SAFMC Citizen Science Program Evaluation: Thoughts & Next Steps Rick Bonney 11/14/2019

The SAFMC Citizen Science Program (CSP) is two years old, and now is a good opportunity to see if the program is on the road to success. Answering that question requires program evaluation, which is not like rocket science. It's much harder.

The evaluation process begins with determining the direction in which a program is desired to go. Remember Alice's Adventures in Wonderland? Alice says, "Would you tell me, please, which way to go from here?" And the Cat replies "That depends on where you want to get to."

The CSP has clearly articulated goals, which were appropriately determined at the start of the program. These are to 1) design, implement, and sustain a program framework to guide the development of projects that support fishery management decision making; 2) facilitate development of individual projects to address specific Council research priorities; 3) ensure that data collected are accessible, robust, and fit for purpose; 4) build partnerships that foster mutual learning, collaboration, and programmatic support; and 5) inspire active management through communication about purposes, processes, and impacts.

These are very appropriate for the program. But like most goals they are, by definition, lofty and visionary. Therefore, the next step in measuring whether they are being achieved—and this step should actually be taken at the beginning of a program design—is to develop objectives that are specific and measurable steps or actions that can be taken to achieve those goals.

The CSP has done this, but somewhat by default. All of the tasks that have been undertaken so far are based on program objectives, but not all objectives have been clearly articulated. An example objective that supports goals 4 and 5, for example, is to "engage new stakeholders who are not typically involved in Council processes." This is a specific and measurable objective that would clearly help to build partnerships that foster mutual learning and enhance communication between stakeholders and managers.

Such objectives are needed for every one of the program goals, and the CSP Operations Committee is actively engaged in developing them. These will be shared with the Council and should help tremendously in showing the specific steps that the program is taking to achieve its important goals.

After program objectives have been written, much more work must be done in the service of program evaluation. While objectives can, by definition, be measured, what are those measurements? What are the indicators that an objective has been successfully accomplished? Identifying realistic, feasible, and valid indicators is probably the most difficult step in designing an effective evaluation. Constraints of time, funding, and reach can restrict the types of data that an evaluation collect and the easiest things to document are not always the most salient or compelling issues.

In addition to articulating clear objectives, over the next few months the CSP Operations Committee will be developing potential indicators of success. With these in hand, an actual evaluation strategy can be developed to measure those indicators. Many techniques could be employed to do so, for example, examinations of collected data, interviews with scientists tasked with using the data; and written and telephone surveys with project participants. These will take time and money to implement, but the only way that program success ultimately can be determined objectively is to engage fully in this evaluation process.

Many Council members will have ideas for indicators of success, and we want to hear them all. In addition, the research undertaken by Dr. Jennifer Shirk to understand how the process of developing the program is unfolding has yielded numerous insights from various stakeholders about what those indicators might be. These thoughts will be brought to bear on the program evaluation.

A final point at this stage in the process. Some Council members might wonder why we can't simply borrow an evaluation plan from another citizen science program. The truth is, no other citizen science program has thus far been developed with the care and methodology employed by the Council. The SAFMC Citizen Science Program is blazing a trail in citizen science program development that others are seeking to emulate. Evaluation of that program must blaze a similar trail.