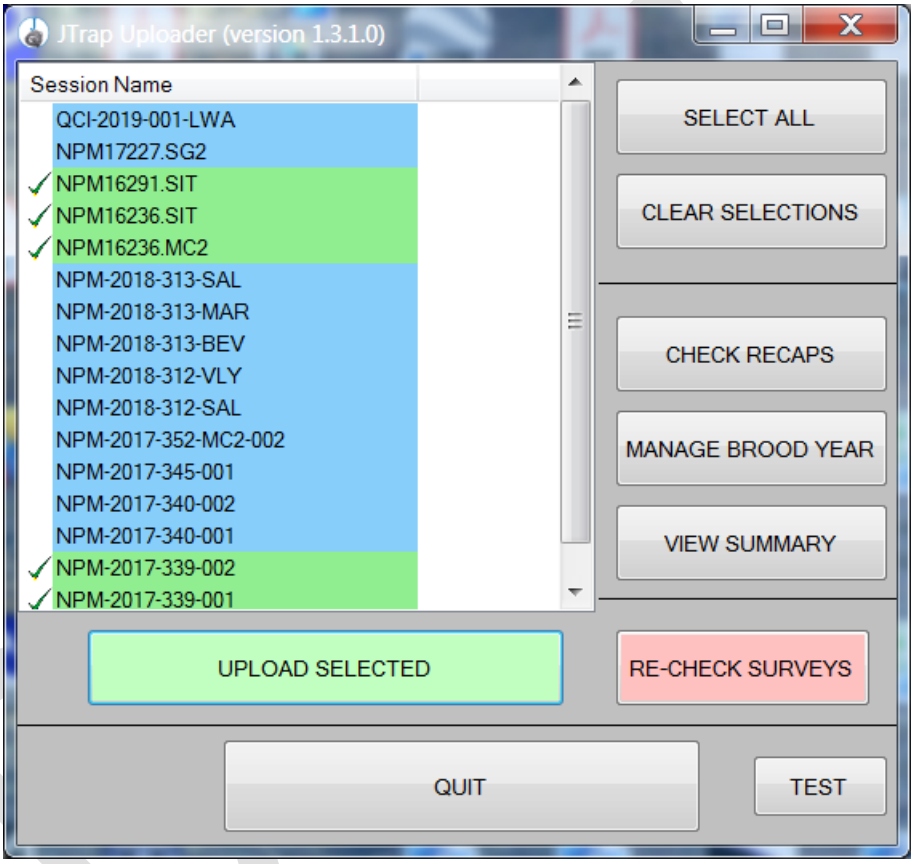
Idaho Department of Fish and Game

SCREW TRAP DATA MANAGEMENT



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P4 Standardization

This section is not meant to be a complete instructional manual for P4. It is only a supplement to the P4 Help document and will cover the necessary standards that are needed for the IDFG Wild Salmon and Steelhead projects. Those standards will include user defined species codes and dispositions.

P4 Resources

P4 is the new PIT tagging software for PTAGIS. It is different from P3 in that it runs with SQL instead of Access. It is much more flexible than P3 in that you can 1) add non-tagged species to tag files, 2) add user-defined fields to the Session and the Detail Records, and 3) customize the data entry layout. Additional advantages to the software will be covered below.

The P4 program and P4 Help file can be downloaded from the PTAGIS website: https://www.PTAGIS.org/software/p4. There is also a P4 Training Webinar: https://www.PTAGIS.org/support/tutorials. The P4 Help file has been placed on the WSS Website in WSS Manuals/Screw Trap Manual/P4 Material along with this document, a WSS P4 configuration file (xml), and a Validation Codes file (xml) to import into P4. Juvenile Data Material

P4 Dashboard

The P4 home screen contains navigation tiles that are grouped into three main feature categories: Collect, Manage, and Configure (Figure 1). In the top-right corner is an application-wide tool bar with buttons to access the help system, to view PTAGIS contact information, to change display themes, and to view notifications.

Figure 1. The P4 Dashboard

P4 Validation Codes

Part of the flexibility of P4 is to allow users to include *user-defined* species that are not tagged (non-target species). The non-tagged fish will be filtered out of the Sessions (tag files) uploaded to PTAGIS but they will be included in the Sessions uploaded to IDFG IFWIS Sql database (Jtrap). A series of the most likely Idaho incidental species have been added to the SRR Verbose validation codes (Figure 2). A Validation Code file that contains these species is on the IDFG WSS website (link above). It will be necessary for any WSS biologists to import these non-PTAGIS species codes as they were agreed upon by the Nez Perce Tribe and the PIT Tag Steering Committee and will be used by the IDFG WSS projects for purposes of statewide standardization (Appendix A). If there are additional species you would like added to the list please notify bruce.barnett@idfg.idaho.gov.

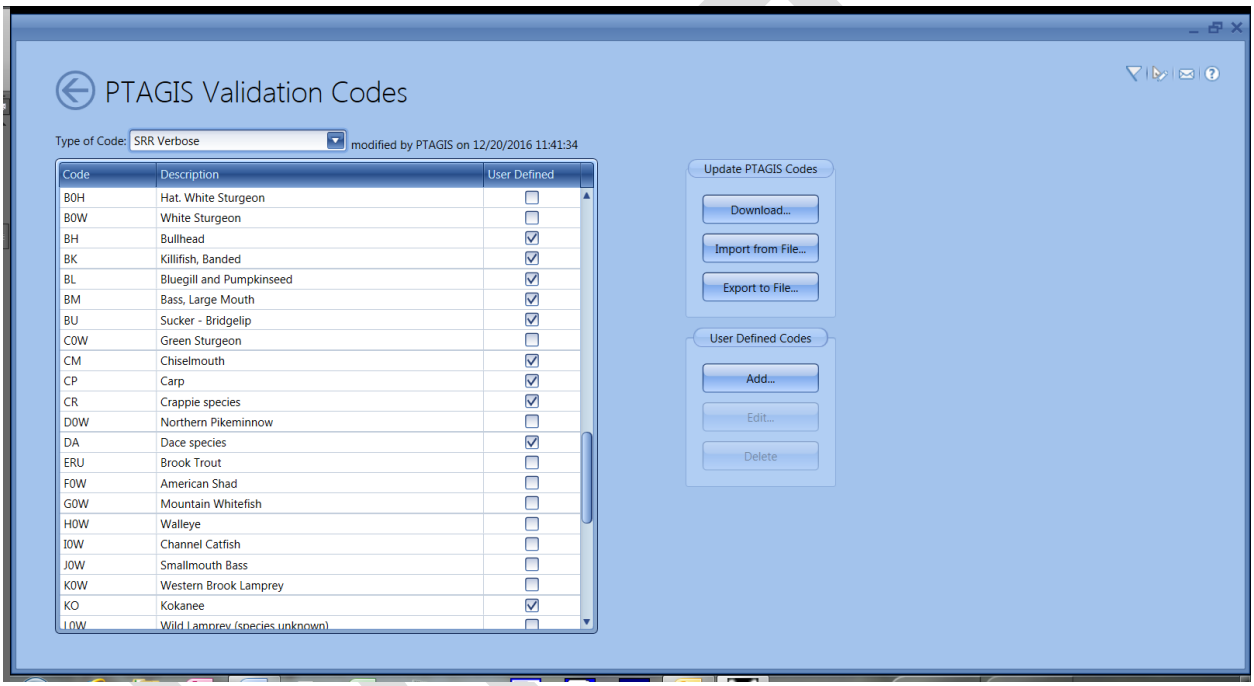


Figure 2. SRR Verbose codes showing User Defined codes with the checkmark. Import from File is used to import these codes.

Configurations

A P4 WSS Configuration file with the standard WSS tag actions, queries, and additional user defined fields has been created and will need to be imported into P4 (link above). You can select which features you would like to import. It is not necessary to import this configuration but it would be easier than building everything from scratch. Coordinating biologists will still need to change the Profiles and Repeating Comments to suit the MRR Sites they operate. To import the configuration file, click on the Import Configuration button on the dashboard and then on Open P4 Files to browse to the file. A list of the items included in the configuration will show up on the left (Figure 3). Users have the option of selecting certain tools of a configuration or all of it. Clicking on one of the tools in the list will show a preview of how that tool is configured. Some of the tool functions are linked to other tools and those will automatically be selected. Session

Queries, Tag Actions, and Project-Defined fields are a necessary minimum to import from the WSS Configuration. Profiles, Repeating Values, and Data Entry Layout can be set up easily but there is a good base to adjust from in this configuration (Figure 3).

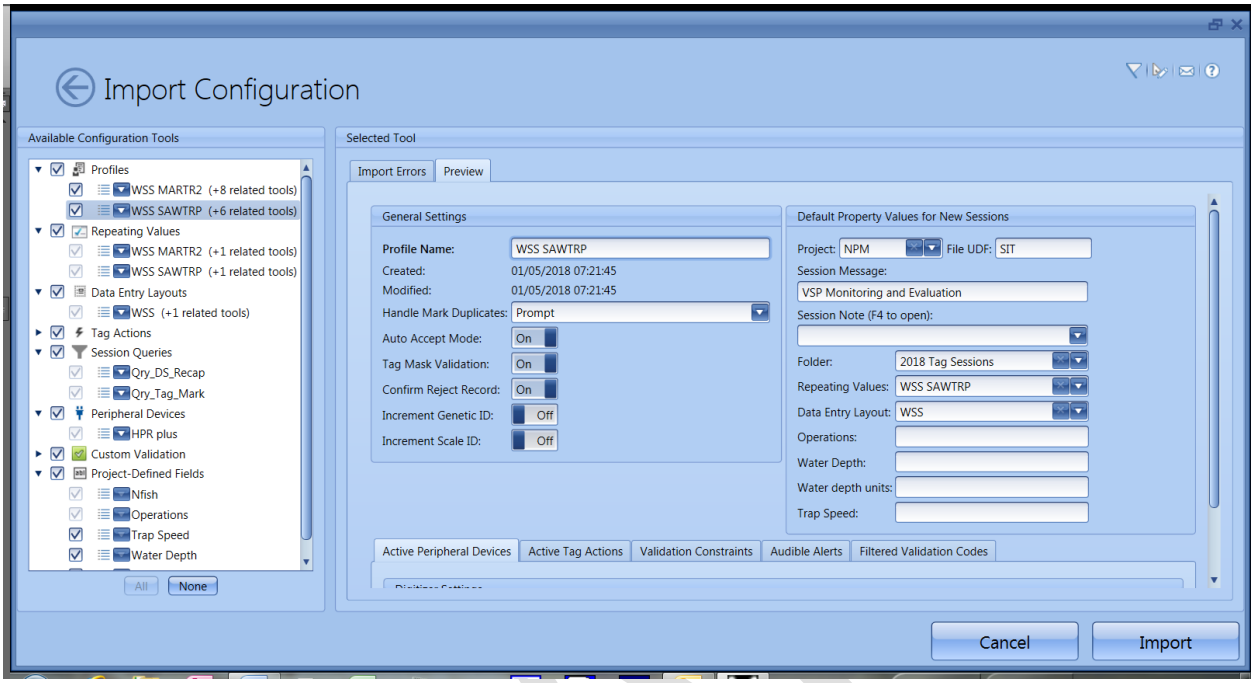


Figure 3. Import Configuration window.

Project Defined Fields

From the Dashboard select Configuration Tools. The first thing that should be set is the Project Defined fields because they are a subset of the Repeating Values, Profiles, and Data Entry Layout (Figure 4). Project Defined fields do not get uploaded to PTAGIS but will get uploaded to the IFWIS database. Operations, Water Depth, Water Depth Units, and Trap Speed are configured to the Session level so those values will be entered when you first create a New Session. They will be constant for all the records in the Session. The Operations field is a list of 0.0, 0.5, 1.0, or NA. Those are the only values that can be entered. The only values that can be entered for the Water Depth Units are Inches, Feet, Centimeters, or Meters. Any positive integer can be entered for Water Depth and Trap Speed. Nfish is a necessary field to include in the Detail Record for a count of fish >1 that do not have tags or length data. Any positive integer can be entered for Nfish and it is recommended to set this value to 1 in the Repeating Comments.

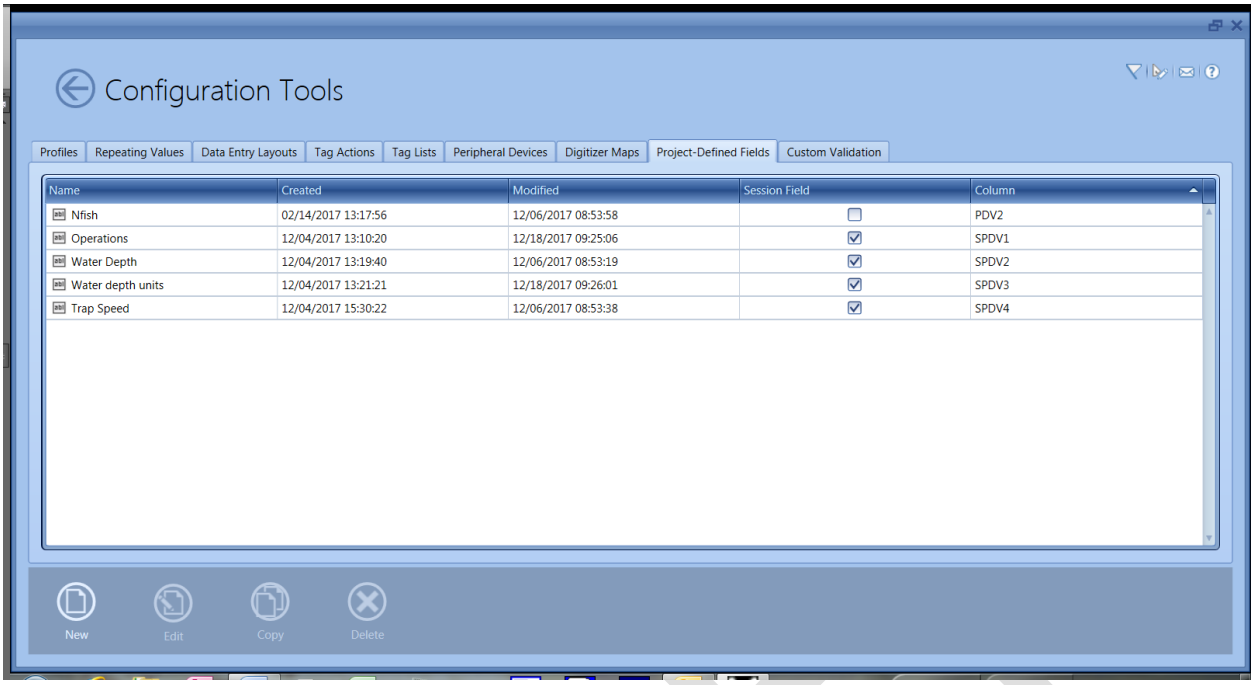


Figure 4. Project defined fields can be created for the Session level, indicated by the check mark, or the Detail Record level.

Data Entry Layout

The Data Entry Layout that comes with the WSS Configuration file is called WSS Data Entry. Open this to move the fields around in the order desired (Figure 5). Notice that Nfish, ScaleID, GeneticID, and Brood Year are added to the data entry. Brood Year is primarily for Chinook salmon and can be set in the Repeating Comments. This is useful for tagging a major proportion of one life stage during the Session. Taggers need to be aware to change the Brood Year when entering a different life stage (e.g. if the tagger is marking all smolts and then enters a Tally of 50 fry). Brood Year is also easily filled in or updated in two other ways that are explained below. The ability to have taggers enter this during tag sessions will save Coordinating biologists a lot of work and there are some Custom Validation checks in the WSS Configuration file to ensure the Brood Years are correct before uploading the Sessions. Assigning Brood Years to Chinook is essential for ease of use in queries, migration estimates, survivals, and for other agency users that don't understand IDFG WSS dispositions. Scale and Genetic IDs can be set to have constant prefixes or suffixes. Because many times Nfish will have a value >1 due to non-tagged fish, it is a necessary part of WSS juvenile data and will be uploaded to the IFWIS Jtrap database. Users can save different Data Entry Layouts under different names. ScaleID, GeneticID, and/or Brood Year can be removed from the entry form.

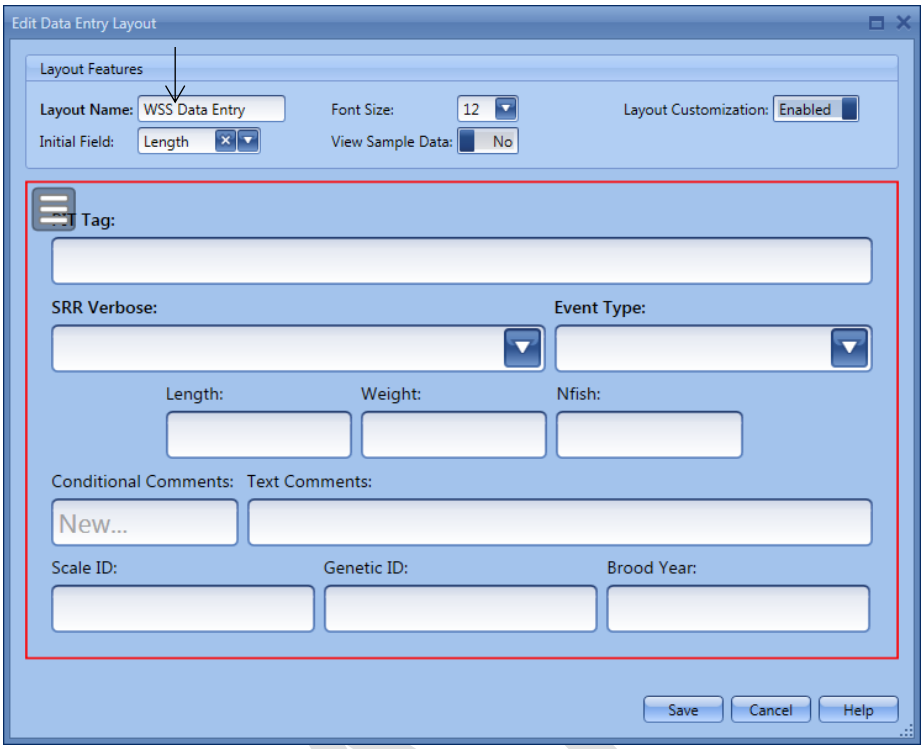


Figure 5. Data Entry layout

Repeating Values

Please be advised to set up a Repeating Values for each tagging location (MRR Site). They are then easily saved as part of Profiles, which also need to be set up for each location. When starting a new Session, a Profile for that location is selected manually and already contains the Repeating Values and Project Defined Fields that go with them. Repeating Values are similar to the Repeating Comments in P3 (Figure 6). However, now they contain most Session fields which can be adjusted for each detail record. Unlike Repeating Comments in P3, Repeating Values in P4 is necessary to fill out because this is now where Header information is entered. The WSS Configuration file comes with Repeating Values set up for MARTR2 and SAWTRP. Coordinators will want to change the Event Site and Release Site to their MRR Sites, adjust any other preferred values, and save with the adjusted MRR Site Code or location name.

In P4 users have the ability to manually enter the Event Date/Time or have P4 populate this field automatically. If the automatic option is selected the Event Time will be the time that the New Session was created but the Release Time will change for each fish every time you accept a record.

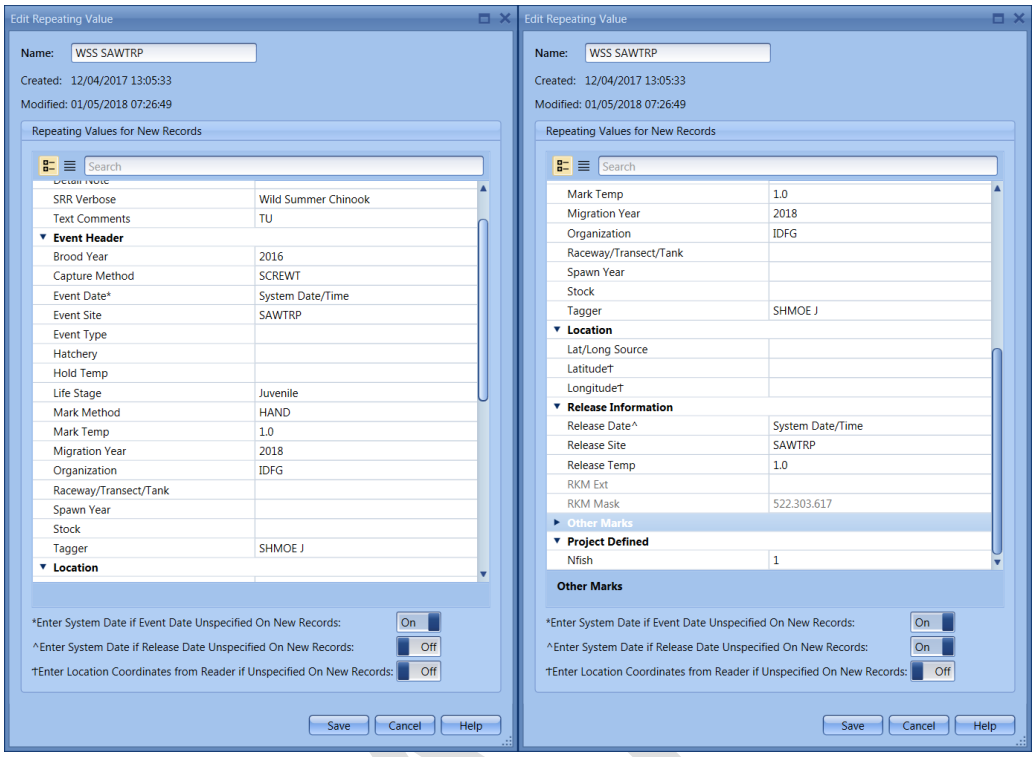


Figure 6. Repeating Values.

Repeating Values will contain the PTAGIS default fields and any User Defined fields. Migration Year is the current year. Mark Method should always be Hand. If using a tag reader with GPS the Lat/Long can be populated from that unit. In the WSS Configuration file the value of 1 is set for the Project Defined field of Nfish because all of the tagged and recaptured fish will have a value of 1 so that will be the most commonly used. The only time this will change is when tallying fish. Also in this configuration Brood Year is set for Chinook smolts (Migration Year = 2018, Brood Year = 2016). This will need to be changed when the Chinook smolts have left the stream. There is opportunity for error here as taggers may forget to change the Brood Year for fish with different brood years during a session but the Custom Validations should catch most of those. Supervisors are reminded to check that field as part of QA/QC periodically and/or at the end of the season. If tagging primarily steelhead species, then it would be more practical to leave this field empty in the Repeating Values. Life Stage is a mandatory field for PTAGIS. Juvenile is the obvious default Repeating Value and taggers need to remember to switch this when they capture an adult in the trap. They can change it for any Detail Record by having the Session Values docked during the tag session (Figure 7). Setting the life stage to Adult for an entire Session is used for Spawning Ground Surveys and other situations where there is adult content (aka adults only). In the docked Current Record Values, Life Stage, Brood Year, or anything else can be changed for the current Detail Record. *This will not change values for the entire Session*.

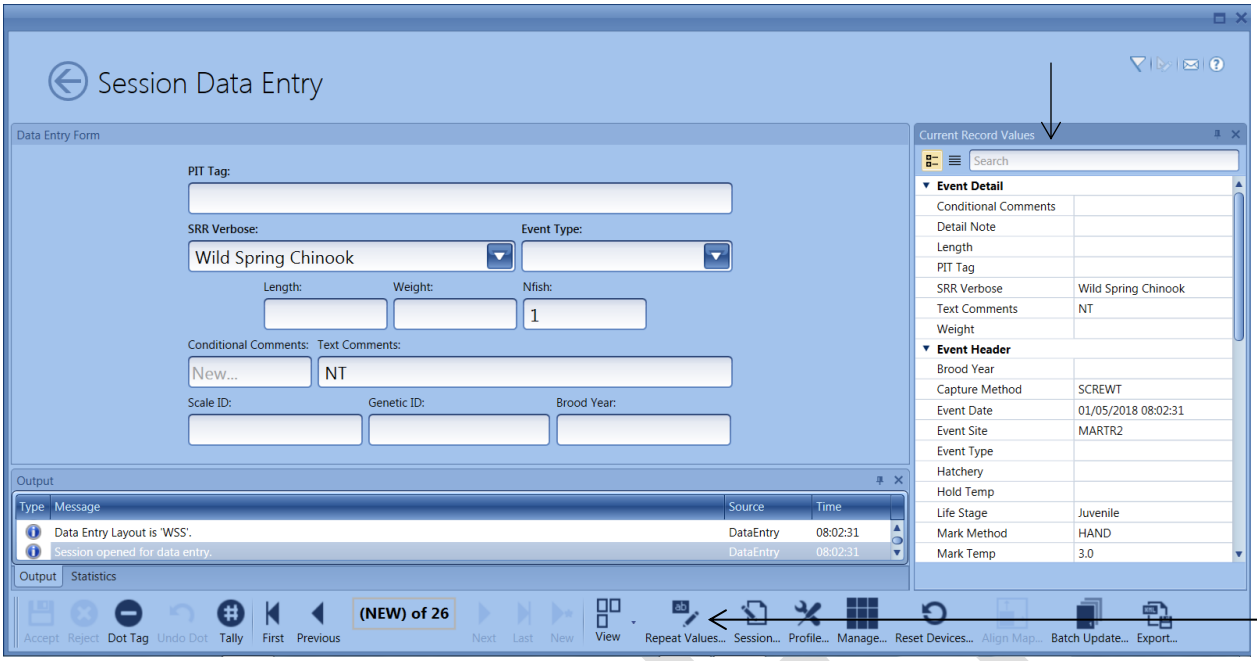


Figure 7. Current Record Values are docked here for an open Session.

Repeating Values are not intuitive when first starting a Session since they are already set up as part of the Profile**. *The first thing taggers need to do when opening a new Session is to adjust the Repeating Values for the day*** (i.e. Mark Temperature, Release Temperature, and Release Time if it is not automatic). This is done by clicking the Repeating Values option at the bottom of the Session screen, not by changing the *Current Record* Values at the right. If this is not done at the beginning of a Session then the values for the repeating fields will be the same as the day before. This creates opportunity for error when Tagger, Event Date/Time, Release Date/Time, and Temperature can vary from day to day. ***Changing a Repeating Value part way through a Session will not change the records that have already been accepted***. Those records will need to be changed manually either by going back through each Current Record Values or via Records Management using the Find and Replace tool or typing them in directly (Figure 8).

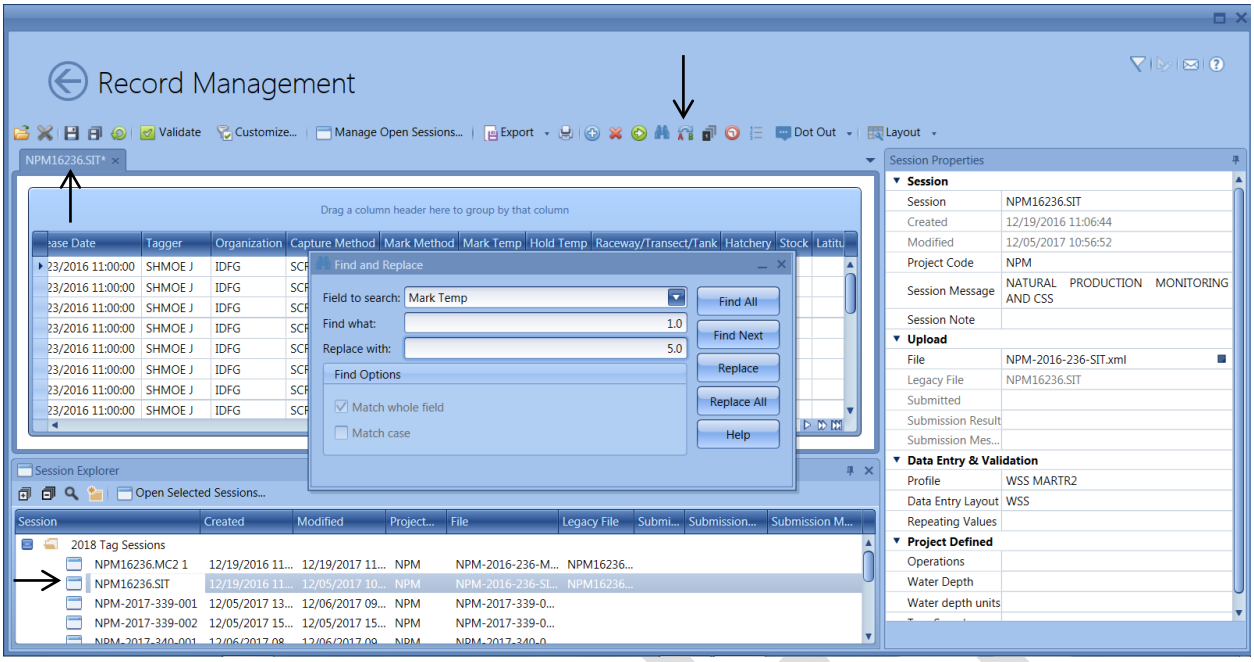


Figure 8. The Find and Replace function in Records Management is used to change Session Values for the *selected* Session.

Tag Actions - Recaptures

The WSS Configuration has three Tag Actions set up (Figure 9). There is a Tag Action for efficiency recaptures (RE RC), downstream recaptures (RE DS), and other recaptures (RE RE). The Recapture Alert tag actions warn the tagger when the scanned tag is already in the P4 database. These tag actions are set up to not only signal the tagger that the tag is already in the database but also to populate the recapture fields in the Detail Record. Recapture is written in the Event Type, RE is written in the Conditional Comment, and either RC, DS, or RE is written in the Text Comment.

The RE RC and RE RE Tag Actions are based on the dynamic query Qry_Tag_Mark that pulls all the records with a PIT tag code where Event Type equals Mark and PIT Tag does not equal a dot out (Figure 10). The RE RC Tag Action can be restricted to a limited number of days (e.g. within five days). This is done in the Qry_Tag_Mark by adjusting the date before starting a tag session. First, open the query in Qry Management by double clicking it (Figure 11). Then, open the Qry Editor on the top tool bar. Finally adjust the rule in the Editor EventDate IsGreaterThan to five days ago (Figure 12). This will query all the mark tags in the database within the last five days. The RE RC Tag Action is set to be INCLUSIVE and will flag all scanned tags in this list as RC in the Text Comment. The RE RE Tag Action is set to be EXCLUSIVE and will flag all the tags that are not in this list, outside of five days, as RE in the Text Comment (Figure 13). **The date in the Editor part of the query will need to be adjusted by one day every day before tagging begins to ensure the five day period.**

The Downstream Recapture Tag Action warns the tagger that this is not the first time a tag in the local database has been recaptured (Figures 14 and 15). In this case DS is written in the Text Comment. The downstream part is based on the assumption that the recaptured fish was released downstream of the MRR Site. Julian dates in the Text Comment in conjunction

with DS (downstream recapture) are not necessary. Downstream recaptures are not used in any analysis and are ignored. The DS Tag Action operates with the dynamic Qry_DS_Recap which pulls all records in the local database that have an Event Type of Recapture. If these two Queries are deleted from Query Management these recapture Tag Actions will not work.

Upon completion of the Session and before upload users can use the Jtrap Uploader Program to search the local database for the Julian date of the original tag file and write it in the associated RC Text Comment for automatically. The Jtrap Uploader Program will look up the original tag file names from PTAGIS of all RE REs in a Session and write them in the Text Comment, assuming those tags are already loaded into PTAGIS. The Jtrap Uploader Program is described in the next section.

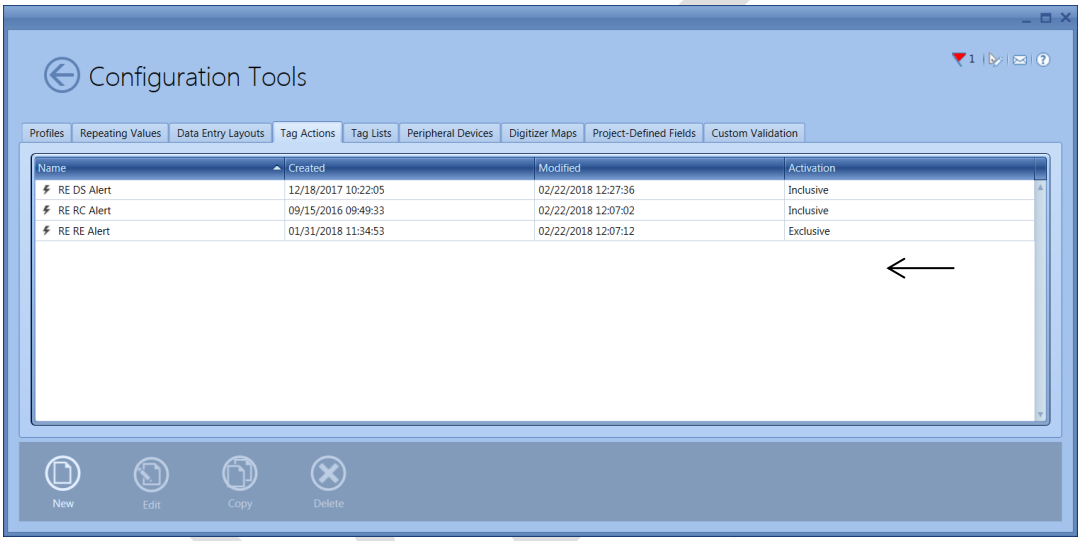


Figure 9. Tag Actions are necessary for flagging recaptures.

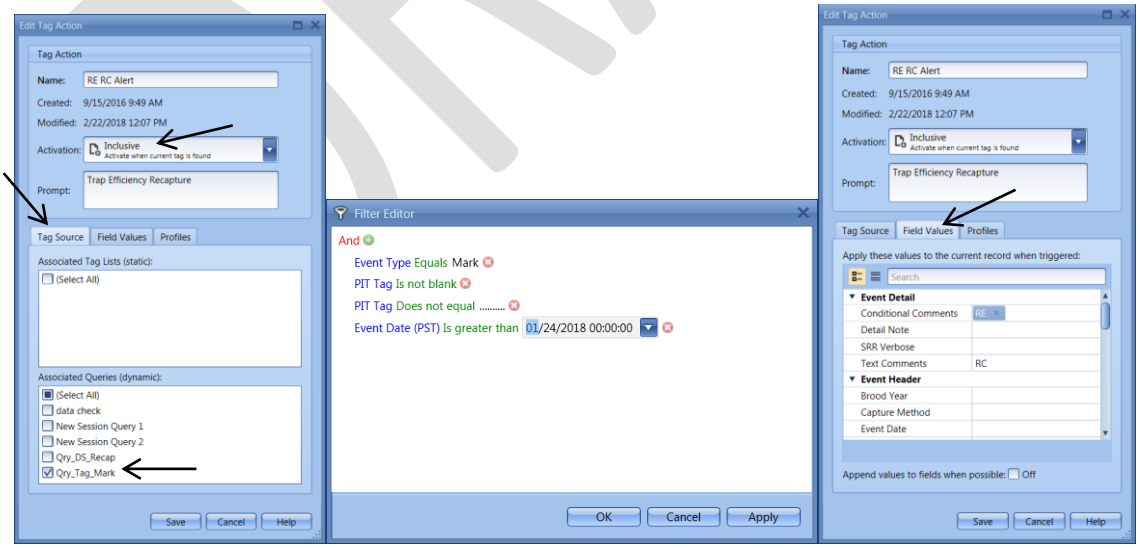


Figure 10. The Recapture Alert Tag Action and associated query (Qry_Tag_Mark). Event Type, Conditional Comment, and Text Comment (RC) are populated with this Action.

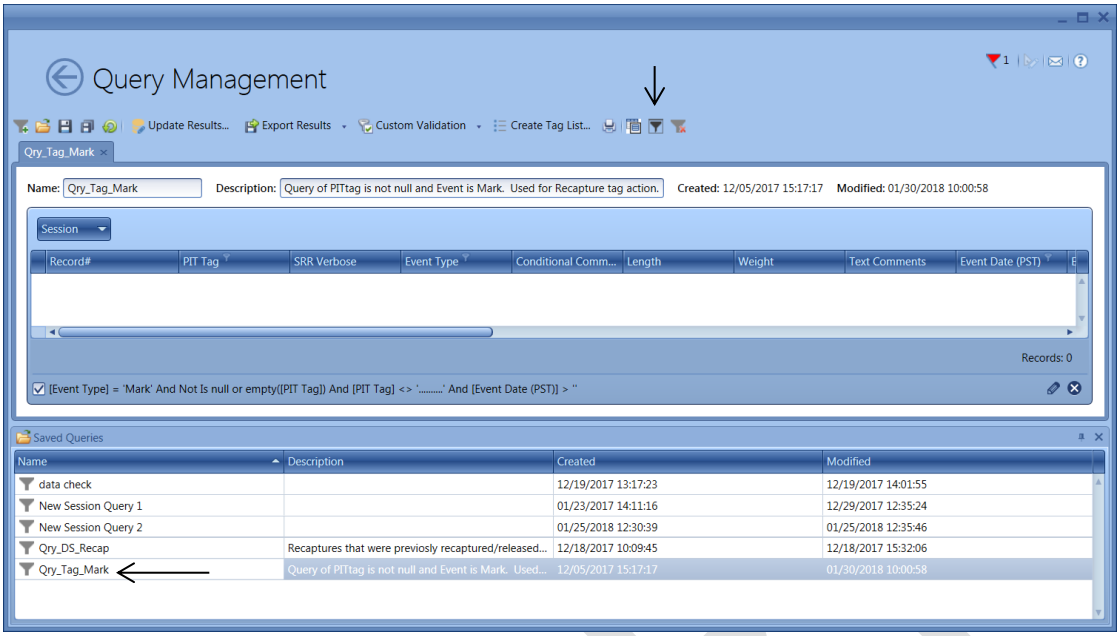


Figure 11. The Qry_Tag_Mark is opened by double clicking it. A query can be edited byclicking the filter icon on the tool bar.

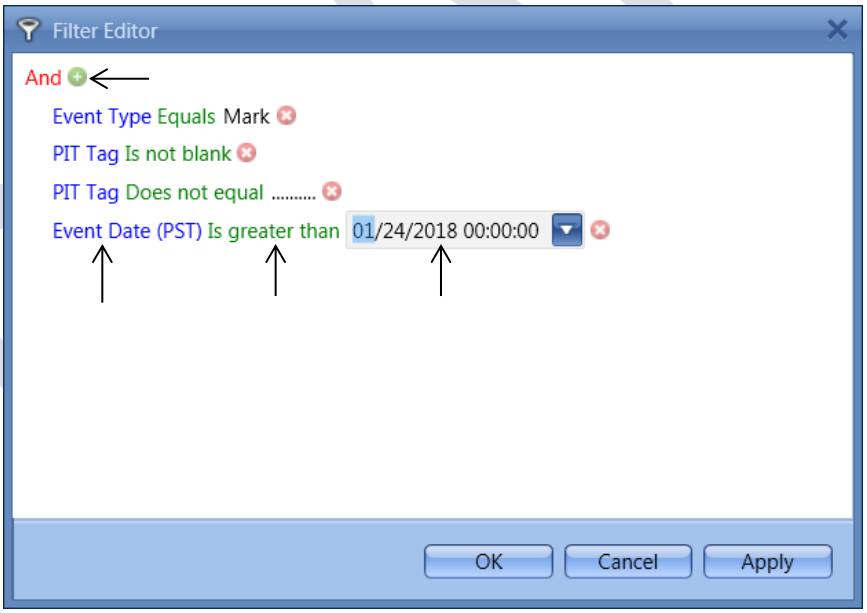


Figure 12. Query Editor of Qry_Tag_Mark. GreaterThan date needs to be changed daily.

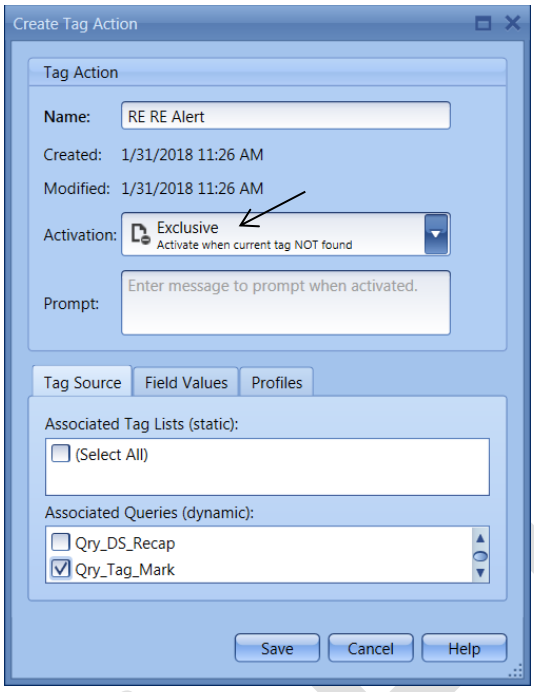


Figure 13. RE RE Tag Action that is Exclusive the tags in Qry_Tag_Mark (outside the timeframe of the query)

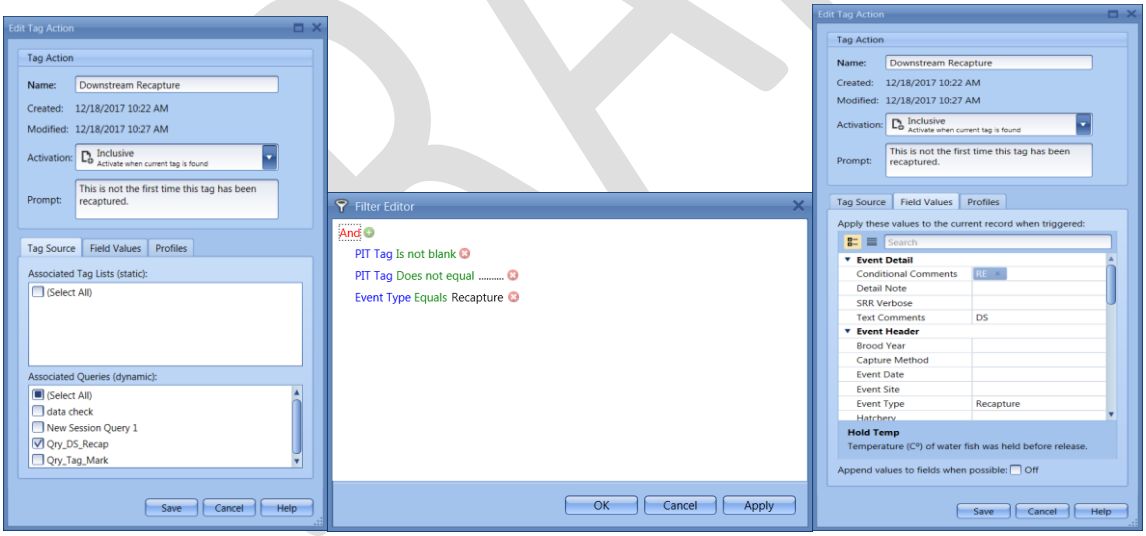


Figure 14. The Downstream Recapture Alert Tag Action and associated Query (Qry_DS_Recap). Event Type, Conditional Comment, and Text Comment (DS) are populated with this Action.

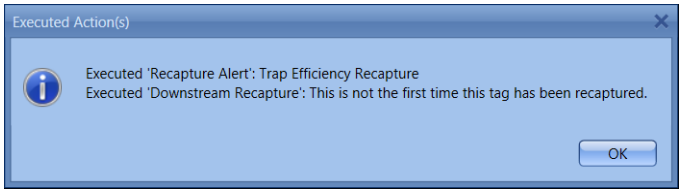


Figure 15. The Tag Session warning when a scanned tag is already in the database.

Profiles

Users can either modify the Profiles in the WSS Configuration (save under a different name) or create new Profiles for each MRR Site (Figure 16). The Default Property Values for New Sessions is where the program and site specific information is selected. Project Code is the same as CoordinatorID and is selected from the PTAGIS Validation Code drop down. Coordinators will want to select their own CoordinatorID or Project Code. File UDF is the suffix for the tag file name. If this is not filled out the tag file name suffix will be a consecutive number for each Session you create in a day (e.g. NPM-2017-340-001, -002, etc.). Each MRR Site uses the same naming convention. This means there could be duplicate session names across MRR Sites for a given day. Files with duplicate names for different sites would overwrite each other when uploaded to the IFWIS Jtrap database. Additionally, Coordinators would not know which site a session file belonged to without opening it. **Therefore, Coordinators need to use File UDF extensions as they did in P3 which correspond with an MRR Site (e.g. NPM-2017-340-SIT, -MCT, etc.).** Appendix B lists the File UDF extensions for each IDFG MRR Site. If you develop a new MRR Site, then develop a new identifying suffix for that location. PTAGIS does not need to approve the suffix.

Continuing with the Profile, select the Repeating Values and Data Entry Layout that were created for this MRR Site. Select the Active Tag Actions tab and make sure those boxes are checked. Finally, it may look like it but this is not where values for Operations, Trap Speed, etc are entered. It is just showing the Session level fields. Species that are not wanted in the Data Entry Form can be filtered out in the Filtered Validation Codes tab. Save when finished using the name of the MRR Site, as different sites will have different Repeating Values.

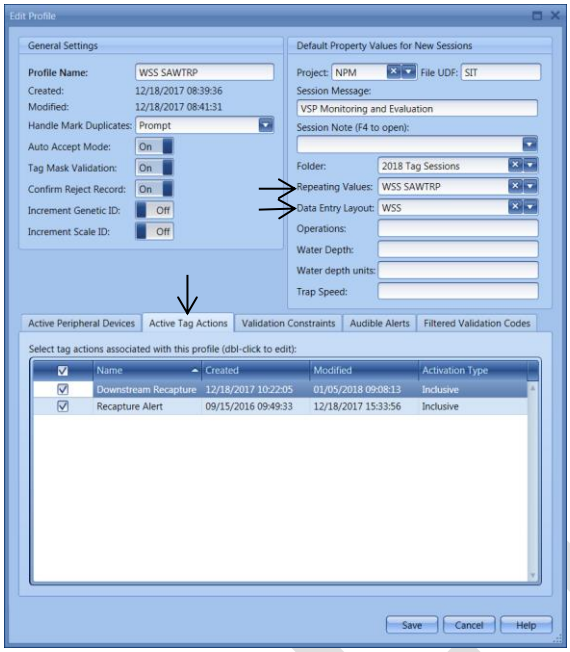


Figure 16. Profiles are set up with preferred Repeating Values, Data Entry Layouts, and Tag Actions.

Custom Validations

The WSS Configuration file comes with some Custom Validation rules (Figure 17). These are not to be confused with the Validation Constraints that are set in the Profiles. Double click on any one of them to see/edit the rule. Coordinators can add as many of these as wanted to ensure taggers validate the data before uploading. The Operations rule warns that the Operations field is blank. The Operations field is necessary for smolt traps but not for other capture methods since WSS reports on days of operation. Most of these rules within the WSS Configuration file pertain to Brood Years of Chinook salmon and Dispositions overall. They will catch most erroneous Brood Years and Dispositions but it is advised to become familiar with them in case one of them needs to be adjusted, depending on location or year. Any Custom Validations related to Brood Year will need to be adjusted on an annual basis (Figure 18). If electing to not have the tagger enter the Brood Year in the field then the Custom Validations related to Brood Year can be disabled. For the sake of preservation the Custom Validation Rules within the WSS Configuration file are in Appendix E. When the user is validating a Session in the Session Management view and a rule is broken the message in the Prompt box is displayed (Figure 19). First, select the Session to be validated, and then select the Validate tool, then select the Manage Records in the toolbar. Selecting Manage Records will open the invalid records in the Records Management view (Figures 19 and 20). From the Record Management view select Validate again and the exact records with the errors will be listed in the grid below.

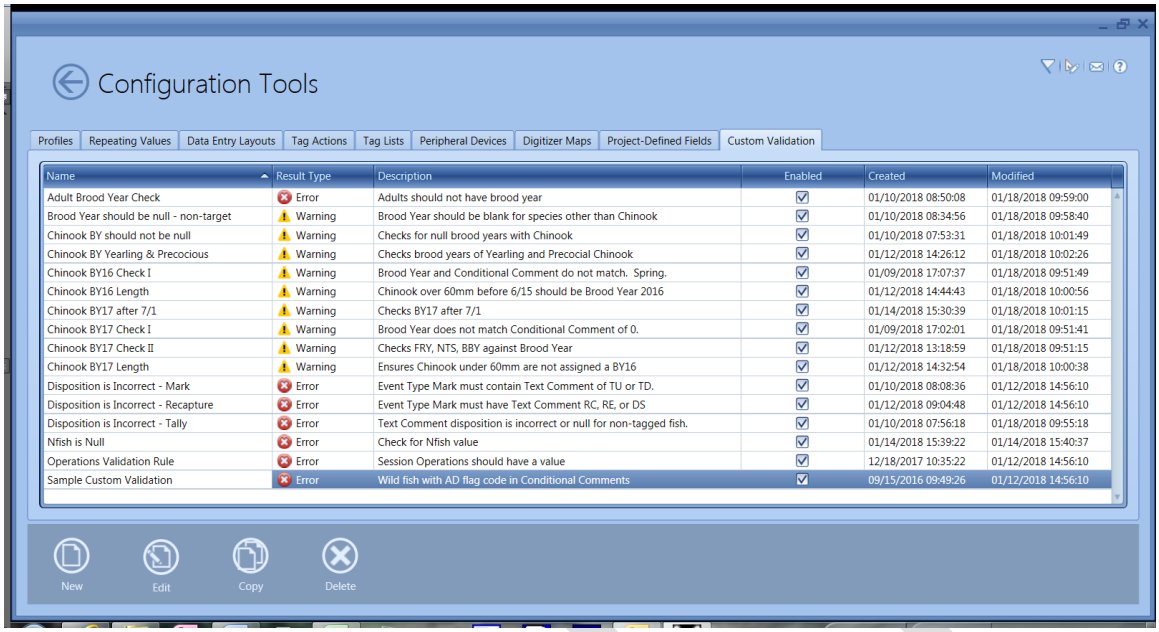


Figure 17. Custom Validations that come with the WSS Configuration file.

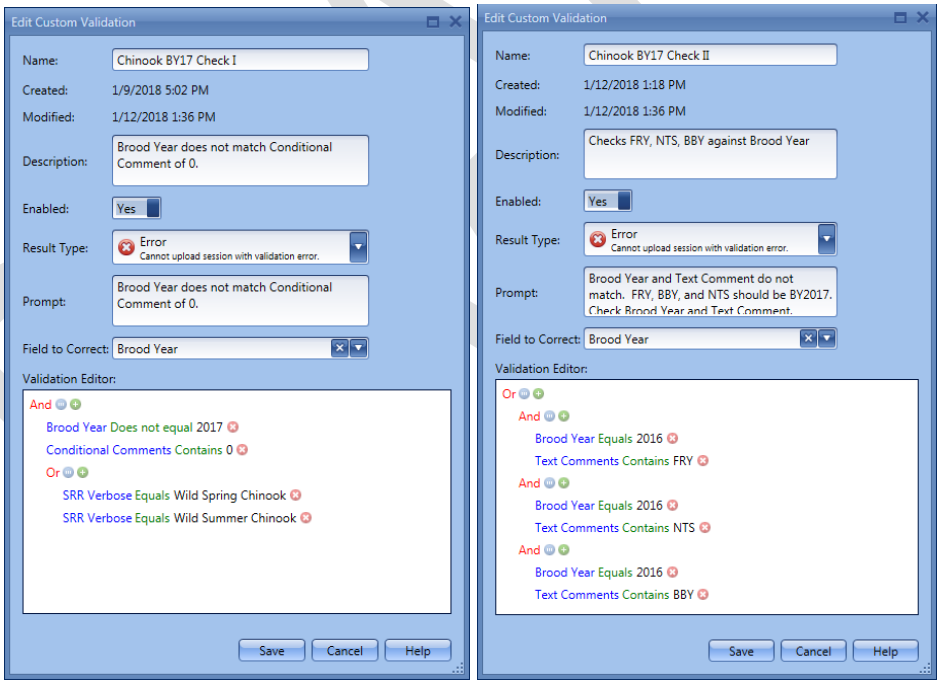


Figure 18. Typical Custom Validation associated with the WSS Configuration file. Brood Year validations need to be updated annually by changing the years in the TitlePrompt, and Editor.

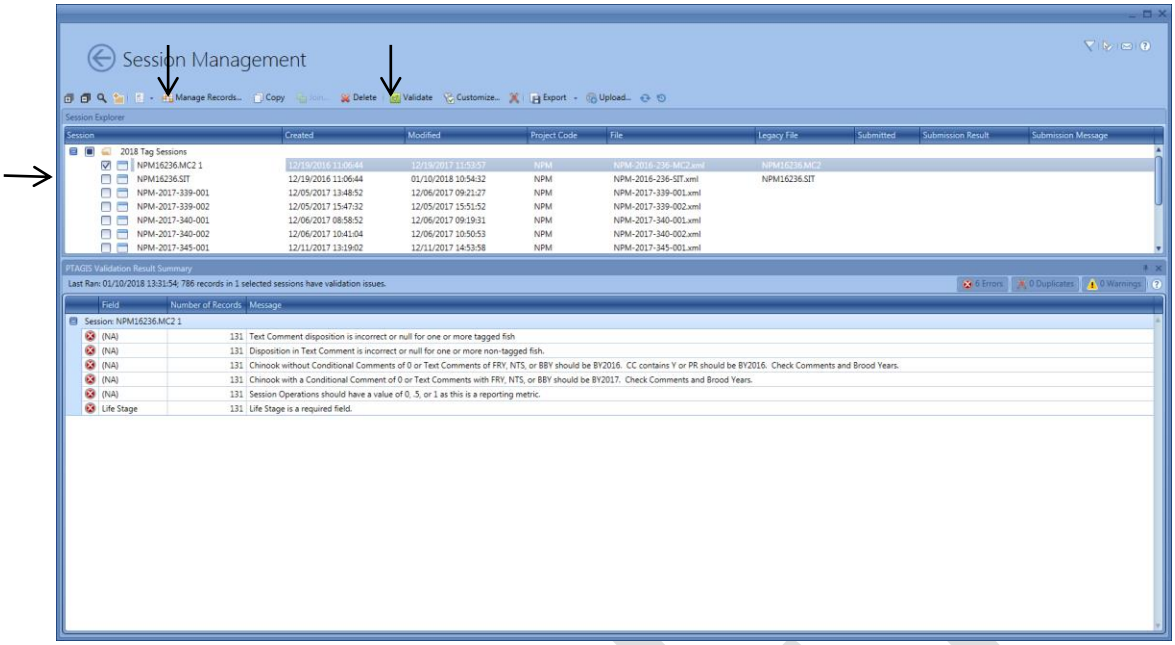


Figure 19. If a Session is not Valid due to one or more Custom Validation rules the reasons will be listed in the grid below the Session.

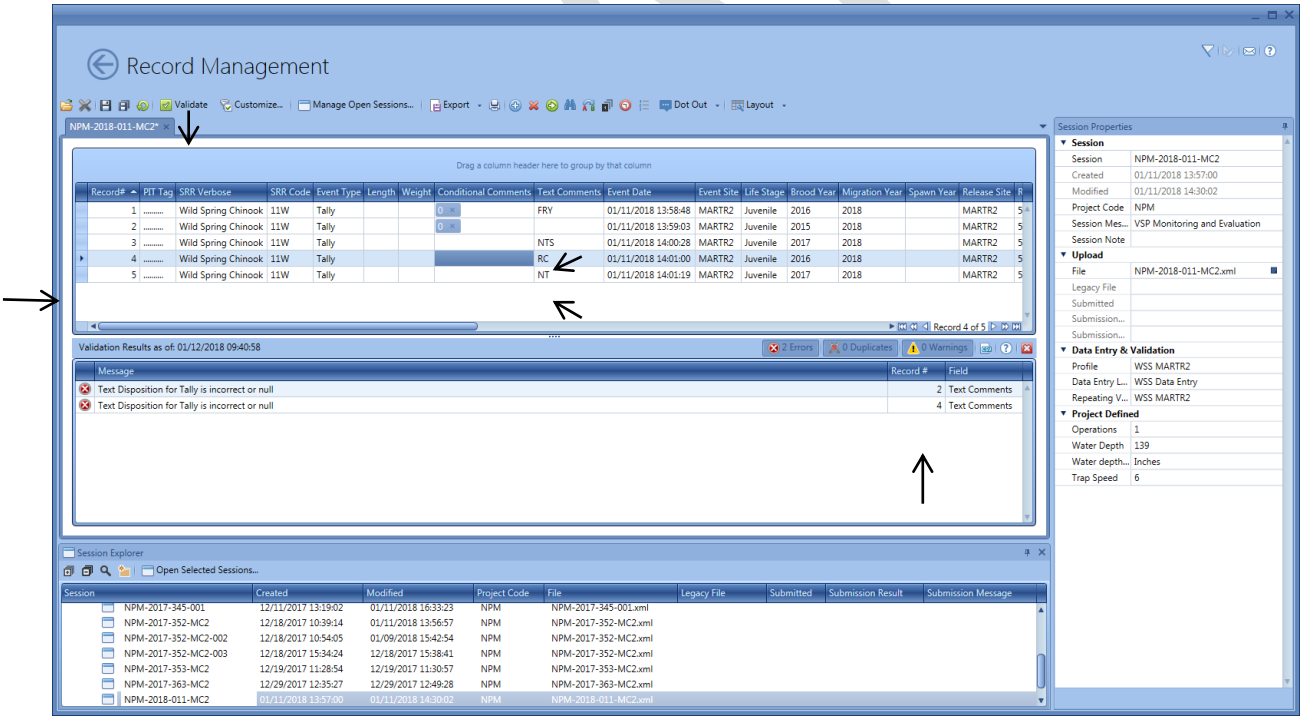


Figure 20. Records Management view of invalid records lists the records with the errors.

Incorrect fields can be edited in the Record Management view directly (Figure 20). Edits will not be written to the P4 database until they are saved using the Save icon in the toolbar. In

addition to taggers validating data in the field, selecting sessions in Sessions Management and validating them with Custom Validations is an efficient way for Coordinators to QA/QC data periodically and at the end of the season. Other options for QA/QC include developing queries in the Query Manager and Exporting to spreadsheets. Then errors can be identified and brought to the attention of the tagger for correction and the sessions reloaded.

The Dispositions in the Brood Year Validations alone do not check all the possibilities of erroneous data. In order to make these Validations all-encompassing WSS Coordinators will need to have the Conditional Comment contain 0 (possible age 0) for all non-tagged fry and parr Chinook in the Spring, not just tagged age 0s. Traditionally this has only been applied before 7/1 for tagged fish, with the assumption that most tagged fish before 7/1 were smolts. Since P4 has the ability to apply Conditional Comments and Brood Years to all tagged and non-tagged Chinook it only makes sense to take advantage. Relatively few Yearling and Precocious Chinook are captured after 7/1 so the assumption is most Chinook captured after this date will be age 0. If the user is tagging predominately steelhead or Chinook smolts and the Conditional Comment is Null in the Repeating Values then it is likely there will be times when a Comment of 0 is missed or a Brood Year is incorrect for Chinook. The Validations will catch both, among other things. This will provide an exceptional level of QA/QC at the field level and save Coordinators the time of assigning Brood Years at the end of the trapping season, although QA/QC will still be necessary.

Dispositions

WSS will be using the Event Types, Conditional Comments, and Text Comments for Dispositions of all fish captured. The combination of these fields will determine the Disposition Acronym in IFWIS_Jtrap. In turn, those Acronyms are used to determine Captures, Marks, and Recaptures for migration estimates. The flexibility of P4 to contain non-tagged fish in the tag files allows the use of the Conditional and Text Comment fields for incidental species and non-tagged target species. We have neither the ability nor the desire to restrict the Text Comment to a pick list in P4 so it is imperative that taggers follow the rules set up in the Disposition Table (Appendix C). This table is not all inclusive for all the variations of Conditional Comments there may be. For example, 0, M, Y, or PR can be used in combination with any of those listed, within reason. Remember that fish with the Event Type of Tally are filtered out of uploads to PTAGIS but are uploaded to IFWIS. If there are dispositions you would like added to Table 2 please contact bruce.barnett@idfg.idaho.gov and/or chris.harrington@idfg.idaho.gov.

Some of the dispositions are different than what has been traditionally used. This is to confuse you and make your life miserable. Note that NTD (Not Tagged, Data taken) and NTR (Not Tagged, Released downstream) have been replaced with NT (Not Tagged). This is because it is evident if data has been taken in the Detail Record. NT will be used for records of non-target species and will go in the Text Comment (Figure 21). NT, NTS (Not Tagged, Subtaggable), NTT (Not Tagged, Taggable), FRY, and BBY will go in the Text Comments for non-tagged target species (Figures 22 and 23). TU, TD, RE, RC, and DS are Text Comments for tagged fish. A Conditional Comment of 0, along with Text Comments of FRY, NTS or BBY, replaces the Disposition YOY in the spring. The reason for this is explained in the Custom Validations section.

In addition to recording what was done with the fish, dispositions also help users assign brood years to Chinook. WSS is not concerned with determining brood years for steelhead, Sockeye salmon, or resident species at this level. If there is not a standard set of protocols for the dispositions then they can be ambiguous. With the exception of delineating fry, entering a value for Brood Year while tagging eliminates any ambiguity and is the preferred method. Still,

most entry errors are associated with using an incorrect disposition code for non-PIT tagged fish and it cannot be assumed that Brood Year will always be entered correctly. Therefore, in addition to the Brood Year Custom Validation Rules there is a necessity for a set of disposition protocols (Appendix D).

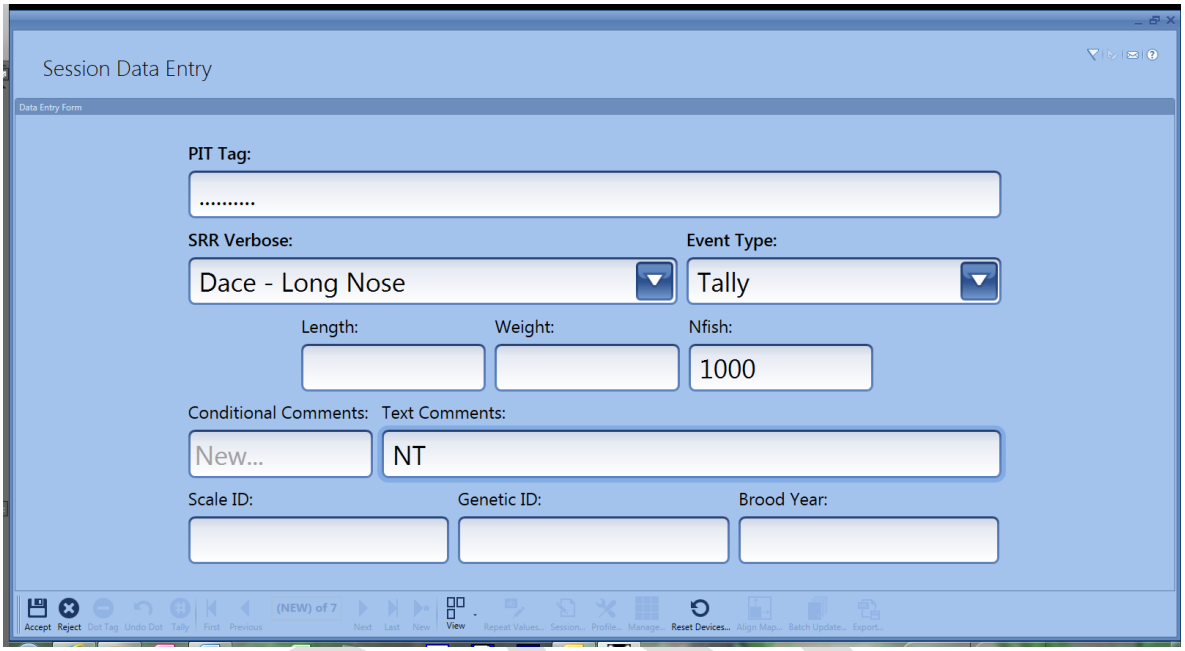


Figure 21. Data Entry example of a non-target species.

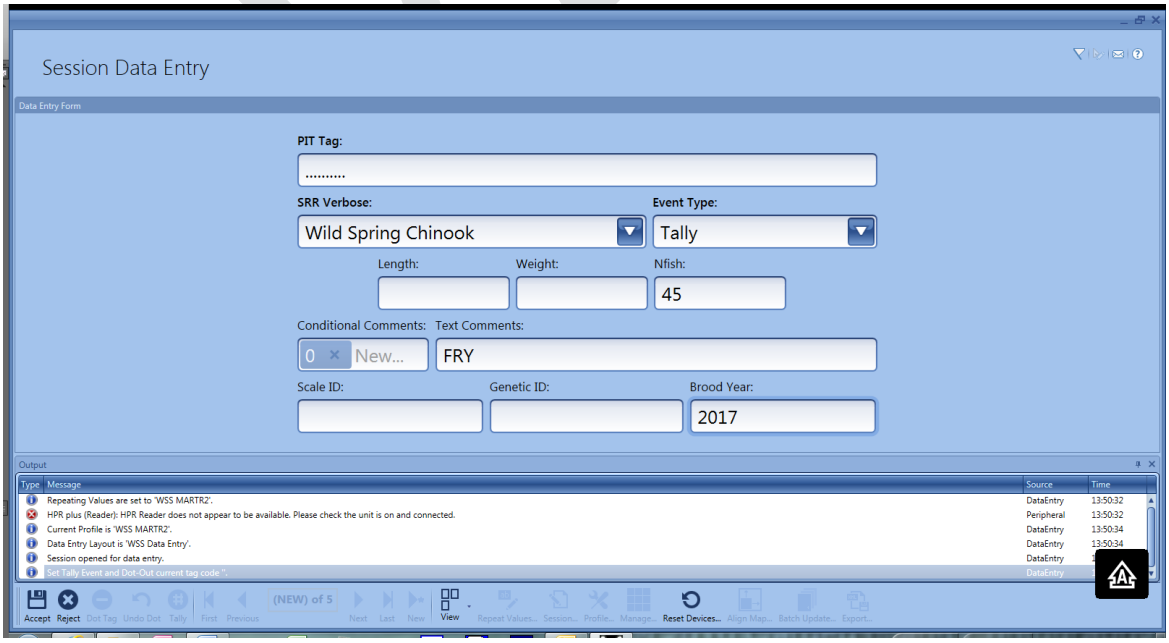


Figure 22. Data Entry example of a non-tagged target species.

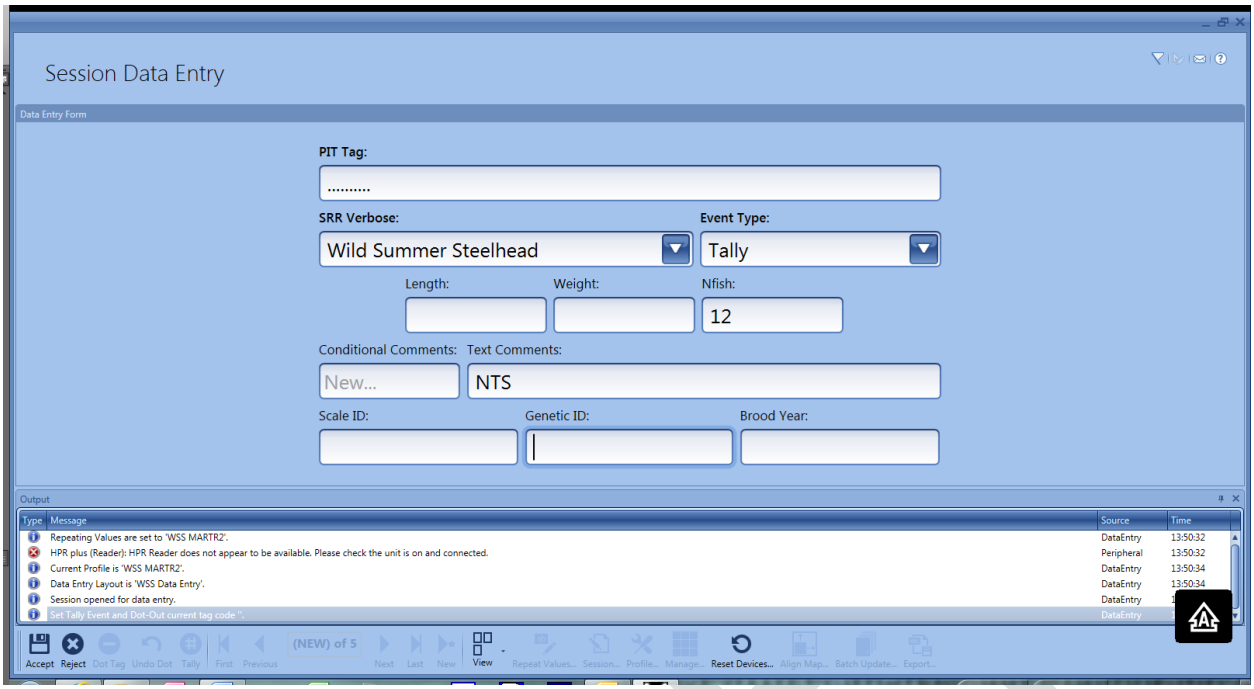


Figure 23. Data Entry example of a non-tagged target species.

Session Management and QA/QC

One nuance with P4 is with importing sessions from another P4 database. If the target database already has a session file that is being imported again then P4 will not overwrite the original file in the target database. It will add an extra suffix ([space]1, [space]2, etc.) to the session file name being imported and keep all of them (Figure 24). Some session names, those not using UDF suffixes, end up with "hyphen then three digit number" (-001, -002, etc.). Both instances result in duplicate data in the target database, the only difference being the session name, precisely suffix. When this happens then the original session in the target database can be deleted and the name of the subsequently imported session can be changed (remove the extra suffix). Users need to be careful when managing the session files this way (transporting between databases) as it could be easy to delete the wrong files.

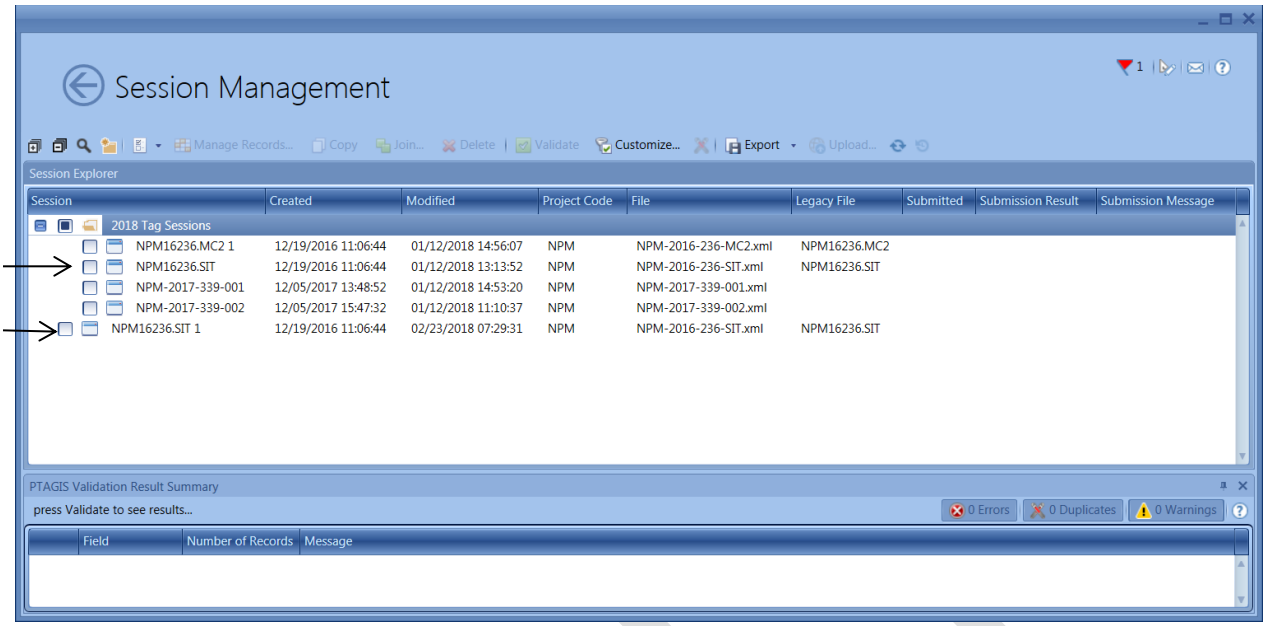


Figure 24. Example of duplicate sessions with different names.

Data uploaded to IFWIS updates/overwrites previously uploaded data with the same Session Name. If there is a session name blah-blah-blah and also a blah-blah-blah 1 and/or a blah-blah-blah 2 then the Jtrap Uploader program adjusts. When uploading to IFWIS the Jtrap Uploader program strips off the space and number suffix and assumes what is left is the real session name. The space and number indicates a duplication which will overwrite data in IFWIS with any changes. If a session name suffix is hyphen and three digit number then the data will be written to IFWIS as new data and will most likely be duplicate. This is another reason it is critical to use UDF suffixes in session names.

Users also need to develop a data flow protocol. Are the sessions going to uploaded to IFWIS from the field or from another P4 database at another location? **If an incorrect session is uploaded to IFWIS from one P4 database after a corrected session has been uploaded from another P4 database it will overwrite the correct data. For this reason sessions should only be uploaded to IFWIS from one designated P4 database.** Coordinators can choose to have all files uploaded to Ptagis and IFWIS from the field computer or they can have all files transferred to them and uploaded from a regional office database. They could also have the files uploaded to Ptagis from the field and then transferred and uploaded to IFWIS from the regional office P4 database ("coordinator's version") after a second level of QA/QC is performed. One option is for the coordinator to create a sub file system of "Unchecked" and "Checked" folders to put the files in. It is recommended that any folder system lists original files next to any duplicate files when viewing the folders so they are easily noticed, ergo this may not be the best option. Another option is to have the field database export to a csv file. The csv can then be sent to the supervisor and the data checked Vis a Vis lengths, brood years, dispositions, etc. The csv can then be sent back to the field for corrections. Sessions could then be uploaded IFWIS from the field. This would avoid the possibility of session management mistakes in P4, such as deleting the wrong files, etc. Coordinators will most likely want to export to a csv to perform QA/QC anyway as this is the easiest way to check all the data in the database. That could be done at the field level. A simple query would be created that doesn't

have any restrictions in the Editor, except maybe a date range, that pulls all the data. That query is then exported via the Export button on the toolbar. Whatever the data flow and QA/QC protocols decided on, they should be written down and taggers made aware so files are not being uploaded from two databases. Session management is the fragile part of the system so the attentiveness required cannot be overstated.

The recommended levels of QA/QC begin with the taggers in the field checking their own data against the raw data sheets. Brood years and recaptures can be checked with the Jtrap Uploader Program, explained in the next section. Session Files should be backed up daily to another drive besides the hard drive of the field laptop, whether that is a thumb drive or network drive. At the second level, the Supervisors check the data again via csv or imported sessions. Taggers then make any corrections and re-upload to Ptagis and/or IFWIS. Uploading to Ptagis should be expedient and in most cases will be before the Supervisor level of QA/QC. Remember that only tagged fish are uploaded to Ptagis and if there are errors then Ptagis will reject the session and notify the tagger. There is not an option in P4 to "Upload Correction" as there was in P3. The original session is just uploaded again and data overwrites in Ptagis based on the PIT-tag code. Note that Ptagis does not care about IDFG dispositions, tallys, etc. so sessions will not be rejected based on mistakes with these values.

Uploading to IFWIS is not as time sensitive so there really isn't any reason for the data to not be clean beforehand. Data does not need to be uploaded to IFWIS daily; it can be done weekly, monthly, quarterly, semi-annually, or annually. Supervisors can QA/QC the data at different time periods through the trapping season and then do a final check at the end of the season. A tracking sheet (xls) is helpful in keeping track of which sessions have been transferred, QA/QC'd, uploaded to Ptagis, uploaded to IFWIS, and backed up. The WSS Data Coordinator out of Nampa Research is the third level of QA/QC and will annually check correct assignment of brood years or logical inconsistencies.

JUVENILE DATA UPLOAD PROGRAM

The primary function of the JTrap Uploader program is to upload P4 data to IFWIS Sql. Secondary functions include checking recapture dates, updating/checking the Brood Year field, and providing a summary of fish caught within a specified time period. There is no data entry component to the program, other than the ability to edit brood years or recapture information if the automated systems are inadequate for some situations. The program can be installed by clicking the following link: https://fishandgame.idaho.gov/ifwis/JTrap4Installer/publish.htm

The program interface is almost an easy button (Figure 25). When the program is opened, it examines the P4 database on your computer and gets all the session names from it, which are displayed in a list box. All subsequent actions start by selecting one or more sessions from this list. For some convenience, there are buttons to select all or none of the sessions, but in practice, selecting all the sessions will likely become tedious. Once selections are made, users can choose any of the tools in the program. Uploading to IFWIS and checking recaptures requires an internet connection. Managing Brood Year and Viewing Summary do not require a connection.

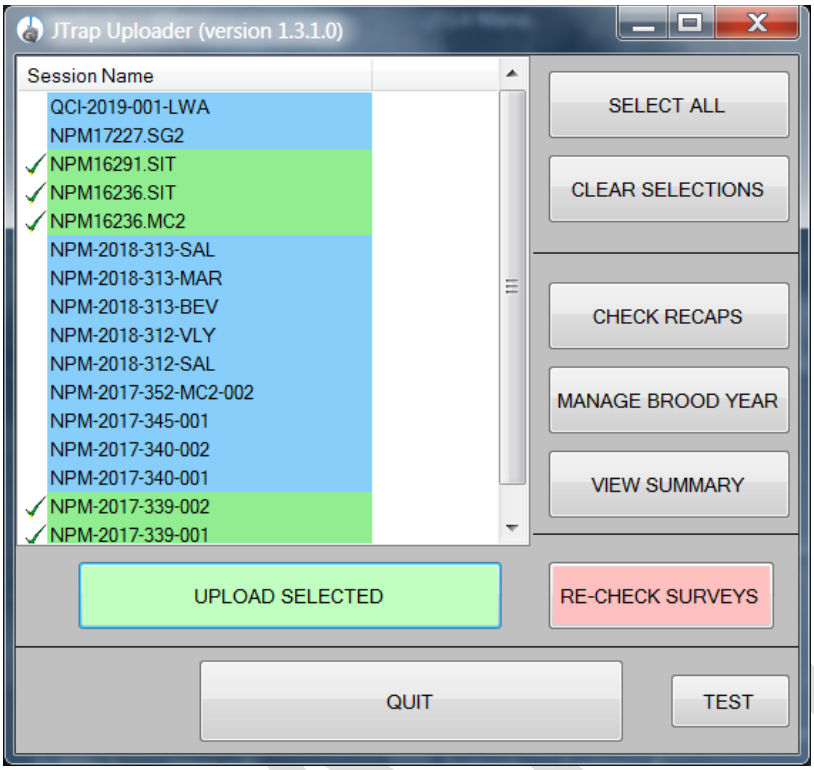


Figure 25. JTrap Uploader Interface.

Checking Recaptures

If the option to check recaptures is chosen, the program will do two things. For all RE RC, it will look in the local database to get the Julian date of the recapture. For all other recaptures, it will search PTAGIS to get the filename of the original session. That trip to PTAGIS is effectively a one-fish-history, and can take a second or two per fish. Therefore, if there are a lot of recaptures, users can expect that checking recaptures will take several seconds, or even minutes. As long as the mouse is over the Uploader form, users will see a spinning cursor while the recaptures are being checked. As long as the cursor is spinning, all is well. If the cursor stops it can only be attributed to human error.

Once all the recapture information is available, a grid shows essential information about each recapture including a “Suggestion” column that has the Julian date (for RE RC) or the filename for other recaptures (RE RE) (Figure 26). The Suggested Julian date will be appended to any TextComments that do not have a Julian date currently. Any tags that were not found in the local database or in PTAGIS will show a TAG NOT FOUND message in the suggestion column. When a Suggested Julian date is different vis a vis the Julian date that is in the TextComments it will be flagged with the color red. Cells in the Suggestion column can be edited if the information is determined to be incorrect. When content with the content of the Suggestion column press either Cancel to exit without saving or Write Them All. Choosing Write Them All will append the contents of the Suggestion column to the Textual Comment in P4, but only if that information is not already there. In other words, if the Filename or Julian date is already in the Textual Comment, it will not be appended again. Furthermore, if the Textual Comment has an incorrect Filename or Julian date already appended to it, the program will not

be able to fix that incorrect value automatically, but will simply add the new value after the old value. Take note of the Session Name and use P4 to edit out the incorrect Text Comment value.

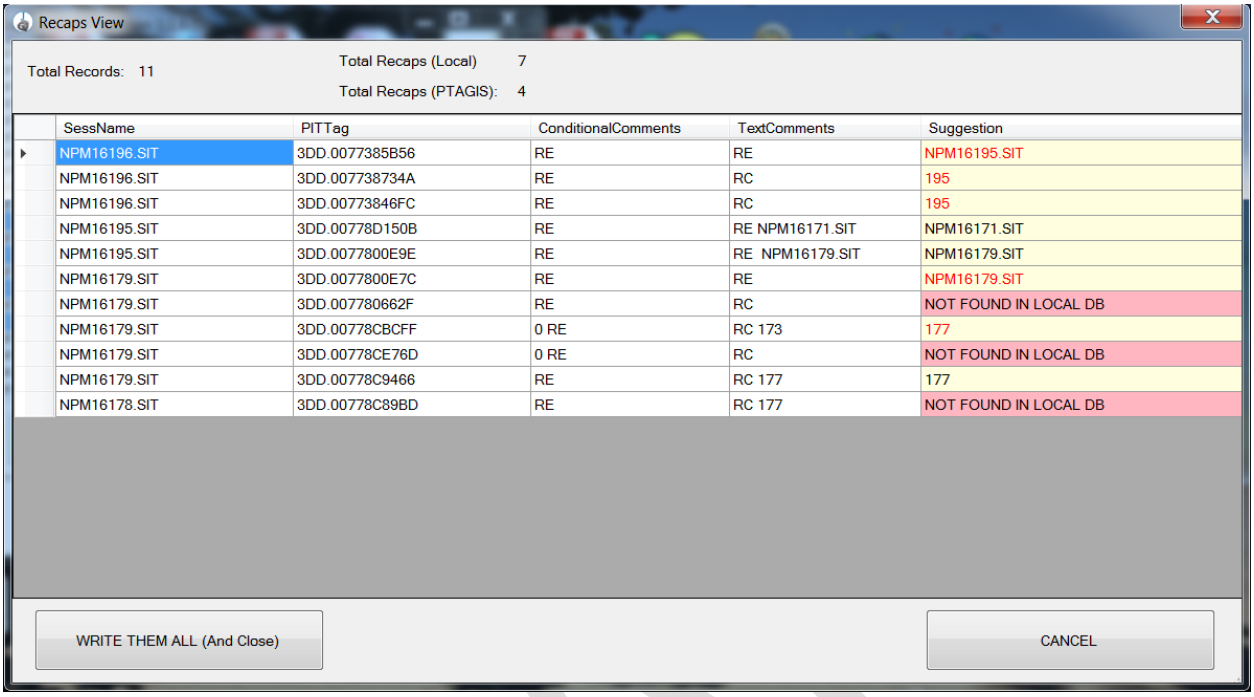


Figure 26. Recapture Grid showing original Session Name and Comments.

View Summary

The View Summary function can be used by taggers to check the fish totals for Sessions created each day against raw data sheets and by biologists to check totals for a given time period (Figure 27). It can also be used to obtain Operations information for reporting purposes. Days of operation are reported in the Idaho Anadromous Emigrant Monitoring annual report. One thing to note is that even though it is possible to import P3 files into P4, but the summary view will not show all of their data correctly, because some of the necessary information that was in the JTrap database no longer exists. Therefore, while the Summary View will show some information for P3 files, it won't show all the information that it will show for P4 files. That being said, View Summary will be an effective tool for current tag sessions.

Users can view a summary of one selected session or multiple sessions (e.g. for a season). The trap name listed is pulled from the selected sessions. If multiple sessions from multiple locations are selected then Multiple will be listed as the Trap Name. The Date Range and number of days in operation are listed for the sessions. Only one date will show when a single session has been selected. Date Ranges cannot be edited manually, they are reflective of selected sessions.

Of primary importance in the summary view is a grid that has one row for each species in the selected session(s). The first column is the species name, the second column is the sum

of the number of fish of that species. The rest of the columns are various conditional or text comments. Note that many of these columns will be empty. There is a checkbox located below the grid on the left that will hide or show empty columns, though any columns that have nothing but 0 values will remain. These are likely just in P3 files.

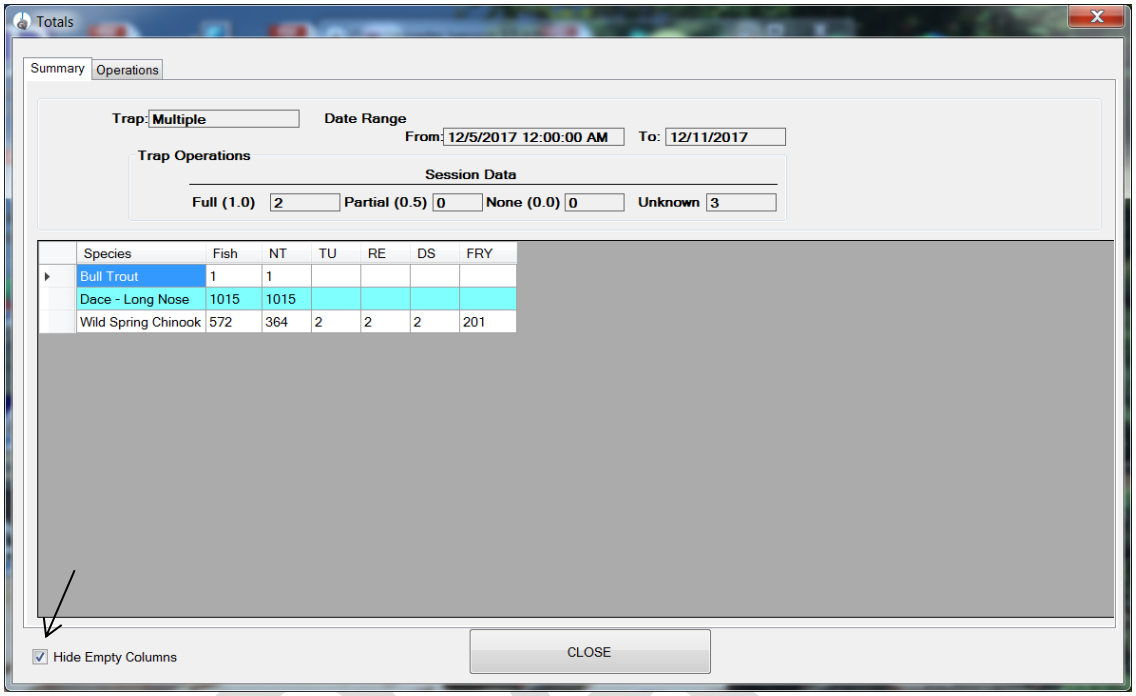


Figure 27. Fish and Operations Summary View in the Jtrap Uploader program.

Manage Brood Year

The Brood Year field for Chinook can be filled in 1) during tag sessions, 2) in Records Management, or 3) via the JTrap Uploader, whichever method the user prefers. The JTrap Uploader is also a way to effectively check brood years that are already entered in the database (Figure 28). Records Management in P4 has a Find and Replace function that only works on one Session at a time. If users want to update or check the Brood Year field in multiple sessions they will need to use the Manage Brood Year query in the Jtrap Uploader program. The Brood Year manager only works for Chinook.

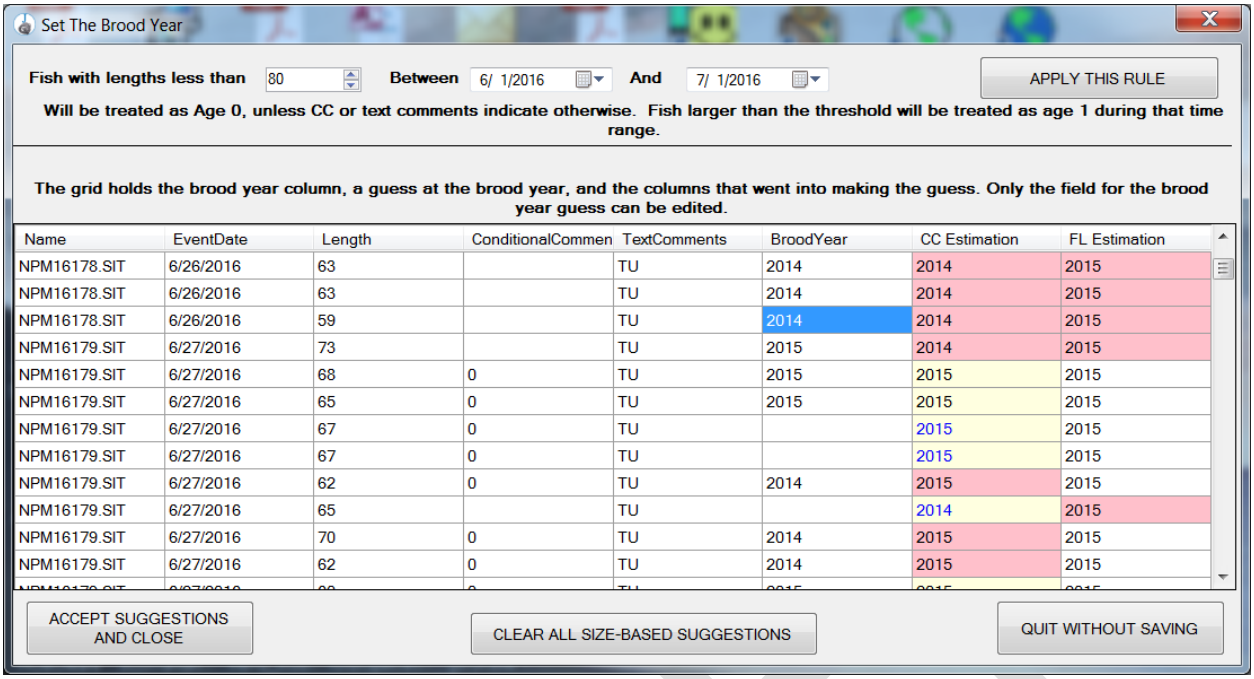


Figure 28. Manage Brood Year function in the Jtrap Uploader program.

For each Chinook record, you will see the Session Name, Date, Length, Conditional Comments, Text Comments, and Brood Year field from P4. None of these columns can be edited directly. Additionally, the column colored yellow is the CC Estimation column, which is where a brood year value is put based on the Conditional comments. The FL Estimation column estimates a brood year based on the Fork Length and Date criteria at the top of the page. To be clear, the Brood Year column shows the values that are already in the P4 database, the CC Estimation column shows the suggested values based on disposition, and the FL Estimation column shows the suggested values based on the length and dates entered at the top of the form. The values in the CC Estimation and FL Estimation columns do not reflect what is in the P4 database. Furthermore, it is the values in the CC Estimation column that will write to P4 once accepted. The values in the FL Estimation column do not write to P4.

The CC Estimation column will initially hold values that are based on the Conditional and Text Comments. This estimation is based on the dispositions in Appendix C and D. More specifically it follows several rules: 1) before 7/1 if Conditional Comment contains a 0 then the CC Estimation is the Trap year minus one year, 2) before 7/1 if the Conditional Comment does not contain a 0 then it is the Trap year minus two years, 3) after 7/1 if the Conditional Comment contains a Y or PR then it is trap year minus two, 4) after 7/1 if the Conditional Comment does not contain a Y or PR then it is the trap year minus one, and 5) at any time during the year if the Text Comment contains a FRY or NTS then it is the trap year minus one. When the estimated brood year is the same as the value in the Brood Year field then the back ground will stay yellow and the print will stay black. If there is a discrepancy between the CC Estimation field and the Brood Year field then the background will be red. If the Brood Year field is blank then the print in the CC Estimation field will be blue. There may be some cells that don't have estimation at all due to lack of data, inconsistent data, or reasonable exceptions to the rules.

At the top of the form is a means to automatically estimate the brood year based on length and date ranges. After the criteria are entered, the button Apply This Rule queries the P4 database and returns values in the FL Estimation column that meet the criteria. If length in P4 is 0 or null then it will be ignored in the FL Estimation column (blank) and not compared to the other columns. Any cell in the FL Estimation column that differs from a currently entered Brood Year or CC Estimation will be flagged with the color red for the user's attention.

The cells in the CC Estimation column can be edited and should be examined scrupulously. When Accept Suggestions And Close button is clicked, any values in the CC Estimation column will be written to the Brood Year column, overwriting the current values in the P4 database. When there are discrepancies users will determine the correct brood year and edit the CC Estimation column accordingly. It is possible, nay likely, those discrepancies between brood year values in these three columns are due to errors in the fish detail record; the conditional comment doesn't match the length, date, or Brood Year. In this case Quit Without Saving and correct the data in P4. Only Accept Suggestions when all the discrepancies are corrected and the appropriate brood year is in CC Estimation column.

The length and date criteria can be determined using scatter plots (Figure 29). When the form is opened there is a default minimum date of Jan 1 of the year of the trapping session and maximum date of June 1 of the year of the trapping session. This can be changed to any other range of dates as needed. June 1 was written as the default because the month of June is where the most frequent changes in criteria occur due fast growth of age 0 Chinook. The length and date ranges will most likely need to be narrowed down to several periods in that month. The criteria before June 1 should be fairly straight forward at most locations. Those fish with a length less than the cutoff will be set to age 0, while those fish with a length larger than the cutoff will be set to age 1. For example, the defaults for the dates are from Jan 1 to Jun 1 of the year of the session, and the default cutoff is 60mm. Therefore, if you don't change any of those defaults, then any Chinook in the session(s) trapped between Jan 1 and Jun 1 and less than 60 mm will have a brood year estimated that is the year of the session minus one. Any Chinook larger than 60 mm during that date range will have a brood year estimated that is the year of the session minus two.

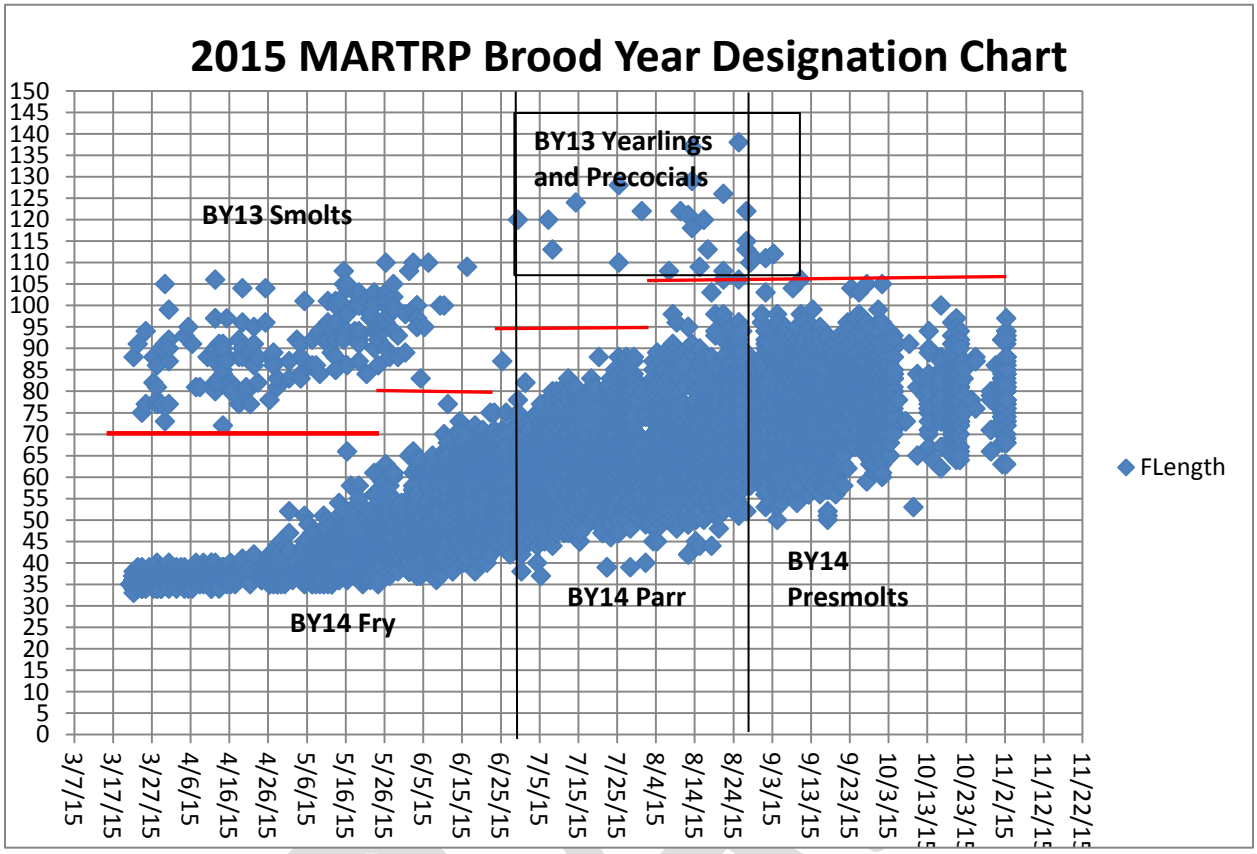


Figure 29. Scatter plot used to determine length and date criteria for Chinook salmon brood years.

Synthesizing then, Manage Brood Year can be used to set the value for all Chinook records. The estimated values are automatically calculated when the form is first opened based on Comment rules. Further estimation can be done by entering length and date criteria and Apply This Rule. Finally, values can be edited manually in the CC Estimation column. When the CC Estimation brood years are correct, clicking Accept Suggestions And Close will write all of them into the Brood Year column in the P4 database. For the timid, Quit Without Saving is the best option.

Uploading Data to IFWIS

As with the other functions of the JTrap Uploader program, tag sessions must be selected before clicking the Upload Selected button. This function uploads the data in the P4 database to the IFWIS Sql database. This will likely take a second or two per session, so it will be considerably faster than checking recaptures. Sessions that were previously uploaded and are loaded again will not cause any problems. This can be done to upload fixes to session or fish data, or by accident. Data in the IFWIS database will not be duplicated. If the data already exists in the IFWIS database, it will be updated.

If not all sessions were successfully uploaded, errors will be listed in the text box. Click on an error to get a full description (Figure 30). The upload process performs a small amount of validation on the data as it is coming in to see that the session data conforms to the expectations of the IFWIS database.

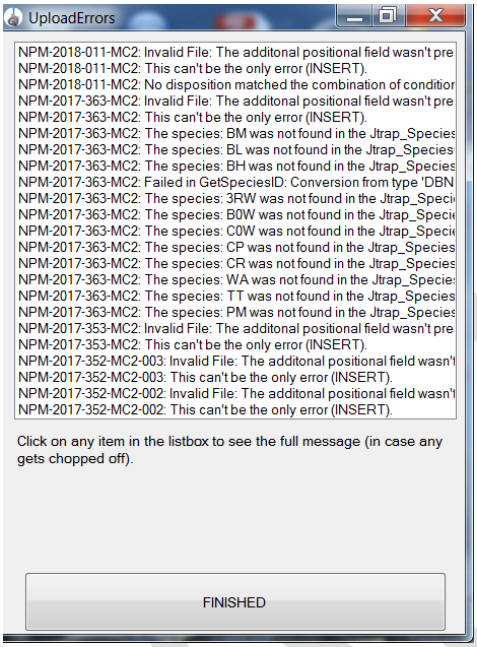


Figure 30. Upload errors.

Immediately after opening the program the session names will start being checked and updated. What this will look like is that each session will color following these rules:

1) If the session name is in SQL Server,

a) the row will get a green check mark and the background color will turn light green,

b) If the session name is not in SQL Server, the row will get a light blue background.

2) If the user then uploads a session, one of two things will happen:

a) If the session uploads successfully, it will get a green check and a green background.

b) If the session does not upload successfully, it will get a red X and a red background.

3) The next time the user opens the program, they will see the same thing, except that any sessions that did not upload successfully will now show up with the red X and red background.

Users can re-check the sessions (those that are not in SQL Server) by pressing the button for that. Double click on any session to see any errors with uploading that session, if there were any.

Accessing Juvenile Data on IFWIS

Data can be accessed by going to the IFWIS report viewer. This requires a login and password Login to IFWIS, which is usually an IDFG login. Scroll down to Fisheries Management then to Juvenile Fish Trapping. User manuals are available at the bottom of the page. This document and other trapping and tagging documents are available on this webpage for reference (Figure 31). In the column on the right side of the page are two queries, Jtrap Fish Detail and Jtrap Daily Summary.

Figure 31. The IFWIS Juvenile Data Page showing two canned queries in the right column.

The Jtrap Fish Detail query will return a report view of fish along with all their values based on the criteria you choose (Figure 32). Users can query by date range or by brood year, by trap or by species. Any field that is left blank will return all the values for that field. After selecting the desired criteria click the Search button on the right. The results can be exported to a csv file (Figure 33). Some operations data is returned with this query as well such as speed and sill depth. The Pivot button is non-functional for all three of these queries because it is illogical. Search will get the desired results.

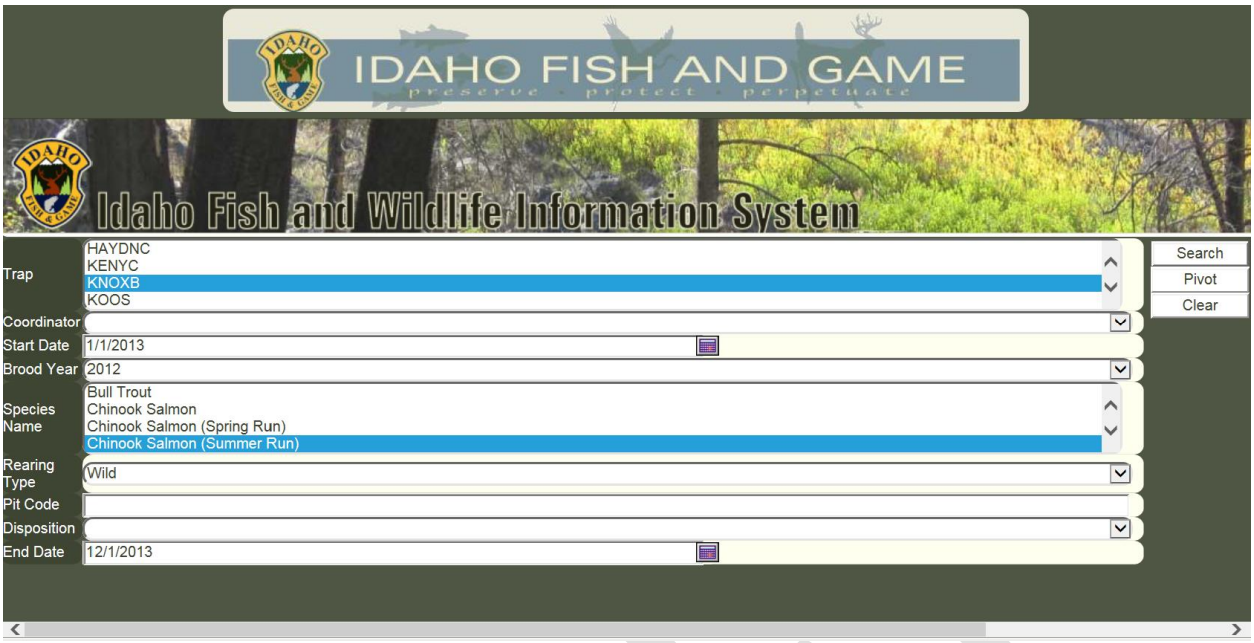


Figure 32. The Jtrap Fish Detail query on IFWIS

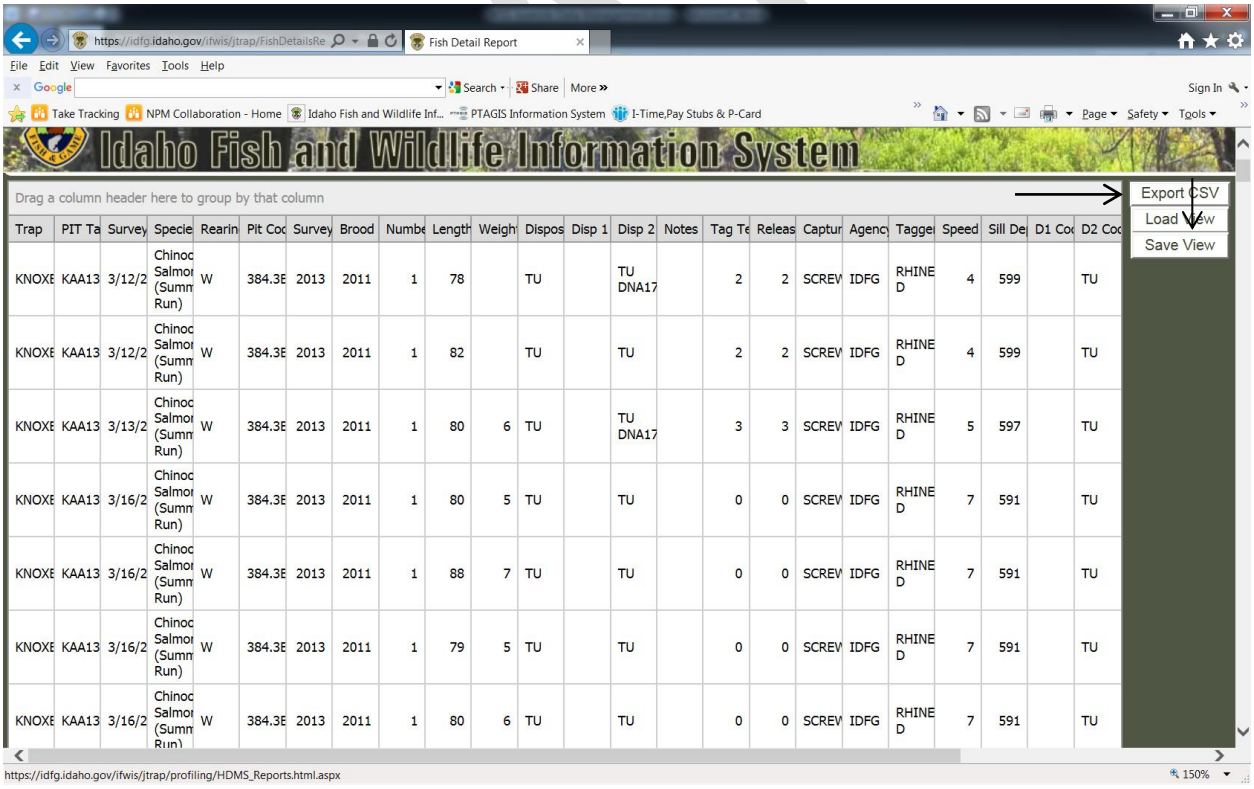


Figure 33. The Jtrap Fish Detail report viewer on IFWIS

The Jtrap Daily Sum query will provide summaries of the data by date and species and disposition; number of fish caught per day (Figure 34). Lengths are details and do not return from this query (Figure 35). These query results can also be exported to a csv. The Daily

Summary report returns all of the operations data for the trap and dates selected including Date, Survey Year, Tag Temp, Release Temp, Agency, Speed, and Sill Depth are considered operations data.

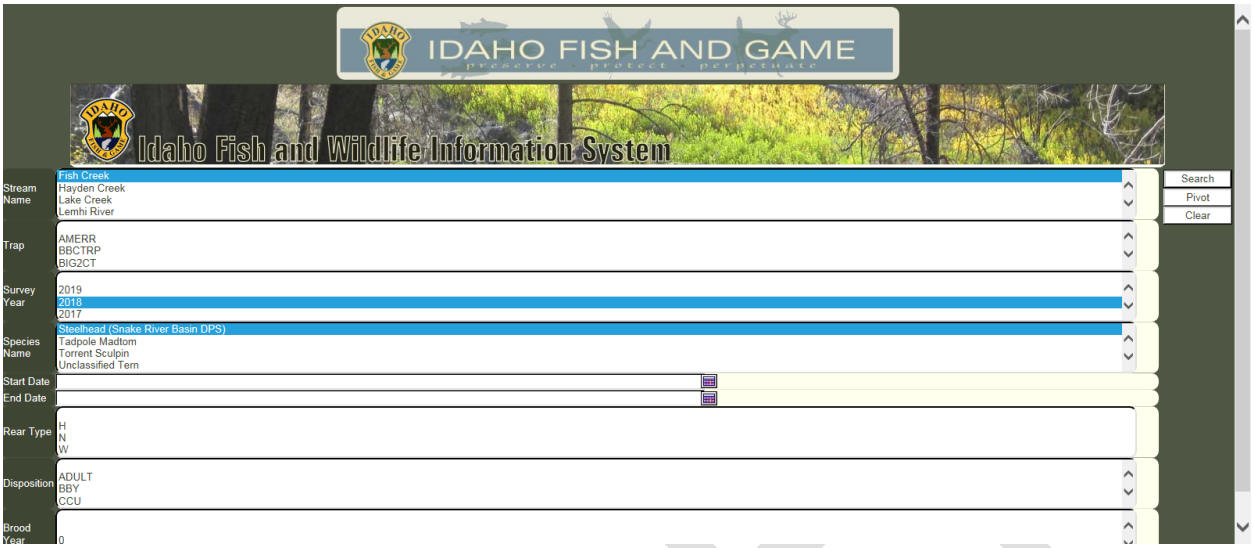
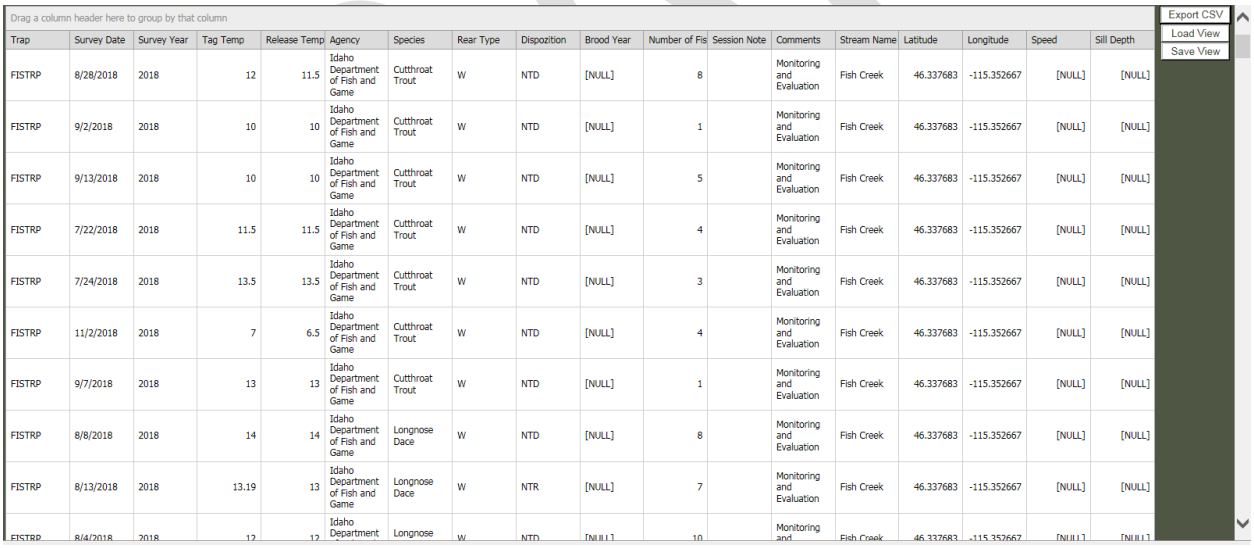


Figure 34. The Jtrap Daily Sum query on IFWIS



Trap	Survey Date	Survey Year	Tag Temp	Release Temp	Agency	Species	Rear Type	Dispozition	Brood Year	Number of Fis	Session Note	Comments	Stream Name	Latitude	Longitude	Speed	Sill Depth
FISTRP	8/28/2018	2018	12	11.5	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	8		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	9/2/2018	2018	10	10	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	1		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	9/13/2018	2018	10	10	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	5		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	7/22/2018	2018	11.5	11.5	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	4		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	7/24/2018	2018	13.5	13.5	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	3		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	11/2/2018	2018	7	6.5	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	4		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	9/7/2018	2018	13	13	Idaho Department of Fish and Game	Cutthroat Trout	W	NTD	[NULL]	1		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	8/8/2018	2018	14	14	Idaho Department of Fish and Game	Longnose Dace	W	NTD	[NULL]	8		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	8/13/2018	2018	13.19	13	Idaho Department of Fish and Game	Longnose Dace	W	NTR	[NULL]	7		Monitoring and Evaluation	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]
FISTRP	8/4/2018	2018	12	12	Idaho Department	Longnose	W	NTD	[NULL]	10		Monitoring and	Fish Creek	46.337683	-115.352667	[NULL]	[NULL]

Figure 35. The Jtrap Daily Sum report viewer on IFWIS.

These report views should be the format needed to run migration estimates and survivals. If there are other views users would like to see, contact the Nampa Research WSS Data Coordinator. Currently, Bruce.barnett@idfg.idaho.gov

Appendix A. Species Run Rear Codes in P4. Codes can be filtered in the Data Entry Form.

Code	Description	Type
AM	Amphibian species	User Defined
BH	Bullhead	User Defined
BK	Killifish, Banded	User Defined
BL	Bluegill and Pumpkinseed	User Defined
BM	Bass, Large Mouth	User Defined
BU	Sucker - Bridgelip	User Defined
CM	Chiselmouth	User Defined
CP	Carp	User Defined
CR	Crappie species	User Defined
DA	Dace species	User Defined
KO	Kokanee	User Defined
LD	Dace - Long Nose	User Defined
LU	Sucker - Largescale	User Defined
LW	Whitefish - Lake	User Defined
MS	Sculpin - Mottled	User Defined
MU	Sucker - Mountain	User Defined
NU	Sucker - Longnose	User Defined
OS	Onchorhynchus (species unknown)	User Defined
PE	Perch	User Defined
PM	Peamouth	User Defined
RS	Shiner, Redside	User Defined
SC	Sculpin species	User Defined
SD	Dace - Speckled	User Defined
SK	Stickleback	User Defined
SP	Siberian Prawn	User Defined
SR	Sand Roller	User Defined
SS	Sucker species	User Defined
SU	Sucker - Other	User Defined
TS	Sculpin - Torrent	User Defined
TT	Tench	User Defined
WA	Warmouth	User Defined
00U	Unknown (fish not observed)	PTAGIS
05U	Unknown	PTAGIS
11H	Hat. Spring Chinook	PTAGIS
11U	Spring Chinook (unknown r/t)	PTAGIS
11W	Wild Spring Chinook	PTAGIS
12H	Hat. Summer Chinook	PTAGIS
12U	Summer Chinook (unknown r/t)	PTAGIS
12W	Wild Summer Chinook	PTAGIS
13H	Hat. Fall Chinook	PTAGIS
13U	Fall Chinook (unknown r/t)	PTAGIS

Appendix A. Continued.

Code	Description	Type
13W	Wild Fall Chinook	PTAGIS
15H	Hat. Chinook (unknown run)	PTAGIS
15U	Chinook (unknown run & r/t)	PTAGIS
15W	Wild Chinook (unknown run)	PTAGIS
25H	Hat. Coho	PTAGIS
25U	Coho (unknown r/t)	PTAGIS
25W	Wild Coho	PTAGIS
30H	Hat. O. mykiss (unknown migratory status)	PTAGIS
30U	O. mykiss (unknown migratory/rearing status)	PTAGIS
30W	Wild O. mykiss (unknown migratory status)	PTAGIS
32H	Hat. Summer Steelhead	PTAGIS
32U	Summer Steelhead (unknown r/t)	PTAGIS
32W	Wild Summer Steelhead	PTAGIS
34H	Hat. Winter Steelhead	PTAGIS
34W	Wild Winter Steelhead	PTAGIS
35H	Hat. Steelhead (unknown run)	PTAGIS
35U	Steelhead (unknown run & r/t)	PTAGIS
35W	Wild Steelhead (unknown run)	PTAGIS
3RH	Hat. Rainbow Trout	PTAGIS
3RU	Rainbow Trout (unknown r/t)	PTAGIS
3RW	Wild Rainbow Trout	PTAGIS
42H	Hat. Summer Sockeye	PTAGIS
42U	Summer Sockeye (unknown r/t)	PTAGIS
42W	Wild Summer Sockeye	PTAGIS
45H	Hat. Sockeye (unknown run)	PTAGIS
45U	Sockeye (unknown run & r/t)	PTAGIS
45W	Wild Sockeye (unknown run)	PTAGIS
52H	Hat. Summer Chum	PTAGIS
52U	Summer Chum (unknown r/t)	PTAGIS
52W	Wild Summer Chum	PTAGIS
53H	Hat. Fall Chum	PTAGIS
53U	Fall Chum (unknown r/t)	PTAGIS
53W	Wild Fall Chum	PTAGIS
55H	Hat. Chum (unknown run)	PTAGIS
55U	Chum (unknown run & r/t)	PTAGIS
55W	Wild Chum (unknown run)	PTAGIS
65W	Wild Pink	PTAGIS
7RW	Bull Trout	PTAGIS
85H	Hat. Coastal Cutthroat	PTAGIS
85U	Coastal Cutthroat (unknown r/t)	PTAGIS
85W	Wild Coastal Cutthroat	PTAGIS
8RW	Wild Resident Cutthroat	PTAGIS

Appendix A. Continued.

Code	Description	Type
90U	Other	PTAGIS
A0W	Pacific Lamprey	PTAGIS
B0H	Hat. White Sturgeon	PTAGIS
B0W	White Sturgeon	PTAGIS
C0W	Green Sturgeon	PTAGIS
D0W	Northern Pikeminnow	PTAGIS
ERU	Brook Trout	PTAGIS
F0W	American Shad	PTAGIS
G0W	Mountain Whitefish	PTAGIS
H0W	Walleye	PTAGIS
I0W	Channel Catfish	PTAGIS
J0W	Smallmouth Bass	PTAGIS
K0W	Western Brook Lamprey	PTAGIS
L0W	Wild Lamprey (species unknown)	PTAGIS

Appendix B. MRR Site codes and File UDFs used at Idaho Fish and Game screw traps.

Location	MRR Site Code	File UDF
Potlatch River	POTR	PTR
Potlatch River East Fork	POTREF	EFP
Big Bear Creek	BIGBEC	BCT
Crooked River	CROTRP	CRT
Lochsa River	LOCTRP	LRT
Fish Creek	FISTRP	FT1
Snake River	SNKTRP	SNK
Salmon River	SALTRP	SAL
Rapid River	RPDTRP	RT1
South Fork Salmon River	SFSRKT	SFK
Big Creek	BIG2CT	BIG
Marsh Creek	MARTR2	MC2
North Fork Salmon River	NFSTRP	NFS
Lemhi River Lower	LLRTP	LMR
Lemhi River Upper	LEMTRP	LRW
Hayden Creek	HDNTRP	HYD
Pahsimeroi River	PAHTRP	PRT
Upper Salmon River	SAWTRP	SIT

Appendix C. Standard Dispositions to be used in P4.

Disposition	Event Type	Conditional Comment[a]	Textual Comment[b]	IFWIS_Sql Disposition Acronym
Tagged and released upstream	Mark		TU	TU
Tagged and released downstream	Mark		TD	TD
Recapture, efficiency	Recapture	RE	RC	RE RC
Recapture, other	Recapture	RE	RE	RE RE
Recapture, downstream	Recapture	RE	DS	RE DS
Recapture, Bismark Brown	Tally	RE	BBY	RE BY
Marked, Bismark Brown	Tally		BBY	BBY
Fry	Tally		FRY	FRY
Not tagged, subtaggable	Tally		NTS	NTS
Not tagged, taggable	Tally		NTT[c]	NTT
Not tagged	Tally		NT[c]	NT
Lower caudal lobe clip	Tally	CL	NT(_)[c]	CL
Upper caudal lobe clip	Tally	CU	NT(_)	CU
Right ventral fin clip	Tally	RV	NT(_)	RV
Left ventral fin clip	Tally	LV	NT(_)	LV
Recapture, lower caudal clip	Tally	RE CL	NT(_)	RE CL
Recapture, upper caudal clip	Tally	RE CU	NT(_)	RE CU
Recapture, right ventral clip	Tally	RE RV	NT(_)	RE RV
Recapture, left ventral clip	Tally	RE LV	NT(_)	RE LV
Precocious	T or M or R	PR	(ANY)	PR (ANY)
Yearling (Possible age one)	T or M or R	Y	(ANY)	Y (ANY)
Mortality	T or M or R	M	RC, RE, TG, TR	MRE,MRC,MTG,MTR
Unknown	T or M or R			UNK

[a] Conditional Comment will contain a 0 for young of the year Chinook Salmon in addition to the Comment listed in the Spring trapping period.

[b] Each Disposition Code used in the Text Comments must be capitalized and followed by a space before additional text is added or the JTrap Uploader Program will not recognize it.

[C] NT(_) = NT or NTT or NTS. NT should be used for Chinook smolts in the Spring and NTT or NTS for age 0 Chinook throughout the year in order to distinguish Brood Year without lengths.

Appendix D. Brood Year Protocols regarding the use of Disposition Codes to associate Chinook with a Brood Year. This protocol is using the calendar year 2018 as an example and should be adjusted annually.

Spring Trapping (Jan 1 – June 30) - During this period, most taggable size Chinook are assumed to be smolts (BY2016) unless otherwise designated.

1. Brood Year 2016 Chinook
   a. Smolts that are PIT tagged are assigned a TU, TD, RC, RE, or DS string in the Textual Comment field.

   b. Smolts that are not PIT tagged are assigned an NT in the Text Comment. They are assumed to be taggable size so NTT is not necessary. NTT is used for BY17. If there is not a length then this is the only way to determine Brood Year. As a good rule of thumb, smolts that are not tagged should have a length taken.

2. Brood Year 2017 Chinook
   a. All age 0 Chinook are assigned a 0 in the Conditional Comment.

   b. Parr/presmolts that are PIT tagged in this period are assigned a TU, TD, RE, RC, or DS in the Textual comment field.

   c. Fry/Parr that are not tagged are assigned FRY, NTS, NTT, or BBY in the Text Comment. It is recommended that any taggable size parr and any stained fry have a length associated with them, within reason. All Fry/Subtaggables should have at least a subsample of lengths.

Summer/Fall Trapping (July 1 – Dec 31) – During this period most Chinook captured are assumed to be fry/parr/presmolt unless otherwise designated (BY2017).

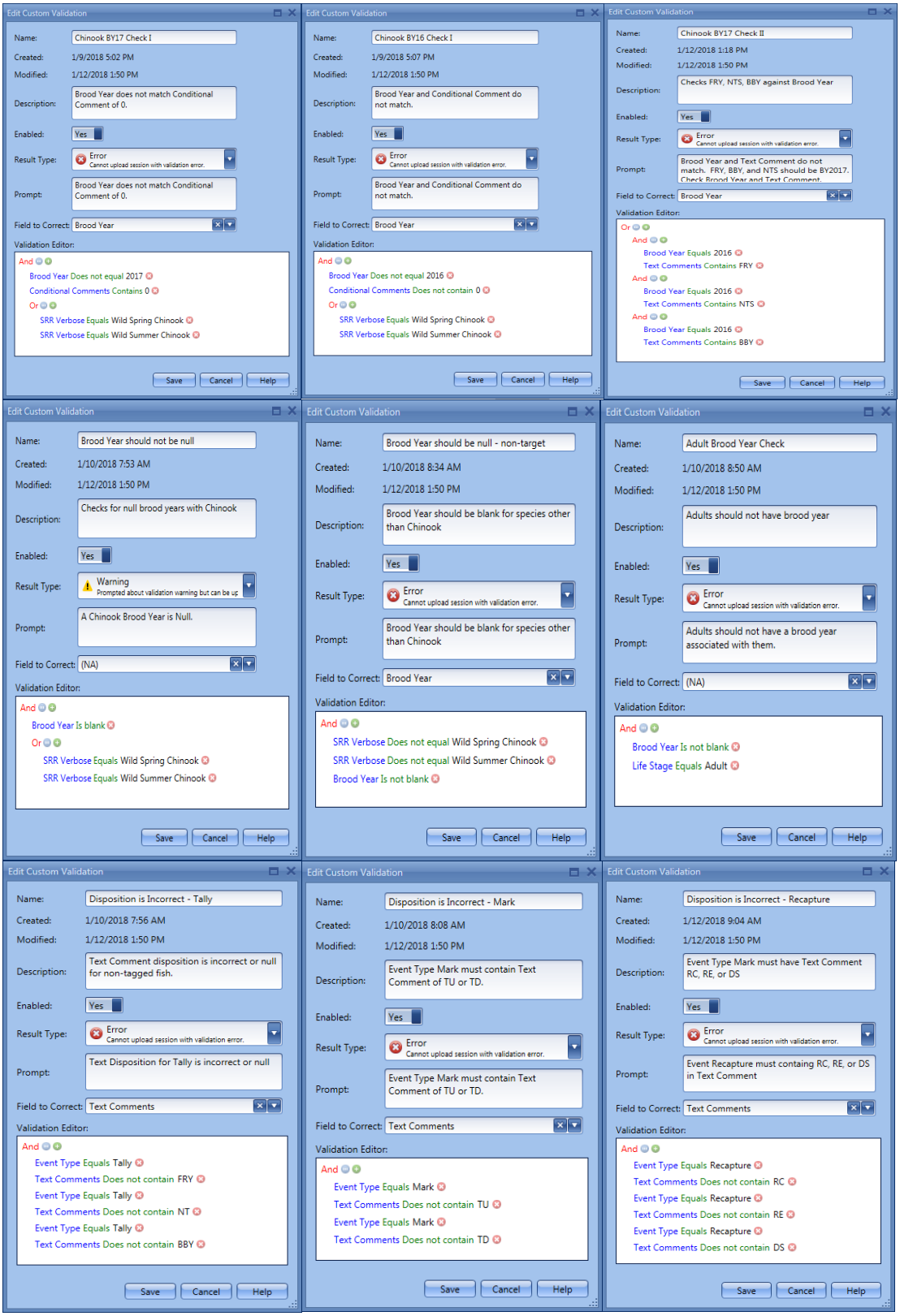
1. Brood Year 2017 Chinook
   a. Parr/presmolts that are PIT tagged in this period are assigned TU, TD, RE, RC, or DS in the Textual comment field.

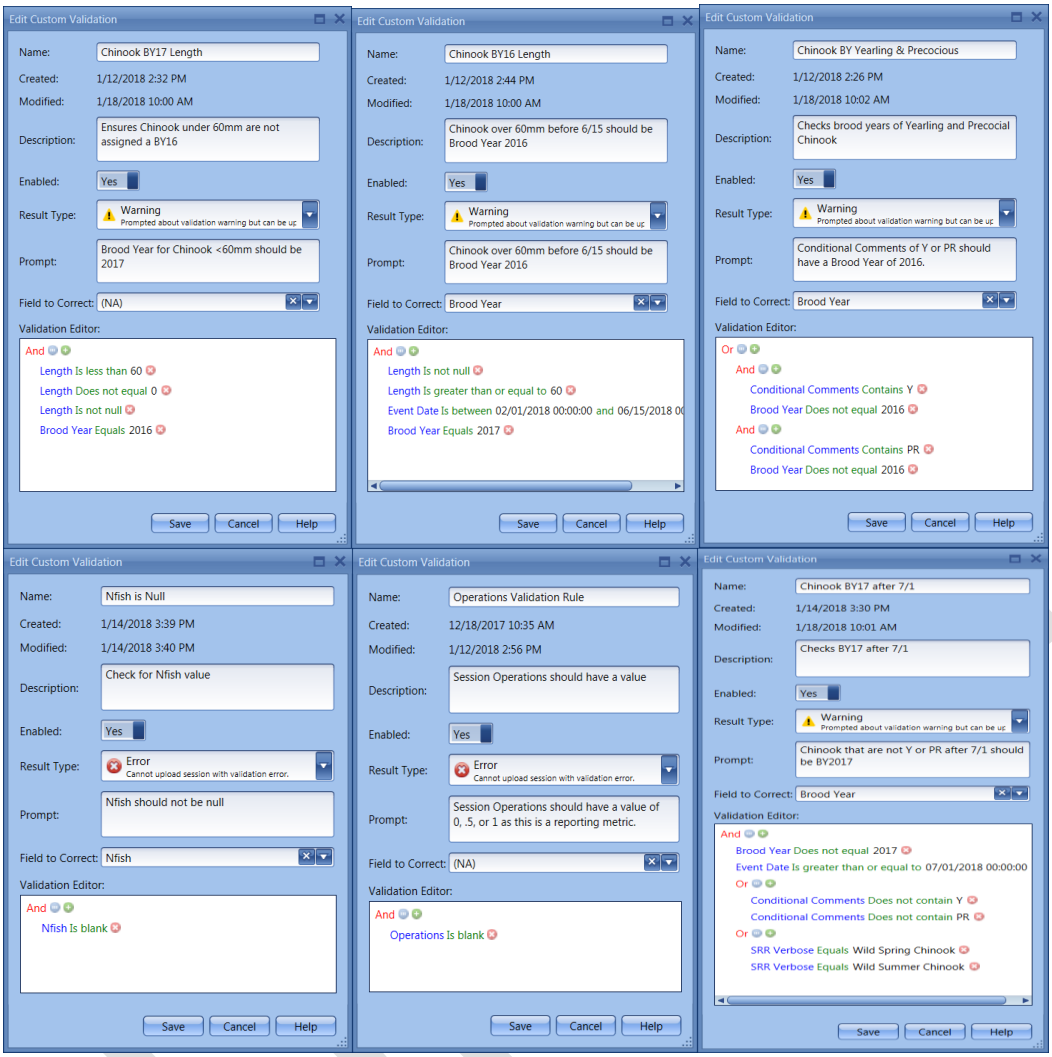
   b. Parr/presmolts that are not tagged are assigned FRY, NTS, NTT, or BBY in the Text Comment.

1. Brood Year 2016 Chinook
   a. Yearlings/precocious Chinook that are pit tagged will be assigned a “Y” or “PR” in the Conditional comment and TU, TD, RE, RC, or DS in the Text comment.

   b. Yearlings/precocious Chinook that are not tagged will be assigned a “Y” or “PR” in the Conditional comment and an NT in the Text Comment.

Appendix E. Custom Validation Rules as part of the WSS Configuration.




Edit Custom Validation
Name: Chinook BY17 Length
Created: 1/12/2018 2:32 PM
Modified: 1/18/2018 10:00 AM
Description: Ensures Chinook under 60mm are not assigned a BY16
Enabled: Yes
Result Type: Warning
Prompted about validation warning but can be ug
Prompt: Brood Year for Chinook <60mm should be 2017
Field to Correct: (NA)
Validation Editor:
And
Length Is less than 60
Length Does not equal 0
Length Is not null
Brood Year Equals 2016
Save
Cancel
Help
Edit Custom Validation
Name: Chinook BY16 Length
Created: 1/12/2018 2:44 PM
Modified: 1/18/2018 10:00 AM
Description: Chinook over 60mm before 6/15 should be Brood Year 2016
Enabled: Yes
Result Type: Warning
Prompted about validation warning but can be ug
Prompt: Chinook over 60mm before 6/15 should be Brood Year 2016
Field to Correct: Brood Year
Validation Editor:
And
Length Is not null
Length Is greater than or equal to 60
Event Date Is between 02/01/2018 00:00:00 and 06/15/2018 0
Brood Year Equals 2017
Save
Cancel
Help
Edit Custom Validation
Name: Chinook BY Yearling & Precocious
Created: 1/12/2018 2:26 PM
Modified: 1/18/2018 10:02 AM
Description: Checks brood years of Yearling and Precocial Chinook
Enabled: Yes
Result Type: Warning
Prompted about validation warning but can be ug
Prompt: Conditional Comments of Y or PR should have a Brood Year of 2016.
Field to Correct: Brood Year
Validation Editor:
Or
And
Conditional Comments Contains Y
Brood Year Does not equal 2016
And
Conditional Comments Contains PR
Brood Year Does not equal 2016
Save
Cancel
Help
Edit Custom Validation
Name: Nfish is Null
Created: 1/14/2018 3:39 PM
Modified: 1/14/2018 3:40 PM
Description: Check for Nfish value
Enabled: Yes
Result Type: Error
Cannot upload session with validation error.
Prompt: Nfish should not be null
Field to Correct: Nfish
Validation Editor:
And
Nfish Is blank
Save
Cancel
Help
Edit Custom Validation
Name: Operations Validation Rule
Created: 12/18/2017 10:35 AM
Modified: 1/12/2018 2:56 PM
Description: Session Operations should have a value
Enabled: Yes
Result Type: Error
Cannot upload session with validation error.
Prompt: Session Operations should have a value of 0, .5, or 1 as this is a reporting metric.
Field to Correct: (NA)
Validation Editor:
And
Operations Is blank
Save
Cancel
Help
Edit Custom Validation
Name: Chinook BY17 after 7/1
Created: 1/14/2018 3:30 PM
Modified: 1/18/2018 10:01 AM
Description: Checks BY17 after 7/1
Enabled: Yes
Result Type: Warning
Prompted about validation warning but can be ug
Prompt: Chinook that are not Y or PR after 7/1 should be BY2017
Field to Correct: Brood Year
Validation Editor:
And
Brood Year Does not equal 2017
Event Date Is greater than or equal to 07/01/2018 00:00:00
Or
Conditional Comments Does not contain Y
Conditional Comments Does not contain PR
Or
SRR Verbose Equals Wild Spring Chinook
SRR Verbose Equals Wild Summer Chinook
Save
Cancel
Help