

## **STReaMS dB Conference Call**

26 March 2015, 1 – 2 pm

Attendees: Kirstin Holfelder (CNHP), Rob Schorr (CNHP), Kevin McAbee (USFWS), Scott Durst (USFWS), Dave Speas (BoR), Travis Francis (USFWS), Koreen Zelasko (CSU Larval Fish Lab), Tom Czapla

Kirstin took us through the agenda and expectation for this webinar, which were as follows:

### *Priority list*

1. Look up values
2. Where to store sex/species
3. PIT tag formats (periods or not)
4. Development schedule: a monthly breakdown
5. Potential working groups (roles, data sensitivity)
6. Action Items (do we have federal data policy contact?)

### **Look up Values – categorical variables in the dB**

Kirstin asked what “Year class mixed” was. This value is for fish in gravel pit ponds that are planted as mixed ages (unlike single age cohorts).

### **Sex categories**

Kirstin asked if the following work: Unknown, Indeterminate, Female, Male. The group felt these were appropriate.

### **Harvest type/release type**

There was some confusion with the terms “passive” (soft release; “netted”?) and “active” (hard release) harvest. It seemed that “release” and “harvest” may be separate entities, so Kirstin decides to add both a release type and a harvest type into the dB for users.

### **Mortality type**

Should there be various categories for “mortality”? The group felt this is a valuable input and Koreen recommends that it include the typical mortality that can occur when “handling”, but also include some reference for when part of a fish was preserved, or if it was euthanized. Also, it could be found dead or predated. “Disposition” may encompass all this, but the “disposition” category is not used in the San Juan. Kirstin will use the current list of acronyms to find the mortality types mentioned.

### **Gear Types**

There was some discussion of the differences in “gear types” that may be used by Upper Colorado and San Juan and about the value of standardizing these categories. Kirstin mentioned that users will be restricted to select types of inputs. Green River does do a bit of “wetland” sampling in the shallows along the river. This may be an “encounter” type. Dave mentioned that this is an older sampling, but people may be interested in these data. Koreen asked Travis to explain what “wetland” is: it sounds like it’s a universal term for how it when a fish was encountered or released in an adjacent wetland.

## **River Side**

Everyone felt these categories (unknown, center, right, left) were appropriate.

### **Studies: User Role**

The categories here include “PI” and “Data collector”. It was clarified that in this Studies Table that PI is a manager of a field study, whereas data collector was for those doing data entry and editing.

### **Studies: Study Type**

Scott recommends including “project number” for what funded project it was (currently called “code”). Upper Basin language for this is “project number”. Does San Juan have similar data structure for how projects are sorted (“code”)? They exist, but only on scopes of work, and not recorded other than by the full name (ex. “adult survival in Upper San Juan”). Tom Chapa mentioned all the codes are available on their website, but Dave notes a word of caution that those codes go back many years and not all involve fish. Dave wonders if “project number” is necessary because it could be easily confused among the hatchery projects and field projects. It should be tied to field projects to help clarify why a fish was collected/tagged. Travis agreed that only field investigations need project numbers. Dave thinks we need to be patient with sorting out how project number should be used and not all data (White River encounters) will be tied to a specific project.

It was decided that for now we’ll stick with “project number” for field investigations and this terminology was preferred over “study”?

Koreen noted that “Name/Reaches” is pretty general, and suggested a description field to clarify what each is.

**User Role:** We returned to User Role for some clarification. This is the role of the person within a study. It was decided to change this to “Project Role”.

### **Species lists**

Everyone was satisfied with the species included but some asked to add the non-natives from the code lists because there may be future investigations that address these species.

### **Nativity – “native”, “non-native”, “invasive”**

It was decided to combine “non-native” and “invasive” and eliminate “invasive”. There was a bit of discussion about how “hybrid” should be incorporated. If any part of a hybrid is non-native then it becomes a “non-native”. The naming conventions for hybrid species is not standardized, but Kirstin will use the codes that have been established in the code sheet to make it clear what species options are available for hybrids.

### **Types of hydrological areas:** River, reach, critical habitats, lakes/reservoirs

There was some discussion about how “reach” and “critical habitat” overlap and will that cause complications, but it is unlikely to be a problem. Kevin and Tom will be providing critical habitat

descriptions to Kirstin. Kevin proposed the idea of making reaches pulldowns within a particular river. The group will provide any reach labels that they typically use, so that they can search by those. Who should develop the list of reaches? Koreen volunteered to provide “reach” definitions for Upper Basin and Scott will provide the “reach” definitions for San Juan.

### **Sampling Organizations**

The group will help define all the organizations that have been used within the historic databases and which should be incorporated into STReaMS. Travis thinks these station-specific categories are being used are appropriate. Kirstin will develop abbreviations for these and send them out for approval. The group decided to add “other” to the larger parent organizations (ex. USFWS-other) when not tied to specific station.

### **Type of sampling organizations**

This category includes “hatchery”, “university”, “agency”, “station”. These groupings work and Kirstin will send out the list of organizations.

*[Rob had to leave, so Kirstin took over note-taking]*

### **Rivers etc. (Hydro Areas)**

- Are [River, Reach, Critical Habitat, and Lakes/Reservoirs] sufficient?
  - Add a “Flood plain/Wetlands” type

### **PIT Tags**

- Are the tag types available [134 kHz, 400 kHz, Floy, Telemetry] sufficient?
  - For now, but we will move tag types to a database table so we can add to them at will
- How will we handle multiple 134 kHz tags?
  - It is a one to many, one fish may have many tags
  - The system will combine fish when possible (if multiple tags are hit in one encounter)
  - This field will be limited to the correct number of characters to prevent improper data entry when possible
- How will we view the changing tag history?
  - It’s easy to get all the encounters for a fish, no matter what tag you enter
  - We may want to view the tag that was scanned at a particular encounter
- Do we want to include the dot in the 134 khz?
  - No
    - Only 45% have a dot
    - Hatcheries don’t use the dot
    - Not a meaningful dot
- Some readers use different formats - Hexa and deca
  - Have to be converted, we can include this conversion as part of the website code

**PIA Locations and Antenna types** – the group will revisit general antenna info next month

- Meeting about downloading data with Peter Mackinnon
  - Not necessary for the whole group

## Sex & Species

- Should we store these two fields in individuals or encounters?
  - Leave it in Individuals
    - Faster, more intuitive
  - Flag that a field has changed in webpage AND on download with a revision number, so you can track it in the website

## The development schedule

- Should I send an email about the release to the group?
  - Yes, and I will include the release notes (a list of features and changes)

## Roles in the website to control user access to features

- How should we start this conversation?
  - Next month, at the meeting
  - PIs will begin thinking about their data entry process and email it to Kirstin if they can't come to the meeting
  - Kirstin will write up a more detailed proposal for roles, and include them with the meeting agenda, maybe something like:
    - Database Manager (everything), Public (the bare minimum)
    - Everything in between could be "office based" or agency based
      - Perhaps have only one login/account for the seasonal employees (and PI's will review data before it is added to the database),
      - Or just have PI's upload completed data sheets

## Public access - it is part of the open data policy (an attempt to streamline things)

- FOIA and CORA concerns might be minimized/superseded by the open data policy
- If Federal funding provided, data access is probably required
  - Privately funded work might be different
- Endangered Species information adds another level of complexity to this because of interest in protecting them from malicious users
- Dave has started to track down answers, CNHP is talking to CSU legal about it

**Database manager** – getting hired in September (hopefully), so they will be involved with the second year of database development

## The agenda for next month (April 16<sup>th</sup>):

Review general antenna data structures, lookups etc. (1:00-1:45)

- Later, a more technical follow up with Peter – a subgroup discussion of the server/antenna communications

Talk about roles (1:45 -3)

- We will be sure to call attention to the importance of PIs thinking through their process, so they can email us if they can't make the meeting
- Kirstin will write up some role options