



# FISH PASSAGE CENTER

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## MEMORANDUM

TO: Charles Morrill, WDFW  
Pat Kinery, ODFW  
Rick Martinson, PSMFC  
FPAC

FROM: Michele DeHart

DATE: March 31, 2009

RE: Responses to list of concerns regarding FPC32.net data entry program

The following is the response to your list of comments provided to the FPC on March 26, 2008. Most of the issues raised by the WDFW are either being addressed or had already been addressed prior to receiving the list. Some of the suggested modifications are based upon lack of familiarity with the new data entry program. Additional experience with the program will likely resolve these concerns. As I advised at that meeting, at this point in time, modifications to the data entry program will be limited to:

- Modifying reports to make validation easier, and
- Modifications to “tools” used to convert data from the FPC standard database into formats compatible with each sites on-site historic databases.
- Fixes of identified bugs

Following is our point by point response to each of your comments provided to us on March 26. Each WDFW comment is in italics, bold followed by the FPC response.

***1) If the power goes out to the touch screen during the sample, is the information recorded up to the point of power outage (exported) or saved somewhere so that the data can be retrieved when the computer reboots? The current window does not let you open a batch.***

Yes, the data will be saved if the power is lost. As each record (a record represents an individual fish examined for condition) is entered in the touch screen and saved the data are written to a data table. When the power is restored the data should all be available up to the last record saved. It is possible (but very unlikely) that the data table could be corrupted if power went out at the precise instant that the data in the table were being written to the hard drive. Again, this type of loss is very unlikely. However, the use of a UPS power back-up system would make this data loss even less likely, and we recommend such a system be installed at sites where there have been periodic power loss in the juvenile monitoring facility that might jeopardize data collection using the touch screen.

Action required: No change to FPC32.net; site(s) should add backup power if power loss is concern.

***2) Unclipped Chinook and coho with a cwt are identified on the touch screen as CH1, cwt, CH0, cwt; CO, cwt: in the FPC Program they are listed as HCH1, CWT; HCH0,CWT; and HCO, CWT. Since hatchery fish by definition have a fin clip this terminology implies these unclipped coded wire tagged fish have a fin clip. The terminology for unclipped steelhead with an eroded fin is recorded as ST, EF on the touch screen and in the FPC program as WST, H which correctly denotes the Steelhead did not have a fin clip (unclipped) but was identified as a Hatchery origin steelhead because of the Eroded Fin. The unclipped chinook and coho need to be handled in the same manner for accurate data & validation.***

We recommend that WDFW provide detailed metadata for understanding the structure of their onsite databases. To clarify, this is a request by WDFW to have data from FPC32.net downloaded into their on-site database. In the process of converting SMP data for the WDFW database, it is necessary to recode the data to match the on-site historic database codes. The FPC data entry program stores data on individual fish such as species (e.g. CH1, CH0, CO) as well as information on clipped fins and the presence or absence of coded wire tags (CWT). The FPC Program you refer to is a tool we have developed to convert SMP data into a format that will be compatible with your historic spreadsheet database. We are working with the site to clarify how the data should be converted for your database. This process is ongoing. On March 26 we provided a list of conversion codes to WDFW to show how we are presently converting this data. We have requested that you review those conversion codes and provide edits so we can determine how this should be done. We recommend that the site develop metadata that describes the codes used in your database. Metadata would facilitate this type of data conversion.

Action required: Site(s) should provide metadata on on-site database so that we can complete the data conversion tool. We have completed a draft conversion tool, and that will be finalized as soon as metadata is complete. FPC will continue to work with WDFW to complete conversion tool.

***3) Why is the speed of the paste into Quattro Pro so slow?***

Not entirely sure what is causing this. Likely this is a computer processor speed issue. The two computers at LGR take differing amounts of time, between 15 to 45 seconds, to paste the

converted data file into their spreadsheet for processing. A faster processor may shorten the wait time on the slower computer. This paste happens once per day and shouldn't greatly affect the sites ability to get a timely transportation report out to the COE or meet other deadlines.

Action required: None.

***4) We need updated code list for all touch screen labels/identifiers. Some of the codes have changed from what we had. If we put in a comment, what are the specific codes to be used?***

This is related to the database conversion tool discussed in response to question 2 above. We will work with WDFW to develop a list of codes that can be used and which fields to use them in so that information entered into comment fields in the touch screen can be converted successfully into WDFW on-site database.

Action required: FPC will continue to work with WDFW to complete conversion tool.

***5) If we write a comment it does not show up on our output page. Where does it show up?***

This is related to the database conversion tool discussed in response to question 2 above. We will work with WDFW to develop a list of codes that can be used and which fields to use them in so that information entered into comment fields in the touch screen can be converted successfully into WDFW on-site database.

Action required: FPC will continue to work with WDFW to complete conversion tool.

***6) There is no number keypad in the brand comments section, so how does one record a brand?***

On the touch screen, the number pad is active and can be used even when the comment pop-up window is open. If a brand is encountered use the ten-key pad to enter numbers. We tested this at the site on March 26 and found that numbers could be entered in the brand comment screen using the existing number pad.

Action required: None.

***7) If the descaled by predator is pushed, a predator should be required.***

The condition data entry protocol does require a predator entered, but the touch screen does not force an entry. If the predator was entered first, and then descaling by predator button was pushed this would lead to a redundant pop-up warning that would slow data entry. The greater the number of validation routines and subsequent pop-up windows the slower the touch-screen program will become. As personnel become accustomed to the new program this issue should be resolved. We chose not to implement this recommendation.

Action required: None.

**8) With lamprey, bird and fish listed as predators, what predators would we identify under “other”?**

WDFW has specifically identified “human” predation in previous data entry. And because WDFW specifically requested that the program retain the flexibility to enter historically collected data the “other” button is there for WDFW use. It may be that WDFW may choose to continue to enter “human” as an “other” type of predator.

Action required: None.

**9) What kinds of comments in the predator comment screen do you envision us writing?**

See response to question 8 above. This was included in the program in response to a specific request from WDFW. FPC included these comment fields in response to WDFW expressed concerns to allow WDFW to gather additional data beyond that information required by the FPC/COE for condition monitoring. Since WDFW has specifically identified “human” predation in previous data entry, and because WDFW specifically requested that the program retain the flexibility to enter historically collected data the WDFW may choose to select “other” predator button and then enter “human” as another type of predator in the comment field.

Action required: None.

**10) The keypad should always default to the length and the scale should always send data to the weight cells. Can you do this.?**

See the data entry protocol to address this issue. If a weight is entered first, the scale data will populate the weight field and if length is entered second, the number pad will default to the length field. If data are not entered in this order, the “Enter Weight” button may have to be pushed to send weight information from the scale to weight field. Similarly, if length is not entered after weight, then the “Enter Length” button may have to be pushed to return the focus of the keypad data entry to the length field. If the number keypad always defaulted to the length field, brand information or other numbers could not be entered into comment fields without additional keypad pop-ups. See question 6 above. Since additional pop-ups slow down the program, we do not think adding more are useful nor needed in this case. As personnel become accustomed to the program this issue should be resolved.

Action required: None. Site(s) should give themselves time to learn the protocol and get used to the data entry sequence we recommend.

**11) On the Catch screen, there is a button for “New Batch End Day Today”, “New Batch End Day Tomorrow”, but no button for “New Batch End Day Yesterday”.**

The button was added prior to March 26.

Action required: None.

***12) Holdover fall Chinook and Lyons Ferry fall Chinook are not broken out by clip or CWT. This becomes a problem when validating them.***

FPC agreed. A new report will be produced that breaks down the holdover fall Chinook and Lyons ferry Chinook data into unclipped, cwt and clipped groupings. This report will have the same format as the daily batch tank report.

Action required: FPC will add a new report called Special Species Daily Batch Tank Report.

***13) In the sub-batch report, there is a column for sockeye fry. Does anyone else see sockeye fry?***

Rock Island sees a few sockeye fry each year. However, as part of a redesign of the Daily Batch Tank Report, sockeye fry, holdover fall Chinook, and Lyons ferry fall Chinook will be removed from the report.

Action required: FPC will remove sockeye fry from the Daily Batch Tank Report.

***14) There is no tally of numbers in the Daily Batch Tank Report.***

FPC is redesigning the Daily Batch Tank Report to include totals column on right. The redesigned Daily Batch Tank Report will also include the following rows; number bypassed, number trucked, number barged and percent descaling rows. These additional rows will make the report consistent with the layout of the Daily Summary report.

Action required: As part of Daily Batch Tank Report redesign, FPC will add total column to right side of report summing each row--which should facilitate data validation.

***15) McNary needs to be able to edit multiple lines for when we forget to enter the "A" or "B" tank.***

The program can not replace diligent attention by data collection and recording personnel. FPC has tried to structure data entry panel in catch detail screen to minimize the potential for incorporating errors into records as well as automatically carrying down repetitive entries from record to record such as Tank and sub-batch. However, if tank is entered improperly or not entered into a record, a group of records cannot be edited simultaneously. Sites will have to edit individual records. Tank is a key field in the database table and validation subroutines as well as field auto fill routines require this field. We reviewed and considered your request for "global editing". Editing the records as a group would be difficult to program with existing data validation routines. But more importantly, it would introduce a significant potential for substantial and broad scope errors with implementation of global editing. The best solution to

this issue is diligent attention to detail by the sampling personnel. As of now we ask that sites are careful to enter this data correctly, and if an error occurs edit all incorrect records individually.

Action required: Carefully follow data entry instructions. Specifically enter tank information correctly at time of data entry. If error is found in tank entries edit records individually.

***16) Descaling tally would be handy.***

When asked, WDFW couldn't clarify/remember what this question meant. Descaling tallies do exist in reports.

Action required: None. If WDFW can provide more information we can better address this.

***17) Be able to clear the tally count between A and B. FPC Staff will get rid of hatchery/wild tally and replace with tally counter for tank A and tank B based on last weeks training sessions and review.***

FPC has reformatted the tally window on the Touch Screen to show tally counts for species and clip type totals separated by tank A and tank B. It will not be necessary to clear the tally count since both tank tally counts will always be available.

Action required: None.

***18) If a fish has more than one injury both injuries do not get converted through the switch and show in Excel.***

FPC will add multiple injuries to the data conversion tool. The data conversion tool FPC is working on will convert multiple injuries into a comma delimited string of two letter codes that will then be concatenated into one data cell and outputted to the WDFW spreadsheet database. This need was identified and discussed March 26 and FPC is working on the tool at this time.

Action required: FPC will continue to work with WDFW to complete final conversion tool.

***19) Some injuries do not copy into Excel at all: Body Injury and Other diseases.***

This need was identified and discussed March 26 and FPC is working on the tool at this time. Action required: FPC will continue working with WDFW to complete final conversion tool.

***20) In the condition screen: it does organize by sequence properly. (sic...does not?)***

Data is organized by sequence and subbatch. In earlier version of program sorting was not fully implemented and available. Newer versions allow sorting of data by any column and by multiple columns so that the user can organize data as they wish.

Action required: None.

***21) Cannot use arrow keys to select a batch, must use mouse. It can be selected, but then it brings up the wrong batch. One could easily edit the wrong batch.***

We have been unable to re-create this problem. You can arrow down through a list of batches on the Catch screen. Click on the data grid to activate it. Then arrow up or down to select the row you wish to edit. When the row is highlighted, select the Edit button to make edits to the record; Once edits are complete save the record. FPC recommends deleting older batches from the Catch screen (which is not the same as deleting the xml file) to minimize confusion and improve software performance.

Action required: None.

***22) Changes to Daily Batch Tank Report.***

See questions (and responses) numbered 12, 13, 14 and 16 above. FPC and WDFW (as well as ODFW) discussed making changes to the Daily Batch Tank Report. FPC is redesigning the Daily Batch Tank Report to include totals column on right. The redesigned Daily Batch Tank Report will also include the following new rows; number bypassed, number trucked, number barged and percent descaling rows. These additional rows will make the report consistent with the layout of the Daily Summary report. A new report will also be created called Special Species Daily Tank Batch Report that will include data for holdover fall Chinook and Lyons Ferry fall Chinook broken down by unclipped, cwt and clipped groupings.

Action required: FPC will redesign Daily Batch Tank Report and add new Special Species Daily Tank Batch Report.

***23) Header information on Daily Tank Batch Report does not include Flow data.***

Header data is only included on the first page of the Daily Tank Batch Report. In an effort to save paper other pages of these reports do not and will not include the header. This will reduce the number of printed pages by half.

Action required: None.