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July 7, 2015

MEMORANDUM

TO: Fish and Wildlife Committee members

FROM: Nancy Leonard, Laura Robinson, and Patty O'Toole

SUBJECT: Update on Objectives Process

BACKGROUND:

Presenter: Staff will update the FW Committee members about the outcome of the first regional meeting for refining salmon and steelhead objectives. This update will be presented by Nancy Leonard, Laura Robinson, and Patty O'Toole.

Summary: A draft compilation of existing salmon and steelhead objectives was completed focusing on natural-origin, adult, anadromous sockeye, chinook, steelhead, coho and chum. This compilation identified (see table for [list of populations](#)):

- A total of 2732 qualitative and quantitative statements (goals and objectives) for 216 populations.
- Among the quantitative statements there were numerical values for 61 different variables ([Summary stats](#)).
- Multiple scales at which the qualitative and quantitative statements apply, including assessment units, sub-populations, populations, major population groups (MPG), ESU/DPS, sub-basin, portion of the basin (e.g. above Bonneville Dam), and basinwide.

The draft compilation of objectives was shared with the region during a regional meeting held on June 3, 2015. Approximately 40 people attended from 3 federal agencies, 1 PUD, 8 regional and coordinating entities, 2 states and 7 tribes, and other organizations (excludes Council staff, see [agenda](#) for meeting participants). This first meeting served to provide background information about the task, the Fish and Wildlife Program goals and quantitative objectives, including how these have evolved, how these are organized in the 2014 Program, how these are to be tracked with indicator graphics, and how the Public Affairs division may improve their reporting with the outcome of this process (see [agenda](#)). This overview also included a presentation by NOAA staff on their proposed Columbia Basin and Steelhead Goals process.

Meeting participants engaged in breakout sessions to explore and discuss the 2014 program qualitative goal statements and to become familiar with the database structure housing the compilation of existing salmon and steelhead goals and quantitative objectives. Meeting participants provided initial feedback on this first compilation phase and upcoming phases, and on the organization and content of a database developed to organize all of the existing objectives (see [meeting notes](#)). Shared concerns among participants included: Why are we working on this task? What is involved in phase 2 for identifying program objectives? How will program objectives be used by the Council in their decision process? Would the Council ask others to change their objectives that they have worked over many years to develop?

All meeting presentations, handouts, and database files, are posted on the Council website (see [meeting materials](#)).

Participants were asked to provide additional suggestions on the content of the database, such as missing documents and needed corrections, by July 9th, 2015 to Nancy Leonard.

With Fish and Wildlife Committee concurrence, the staff intends to revise the content of the database per the comments received and add:

- a. natural-origin salmon and steelhead objectives from additional existing final and draft documents not included in draft compilation
- b. objectives from HGMPs and HSRG documents such as escapement
- c. a glossary to define terms and acronyms

Further work by the staff could include:

- a. Add a more structured format to facilitate searching of non-numerical objectives, as well as to facilitate searching by subbasin, Hydrological Unit Code (HUC), etc.
- b. Merge similar objectives together
- c. Split apart statements with multiple objective/goals
- d. Organize objectives in a hierarchical manner such as by nesting local objectives within broader objectives

Staff suggest that it continue to coordinate with NOAA's implementation of its Columbia Basin and Steelhead Goals process. With this coordination in mind, staff suggests that the next regional meeting, perhaps in September, could focus on discussing the changes to the database and its content and exploring potential approaches for identifying program objectives during Phase 2 (e.g. sideboards, scope). This discussion about Phase 2 would both inform the Council's next step for the 2014 FW Program's objectives refinement task and NOAA's process. If the Council prefers delaying the next regional meeting, staff could move to the next topic for refining program objectives, resident fish and other anadromous fish.

Relevance: The 2014 Fish and Wildlife Program calls for the Council to collaborate with others (e.g., state and federal fish and wildlife agencies, Native American tribes, federal agencies, and independent science panels) in the Columbia River Basin to oversee a regional process to survey, collect, identify, and refine a realistic set of quantitative objectives for program focal species and their habitat related to the four broad themes and program goals. The Council identified the first step of this refinement process to focus on existing wild adult salmon and steelhead objectives.

Workplan: This task is tracked in the Fish and Wildlife division work plan under Adaptive Management, and in the Council's Annual work plan under priority #2b

Background: Phase 1 – Compilation of existing Columbia River Basin salmon and steelhead objectives

Description of Compilation Exercise

The initial step towards fulfilling the Council's request for a searchable database of existing quantitative objectives for Columbia River Basin salmon and steelhead was the review of pertinent Columbia River Basin reports/plans, as well as the objectives submitted through the 2014 Fish and Wildlife Program amendment process. Seventy-eight documents (see list of [Document](#)), authored by 29 entities (see list of [Authors](#)), were screened for objectives and goals. Plans and reports included in the review were those from state and federal fish and wildlife agencies, Native American tribes, federal agencies, and science panels. The focus of the effort was limited to objectives that are specific to wild salmon and steelhead, many existing plans were not included in this assessment; however, opportunities may exist in the future for their inclusion in other efforts that are better aligned with their respective objectives and goals.

A total of objective statements were mined for the 216 populations from the 78 documents were compiled and recorded in a manner that preserved the authors' intent. These included 2447 quantitative statements with 61 different variables and 285 qualitative statements (Table 1; for more details on the types of objectives see [Summary stats](#)). During this mining exercise a total of 46 goal statements were identified and captured as these may be informative to the process (e.g., broad sense and recovery goal statements).

The assignment of statements into quantitative or qualitative corresponded to whether authors identified objectives as qualitative or quantitative; however, authors occasionally grouped qualitative and quantitative objectives into a general category identified as "objectives". For these general statements, if a benchmark and timeframe existed, these were categorized as quantitative and the remaining objectives were placed in the qualitative category. The only deviation from this approach is related to NOAA's use of "goal" relative to recovery metrics. Since many of the authors described the NOAA metrics as objectives, NOAA's goals were assigned to the quantitative objectives category to potentially reduce confusion and simplify side-by-side comparisons. This categorization was sometimes subjected due to the large gradation of the statements and will benefit from verification from the authors and others in the region.

The task to mine and compile objectives did not include a directive to refine the content, such as organizing similar statements and variables to reduce redundancies. Subsequently, the 61 variables for the 2447 quantitative objectives likely represent an inflated number. A dialogue among the authors of the plans should be facilitated to evaluate whether the similar variables and objective are comparable and if they should be grouped accordingly.

Table 1. Columbia River Basin salmon and steelhead objectives and goals compiled from 78 reports and plans. Several of the objectives may be similar to others, and were kept as separate entries at this time to honor the original author’s and document’s product.

	Count
Objectives	
Quantitative Total	2447
<i>Steelhead</i>	967
<i>Chinook</i>	884
<i>Coho</i>	318
<i>Chum</i>	236
<i>Sockeye</i>	42
Qualitative Total	285
Goals¹ Statements Total	46
<i>Overall Goals (General)</i>	38
<i>Broad sense</i>	5
<i>Recovery</i>	3

¹ These include NOAA recovery goals which were categorized under objectives in the original document to align with other reports and facilitate side-by-side comparisons within the database.

Description of the Salmon and Steelhead Objectives Database Structure

Compiled objectives were archived in a searchable database that was developed using Microsoft Access 2010 (Figure 1; access database files available [here](#)).

The searchable database was developed to accommodate various “paths” that users may use to view salmon and steelhead objectives. Although numerous pathways and forms have been developed, users of the searchable database may prefer that the pathways and forms be modified to better accommodate their individual or group needs. A survey of the users should be considered to determine if additional forms and pathways need to be developed.

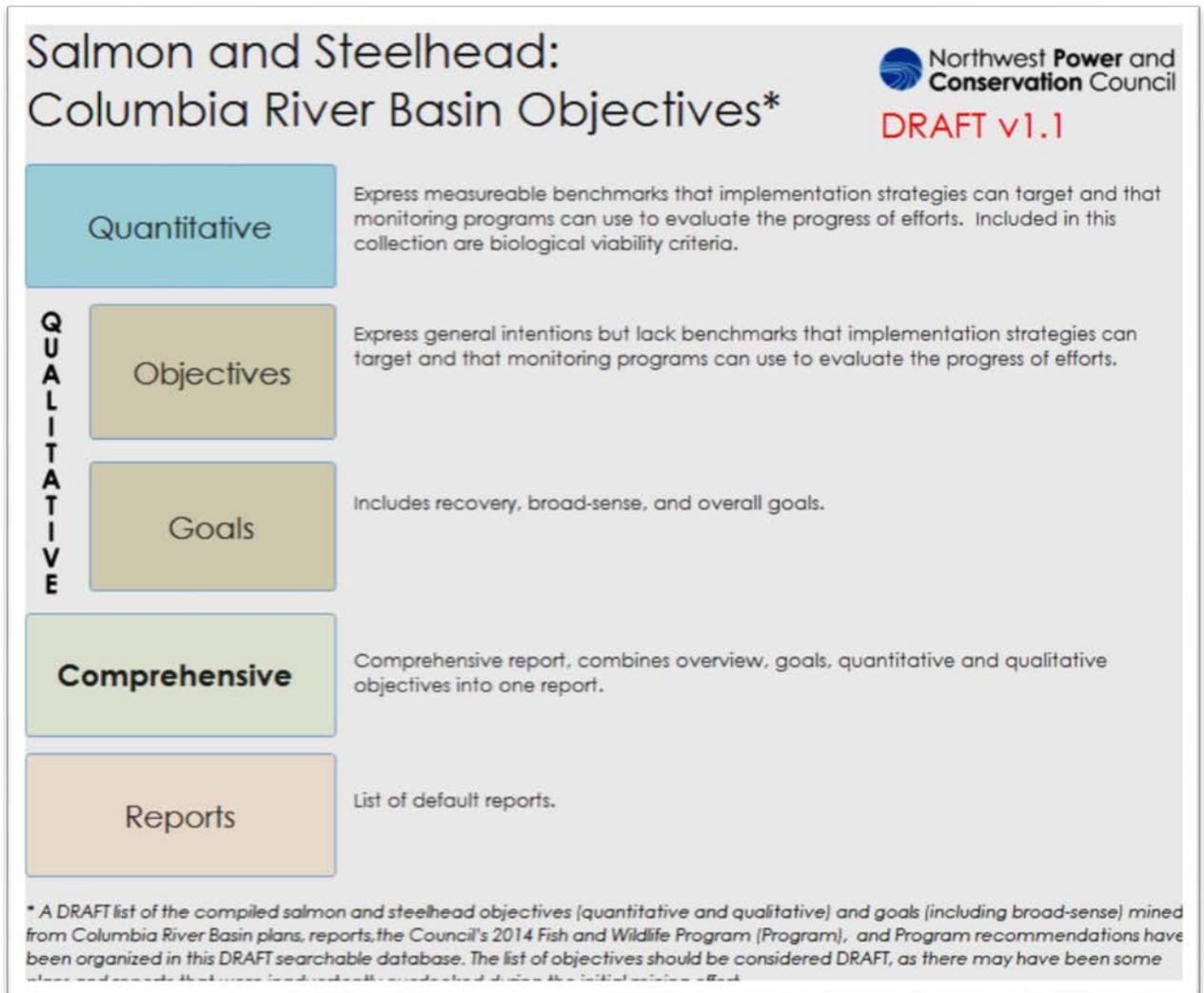


Figure 1: Homepage of the salmon and steelhead objectives database.

The Access database contains the following forms that assist the user while searching for objectives:

1. *Home* – Provides users with five options to search and view objectives: 1) quantitative, 2) qualitative, 3) goals, and 4) comprehensive report.
2. *Quantitative* – Allows the users to search and view quantitative objectives in the database. The users are provided options to search quantitative objectives by “species”, “documents”, or “authors”. This search form opens the “quantitative” report that is based on the user selection.
3. *Qualitative* – Users can search and view qualitative objectives in the database. The users are provided options to search qualitative objectives by “documents” or “authors”. This search form opens the “qualitative” report that is based on the user selection.

4. *Goals* – Allows the users to search for goals in the database. Users are provided options to search goals by “documents” or “authors”. This search form opens the “qualitative” report that is based on the user selection.
5. *Comprehensive* – Users can search the objectives database and view a comprehensive report. This comprehensive report combines all quantitative and qualitative objectives and goals into one report. This report also includes a document overview.
6. *Reports* – Provides a list of “canned” reports.

Considerations to Improve the Compilation of Objectives

- a. Revise content of the draft salmon and steelhead objective database per comments received, such as adding
 - natural-origin salmon and steelhead objectives from additional existing final and draft documents not included in draft compilation
 - salmon and steelhead hatchery objectives such as escapement from HGMPs and HSRG documents
 - a glossary to define terms and acronyms
 - a. Provide a more structured format for the qualitative statements to facilitate searching by species or other grouping.
- b. Provide an additional organization scheme to the database content that groups objectives by subbasin and/or Hydrological Unit Code (HUC)
- c. Convert database to a web-environment to allow using general word search tools and make it accessible on smart phones and tablets.
- d. Merge similar objectives together and seek public input
- e. Split out statements with multiple objective/goals
- f. Organize objectives in a hierarchical manner such as by nesting local objectives within broader objectives, e.g., assessment unit objectives being nested within population objectives.
- g. Additional suggestions are in the [meeting notes](#) and are being received by staff through email correspondence.

More Info: 2014 Fish and Wildlife Program, Refining program goals and quantitative objectives section. http://www.nwcouncil.org/fw/program/2014-12/program/partthree_vision_foundation_goals_objectives_strategies/iii_goals_objectives/a_goals_objectives/1_refining_goals_objectives/