in user-customizable raw data download format. In addition, RMIS Standard Reporting has the following report formats available in either textual summary (with page headers) or textual detail (one report row per line) levels:

- Release reports by tag code or release id: 5 reports (detail)
- Release reports by adipose clip: 1 report (summary)
- Recovery reports by tag code: 18 reports (summary and detail)
- Recovery reports by tag list: 2 reports (summary and detail)
- Recovery reports by hatchery of release: 7 reports (summary and detail)
- Catch / Sample reports: 1 report (detail/raw)
- Location reports: 1 report (detail/raw).

The **RMIS Analysis Reporting System** was developed to facilitate the analysis of coastwide salmon recovery information in terms of actual geographic areas used for management of the various fisheries. It refers to a version of the CWT database that is summarized by tag code, “management-fishery” units, and age class of returning fish. RMIS Analysis allows the user to auto-generate and maintain lists of tag codes based on various criteria—such as morphological characteristics of the fish releases. RMIS Analysis also provides a means of organizing (grouping) tag codes and/or management-fisheries by various user-identified criteria and using the group definitions as units for aggregation in report output. RMIS Analysis Reporting has the following report formats available:

- CWT- based recovery reports: 9 reports (summary and detail)
- Management-fishery based recovery report: 1 report (summary).

In the following chapters, this document will provide usage instructions for the RMIS Standard and RMIS Analysis reporting systems (systems 1 & 2 above) as well as provide report explanations and examples.

There are no formatted reports available of Catch-&-Effort data (only detail/raw reports are available) so the **RMIS Catch-&-Effort Reporting System** (system 3 above) will not be described in this document. Please see the CWT specification document described above or contact the RMPC for specific information regarding Catch-&-Effort datasets.

News & Data Status Page

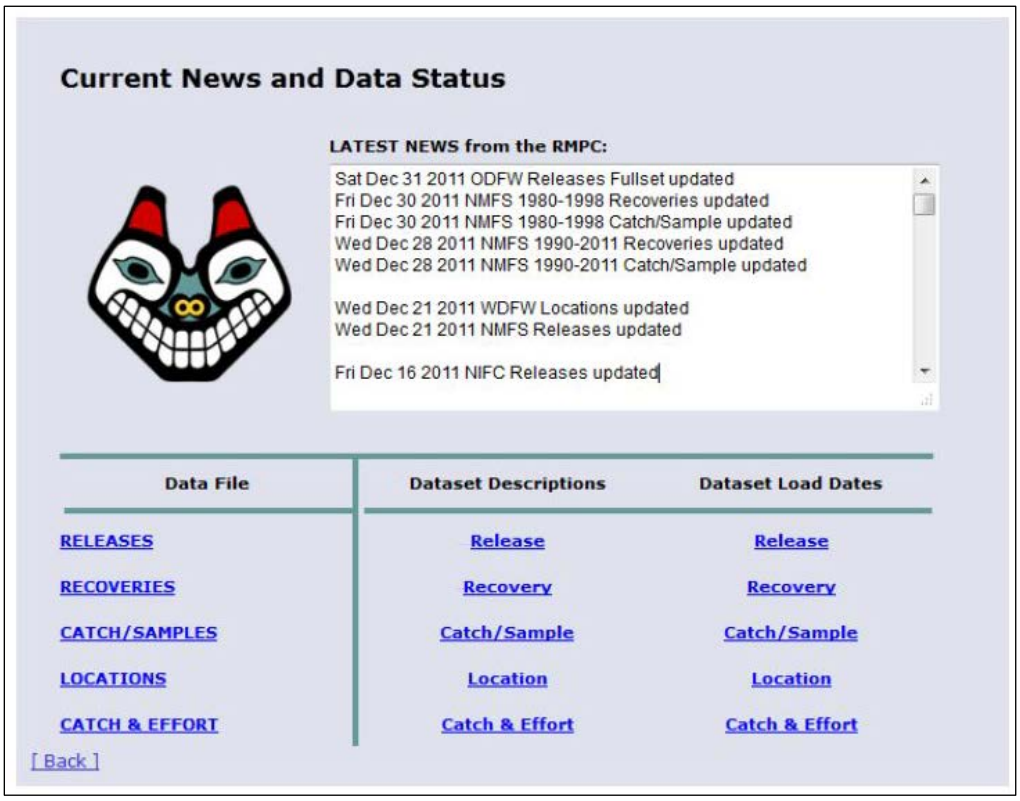


Figure 3: News & Data Status Page

This page of the web site includes (see Figure 3 and Figure 4):

- Status tables of all CWT metadata ('Descriptions') selectable by data class and reporting agency which allow user tracking and review of data update activity.
- Status tables showing all current data processing information from the RMPC including load date and number of records loaded into the database.
- Scrolling list of recent news developments regarding the RMPC computer system and the CWT database updates.

CWT metadata that has been provided by the Reporting Agencies can be obtained from these charts. For example, under the column 'Dataset Descriptions', the 'Recovery' chart is illustrated as follows:

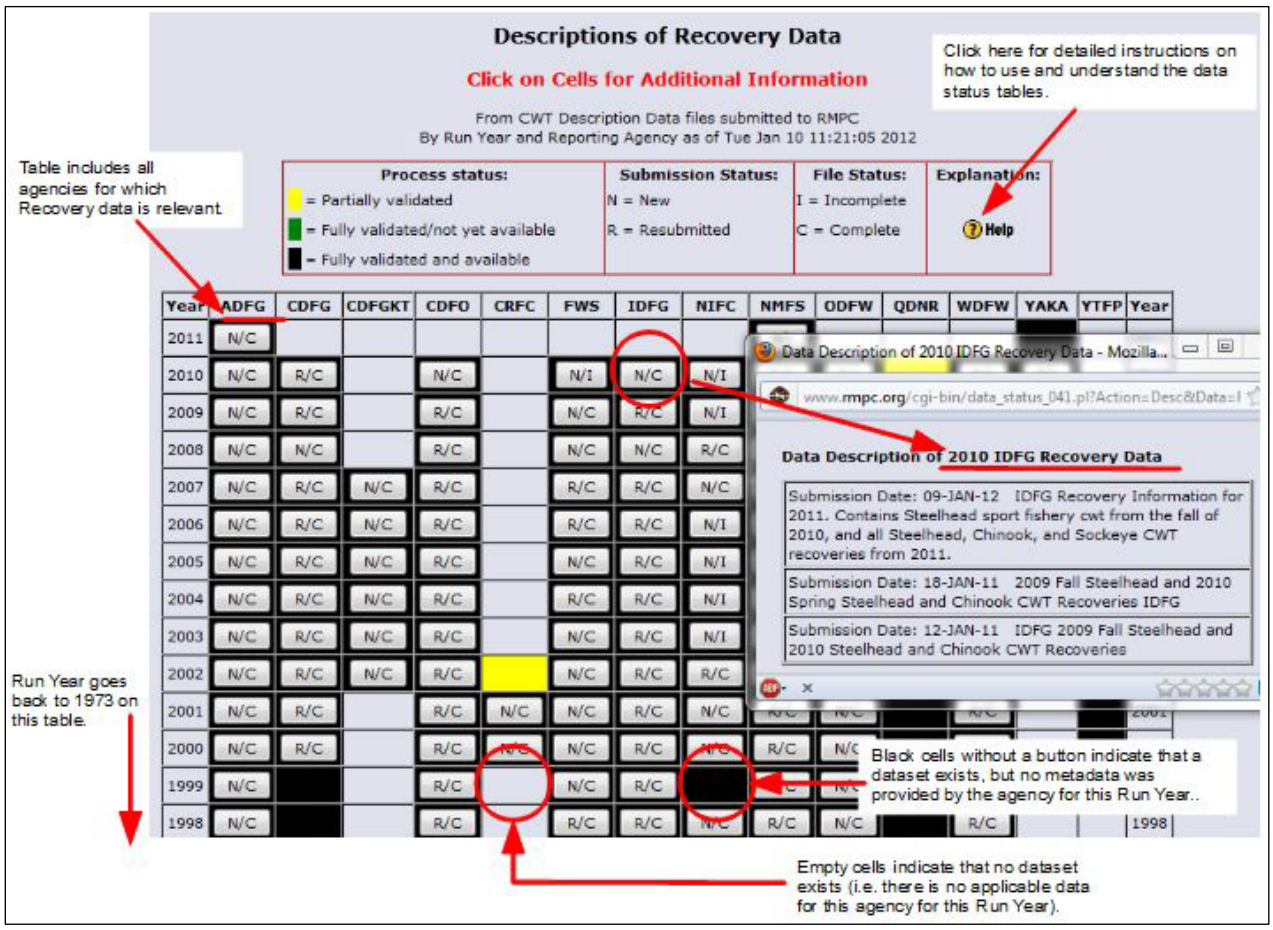


Figure 4: Illustration of Data Status table and pop-up window showing metadata

Other Pages

The web site also includes an image gallery illustrating many aspects of the coastwide CWT field processes as well as a set of numerous CWT related publications available for download.

2.2 Definitions

The following concepts and terms (both general and CWT specific) are used throughout RMIS and this guide and are described here for reference.

Browser Delivery : An alternate method for delivery of report output. Suitable for small result sets and reports that run quickly.

CSV Report : A report in text-based comma-separated-value (CSV) format. The first record of a CSV report contains comma-separated field names. CSV report files can be imported into many popular personal computer database and spreadsheet programs.

CSV/HTM Data Field Chooser : A window that allows you to choose which data fields to include in your CSV or HTM report by clicking on PSC Common Names as described in the CWT Data Format Specification (§ 1.1).

CWT : The Coded-Wire Tag database. Contains the Release, Recovery, Catch/Sample, and Location data defined in CWT Data Format Specification (§ 1.1).

Database : A collection of related information and their definitions.

Email Delivery : The default method for delivery of report output. Preferable for large result sets that take a long time to run and/or that produce large amounts of output.

Geographic Narrowing Menus: A series of menus (applicable to certain fields) which allow for identifying RMIS Regions, RMIS Basins, or specific Location Codes by successively narrowing down your choices and finally choosing the value(s) for placement into the field.

HTM Report : A report in Hyper-Text Markup Language (HTML) format. HTM reports can be displayed as easily-viewable tables in a Web browser.

Key Field : A field on an RMIS Query Form that corresponds to an indexed column on the RMIS data table in the CWT database. Every query must have at least one key field filled in.

Pop-up Window : A window that opens in your Web browser when you click on a link or a button on the RMIS Web site. Pop-up windows are displayed above the main RMIS window and they must be closed in order to return to the underlying window. Two uses of pop-up windows in RMIS are to display help messages and to display forms that allow the user to click on checkboxes to select data-codes when using a Query Form.

Preview Window : A separate browser window in which you can preview the result set returned by your query prior to running a report.

Query Form : A Query Form is a set of parameters that identifies what data you want reported. Queries serve to *restrict* the amount of data retrieved from the database when a report is run.

RAR Navigation Menu: The list of all available Query Forms and Report output formats in the RMIS Analysis Reporting (RAR) system. This menu appears on the left-hand side of all RAR Query Forms.

RMIS : The Web site that is used to create queries and run reports using data contained in the CWT and CE databases.

RMPC : Regional Mark Processing Center, The PSMFC office that provides for the planning, organization, direction and control of the centralized CWT data repository at the direction of the Pacific Salmon Commission.

RSR Navigation Menu: The list of all available Query Forms in the RMIS Standard Reporting (RSR) system (see Figure 6). This menu appears on the left-hand side of all RSR Query Forms.

Tag List : A tag list is a list of up to 1,000 tag codes. Tag lists are used in the Recoveries by Tag List Query Form, which is optimized for quick retrieval of recovery data from large tag lists.

Wild Card Searches : Searching for character string patterns within fields of character data. The most useful example of this is searching by location name when you don't know the exact spelling of the name (see Figure 8).

2.3 RMIS Usage Setup

Login

The 3 RMIS reporting systems can all be accessed from the RMIS website home page (see Figure 2 above) by clicking on the desired reporting system. If RMIS Standard is chosen, the login screen will appear as shown here (Figure 5).

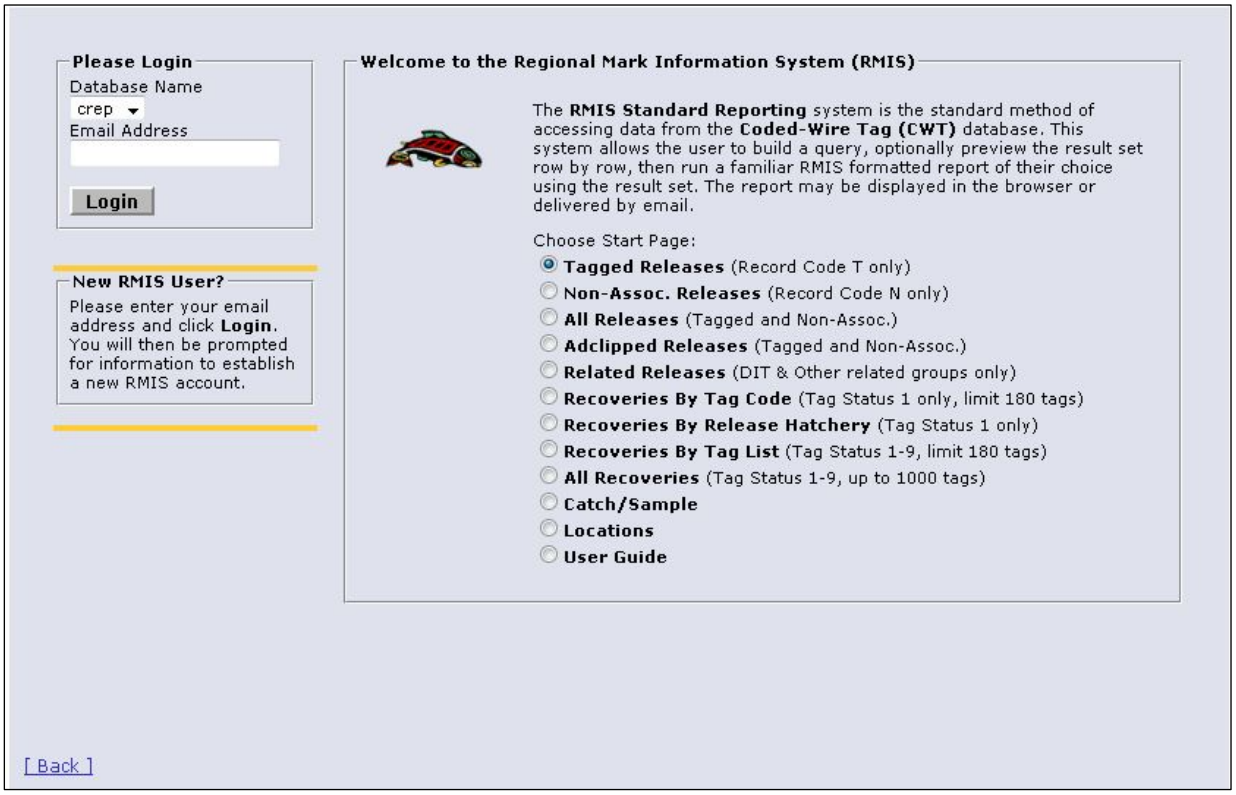


Figure 5: RSR Login Screen

Returning Users: To login, enter your email address and click on the Login button.

New Users: The first time you login you'll need to verify that you want to create a new account. At this point please enter in the following information:

1. Email Address (re-type)
2. Name
3. Organization
4. Phone Number

On subsequent logins your email address will be recognized as a returning user.

RMIS logins are based on browser sessions. After you click the Login button you'll have full access to all of the RMIS Reporting systems until you either logout or close your browser.

Hardware and Software Requirements

RMIS should function on a variety of systems and web browsers, including the following:

1. Operating Systems: Linux, Windows (2000/Windows-7), Mac (OS X);
2. Web browsers: Firefox, Google Chrome, Internet Explorer, Opera;
3. Browser settings: JavaScript is required and session cookies must be enabled;
4. Screen resolution: 1024 by 768 pixels or higher.

Chapter 3 RMIS Standard: Introduction, & Navigation

From the RMIS Home Page clicking on the RMIS Standard Reporting icon leads to the RSR Login page (see above for login instructions). The contents of this page are determined by which database you chose. Here are the start pages available on the RSR Login page (see Figure 5 above):

1. **Tagged Releases (Record Code T only)** : Search & report release groups containing only coded-wire tagged fish
2. **Non-Associated Releases (Record Code N only)** : Search & report release groups not containing any coded-wire tagged fish
3. **All Releases (Tagged and Non-Assoc)** : Search & report all release groups regardless of whether they contain coded-wire tagged fish
4. **Adclipped Releases** : Search & report while comparing ad-clipped with un-clipped releases
5. **Related Releases** : Search & report based on double-index tag (DIT) & other related release groups
6. **Recoveries by Tag Code (Tag Status 1 only, limit 180 tags)** : Search & report on all fully-decoded (i.e. Tag Status '1') recoveries by specific tag codes or other release & recovery fields
7. **Recoveries by Hatchery (Tag Status 1 only)** : Search & report on all fully-decoded (i.e. Tag Status '1') recoveries by release hatchery or other release & recovery fields
8. **All Recoveries (Tag Status 1-9, limit 180 tags)** : Search & report on all recoveries in the database (including those with Tag Status other than '1')
9. **Recoveries by Tag List (Tag Status 1-9, up to 1000 tags)** : Search & report on all fully-decoded (i.e. Tag Status '1') recoveries by specific tag codes and you have a large number of tag codes for your search
10. **Catch/Sample** : Search & report on raw catch/sample records
11. **Location Codes** : Search & report on location records

From the RSR Login page clicking on Login button leads to the RSR Query Form. The navigation of these forms is described below.

3.1 RSR Navigation

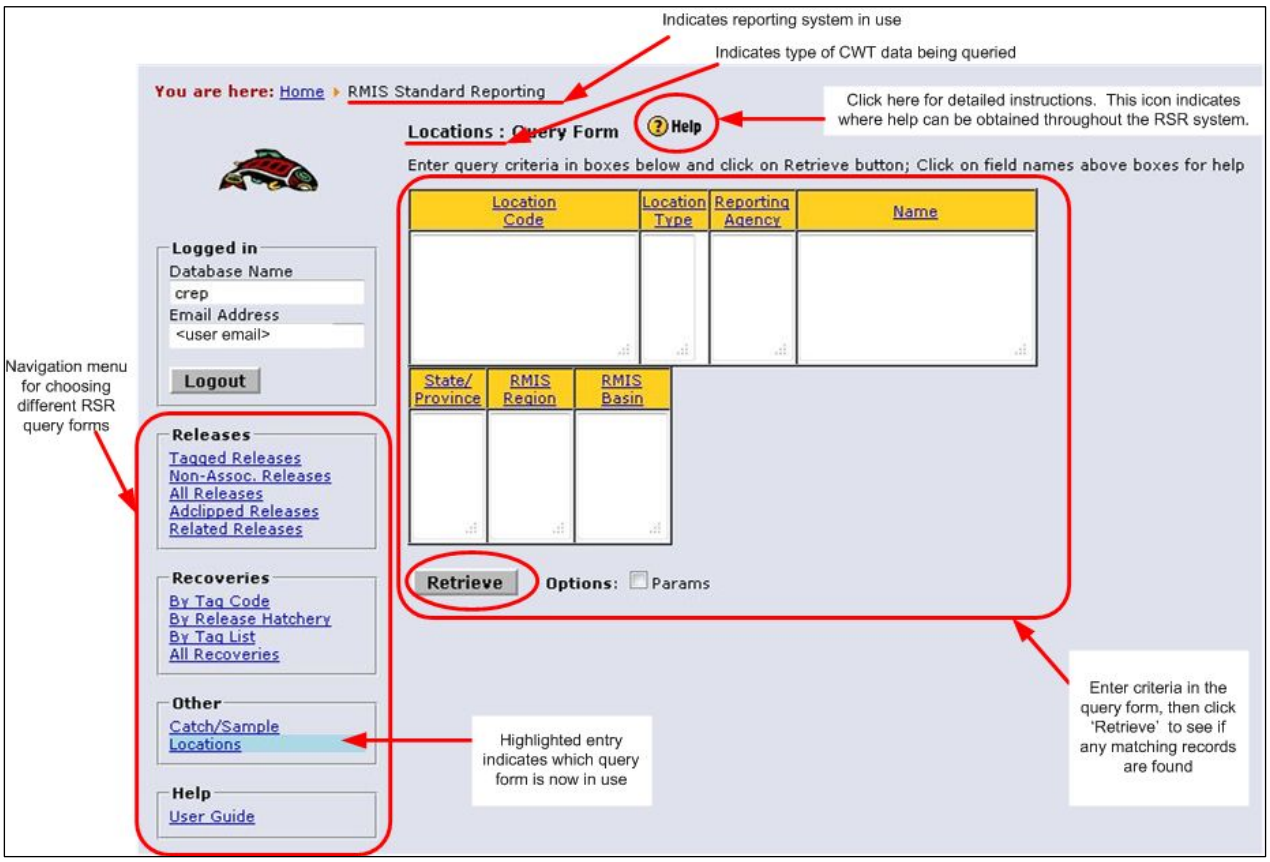


Figure 6: RSR Query Form illustration of navigation elements

The contents of the query form are determined by which type of CWT data you choose, but the query forms all have the same general structure (see Figure 6). The left-hand column of the query Form is a menu of links that allow you to navigate between different types of CWT data. The top line of the query form identifies the type of CWT data being queried. Beneath that are up to three rows of fields that you can use to build your query. The bottom line of the query form contains a Retrieve button. Click on the button to run the query and see how many matching records it finds in the database.

Chapter 4 RMIS Standard: Query Form Window

4.1 Key Fields & Data Restriction

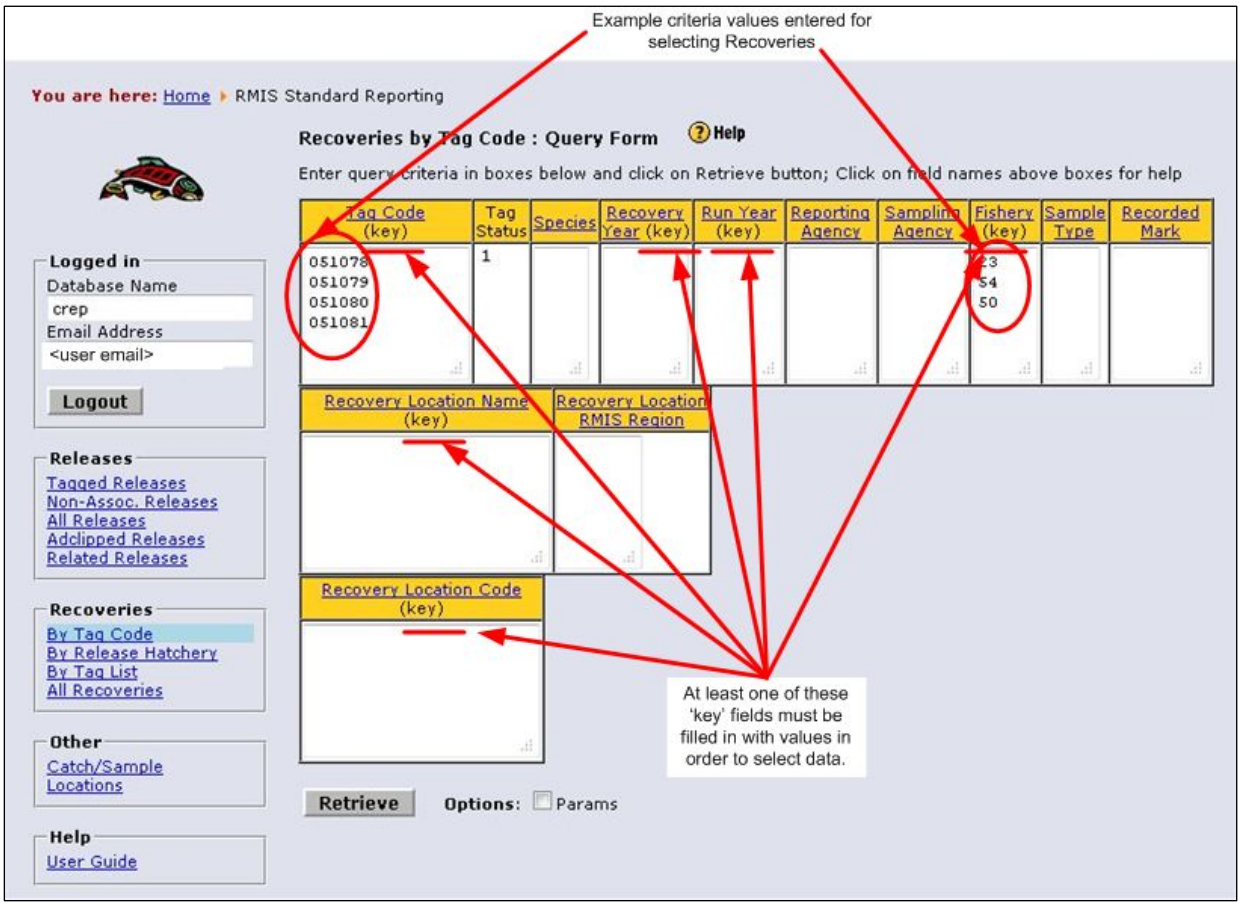


Figure 7: RSR Query Form illustration of field & criteria elements

Entering Codes

Each field in a query form consists of a name and a box. You can click on the name which will display a pop-up window for help in filling in the box, or you can type the desired criteria (values) directly into the box. In general you can type as many values as you want into each box, but each value must be on a separate line (Figure 7).

Key Fields

Some query forms (such as Recoveries by Tag Code shown in Figure 7) have 'key' fields. This means that the data table has indexes on these fields and in order to select data there must be at least one value entered in at least one of the key fields.

Wild-Card Searches

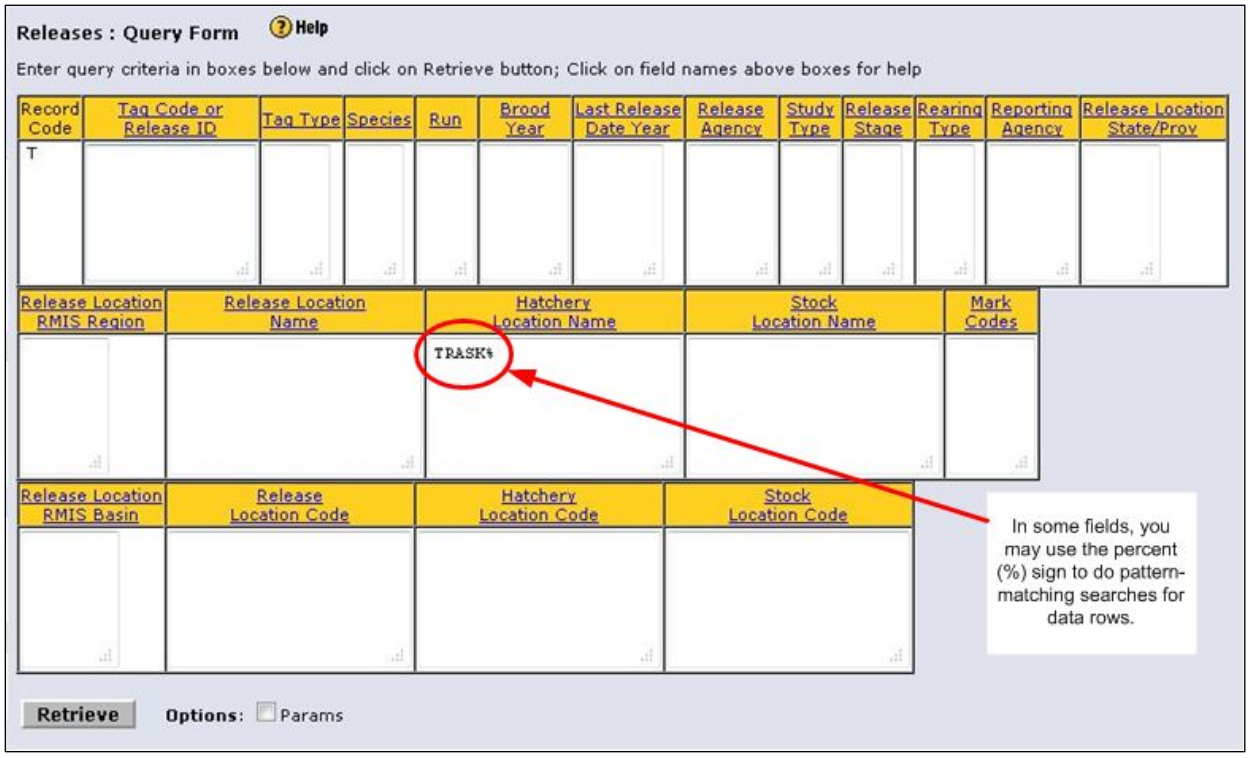


Figure 8: RSR Query Form illustration of wild-card pattern matching

Data rows may be found when searching by location name when you don't know the exact spelling of the name. This is done using the pattern-matching character: '**%**'. For example, within the Tagged Releases query form, CWT release groups that begin with the string 'TRASK' may be selected by entering the string **TRASK%** into the field 'Hatchery Location Name' (see Figure 8). This locates data from both 'TRASK R HATCHERY' and 'TRASK R PONDS' facilities. This query retrieves about 243 CWT rows from the database. Pattern-matches can sometimes be used both before and after the search string. For example, '%COLUMBIA R%' entered into the field Release Location Name will match any rows of data where the Release Location explicitly indicates the Columbia River.

Geographic Narrowing Menus

Some query forms in the RSR system allow geographic data selection using a series of menus within a pop-up window. The user can simply type in the field values if known, or can use the geographic narrowing menus by clicking on the field header. The fields listed below have this capability -- allowing the user to choose from hydrologically defined domains, regions, and basins to fill in the desired criteria value(s):

- **Releases query forms**: Release Location RMIS Region, Release Location RMIS Basin, Release Location Name, Release Location Code, Hatchery Location Name, Hatchery Location Code, Stock Location Name, Stock Location Code
- **Locations query form**: RMIS Region, RMIS Basin

Geographic criteria values are then placed into the query form by narrowing down your choices through one or more of the following geographic divisions in the greater Pacific region:

- **RMIS Domain:** (see Figure 9: RSR Locations lookup step 1: choose domain)
- **RMIS Region:** (see Figure 10: RSR Locations lookup step 2: choose region)
- **RMIS Basin:** (see Figure 11: RSR Locations lookup step 3: choose basins)
- **Location Code / Name:** (see Figure 12: RSR Locations lookup step 4: choose locations)

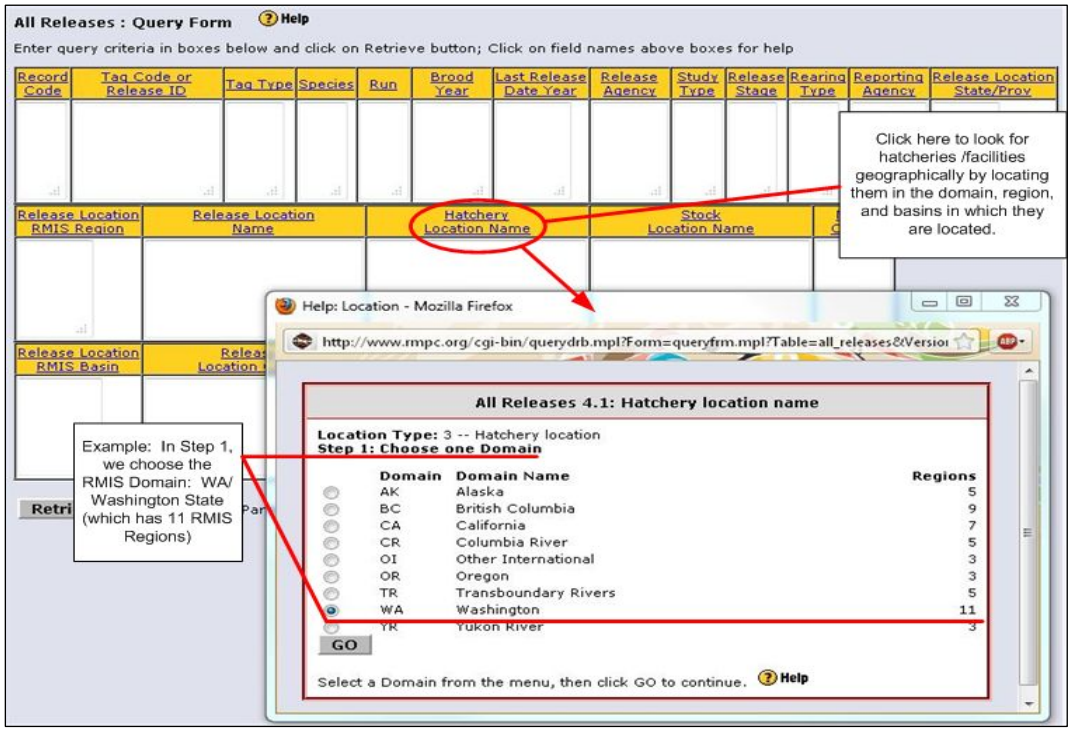


Figure 9: RSR Locations lookup step 1: choose domain

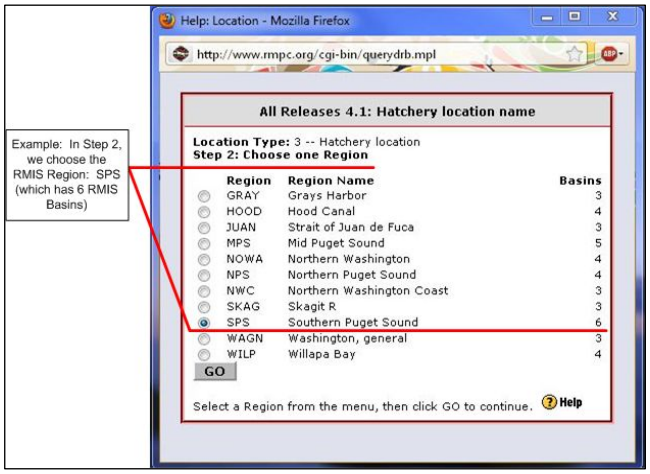


Figure 10: RSR Locations lookup step 2: choose region

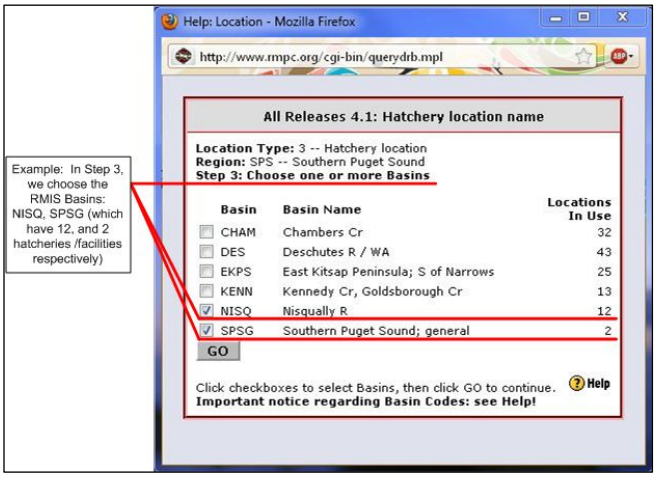


Figure 11: RSR Locations lookup step 3: choose basins

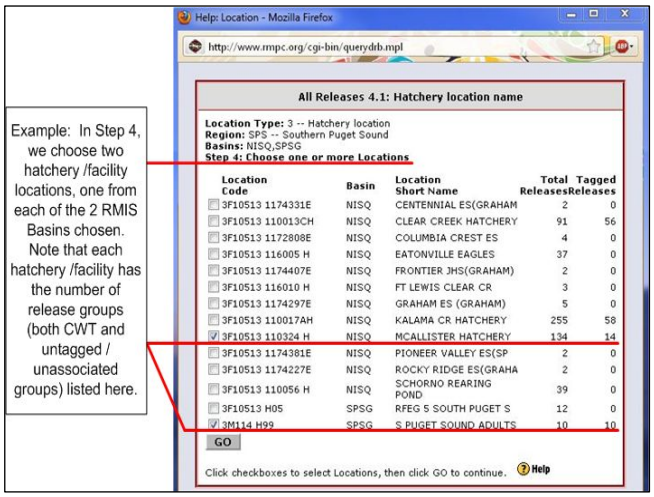


Figure 12: RSR Locations lookup step 4: choose locations

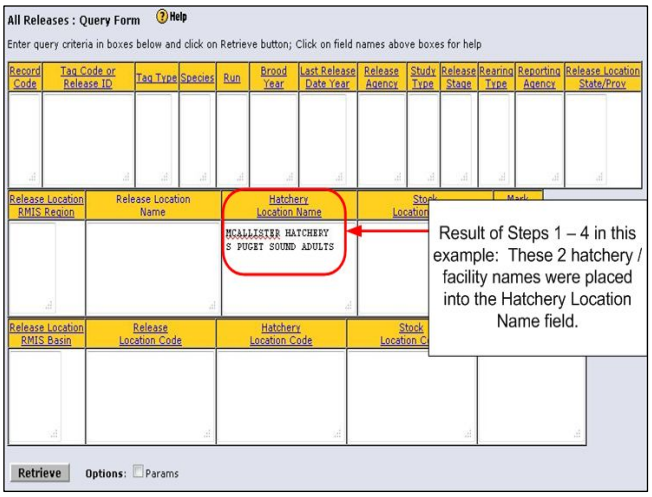


Figure 13: RSR Locations lookup result

The above figures (Figure 9 to Figure 13) show how to select releases from specific hatcheries /facilities by using the geographic narrowing menus. Note that the location name(s) could also be typed into the box exactly as seen or could be found by pattern-matching (see Figure 8); however, these methods are subject to typing errors, etc. and are therefore somewhat less reliable than using the geographic narrowing menus. In the above example scenario, after placing the 2 values into the Hatchery Location Name field, the data can be selected by clicking the 'Retrieve' button (see Figure 6).

These geographic divisions (RMIS Domain / RMIS Region / RMIS Basin) are detailed in documents and maps found on the following RMPC web page: RMIS Map Documents.

Note that the geographic narrowing menus are also available on Recoveries and Catch/Sample query forms; however, fully inclusive data selection cannot be assured on these query forms using these menus since some Recovery Site locations do not have values for RMIS Region and RMIS Basin codes. This is the case because RMIS Domain, RMIS Region, and RMIS Basin codes are only formally defined for Release Site, Hatchery/Facility, and Stock locations.

Chapter 5 RMIS Standard: Query Results Window

After clicking 'Retrieve' the RSR system will attempt to retrieve the rows from the database and go to the Query Results window. There could be some conditions in which the RSR system cannot select the data rows and go to the Query Results window. These conditions include:

- *..Warning. Your <queryform> query didn't retrieve any rows. Please go back to the Query form and change your query.*
- *..Warning. Your <queryform> query must include a value for at least one key column. Please go back to the Query form and change your query.*
- *..Warning. Your <queryform> query retrieved too many rows (<# rows>). Please go back to the Query form and change your query.*

If rows are found for the query and the result is reportable, then the RSR system will open the Query Results window -- a new window with the elements shown in Figure 14. The sections of this window are described below.

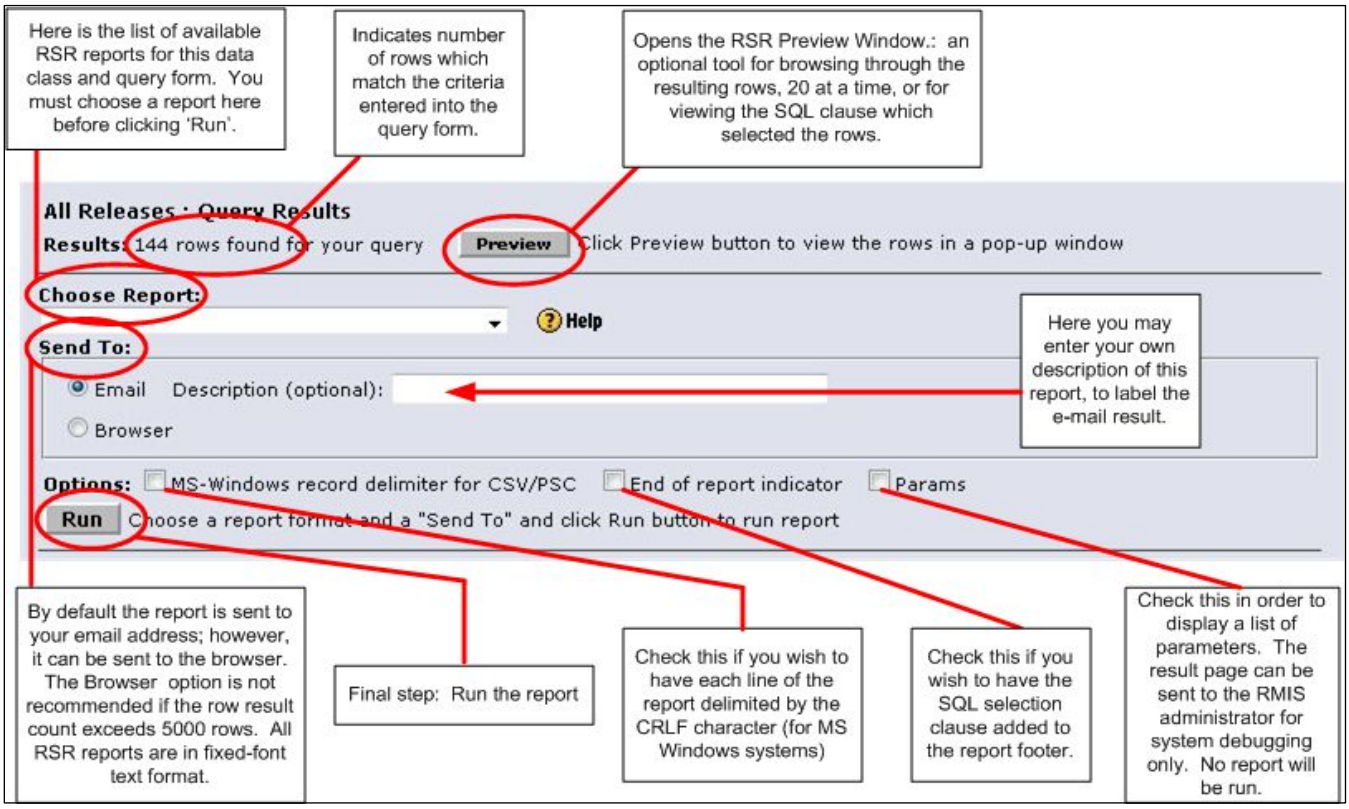
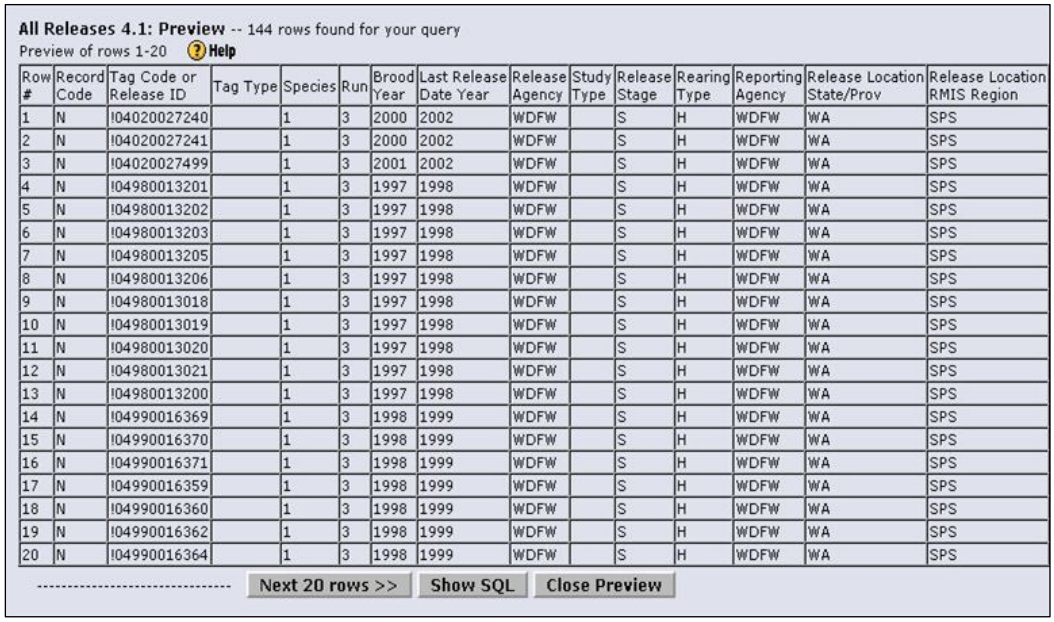


Figure 14: RSR Query Result window illustration

Results & Preview section

The Query Results window begins by showing how many data rows were found based on the specific criteria entered on the query form. You may go directly to the 'Choose Report' section (see below) or you may wish to preview the data first. The **Preview** button opens a new window which displays rows of data in sets of 20 rows at a time so you can inspect the data retrieved by your query prior to running a report. The preview window is shown in Figure 15.



All Releases 4.1: Preview -- 144 rows found for your query
Preview of rows 1-20 Help

Row #	Record Code	Tag Code or Release ID	Tag Type	Species	Run	Brood Year	Last Release Date Year	Release Agency	Study Type	Release Stage	Rearing Type	Reporting Agency	Release Location State/Prov	Release Location RMIS Region
1	N	!04020027240		1	3	2000	2002	WDFW		S	H	WDFW	WA	SPS
2	N	!04020027241		1	3	2000	2002	WDFW		S	H	WDFW	WA	SPS
3	N	!04020027499		1	3	2001	2002	WDFW		S	H	WDFW	WA	SPS
4	N	!04980013201		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
5	N	!04980013202		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
6	N	!04980013203		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
7	N	!04980013205		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
8	N	!04980013206		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
9	N	!04980013018		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
10	N	!04980013019		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
11	N	!04980013020		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
12	N	!04980013021		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
13	N	!04980013200		1	3	1997	1998	WDFW		S	H	WDFW	WA	SPS
14	N	!04990016369		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
15	N	!04990016370		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
16	N	!04990016371		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
17	N	!04990016359		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
18	N	!04990016360		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
19	N	!04990016362		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS
20	N	!04990016364		1	3	1998	1999	WDFW		S	H	WDFW	WA	SPS

Next 20 rows >> Show SQL Close Preview

Figure 15: RSR Row Preview table illustration

If the data in the Preview table is not what you expected, click the Back button to return to the Query Form and change your query.

When you are satisfied that the data in the Preview table looks correct, close the preview window and choose your desired report format and delivery method, then click the **Run** button.

These elements are shown in Figure 14.

Choose Report section

The pop-up menu in this form-section allows you to choose the output format for your report. Some reports have a row-limit specified. (I.e. the available reports shown here are determined in part by the number of rows selected). For example, if you are running a Recoveries-by-Tagcode report and the number of rows selected is extremely large (e.g. more than 100,000 rows) then certain reports (such as TS3) may not appear as an option because they have a very long page format and produce numerous lines for each row found. However, the raw data listing reports (CSV, HTM, etc.) are nearly always available. If you choose Comma-Separated Values (CSV) or HTML table (HTM) format, you will need to go down to the next section (see below) and choose at least one output column before running the report.

These elements are shown in Figure 14.

Send To & Options sections

Send To: These two radio buttons allow you to choose the delivery method for your report. Email is checked by default, which means the report will be delivered as an FTP link sent to you by email. Due to limitations in the browser and server software, Send To: Browser is only appropriate for short reports. For reports in which you expect large amounts of data (e.g. more than about 5000 rows), it is better to check the Email button option.

Options: The CR-LF checkbox uses both carriage return & line feed characters as the record delimiter for CSV & PSC reports rather than the default record delimiter which is line feed only. The End of report checkbox adds the text of the SQL select clause after the last record in the report. If you check the Params checkbox, the system will not run a report, but will instead display only parameter and SQL information about the query.

Then, click on the **Run** button to run your report. NOTE: If you chose Send To: Browser, your web browser will have to wait until the report is done running; however, if you chose Send To: Email, you will get a confirmation message and then you can continue working in your web browser without having to wait for the report to complete.

These elements are shown in Figure 14.

CSV / HTM Data Field Chooser section

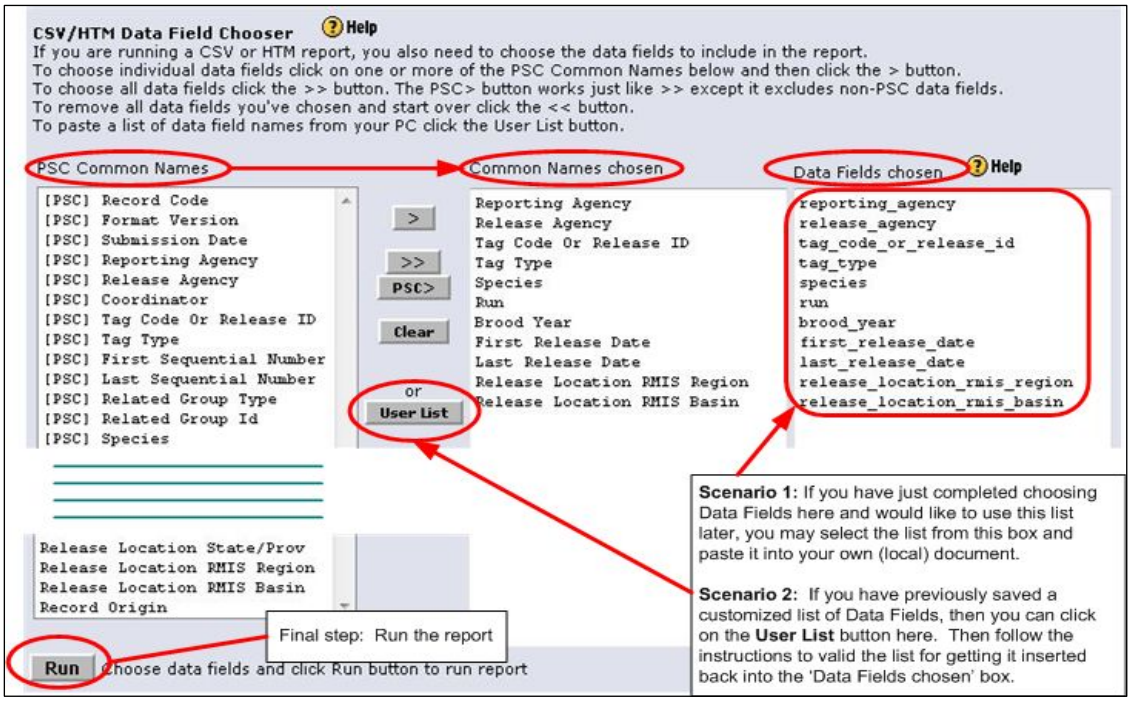


Figure 16: RSR CSV / HTM Data Field Chooser illustration

You must choose the "Comma-Separated Values custom file (CSV)" or the "HTML custom table (HTM)" report format in order to use these data field names to generate a customized report.

Click on one or more PSC Common Names in the left-hand box. You may click and drag to select multiple adjacent PSC Common Names, or you may Ctrl-click to select multiple non-adjacent Names. Then click on the **>** button which will add corresponding data field names from the CWT database to the right-hand box.

To select all of the Names in the left-hand box, click on the **>>** button and all of the corresponding data field names from the CWT database will be added to the right-hand box. The **PSC>** button works just like the **>>** button except that it selects only those Names that appear in the PSC Specification for the currently selected table (i.e. Names prefixed with "[PSC]").

If you make a mistake by choosing the wrong data fields, you can correct the mistake by clicking on the **Clear** button which will clear out the right-hand box so you can re-do the field selection.

These elements are shown in Figure 16.

Customized User List

If you have built a customized list of Data Fields in the 'Data Fields chosen' box and would like to use the list later, you may select the list from this box and paste it into your own (local) document. Save the document for later use. Then when running a report later on, you may use this customized list of Data Fields by clicking on the **User List** button. After clicking on **User List**, follow the instructions to validate the list for getting the list inserted back into the 'Data Fields chosen' box. This procedure is illustrated as Scenario 1 and Scenario 2 in Figure 16 above.

Then, after you have chosen all your data fields run your report by clicking the **Run** button (see Figure 14 or Figure 16).

Chapter 6 RMIS Standard: Report Examples

RMIS Reports can be run from the Query Results Window after rows of data have been selected (see Figure 14). The set of available reports is determined by the Query Form initially chosen for selecting data (see Figure 6).

6.1 Release Reports

General Release Reports & Downloading

If you selected one of these three Query Forms in the **--Releases--** section of the RSR Navigation Menu:

- Tagged Releases
- Non-Assoc. Releases
- All Releases

then you may have up to nine (9) report formats available to run:

- RMPC Release book, side A (RBA)
- RMPC Release book, side B (RBB)
- PSC 4.1 Data Exchange format (PRL)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM)
- Tag List (RTL) for copy/paste to new query
- Releases with Zero Rec. By Tag Code (RZ1)
- Releases with Zero Rec. By Hatchery (RZ2)
- CWT & Total Released By Year (RTR).

These reports are described and illustrated as follows:

RMPC RELEASE BOOK, SIDE A (RBA)

This report lists the most commonly used columns from the Releases data file (including numbers of fish released). Report characteristics:

- tabular format
- does not break down or aggregate data results
- sorts by column: Tag Code or Release Id.

Example output listing:

PAGE 1A 14:52:15 11/08/2011

Tag Code or. Release ID..	Tag Typ	Run.	Spec	BdYr	Rel. Agy	Hatchery Location...	Release Location....	First. Release	Last.. Release	CWT.... Mrk Cnt	Loss Rate	Non-CWT Mrk Cnt
042222	0	Spri	Chin	1981	ADFG	DEER MOUNTAIN	KETCHIKAN CR 101-47	830516	830516	8,341	0.022	188
042244	0		Coho	1981	ADFG	SNETTISHAM	INDIAN LK 111-33	830826	830826	7,164	0.219	11,836
042255	0	Spri	Chin	1982	SSRA	WHITMAN LAKE	NEETS BAY 101-90	840601	840601	20,063	0.012	50,593
044422	0	Fall	Coho	1993	ADFG	MARX CREEK	MARX CR 101-15	950316	950529	686	0.0186	13
051122	0	Fall	Chin	1981	FWS	QUINAULT NFH -COOK C	COOK CR 21.0429	830503	830503	27,545	0.033	27,705
052222	0	Fall	Chin	1989	FWS	ABERNATHY SCDC HATCH	ABERNATHY CR 25.0297	900329	900518	22,241	0.0838	863,661
052233	0	Wint	Sthd	1989	FWS	EAGLE CR NFH	EAGLE CR (CLACKAMAS)	900425	900425	21,027	0.0659	1,483
052244	0	Spri	Chin	1989	FWS	WARM SPRINGS NFH	WARM SPRINGS R	900926	910417	49,883	0.03	1,542
052255	0		Coho	1988	FWS	QUILCENE NFH	BIG QUILCENE 17.0012	900503	900503	26,109	0.01	140,117
054422	0	Fall	Chin	1999	FWS	SPRING CR NFH	SPRING CR 29.0159	000420	000420	66,303	0.1282	2,084,195
064422	12	Fall	Chin	2000	CDFG	MERCED R FISH FACIL	MERCED R FISH FACIL	010508	010508	24,722	0.019	479
071122	0	Spri	Chin	1994	ODFW	CEDC YOUNGS BAY NET	YOUNGS R & BAY	960229	960229	51,737	0.019	81,780
072211	0	Spri	Chin	1979	ODFW	COLE RIVERS HATCHERY	ROGUE R 4	801211	801212	29,811	0.009	65,861
072222	0	Spri	Chin	1979	ODFW	MCKENZIE HATCHERY	MCKENZIE R 1	810316	810316	36,005	0.072	2,793
072233	0	Late	Chin	1979	ODFW	FALL CR HATCHERY	FALL CR (ALSEA R)	801025	801025	25,214	0.012	306
072244	0	Fall	Chin	1979	ODFW	ELK R HATCHERY	ELK R	801025	801025	26,173	0.014	372
072255	0		Coho	1979	ODFW	SANDY HATCHERY	CEDAR CR #2 (SANDY R	810501	810501	27,742	0.025	158,162
073322	0		Chin	1984	ODFW	BONNEVILLE HATCHERY	TANNER CR (BNVILLE)	850513	850513	79,162	0.039	146,974
074422	9		Coho	1985	ODFW	TRASK R HATCHERY	TRASK R	870416	870416	27,118	0.018	150,180
082211	0	Fall	Chin	1982	CDFO	H-Quinsam River H	R-Campbell Est	8304	830421	11,666	0.0201	239

RMPC RELEASE BOOK, SIDE B (RBB)

This report lists some additional columns from the Releases data file that are not included in the RBA report. Report characteristics:

- tabular format
- does not break down or aggregate data results
- sorts by column: Tag Code or Release Id.

Example output listing:

```
PAGE 1B                                                                                                    15:33:43 11/08/2011
Tag Code or. Tag Ct. T.L. Weight Length Rear Rel.. Rel. St. Co- Stock Location..... Comments.....................................
Release ID.. Typ Mhd Days  (gm)   (mm)  Type Stage Type Int ord
042222       0        107  17.70        H    Smolt          01  KETCHIKAN CR
042244       0          6            85 H    Unkn  E        01  SNETTISHAM+SPEEL
042255       0         45  47.60        H    Unkn  P        01  LPW (UNUK R)
044422       0          0               H    Smolt B    N   01  MARX CR 101-15
051122       0         34  64.86        H    Smolt K    N   07  COOK CR      21.0429
052222       0   W     36   6.06        H    Finlg E    N   07  ABERNATHY CR 25.0297
052233       0   W    108  41.46        H    Smolt E    N   07  CLACKAMAS R EARLY
052244       0   B    173  32.89        H    Smolt B    N   07  WARM SPRINGS R
052255       0   W     42  20.45        H    Smolt P    N   07  BIG QUILCENE 17.0012 QUIL000061
054422       0   B     32   6.71     95 H    Finlg K    N   07  ABERNATHY CR 25.0297 SC 62 Columbia River       Spring Creek NFH

064422       12        54   6.74     83 H    Finlg E    N   08  MERCED RIVER         MERCED R. SURVIVAL TEST.
071122       0   W     34  41.69        H    Smolt B        05  SANTIAM R S FK       NET PEN STUDY FROM MCKENZIE
072211       0        170  58.68        H    Unkn  P        05  COLE RIVERS HATCHERY
072222       0        160  47.59        H    Unkn  E        05  MCKENZIE HATCHERY
072233       0        103  38.67        H    Unkn  P        05  FALL CR (ALSEA R)
072244       0         30  40.86        H    Unkn  P        05  ELK R (ELK R HT)
072255       0        172  23.62        H    Unkn  P        05  SANDY R (SANDY HT)
073322       0   W     20   7.48        H    Unkn  E        05  TANNER CR (BNVILLE)
074422       9   W     68  40.03        H    Unkn  P        05  TRASK R (TRASK HT)
082211       0          5   3.60        H    Smolt E    N   03  S-Quinsam R          ESTUARY STUDY - ESTUARY RELEASE
```

PSC 4.1 DATA EXCHANGE FORMAT (PRL)

This report is a fixed raw data listing of columns that correspond exactly to the Pacific Salmon Commission data exchange format for Release data. See "PSC Format Specification" document, Ch. 2 (referenced in §1.1).

Example output listing:

```
record_code,format_version,submission_date,reporting_agency,release_agency,coordinator,tag_code_or_release_id,tag_type,first_sequential_number,last_sequential_number,related_group_type,related_group_id,species,run,brood_year,first_release_date,last_release_date,release_location_code,hatchery_location_code,stock_location_code,release_stage,rearing_type,study_type,release_strategy,avg_weight,avg_length,study_integrity,cwt_1st_mark,cwt_1st_mark_count,cwt_2nd_mark,cwt_2nd_mark_count,non_cwt_1st_mark,non_cwt_1st_mark_count,non_cwt_2nd_mark,non_cwt_2nd_mark_count,counting_method,tag_loss_rate,tag_loss_days,tag_loss_sample_size,tag_reused,comments
"N","4.1","20020328","NIFC","SUQ","14","!14199800107",,,,,"5","3","1997","19980512","19980512","3F10510  150298 R","3F10510  150298 H","3F10510  150298 S","F","H","P","FR","1.22","0","N",,,,,"0000","615952",,,"B",,,,,
"N","4.1","20020328","NIFC","SUQ","14","!14199800106",,,,,"5","3","1997","19980429","19980429","3F10510  150298AR","3F10510  150298 H","3F10510  150298 S","F","H","P","FR",".52","0","N",,,,,"0000","131343",,,"B",,,,,
"N","4.1","20040126","NIFC","SUQ","14","!14200300016",,,,,"5","3","2002","20030313","20030327","3F10510  150298 R","3F10510  150298 H","3F10510  150298 S","E","H",,"V0",".38",,"N",,,,,"0000","490900",,,"B",,,,,"EGG BOX RELEASE"
"N","4.1","20081106","WDFW","WDFW","04","!04710025808",,,,,,"2","3","1970","19710422","19710422","3F42001  260002 R","3F42001  270017 H","3F42001  270017 S","G","H",,,"1.18",,,,,,,"0000","285000",,,"B",,,,,
"N","4.1","20081106","WDFW","WDFW","04","!04990017473",,,,,,"2","3","1998","19990719","19990719","3F553 27 QMB559 R","3F42001  270017 H","3F42001  270002 S","G","H",,,"5.66",,,,,,,"0000","97800",,,,,,,,"SURPLUS COHO."
"T","4.1","20110617","WDFW","WDFW","04","635694","12",,,,,"1","3","2010","20110601","20110609","3F42001  260002 R",,"3F42001  260002 S","S","M","P",,"5.84","78",,"0000","82047",,,,,,,,,,,"Bo. Mix rel. by COWLITZ SALMON HATCH"
"T","4.1","20110617","WDFW","WDFW","04","635576","13",,,,,"2","7","2009","20110427","20110502","3F42001  260002 R",,"3F42001  260002 S","S","W",,,"29.52","136",,"0000","823183",,,"0000","4549",,,,,,,,"Bo. W rel. by COWLITZ SALMON HATCH"
"T","4.1","20110617","WDFW","WDFW","04","635389","13",,,,,"2","7","2009","20110427","20110502","3F42001  260002 R",,"3F42001  260002 S","S","W","P",,"29.84","138",,"0000","251270",,,,,,,,,,,"Bo. W rel. by COWLITZ SALMON HATCH"
```

COMMA-SEPARATED VALUES CUSTOM FILE (CSV)

NOTE: This report requires that you choose your own list of **--Releases—**columns (see Figure 16).

This report is simply a raw data listing of columns that you can customize by arranging in any order desired. It is generally intended for import into a spreadsheet program for further manipulation. Report characteristics:

- does not break down or aggregate data results
- has no particular sort order.

Example output listing:

```
tag_code_or_release_id,reporting_agency,tag_type,species,brood_year,first_release_date,rearing_type,release_strategy,release_loca
tion_name,cwt_1st_mark,cwt_1st_mark_count,cwt_2nd_mark,cwt_2nd_mark_count,comments
"!05NT9020","ODFW",,"3","2007","20070602","H","FR","ROWLAND CR (COQUILLE R S",,,,,"FRY RELEASE V0 1190"
"!05NT9062","ODFW",,"3","2006","20060611","H","FR","ROWLAND CR (COQUILLE R S",,,,,"FRY RELEASE V01173 COQUILLE HS"
"635176","WDFW","13","2","2008","20100428","W",,"COWLITZ R    26.0002","5000","936291",,,
"635286","WDFW","12","1","2009","20100610","M",,"COWLITZ R    26.0002","0000","197510",,,
"634979","WDFW","12","2","2007","20090402","W",,"COWLITZ R @ MAYFIELD","0000","11362",,,"COHO WILDSTOCK"
"634983","WDFW","12","2","2007","20090402","W",,"COWLITZ R @ MAYFIELD","0000","11398",,,"COHO WILDSTOCK"
"634984","WDFW","12","2","2007","20090630","W",,"COWLITZ R @ MAYFIELD","0000","4243",,,"COHO WILDSTOCK"
"!04970009259","WDFW",,"8","1996","19970509","H",,"HORSESHOE LK (COWL)",,,,,"THESE WERE EXTRA CUTTHROAT"
"!04970009261","WDFW",,"8","1996","19970529","H",,"HORSESHOE LK (COWL)",,,,,"THESE WERE EXTRA CUTTHROAT"
"!04070045591","WDFW",,"8","2006","20070415","H",,"COWLITZ R    26.0002",,,,,
"!04060042811","WDFW",,"8","2006","20060831","H",,"COWEEMAN LK (COWL)",,,,,
"!04980014495","WDFW",,"8","1998","19981020","H",,"LK MERWIN (COWL)",,,,,"EXCESS TO PROGRAM."
"!04980014513","WDFW",,"8","1998","19981026","H",,"ROWLAND LK (KLIC)",,,,,"EXTRA 98 BROOD."
```

HTML CUSTOM TABLE (HTM)

NOTE: This report requires that you choose your own list of **--Releases—**columns (see Figure 16).

This report is simply a raw data listing of columns that you can customize by arranging in any order desired. The columns are placed into an HTML formatted table for viewing in an Internet browser. It is generally intended only for viewing in an Internet browser. Report characteristics:

- does not break down or aggregate data results
- has no particular sort order.

Example output listing:

You are here: Home ▸ RMIS Standard Reporting ▸ Query Results ▸ Report HTM

tag_code_or_release_id	reporting_agency	tag_type	species	brood_year	first_release_date	rearing_type	release_location_name	cwt_1st_mark	cwt_1st_mark_count	comments
!04060042811	WDFW		8	2006	20060831	H	COWEEMAN LK (COWL)			
!04070045591	WDFW		8	2006	20070415	H	COWLITZ R 26.0002			
!04970009259	WDFW		8	1996	19970509	H	HORSESHOE LK (COWL)			THESE WERE EXTRA CUTTHROAT
!04970009261	WDFW		8	1996	19970529	H	HORSESHOE LK (COWL)			THESE WERE EXTRA CUTTHROAT
!04980014495	WDFW		8	1998	19981020	H	LK MERWIN (COWL)			EXCESS TO PROGRAM.
!04980014513	WDFW		8	1998	19981026	H	ROWLAND LK (KLIC)			EXTRA 98 BROOD.
!05NT9020	ODFW		3	2007	20070602	H	ROWLAND CR (COQUILLE R S			FRY RELEASE VO 1190
!05NT9062	ODFW		3	2006	20060611	H	ROWLAND CR (COQUILLE R S			FRY RELEASE VO1173 COQUILLE HS
634979	WDFW	12	2	2007	20090402	W	COWLITZ R @ MAYFIELD	0000	11362	COHO WILDSTOCK
634983	WDFW	12	2	2007	20090402	W	COWLITZ R @ MAYFIELD	0000	11398	COHO WILDSTOCK
634984	WDFW	12	2	2007	20090630	W	COWLITZ R @ MAYFIELD	0000	4243	COHO WILDSTOCK
635176	WDFW	13	2	2008	20100428	W	COWLITZ R 26.0002	5000	936291	
635286	WDFW	12	1	2009	20100610	M	COWLITZ R 26.0002	0000	197510	

TAG LIST (RTL) FOR COPY / PASTE TO NEW QUERY

This report simply generates a list of tag codes that can be copied to the clipboard and pasted into the tag code field on a Release or Recovery Query Form. It is generally used to select Recoveries when only certain Release criteria are known and a tag code list has not yet been obtained for insert into a Recoveries by Tag Code (see Figure 7 above) or Recoveries by Tag-List query form.

RELEASES WITH ZERO REC. BY TAG CODE (RZ1)

This report lists release groups based on the query entered which have zero recoveries (i.e. groups for which no recoveries have occurred). It is applicable to the Tagged Releases query form. Report characteristics:

- does not break down or aggregate data results
- sorts by column: Tag Code.

Example output listing:

```
14:23:36 12/05/2011          Regional Mark Information System                  PAGE 1
REPORT: RZ1                   RELEASES WITH ZERO RECOVERIES
                                       BY TAG CODE

Tag Code      Rel.  Hatchery                    Spec  1st   Last  Release
              Agcy  Location Name                      Rel.  Rel.  Location Name
024339*1      CDFO                               Coho  1986  1986  R-Sheslay R
041340        ADFG  SNETTISHAM                   Coho  1987  1988  TWIN LKS 111-40
042422        ADFG  JERRY MYERS                  Coho  1986  1986  TAIYA INLET 115-34
065101        CDFG  WARM SPRINGS HATCHERY        Coho  1985  1985  WARM SPRINGS HATCHERY
065102        CDFG  WARM SPRINGS HATCHERY        Coho  1985  1985  WARM SPRINGS HATCHERY
B40003        ADFG  TRAIL LAKES                  Coho  1985  1985  SIX MILE CR 247-60
B40004*2      ADFG  TRAIL LAKES                  Coho  1985  1985  SIX MILE CR 247-60
B40600        NSRA  MEDVEJIE CIF                 Coho  1986  1986  FINGER LK 109-10
B40700        ADFG  TRAIL LAKES                  Coho  1985  1985  TERN LK 244-30
B40701        ADFG  TRAIL LAKES                  Coho  1985  1985  QUARTZ CR 244-30
B41509        ADFG  BIG LAKE                     Coho  1985  1985  WASILLA LK 247-50
End of report

The query criteria used to produce this report was:
WHERE record_code = 'T'
AND   species = '2'
AND   brood_year = 1984
```

RELEASES WITH ZERO REC. BY HATCHERY (RZ2)

This report lists release groups based on the query entered which have zero recoveries (i.e. groups for which no recoveries have occurred). It is similar to the RZ1 report (described above) except that it is sorts by different columns. Report characteristics:

- does not break down or aggregate data results
- sorts by columns: Release Agency, Hatchery Location Name.

Example output listing:

```
14:34:08 12/05/2011          Regional Mark Information System                  PAGE 1
REPORT: RZ2                   RELEASES WITH ZERO RECOVERIES
                                       BY HATCHERY

Rel.  Hatchery                   Spec  1st   Last  Release                  Tag Code
Agcy  Location Name                    Rel.  Rel.  Location Name
ADFG  BIG LAKE                   Coho  1985  1985  WASILLA LK 247-50        B41509
ADFG  JERRY MYERS                Coho  1986  1986  TAIYA INLET 115-34       042422
ADFG  SNETTISHAM                 Coho  1987  1988  TWIN LKS 111-40          041340
ADFG  TRAIL LAKES                Coho  1985  1985  TERN LK 244-30           B40700
ADFG  TRAIL LAKES                Coho  1985  1985  SIX MILE CR 247-60       B40003
ADFG  TRAIL LAKES                Coho  1985  1985  SIX MILE CR 247-60       B40004*2
ADFG  TRAIL LAKES                Coho  1985  1985  QUARTZ CR 244-30         B40701
CDFG  WARM SPRINGS HATCHERY      Coho  1985  1985  WARM SPRINGS HATCHERY     065102
CDFG  WARM SPRINGS HATCHERY      Coho  1985  1985  WARM SPRINGS HATCHERY     065101
CDFO                             Coho  1986  1986  R-Sheslay R              024339*1
NSRA  MEDVEJIE CIF               Coho  1986  1986  FINGER LK 109-10         B40600
End of report

The query criteria used to produce this report was:
WHERE record_code = 'T'
AND   species = '2'
AND   brood_year = 1984
```

CWT & TOTAL RELEASED BY YEAR (RTR)

This report provides an aggregate summary in two columns showing total CWT-only fish released, and all fish released. It also provides a subtotal for each Release Year and Species. Report characteristics:

- aggregates by columns: Release Year, Species
- sorts by columns: Species, Release Year, State/Province.

Example output listing:

14:38:36 12/05/2011 Regional Mark Information System PAGE 1
REPORT: RTR CWT & TOTAL RELEASED BY YEAR

Species Name	Release Year	State	CWT Released	Total Released
Coho	2003	NA	109091	553625
Coho	2003	OR	48758	505400
Coho	2003	WA	898349	2110151
Coho	2003 subtotal		1056198	3169176
Coho	2004	OR	46629	557016
Coho	2004	WA	946179	2511111
Coho	2004 subtotal		992808	3068127
Coho	TOTAL		2049006	6237303
Steelhead	2003	CA	159207	166580
Steelhead	2003	ID	184042	1990668
Steelhead	2003	WA	207761	381906
Steelhead	2003 subtotal		551010	2539154
Steelhead	2004	CA	121789	127265
Steelhead	2004	ID	214619	1957510
Steelhead	2004	WA	196719	409882
Steelhead	2004 subtotal		533127	2494657
Steelhead TOTAL			1084137	5033811

Adclipped-Release Reports

If you selected Query Form Adclipped Releases in the **--Releases--** section of the RSR Navigation Menu then you may have up to three (3) report formats available to run:

- Ad-clipped Releases Summary (AS1)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

The CSV and HTM reports are described in the section above. The AS1 report is described and illustrated as follows:

AD-CLIPPED RELEASES SUMMARY (AS1)

This report provides an aggregate summary of ad-clipped and unclipped releases in 6 columns including:

- CWT-tagged & Ad-clipped
- CWT-tagged & Unclipped
- Non-CWT-tagged & Ad-clipped
- Non-CWT-tagged & Unclipped
- Non-CWT-tagged & Unknown clip status
- Totals column.

It also provides columnar subtotals and a grand total. Report characteristics:

- aggregates by columns: Species, Brood Year, State/Province, Release Year, RMIS Region, RMIS Basin, Hatchery/Facility
- sorts by columns: Species, Brood Year, Release Year.

Example output listing:

```
15:22:51 12/05/2011                  Regional Mark Information System                                PAGE 1
REPORT: AS1                             AD-CLIPPED RELEASES SUMMARY
SPECIES: Chinook                             BROOD YEAR: 2007                          RELEASE YEAR: 2008

S/P  REGION  BASIN  HATCHERY/FACILITY     ----- CWT TAGGED -----  ------------ NON-CWT -------------       TOTAL
                                          AD-CLIPPED   UNCLIPPED  AD-CLIPPED   UNCLIPPED     UNKNOWN
WA   CECR    WIND   LTL WHITE SALMON NFH      199665      199740     1603155           0           0     2002560
WA   CECR    WIND   SPRING CR NFH             445962      445588    14002310        5410           0    14899270

15:22:51 12/05/2011                  Regional Mark Information System                                PAGE 2
REPORT: AS1                             AD-CLIPPED RELEASES SUMMARY
SPECIES: Chinook                             BROOD YEAR: 2007                          RELEASE YEAR: 2009

S/P  REGION  BASIN  HATCHERY/FACILITY     ----- CWT TAGGED -----  ------------ NON-CWT -------------       TOTAL
                                          AD-CLIPPED   UNCLIPPED  AD-CLIPPED   UNCLIPPED     UNKNOWN
OR   CECR    DESC   WARM SPRINGS NFH         577289           0        3598           0           0      580887
WA   CECR    WIND   CARSON NFH                71613           0     1144585           0           0     1216198
WA   CECR    WIND   LTL WHITE SALMON NFH       71221           0      519542           0           0      590763
WA   CECR    WIND   WILLARD NFH                75394           0      349175           0           0      424569

15:22:51 12/05/2011                  Regional Mark Information System                                PAGE 3
REPORT: AS1                             AD-CLIPPED RELEASES SUMMARY
SPECIES: Chinook                             BROOD YEAR: 2008                          RELEASE YEAR: 2009

S/P  REGION  BASIN  HATCHERY/FACILITY     ----- CWT TAGGED -----  ------------ NON-CWT -------------       TOTAL
                                          AD-CLIPPED   UNCLIPPED  AD-CLIPPED   UNCLIPPED     UNKNOWN
WA   CECR    WIND   LTL WHITE SALMON NFH      511501      197857     5828541        1938           0     6539837
WA   CECR    WIND   SPRING CR NFH             359893      439989    10513169          94           0    11313145

15:22:51 12/05/2011                  Regional Mark Information System                                PAGE 4
REPORT: AS1                             AD-CLIPPED RELEASES SUMMARY
SPECIES: Chinook                             BROOD YEAR: 2008                          RELEASE YEAR: 2010

S/P  REGION  BASIN  HATCHERY/FACILITY     ----- CWT TAGGED -----  ------------ NON-CWT -------------       TOTAL
                                          AD-CLIPPED   UNCLIPPED  AD-CLIPPED   UNCLIPPED     UNKNOWN
OR   CECR    DESC   WARM SPRINGS NFH         699847           0        5394           0           0      705241
WA   CECR    WIND   CARSON NFH                74183           0     1204309           0           0     1278492
WA   CECR    WIND   LTL WHITE SALMON NFH       72614           0      512189           0           0      584803
WA   CECR    WIND   WILLARD NFH                74970           0      350571           0           0      425541
                                          ----------  ----------  ----------  ----------  ----------  ----------
Report Totals                               3234152     1283174    36036538        7442           0    40561306

Note: Numbers of adipose-clipped fish may be inaccurate due to incomplete data collection and/or partial marking.
End of report

The query criteria used to produce this report was:
WHERE species IN ('1','3')
AND   brood_year IN (2007,2008)
AND   release_agency = 'FWS'
AND   release_location_rmis_region = 'CECR'
```

Related Releases Reports

If you selected Query Form Related Releases in the **--Releases--** section of the RSR Navigation Menu then you may have up to four (4) report formats available to run:

- Related Group Summary (RS1)
- Ad-clipped Releases Summary (AS1)
- Comma-Separated Values custom file (CSV)

- HTML custom table (HTM).

The CSV, HTM, and AS1 reports are described in the sections above. The RS1 report is described and illustrated as follows:

RELATED-GROUP RELEASES SUMMARY (RS1)

This report provides a tabular chart with information for all members of a given related group of fish (i.e. releases sharing the same Related Group Id). The columns shown include:

- CWT 1-st Mark
- CWT 2-nd Mark
- Ad-clipped
- Unclipped.

It also provides a totals row as well as the ratio of unclipped to clipped fish to be used in DIT (Double-Index Tag) group analysis. Report characteristics:

- aggregates by column: Related Group Id
- sorts by columns: Species, Hatchery/Facility, Brood Year, Related Group Id.

Example output listing:

```
16:25:14 12/05/2011                Regional Mark Information System                          PAGE 1
REPORT:  RS1                        RELATED GROUP RELEASES SUMMARY

RELATED GROUP:  072011Smolt    TYPE:DIT        SPECIES:  Chinook            RUN:
     HATCHERY:  LTL WHITE SALMON NFH           BR YEAR:  2010             AGENCY:  FWS

RELATED_GROUP   RELEASE_GRP     RL_YEAR      CWT_1ST_MK  CWT_2ND_MK  TT_ADCLIPPED  TT_UNADCLIPPED
--------------  ------------    -------      ----------  ----------  ------------  --------------
072011Smolt     055069             2011      0000                           0           98724
072011Smolt     054599             2011      5000        0000            96925            2403
072011Smolt     055070             2011      0000                           0           99070
072011Smolt     055232             2011      5000        0000            96360            2199
-------------------------------------------------------------------------------------------------
072011Smolt      TOTALS and RATIO.................................      193285          202396    1.047
-------------------------------------------------------------------------------------------------------------

RELATED GROUP:  072011April    TYPE:DIT        SPECIES:  Chinook            RUN:  Fall
     HATCHERY:  SPRING CR NFH                  BR YEAR:  2010             AGENCY:  FWS

RELATED_GROUP   RELEASE_GRP     RL_YEAR      CWT_1ST_MK  CWT_2ND_MK  TT_ADCLIPPED  TT_UNADCLIPPED
--------------  ------------    -------      ----------  ----------  ------------  --------------
072011April     055405             2011      5000                      203259               0
072011April     055406             2011      0000                           0          202650
-------------------------------------------------------------------------------------------------
072011April      TOTALS and RATIO.................................      203259          202650    0.997
-------------------------------------------------------------------------------------------------------------

RELATED GROUP:  072011May      TYPE:DIT        SPECIES:  Chinook            RUN:  Fall
     HATCHERY:  SPRING CR NFH                  BR YEAR:  2010             AGENCY:  FWS

RELATED_GROUP   RELEASE_GRP     RL_YEAR      CWT_1ST_MK  CWT_2ND_MK  TT_ADCLIPPED  TT_UNADCLIPPED
--------------  ------------    -------      ----------  ----------  ------------  --------------
072011May       055365             2011      5000                      199576               0
072011May       055398             2011      0000                           0          199410
-------------------------------------------------------------------------------------------------
072011May      TOTALS and RATIO.................................      199576          199410    0.999
-------------------------------------------------------------------------------------------------------------
Notes:
  1) This report is sorted by:  1) Species; 2) Hatchery; 3) Brood Year; 4) Related Group Id.
  2) Related Group Ratio:  Ratio = Total{CWT&UnAdclipped} / Total{CWT&Adclipped}
  3) Numbers of ad-clipped fish may be inaccurate due to incomplete data collection &/or partial marking.
End of report

The query criteria used to produce this report was:
WHERE related_group_type IN ('D','O')
AND   species = '1'
AND   reporting_agency = 'FWS'
AND   brood_year IN (2010,2011)
AND   release_location_state = 'WA'
```

6.2 Recovery Reports

NOTE: If there is a very large number of recovery data rows (generally greater than about 150,000) selected by the query (see Figure 14) then some RMIS recovery reports may not appear in the list of available reports. Some report formats are very long and have an upper rowlimit for availability because the format is very large and could result in too much data to send to a browser session for output. In this case, to obtain all data rows desired for your

output you can divide your query into multiple queries. For example, you could run one query for Recovery Years 1976 to 1985, then run another query for Recovery Years 1986 to 1995, etc.

Recoveries-by-Tag-Code Reports

If you selected Query Form By Tag Code in the **--Recoveries--** section of the RSR Navigation Menu, then you may have up to twenty (20) report formats available to run:

- Tag Detail by Recovery Year, Fishery (TD1-Rec)
- Tag Detail by Run Year, Fishery (TD1-Run)
- Tag Detail by Recovery Year, Site Name (TD2-Rec)
- Tag Detail by Run Year, Site Name (TD2-Run)
- Tag Detail by Recovery Month, Site Name (TD3)
- Tag Detail by Recovery Year, Site Name (TD4-Rec)
- Tag Detail by Run Year, Site Name (TD4-Run)
- Tag Detail by Site, Statistical Week (TD5)
- Tag Raw Zero Filled (TR1)
- Tag Summary by Recovery Year, Fishery (TS1-Rec)
- Tag Summary by Run Year, Fishery (TS1-Run)
- Tag Summary by Month, Site Name (TS2)
- Tag Summary by Fortnt, Site Name (TS3)
- Tag Summary by Statwk, Site Name (TS4)
- Tag Estimation Analysis by Rec Year (TA1-Rec)
- Tag Estimation Analysis by Run Year (TA1-Run)
- Species Analysis; Smolt/Adult Ratio (SA1)
- PSC 4.1 Data Exchange format (PRC)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

NOTE: regarding result values: Most RSR Recovery reports give these numeric aggregate totals:

- ***OBS'D*** *: This is simply the number of observed fish recovered (rows in the Recoveries data table) for the given aggregated criteria;*
- ***EST'D*** *: This is the total number of estimated recoveries (Estimated Number) for the given aggregated criteria. It is rounded during summation to the nearest integer value;*
- ***MEAS'D*** *: This is the number of fish among those observed that were measured to determine the average length;*
- ***AVG MM*** *: This is the average length for the given aggregated criteria.*

These reports are described and illustrated as follows:

TAG DETAIL BY RECOVERY YEAR, FISHERY (TD1-REC)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Fishery
- sorts by columns: Tag Code, Recovery Year, Reporting Agency, Fishery.

Example output listing:

```
FORMAT: TAG DETAIL BY FISHERY (TD1) -- BY RECOVERY YEAR

TAGCODE       YEAR AGCY FC  OBS'D   EST'D  MEAS'D  AVG MM
093640        2004 ADFG 25      1       0       1     578
093640        2004 ODFW 46      2       2       2     597
093640        2004 ODFW 52      1       1       1     620
093640        2005 ODFW 44      1       4       1     690
093640        2005 ODFW 46      1       1       1     584
093640        2005 ODFW 50      5       5       4     580
093640        2005 ODFW 52      3       4       3     665
093640        2006 ODFW 50      3       3       3     703
635824        1997 ODFW 44      3       6       1     770
635824        1997 WDFW 50      4       4       4     688
635824        1998 WDFW 50      4       4       4     733
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG DETAIL BY RUN YEAR, FISHERY (TD1-RUN)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Run Year, Reporting Agency, Fishery
- sorts by columns: Tag Code, Run Year, Reporting Agency, Fishery.

Example output listing:

```
FORMAT: TAG DETAIL BY FISHERY (TD1) -- BY RUN YEAR

TAGCODE       YEAR AGCY FC  OBS'D   EST'D  MEAS'D  AVG MM
093640        2004 ADFG 25      1       0       1     578
093640        2004 ODFW 46      3       3       3     593
093640        2004 ODFW 50      5       5       4     580
093640        2004 ODFW 52      1       1       1     620
093640        2005 ODFW 44      1       4       1     690
093640        2005 ODFW 50      3       3       3     703
093640        2005 ODFW 52      3       4       3     665
635824        1997 ODFW 44      3       6       1     770
635824        1997 WDFW 50      7       7       7     696
635824        1998 WDFW 50      1       1       1     810
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG DETAIL BY RECOVERY YEAR, SITE NAME (TD2-REC)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Brood Year
- sorts by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Brood Year.

Example output listing:

```
FORMAT: TAG DETAIL BY RECOVERY SITE NAME (TD2) -- BY RECOVERY YEAR

             BRD- REC-
TAGCODE      YEAR YEAR AGCY FC  SITE NAME            SITE CODE           OBS'D   EST'D  MEAS'D  AVG MM
093640       2002 2004 ADFG 25  AK M 1 SW SASO       1M1SWSASO               1       0       1     578
093640       2002 2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2801  27      1       1       1     584
093640       2002 2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2802  27      1       1       1     610
093640       2002 2004 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24      1       1       1     620
093640       2002 2005 ODFW 44  COL R WA SEC 4       5F33203  R104   12      1       4       1     690
093640       2002 2005 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2801  27      1       1       1     584
093640       2002 2005 ODFW 50  CTUIR BROOD PONDS    5F33421  H21    22      3       3       2     595
093640       2002 2005 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22      2       2       2     566
093640       2002 2005 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24      3       4       3     665
093640       2002 2006 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22      3       3       3     703
635824       1994 1997 ODFW 44  COL R OR SPORT SEC 8 5F33203  R208   12      1
635824       1994 1997 ODFW 44  COL R OR SPORT SEC 9 5F33203  R209   12      2       6       1     770
635824       1994 1997 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H       4       4       4     688
635824       1994 1998 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H       4       4       4     733
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG DETAIL BY RUN YEAR, SITE NAME (TD2-RUN)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Run Year, Reporting Agency, Fishery, Recovery Site Name, Brood Year
- sorts by columns: Tag Code, Run Year, Reporting Agency, Fishery, Recovery Site Name, Brood Year.

Example output listing:

```
FORMAT: TAG DETAIL BY RECOVERY SITE NAME (TD2) -- BY RUN YEAR

             BRD- RUN-
TAGCODE      YEAR YEAR AGCY FC  SITE NAME            SITE CODE           OBS'D   EST'D  MEAS'D  AVG MM
093640       2002 2004 ADFG 25  AK M 1 SW SASO       1M1SWSASO               1       0       1     578
093640       2002 2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2801  27      2       2       2     584
093640       2002 2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2802  27      1       1       1     610
093640       2002 2004 ODFW 50  CTUIR BROOD PONDS    5F33421  H21    22      3       3       2     595
093640       2002 2004 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22      2       2       2     566
093640       2002 2004 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24      1       1       1     620
093640       2002 2005 ODFW 44  COL R WA SEC 4       5F33203  R104   12      1       4       1     690
093640       2002 2005 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22      3       3       3     703
093640       2002 2005 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24      3       4       3     665
635824       1994 1997 ODFW 44  COL R OR SPORT SEC 8 5F33203  R208   12      1
635824       1994 1997 ODFW 44  COL R OR SPORT SEC 9 5F33203  R209   12      2       6       1     770
635824       1994 1997 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H       7       7       7     696
635824       1994 1998 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H       1       1       1     810
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1
```

TAG DETAIL BY RECOVERY MONTH, SITE NAME (TD3)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Recovery Month
- sorts by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Recovery Month.

Example output listing:

```
FORMAT: TAG DETAIL BY RECOVERY SITE/CAL. MONTH (TD3)

TAGCODE      YEAR AGCY FC  SITE NAME            SITE CODE          MO OBS'D   EST'D  MEAS'D  AVG MM
093640       2004 ADFG 25  AK M 1 SW SASO       1M1SWSASO          08     1       0       1     578
093640       2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2801  27  12     1       1       1     584
093640       2004 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2802  27  10     1       1       1     610
093640       2004 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24  12     1       1       1     620
093640       2005 ODFW 44  COL R WA SEC 4       5F33203  R104   12  08     1       4       1     690
093640       2005 ODFW 46  UMATILLA R SPORT SEC 5F33428  R2801  27  03     1       1       1     584
093640       2005 ODFW 50  CTUIR BROOD PONDS    5F33421  H21    22  03     3       3       2     595
093640       2005 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22  04     1       1       1     606
093640       2005 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22  05     1       1       1     525
093640       2005 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24  09     1       1       1     610
093640       2005 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24  10     1       1       1     735
093640       2005 ODFW 52  THREE MILE DAM (UMAT 5F33427  H27    24  11     1       1       1     650
093640       2006 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22  03     1       1       1     670
093640       2006 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22  04     1       1       1     734
093640       2006 ODFW 50  MINTHORN PD (UMATILL 5F33414  H14    22  05     1       1       1     704
635824       1997 ODFW 44  COL R OR SPORT SEC 8 5F33203  R208   12  06     1
635824       1997 ODFW 44  COL R OR SPORT SEC 9 5F33203  R209   12  06     2       6       1     770
635824       1997 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H   12     4       4       4     688
635824       1998 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H   01     1       1       1     680
635824       1998 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H   02     2       2       2     720
635824       1998 WDFW 50  SKAMANIA HATCHERY    3F42001  280200 H   12     1       1       1     810
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG DETAIL BY RECOVERY YEAR, SITE NAME (TD4-REC)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name
- sorts by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name.

Example output listing:

```
FORMAT: TAG DETAIL BY SITE SHORT NAME (TD4) -- BY RECOVERY YEAR

TAGCODE       YEAR AGCY FC  SITE NAME            OBS'D   EST'D  MEAS'D  AVG MM
093640        2004 ADFG 25  AK M 1 SW SASO           1       0       1     578
093640        2004 ODFW 46  UMATILLA R SPORT SEC     1       1       1     584
093640        2004 ODFW 46  UMATILLA R SPORT SEC     1       1       1     610
093640        2004 ODFW 52  THREE MILE DAM (UMAT     1       1       1     620
093640        2005 ODFW 44  COL R WA SEC 4           1       4       1     690
093640        2005 ODFW 46  UMATILLA R SPORT SEC     1       1       1     584
093640        2005 ODFW 50  CTUIR BROOD PONDS        3       3       2     595
093640        2005 ODFW 50  MINTHORN PD (UMATILL     2       2       2     566
093640        2005 ODFW 52  THREE MILE DAM (UMAT     3       4       3     665
093640        2006 ODFW 50  MINTHORN PD (UMATILL     3       3       3     703
635824        1997 ODFW 44  COL R OR SPORT SEC 8     1
635824        1997 ODFW 44  COL R OR SPORT SEC 9     2       6       1     770
635824        1997 WDFW 50  SKAMANIA HATCHERY        4       4       4     688
635824        1998 WDFW 50  SKAMANIA HATCHERY        4       4       4     733
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag status = '1'
```

TAG DETAIL BY RUN YEAR, SITE NAME (TD4-RUN)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Run Year, Reporting Agency, Fishery, Recovery Site Name
- sorts by columns: Tag Code, Run Year, Reporting Agency, Fishery, Recovery Site Name.

Example output listing:

```
FORMAT: TAG DETAIL BY SITE SHORT NAME (TD4) -- BY RUN YEAR

TAGCODE       YEAR AGCY FC  SITE NAME            OBS'D   EST'D  MEAS'D  AVG MM
093640        2004 ADFG 25  AK M 1 SW SASO           1       0       1     578
093640        2004 ODFW 46  UMATILLA R SPORT SEC     2       2       2     584
093640        2004 ODFW 46  UMATILLA R SPORT SEC     1       1       1     610
093640        2004 ODFW 50  CTUIR BROOD PONDS        3       3       2     595
093640        2004 ODFW 50  MINTHORN PD (UMATILL     2       2       2     566
093640        2004 ODFW 52  THREE MILE DAM (UMAT     1       1       1     620
093640        2005 ODFW 44  COL R WA SEC 4           1       4       1     690
093640        2005 ODFW 50  MINTHORN PD (UMATILL     3       3       3     703
093640        2005 ODFW 52  THREE MILE DAM (UMAT     3       4       3     665
635824        1997 ODFW 44  COL R OR SPORT SEC 8     1
635824        1997 ODFW 44  COL R OR SPORT SEC 9     2       6       1     770
635824        1997 WDFW 50  SKAMANIA HATCHERY        7       7       7     696
635824        1998 WDFW 50  SKAMANIA HATCHERY        1       1       1     810
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG DETAIL BY SITE, STATISTICAL WEEK (TD5)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Recovery Week
- sorts by columns: Tag Code, Recovery Year, Reporting Agency, Fishery, Recovery Site Name, Recovery Week.

Example output listing:

```
FORMAT: TAG DETAIL BY SITE SHORT NAME/STAT. WEEK (TD5)

TAGCODE      YEAR AGCY FC SITE NAME            WK  OBS'D  EST'D MEAS'D AVG MM
093640       2004 ADFG 25 AK M 1 SW SASO       33      1      0      1    578
093640       2004 ODFW 46 UMATILLA R SPORT SEC  1      1      1      1    584
093640       2004 ODFW 46 UMATILLA R SPORT SEC 44      1      1      1    610
093640       2004 ODFW 52 THREE MILE DAM (UMAT 51      1      1      1    620
093640       2005 ODFW 44 COL R WA SEC 4       32      1      4      1    690
093640       2005 ODFW 46 UMATILLA R SPORT SEC 10      1      1      1    584
093640       2005 ODFW 50 CTUIR BROOD PONDS    12      3      3      2    595
093640       2005 ODFW 50 MINTHORN PD (UMATILL 16      1      1      1    606
093640       2005 ODFW 50 MINTHORN PD (UMATILL 19      1      1      1    525
093640       2005 ODFW 52 THREE MILE DAM (UMAT 38      1      1      1    610
093640       2005 ODFW 52 THREE MILE DAM (UMAT 43      1      1      1    735
093640       2005 ODFW 52 THREE MILE DAM (UMAT 45      1      1      1    650
093640       2006 ODFW 50 MINTHORN PD (UMATILL 14      1      1      1    670
093640       2006 ODFW 50 MINTHORN PD (UMATILL 16      1      1      1    734
093640       2006 ODFW 50 MINTHORN PD (UMATILL 19      1      1      1    704
635824       1997 ODFW 44 COL R OR SPORT SEC 8 25      1
635824       1997 ODFW 44 COL R OR SPORT SEC 9 25      2      6      1    770
635824       1997 WDFW 50 SKAMANIA HATCHERY    49      1      1      1    710
635824       1997 WDFW 50 SKAMANIA HATCHERY    50      1      1      1    700
635824       1997 WDFW 50 SKAMANIA HATCHERY    52      1      1      1    660
635824       1997 WDFW 50 SKAMANIA HATCHERY    53      1      1      1    680
635824       1998 WDFW 50 SKAMANIA HATCHERY     2      1      1      1    680
635824       1998 WDFW 50 SKAMANIA HATCHERY     6      2      2      2    720
635824       1998 WDFW 50 SKAMANIA HATCHERY    52      1      1      1    810
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('093640','635824')
AND   tag_status = '1'
```

TAG RAW ZERO FILLED (TR1)

Report characteristics:

- tabular, fixed-field line, zero-filled format
- does not break down or aggregate data results
- sorts by columns: Tag Code, Reporting Agency, Fishery, Recovery Date.

Example output listing:

```
212255       Coho 86 890715 CDF0 10 2MS02024         000    6.43    600
212255       Coho 86 890805 CDF0 10 2MS01027         069    5.56    652
212255       Coho 86 891009 QDNR 22 3F21703  210016 R      2.08      0
212255       Coho 86 890723 WDFW 40 3M32202                 0.00      0
212255       Coho 86 890716 WDFW 42 3M32202                 0.00      0
232244       Chin 86 900815 FWS  50 3F42001  450474 H      1.00    760
232244       Chin 86 910814 FWS  50 3F42001  450474 H      1.00    930
232244       Chin 86 910522 WDFW 46 3F42001  450474 R      3.13      0
End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('232244','212255')
AND   tag status = '1'
```

TAG SUMMARY BY RECOVERY YEAR, FISHERY (TS1-REC)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency
- sorts by columns: Tag Code, Recovery Year, Fishery, Reporting Agency.

Example output listing:

```
11:42:38 12/21/2011     Regional Mark Information System              PAGE 1
REPORT: TS1-Rec           ANNUAL RECOVERIES BY REC YEAR
                                TAGCODE:    090137
RELEASE AGENCY: ODFW                                          STUDY TYPE: P
2008 Summer      Steelhead   #CWT:     18472     HATCHERY: UMATILLA HATCHERY
RELEASED:  4/29/2009    LOSS RATE:      .109         SITE: BOSTON CANYON CR (UM
LENGTH:                  #NON-CWT:     36037        STOCK: UMATILLA R

YEAR FISHERY -  Recovery Agency ................. OBS'D   EST'D  MEAS'D  AVG MM

2010  Columbia River Sport               - ODFW      1       5       1     570
      Fish Trap (freshwater)             - ODFW      5       5       5     570

2010 TOTALS:                                         6      10       6     570

2011  Fish Trap (freshwater)             - ODFW      3       3       3     585

2011 TOTALS:                                         3       3       3     585

TOTALS FOR TAGCODE 090137                            9      13       9     575
End of report

The query criteria used to produce this report was:
WHERE tag_code = '090137'
AND   tag_status = '1'
```

TAG SUMMARY BY RUN YEAR, FISHERY (TS1-RUN)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Tag Code, Run Year, Reporting Agency
- sorts by columns: Tag Code, Run Year, Fishery, Reporting Agency.

Example output listing:

```
11:42:54 12/21/2011      Regional Mark Information System              PAGE 1
REPORT: TS1-Run            ANNUAL RECOVERIES BY RUN YEAR
                                 TAGCODE:    090137
RELEASE AGENCY: ODFW                                          STUDY TYPE: P
2008 Summer       Steelhead   #CWT:     18472     HATCHERY: UMATILLA HATCHERY
RELEASED:  4/29/2009    LOSS RATE:       .109         SITE: BOSTON CANYON CR (UM
LENGTH:                  #NON-CWT:     36037        STOCK: UMATILLA R

YEAR FISHERY -  Recovery Agency ................. OBS'D   EST'D  MEAS'D  AVG MM

2010  Columbia River Sport               - ODFW      1       5       1     570
      Fish Trap (freshwater)             - ODFW      8       8       8     575

2010 TOTALS:                                         9      13       9     575

TOTALS FOR TAGCODE 090137                            9      13       9     575
End of report

The query criteria used to produce this report was:
WHERE tag_code = '090137'
AND   tag status = '1'
```

TAG SUMMARY BY MONTH, SITE NAME (TS2)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Recovery Site Name
- sorts by columns: Tag Code, Recovery Year, Fishery, Reporting Agency, Recovery Site Name.

Example output listing:

14:34:21 12/21/2011 Regional Mark Information System PAGE 1
REPORT: TS2 2010 RECOVERIES OF TAGCODE
062589
BY CALENDAR MONTH

2008 Hybrid Chinook LENGTH:
RELEASE AGENCY: CDFG #CWT: 13010 HATCHERY: FEATHER R HATCHERY
RELEASED: 10/31/2009 LOSS RATE: .025 SITE: TIBURON NET PENS
STUDY TYPE: E #NON-CWT: 668 STOCK: FEATHER R HATCHERY

FISHERY AREA.....	DATA	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL
Hatchery			- CDFG												
FEATHER R HATCHERY	OBS									1	7				8
	EST									1	7				8
	#LM									1	7				8
	MM									541	546				545
FISHERY TOTALS:	OBS									1	7				8
	EST									1	7				8
	#LM									1	7				8
	MM									541	546				545
Hatchery			- FWS												
COLEMAN NFH	OBS										3				3
	EST										3				3
	#LM										3				3
	MM										556				556
FISHERY TOTALS:	OBS										3				3
	EST										3				3
	#LM										3				3
	MM										556				556
Ocean Sport			- CDFG												
FORT ROSS-PIGEON PT	OBS						1								1
	EST						5								5
	#LM						1								1
	MM						592								592
FISHERY TOTALS:	OBS						1								1
	EST						5								5
	#LM						1								1
	MM						592								592
TOTALS FOR 2010	OBS						1			1	10				12
	EST						5			1	10				16
	#LM						1			1	10				12
	MM						592			541	549				552

End of report

The query criteria used to produce this report was:
WHERE tag_code = '062589'
AND tag_status = '1'

TAG SUMMARY BY FORTNT, SITE NAME (TS3)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Recovery Site Name
- sorts by columns: Tag Code, Recovery Year, Fishery, Reporting Agency, Recovery Site Name.

Example output listing:

```
14:37:47 12/21/2011                          Regional Mark Information System                                    PAGE 1
REPORT: TS3                                    2010 RECOVERIES OF TAGCODE
                                                        062589
                                               BY STATISTICAL FORTNIGHT
2008 Hybrid      Chinook                                    LENGTH:
RELEASE AGENCY: CDFG         #CWT:     13010    HATCHERY: FEATHER R HATCHERY
RELEASED: 10/31/2009    LOSS RATE:      .025       SITE: TIBURON NET PENS
STUDY TYPE: E            #NON-CWT:       668      STOCK: FEATHER R HATCHERY

FISHERY/AREA
WEEK NUMBER:   2   4   6   8  10  12  14  16  18  20  22  24  26  28  30  32  34  36  38  40  42  44  46  48  50  52  54   UNK TOTAL
Hatchery                          - CDFG
    FEATHER R HATCHERY
        OBS                                                                                 2   6                                  8
        EST                                                                                 2   6                                  8
        #LM                                                                                 2   6                                  8
        MM                                                                                556 542                                545
    FISHERY TOTALS:
        OBS                                                                                 2   6                                  8
        EST                                                                                 2   6                                  8
        #LM                                                                                 2   6                                  8
        MM                                                                                556 542                                545
Hatchery                          - FWS
    COLEMAN NFH
        OBS                                                                                     3                                  3
        EST                                                                                     3                                  3
        #LM                                                                                     3                                  3
        MM                                                                                    556                                556
    FISHERY TOTALS:
        OBS                                                                                     3                                  3
        EST                                                                                     3                                  3
        #LM                                                                                     3                                  3
        MM                                                                                    556                                556
Ocean Sport                       - CDFG
    FORT ROSS-PIGEON PT
        OBS                                                 1                                                                      1
        EST                                                 5                                                                      5
        #LM                                                 1                                                                      1
        MM                                                592                                                                    592
    FISHERY TOTALS:
        OBS                                                 1                                                                      1
        EST                                                 5                                                                      5
        #LM                                                 1                                                                      1
        MM                                                592                                                                    592
    TOTALS FOR 2010
        OBS                                                 1                                   2   9                                 12
        EST                                                 5                                   2   9                                 16
        #LM                                                 1                                   2   9                                 12
        MM                                                592                                 556 546                                552
End of report

The query criteria used to produce this report was:
WHERE tag_code = '062589'
AND   tag_status = '1'
```

TAG SUMMARY BY STATWK, SITE NAME (TS4)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section

- aggregates by columns: Tag Code, Recovery Year, Reporting Agency, Recovery Site Name
- sorts by columns: Tag Code, Recovery Year, Fishery, Reporting Agency, Recovery Site Name.

Example output listing:

```
14:56:05 12/21/2011                          Regional Mark Information System                          PAGE 1
REPORT: TS4                                    2010 RECOVERIES OF TAGCODE
                                                       210849
                                                 BY STATISTICAL WEEK
2008 Spring      Chinook                                    LENGTH:
RELEASE AGENCY: WDFW          #CWT:     48447     HATCHERY: DUNGENESS HATCHERY
RELEASED:  4/10/2010    LOSS RATE:       .02         SITE: DUNGENESS R  18.0018
STUDY TYPE:               #NON-CWT:      1153        STOCK: DUNGENESS R  18.0018

FISHERY/AREA
Spawning Ground                    - WDFW
    DUNGENESS R  18.0018
       WEEK  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27
       OBS
       EST
       #LM
       MM
       WEEK 28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54 UNK   TOTAL
       OBS                                  1               2   1   1                                                      5
       EST                                  3               6   3   3                                                     14
       #LM                                                  2   1   1                                                      4
       MM                                                 355 370 360                                                    360
    FISHERY TOTALS:
       WEEK  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27
       OBS
       EST
       #LM
       MM
       WEEK 28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54 UNK   TOTAL
       OBS                                  1               2   1   1                                                      5
       EST                                  3               6   3   3                                                     14
       #LM                                                  2   1   1                                                      4
       MM                                                 355 370 360                                                    360
    TOTALS FOR 2010
       WEEK  1   2   3   4   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20  21  22  23  24  25  26  27
       OBS
       EST
       #LM
       MM
       WEEK 28  29  30  31  32  33  34  35  36  37  38  39  40  41  42  43  44  45  46  47  48  49  50  51  52  53  54 UNK   TOTAL
       OBS                                  1               2   1   1                                                      5
       EST                                  3               6   3   3                                                     14
       #LM                                                  2   1   1                                                      4
       MM                                                 355 370 360                                                    360
End of report

The query criteria used to produce this report was:
WHERE tag_code = '210849'
AND   tag_status = '1'
```

TAG ESTIMATION ANALYSIS BY REC YEAR (TA1-REC)

Report characteristics:

- summarized, aggregated by columns: Tag Code, Recovery Year

- sorts by columns: Tag Code, Recovery Year.

Example output listing:

15:41:07 12/21/2011 Regional Mark Information System PAGE 1
REPORT: TA1-Rec TAGCODE ESTIMATION ANALYSIS BY RECOVERY YEAR (2001-2008)

Tagcode	Tagged	Hatchery Name	Sp	Run	BrYr	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TT
050190	24096	EAGLE CR NFH	Coho		1999	**	**	20	436							**	**	456
050191	22577	EAGLE CR NFH	Coho		1999	**	**	2	831							**	**	833
050195	23799	DWORSHAK NAT. HATCH	Stee	Summ	2001	**	**		1	2	11	29				**	**	43
050199	22517	DWORSHAK NAT. HATCH	Stee	Summ	2001	**	**			1	4	41				**	**	46
050264	21966	DWORSHAK NAT. HATCH	Stee	Summ	2003	**	**					8	59			**	**	67
050265	21331	DWORSHAK NAT. HATCH	Stee	Summ	2002	**	**					31	23			**	**	54
050266	22430	DWORSHAK NAT. HATCH	Stee	Summ	2002	**	**				9	21	14			**	**	44
050489	55845	DWORSHAK NAT. HATCH	Chin	Spri	2000	**	**			32	224	4				**	**	261
050575	29885	WARM SPRINGS NFH	Chin	Spri	2000	**	**		7	71	177	2				**	**	256
050777	68627	SPRING CR NFH	Chin	Fall	2001	**	**			49	404	103	5			**	**	561
050799	65864	KOOSKIA NAT	Chin	Spri	2001	**	**				4	30				**	**	34
051170	38022	LTL WHITE SALMON NFH	Chin	Spri	2002	**	**					4	22	5		**	**	31
051171	144186	SPRING CR NFH	Chin	Hybr	2002	**	**				81	360	38			**	**	479
051181	73062	LTL WHITE SALMON NFH	Chin	Spri	2002	**	**				1	7	299	68		**	**	374
051184	67174	DWORSHAK NAT. HATCH	Chin	Spri	2002	**	**					8	112	31	7	**	**	159
051468	42649	WILLARD NFH	Coho		2002	**	**					34				**	**	34
051477	22990	WARM SPRINGS NFH	Chin	Spri	2002	**	**					8	129	15		**	**	152

**: In this 12-year report format, these year columns either have no recoveries or were left out of this query.
End of report

The query criteria used to produce this report was:
WHERE tag_code IN
('050575','050777','050799','051170','051171','051181','051184','051468','051477','050190','050191','050195','050199','050264',
'050265','050266','050489')
AND tag_status = '1'

TAG ESTIMATION ANALYSIS BY RUN YEAR (TA1-RUN)

Report characteristics:

- summarized, aggregated by columns: Tag Code, Run Year
- sorts by columns: Tag Code, Run Year.

Example output listing:

15:41:24 12/21/2011 Regional Mark Information System PAGE 1
REPORT: TA1-Run TAGCODE ESTIMATION ANALYSIS BY RUN YEAR (2001-2008)

Tagcode	Tagged	Hatchery Name	Sp	Run	BrYr	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	TT
050190	24096	EAGLE CR NFH	Coho		1999	**	**	20	436							**	**	456
050191	22577	EAGLE CR NFH	Coho		1999	**	**	2	831							**	**	833
050195	23799	DWORSHAK NAT. HATCH	Stee	Summ	2001	**	**		1	2	11	29				**	**	43
050199	22517	DWORSHAK NAT. HATCH	Stee	Summ	2001	**	**			1	4	41				**	**	46
050264	21966	DWORSHAK NAT. HATCH	Stee	Summ	2003	**	**					7	60			**	**	67
050265	21331	DWORSHAK NAT. HATCH	Stee	Summ	2002	**	**					32	22			**	**	54
050266	22430	DWORSHAK NAT. HATCH	Stee	Summ	2002	**	**				9	21	14			**	**	44
050489	55845	DWORSHAK NAT. HATCH	Chin	Spri	2000	**	**			32	224	4				**	**	261
050575	29885	WARM SPRINGS NFH	Chin	Spri	2000	**	**		7	71	177	2				**	**	256
050777	68627	SPRING CR NFH	Chin	Fall	2001	**	**			49	404	103	5			**	**	561
050799	65864	KOOSKIA NAT	Chin	Spri	2001	**	**				4	30				**	**	34
051170	38022	LTL WHITE SALMON NFH	Chin	Spri	2002	**	**					4	22	5		**	**	31
051171	144186	SPRING CR NFH	Chin	Hybr	2002	**	**				81	360	38			**	**	479
051181	73062	LTL WHITE SALMON NFH	Chin	Spri	2002	**	**				1	7	299	68		**	**	374
051184	67174	DWORSHAK NAT. HATCH	Chin	Spri	2002	**	**					8	112	37	1	**	**	159
051468	42649	WILLARD NFH	Coho		2002	**	**					34				**	**	34
051477	22990	WARM SPRINGS NFH	Chin	Spri	2002	**	**					8	129	15		**	**	152

**: In this 12-year report format, these year columns either have no recoveries or were left out of this query.
End of report

The query criteria used to produce this report was:
WHERE tag_code IN
('050575','050777','050799','051170','051171','051181','051184','051468','051477','050190','050191','050195','050199','050264',
'050265','050266','050489')
AND tag_status = '1'

SPECIES ANALYSIS; SMOLT / ADULT RATIO (SA1)

Report characteristics:

- tabular, fixed-field line format
- aggregates by column: Tag Code
- sorts by columns: Species, Brood Year, Tag Code.

Example output listing:

09:55:42 12/30/2011 Regional Mark Information System PAGE 1
REPORT: SA1 SPECIES SURVIVAL ANALYSIS
SPECIES: Coho

Tagcode	BrYr	Date Rel	Release Location....		Hatchery Location...	#CWT....	LossRt	#Non-CWT.	Total Rel	#Obs.	#Est....	% Surv
631084	2000	20020415	NASELLE R	24.0543	NASELLE HATCHERY	23986		267	24253	246	936.73	3.91
631085	2000	20020415	NASELLE R	24.0543	NASELLE HATCHERY	24429		197	24626	274	1087.94	4.45
631086	2000	20020415	NASELLE R	24.0543	NASELLE HATCHERY	24790		454	25244	242	904.81	3.65
631195	2000	200204	NAHCOTTA NET PENS		NASELLE HATCHERY	20829		0	20829	131	447.61	2.15
631196	2000	200204	NAHCOTTA NET PENS		NASELLE HATCHERY	20059		0	20059	120	411.67	2.05

Release Group Percent Survival: (%.Surv) = (Total{Estimated.Number})(100) / (Number.Released.CWT)
This report is sorted by: 1) Species Name; 2) Brood Year; 3) Tag Code.
End of report

The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) = 'NASELLE HATCHERY'
AND brood_year = 2000
AND tag_status = '1'

PSC 4.1 DATA EXCHANGE FORMAT (PRC)

This report is a fixed raw data listing of columns that correspond exactly to the Pacific Salmon Commission data exchange format for Recovery data. See "PSC Format Specification" document, Ch. 3 (referenced in §1.1).

Example output listing:

```
record_code,format_version,submission_date,reporting_agency,sampling_agency,recovery_id,species,run_year,recovery_date,recovery_d
ate_type,period_type,period,fishery,gear,adclip_selective_fishery,estimation_level,recovery_location_code,sampling_site,recorded_
mark,sex,weight,weight_code,weight_type,length,length_code,length_type,detection_method,tag_status,tag_code,tag_type,sequential_n
umber,sequential_column_number,sequential_row_number,catch_sample_id,sample_type,sampled_maturity,sampled_run,sampled_length_rang
e,sampled_sex,sampled_mark,estimated_number
"R","4.1","20111227","NMFS","NMFS","1995091145","1","1995","19950122","R","1","01","88","74","N",,"7M      N","HSEA","5000","F",
".6","1","1","290","0","1","V","1","312311","0",,,,,"3","4",,,,,
"R","4.1","20111227","NMFS","NMFS","1995091144","1","1995","19950122","R","1","01","88","74","N",,"7M      N","HSEA","5000","F",
"1.6","1","1","460","0","1","V","1","043919","0",,,,,"3","4",,,,,
"R","4.1","20111227","NMFS","NMFS","1995091129","1","1995","19950122","R","1","01","88","74","N",,"7M      N","HSEA","5000","F",
"2.9","1","1","580","0","1","V","1","043929","0",,,,,"3","4",,,,,
"R","4.1","20111227","NMFS","NMFS","1995091130","1","1995","19950125","R","1","01","88","74","N",,"7M      N","HSEA","5000","M",
"2.4","1","1","540","0","1","V","1","044033","0",,,,,"3","4",,,,,
End of report

The query criteria used to produce this report was:
WHERE tag_status = '1'
AND   recovery_date_year = 1995
AND   fishery = '88'
```

COMMA-SEPARATED VALUES CUSTOM FILE (CSV)

NOTE: This report requires that you choose your own list of **--Recoveries—**columns (see Figure 16).

To see a description and an example listing of this report format, see the **Release Reports** section above (§ 6.1).

HTML CUSTOM TABLE (HTM)

NOTE: This report requires that you choose your own list of **--Recoveries—**columns (see Figure 16).

To see a description and an example listing of this report format, see the **Release Reports** section above (§ 6.1).

Recoveries-by-Release-Hatchery Reports

If you selected Query Form 'By Release Hatchery' in the **--Recoveries--** section of the RSR Navigation Menu, then you may have up to nine (9) report formats available to run:

- Species Analysis; Smolt/Adult Ratio (SA1)
- Annual Rec by Recovery Year, Fishery (HS1-Rec)

- Annual Rec by Run Year, Fishery (HS1-Run)
- Estimated Recoveries by Calendar Month (HS2)
- Annual Recoveries by Recovery Year (HS4)
- Recovery Estimation Analysis by Year (HA2)
- PSC 4.1 Data Exchange format (PRC)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

The SA1, PRC, CSV, and HTM reports are described in the above section. The other reports are described and illustrated as follows:

ANNUAL REC BY RECOVERY YEAR, FISHERY (HS1-REC)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Recovery Year, Reporting Agency
- sorts by columns: Hatchery Location Name, Stock Location Name, Species, Run, Recovery Year, Fishery, Reporting Agency.

Example output listing:

```
10:23:54 12/30/2011     Regional Mark Information System              PAGE 1
REPORT: HS1-Rec           ANNUAL RECOVERIES BY REC YEAR
                             HATCHERY: OAK SPRINGS HATCHERY  SPECIES: Steelhead
                              STOCK: UMATILLA R                       RUN: Summ

YEAR FISHERY -  Recovery Agency ................. OBS'D   EST'D  MEAS'D  AVG MM

1991  Columbia River Gillnet             - ODFW      14      30      14     587
      Columbia River Sport               - ODFW       3      32       2     575
      Fish Trap (freshwater)             - ODFW      73      74      73     641
      Freshwater Sport                   - ODFW       9       3       9     593
      Hatchery                           - FWS        1       1       1     750
      Hatchery                           - ODFW      88      88      88     616

1991 TOTALS:                                         188     228     187     623

1992  Columbia River Gillnet             - ODFW      39      98      39     634
      Columbia River Sport               - ODFW       3      14       2     600
      Fish Trap (freshwater)             - ODFW      48      69      48     610
      Freshwater Sport                   - ODFW       7      15       7     582
      Freshwater Sport                   - WDFW       7      86       7     700
      Hatchery                           - ODFW      73      82      73     633

1992 TOTALS:                                         177     363     176     627
End of report

The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) = 'OAK SPRINGS HATCHERY'
AND   recovery_date_year IN (1991,1992)
AND   tag_status = '1'
```

ANNUAL REC BY RUN YEAR, FISHERY (HS1-RUN)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section

- aggregates by columns: Run Year, Reporting Agency
- sorts by columns: Hatchery Location Name, Stock Location Name, Species, Run, Run Year, Fishery, Reporting Agency.

Example output listing:

```
10:24:17 12/30/2011     Regional Mark Information System              PAGE 1
REPORT: HS1-Run           ANNUAL RECOVERIES BY RUN YEAR
                             HATCHERY: OAK SPRINGS HATCHERY  SPECIES: Steelhead
                              STOCK: UMATILLA R                       RUN: Summ

YEAR FISHERY -  Recovery Agency ................. OBS'D   EST'D  MEAS'D  AVG MM

1990  Fish Trap (freshwater)             - ODFW     28      28      28     716

1990 TOTALS:                                       28      28      28     716

1991  Columbia River Gillnet             - ODFW     14      30      14     587
      Columbia River Sport               - ODFW      3      32       2     575
      Fish Trap (freshwater)             - ODFW     84      86      84     603
      Freshwater Sport                   - ODFW      9       3       9     593
      Hatchery                           - FWS       1       1       1     750
      Hatchery                           - ODFW     88      88      88     616

1991 TOTALS:                                      199     240     198     608

1992  Columbia River Gillnet             - ODFW     39      98      39     634
      Columbia River Sport               - ODFW      3      14       2     600
      Fish Trap (freshwater)             - ODFW      9      29       9     599
      Freshwater Sport                   - ODFW      7      15       7     582
      Freshwater Sport                   - WDFW      7      86       7     700
      Hatchery                           - ODFW     73      82      73     633

1992 TOTALS:                                      138     323     137     631
End of report

The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) = 'OAK SPRINGS HATCHERY'
AND   recovery_date_year IN (1991,1992)
AND   tag_status = '1'
```

ESTIMATED RECOVERIES BY CALENDAR MONTH (HS2)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Recovery Year, Reporting Agency, Recovery Site Name
- sorts by columns: Hatchery Location Name, Stock Location Name, Species, Run, Recovery Year, Fishery, Reporting Agency, Recovery Site Name.

Example output listing:

```
11:26:25 12/30/2011     Regional Mark Information System              PAGE 1
REPORT: HS2        1986 ESTIMATED RECOVERIES (CALENDAR MONTH)
                          HATCHERY: H-Deer Bay Seapen     SPECIES: Chum
                           STOCK: S-Pallant Cr                 RUN: Fall

 FISHERY/AREA.......  JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC UNK TOTAL
-------------------------------------------------------------------------------
                                      1986
-------------------------------------------------------------------------------
Commercial Seine                  - ADFG
 AK M 1 SW SASO                                    4                        4
    FISHERY TOTALS:                                4                        4
Hatchery                          - CDFO
 H-PALLANT CR                                                         165   165
    FISHERY TOTALS:                                                   165   165
Mixed Net and Seine               - CDFO
 NN           02E-000                              9  43                   51
 NN           02E-120                              6                       6
 NN           02E-186                                 5                    5
 NN           02E-187                              3                       3
    FISHERY TOTALS:                                18  48                  66
TOTALS FOR 1986                                    4  18  48          165   235
-------------------------------------------------------------------------------
                                      1987
-------------------------------------------------------------------------------
Commercial Seine                  - ADFG
 AK M 1 SW SASO                                    4                        4
    FISHERY TOTALS:                                4                        4
Mixed Net and Seine               - CDFO
 NN           02E-000                              6 148                  154
 NN           02E-120                            102  23                  125
    FISHERY TOTALS:                              108 171                  279
Ocean Gillnet (non-treaty)        - ADFG
 AK M 1 SE 101-11                        2                                2
    FISHERY TOTALS:                      2                                2
Spawning Ground                   - CDFO
 R-PALLANT CR                                                         316   316
    FISHERY TOTALS:                                                   316   316
TOTALS FOR 1987                         2   4 108 171                 316   601
End of report

The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) = 'H-DEER BAY SEAPEN'
AND   recovery_date_year IN (1986,1987)
AND   species = '5'
AND   tag status = '1'
```

ANNUAL RECOVERIES BY RECOVERY YEAR (HS4)

Report characteristics:

- summarized, aggregated master-detail format showing release information in header section
- aggregates by columns: Tag Code, Recovery Year, Reporting Agency
- sorts by columns: Hatchery Location Name, Stock Location Name, Species, Run, Tag Code, Recovery Year, Fishery, Reporting Agency.

Example output listing:

```
11:42:43 12/30/2011     Regional Mark Information System              PAGE 1
REPORT: HS4            ANNUAL RECOVERIES BY RECOVERY YEAR
                          HATCHERY: TUOLUMNE R FISH FAC.     SPECIES: Chinook
                           STOCK: TUOLUMNE RIVER                   RUN: Fall

YEAR FISHERY -  Recovery Agency ................. OBS'D   EST'D  MEAS'D  AVG MM
TAG CODE 0601110203
1992  Treaty Troll                        - WDFW      1       1       1     640

          TOTALS FOR YEAR:                            1       1       1     640

          GRAND TOTALS:                               1       1       1     640
TAG CODE 0601110204
1992  Ocean Troll (non-treaty)            - ODFW      1      17       1     740

          TOTALS FOR YEAR:                            1      17       1     740

          GRAND TOTALS:                               1      17       1     740
End of report
The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) = 'TUOLUMNE R FISH FAC.'
AND   tag_status = '1
```

RECOVERY ESTIMATION ANALYSIS BY YEAR (HA2)

Report characteristics:

- tabular, fixed-field line format
- aggregates by columns: Brood Year
- sorts by columns: Hatchery Location Name, Stock Location Name, Species, Run, Brood Year.

Example output listing:

```
13:32:58 12/30/2011                    Regional Mark Information System                                    PAGE 1
REPORT: HA2                 RECOVERY ESTIMATION ANALYSIS BY RECOVERY YEAR (2001-2010)
                                       HATCHERY: ELWHA HATCHERY

Stock Name                Sp   Run  BrYr  1999  2000  2001  2002  2003  2004  2005  2006  2007  2008  2009  2010     TT
ELWHA R      18.0272      Chin Fall 2002   **    **                              1     9    18                        28
ELWHA R      18.0272      Chin Fall 2003   **    **                                   15    75     2                  92
ELWHA R      18.0272      Chin Fall 2004   **    **                                    1    35    28     7            71
ELWHA R      18.0272      Chin Fall 2005   **    **                                         1    27    82    26     136
ELWHA R      18.0272      Chin Fall 2006   **    **                                                    5    37      41
ELWHA R      18.0272      Chin Fall 2008   **    **                                                              2       2
ELWHA R      18.0272      Coho Fall 2005   **    **                                        17    44                  62
ELWHA R      18.0272      Coho Fall 2007   **    **                                                   371   366     738
ELWHA R      18.0272      Coho Wint 2000   **    **           81   812    25                                         919
ELWHA R      18.0272      Coho Wint 2001   **    **                238  1512     1                                    1752
ELWHA R      18.0272      Coho Wint 2002   **    **                      432  1243    85                             1760
ELWHA R      18.0272      Coho Wint 2003   **    **                           112   265                              377
ELWHA R      18.0272      Coho Wint 2004   **    **                                   31    99                       130
LOWER ELWHA  18.0274      Coho Fall 1997   **    **      2                                                              2
LOWER ELWHA  18.0274      Coho Fall 1998   **    **   3140    53                                                     3193
LOWER ELWHA  18.0274      Coho Fall 1999   **    **    478  1894   144                                                2516
LOWER ELWHA  18.0274      Coho Fall 2006   **    **                                             24   233            257
  **:  In this 12-year report format, these year columns either have no recoveries or were left out of this query.
End of report
The query criteria used to produce this report was:
WHERE UPPER(hatchery_location_name) IN ('ELWHA HATCHERY','LOWER ELWHA HATCHERY')
AND   recovery_date_year IN (2001,2002,2003,2004,2005,2006,2007,2008,2009,2010)
AND   tag_status = '1'
```

PSC 4.1 DATA EXCHANGE FORMAT (PRC)

The PRC report is described in the above section.

COMMA-SEPARATED VALUES CUSTOM FILE (CSV)

NOTE: This report requires that you choose your own list of **--Recoveries—**columns (see section above).

To see a description and an example listing of this report format, see the **Release Reports** section above (§ 6.1).

HTML CUSTOM TABLE (HTM)

NOTE: This report requires that you choose your own list of **--Recoveries—**columns (see section above).

To see a description and an example listing of this report format, see the **Release Reports** section above (§ 6.1).

Recoveries-by-Tag-List Reports

This query form is for use if you have only Tag Codes as a selection criterion. It can accommodate up to 1000 tag codes per query for data selection; whereas, the 'Recoveries by Tag-Code' query form can only accept up to 180 tag codes per query.

If you selected Query Form 'by-Tag-List' in the **--Recoveries--** section of the RSR Navigation Menu then you may have up to four (4) report formats available to run:

- Tag Analysis by SFEC Region, FisheryType (TA3)
- PSC 4.1 Data Exchange format (PRC)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

The PRC report is described in the 'Recoveries-by-Tag-Code' section above. The CSV and HTM reports are described the **Release Reports** section above (§ 6.1). The TA3 report is described and illustrated as follows:

TAG ANALYSIS BY SFEC REGION, FISHERYTYPE (TA3)

This report is designed to provide a high-level aggregation of recoveries to assist with Selective Fishery Evaluation Committee (SFEC) analyses. Please see Appendix, §12.1 for further explanation of this report format.

Example output listing:

14:16:38 12/30/2011 Regional Mark Information System
REPORT: TA3 TAGCODE OBSERVED ANALYSIS BY SFEC-REGION, SFEC-FISHERYTYPE

TAG_CODE	SFEC_REGION	SFEC_FISHERYTYPE	OBSERVED
212212	Alaska	Commercial	1
212212	BC Marine South	Commercial	8
212212	BC Marine South	Sport	14
212212	Washington	Commercial	72
212212	Washington	Sport	24
212229	Alaska	Commercial	4
212229	BC Marine North	Commercial	5
212229	BC Marine North	Sport	1
212229	BC Marine South	Commercial	258
212229	BC Marine South	Sport	30
212229	Washington	Commercial	166
212229	Washington	Sport	1

End of report

The query criteria used to produce this report was:
WHERE tag_code IN ('212212','212229')

All Recoveries Reports

This query form is for use if you want to query for **all** possible recoveries for your tag groups – regardless of 'Status of Tag' indicator. I.e. if you want to include data rows in which no tag was present, or there was a discrepancy of some kind (see discussion on 'Status of Tag' in § 1.2) then this query form must be used.

If you selected Query Form 'All Recoveries' in the **--Recoveries--** section of the RSR Navigation Menu then you may have up to four (4) report formats available to run:

- PSC 4.1 Data Exchange format (PRC)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM)
- Recoveries by Fin Mark (FM1).

The PRC report is described in the 'Recoveries-by-Tag-Code' section above. The CSV and HTM reports are described the **Release Reports** section above (§ 6.1). The FM1 report is described and illustrated as follows:

RECOVERIES BY FIN MARK (FM1)

This report is based on an aggregation of recoveries by generalized type of fin mark (i.e. 'Fin Mark Type') and is based on the 'Marks' table (see "PSC Format Specification" document, Ch. 11, referenced in §1.1). Fin Mark types are:

- No Adclip
- Adclip
- Adipose Clip Unknown
- Left Ventral
- Right Ventral
- Left Pectoral
- Right Pectoral
- Left Maxillary
- Right Maxillary
- Visual Implant
- Elastomer Injection
- Freeze Brand

Report characteristics:

- summarized, aggregated, fixed-field line format
- aggregates by columns: Fin Mark Type (above)
- sorts by columns: Fin Mark Type, Recorded Mark (Mark Code), Recovery Year, Reporting Agency.

Example output listing:

```
10:57:57 01/05/2012     Regional Mark Information System              PAGE 1
REPORT: FM1                  RECOVERIES BY FIN MARK

                      MARK  REC.  REPORTING
FIN MARK              CODE  YEAR  AGENCY     OBSERVED
No Adclip             0000  2000  ODFW             13
No Adclip             0001  2000  ODFW              2
No Adclip TOTAL                                    15

Adclip                5000  2000  ODFW            681
Adclip                5001  2000  ODFW             61
Adclip                5002  2000  ODFW             12
Adclip TOTAL                                      754

Left Ventral          0001  2000  ODFW              2
Left Ventral          5001  2000  ODFW             61
Left Ventral TOTAL                                 63

Right Ventral         5002  2000  ODFW             12
Right Ventral TOTAL                                12
End of report

The query criteria used to produce this report was:
WHERE run_year = 2000
AND   UPPER(recovery_location_name) LIKE 'BONNEVILLE POOL%'
```

6.3 Other Reports

Catch /Sample Downloading

If you selected Query Form 'Catch/Sample' in the **--Other--** section of the RSR Navigation Menu then you may have up to three (3) report formats available to run:

- PSC 4.1 Data Exchange format (PCS)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

The CSV and HTM reports are described the **Release Reports** section above (§ 6.1). The PCS report is described and illustrated as follows:

PSC 4.1 DATA EXCHANGE FORMAT (PCS)

This report is a fixed raw data listing of columns that correspond exactly to the Pacific Salmon Commission data exchange format for Catch/Sample data. See "PSC Format Specification" document, Ch. 4 (referenced in §1.1).

Example output listing:

```
record_code,format_version,submission_date,reporting_agency,sampling_agency,catch_sample_id,species,catch_year,period_type,period
,first_period,last_period,fishery,adclip_selective_fishery,estimation_level,catch_location_code,detection_method,sample_type,samp
led_maturity,sampled_run,sampled_length_range,sampled_sex,sampled_mark,number_caught,escapement_estimation_method,number_sampled,
number_estimated,number_recovered_decoded,number_recovered_no_cwts,number_recovered_lost_cwts,number_recovered_unreadable,number_
recovered_unresolved,number_recovered_not_processed,number_recovered_pseudotags,mr_1st_partition_size,mr_1st_sample_size,mr_1st_s
ample_known_ad_status,mr_1st_sample_obs_adclips,mr_2nd_partition_size,mr_2nd_sample_size,mr_2nd_sample_known_ad_status,mr_2nd_sam
ple_obs_adclips,mark_rate,awareness_factor,sport_mark_incidence_sampl_size,sport_mark_inc_sample_obs_adclips
"S","4.1","20081014","WDFW","WDFW","1119671","5","1999","6","41",,,"22",,"5","3M21902  G","V","1",,,,,,"68",,"0",,"0","0","0",
"0","0","0","0","0","0",,,,,,,,,,
"S","4.1","20081014","WDFW","WDFW","1119672","5","1999","6","42",,,"22",,"5","3M21902  G","V","1",,,,,,"1050",,"0",,"0","0","0",
"0","0","0","0","0","0",,,,,,,,,,
End of report

The query criteria used to produce this report was:
WHERE species = '5'
AND   catch_year = 1999
AND   UPPER(catch_location_code) LIKE '3M21902%'
```

Locations Downloading

If you selected Query Form 'Locations' in the **--Other--** section of the RSR Navigation Menu then you may have up to three (3) report formats available to run:

- PSC 4.1 Data Exchange format (PLC)
- Comma-Separated Values custom file (CSV)
- HTML custom table (HTM).

The CSV and HTM reports are described the **Release Reports** section above (§ 6.1). The PLC report is described and illustrated as follows:

PSC 4.1 DATA EXCHANGE FORMAT (PLC)

This report is a fixed raw data listing of columns that correspond exactly to the Pacific Salmon Commission data exchange format for Location data. See "PSC Format Specification" document, Ch. 6 (referenced in §1.1).

Example output listing:

```
record_code,format_version,submission_date,reporting_agency,location_code,location_type,name,latitude,longitude,psc_basin,psc_reg
ion,epa_reach,description
"L","4.1","20111220","WDFW","3F10805  196005 H","3","OLSON RESORT    (19)",,,"LYHO","JUAN",,"OLSON RESORT"
"L","4.1","20111220","WDFW","3F10805  1973422E","3","CLALLAM BAY ES/HS",,,"LYHO","JUAN",,"CLALLAM BAY HIGH & ELEMENTARY (SEKIU)"
"L","4.1","20111220","WDFW","3F10804  190235 H","3","SAIL R NETARTS BOXES",,,"LYHO","JUAN",,"SAIL RIVER STREAMSIDE NETARTS BOX"
"L","4.1","20111220","WDFW","3F10805  190148 H","3","HOKO FALLS HATCHERY",,,"LYHO","JUAN",,"HOKO FALLS HATCHERY (MAKAH TRIBE)
[FORMERLY HOKO HATCHERY]"
"L","4.1","20111220","WDFW","3M10705  888001 H","3","CLALLAM BAY NET PENS",,,"LYHO","JUAN",,"CLALLAM BAY NET PENS"
End of report

The query criteria used to produce this report was:
WHERE location_type = '3'
AND   rmis_basin = 'LYHO'
```

Chapter 7 RMIS Analysis: Introduction and Navigation

The RMIS Analysis Reporting (RAR) system is based on the former "CWT Retrieval and Analysis System" (CRAS) developed by the Northwest Indian Fisheries Commission (NWIFC) in 1995. The reporting system is based on a summarized table of CWT recoveries maintained at the RMPC (updated twice per week). This table is aggregated by Tag Code, age cohort index, Management-Fishery, and Recovery Date Year.

RAR also has a number of additional distinguishing features including:

- Allows analyzing recoveries based on **Management-Fishery** – which is a coast-wide alternative fishery designation to the standard PSC 'Fishery' code. (The PSC 'Fishery' code is stored in the CWT database and reported through the RMIS Standard Reporting (RSR) system). See Appendix, §12.2 for a list of Management-Fisheries in RAR;
- Allows the ability to aggregate recoveries in multiple ways in a single report by using grouped criteria (i.e. sets of Tag Codes or Management-Fisheries). For example, Tag Codes can be grouped by Brood Year, Hatchery/Facility, Release Site, etc. and viewed in this way in the recovery distribution reports;
- Allows viewing and analyzing recoveries based on age cohort;
- Allows viewing and analyzing recoveries as a distribution (by percentage) across Management-Fisheries or across Recovery Years.

There are two main types of analysis reporting in RAR:

1. CWT Recoveries;
2. Management-Fishery Recoveries.

Both of these require that you first specify the conditions you want to use to return a list of recoveries. Reports are then generated from these lists.

From the RMIS Home Page clicking on the RMIS Analysis Reporting icon leads to the RAR Login page (see § 2.3 above for login instructions). The contents of this page are determined by which database you chose. Here are the start pages available on the RAR Login page:

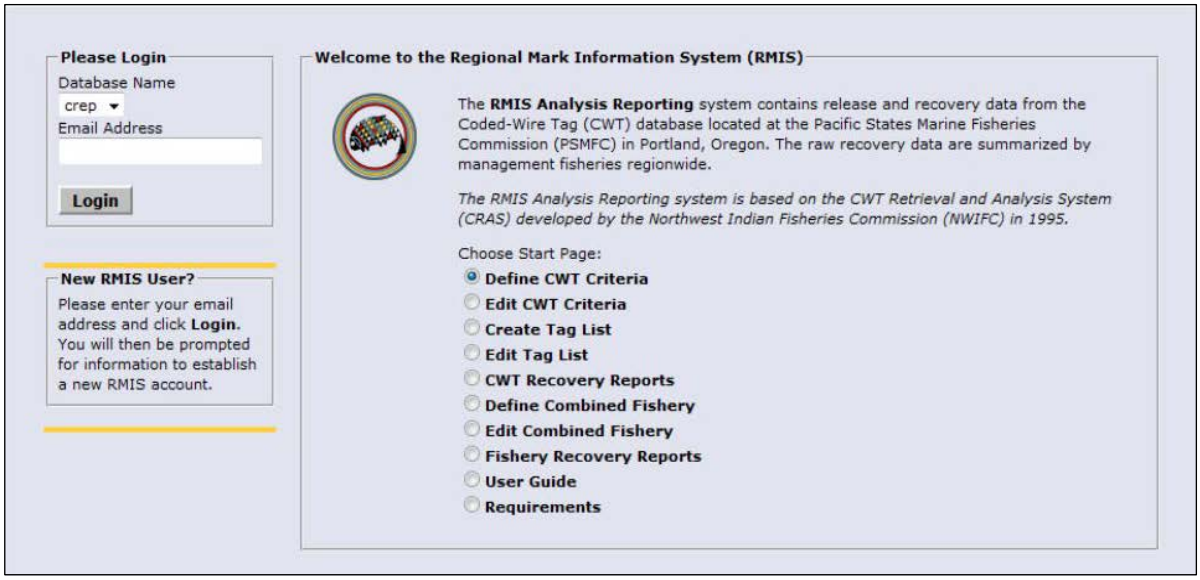


Figure 17: RAR Login Screen

1. **Define CWT Criteria**: Define and create a Criteria object and (optionally) generate a RAR Tag-List based on the Criteria;
2. **Edit CWT Criteria:** Change, rename, or delete previously created Criteria objects;
3. **Create Tag List**: Create a RAR Tag-List (manually) by entering specific Tag Codes;
4. **Edit Tag List:** Manage all existing RAR Tag-Lists (I.e. inspect, edit, rename, or delete);
5. **CWT Recovery Reports**: Choose and run a CWT-based recovery report using a RAR Tag-List;
6. **Define Combined Fishery**: Create a list of Management-Fisheries for use with the RAR Management-Fishery report;
7. **Edit Combined Fishery**: Change, rename, or delete previously created Management-Fishery list objects;
8. **Fishery Recovery Reports**: Run the Management-Fishery based report using a Management-Fishery list.

From the RAR Login page clicking on Login button leads to the selected RAR Query Form. The navigation of these forms is described below.

7.1 RAR Navigation

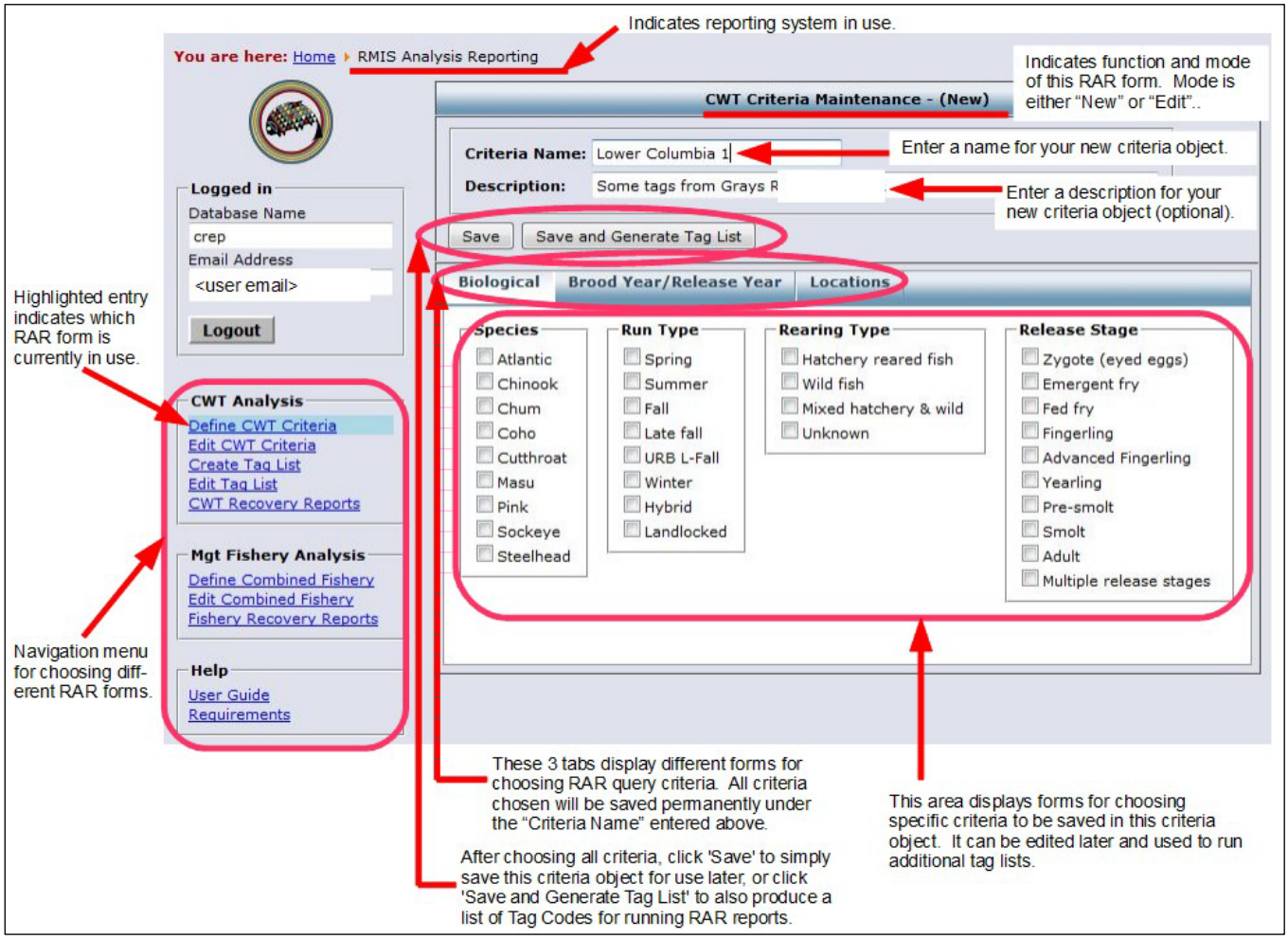


Figure 18: RAR Query Form illustration of navigation elements

The RAR query forms are used to do analysis based on Tag Codes (CWT) or based on Management-Fisheries (see Figure 18, left-side navigation column above).

For CWT Analysis (see Figure 18):

- First, define your criteria by choosing species, run type, rearing type, release stage, brood year, release year and/or hatchery;
- Process your criteria list by selecting the Save and Generate Tag List button;
- A list of tags will automatically be generated.

You can edit this list a number of ways: adding tag codes, removing tag codes, temporarily excluding tag codes, or grouping tag codes to analyze their combined recoveries (see below).

You can also hand-enter tag codes in a tag code list if you already know the ones you want, avoiding the steps above (see 'Create Tag List' form).

Your personal Criteria and RAR Tag-Lists are automatically saved for later recall.

Chapter 8 RAR Tag-List Maintenance

Here is an example RAR Tag-List with 15 Tag Code releases which can be manipulated in a number of ways in preparation for running a RAR CWT Recovery report. Some RAR reports give best results when the RAR Tag-List is grouped (see §8.1 and §8.2 below).

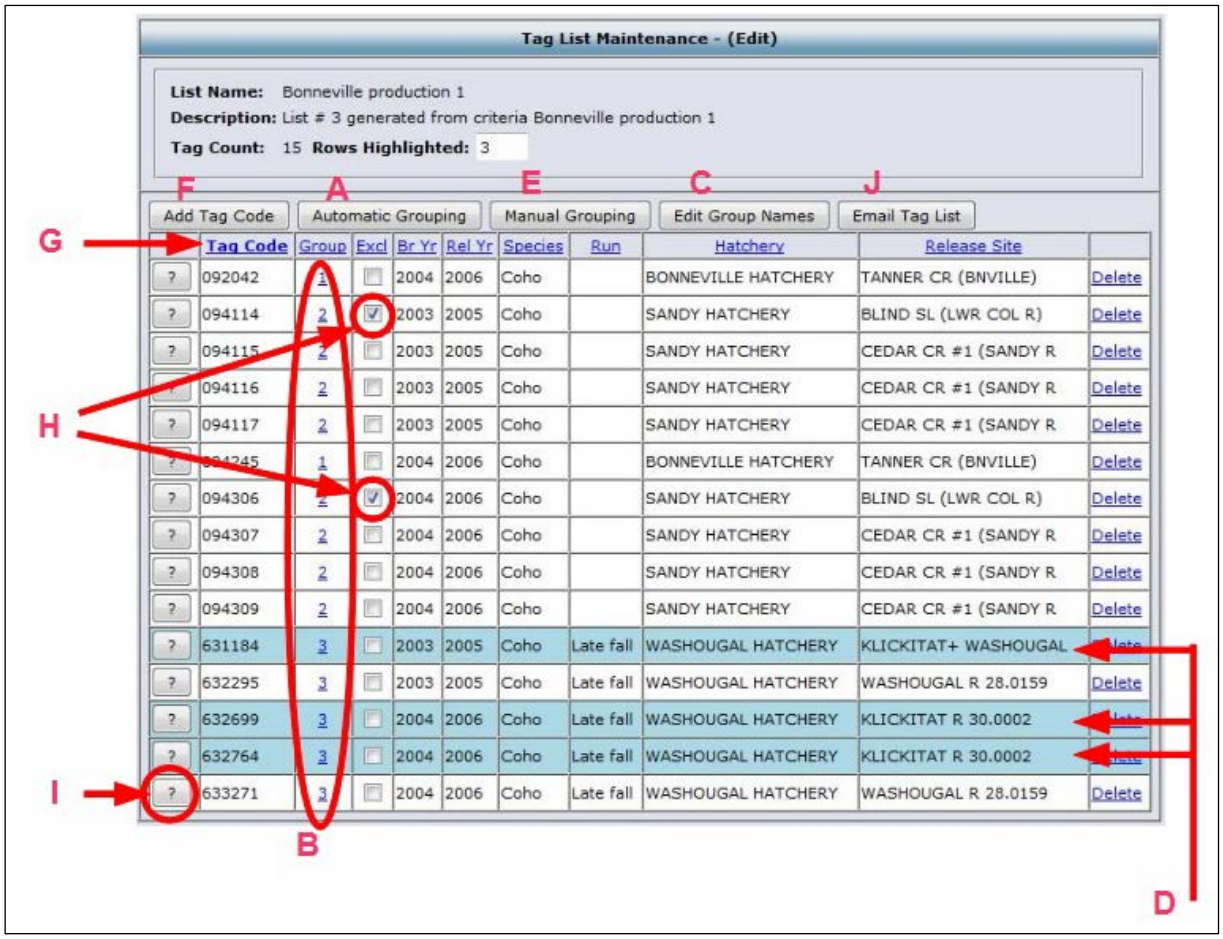


Figure 19: RAR Tag-List Maintenance example illustration

8.1 Automatic Tag Code Grouping

Tag Codes can be automatically grouped by: brood year, species, run, hatchery, or release site. To do this, click 'Automatic Grouping' (A). In this example, they have been grouped by hatchery (B). To edit the name of a group, click on a group number (B), or click 'Edit Group Names' (C). These group names will appear in some report results. *NOTE: RAR CWT Maintenance always includes a default group (0) called 'Ungrouped Tags'.*

8.2 Manual Tag Code Grouping

Manual Grouping is a two-step process. First, highlight rows you want to group together by clicking on them (D). The number of highlighted rows will appear in the top header of the form. Then, after you have highlighted all the rows to be grouped, click on the 'Manual Grouping'

button (E) to choose a group. This will go to a Tag Group Maintenance form showing the highlighted Tag Codes and having the new group to be added listed at the bottom. There, enter a name for the new group (ex: 'Klickitat R Sites') in the box, then click 'Save'. You will be returned to the form shown above (Figure 19). In this example, a new, 4th group will be created to identify Release Sites which include the Klickitat River.

8.3 More Editing Features

Adding Tag Code

You can manually add a Tag Code to this list by clicking on 'Add Tag Code' (F). This will go to a form to enter the new Tag Code and assign it to one of the groups.

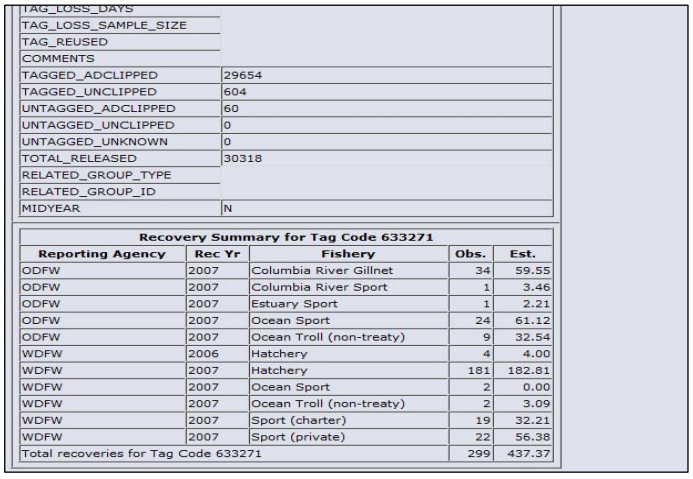
Changing Sort Columns

The RAR Tag-List Maintenance form can have sort order changed by clicking on the column header (G). The sort order shown is by Tag Code.

Excluding Tag Codes

Specific Tag Codes can be excluded (temporarily) from the RAR Tag-List to compare recovery results without them. For example, in the illustration above (H), releases from 'BLIND SL (LWR COL R)' have been excluded from being run in the report. They can be re-included later.

Looking up Tag-Code Detail



TAG_LOSS_DAYS	
TAG_LOSS_SAMPLE_SIZE	
TAG_REUSED	
COMMENTS	
TAGGED_ADCLIPPED	29654
TAGGED_UNCLIPPED	604
UNTAGGED_ADCLIPPED	60
UNTAGGED_UNCLIPPED	0
UNTAGGED_UNKNOWN	0
TOTAL_RELEASED	30318
RELATED_GROUP_TYPE	
RELATED_GROUP_ID	
MIDYEAR	N

Recovery Summary for Tag Code 633271

Reporting Agency	Rec Yr	Fishery	Obs.	Est.
ODFW	2007	Columbia River Gillnet	34	59.55
ODFW	2007	Columbia River Sport	1	3.46
ODFW	2007	Estuary Sport	1	2.21
ODFW	2007	Ocean Sport	24	61.12
ODFW	2007	Ocean Troll (non-treaty)	9	32.54
WDFW	2006	Hatchery	4	4.00
WDFW	2007	Hatchery	181	182.81
WDFW	2007	Ocean Sport	2	0.00
WDFW	2007	Ocean Troll (non-treaty)	2	3.09
WDFW	2007	Sport (charter)	19	32.21
WDFW	2007	Sport (private)	22	56.38
Total recoveries for Tag Code 633271			299	437.37

Figure 20: RAR Tag Code Detail showing recovery table

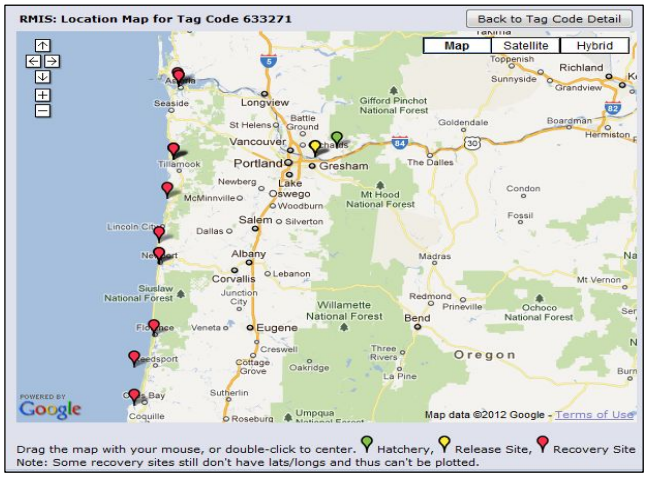


Figure 21: RAR Tag Code Detail showing map

The release and recovery detail of a Tag Code can be viewed by clicking on the '?' button (Figure 19, I). This feature has the ability to display a table of the Tag Code's release & recovery information (Figure 20), as well as generate a dynamic map of releases and recoveries for the Tag Code (if available) Using a GoogleMaps application (Figure 21). **Note that these maps show only points where lat/long coordinates are available for the Tag Code. Some recovery sites do not have lat/longs and cannot be shown.**

Emailing RAR Tag-List

You can obtain a simple list of these Tag Codes sent by email by clicking on 'Email Tag List' button (Figure 19, J). This allows easy copy & paste of this RAR Tag-List for use in other applications (such as RMIS Standard Reporting).

Chapter 9 RAR Combined Fishery Maintenance

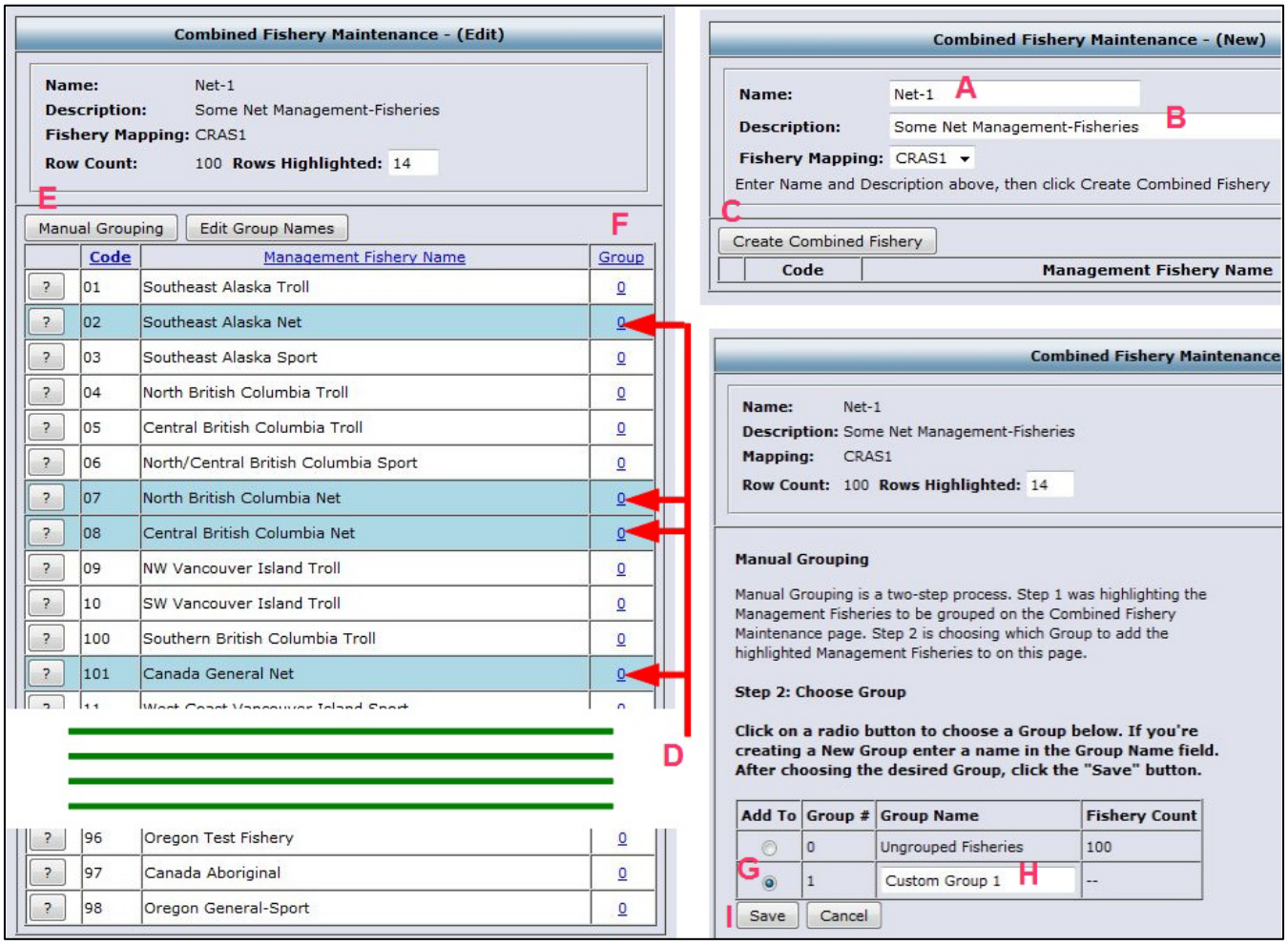


Figure 22: RAR Combined-Fishery Maintenance example illustration

On the Combined Fishery Maintenance forms (Figure 22), enter a Name (A) and Description (B) for your new 'Combined-Fishery' object. Then click 'Create Combined Fishery' button (C). The table shown above will appear. At that point, you can do the two-step sequence below.

9.1 Adding Groups to a Combined-Fishery

Step 1

Choose your first group of Management-Fisheries by clicking on them as seen in the example above (D). Then click on the 'Manual Grouping' button in the upper left (E).

Step 2

You will then go to a form to enter a name for the group of items (shown lower-right). Per instructions on the form, click on the lowest radiobutton (G), type in a Group Name (H), and click 'Save' (I). Then you will be returned to the table at left with Group '1' items identified (F).

Repeat

Repeat steps 1 & 2 to create multiple groups of Management-Fisheries. Each item will have a Group number (F) as shown. *Note: Group '0' is always categorized as the default group: 'Ungrouped Fisheries'.*

Chapter 10 RAR CWT Recovery Reports

You can generate a number of CWT recovery reports using a range of fishery recovery locations. RMIS Analysis CWT Reports are as follows:

- **CWT Summary**
- **CWT Recovery Distribution (all fisheries)**
- **CWT Recovery Distribution (combined fisheries)**
- **CWT Recovery Distribution (CWT groups)**
- **CWT Recovery Distribution (CWT groups and combined fisheries)**
- **Freshwater Fishery Recovery**
- **Freshwater Recovery (CWT groups)**
- **Survival and Contribution Rate (CWT groups)**
- **Contribution Rate (combined fisheries)**.

RAR CWT Recovery reports are run from a RAR Tag-List object (described in Ch. 8). Some reports optionally can include, or require; a RAR Combined-Fishery object as well (a list of Management- Fisheries – described in Ch. 9).

These reports are described and illustrated as follows:

CWT SUMMARY

Report characteristics:

- summarized, master-detail format showing release information in header section
- recovery data (by general recovery location) and estimated recoveries by age
- aggregates by columns: Location State/Province, age cohort
- sorts by columns: Release Year, Tag Code.

Example output listing:

CWT Summary
Run Date: 2012-03-14
Tag List: Chinook1
Sorted by: year of release

Release Summary

Tag Code: 630884
Brood Year: 2000
Species: Chinook
Hatchery Name: NORTH TOUTLE HATCHRY
Release Agency: Washington Department of Fish and Wildlife
Release Stage: Smolt
First Release Date: 2002-05-26
Last Release Date: 2002-05-30
CWT 1st Mark Name: Adipose clip (Ad)
CWT 1st Mark Count: 105,616
CWT 2nd Mark Name:
CWT 2nd Mark Count:

Run: Spring
Release Site: GREEN R 26.0323
Stock: COWLITZ R 26.0002
Rearing Type: Hatchery reared fish
Tag Type: Standard Alphanumeric (1 mm)
Avg. Weight (g): 50.39
Non CWT 1st Mark Name: Adipose clip (Ad)
Non CWT 1st Mark Count: 970
Non CWT 2nd Mark Name:
Non CWT 2nd Mark Count:

Total # Released: 106,586
Adclips Associated w/Release: 106,586

Recovery Summary (All Ages)

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Alaska	4	14.9	1%
British Columbia	48	157.2	15%
Washington	46	124.6	12%
Oregon	28	82.4	8%
California	0	0.0	0%
Escapement	231	601.3	56%
Other	45	90.0	8%
Total Recoveries	409	1074.2	100%

Estimated Minimum Survival Rate 0.01017

Estimated Recoveries by Age

Recovery Age	Total	Total %	Fishery	Fishery %	Freshwater Escapement	Freshwater %
2	18.0	2%	0.0	0%	18.0	3%
3	210.2	20%	103.2	22%	107.0	18%
4	671.9	63%	331.2	70%	340.7	57%
5	160.6	15%	33.9	7%	126.7	21%
6	13.5	1%	4.6	1%	8.9	1%

CWT Recovery Distribution (all fisheries)

Report characteristics:

- summarized, master-detail format showing release information in header section
- recoveries are summarized showing distribution into management fishery
- aggregates by columns: age cohort, Management-Fishery, fishery summary type (whether freshwater escapement or otherwise)
- sorts by columns: Release Year, Tag Code, age cohort, fishery summary type.

Example output listing:

CWT Recovery Dist (all fisheries)
Run Date: 2012-03-14
Tag List: Chinook1
Sorted by: year of release

Release Summary

Tag Code: 630884
Brood Year: 2000
Species: Chinook
Run: Spring
Hatchery Name: NORTH TOUTLE HATCHRY
Release Site: GREEN R 26.0323
Release Agency: Washington Department of Fish and Wildlife
Stock: COWLITZ R 26.0002
Release Stage: Smolt
Rearing Type: Hatchery reared fish
First Release Date: 2002-05-26
Tag Type: Standard Alphanumeric (1 mm)
Last Release Date: 2002-05-30
Avg. Weight (g): 50.39
CWT 1st Mark Name: Adipose clip (Ad)
Non CWT 1st Mark Name: Adipose clip (Ad)
CWT 1st Mark Count: 105,616
Non CWT 1st Mark Count: 970

Total # Released: 106,586
Adclips Associated w/Release: 106,586

Recovery Summary (Age 2)

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Freshwater Escapement	18	18.0	100.0%
Total Recoveries	18	18.0	100.0%

Recovery Summary (Age 3)

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
SW Vancouver Island Troll	10	29.2	13.9%
WA Area 2 Sport (Westport)	7	19.8	9.4%
WA Area 1 Troll (Columbia River Mouth)	1	8.0	3.8%
WA Area 1 Sport (Illwaco)	4	7.4	3.5%
Buoy 10 Sport	1	2.8	1.3%
Tillamook Troll	2	3.4	1.6%
Tillamook Sport	2	5.8	2.8%
Freshwater Net	13	23.0	10.9%
High Seas Catch	4	3.8	1.8%
Freshwater Escapement	107	107.0	50.9%
Total Recoveries	151	210.2	100.0%

<report example continued on next page..>

Recovery Summary (Age 4)

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Southeast Alaska Troll	4	14.9	2.2%
North British Columbia Troll	2	4.6	0.7%
NW Vancouver Island Troll	16	48.2	7.2%
SW Vancouver Island Troll	8	24.7	3.7%
Southern British Columbia Troll	3	0.0	0.0%
West Coast Vancouver Island Sport	4	31.9	4.7%
WA Areas 4 and 4B Troll (Cape Flattery)	15	37.0	5.5%
WA Area 4 Sport (Neah Bay)	2	3.9	0.6%
WA Area 3 Troll (Quileute)	1	2.0	0.3%
WA Area 2 Troll (Grays Harbor)	6	19.6	2.9%
WA Area 2 Sport (Westport)	2	5.2	0.8%
WA Area 1 Troll (Columbia River Mouth)	4	12.0	1.8%
WA Area 1 Sport (Illwaco)	2	5.6	0.8%
Newport Troll	19	57.2	8.5%
Newport Sport	2	3.8	0.6%
Coos Bay Troll	3	12.2	1.8%
Freshwater Sport	5	21.6	3.2%
Freshwater Net	17	26.8	4.0%
High Seas Catch	3	0.0	0.0%
Freshwater Escapement	69	340.7	50.7%
Total Recoveries	187	671.9	100.0%

Recovery Summary (Age 5)

Recovery Location	Number of	Number of	% of Total
North British Columbia Troll	2	3.8	2.4%
NW Vancouver Island Troll	2	10.2	6.4%
WA Areas 4 and 4B Troll (Cape Flattery)	1	1.3	0.8%
Freshwater Sport	2	8.4	5.2%
Freshwater Net	8	10.2	6.4%
Freshwater Escapement	31	126.7	78.9%
Total Recoveries	46	160.6	100.0%

Recovery Summary (Age 6)

Recovery Location	Number of	Number of	% of Total
SW Vancouver Island Troll	1	4.6	34.1%
Freshwater Escapement	6	8.9	65.9%
Total Recoveries	7	13.5	100.0%

Recovery Summary (All Ages)

Recovery Location	Number of	Number of	% of Total
Fishery	178	472.9	44.0%
Freshwater Escapement	231	601.3	56.0%
Total Recoveries	409	1074.2	100.0%

CWT Recovery Distribution (combined fisheries)

Report characteristics:

- summarized, master-detail format showing release information in header section
- recoveries are summarized showing distribution into customized fishery categories (groups) using a combined-fishery (created by the user, see Ch. 9 above)
- aggregates by columns: age cohort, Management-Fishery group, fishery summary type (whether freshwater escapement or otherwise)
- sorts by columns: Release Year, Tag Code, age cohort, Management-Fishery group, fishery summary type.

Example output listing:

CWT Recovery Dist (combined fishery)
Run Date: 2012-03-14
Tag List: Chinook1
Combined Fishery: Gear Types 1
Sorted by: year of release

Release Summary

Tag Code: 630884
Brood Year: 2000
Species: Chinook
Hatchery Name: NORTH TOUTLE HATCHRY
Release Agency: Washington Department of Fish and Wildlife
Release Stage: Smolt
First Release Date: 2002-05-26
Last Release Date: 2002-05-30
CWT 1st Mark Name: Adipose clip (Ad)
CWT 1st Mark Count: 105,616
CWT 2nd Mark Name:
CWT 2nd Mark Count:

Run: Spring
Release Site: GREEN R 26.0323
Stock: COWLITZ R 26.0002
Rearing Type: Hatchery reared fish
Tag Type: Standard Alphanumeric (1 mm)
Avg. Weight (g): 50.39
Non CWT 1st Mark Name: Adipose clip (Ad)
Non CWT 1st Mark Count: 970
Non CWT 2nd Mark Name:
Non CWT 2nd Mark Count:

Total # Released: 106,586
Adclips Associated w/Release: 106,586

Recovery Summary (Age 2)

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries (All Ages)	% of Total Est. Recoveries for Age
Ungrouped Fisheries	18	18.0	1.7%	100.0%
Total Recoveries	18	18.0	1.7%	100.0%

Recovery Summary (Age 3)

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries (All Ages)	% of Total Est. Recoveries for Age
Ungrouped Fisheries	111	110.8	10.3%	52.7%
All-Troll	13	40.6	3.8%	19.3%
All-Net	13	23.0	2.1%	10.9%
All-Sport	14	35.8	3.3%	17.0%
Total Recoveries	151	210.2	19.6%	100.0%

<report example continued on next page..>

Recovery Summary (Age 4)

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries (All Ages)	% of Total Est. Recoveries for Age
Ungrouped Fisheries	72	340.7	31.7%	50.7%
All-Troll	81	232.4	21.6%	34.6%
All-Net	17	26.8	2.5%	4.0%
All-Sport	17	72.0	6.7%	10.7%
Total Recoveries	187	671.9	62.5%	100.0%

Recovery Summary (Age 5)

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries (All Ages)	% of Total Est. Recoveries for Age
Ungrouped Fisheries	31	126.7	11.8%	78.9%
All-Troll	5	15.3	1.4%	9.5%
All-Net	8	10.2	0.9%	6.4%
All-Sport	2	8.4	0.8%	5.2%
Total Recoveries	46	160.6	15.0%	100.0%

Recovery Summary (Age 6)

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries (All Ages)	% of Total Est. Recoveries for Age
Ungrouped Fisheries	6	8.9	0.8%	65.9%
All-Troll	1	4.6	0.4%	34.1%
Total Recoveries	7	13.5	1.3%	100.0%

Recovery Summary (All Ages)

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Fishery	178	472.9	44.0%
Freshwater Escapement	231	601.3	56.0%
Total Recoveries	409	1074.2	100.0%

CWT RECOVERY DISTRIBUTION (CWT GROUPS)

Report characteristics:

- tabular format, organized by CWT group number (see RAR Tag-List grouping in Ch. 8)
- recoveries are summarized by CWT groups and Management-Fisheries
- aggregates by columns: CWT group number, age cohort
- sorts by columns: CWT group number, age cohort.

Example output listing:

CWT Recovery Dist (groups)
Run Date: 2012-03-14
Tag List: Bonneville production 1

Group Name: Hatchery: BONNEVILLE HATCHERY
Age: 2 Total # of Est. Recoveries: 213.2 Total # of Est. Fishery Recoveries: 3.0

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
WA Area 1 Sport (Illwaco)	1	3.0	1.4%
Freshwater Escapement	208	210.2	98.6%
Total Recoveries	209	213.2	100.0%

Group Name: Hatchery: BONNEVILLE HATCHERY
Age: 3 Total # of Est. Recoveries: 1,976.6 Total # of Est. Fishery Recoveries: 641.6

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
WA Areas 4 and 4B Troll (Cape Flattery)	3	8.0	0.4%
WA Area 4 Sport (Neah Bay)	1	3.9	0.2%
WA Area 3 Troll (Quileute)	1	1.4	0.1%
WA Area 2 Troll (Grays Harbor)	1	1.8	0.1%
WA Area 2 Sport (Westport)	12	28.1	1.4%
WA Area 1 Troll (Columbia River Mouth)	8	37.0	1.9%
WA Area 1 Sport (Illwaco)	94	197.7	10.0%
Buoy 10 Sport	32	95.7	4.8%
Tillamook Troll	2	4.0	0.2%
Tillamook Sport	15	40.9	2.1%
Newport Troll	1	0.0	0.0%
Newport Sport	17	57.2	2.9%
Coos Bay Troll	4	15.1	0.8%
Coos Bay Sport	29	80.5	4.1%
Brookings Sport	6	19.4	1.0%
Eureka Sport	2	9.2	0.5%
Freshwater Sport	2	6.9	0.3%
Freshwater Net	16	34.8	1.8%
Freshwater Escapement	1,337	1,335.0	67.5%
Total Recoveries	1,583	1,976.6	100.0%

<report example continued on next page..>

Group Name: Hatchery: SANDY HATCHERY

Age: 2 Total # of Est. Recoveries: 184.1 Total # of Est. Fishery Recoveries: 0.0

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Freshwater Escapement	157	184.1	100.0%
Total Recoveries	157	184.1	100.0%

Group Name: Hatchery: SANDY HATCHERY

Age: 3 Total # of Est. Recoveries: 2,336.6 Total # of Est. Fishery Recoveries: 630.4

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
West Coast Vancouver Island Sport	1	14.9	0.6%
WA Areas 4 and 4B Troll (Cape Flattery)	2	4.4	0.2%
WA Area 3 Sport (La Push)	1	1.6	0.1%
WA Area 2 Troll (Grays Harbor)	1	1.3	0.1%
WA Area 2 Sport (Westport)	13	28.1	1.2%
WA Area 1 Troll (Columbia River Mouth)	5	19.8	0.8%
WA Area 1 Sport (Illwaco)	103	209.5	9.0%
Buoy 10 Sport	29	84.1	3.6%
Tillamook Sport	12	29.9	1.3%
Newport Troll	1	2.1	0.1%
Newport Sport	18	57.1	2.4%
Coos Bay Troll	6	22.7	1.0%
Coos Bay Sport	14	41.7	1.8%
Brookings Sport	1	5.7	0.2%
WA Area 5 Sport	1	4.2	0.2%
Freshwater Sport	8	34.2	1.5%
Freshwater Net	37	66.4	2.8%
Freshwater Escapement	1,541	1,706.2	73.0%
Oregon General-Sport	2	2.7	0.1%
Total Recoveries	1,796	2,336.6	100.0%

Group Name: Hatchery: SANDY HATCHERY

Age: 4 Total # of Est. Recoveries: 1.0 Total # of Est. Fishery Recoveries: 0.0

Recovery Location	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Freshwater Escapement	1	1.0	100.0%
Total Recoveries	1	1.0	100.0%

CWT RECOVERY DISTRIBUTION (CWT GROUPS AND COMBINED FISHERIES)

Report characteristics:

- tabular format, organized by CWT group number (see RAR Tag-List grouping in Ch. 8)
- recoveries are summarized by CWT groups and show a distribution into customized fishery categories (groups) using a combined-fishery (also created by the user, see Ch. 9)
- aggregates by columns: CWT group number, age cohort, Management-Fishery group
- sorts by columns: CWT group number, age cohort, Management-Fishery group.

Example output listing:

CWT Recoveries (groups/combined fishery)
Run Date: 2012-03-15
Tag List: Bonneville production 1
Combined Fishery: Gear Types 1

Group Name: Hatchery: BONNEVILLE HATCHERY

Age: 2 Total # of Est. Recoveries: 213.2 Total # of Est. Fishery Recoveries: 3.0

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Ungrouped Fisheries	208	210.2	98.6%
All-Sport	1	3.0	1.4%
Total Recoveries	209	213.2	100.0%

Age: 3 Total # of Est. Recoveries: 1,976.6 Total # of Est. Fishery Recoveries: 641.6

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Ungrouped Fisheries	1,339	1,344.2	68.0%
All-Troll	20	67.3	3.4%
All-Net	16	34.8	1.8%
All-Sport	208	530.3	26.8%
Total Recoveries	1,583	1,976.6	100.0%

Group Name: Hatchery: SANDY HATCHERY

Age: 2 Total # of Est. Recoveries: 184.1 Total # of Est. Fishery Recoveries: 0.0

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Ungrouped Fisheries	157	184.1	100.0%
Total Recoveries	157	184.1	100.0%

Age: 3 Total # of Est. Recoveries: 2,336.6 Total # of Est. Fishery Recoveries: 630.4

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Ungrouped Fisheries	1,541	1,706.2	73.0%
All-Troll	15	50.3	2.2%
All-Net	37	66.4	2.8%
All-Sport	203	513.7	22.0%
Total Recoveries	1,796	2,336.6	100.0%

Age: 4 Total # of Est. Recoveries: 1.0 Total # of Est. Fishery Recoveries: 0.0

Grouped Fishery Name	Number of Obs. Recoveries	Number of Est. Recoveries	% of Total Est. Recoveries
Ungrouped Fisheries	1	1.0	100.0%
Total Recoveries	1	1.0	100.0%

FRESHWATER FISHERY RECOVERY

Report characteristics:

- summarized, master-detail format showing release information in header section
- observed and estimated freshwater recoveries by recovery year, (standard PSC) fishery, and site
- aggregates by columns: Tag Code, Recovery Year
- sorts by columns: Tag Code, Recovery Year, PSC Fishery name.

Example output listing:

Freshwater Recovery
Run Date: 2012-03-15
Tag List: Mid-Columbia

Release Summary

Tag Code: 094052
Brood Year: 2003
Species: Coho
Hatchery Name: OXBOW HATCHERY
Release Agency: Oregon Department of Fish and Wildlife
Release Stage: Smolt

Run:
Release Site: TANNER CR (BNVILLE)
Stock: TANNER CR (BNVILLE)
Rearing Type: Hatchery reared fish

Return Year	PSC Fishery	Site	# Observed	# Estimated
2005	Hatchery	BONNEVILLE HATCHERY	47	47.47
2006	Columbia River Gillnet	ABOVE BNVILLE NET	4	11.46
2006	Columbia River Gillnet	COL R TONGUE PT POST '06	5	18.30
2006	Columbia River Gillnet	COL R ZONE 1 NET 777	1	1.00
2006	Columbia River Gillnet	COL R ZONE 2 NET	3	6.27
2006	Columbia River Gillnet	COL R ZONE 3 NET	3	4.34
2006	Columbia River Gillnet	COL R ZONE 4 NET 534	4	5.44
2006	Columbia River Gillnet	COL R ZONE 5 NET AREA 5	7	10.22
2006	Columbia River Sport	COL R OR SPORT SEC 8	1	2.64
2006	Columbia River Sport	COL R OR SPT SEC 10	1	4.23
2006	Estuary Sport	COLUMBIA R ESTUARY	7	7.39
2006	Hatchery	BONNEVILLE HATCHERY	1,149	1,160.49
2006	Hatchery	LTL WHITE SALMON NFH	5	5.00
2006	Spawning Ground	COL R BEL BONNEVILLE	1	1.00
2006	Spawning Ground	NELSON CR 29.0019	1	0.00
2006	Spawning Ground	WASHOUGAL R 28.0159	1	0.00

Release Summary

Tag Code: 094458
Brood Year: 2005
Species: Coho
Hatchery Name: OXBOW HATCHERY
Release Agency: Oregon Department of Fish and Wildlife
Release Stage: Smolt

Run:
Release Site: UMATILLA R
Stock: TANNER CR (BNVILLE)
Rearing Type: Hatchery reared fish

Return Year	PSC Fishery	Site	# Observed	# Estimated
2007	Fish Trap (freshwater)	THREE MILE DAM (UMAT	1	1.00
2008	Columbia River Gillnet	ABOVE BNVILLE NET	10	63.33
2008	Columbia River Gillnet	COL R ZONE 5 NET AREA 5	1	2.57
2008	Estuary Sport	COLUMBIA R ESTUARY	3	9.01
2008	Fish Trap (freshwater)	THREE MILE DAM (UMAT	13	13.00
2008	Freshwater Net	DRANO LK (SKAM)	1	0.00
2008	Freshwater Sport	UMATILLA R SPORT SEC-1	1	1.00

FRESHWATER RECOVERY (CWT GROUPS)

Report characteristics:

- tabular format, organized by CWT groups (see RAR Tag-List grouping in Ch. 8)
- observed and estimated freshwater recoveries by CWT groups, recovery year, (standard PSC) fishery, and site
- aggregates by columns: CWT group number, Recovery Year, PSC Fishery name
- sorts by columns: CWT group number, Recovery Year, PSC Fishery name.

Example output listing:

Freshwater Recovery (groups)
Run Date: 2012-03-15
Tag List: Mid-Columbia

Group Name: Release Site: TANNER CR (BNVILLE)

Return Year	PSC Fishery	Site	# Observed	# Estimated
2005	Hatchery	BONNEVILLE HATCHERY	51	51.51
2006	Columbia River Gillnet	ABOVE BNVILLE NET	5	14.43
2006	Columbia River Gillnet	COL R TONGUE PT POST '06	6	21.96
2006	Columbia River Gillnet	COL R ZONE 1 NET 777	1	1.00
2006	Columbia River Gillnet	COL R ZONE 2 NET	3	6.27
2006	Columbia River Gillnet	COL R ZONE 3 NET	3	4.34
2006	Columbia River Gillnet	COL R ZONE 3 NET 23	1	1.36
2006	Columbia River Gillnet	COL R ZONE 4 NET 534	4	5.44
2006	Columbia River Gillnet	COL R ZONE 5 NET AREA 5	7	10.22
2006	Columbia River Sport	COL R OR SPORT SEC 8	1	2.64
2006	Columbia River Sport	COL R OR SPT SEC 10	1	4.23
2006	Estuary Sport	COLUMBIA R ESTUARY	11	11.53
2006	Hatchery	BONNEVILLE HATCHERY	1,679	1,695.79
2006	Hatchery	LTL WHITE SALMON NFH	7	7.00
2006	Spawning Ground	COL R BEL BONNEVILLE	1	1.00
2006	Spawning Ground	NELSON CR 29.0019	1	0.00
2006	Spawning Ground	WASHOUGAL R 28.0159	1	0.00

Group Name: Release Site: UMATILLA R

Return Year	PSC Fishery	Site	# Observed	# Estimated
2007	Columbia River Gillnet	ABOVE BNVILLE NET	1	4.38
2007	Fish Trap (freshwater)	THREE MILE DAM (UMAT	3	3.00
2008	Columbia River Gillnet	ABOVE BNVILLE NET	10	63.33
2008	Columbia River Gillnet	COL R ZONE 5 NET AREA 5	1	2.57
2008	Estuary Sport	COLUMBIA R ESTUARY	3	9.01
2008	Fish Trap (freshwater)	THREE MILE DAM (UMAT	13	13.00
2008	Freshwater Net	DRANO LK (SKAM)	1	0.00
2008	Freshwater Sport	UMATILLA R SPORT SEC-1	1	1.00

SURVIVAL AND CONTRIBUTION RATE (CWT GROUPS)

Report characteristics:

- tabular format, organized by Species, CWT groups (see RAR Tag-List grouping in Ch. 8)
- shows number CWT released, 'contribution' into Management-Fisheries, 'expanded escapement' rate, and 'total expanded recovery' rate for each Tag Code release
- aggregates by columns: Tag Code
- sorts by columns: Species, CWT group number, Tag Code.

Example output listing:

Survival and Contribution Rate (groups)
Run Date: 2012-03-16
Tag List: Umatilla Basin

Species: Chinook

Group Name	Tag Code	Hatchery Name	Release Site	BrYr	# CWTs Released	Expanded Fishery Contribution Rate	Expanded Escapement Rate	Total Expanded Recovery Rate
Release Site: COLUMBIA R-5	B50312	SOC SEC PENS (MCNARY	COLUMBIA R-5	1985	50,840	0.0029	0.0001	0.0029
Release Site: COLUMBIA R-5	B50313	SOC SEC PENS (MCNARY	COLUMBIA R-5	1985	54,598	0.0019	0.0004	0.0023
Release Site: COLUMBIA R-5	B50314	SOC SEC PENS (MCNARY	COLUMBIA R-5	1985	52,387	0.0023	0.0004	0.0027
Release Site: COLUMBIA R-5	B50315	SOC SEC PENS (MCNARY	COLUMBIA R-5	1985	52,946	0.0014	0.0014	0.0028
					Average	0.0021	0.0006	0.0027
Release Site: UMATILLA R	073162	BONIFER POND	UMATILLA R	1984	30,838	0.0063	0.0004	0.0067
Release Site: UMATILLA R	073327	IRRIGON HATCHERY	UMATILLA R	1984	88,396	0.0294	0.0027	0.0321
Release Site: UMATILLA R	073833	IRRIGON HATCHERY	UMATILLA R	1985	20,636	0.0050	0.0024	0.0074
Release Site: UMATILLA R	073834	IRRIGON HATCHERY	UMATILLA R	1985	21,335	0.0037	000000	0.0038
Release Site: UMATILLA R	073835	IRRIGON HATCHERY	UMATILLA R	1985	20,690	0.0032	0.0004	0.0036
Release Site: UMATILLA R	073836	IRRIGON HATCHERY	UMATILLA R	1985	20,170	0.0041	0.0011	0.0052
Release Site: UMATILLA R	073837	IRRIGON HATCHERY	UMATILLA R	1985	20,982	0.0028	0.0021	0.0050
Release Site: UMATILLA R	073838	IRRIGON HATCHERY	UMATILLA R	1985	20,815	0.0032	0.0003	0.0035
Release Site: UMATILLA R	073839	IRRIGON HATCHERY	UMATILLA R	1985	21,659	0.0053	0.0002	0.0054
Release Site: UMATILLA R	073840	IRRIGON HATCHERY	UMATILLA R	1985	20,269	0.0051	0.0005	0.0056
Release Site: UMATILLA R	073841	IRRIGON HATCHERY	UMATILLA R	1985	20,895	0.0027	0.0034	0.0061
Release Site: UMATILLA R	073842	IRRIGON HATCHERY	UMATILLA R	1985	21,694	0.0042	0.0002	0.0044
					Average	0.0063	0.0011	0.0074

Species: Steelhead

Group Name	Tag Code	Hatchery Name	Release Site	BrYr	# CWTs Released	Expanded Fishery Contribution Rate	Expanded Escapement Rate	Total Expanded Recovery Rate
Release Site: LTL SHEEP CR (IMNAHA	073760	IRRIGON HATCHERY	LTL SHEEP CR (IMNAHA	1985	28,491	0.0042	0.0039	0.0081
Release Site: LTL SHEEP CR (IMNAHA	073761	IRRIGON HATCHERY	LTL SHEEP CR (IMNAHA	1985	28,527	0.0026	0.0041	0.0067
					Average	0.0034	0.0040	0.0074
Release Site: SPRING CR (WALLOWA R	073762	IRRIGON HATCHERY	SPRING CR (WALLOWA R	1985	28,610	0.0105	0.0050	0.0155
Release Site: SPRING CR (WALLOWA R	073763	IRRIGON HATCHERY	SPRING CR (WALLOWA R	1985	29,766	0.0115	0.0051	0.0165
Release Site: SPRING CR (WALLOWA R	073801	IRRIGON HATCHERY	SPRING CR (WALLOWA R	1985	28,518	0.0036	0.0032	0.0068
Release Site: SPRING CR (WALLOWA R	073802	IRRIGON HATCHERY	SPRING CR (WALLOWA R	1985	28,303	0.0062	0.0032	0.0094
					Average	0.0080	0.0041	0.0121

CONTRIBUTION RATE (COMBINED FISHERIES)

Report characteristics:

- tabular format across Recovery Years
- shows Estimated Number and, 'contribution' rate into customized Management-Fishery categories (groups) using a combined-fishery (created by the user, see Ch. 9 above)
- aggregates by columns: Management-Fishery group number
- sorts by columns: Management-Fishery group number.

Example output listing:

Contribution Rate (combined fishery)
Run Date: 2012-03-16
Tag List: Umatilla Basin
Combined Fishery: Gear Types 1

	Recovery Years											
Fisheries	1986 #	%	1987 #	%	1988 #	%	1989 #	%	1990 #	%	1991 #	%
Ungrouped Fisheries	79.1	64.9	27.9	2.6	582.7	20.4	487.1	26.7	96.8	17.0	24.1	58.1
All-Troll	4.7	3.9	58.7	5.6	1,024.6	35.9	491.5	26.9	190.0	33.3	14.1	34.0
All-Net	38.0	31.2	586.7	55.6	990.1	34.7	804.1	44.0	255.8	44.8	3.3	8.0
All-Sport	0.0	0.0	382.8	36.2	256.1	9.0	43.0	2.4	28.2	4.9	0.0	0.0
Total Recoveries	121.8	100.0	1,056.1	100.0	2,853.5	100.0	1,825.7	100.0	570.8	100.0	41.5	100.0

Contribution Rate = total # of estimated recoveries in fishery for recovery year / total # of recoveries in all fisheries and escapement for recovery year

Chapter 11 RAR Fishery Recovery Report

The RAR Fishery recovery report is described and illustrated as follows:

- based on inputs of:
  - user created RAR Combined-Fishery object (described in Ch. 9)
  - one Species
  - range of Recovery Years;
- produces a complete table of observed and estimated recoveries for each Tag Code release as distributed into the Management-Fishery categories defined in the RAR Combined-Fishery;
- aggregates by columns: Management-Fishery group number, Tag Code;
- sorts by columns: Management-Fishery group number, Brood Year, Recovery Year, Tag Code.

Example output listing:

Fishery Recovery
Run Date: 2012-03-16
Combined Fishery: Coastal—2
Species: Chum
Recovery Year: 2000 to 2002

Fishery Group: #1 Washington Troll
Species: Chum

Strata	BY	Tag Code	Release Site	Hatchery	Stock	# Observed	# Estimated
2002	1998	183850	R-Chehalis R	H-Chehalis River H	S-Chehalis R	1	2
	1998	183851	R-Chehalis R	H-Chehalis River H	S-Chehalis R	1	2
	1998	183852	R-Chehalis R	H-Chehalis River H	S-Chehalis R	1	2
	1999	184543	R-Inch Cr	H-Inch Creek H	S-Inch Cr	1	2
	1999	184545	R-Sliammon R	H-Sliammon River H	S-Sliammon R	3	7

Fishery Group: #3 SE Alaska Troll
Species: Chum

Strata	BY	Tag Code	Release Site	Hatchery	Stock	# Observed	# Estimated
2001	1997	0401010308	NAKAT INLET 101-11	NAKAT INLET	NEETS BAY	3	0
	1998	0401031406	NAKAT INLET 101-11	NAKAT INLET	NEETS BAY	1	0

Fishery Group: #4 High Seas
Species: Chum

Strata	BY	Tag Code	Release Site	Hatchery	Stock	# Observed	# Estimated
2000	1997	0401010307	NAKAT INLET 101-11	NAKAT INLET	NEETS BAY	1	0
2001	1998	184045	R-Inch Cr	H-Inch Creek H	S-Inch Cr	1	0

Chapter 12 APPENDIX

12.1 Explanation of RSR, TA3 Report

The TA3 report is designed to provide a high-level aggregation of recoveries to assist with Selective Fishery Evaluation Committee (SFEC) analyses. The report provides a custom aggregation of recovery record counts (observed) by Tag Code and specially defined conceptual region (SFEC-Region) and type of fishery (SFEC-FisheryType) where SFEC-Region is a geographic entity based on PSC format fields Recovery Location Code and/or PSC Region code; SFEC-FisheryType is a broad fishery categorization value based on PSC format field Fishery.

Report characteristics:

- Tabular, fixed-field line format
- aggregates by columns: Tag Code, SFEC Region, SFEC FisheryType
- sorts by columns: Tag Code, SFEC Region, SFEC FisheryType.

where SFEC Region, SFEC FisheryType are described as follows:

- **SFEC-Region**: This comprises the following broadly categorized regions for SFEC purposes:
  - ALASKA: all one category
  - BRITISH COLUMBIA:
    - BC Marine North (where Recovery Location Code contains '2MN...')
    - BC Marine South (where Recovery Location Code contains '2MS...')

  - WASHINGTON:
    - Columbia River (where RMIS Region is: LOCR, CECR, UPCR, SNAK)
    - Washington (includes all other WA recovery locations)
  - IDAHO: Columbia River (where RMIS Region is: UPCR, SNAK)
  - OREGON:
    - Columbia River (where RMIS Region is: LOCR, CECR, UPCR, SNAK)
    - Oregon Coast (includes all other OR recovery locations)
  - CALIFORNIA: all one category

- **SFEC-FisheryType**: Only PSC Fishery values that fall into defined 'commercial' or 'sport' categories are included in the report. (i.e. those in series ranges: 10 – 19, 20 – 29, 40 – 49). **All other fishery categories are considered not relevant and are excluded from the report.**

12.2 Table of RAR CRAS1 Management-Fisheries

The following table of fisheries is used in the RMIS Analysis Reporting system. These Management-Fisheries are 'mapped' to PSC Fishery codes and Recovery Sites coast-wide in the RMIS CWT database using a translation known as 'CRAS1'. CRAS1 has been used in research and analysis at the Northwest Indian Fisheries Commission (NWIFC), and by other fisheries analysts throughout the Pacific Northwest. The RMIS Analysis Reporting system can be modified to accommodate additional fishery-to-Recovery-Site translations.

Management Fishery Code	Management Fishery Name
01	Southeast Alaska Troll
02	Southeast Alaska Net
03	Southeast Alaska Sport
04	North British Columbia Troll
05	Central British Columbia Troll
06	North/Central British Columbia Sport
07	North British Columbia Net
08	Central British Columbia Net
09	NW Vancouver Island Troll
10	SW Vancouver Island Troll
100	Southern British Columbia Troll
101	Canada General Net
11	West Coast Vancouver Island Sport
12	West Coast Vancouver Island Net
13	Georgia/Juan de Fuca/Johnstone Str. Troll
14	Georgia/Juan de Fuca/Johnstone Str. Sport
15	Georgia/Johnstone Straits Net
16	Fraser River Net
17	Juan de Fuca Net (Canadian Area 20)
18	WA Areas 4 and 4B Troll (Cape Flattery)
19	WA Area 4 Sport (Neah Bay)
20	WA Area 3 Troll (Quileute)

Management Fishery Code	Management Fishery Name
49	Lummi Bay Net (WA Area 7D)
50	Juan de Fuca Troll (WA Areas 5, 6,6C, 7,7A)
51	WA Area 5 Sport
52	WA Area 6 Sport
53	Juan de Fuca Net (WA Areas 4B,5,6,6A,6C)
54	Dungeness Net (WA Area 6D)
55	WA Area 8 or 8-1 Sport (Skagit)
56	Skagit Marine Net (WA Area 8)
57	WA Area 8-2 Sport (Stillaguamish-Snohomish)
58	Stillaguamish/Snohomish Net (WA Area 8)
59	Tulalip Bay Net (Area 8D)
60	WA Area 9 Sport (Discovery-Admiralty)
61	WA Areas 6B and 9 Net
62	WA Area 9A Net (Port Gamble Bay)
63	WA Area 10 Sport (Seattle-Bainbridge)
64	WA Area 11 Sport (Tacoma-Vashon)
65	WA Area 10 Net
66	WA Area 10A Net
67	WA Area 10B, 10C, 10D, 10F, 10G Net
68	WA Area 10E Net
69	WA Area 11 Net
70	WA Area 11A Net

21	WA Area 3 Sport (La Push)
22	WA Area 2 Troll (Grays Harbor)
23	WA Area 2 Sport (Westport)
24	WA Area 1 Troll (Columbia River Mouth)
25	WA Area 1 Sport (Illwaco)
26	North Washington Coastal Marine Net
27	Grays Harbor Net
28	Willapa Bay Net
29	Buoy 10 Sport
30	Tillamook Troll
31	Tillamook Sport
32	Newport Troll
33	Newport Sport
34	Coos Bay Troll
35	Coos Bay Sport
36	Brookings Troll
37	Brookings Sport
38	Crescent City Troll
39	Crescent City Sport
40	Eureka Troll
41	Eureka Sport
42	Fort Bragg Troll
43	Fort Bragg Sport
44	Southern California Troll
45	Southern California Sport
46	WA Area 7 Sport
47	San Juan Net (WA Areas 7 and 7A)
48	Nooksack/Samish Net (WA Areas 7B, 7C, 7E)

71	WA Area 12 Sport
72	Hood Canal Net (WA Areas 12,12B,12C,12D)
73	Quilcene Bay Net (WA Area 12A)
74	WA Area 13 Sport (South Sound)
75	WA Area 13 Net
76	WA Area 13A Net
77	WA Area 13C Net
78	WA Area 13D Net
79	WA Areas 13E-13K Net
80	Freshwater Sport
81	Freshwater Net
82	Juvenile Catch
83	High Seas Catch
84	Freshwater Escapement
85	Alaska Coast Recovery
86	Gear and Location Unknown
87	BC General-Troll
88	Oregon General-Troll
89	Oregon-Calif General-Troll
90	California General-Troll
91	Alaska-Unknown or Mixed Gear
92	Oregon-Unknown or Mixed Gear
93	Columbia R-Unknown or Mixed Gear
94	California-Unknown or Mixed Gear
95	Washington General-Net
96	Oregon Test Fishery
97	Canada Aboriginal
98	Oregon General-Sport