Frameworks and Standards for R3 Effort and Strategy Evaluation

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INTRODUCTION AND BACKGROUND

The *Frameworks and Standards for R3 Effort and Strategy Evaluation* project is funded by the 2020 Modern Multistate Conservation Grant Program (Grant Agreement Number F21AP00036).

In 2016, The Council to Advance Hunting and the Shooting Sports and the Wildlife Management Institute released the *National Hunting & Shooting Sports Action Plan: Strategies for Recruiting, Retaining and Reactivating Hunting and Shooting Sports Participants*. Later that same year the Aquatic Resources Education Association and the Recreational Boating & Fishing Foundation released *Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts.* The purpose of these documents, and the efforts that created them, was to assist the angling, hunting, and shooting sports communities develop integrated, comprehensive, and coordinated strategies to reverse the declines in angling and hunting participation and maintain the growth in the shooting sports.

Since then, great strides have been made in implementing many of the best practices and recommendations put forth in these documents. However, despite constant emphasis in the above-mentioned resources, as well as reminders by nearly every national R3 expert, one area that has consistently, if not chronically lagged in its implementation by R3-vested organizations has been R3 effort evaluation. As a result, the R3 community has yet to answer the question that served as the primary catalyst for nearly every national R3 strategy initiative since the early 2000's. Simply, "what works?'

Over the last decade, many R3 practitioners and experts have postulated causes for the seemingly ubiquitous avoidance, if not aversion, to R3 effort evaluation and outcome-based decision making. Some of these include:

- A lack of consensus about which R3 evaluation strategies to use in various situations.
- Uncertainty about how various types of R3 efforts (in-person training vs marketing vs mentoring, etc.) can and should be measured.
- Confusion about what outcome metrics and associated indicators to use.
- Lack of time and resources to develop and implement evaluation strategies.
- Fear of discovering the true impact (or lack thereof) of favored and long-held R3 programs.

It is difficult to say which of these often-cited issues is an actual barrier to evaluation, or merely a symptom of some other problem. The truth is, none of these challenges are unique to R3 and none are novel to the well-established field of social science. Given the specific and easy to identify behavioral outcomes sought by hunting, fishing, and shooting sports R3 efforts, one could make a strong argument that R3 effort evaluation is straightforward (if not easy) compared to other human behavior change efforts, programs, or campaigns.

What is clear upon an even cursory review of recent discussions, meetings, and symposia is that the community of R3 professionals within state fish and wildlife agencies and conservation NGOs are desperate for answers, recommendations, tools, and resources to help "fix" their evaluation shortfalls. Unfortunately, this desire for answers often presumes that there are near-universal solutions and templates for R3 evaluation strategies. But given the wide-ranging diversity of efforts implemented under the R3 umbrella, this expectation is inappropriate. Like

R3 efforts themselves, evaluation metrics and measurement criteria are not one-size-fits-all. Evaluation strategies, metrics, and measurement criteria must be applied in ways appropriate to both the type of effort being implemented and the nature of the outcome(s) that effort might reasonably produce.

To resolve these issues, this grant proposal postulated that the R3 community needs three items:1) a catalogue and assessment of existing R3 evaluation resources and toolkits; 2) evaluations standards, and expectations, that will guide R3 practitioners in identifying the appropriate evaluation strategy to use for their effort(s); and 3) standardized metrics and evaluation criteria for R3 efforts that correspond to the standards, and expectations identified.

During the past decade, numerous R3 evaluation toolkits, recommendations, templates, and best practices guides have been developed by a variety of stakeholder groups, industry/agency partnerships, consultants, and academicians. Similarly, formal research and prior Association of Fish and Wildlife Agencies Multistate Conservation Grants have produced resources and best practices to guide the development of objectives, outcomes, metrics, and criteria by which to evaluate the effectiveness of various R3 efforts. Many of these resources have been used in in-person trainings in various formats and locations. Unfortunately, most of these resources are not widely used by current R3 practitioners.

Given the current demand for evaluation resources and assistance within the R3 community, it is somewhat surprising to discover how little the above resources are utilized. When asked, many R3 practitioners relate a similar list of reasons why they do not utilize existing resources. Among the most commonly cited reasons are the lack of intra- or inter-organizational social science expertise, varying expectations, and standards among R3 stakeholder groups/agencies, and new, inexperienced R3 coordinators who were not on staff when the initial evaluation trainings were offered and did not receive the full breath of training during their on-boarding.

This misalignment between available R3 evaluation resources and the lack of confidence or consensus regarding their use has resulted in the R3 community’s perpetual struggle to integrate evaluation into their efforts. Additionally, the lack of consensus about how R3 evaluation should be implemented has caused uncertainty among decision-makers about which criteria and metrics should be used and how to compare the results of their organization’s R3 efforts at multiple scales and with efforts of other organizations.

This lack of agreement on the broad application of R3 evaluation validity, standards, criteria, and outcomes, has often led R3 practitioners and decision-makers to devalue and underate the need for, and prioritize, data-driven outcome evaluation of their efforts. Though often cited as important by R3 practitioners and administrators at conferences and during interviews, most fail to apply the same sense of urgency within their own organizations.

To address the above disparities, this assessment seeks to document the following elements:

1) The primary barriers influencing the R3 community’s reticence to apply outcome evaluation strategies within their R3 efforts
2) The current and potential utility of existing R3 evaluation resources and where additional resources need to be developed

3) Recommendations for how to overcome current barriers to R3 evaluation
4) A list of standardized metrics and evaluation criteria for R3 efforts.

It is the belief of the authors that the chronic lack and dismissal of outcome evaluation in the implementation and modification of R3 efforts is the primary issue retarding the effectiveness of R3 as a field.

Only when the R3 community recognizes that rigorous evaluation is the only way to produce reliable data capable of improving the effectiveness of their efforts, terminating ill-considered programs, and engaging new constituents, will meaningful progress be made.

METHODOLOGY

This project examined more than 50 written resources most likely to be useful to R3 practitioners in conducting formative (program improvement) and summative (ultimate program impact) evaluations for R3 efforts. Many of these were written specifically for R3-type efforts, while others were designed to provide advice and assistance for the broader topic area of programmatic evaluations. Based upon their specificity to R3 efforts, 18 written resources were selected for inclusion in telephone interview discussions with select R3 practitioners to assess practitioner "familiarity" with these resources as well as their "helpfulness" in conduction evaluations.

The original list of 18 written resources that were selected for inclusion in telephone interview discussions was ultimately modified based on the interviewee responses, an assessment of their direct applicability to R3, and the authors judgement, to create a composite list of recommended written resources. These resources are listed and briefly described in the **Catalogue and Assessment of R3 Evaluation Resources and Toolkits** section and links are provided to them. In addition, these resources are posted in the "Partners Collections" tab of the Council to Advance Hunting and the Shooting Sports' online Clearinghouse under the heading of "Recommended R3 Evaluation Resources."

In addition, more than 40 resources for digital marketing campaigns were reviewed. Ten were selected for inclusion in the **Catalogue and Assessment of R3 Evaluation Resources and Toolkits** section because they provided more details on how to design and implement campaigns for non-marketing R3 practitioners. The balance of the resources were largely case study reports on the results of campaigns. These reports provided clear evidence on the value of using technology and digital marketing campaigns to meet R3 goals.

More than a dozen training resources also were reviewed. Three were selected for inclusion in the **Catalogue and Assessment of R3 Evaluation Resources and Toolkits** section because their focus most closely matched what the interviewees' identified as training needs.

More than 30 R3 evaluation reports were examined. Five were selected for inclusion in the **Catalogue and Assessment of R3 Evaluation Resources and Toolkits** section because they provided the best examples of having evaluation integrated into effort's earliest stages. As a result, the evaluations were able to determine if the goals and objective of the effort were met.

To ascertain the utility of the originally selected 18 written resources, 18 R3 practitioners were interviewed and asked how "familiar" and "helpful" each resource was to them using a 1-5 scale (5 being "very familiar" or "very helpful"). Not all interviewees rated all resources.

Selected interviewees were R3 practitioners employed by agencies and organizations and represented a current cross-section of the R3 community in terms of length of time in their position, geographic regions, and position within their respective agency or organization. Telephone interviews used a script (Appendix A) to guide a conversation regarding a wide range of issues related to R3 evaluations.

In addition to discussing existing evaluation resources, interviewees were also asked questions regarding R3 positions they held, training they have received, training that they would like to receive, barriers to implementing effort evaluation, and other consideration or concerns they had related to R3 evaluation. A synthesis of the topics identified in the interviews is presented in subsequent sections of this report.

A second set of interviews were held with 13 R3 administrators. Similar to the practitioner interviews, the selected R3 administrators were interviewed over the telephone following a script that allowed for a wide-ranging and nuanced conversation about topics related to R3 evaluation.

EVALUATING R3 EFFORTS

Evaluation Overview

Evaluation is defined as, "The systematic collection and scrutiny of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming (Best Practices Guide for Program Evaluation for Aquatic Educators 2011. Recreational Boating and Fishing Foundation. https://www.takemefishing.org/getmedia/9dde6653-a6e6-4025-a943-3445412adf74/BP-Evaluation-guide-2011.pdf)."

Along these lines, it is critical to understand that *evaluations begin in the earliest stages of an efforts' planning, extends through the efforts' implementation and continues well after an effort is completed. Meaningful evaluations* ***are not*** *something that are only thought about, and tacked on, at the end of a projects' life.* Doing so is a great disservice to its participants, partners, funders, and to the effort itself.

Simply put, evaluation determines the merit and worth of a project or program. As the W.K. Kellogg Foundation suggests, evaluation is a learning and management tool that can and should be used from the start of the design of program through determining the program's impact—its value and worth for the time and money invested (W.K. Kellogg Foundation, 2000)

Evaluations are also a *process*. At its core, the evaluation process *seeks to answer specific questions regarding your effort.* The tools selected for your evaluation are dependent on what questions that you want to answer. The earlier in the process that you define the questions you are seeking to answer, the more likely you will be able to get the answers to them.

Evaluations involve collecting data that is synthesized and analyzed to inform decisions. Extracting “lessons learned” is a key element of an evaluation so that future iterations of your efforts yield better outcomes. They are most often used to help determine a) how well an effort is working [formative evaluation]; or b) whether the effort is meeting its designed goals or objectives [summative evaluation]. A planning evaluation can also be used to help design an effort. An often-overlooked element of an evaluation is determining who, and how, the information collected will be used.

It is also important to understand that they get easier with practice.

Ideally, evaluations are also iterative, in that they ask similar questions in several different ways, as well as at several different points along the process, so that the answers obtained are clear and unambiguous. Like most processes, the specific evaluation steps are refined over time as both your effort, and the evaluation processes selected, evolve. As you answer one set of questions, other questions will likely emerge. Often, these more advanced questions require more advanced evaluation tools to obtain answers. It is also important to remember that there is no “universal tool or template” that can be applied to all situations.

Formative evaluations ask, “How can this effort be improved?” Summative evaluations ask, “Did this effort meet its stated goals?”

Formative evaluations focus on modifying or improving the internal workings of an effort prior to, and during, its implementation in order to make the effort as good as it possibly can be. Summative evaluations focus on the changes that occur as a result of the effort and whether it is having the intended effect. Summative evaluations often seek to measure changes in skills, knowledge, attitudes, confidence, or behaviors as a result of the effort. However, some of these attributes may also be used to measure interim outcomes as part of formative, or program improvement, evaluations.

Both formative and summative evaluations can use quantitative or qualitative data. Quantitative data are expressed as numbers that measure specific program attributes or outcomes. Because quantitative data are numerical, they often are easier to understand and analyze, and are useful for comparing, classifying, or judging an effort. However, using only quantitative data may limit your about how or why a particular program goal or objective was, or was not achieved.

Qualitative evaluations generally collect descriptions of specific characteristics. They are often used to tell a “story” about the effort and describe “why” something did, or did not, happen. Qualitative data often is often time consuming to collect, synthesize and analyze. This data also can be assigned numerical values and summarized in a quantitative manner. However, the information collected should also be summarized in a narrative form in order to develop a comprehensive understanding of program outcomes and impacts.

As you become more proficient with evaluations, you will likely come to realize that *they are the most important part of any effort!*

Before delving into the critical steps of an evaluation some definitions are in order (adapted from *Open Standards for Conservation*):

> *Vision* – A description of the desired future state, or condition, that an effort is seeking to achieve. For R3 efforts, this generally would be something like "Reversing the declining participation rates for hunting and angling or maintaining the increases in participation rates in the shooting sports."
>
> *Goal* – A formal, written, statement detailing an effort's desired *impact* or *ultimate outcome.* A well written and, actionable, goal is written using the SMART template (Specific, Measurable, Achievable, Results-oriented, and Time-limited). For R3 efforts, this generally would be something like, "Increase participation in X by 10% in state Y by [year Z]."
>
> *Outcome* – A desired future state of a need, barrier, or opportunity. Goals are formal statements of the desired outcome (also called an *impact* or *result*). Note: written *objectives* may also contain *outcomes*, particularly short-term, *interim outcomes*. For R3 efforts, this could be something like, "Increase participation in X," "Reduce regulatory barriers to participating in X," or "Use interest in local sustainable foods to increase participation in X."
>
> *Objective* – A formal, written, statement detailing a specific step needed to achieve an effort's desired outcome. A well written, and actionable, goal is written using the SMART template. For R3 efforts this could be something like, "Within the next 12 months, conduct three focus groups with a minimum of 20 people representing the target audience to determine their barriers to participating in X, and potential actions to overcome those barriers."

If an effort is well-thought out, and designed, achieving an effort's objectives should lead to the achieving the effort's goals and vision. However, don't get too focused on the terms; focus on what you want to achieve and how you will go about achieving it.

Critical Evaluation Steps

Describe the Effort

An important first step in developing an effective evaluation is describing what you want to accomplish, what you want your target audience to do because of your efforts, why it is needed and how your effort will meet, or overcome, an identified need, barrier, or opportunity. This description will help clarify if the effort is really needed, or not, and form the basis for setting specific goals to accomplish. The goal(s) identified in this description will likely become your effort's *outcomes* or describe your effort's *impact*. In addition, this description will be the basis for your *theory of change.* Using *results chains* is an excellent means to visually depict your theory of change and all of the interim steps need to accomplish your goal(s). Having a well thought out, and articulated, theory of change makes any subsequent evaluation efforts much easier!

Even long-running, established efforts will benefit from *critically thinking* about what they are trying to accomplish. Not being able to clearly describe, and write down, what your effort is trying to accomplish is a clear sign that the program needs to be re-thought, re-vamped or possibly discontinued.
For R3 efforts, it is also important to specify which "R" you are focusing on. Recruiting someone requires different tools and tactics than retraining, or reactivating, them. Being specific about what you intend to accomplish clarifies your thinking and makes evaluations much easier.
Other important aspects to consider in your effort's description include: who is your *specific* target audience; how will you select the **participants** and what method(s) will you use to determine if the **participants are from the identified target audience**; how will you communicate with them; what do *they need* and *in what format* do they prefer in order to optimize the likelihood of you meeting your goal(s); how will you determine their needs; and what information will you need to collect in order to communicate with them in the future?

Both goals and objectives should be written clearly and precisely. Using a SMART format (Specific; Measurable; Achievable; Results-Oriented; Time-Limited) will help ensure that your goals and objectives are clear and precise. The clearer and more precise your goals and objectives are the better your evaluation will be; weak goals and objectives yield weak evaluations. Fuzzy thinking results in fuzzy outcomes.

Taking the time and investing effort into describing what you want to accomplish pays huge dividends in achieving your goals and being able to measure your actual impact!

Layout and Design the Implementation Process
Once your theory of change, and goals and objectives are established, you can begin to design how you implement your effort. From an evaluation perspective, you should also include points along the implementation process to measure *interim outcomes* to determine how well your effort is proceeding in meeting its goals and objectives. Because most efforts involve a series of steps that build upon each other, if your effort underperforms in an early step, you will be less likely to be successful in any subsequent steps.

Objectives should be written for each step in the process and measured as each step is accomplished. Identifying these key places and key *indicators of success* early in your design process will make program improvement types of evaluations much easier and you will be able to make mid-term adjustments to your efforts in a timely manner.

For event or program based R3 efforts, these interim indicators of success are often measured as changes in skills, knowledge, confidence, or attitudes. These are often captured using pre- and post-surveys, but can also be captured by direct observation, tests, or discussions. However, in order to be valid, these alternative methods of evaluation need to be well thought out, and consistently applied.

For digital marketing-based efforts, indicators can be, unique engagements, clicks, views, click-throughs, time spent on a page, etc. In most situations, this information is captured automatically by your system's analytics software. It is important to note that most system analytics software produce their own set of indicators they track. While there is some overlap between systems not every system can, or will, track the indicators you are most interested in.

As you design and plan your evaluation's implementation process, don't forget about designing mechanisms to measure your effort's ultimate outcomes. After all, achieving these outcomes is the reason you are undertaking the effort in the first place. In most cases, these outcomes will have been identified in your program's description. In many situations, these outcomes may not occur for some time after the effort is completed and will require longer-term monitoring and a longer-term evaluation process.

For R3 efforts, *ultimate outcomes are one of two possibilities:1) increase participation in hunting, angling and/or the shooting sports; or 2) increase avidity of current participants.*

Identify and Develop Indicators
Once you have decided when different measurements should be made, you should select exactly what measurements, or indicators, you want to track. A list of potential indicators should be developed and then pared down to only a few key elements. Not all indicators need to be measured; pick key items or those that may reflect multiple sub-items.

It is often helpful to reflect back on the participants identified needs to help identify key indicators. The identified needs often reflect barriers that may have multiple components. Identifying an indicator that reflects reductions of these barriers may capture several sub-components as well.

Design the Evaluation
Once you have decided what you would like to measure, you should begin to start thinking about *how to measure them* and what evaluation tools should be used. Many people automatically think that surveys are the best tools for conducting evaluations. While they are very useful, they are not the only tools available. In some situations, direct observation, tests, focus groups, discussions, journals, or other evaluation tools may yield better answers to the questions you want to answer. In addition, some consideration should be given to who, and how, the information collected will be used.

Remember, evaluations *seek to answer specific questions regarding your effort.* The tools selected are dependent on what questions that you want to answer. *The questions you ask should reflect what specifically what you want to learn.*

When selecting evaluation tools, you also need to be mindful of the time and resources needed to complete, synthesize and analyze the information collected. Both participant time and staff time need to be taken into account. The time and resources needed to complete an evaluation need to be factored into the evaluation design, and into the effort's time and resources budget. Additional safeguards, procedures and restrictions may need to be factored in if any of your evaluation participants are minors.

Implement the Evaluation

By this stage in the evaluation process, most of the critical thinking and hard internal questions have been asked, and answered, and all that needs to be done is collect the desired information in the desired format. While this may take work, logistical planning, and resources, it should be a relatively straight forward process if all of the other steps have been followed.

As you collect your data, it is important to make sure that it is kept confidential and secured in a safe location. Extra care needs to be taken if any personal information has been collected.

Synthesize, Analyze and Interpret the Information

The synthesis, analysis and interpretation of the data collected can be a daunting task. Especially, if you skipped, or short-changed, any of the previous steps. However, doing all of these tasks will allow you to answer the questions like, "Was the effort successful?" "Did it have an impact?" "Can it be improved?"

If you have followed all of the suggested steps in developing evaluations, you should have a good idea of the amount of work that synthesizing, analyzing and interpreting the data will take and will have dedicated time and resources to accomplish these tasks. In many situations, some of these tasks can be automated if you possess the technology to do so. *We highly recommend that agencies and organizations invest in this technology.* Third-party contractors can also assist. In any case, both the contractor and your technological capacity needs to be factored into the evaluation design early in the process.

In some situations, data analysis make take special skills that need to be acquired. This may be especially true for qualitative data.

Regardless of how the data is synthesized and analyzed it will be up to you to interpret the information. Data can only take you so far, at some point human judgements will need to be made. These judgements will generally involve comparing what you found out in your evaluation questions to the effort's description that were initially developed. The better the description, the easier it will be to make the judgements!

Develop the Evaluation Report

Drafting a report that summarizes your effort and what your evaluation found can also be a daunting task. However, it is a critical step that documents what you did and what its results were. This documentation allows you and the R3 community to learn, and improve, over time.

Before you start drafting your report, it is important to consider who, and how, the information will be used. Ideally, these questions were asked and answered in the initial stages of the effort's design.

We highly recommend that all evaluation reports be shared within the R3 community, even those that found that your effort did not achieve its outcomes as well as the planners had hoped.

CONSTRAINTS TO R3 EVALUATION

As noted in the Methodology section of this report, a total of 31 R3 professionals (practitioners and organizational leaders) were interviewed to identify the current application and utility of existing R3 evaluation resources, as well to collect information of the real and perceived organizational barriers to implementing effective R3 evaluation. Participants were interviewed via phone or video conference using a structured moderator guide (Appendix A) that was drafted with the guidance of national R3 experts and social scientists. The data collected from these structured interviews was summarized and organized according to primary themes that emerged after all interviews were completed.

1. Lack of Automated Customer Evaluation Processes and Data Management

Interviewees reported that most organizations conducting R3 efforts do not have automated systems in place to conduct event evaluations or track participant behavior through time. This includes a lack of Customer Relationship Management (CRM) systems that support automated customer tracking as well as simple electronic dissemination and collection of event surveys and questionnaires. Thus, most R3 practitioners do not have a clear understanding of who their customers are, where they need assistance, and what they experienced during and after an R3 event or program. In absence of electronic or automated evaluation processes, some practitioners use paper surveys to gather event metrics, but then struggle with finding the time to manually compile and summarize subsequent data, noting that even when they do, "information is often not disseminated or reviewed later to discern trends." And while some organizations and agencies have access to data dashboards that compile basic customer demographic data with other data streams (Hunter education course graduates, license purchases, etc.), "the information they do provide is not timely or actionable. We need to have a daily pulse on what is going on. What is needed is a real-time system that is connected to the license system and legacy databases that can provide on-demand reports of actionable information."

2. Evaluation Design

A reoccurring theme across all interview and survey responses collected as part of this assessment is the ubiquitous vacancy of knowledge about the application of basic evaluation theory among R3 practitioners and the organizations they work for. This includes a lack of knowing how to formulate evaluation questions, what questions to ask, when to ask them, and how to interpret and operationalize the responses. Additionally, nearly all respondents noted that training and technical help are needed before they would feel confident enough to engage in designing and implementing R3 program or effort evaluation. As noted previously, the lack of priority and confidence on the part of R3 professionals to implement their R3 efforts using an outcome and data-based adaptive approach is likely due to a combination of factors that include the lack of sufficient formal training, lack of support from leadership in the form of funding, staff, and technical assistance, and an organizational culture that over-estimates the value of outputs as acceptable performance metrics (See Recommendation 1). Additionally, most state fish and wildlife agency leaders noted that current agency culture often considered the agency a passive service provider to outdoor recreationists or, as stated by one director, "the agency culture perspective simply sees itself as the DMV of outdoor recreation," as opposed to "a marketing firm perspective that incorporate a customer centric approach that tries to meet the customer where the customer is." Agencies, as noted by the same interviewee, are "process-forward where we define the processes and make sure they are as streamlined as possible and are equitable and inclusive. Thus, the process becomes the outcome, not customer feedback that can tell us how effective we are."

3. Lack of Adequate Staffing

An underappreciated deficiency of most state natural resource management agencies and conservation/outdoor recreation NGO's is the very limited to complete absence of human dimension, marketing, and data-analysis expertise available to R3 and outdoor education staff. While trained experts in these areas may be present in the organization, they are typically siloed in other sections or divisions and are not directed (or able) to commit time and resources to R3 or outdoor education implementation, evaluation, or strategic improvement. Thus, R3 coordinators and staff are typically left to grapple with an extremely diverse and multi-discipline suite of technical and management tasks that they are undertrained, underqualified, and under-resourced to complete. Except for a few instances where partnership with universities have been established (e.g., North Carolina State University and the Georgia Wildlife Federation), external partnerships do not typically succeed in overcoming this deficiency as most R3 partner organizations suffer from a similar lack of expertise and capacity to implement data-driven optimization of their R3 efforts.

4. Restricted Funding

Every interview respondent identified restricted funding as a significant limiter to strategic R3 implementation and outcome evaluation. It is not clear that this barrier as expressed by R3 professionals is a consequence of actual spending caps needed to avoid budget shortfalls or is a symptom of a lack of prioritizing R3 effort delivery and experimentation. In the Recreational Boating and Fishing Foundation's *2018 Angler R3 Effort Survey*, researchers found that most of the agencies surveyed in the study, "do not track their aquatic education/angler R3 budgets in a manner that permitted respondents to provide reliable estimates of their angler R3 budget allocations, and numerous respondents reported difficulty in responding to the budget questions presented. It appears that angler R3 budgets within agencies are usually imbedded within general education funds, and very few agencies segment that general budget by angler R3 efforts and programs designed to create more anglers versus those designed to educate participants about aquatic conservation." This lack of line-item clarity and allocation is likely a very significant factor in why many organizations, state fish and wildlife agencies in particular, do not adequately fund their R3 efforts and are averse to expanding funding when solicited by R3 practitioners. It is worth noting that many organizational leaders interviewed as part of this assessment observed that in the past five years, there has been an increase in federal funding availability for R3 programs. But agency culture, lack of R3 program effectiveness data, political pressure from commissioners, and state hiring freezes have impeded additional funds from reaching R3 programs and staff.

Cooperative funding models, though initially appealing, appear to be highly constrained by the vision and mission of the funders and are thus less desirable as a scalable R3 program implementation model then previously anticipated. Many SFWA R3 practitioners report that "NGO's fund programs that their members and member family members enjoy." Similarly, they note that "agencies often focus on programs that their volunteers like implementing, or their leadership and commissioners enjoy, but outdoor industries and NGO's do not." One R3 coordinator summarized this dynamic as follows; “In order for cooperative funding to work AND follow R3 best practices, both parties have to agree on the same vision. This does not happen as frequently as expected or desired.”

CATALOGUE AND ASSESSMENT OF R3 EVALUATION RESOURCES AND TOOLKITS

The following section identifies and summarizes various evaluation resources that the authors deemed as “the best” available resources for R3 practitioners to study and apply. Admittedly, this is a highly subjective selection. However, several factors were considered to winnow down the list: interviewee responses, an assessment of their direct applicability to R3, and the authors judgement on their educational content, simplicity, and overall utility.

Many of these recommended resources are not new. The R3 community should be familiar with many, if not most, of them. Unfortunately, this community has not embraced, prioritized, or effectively utilized them. Other resources contained in the catalogue, while not new, may be new to the R3 community, and have been effectively applied to other educational programs or conservation endeavors.

Some of the resources are geared toward specific outdoor activities. However, the content and the evaluation processes advocated in them are readily applied to any outdoor activity, as well as other educational or conservation activities. What is in a title should not preclude anyone from using any of the recommended resources. Many are large, detailed documents that may be intimidating to someone not familiar with evaluations, but that fact should not deter anyone. By and large, they are well written, and broken down into relatively easily digestible sections. Many have a “How to use” section that will help guide people to the information they need.

R3 practitioners need not study all the recommended resources. Picking out one or two, and fully digesting and applying the material will go a long way in increasing a novices’ familiarity, comfort, and confidence in evaluating their efforts.

Evaluation is a new discipline to most R3 practitioners, and the successful application of the information contained in these resources will require hard work and study. There is no other way to acquire these skills. For some of these resources, specific training will likely be developed and offered. However, even if specific training is offered, hard work and study will still be required.

As professional R3 practitioners, it is up to you, with community support, to prioritize and embrace these new skills and effectively evaluate your efforts.

Written Evaluation Resources and Toolkits for R3 Program/Event Efforts

Best Practices Guide for Program Evaluation for Aquatic Educators 2011. Recreational Boating and Fishing Foundation. https://www.takemefishing.org/getmedia/9dde6653-a6e6-4025-a943-3445412adf74/BP-Evaluation-guide-2011.pdf

This comprehensive guide to program evaluation was designed specifically for aquatic educators. However, the information and concepts presented are readily transferable to any R3 effort. Thus, this resource is highly recommended for all R3 practitioners. The guide is arranged in discrete sections that can be used independently from one another. A "Quick Reference to the Evaluation Process" uses a series of questions to direct users to the specific information needed to solve their evaluation issue(s).

This guide defines evaluation as:

> *… the systematic collection and scrutiny of information about the activities, characteristics, and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming. As it relates to program management, evaluation involves the collection of data that is then transformed into useful results to inform decisions. It is important to extract the "lessons learned" from experiences so that you can develop solutions to program or organizational problems.*
>
> *Evaluation can help you determine how well a program is working or whether the results of the program are meeting certain criteria. Evaluation can also be used to gather information to help design and improve programs. In the long run, the evaluation effort will help to improve program operations and outcomes.*

The guide identifies three major types of evaluation: a) *planning evaluations,* which take place before a program is designed; b) *formative evaluations* that provide information to improve programs; and c) *summative evaluation* to measures the effects (outcomes and impacts) of the program. Deciding which to use is dependent on the evaluation's purpose, program needs, and the evaluation questions to be answered.

Effective, purposeful evaluations require effective, purposeful planning and notes that *effective evaluations are an integral part of the program design and are not an "add-on" after the program ends.* In addition, programs cannot be effectively evaluated unless they have *specific, clearly defined, written goals and objectives that are created during the initial stages of the program planning process.*

The guide identifies 13 discrete steps for implementing an evaluation. The development of a *program logic model* is one of those steps, and it provides a simple, comprehensive overview of creating a customized logic model for any R3 effort.

Of particular interest to this assessment is the detailed information on the strengths and weaknesses of specific evaluation tools. These tools are discussed in detail and summarized in Table 4.5 *Evaluation Tools for Typical Aquatic Education Programs* and Table 4.6 *Types of*

Longitudinal Change Analysis. However, the guide cautions that "users should work through all the steps in designing an effective evaluation before jumping to the evaluation tools section." The guide also cautions that it is very "important to decide how the information will be used and who will use it" during the evaluation planning stages before any data is collected to avoid wasting time and money.
Lastly, the guide recognizes that evaluations are likely foreign to most users and therefore contains an extensive glossary.

Questionnaire Design: Asking Questions with a Purpose. 1998. Ellen Taylor-Powell. University of Wisconsin-Extension.
https://find.nationalr3community.org/show/r3topics/CC4F9ED2-471A-4038-A0C2A8D9484CDAF2/?mediaId=C8AF907B-DDEF-4BF2-8D83ED93D4A363AA

This resource focuses on gathering information related to agriculture and agricultural extension. However, the information is readily transferable to R3 effort evaluations. It provides simple, direct guidance on a) constructing questionnaires; b) identifying the type and kind of information sought; c) how to word the questions correctly to get the information you are seeking; d) the types of questions that could be asked; f) questionnaire formatting; and g) pretesting the questionnaire.

The guide emphasizes that, *the response or information you obtain is only as good as the question. If you don't get the type of information you want, it is probably because you didn't ask the right question!*

To write meaningful questions, the questionnaire drafters need be clear about their objectives and type of information desired. Knowing what information you want – and why you want it – will focus your question drafting so that final questions clearly and concisely ask about knowledge, attitudes/beliefs/opinions, behavior, or attributes and increase the likelihood that you will obtain the desired information.

Numerous suggestions on evaluation question drafting are included such as: a) use simple wording b) avoid the use of abbreviations, jargon, or foreign phrases; c) use mutually exclusive categories so the information collected is precise; d) avoid bias in questions; e) avoid double-barreled questions; f) use complete sentences; and g) plan ahead to make tabulation easy.

Additional guidance is provided on drafting open-ended questions, close-ended questions, formatting, and pretesting.

Natural Pathways: A Project of the Association of Fish and Wildlife Agencies North American Conservation Education Strategy. 2016. Produced by the North American Conservation Education Strategy and the Wildlife Management Institute.
https://www.fishwildlife.org//application/files/6115/4446/6541/Natural_Pathways_Final_Report.pdf

The Natural Pathways report documents a project completed by the Association of Fish and Wildlife Agencies North American Conservation Education Strategy to understand how conservation education and outdoors skills development impact an individual's "natural pathway" to the adoption of outdoor-related activities.

R3 practitioners are encouraged to read this resource (including the appendices) because it documents real-world examples of using the Outdoor Recreation Adoption Model (ORAM) and results chains to evaluate (i.e., prove and/or improve) their efforts.

The Natural Pathways project had three distinct, but integrated, phases: a) awarding grants to projects that focused on three forms of outdoor recreation: hunting, fishing, and shooting sports; b) conducting a workshop for leaders of the programs to define measurable outcomes and provide a framework for program evaluation; and c) integrating the ideas learned at the workshop into their programs and documenting the results.

The process that the Natural Pathways project underwent documents the critical importance of how program planning should be integrated with program evaluation and provides simple explanations for the ORAM and using results chains as a tool to plan R3 efforts.

The workshop portion of the project utilized the ORAM to identify the potential intervention point(s) for their program(s) and developed results chain(s) (theory of change) (See *Open Standards for the Practice of Conservation, Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts* and *National Hunting & Shooting Sports Action Plan* for additional information) to identify expected *intermediate* outcomes, and *ultimate outcomes.* These outcomes were used to develop an evaluation framework (objectives, indicators, and participant questions) for each program to determine whether the program was successful in achieving their desired goals. Two generic *results chains* (*Basic Angling Skills Training with Fishing* and *Electronic Self-Learning Tools)* were developed as part of the workshop.

As a result of this process, the Natural Pathways project developed five recommendations to R3 practitioners: a) programs must be designed with a specific audience in mind; b) partnership(s) with other organizations is key to increased success; c) build natural pathways within an existing social support framework; d) the low-hanging fruit are those who already have a foot on a natural pathway; and e) e*valuation is time consuming, expensive, and invaluable (*emphasis added).

Two notable comments found in this report are:

> *Project leaders recognized that the historical avoidance of evaluation-based adaptation of R3 efforts has led many organizations, including their own, to omit the resources and time needed to incorporate evaluation systems into their education and R3 programs. They recommended strongly that additional budget resources and human dimension researcher expertise be incorporated into any R3 effort development and/or implementation so that it can improve its effectiveness in achieving its desired outcomes.*

and

> *Perhaps most surprising, this research also indicated that the majority of R3 efforts being implemented were not strategically designed to overcome documented and specific*

barriers to participation influencing a particular target audience. Rather, these efforts appeared to be designed according to the perceptions, expectations, or personal experiences of the program administrators (or volunteer instructors), and not heavily informed by target audience's needs, desires, or preferences.

Each of the grantees used their new-found knowledge to modify their program(s) and submitted a report (See Appendix A of Natural Pathways resource for copies) that included the following sections: 1) desired program outcome(s); 2) target audience identification; 3) program overview; 4) audience selection; 5) program logic [with a customized *results chain* for their program]; 6) program process; 7) results summary; 8) lessons learned; and 9) successes

Each report included appendices that contained evaluation tools and surveys that were used.

Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts. 2016. Prepared for the Aquatic Resources Education Association and the Recreational Boating & Fishing Foundation.
https://www.takemefishing.org/getmedia/4d891d05-348f-40b0-962f-3df34b5cc0a7/AREA-RBFF-Angler-R3-Recommendations_November-2016.pdf

This resource was developed specifically for angling R3 efforts. However, the concepts, recommendations, and evaluation framework developed are applicable any R3 effort. This resource builds upon the information contained in the Recreational Boating & Fishing Foundation's *Best Practices Workbook for Boating, Fishing and Aquatic Resources Stewardship Education* and the National Hunting & Shooting Sports Action Plan.

It advances the R3 communities' understanding of angler R3 efforts by a) using an updated angler R3 literature review to base its development; b) develops specific definitions for each "angler-type"; c) identifies specific threats and barriers to angler participation; d) defines and "maps" specific angler R3 "effort-types" on the Outdoor Recreation Adoption Model; and e) presents an "Evaluation Framework for Angler R3 Efforts."

This document includes seven recommendations for agencies and organizations to improve angler R3 efforts: 1) assess and map existing efforts using the Outdoor Recreation Adoption Model; 2) improve institutional capacity to design, implement and evaluate efforts; 3) develop strategic priorities; 4) improve partnerships to collaboratively implement efforts; 5) ensure that efforts are outcome-driven; 6) coordinate efforts with hunting and shooting sports R3 efforts; and 7) focus research to address threats, needs, strategies or validating best practices. Additional information on these recommendations can be found in the "Detailed Explanation of Recommendations" section of this resource.

The angler R3 effort-types mapping exercise is very relevant to program evaluation because it helps clarify the *expected outcomes* for each effort-type (as well as clarify what outcomes *should not be expected* from each effort-type) and helps manage and define the overall *expectations* of R3 efforts.

The second recommendation directly speaks the need for improved evaluation capacity by R3 practitioners. This resource provides a broad framework to meet this need in its Appendix C.

This recommendation was supported by several specific findings:

> *The literature review found few examples of programs with effective evaluation systems in place. Currently, the most used evaluation tools only measure program outputs (e.g., number of participants; fishing catch rates; age, gender and race of participants; and overall satisfaction). These metrics do not address ultimate effectiveness or outcomes (e.g., participant mastery of angling skills and knowledge, or participant behaviors such as going fishing or purchasing a fishing license);*
>
> *…most programs do not have data management systems for R3 efforts that track indicators of participant behavior. The Working Group noted that most state fish and wildlife agencies have limited capacity to track a participant from an R3 program to a future license purchase.*

and

> *…few programs are designed to specifically address identified threat(s) to angling participation.*

Each of these findings requires a different scope, and/or suite of tools, for evaluating and tracking progress in overcoming identified shortcomings. Currently, some agencies and organizations within the angler R3 community may not have all the tools necessary to conduct effective evaluations, especially for long-term outcomes.

Of particular importance for R3 practitioners is the *Evaluation Framework for Angler R3 Efforts* section that presents a process, and set of tools, that angler R3 effort implementers and administrators can use to design effective R3 efforts, evaluate their ultimate impact, and identify the elements of the efforts that need to be improved.

This section notes:

> *Evaluation systems for R3 efforts may seem complicated and difficult to design and deliver, but the evaluation tools needed to determine the ultimate impacts of an effort or highlight areas for improvement are very straightforward. This document presents a simple method that program staff can use to design and evaluate an R3 effort. It is not, however, an all-encompassing manual on evaluation.*

This resource advocates using *results chains* (theory of change) to design R3 angler efforts. Effectively using results chains will also help practitioners identify specific goals and outcomes (i.e., results), as well as indictors that can be used to measure the impact of the effort. It contains a detailed discussion on how to use this framework to customize the planning, implementation, and evaluation of their specific efforts. However, it notes that, “it is critical to think about each element of this process during the planning stages, **NOT** after the program is completed!”

National Hunting & Shooting Sports Action Plan: Strategies for Recruiting, Retaining and Reactivating Hunting and Shooting Sports Participants (DRAFT March 2016). Council to Advance Hunting and the Shooting Sports and Wildlife Management Institute.
https://find.nationalr3community.org/show/r3topics/CC4F9ED2-471A-4038-A0C2A8D9484CDAF2/?mediaId=C832C67D-8EA3-4987-B1892B072095A247

This Action Plan provides national strategic guidance for R3 efforts as well as specific planning guidance to optimize R3 efforts. It includes numerous recommendations and "Actionable Topics" for R3 community capacity building and R3 effort implementation.

The most pertinent recommendations for this review and assessment are:

> *Complete the Hunting and Fishing Participation Scorecard on an annual (or more frequent) basis (Recommendation 2).*

An agencies' ability to track an individual's license purchasing behavior is a critical factor in achieving and measuring an R3 efforts' long-term success. To accomplish this, R3 efforts must work closely with their license database administrators to document the impact of their efforts. [Note: *Hunting and Fishing Participation Scorecard* has been updated in the CRM section of this report.]

> *Apply the Wildlife Management Institute (WMI) evaluation tools to all current R3 programs (Recommendation 4). Implementing this recommendation also requires implementing Recommendation 3.*

The evaluation tools provided in Appendix C of the Action Plan include generic Pre-, Post-, and Follow-up questionnaire templates for Skills Training Seminar and Training Hunt-type efforts. However, these templates can be readily customized for any R3 efforts.

> Provide key staff with an understanding of foundational R3 concepts using the Outdoor Recreation Adoption Model (ORAM) and the Hunter and Angler Customer Journey (Recommendation 3).

Fully implementing this recommendation will require using an adaptive, outcome-based approach to design, pilot, and evaluate all R3 efforts. Critical elements of this approach include a) targeting a specific audience; b) conducting focus groups or market research on the specific targeted audience's interest level, size, preferred communication methods, needs, and barriers to participation; c) specific, measurable outcomes are identified at the outset of the program design and development process; and measuring results that are evaluated, documented, and incorporated into the next program iteration.

This approach is extremely helpful in conducting *formative* evaluations that help *inform* an R3 implementer about *improvements* that could be made to an R3 effort to be better able to meet the *needs of the target audience*. Elements of this approach are often reemphasized in other Actionable Topic sections of this Action Plan

Appendix B of this Action Plan contains 16 "Threat Documents" that were used to identify the threats or barriers to becoming, or remaining, a hunter or shooting sports participant.

Appendix C: Skills Training Seminars Evaluation Toolkit. 2016. Council to Advance Hunting and the Shooting Sports and Wildlife Management Institute.
https://find.nationalr3community.org/media/?mediaId=F32EA785-A90A-4C4F-94AF3E8840034333

Appendix C: Training Hunts Evaluation Toolkit. 2016. Council to Advance Hunting and the Shooting Sports and Wildlife Management Institute.
https://find.nationalr3community.org/media/?mediaId=6B90DE0F-1078-4FBC-807B44334DF21394

These two Appendices of the *National Hunting & Shooting Sports Action Plan* provide a mini course in using *results chains* to develop a program's *theory of change*. Using a results chain in a program's design and development stage (or retrofitting one for an existing program) will help the program implementers clarify their thinking by developing succinct goals and objectives. This will greatly enhance the development of an effective evaluation process.

These resources use *Training Hunts* and *Training Seminars* as examples of how to apply a results chain to real-world R3 programs. Step-by-step guidance is provided to help practitioners customize and incorporate this thinking into specific program(s).

These samples also develop *indicators* that can be used in evaluating program(s) and provides suggested evaluation questions that can be customized for individual situations.

Appendix B: Threat Spreadsheets. 2016. Council to Advance Hunting and the Shooting Sports and Wildlife Management Institute.

Threat #1 *Lack of resources and motivation for potential participants from non-traditional hunting/shooting sports demographics.*
https://find.nationalr3community.org/media/?mediaId=D59C8780-6F5C-4230-90AEA67088C23D5F

Threat #2 *Lack of Instructors, Coaches and Mentors throughout the hunting and shooting sports adoption process*. https://find.nationalr3community.org/media/?mediaId=73EA7D53-DB51-4856-AD69CBB9D32A4FED

Threat #3 *Lack of effective self-learning tools*.
https://find.nationalr3community.org/media/?mediaId=19D31481-D27E-4181-8BD006A9D55D89BB

Threat #4 *Lack of societal acceptance from public*.
https://find.nationalr3community.org/media/?mediaId=311F5222-FCF6-4F44-8227CBBCB7AE5682

Threat #5 *Lack of societal acceptance from administrative, regulatory and education entities*. https://find.nationalr3community.org/media/?mediaId=71480868-6403-404C-8270D5A1BF286300

Threat #6 *Existing R3 strategies and programs do not span the complete purchasing/learning process (Customer Journey [CJ]/Adoption Model [AM]) necessary to become a hunter or shooter, and/or are not linked with other resources and/or programs to maintain engagement throughout the buying/learning process.* https://find.nationalr3community.org/media/?mediaId=E2F2162B-5074-4E24-A8861DCC2CFE464A

Threat #7 *Lack of an established and supported "R3 Community."* https://find.nationalr3community.org/media/?mediaId=A6D72486-FC2B-466E-A669B680E5231117

Threat #8 *Develop new or improve and enhance existing program offerings to become effective learning opportunities.* https://find.nationalr3community.org/media/?mediaId=A6439569-084F-4A09-911EF8014B1646C1

Threat #9 *Constraint to hunting and shooting sports by the current public land management.* https://find.nationalr3community.org/media/?mediaId=8C79BF66-B10F-472E-879F41D83616555E

Threat #10 *Lack of convenient, well designed, and managed places to shoot.* https://find.nationalr3community.org/media/?mediaId=B77CA687-D860-4418-A4326F60E5D17B85

Threat #11 *Lack of convenient, quality places to hunt.* https://find.nationalr3community.org/media/?mediaId=F35FFF5E-C04D-4666-97E1E9C11C27E492

Threat #12 *Lack of sufficient hunter education capacity to meet future demand.* https://find.nationalr3community.org/media/?mediaId=2F9793F1-9EBA-4A1F-895028EB4D795E8F

Threat #13 *Lack of open systems and standards for databases for maps and recreational sites.* https://find.nationalr3community.org/media/?mediaId=365D032D-D009-4387-AFD1038EFD3D25AB

Threat #14 *Inability to obtain permits, tags and/or licenses.* https://find.nationalr3community.org/media/?mediaId=235BDC46-5196-4EEF-A6D5393DF59CA6C0

Threat #15 *Complicated and unwieldy hunting regulations, license requirements, and application processes.* https://find.nationalr3community.org/media/?mediaId=6BAC09F0-925F-418B-92ABEEB78E8B62E2

Threat #16 *Lack of strategic communication about hunting and shooting sports with the mainstream and outdoor media.*
https://find.nationalr3community.org/media/?mediaId=5CD1BF70-D430-42D2-AFAF624A7A3CBE86

These 16 spreadsheets were created as precursors to the National Hunting & Shooting Sports Action Plan to help it to be focused and comprehensive. The breath of the issues covered by the 16 spreadsheets is comprehensive but will not likely meet all of the threats facing R3 today. Note that many of these remain in draft form as their utility at the time was uncertain due to the widespread lack of capacity within organizations to implement any of their approaches.

Each spreadsheet contains: a) a *definition* of the threat; b) a *rationale* for the threat being addressed; c) *mid-term outcome(s)* for that specific threat; d) *strategies* to address the threat; e) specific *actions* to address the threat; and f) performance measures/indicators of success for each strategy and action.

The *rationale* section discusses why these threat needs to be addressed. Many of the threats identified also apply to angling participation. Their value for R3 practitioners and administrators is they capture a lot of critical thinking to address a whole suite of challenges facing R3 efforts. Their value for *evaluation purposes* is that they contain performance measures/indicators of success which can readily be converted to measurable *objectives* that can be applied to other R3 efforts.

Open Standards for the Practice of Conservation. 2020. Conservation Measures Partnership.
https://cmp-openstandards.org/download-os/

This resource is a core text for teaching the *Open Standards for the Practice of Conservation* (ALC3128) course offered by the National Conservation Training Center and other institutions. It was developed by the Conservation Measures Partnership (CMP) specifically to improve the management – and measure the impact of – conservation interventions (efforts). While designed for field interventions, the core philosophy and specific steps advocated are very applicable to the planning, implementation, and evaluation of R3 efforts.

This resource is supported by *Miradi (https://www.miradi.org)*, a specialized adaptive management software that assists managers implement the Open Standards and track a variety of elements within any intervention.

The conservation and R3 communities are very similar in that they both address large, complex, and urgent problems. CMP created a vision that advocates: coordination of efforts so practitioners will be more efficient and effective; learning how to replicate what works and avoid what doesn't; use evidence and credible measurement to document our effectiveness; and share the lessons learned.

Of particular importance for the R3 community is this resource's development and use of *results chains* (theory of change) to visually represent barriers to success and develop strategies to overcome them. In addition, the document identifies desired results as *outcomes*, not outputs or actions. It recommends that developing *very specific goals and objectives, as well as indicators of their completion* is critical to tracking progress in achieving outcomes. This is an iterative process that is designed to improve as well as prove the effectiveness of an effort and is essentially an *ongoing evaluation* process.

The Open Standards advocates a five-step process to design, implement and track the success of interventions: 1) Assess the basic parameters for your proposed intervention; determine its purpose; and identify threats, opportunities, and key stakeholders. 2) Plan your intervention by defining and developing your project's goals, strategies, and objectives, and identifying your assumptions and theories of change (results chains) about how you believe your strategies will achieve your project's goals, and develop action, monitoring, and operational and work plans, and select *indicators* of success. 3) Implement specific work plans while ensuring sufficient resources and capacity are available, and partners are fully involved. 4) Manage your data and analyze your project's results, core assumptions, key uncertainties, and relevant operational and financial data, and adapt your work plan as necessary. And 5) Share lessons and formal products with key audiences, giving and receiving feedback and promoting a learning culture.

This resource recommends that goals and objectives be *Specific; Measurable; Achievable; Results-Oriented; Time-Limited* (SMART) and be established early in the planning process.

To assist new users, this resource contains an extensive glossary.

Responsive Management/National Shooting Sports Foundation. 2017. Hunting, Fishing, Sport Shooting, and Archery Recruitment, Retention and Reactivation: A Practitioner's Guide. Harrisonburg, VA.
https://mail.google.com/mail/u/0/#label/R3+Grant/FMfcgxwKjnZhtpSkfsgBFgTljwHcPkTr?projector=1&messagePartId=0.2

This document contains an expansive compilation of the results from a variety of surveys and assessments that are broadly related to R3 efforts. Of particular interest is an operational definition that identifies the difference between Outputs and Outcomes:

> "Successfully fulfilled objectives result in outputs, while successfully fulfilled goals result in outcomes." (Page 94).

In addition, this book contains a 50-page section (pages 77 – 126) devoted specifically to evaluation that contains: detailed, customizable pre- and post-event evaluation questions (pages 101 – 126); an "Overview of Evaluation Methodologies" (pages 79 -80); An assessment of the "Advantages and Disadvantages of Survey Modes" (pages 83 – 85); guidance on "Pre- and Post-Program Survey Instrument Templates" (page 92); and guidelines for survey administration (pages 93 – 94).

The pre- and post-event evaluation questions are arranged into twelve topic areas and further categorized by questions suitable for adults' verses questions suitable for children. Multiple potential questions to assess each topic are provided.

Guidance on evaluation methodologies include discussions on surveys, focus groups, direct observations, the modified Delphi method, reflective essays, using existing data, and using proxy indicators. In addition, an assessment of the advantages and disadvantages and strengths and weaknesses of various survey methods is included.

Additional considerations include a) ensuring that participants are aware of the evaluation process and who is conducting it; b) being aware of privacy laws affecting survey administration; c) include agency/organization branding on evaluation instruments; d) maintaining the validity of pre- and post-program comparisons by asking precise questions; and e) establishing a large enough pool of participants to overcome respondent attrition.

Guidance on planning and implementing R3 efforts include establishing clearly defined goals and objectives and committing them to writing during the earliest planning stages; evaluate R3 programs and efforts extensively and continually; apply the same scientific strategies and techniques to program evaluation that are used to guide the design and development of the programs themselves; and remain focused on *program outcomes* over outputs.

R3 Toolkit—A Guide to Recruitment, Retention and Reactivation. Minnesota Department of Natural Resources. 2016.
https://files.dnr.state.mn.us/fish_wildlife/outreach/r3/r3_toolkit.pdf

This toolkit is divided into three topic areas: 1) defining the R3 situation as it exists nationally and in Minnesota; 2) a brief overview of participation research, an introduction to the Outdoor Recreation Adoption Model (ORAM), and suggestions on how to overcome the issues the research identifies; and 3) examples of R3 programs.

In the R3 program examples section, the toolkit selected an example of a program that corresponds to each of the "steps" identified in the ORAM for additional explanation. For each example the toolkit has created a *results chain* (theory of change) and identifies: the ORAM stage; specific audience targeted; goal(s) of the effort; suggested number of participants; program length; volunteer needed; site requirements; course fee; and partner information.

In addition, the toolkit also provides guidance on: marketing opportunities; pre-assessment tools; post-assessment tools; program outputs; long-term program evaluation; and how to use the findings from program assessment(s) to adapt the program to better meet the needs of the participants and achieve program goals.

Locavore.guide. 2018. *This website was developed under* ***Wildlife and Sport Fish Restoration Programs*** *of the U.S. Fish and Wildlife Service, Multistate Conservation Grant Program grant #F14AP00160.* https://locavore.guide

> Incorporating "Participant Feedback" and Measuring Success (Pre, Post, and Follow-up Evaluations) https://locavore.guide/hunting/incorporating-participant-feedback-and-measuring-success-pre-post-and-follow-evaluations

This comprehensive web-based resource is designed to use a participants' interest in food as a tactic to recruit new anglers and hunters. Within the "Program and Planning" section is a subsection that addresses program evaluation. It uses the phrase "Participant Feedback" as a less intimidating term for evaluation.

This section provides guidance for developing mechanisms to collect and incorporate "participant feedback" and ways to measure program success. In addition, it contains links to more than 40 additional resources that include pre-, post-, and follow-up customizable, evaluation survey templates and examples of programs where these, and other, resources were successfully applied.

Additional sections of this resource provide guidance on finding and marketing to the "right audience," communicating with them, and using results chains to plan and implement R3 efforts and evaluate their impact.

Best Practices Workbook for Hunting and Shooting Recruitment and Retention. 2008. National Shooting Sports Foundation.
https://find.nationalr3community.org/media/?mediaId=4FB8F82C-F01F-4D14-8F8FD77CCFE9B0B0

Published in 2008, this Workbook is one of the earliest comprehensive tools for hunting and shooting recruitment and retention (R&R) practitioners to use to improve the planning, implementation, and evaluation of various R&R efforts. It is similar to the *Best Practices Workbook for Boating, Fishing and Aquatic Resources Stewardship* initially created by RBFF in 2003.

While it is more than a decade old, the concepts and *Best Practices* (BP) contained are still valid today.

It contains 126 BPs, of which *16 are specifically related to evaluation.* In addition, it contains 23 *Recommendations,* of which 2 *are specifically related to evaluation.* Each of the 126 BPs, has a corollary "worksheet" so implementers can organize their thinking and track their progress in accomplishing it.

Chapter 5 is entirely devoted to evaluation and encourages practitioners to make evaluation a permanent, ongoing, and integral part of their R&R effort. It also identifies and discusses eight potential program *outcomes* for hunting and shooting programs. In addition, it includes detailed information on a variety of evaluation methods including surveys; testing; focus groups; ethnographic methods; longitudinal studies; and experimental methods.

Best Practices Workbook for Boating, Fishing and Aquatic Resources Stewardship. 2010. Recreational Boating and Fishing Foundation.
https://www.takemefishing.org/getmedia/34093003-0309-45a6-9d7e-ed7340fb60b2/Best-Practices-Workbook-FINAL_2010.pdf

Originally published in 2003, and updated in 2010, this document is the first resource to explicitly focus on improving the planning, implementation and evaluation of boating and fishing efforts designed to increase participation in boating and angling. This resource was also used as the foundation for the *Best Practices Workbook for Hunting and Shooting Recruitment and Retention* and there is considerable overlap in the material contained in these two documents.

While it is more than a decade old, the concepts and *Best Practices* (BP) contained are still valid today.

This resource was designed to make it easy for practitioners to navigate and quickly find the information that is most applicable to their situation. In addition, worksheets are created for each Best Practice. Of the 91 Best Practices it contains*; 22 are specifically related to evaluation*. In addition, it identifies seven potential program *outcomes* for boating and fishing programs,

Chapter 4 is entirely devoted to evaluation and contains generic, customizable pre- and post-program survey boating and fishing programs. Chapter 5 contains detailed information on a variety of evaluation methods including: surveys; testing; focus groups; ethnographic methods; longitudinal studies; experimental methods portfolios and journals; and projects.

In addition, this resource provides an overview of the "Recruitment-Training-Retention Intervention Model."

Lastly, this resource contains an extensive glossary.

Angler R3 Plan Development – Guiding Document for State Agencies. ND. Recreational Boating and Fishing Foundation. https://www.takemefishing.org/getmedia/b512c604-af20-44bd-ba68-210786a03278/RBFF-R3-Plan-Development-Guiding-Document-for-States-FINAL.pdf

This document summarizes most of the information contained in the *"Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts"* document. However, it adds to that effort by creating a "Worksheet" to guide planning of Angler R3 efforts. These worksheets can easily be adapted to any R3 effort.

The worksheet asks R3 effort planners a series of 12 questions regarding objectives, threats, target audiences, timelines, communications, evaluation processes and partnerships. Additional questions are included within each topic area outlined to help guide the thinking and planning of the R3 effort.

Within the evaluation section of the worksheet, four sub-questions are included: A) What are the metrics for assessment? B) Has a results chain been created for the R3 effort? C) What are the outputs? And D) What are the outcomes?

Completing this worksheet will help R3 implementers design methods to measure their effort's impact.

Northeastern Association of Fish and Wildlife Agencies R3 Working Group Regional Questions. 2020. Northeastern Association of Fish and Wildlife Agencies. Developed by NEAFWA R3 Working Group: Standardized Survey Question for Hunting Programs

(http://find.nationalr3community.org265776aa6c44be58/original/Regional-Survey-Questions-Hunting-Programs.docx***); Introductory Fishing Skills Programs (***https://find.nationalr3community.org/l/dbd5f8913eb9758/***); and Advanced Fishing Skills Programs*** (http://find.nationalr3community.org4dc7b9e79111e0a4/original/NEAFWA-Regional-Survey-Questions-Advanced-Fishing-Skills-Programs.docx).

The NEAFWA R3 Working Group developed Pre-Survey Questions; Post-Survey Questions; and End-of-Season Survey Questions for Hunting Programs; Introductory Fishing Skills Programs; and Advanced Fishing Skills Programs so that agency and organization R3 efforts can utilize consistent, standardized questions to evaluate their efforts. Utilizing these standardized questions will allow the evaluation assessments to be compared across the region and also enable the R3 community within this region to learn from each other. This "community learning" should enable any "lessons learned" to be applied more rapidly and broadly than if individual agencies and organizations developed these surveys independently.

The Theory and Practice of Program Evaluation: A Literature Review. 2010. By Bob Byrne Consulting for the Wildlife Management Institute.
https://find.nationalr3community.org/l/7e41e07bb553fac2/

This document summarizes more than 30 contemporary evaluation resources. It contains information that most R3 practitioners are lacking but would benefit from understanding. The most critical information is contained in its the first 20 pages.

The review cites numerous program evaluators who assert that the goal of a program evaluation is to improve the program and to determine the extent to which the program is meeting its goals and objectives. To achieve these goals, most R3 event-based efforts do NOT need comparison groups, complex research designs or sophisticated statics. Definitive statements about a effort's cause-and-effect can be made when clear links can be established between the source of information and the learning that took place.

However, some of these attributes may be built into the software that supports digital marketing campaigns or tracks license purchasing behaviors.

Additional guidance on 14 topics is contained in this resource. It also contains several case studies and an extensive glossary.

This document summarizes its contents by stating:

> *Concepts surrounding, and purposes for, evaluation have changed dramatically during the past few years. Evaluation is now more concerned with improving programs rather than about trying to prove definitive cause-and-effect relationships between a program and a result. Proving cause and effect generally requires a rigorous scientific design, a control group for comparing results, and considerably more resources than generally are available.*

Because evaluations are designed to improve programs, they are iterative in nature and not an "event" that occurs at the end of a program. Under ideal situations, evaluations are designed as part of program implementation.

A program is only as effective as its implementation. Therefore, most programs benefit from receiving a ***formative evaluation*** *(an assessment of how a program is being implemented) before undergoing* ***summative evaluation*** *(an assessment of the program's effects).*

Because evaluations are designed to judge programs, they are not always welcome and often are feared. Creating an organizational culture that embraces evaluations is an important, but often overlooked, element of any evaluation effort's success.

Clear planning is critical for any program. The bane of any evaluation effort is unclear goals and objectives. ***Logic models*** *(or* ***results chains****) are highly recommended planning tools for program management and evaluation.*

Identifying ***outcomes*** *can be difficult. Outcomes generally are measured by identifying* ***indicators*** *of success. Indicators are statements of success that are best written in a SMART (Specific; Measurable; Attainable; Results oriented; and Time specific) format.*

Numerous techniques exist to measure indicators. The best method depends on the outcome and the questions that the evaluation seeks to answer. Asking the right questions is critical to an evaluation's results. No one technique can or should apply to all circumstances. Both ***qualitative*** *and* ***quantitative measurements*** *are recommended to determine whether outcomes are achieved.*

Finally, evaluations improve with practice. Agencies and organizations are encouraged to start small to gain experience.

Evaluation Planning Resources

Planning Your Program Evaluation (excerpted from Tab 5 in the Locavore.guide Training Manual available through DJ Case and Associates). 2021.

This material contains the worksheets that were used in the evaluation section of an in-person training workshop on how to use the resources contained in Locavore.guide website (https://locavore.guide). The Locavore.guide was developed under Multistate Conservation Grant Program, Grant number F14AP00160 that was jointly administered by the SEAFWA Hunting, Fishing & Wildlife Recreation Participation Committee and MAFWA Recruitment & Retention Committee.
The in-person instruction involved both facilitated discussions on the evaluation process, as well as small workgroups where participants worked on specific elements needed to evaluate their own programs. The participants presented the results of their small workgroups to the larger

group for constructive criticism. This process enhanced group learning and helped ensure that everyone left the workshop with the skills needed to effectively evaluate their program.

Sample pre-, post- and post-season evaluation templated are also provided.

Locavore.guide website offers a simple, step-by-step, comprehensive guide to developing a hunting or fishing recruitment program for locally sourced, food-motivated individuals (locavores). While this resource was developed specifically for locavores, the concepts presented are readily transferrable to any R3 effort. Additional tabs are available for program design, implementation, and administration.

Evaluation Resources and Toolkits for Marketing Campaigns and/or Efforts

Ten Steps to Create a Digital Marketing Campaign: Examples from State Agencies. 2021. Recreational Boating and Fishing Foundation.
https://www.takemefishing.org/getmedia/9cef9cda-4052-4dff-8463-4005d24364b3/10-Steps-to-Create-a-Digital-Marketing-Campaign_FINAL_WEB.pdf

This resource summarizes and provides links to seven state agency case studies that implemented a variety of digital marketing campaigns. Each campaign implemented a different strategy that used a combination of search engine marketing (SEM), urchin tracking module (UTM) codes, pixel tracking, and geofencing. All these campaigns were assisted by private marketing agencies to assist with the overall campaign, digital ad buys and ad placements. The ten steps advocated by the resource include:1) determine overall budget and timeline for campaign; 2) find a marketing agency 3) analyze current anglers; 4) determine campaign goals; 5) ensure tracking is set up and ready; 6) determine target audience; 7) determine marketing tactics; 8) create ads; 9) implement campaign; and 10) monitor the campaign.

Each of the case studies included summaries of the methods used, revenue results, roadblocks; other insights; and lessons learned and future plans. In addition, this resource includes a glossary of important digital marketing terms. These terms contain links to additional resources for further information.

This resource integrates these campaigns into a conceptual Outdoor Recreation Adoption Model diagram and provides a few suggested indicators to monitor the results. Indicators suggested include reach, clicks, click-through rate (CTR), view-through conversions, impressions, website behaviors, license purchases and participation.

RBFF-Georgia New Angler Retention Pilot Program. 2016. Prepared for the Recreational Boating & Fishing Foundation by Southwick and Associates.
https://www.takemefishing.org/getmedia/24d84031-06d4-4fb3-bffc-7529635467ee/RBFF-GA_NewAnglerRetentionPilotProgram-FinalResults9_30_16

This project report provides a simple, yet detailed overview of a campaign to increase renewal rates for first time anglers. This pilot project divided the target audience into a control group and four treatment groups. Each of the treatment groups received different email messages. The differences in each group's response were compared to the control group to determine the specific impact of the treatment as well as the impact of the overall pilot program.

This project also generated the creation of the *First-Time License Buyers Retention Pilot Program Toolkit (2016)* by RBFF. (https://www.takemefishing.org/getmedia/5742caf6-e570-40e1-b9ee-c50a81402dd8/First-Time-License-Buyers-Retention-Toolkit.pdf).

State Wildlife Agency Partnership Marketing Outreach Summary Association of Fish & Wildlife Agencies Multi-State Conservation Grant Program Award #F14ap000154 State Wildlife Agency Partnership Marketing Outreach Summary. 2017.
National Shooting Sports Foundation prepared by Southwick Associates.
www.southwickassociates.com/2015-nssf-hunter-churn-and-lifestyle-summary-report/

This five-page summary reports the results of marketing campaigns in collaboration with natural resources agencies in eight states. The campaigns included: 1) digital marketing and/or email campaigns; 2) a hunter education graduate engagement campaign; and 3) hunter engagement email campaigns. The target audience of these campaigns were: 1) people who had expressed an interest in hunting (recruitment); 2) hunter education graduates and apprentice license buyers (retention/conversion); and 3) current and past hunting license purchasers (retention/reactivation).

The goal of these marketing campaigns was to test several different approaches designed to increase awareness of hunting and boost hunting license sales. Each campaign was evaluated based on changes in license purchases and revenue generated between a control group and various treatment groups.

The brief descriptions of the campaign elements did not include either the granular details of the assumptions made, or the descriptions of the specific steps taken to identify control or test groups. However, contact information is provided to allow interested parties to contact the project leads.

Making It Last (MIL) State Marketing Campaign Toolkit. Association of Fish & Wildlife Agencies.
https://www.fishwildlife.org/application/files/5815/9009/2691/Making_It_Last_Toolkit-UpdatedMay2020.pdf

While not specifically designed for R3 efforts, this toolkit provides a general overview of how to design and implement marketing campaigns. The concepts presented are readily adapted to any program, including those focused on R3. It provides numerous tips and best practices for developing marketing campaigns. From an R3 evaluation perspective, this resource advises that: "success metrics" be established at the onset of any campaign and the metrics selected should span a variety of elements, including ultimate outcomes (in this case changes in attitudes and knowledge), intermediate outcomes (such as interest in volunteering, email signups, etc.), and outputs (such as views, shares, or cost per click); priority audiences be selected to target; and key audiences be selected based on interest and aligned activities rather that demographics. It also contains several audience profiles of potential target audiences.

In addition, it contains numerous, specific suggestions for designing, testing, and delivering messages, as well as tips for implementing campaigns and purchasing paid media. The results and "Lessons Learned of several pilot campaigns are also presented.

Iowa Department of Natural Resources Hunter Education Graduate Email Campaign. Iowa Department of Natural Resources Hunter Education Graduate Email Campaign & Survey. 2017. Prepared by Southwick and Associates.
https://find.nationalr3community.org/l/119558af6f854cde/

This detailed report outlines specific steps taken by the Iowa Department of Natural Resources (assisted by Southwick and Associates) to engage hunter education graduates via an email marketing campaign during two different years and a follow-up survey used to assess their attitudes, preferences, motivations for, and barriers to hunting. The agency targeted slightly different audiences and utilized different marketing approaches each year. The results of the different efforts were then compared to identify which was most effective.

Iowa hunter education graduates were contacted through a series of eight content-specific email messages that used embedded links, images and videos, and topic-specific information. Graduates that clicked on any of the embedded links would be automatically redirected to the DNR's website that provided additional information such as how to hunt a particular species.

In addition to the email campaign, surveys were sent to Hunter Education graduates to gauge their attitudes, preferences, motivations for, and barriers to hunting. Numerous insights were obtained related to these goals. In addition, this survey assessed species specific hunting participation rates and a self-selected avidity rating for each respondent.

Council to Advance Hunting and the Shooting Sports Marketing R3 Topic Guide. Produced by the Council to Advance Hunting and the Shooting Sports.
https://nationalr3community.org/marketing/
Marketing R3 Topic Guide
https://nationalr3community.org/marketing/

Marketing Awareness https://nationalr3community.org/marketing/awareness/

This resource provides *Best Practices* for improving constituency awareness about available opportunities to go hunting and/or fishing. Sub-topics include events and program recommendations; branding; communication tools; recruiting locations; the importance of good imagery; using paid marketing; establishing and defining benchmarks; and an appendix of supporting content.

Marketing Partnerships https://nationalr3community.org/marketing/marketing-partnerships/

This resource provides *Best Practices* using marketing tactics for developing partnerships to assist in achieving your R3 goals. Sub-topics include creating and maintaining partnerships; educating partners on measuring and evaluating R3 efforts and marketing strategies; assisting partners recruit participants; grant opportunities; and an appendix of supporting content.

Marketing Retention https://nationalr3community.org/marketing/marketing-retention/

This resource provides *Best Practices* for marketing tactics designed to retain existing hunters, anglers, and sports shooters. Sub-topics include collecting background data and establishing benchmarks; setting internal goals; identifying specific target audiences; developing strategies for Millennials; customizing messages for older audiences and female audiences; collecting and using good data; how to analyze your audiences and create personas; and creating customized content for future analysis or use.

Selling Licenses https://nationalr3community.org/marketing/selling-licenses/

This resource provides *Best Practices* for creating systematic processes and communication strategies for selling hunting, fishing, target shooting, and other recreational licenses/permits/registrations and tracking purchasing behaviors. Sub-topics include conducting internal and external assessments of websites; dissemination of license data to create dashboards; training license agents and call center support; configuring licensing systems to identify pre-requisite product purchases and create license packages; using UTM tags to track message origins; creating and using a Customer Relationship Management (CRM) system; and a list of resources.

Licensing Systems https://nationalr3community.org/marketing/licensing-system/

This resource offers tips and ideas to consider when a new licensing system is being considered and/or purchased. Sub-topics include setting requirements; including add-on and marketing options; establishing evaluation criteria for competing systems; and establishing best value criteria.

TX Parks & Wildlife Department Digital License Renewal Campaign. 2020.
https://www.takemefishing.org/getmedia/178bba53-4c85-4bbe-8e71-a084458c76b3/TX_Digital_Campaign_Case_Study_2020_FINAL.pdf

This case study provides an overview of the Texas Parks & Wildlife Department's license renewal campaign. TPWD worked with its ad agency and their data vendors to match customers using their digital IDs. This allowed Texas to effectively market to their customers while keeping customer data protected and anonymous.

The media strategy developed specifically focused on reactivation of lapsed customers. Four different lapsed license buyer types were directly targeted with digital ads placed on social media over an eight-week period. A fifth group was used as a control group so an evaluation on the campaign's effectiveness could be performed. The campaign reactivated 2,382 anglers and resulted in $146,226 in added revenue.

Direct Mail & Email Marketing Toolkit to Reactivate Lapsed Anglers. (ND). Recreational Boating and Fishing Foundation.
https://www.takemefishing.org/getmedia/ebe9209a-dc87-454b-9c32-7c5187f0db38/ReactivateLapsedAnglers_DirectAndEmailMarketingToolkit

This toolkit outlines ways to launch a marketing campaign targeted at reactivating lapsed anglers to increase fishing license sales. The toolkit also includes numerous templates and downloadable files that can be used to customize direct mail and email messages sent to the lapsed anglers in your state.

The toolkit identifies six specific steps that are needed to successfully implement the campaign: 1) leverage your database; 2) set a budget; 3) determine your strategy; 4) prepare for response; 5) launch your program; and 6) evaluate your program. Important tips to consider and implement are included for each of the six-steps.

Fishing license sales is the metric used for evaluating and determining the success of this campaign.

TN Geofencing And Outreach, RBFF State R3 Program Grants (2020). Tennessee Wildlife Resources Agency and Recreational Boating and Fishing Foundation.
https://www.takemefishing.org/getmedia/db1a9523-a464-49ef-9315-3dab1ddde7b3/TN-Geofencing-and-Outreach-Case-Study-FINAL.pdf.

This two-page case study summarizes the Tennessee Wildlife Resources Agency's innovative geofencing marketing campaign to reach lapsed anglers who also attended either the Nashville Farmers Market or the Wilderness Wildlife Festival in Pigeon Forge. This case study outlines the methodology, lessons learned, benefits, and results.

First-Time License Buyers Retention Pilot Program Toolkit. 2020. Recreational Boating and Fishing Foundation. https://www.takemefishing.org/getmedia/5742caf6-e570-40e1-b9ee-c50a81402dd8/First-Time-License-Buyers-Retention-Toolkit.pdf?utm_source=newswaves%20newsletter&utm_medium=email&utm_campaign=1120%20newswaves

This resource provides an overview of Recreational Boating and Fishing Foundation's partnership with the Georgia Wildlife Resources Division (GWRD) to implement an angler retention pilot program that targets first-time fishing license buyers and encourages them to renew their fishing license. This resource summarizes the success of GWRD's program, as well as provides angler R3 practitioners with all of the marketing and promotional tools necessary to implement a similar program in their respective state. The toolkit also provides an outline for an experimental design (based on communications the first-time fishing license buyer receives) so that the success of various toolkit's marketing efforts can be assessed and evaluated.

RBFF Marketing Webinars and Workshops
https://www.takemefishing.org/corporate/resource-center/webinars-workshops/

Numerous additional marketing resources are available on this site. Resources include presentations made at the annual RBFF State Marketing Workshops.

R3 Evaluation Training Resources

Planning Your Program Evaluation (excerpted from the Locavore.guide Training Manual available through DJ Case and Associates). 2021.

This evaluation-specific resource is Chapter 5 of the workbook used in the in-person training put on by DJ Case and Associates on how to use the material contained in Locavore.guide (https://locavore.guide). This material is in the process of being revised for the 2021 training sessions.

This training supplements the resources contained in in Locavore.guide by providing detailed explanations for the content and strategies used to implement an R3 effort aimed at using interest in wild food as a participant motivator. The training uses worksheets and small group discussions to help workshop participants apply the information learned to their specific situation. In addition, the workshop provides sample questions that can be customized and used for evaluating specific efforts. While the information presented is tied to the Locavore.guide, the training provided is readily applied to other R3 programs and efforts.

Recruit, Retain, Reactivate (R3) Training (OUT8072). National Conservation Training Center. National Conservation Training Center, Shepherdstown, WV.
https://nctc.fws.gov/courses/descriptions/OUT8072-Recruit-Retain-Reactivate-Training-R3.pdf**.**

This three-and one-half day course is offered to "anyone responsible for outdoor recreation programs; [particularly] R3 coordinators and practitioners." It has been offered three times (2017, 2018 and 2019).

The course description states that, "Upon completion of this course, you [graduates of the course] will be able to:

- Lead R3 Plan development, implementation, and evaluation efforts; and
- Engage stakeholders in R3 planning, implementation, and evaluation."

The evaluation section for each of the courses used different instructors and different instructional material. None of this material was available for review.

Open Standards for the Practice of Conservation. 2020. Conservation Measures Partnership.
https://cmp-openstandards.org/download-os/

This resource covers all aspects of using *results* chains to design, implement and evaluate conservation initiatives. While it is designed for biological-focused initiatives, the skills taught are readily transferable to R3 efforts. It is used as the textbook for teaching the *Open Standards for the Practice of Conservation* (ALC3128) course offered by the National Conservation Training Center and other institutions.

Council to Advance Hunting and the Shooting Sports R3 Evaluation Resources

Diving into Evaluations. December 2019. (90 minutes). Council to Advance Hunting and the Shooting Sports Webinar Series.
https://www.youtube.com/watch?v=kbjGjz8L5YA

This webinar features Matt Dunfee and Sam Pedder discussing the basics of both program improvement evaluations (formative) and impact evaluations (summative). They reiterate that the goal (ultimate outcome) of R3 efforts is to: 1) create a new participant; or b) increase the avidity of an existing participant. Results chains are explained and used to develop an efforts' "theory of change." The theory of change forms multiple hypothesizes that can be tested and used as the basis for asking evaluation questions. The evaluation tool used, and the data collected depends on the question(s) you want answered.

They advise that program improvement evaluations be conducted over time until internal program changes are fully implemented, and consistent results are obtained. At that time, the evaluation focus can be shifted to ultimate outcome measures. In many situations, determining an efforts' ultimate outcome may require an integrated data management system(s) that can track customers behaviors over time.

Try, test, learn, adapt: The Massachusetts approach to R3. September 2018. (55 minutes). Council to Advance Hunting and the Shooting Sports Webinar Series.
https://www.youtube.com/watch?v=mMKS4OeOk1s&list=PL_JRPeudfPfCVJGjTpy45Ob8QoGhe78q9&index=17

This webinar provides an overview of Massachusetts Division of Fisheries and Wildlife's R3 program evolution and planning processes, as well as an in-depth explanation of the implementation and evaluation of their newly developed Learn to Hunt clinics.

A Multi-state Approach to Evaluate the Success of Programs. March 2019. (43 minutes). Council to Advance Hunting and the Shooting Sports Webinar Series.
https://www.youtube.com/watch?v=D_Dubroe6JE

This seminar features Rachel Ladd (IA), Eddie Herndon (VA) and Micaela Rahe (NE NWTF / NE Game and Parks) who discuss the implementation and findings of surveys that used several of the same questions in evaluating of multiple, different programs held in several states. The survey used Kalkomey to deliver the pre-program questions during the registration process. The discussion includes lessons learned in writing, designing, implementing, collecting, and analyzing these survey questions.

Outcomes versus Outputs. July 2017. (5 minutes). Council to Advance Hunting and the Shooting Sports Webinar Series. https://www.youtube.com/watch?v=aDdvzdPmfOY

This quick webinar discusses the differences between outcomes and outputs and identifies that the specific outcome of R3 effort is: 1) create a new participant; or 2) get an existing participant to become a more active participant. It emphasizes that measuring the change(s) in behavior of participants is critical to measuring the "success" of R3 efforts, i.e., "outcomes are all about achieving the change your effort was designed to bring about." In addition, it discusses measuring outputs and mid-term outcomes.

Showcasing Data in Action. April 2018. (48 minutes). Council to Advance Hunting and the Shooting Sports Webinar Series. https://www.youtube.com/watch?v=e9jnbMC8nQY

This webinar highlights various marketing strategies from Georgia (Jenifer Wisniewski) and Virginia (Eddie Herndon and Aaron Bunch). Both use multiple data sources that the agency already possesses to identify specific lapsed customers to send, and test, customize marketing messages.

Georgia used data dashboards Southwick and Associates developed to identify specific lapsed license holders to send customized messages. They were assisted by their license vendor (Brandt) to manage the emailing and tracking aspects of the campaigns. They have also recently started to use UMT tracking to understand customer web browsing and licensing purchasing behaviors. In addition, Jenifer shared valuable lessons learned.

Virginia is targeting anglers who participated in fishing creel surveys but have allowed their fishing licenses to lapse. They are combining the using zip codes of fishing creel surveys participants with their lapsed angler data bases to create spatial maps of areas to target. Customized emails will be developed and tested based on the watershed the lapsed angler was fishing at the time they were surveyed. Staff from several sections of the agency worked on this campaign and contributed their specialized skills to the effort.

Data Dashboards Resources

What Are Data Dashboards? [Tracking Participation and Revenue Trends via Data Dashboards]. Council to Advance Hunting and the Shooting Sports R3 Webinar. October 2016. (48 minutes). https://www.youtube.com/watch?v=41utM8CmBzM

This with webinar features Rob Southwick, from Southwick and Associates, who discusses scorecards and dashboards. A scorecard is essentially the fish and wildlife industries equivalent to a list of key performance indicators (KPI). Scorecards list a series of suggested metrics related to hunting and fishing license sales that agencies should track. Tracking these metrics allows a state to monitor changes in sales over time. Before dashboards were available, this information was difficult to produce, analyze, and interpret.

Dashboards provide a quick visual summary of trends, values, distributions, and other key performance indicators that are selected. They can be sorted by specific time frames to discover patterns, connections, or unique trends. The quality of the information displayed is limited by the quality of the data that supports it. In addition, it only displays the data, not the reasons behind the changes depicted. Analyzing and interpreting the trends depicted is a separate set of skills.

The ability to create dashboards is an internal function of computer software. Having this ability, and its ease of operation, are important considerations when looking at software upgrades.

Some license vendors are offering dashboard capability as part of their suite of services and often provide staff training on how to use this function. With these types of software, states can customize dashboards depending on need and quality of their data.

Linking license databases with an event management system or a customer relationship management (CRM) system will allow states to track events, individual participation, license sales, and monitor the impacts of their R3 efforts. The best way to discern trends in this data is displaying the information in a dashboard format. However, R3 strategies will need to be developed based on interpreting the data, trends, and other state specific factors.

Hunting Season 2020 and Using Data Dashboards to Retain New Participants. Council to Advance Hunting and the Shooting Sports R3 Coffee Hour. October 2020. (52 minutes).
https://www.youtube.com/watch?v=fsdac4HFr9Q

This "Coffee Hour" features Rob Southwick, from Southwick and Associates, going over a data dashboard constructed using license data from 15-19 states. The actual dashboard has not been released to the public.

Dashboards are powerful tools to visually display complex data sets to discern trends. This dashboard rolls up state-specific license data into a larger data set (i.e., regional, and national) that can project trends for a larger universe. This data only includes license holders and does not include non-licensed hunters or anglers.

It is important to note that dashboards are only as good as the data used to create it. In addition, dashboards do not report the reasons for the trends displayed, so they need to be interpreted with care and skill. The real power of dashboards is that they display trends in a manner that lends itself to asking questions about why these trends are occurring, and or identifying emerging trends that may go undetected using other tools.

For R3 evaluation purposes, linking license databases with an event management system or a customer relationship management (CRM) system is the holy grail that will enable practitioners to measure the outcomes of their efforts.

National/Regional Sportsman Participation Data Dashboard. American Sportfishing Association. 2020. Produced by Southwick and Associates.
https://asafishing.org/data-dashboard/

This interactive dashboard is discussed in *R3 Coffee Hour: Hunting Season 2020 and Using Data Dashboards to Retain New Participant* summarized above. It the uses state license data to create the dashboard. This dashboard is updated two times per year. The dashboard allows users to select and manipulate key performance indicators (metrics), location, and timeframes to obtain different "snapshots" of the data. In addition, three supporting documents are appended that explain the methodology (https://asafishing.org/wp-content/uploads/2020/10/National-Regional-Dashboard-Methodology-9_22_20.pdf), state-specific anomalies and notes (https://asafishing.org/wp-content/uploads/2020/10/State-Specific-Dashboard-Notes.pdf), and a "how to" document to assist users in operating the site (https://asafishing.org/wp-content/uploads/2020/10/National-Regional-Dashboard-Instructional-Graphic.jpg).

R3 Evaluation Examples

Conservation Leaders for Tomorrow Workshop Assessment 2012-16 Workshop Survey Analysis. 2019. Prepared for Conservation Leaders for Tomorrow by DJ Case & Associates.
https://clft.org/sites/default/files/resources/CLfT_workshop_assessment_2-4-19_revised.pdf

The Conservation Leaders for Tomorrow (CLfT) Workshop is NOT and R3 program. However, it was carefully designed to achieve very clear *goal*, namely:

> *…to identify current and future leaders of the natural resource profession who do not hunt and provide them with an understanding of the diverse and important roles hunters and the consumptive use of wildlife play in conservation.*

This resource is included in this assessment of evaluation tools because it is an excellent example of using *results chains* (See *Open Standards for the Practice of Conservation* section for additional information) to design, implement, improve and evaluate a program.

CLfT incorporated an evaluation component as an integral part of every aspect of the programs' design and implementation. As a result, the program adapted, and improved because of the feedback obtained from its short- and mid-term evaluation efforts.

This resource summarizes the analysis of four years of workshop exit surveys from agency professionals who attended CLfT, as well as a long-term assessment on the *impact* (*ultimate outcomes*) that it is having on natural resource professionals.

By using the *results chain model* to guide its evaluation efforts, CLfT can confidently assert the following *result:*

> *[they can] …understand the movement of program participants from interested or even somewhat skeptical of hunting, fishing and trapping to supporters and at times even advocates for these activities as they relate to conservation efforts across the country.*

The *critical thinking* that created CLfT's *results chain* identified *specific objectives* for the program. These objectives were carefully worded so that they can be measured, and *indicators* were selected that represent their completion. The indicators were tracked and used in the evaluation to determine the program's progress towards meeting each of the identified objectives.

Program Evaluation: Transforming Youth Outdoors. ND. http://mytyo.org/resources/program-evaluation/.

This evaluation information is provided to participants of the National Conservation Training Centers' *Recruit, Retain, Reactivate (R3) Training* course. Nine sub-tabs are connected to this website that provide examples of the steps used in developing their evaluation.

While it is not R3 specific, it provides a simple overview of how the Transforming Youth Outdoors program evaluates its' outdoor skills training courses. This program suggests a ten-step process to measure its' impact. The steps include: 1) Establish Theory of Change; 2) Clarify Program Activities; 3) Define Program Outcomes; 4) Choose Program Indicators; 5) Identify Program Metrics;6) Determine Methodology; 7) Develop Tools; 8) Test Tools; 9) Gather Data; and 10) Integrate Results.

These steps are similar to the steps recommended by other evaluation guides. However, this material provides guides and examples of how the program implemented each of the steps.

In addition, this guide has created a table titled "Evaluation Issues and Suggestions for Addressing Them" that R3 practitioners may find useful.

Locavore Pilot Pre-Program, Post-Program, and Post-Season Survey Results 2016. Conducted for the Southeastern Association of Fish & Wildlife Agencies' Committee on Hunting, Fishing, and Wildlife-Related Participation and the Midwestern Association of Fish & Wildlife Agencies' Recruitment and Retention Committee by Responsive Management. http://locavore.guide/sites/default/files/resources/files/Locavore%202016%20Pilot%20Survey%20Report%2012%2019%202016.pdf

This resource reports the results of pre-, post-, and post-season surveys used to measure the outcomes from seven different R3 event-based efforts conducted in five states. The efforts were specifically designed to target young adults in urban/suburban areas who are interested in locally grown and/or organic foods (a.k.a. "locavores").

The generic survey questions asked for each program. These were then customized by the program implementer to match the specifics of the program being taught. These survey questions are imbedded into the graphs showing the results for each program.

It is unclear if these seven programs established specific goals, objective or outcomes they hoped to achieve prior to being implemented. As a result, while the survey questions captured and reported on a lot of useful information about program participants and their experience in the program, they did not specifically report if the program met their goals. In addition, this resource reported the “likelihood” of participants continuing to participate in hunting or fishing, which is as far as a survey can assess. It is unclear if the sponsoring agencies tracked participant license purchases over time.

Alumni Reflections on Wisconsin's "Hunting for Sustainability" Course, 2012 & 2013. 2014. Wisconsin Department of Natural Resources. R. Holsman and N. Kaner
https://locavore.guide/sites/default/files/resources/files/SS1136.pdf

This report summarizes the themes and program feedback that emerged after conducting semi-structured, telephone interviews with individuals who participated in the program’s first two years. The objective of this evaluation was to assess participant perceptions and to gain insights into their individual progress in the process of becoming a hunter after their program experience.

This evaluation is somewhat unique in that it adopted a “case study” approach to obtaining the information sought. This approach allows each participant to “tell their own story” while providing the program administrators a richer understanding of the program’s strengths, weaknesses and long-term impact(s).

Assessing Questionnaire Responses. Massachusetts Division of Fisheries and Wildlife. November 2019. Northeastern Association of Fish and Wildlife Agencies Annual Meeting Portland, ME. www.neafwa.org

This resource is a PDF file of a presentation made by Jody Simoes, Human Dimensions Program Coordinator for Massachusetts Division of Fisheries and Wildlife, at the 2019 Northeastern Association of Fish and Wildlife Agencies Annual Meeting.

This presentation provides an excellent overview of MassWildlife’s R3 program evaluation process, including guidance on survey design and survey data management. Referencing several key resources found in the *Recommended R3 Evaluation Resources* collection, MassWildlife’s evaluation process is framed by five recurring evaluation concepts that emphasize: a strategic and scientific approach; the application of the Outdoor Recreation Adoption Model; audience selection; participant social support; and program resources.

These evaluation design concepts, in concert with formal program evaluation concepts (i.e. Planning Evaluation, Formative Evaluation and Summative Evaluation), frame specific, strategic questions about why the program existed, who the “right audience” was, what did this audience need, what level of social support did they currently have, what activities have they already participated in, what are their current skill and confidence levels, and what does success look like for them. These questions formed the basis for their planning and formative evaluation and provided indicators to measure them. This also set the stage for a summative evaluation that sought to determine what behavioral changes took place among the target audience and whether the agencies’ program goals were being met.

The presentation concludes with evaluation results from MassWildlife’s Youth Hunt” and “Learn to Hunt” programs as well as examples of how the information was used to improve program offerings.

RECOMMENDATIONS

Though numerous recommendations and conclusions could be drawn from the R3 practitioner interviews and R3 evaluation resource assessments completed as part of this project, the majority of the it is clear to the authors and R3 experts who reviewed the products included in this report that the implementation of two primary recommendations is critical to the future of effective and efficient R3 evaluation and R3 effort delivery.

Recommendation 1: Organizations implementing R3 efforts or allocating R3 funding should adopt and enforce standard R3 evaluation outcome criteria and metrics.

Stated most simply, the purpose of an R3 effort is to modify human behavior. That is, incentivize a person to adopt an activity and participate in that activity of their own volition at some frequency over time. Thus, R3 efforts should be viewed as interventions that are needed to initiate an individual's adoption of new behaviors through the acquisition of knowledge, skills, peer support, and personal experience.

Such a view is not a novel approach to influencing human behavior change. As described by decades of social science and marketing literature, the processes needed to initiate a person's adoption of new behaviors are relatively predictable, easily discovered, and readily adapted (Byrne and Dunfee, 2018). These processes, specific to the adoption of outdoor recreation activities, are well described in the 2018 review by Byrne and Dunfee, "Evolution and Current Use of the Outdoor Recreation Adoption Model." As noted in that review (as well as numerous other research reports and case studies), an individual or group's adoption of a new behavior (or behaviors) is likely dependent upon 1) how well the behavior aligns with the individual's existing values or beliefs, and 2) how well an R3 effort addresses the unique barriers (real and perceived) that are restricting a particular audience from participating in the behavior. Ideally, R3 efforts should be specifically designed and implemented to address the barriers and subjective learning needs of a particular group or demographic. If the effort is designed without an understanding of an audience's beliefs, values, and barriers to participation, it may fail to motivate attendees to become independent participants in the future. Given the diversity among the population of those likely to engage in a new outdoor activity, it is imperative that R3 efforts be designed and implemented adaptively with outcome feedback loops capable of informing R3 practitioners on how and when to modify their R3 tactics for increased effectiveness and efficiency.

This underscores the need for adaptive R3 program design and implementation that incorporates an output and outcome evaluation system capable of documenting the effort's impact on its participants' behaviors over time. Unfortunately, surveys and research previously completed by WMI, the Aquatic Resources Education Association, the Recreational Boating and Fishing Foundation (RBFF), the Council to Advance Hunting and the Shooting Sports (CAHSS), and

Responsive Management have documented that among the numerous and diverse hunting, shooting sports, and fishing R3 programs implemented annually in the United States, a systemic lack of evaluation to document ultimate R3 outcomes (i.e., the number of new participants or the amount of increased participation by existing users) is hampering 80-90% of these efforts. Additionally, these studies reveal a broad absence of evaluation structures capable of gathering participant and staff feedback essential to helping R3 implementers improve their program over time. Perhaps most surprising, this research also indicates that the majority of R3 efforts being implemented by state fish and wildlife agencies and conservation NGOs were not strategically designed to overcome documented and specific barriers to participation that negatively impact a particular target audience. Rather, these efforts appeared to be designed according to the perceptions, expectations, or personal experiences of the program administrators (or volunteer instructors), and not heavily informed by target audience's needs, desires, or preferences.

Need for R3 Evaluation Standards

To be fair, the number of R3 practitioners and R3-vested organizations working diligently to evaluate their current efforts and design new, data-driven R3 strategies has been steadily increasing since the 2016 publication of the National Hunting and Shooting Sports Action plan and the outcome-based vision of R3 advocated by WMI, CAHSS, RBFF, and a growing number of fish and wildlife management agencies. However, these organizations and individuals still struggle to gain traction against the outcome-metric apathy that seems to dominate the R3 and conservation education culture examined as part of this project. This is likely due, in part, to the lack of agreed upon and explicitly stated metric and measurement standards for R3 outcomes, outputs, and key indicators. Though R3 evaluation standards have existed within the R3 community, at least in theory, since 2009 (as identified at the Western Association of Fish and Wildlife Agencies Hunter, Angler and Shooting Sports Participation Committee in November 2009), the R3 coordinators and agency leaders interviewed in this project identified a consistent need for these evaluation standards to be simply and clearly articulated according to the current state of available science and practitioner knowledge.

It is not entirely clear why those the R3 community who were interviewed during this project so ubiquitously call for a codification of national R3 standards, but it is likely due to two main types of challenges that have been identified at numerous R3-related workshops, symposia, and committee meetings in recent years. First, that those implementing R3 efforts generally perceive that they do not have the expertise, resources, or support needed to systematically evaluate and adapt their efforts using ultimate outcomes. Second, and perhaps most influential, is that the organizations who have historically engaged in R3 work were, for many reasons, inadvertently influenced by "measurability bias". In his excellent critique on the use of performance metrics, "The Tyranny of Metrics (2018)," Jerry Z. Muller describes this bias as, "the tendency to prefer options simply because they can more easily be measured." Even a cursory review of most R3 evaluation-related resources reveal how pervasive this bias has been in R3 evaluation for decades, and how it has created the outcome data vacuum described in the previous section. Nearly all the R3 evaluation best practices and recommendations that have emerged from academia, NGO think-tanks, and independent research have highlighted the chronic misuse of "easy metrics" in the assessment of R3 success at both program and organization levels. Or in Muller's words, "measuring the simple when the desired outcome is complex." This is, perhaps, the most elegant and succinct way to describe the recurring flaws in R3 effort evaluation; displacing the difficult work of documenting complex human behavior change outcomes in exchange for simple program output tallies. It is easy to see how R3 program staff can fall into the trap of defending the effectiveness of their program by reporting easily obtained metrics such as attendee numbers or program delivery frequency. It takes little time or investment to document how many programs were delivered in a year, how many people attended them, or even how many participants indicated they were likely to engage in a program-focused activity in the future. However, none of these metrics reveal the quantity, durability, or frequency of desired behavior changes that resulted from a particular R3 program being delivered to a particular type of participant.

Unfortunately, extensive interview data from R3 coordinators and organization leaders and numerous assessments documenting the state of R3 program assessment in the United States, indicate that the professional field of outdoor recreation R3 is not likely to adopt outcome-driven program improvement and efficiency based on meaningful metrics until practitioners and organizations first adopt:

1. Standardized outcome and associated metrics as the basis of their R3 evaluation strategies.
2. A logic model results chain approach to designing and evaluation their R3 efforts to effect participant behavior change.

To remedy these deficiencies, the following two sections present a proposed framework for both of these practices that can, hopefully, provide strategists and program implementors a common foundation for data-driven improvement of outdoor recreation R3 efforts over time.

Standard R3 Outcome

Both the *National Hunting and Shooting Sports Action Plan* published by the Council to Advance Hunting and the Shooting Sports and the *Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts* published by the Recreational Boating and Fishing Foundation provide clear and defensible guidance on the ultimate goal of outdoor recreation R3; to increase participation (i.e., physical engagement) in a target activity. This does not include pre-engagement or intermediary steps such as skills and knowledge learning, consideration, soliciting expertise, etc. While important, these intermediary steps are not the end point. They are useful in documenting an individual's progression or needed next steps in achieving the end point, but if an R3 effort's facilitation of these steps does not ultimately result in an individual's physical participation in the target activity, then the effort cannot be considered ultimately successful. It should be noted that not all R3 efforts are designed to include an opportunity for a participant to engage in the target activity. Nor should they. However, if the implementors of these intermediary R3 efforts cannot link the impact of their endeavor to a participant's future behavior, the ultimate effectiveness of the effort will remain obscure, leaving staff vulnerable to measurability bias given that they will have only output data upon which to evaluate the merits of the effort.

The ultimate outcome of an R3 effort and its associated behavioral objectives can be stated as:

1. The number (or proportion) of participants who exhibit the behavioral objectives of an R3 effort following the completion of the effort and who would not have done so without the influence of the effort.

a. Behavioral Objective 1: The R3 effort participant participates in the desired activity for the first time as a result of the R3 effort's influence.
b. Behavioral Objective 2. The R3 effort participant participates at an increased frequency or duration in the target activity over a period of time as a result of the R3 effort's influence.

Objectively observing behavior change of the participants of an R3 program over time is neither reasonable nor realistic as a technique for objectively documenting the above outcomes. Such a practice, though the gold standard in human research, is simply impropriation outside of a laboratory or controlled research setting. Therefore, R3 practitioners must rely on a proxy for direct observation, some indicator(s) that can easily be tracked or measured and are highly correlated to the desired participant behavior change.
Fortunately, R3 practitioners have several such indicators that can be used as indicators of the desired outcome. The most reliable of these can be summarized as:

1. Privilege purchase (licenses, tags, access passes) patterns of R3 effort participants. Ideally, these should be identifiable by unique individual identifiers (customer or sportsperson numbers, DOB, etc.). Target activity-related equipment purchases may also be used as behavioral indicators but are best used in combination with an additional behavioral indicator given that little is known about how likely a buyer is to use their equipment, particularly at multi-year timescales. Thus, equipment purchases are better used as an indicator of Behavioral Objective 1 unless equipment purchases of the R3 effort participant can be tracked over time.
2. Questionnaire or survey responses. Where privilege or equipment purchase rates are not available as participant behavior indicators, post-event surveys or questionnaires should be used to document participant behavior at an appropriate time interval to document the effort's impact on the participant's behavior and target activity avidity. For example, hunting and fishing R3 effort evaluation should follow peak hunting and fishing seasons. For other outdoor activities such as hiking, boating, shooting sports, camping, etc., surveys or questionnaires designed to document R3 effort outcomes should be delivered no less than six months following the completion of the effort, and only after the seasonal peaks of the activities have passed (thus providing participants reasonable opportunity to engage in the desired activity). Ideally, initial surveys should be paired with long-term, longitudinal surveys that document participant behavior change or stability over time.

R3 Effort Outputs
As previously stated, past and current R3 effort evaluation processes have disproportionately relied on simple implementation outputs, rather than participant behavioral outcomes. According to R3 coordinators interviewed for this project as well as parallel projects delivered through 2020 and 2021 Multistate Conservation Grant program awards, the most common outputs tracked in current R3 efforts include the following:

1. The number of participants that attend an effort, program, or event over the course of its delivery per annum.
2. The total number of efforts delivered per annum.
3. The number of views for online media content, open rates for emails, and website visitations.

4. The number impressions generated in a digital marketing effort (these include pay-per-click impressions, shares and forwards on social media, on-site views of calls-to-action, views of content through third-party sites, etc.).
5. Post-event attitude or opinion data (increase in participant knowledge, skills, motivation, intention to participate in the target activity in the future, etc.)
6. Demographic data (age, gender, ethnicity, race, etc.)

Effort delivery metrics like these may document how well a program or effort has been implemented in the short term but are inadequate to reflect how the effort's implementation impacted the participant's future desired behaviors. This shortcoming isn't to say, however, that effort output data is not useful. On the contrary, R3 effort output data, when tied to implementation objectives, is critical to those wishing to improve their program's effectiveness over time. But to do so, a more thorough and thoughtful evaluation strategy is needed.

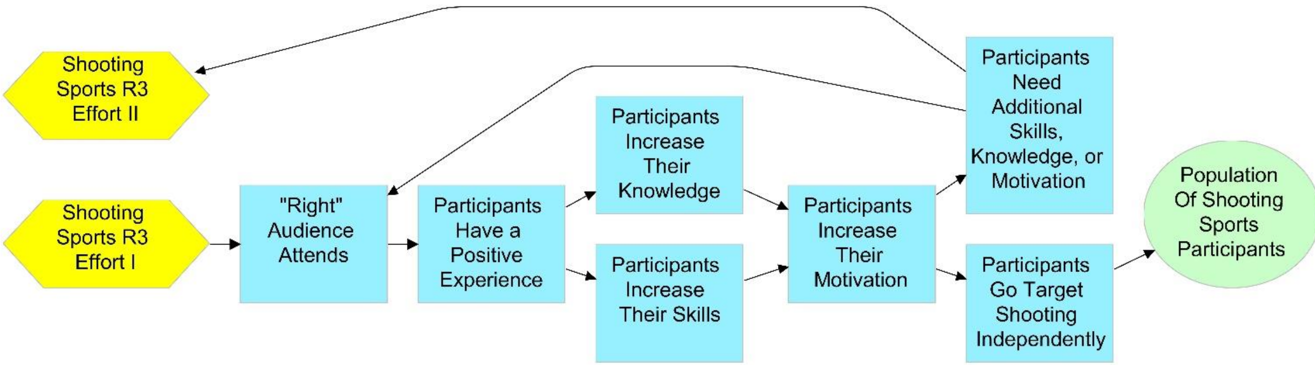
According to those interviewed as part of this project, the use of results chains is likely the most efficient and effective means of developing R3 effort implementation objectives and associated output metrics capable of adaptively improving an effort over time. The process of using results chains to evaluate R3 efforts has been well described in two recent publications; "Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts" published through a partnership between the Aquatic Resources Education Association and the Recreational Boating & Fishing Foundation, and the "Natural Pathways" project published by the Association of Fish and Wildlife Agencies North American Conservation Education Strategy. The following section is a compilation of excerpts (written by this project's authors) from these documents with modifications for applicability of this report.

R3 Effort Results Chains

In simple terms, a results chain identifies the sequential changes in the outside world produced by an effort or program, and it does so by listing those changes in an "if, then" logic flow. These changes, or steps, break down an R3 effort in a way that frames each step as a "result" that occurs as a function of the step before it. In other words, each step must occur before the subsequent result can be achieved. If one of the results is missing or poorly delivered in a program's implementation, then the "results" that follow are far less likely to be achieved, and the ultimate outcome of increasing an audience's participation will likely remain unrealized. Using this type of logic to construct a new R3 effort or de-construct an existing effort is critical to understanding the core theory of how the effort is designed to change the short and long-term behavior of its participants.

Figure 1 illustrates this core theory in a simple results chain, using shooting sports R3 as an example focus. Note that this theory is applicable to hunting, fishing and likely any other outdoor activity R3.

Figure 1. Basic shooting sports R3 effort results chain.



shooting sports participants. The logic of how this program achieves that outcome is represented by the sequence of steps the participants move through, illustrated by the blue boxes. Each step is a result that must be experienced by the participants in a total sequence of results that are likely needed to bring about the ultimate change in participant desired behavior; in this case, that participants go target shooting and thereby increase the population of shooting sports participants.

The first step of this R3 effort (and a critical step to all efforts designed to change the behavior of a target audience) requires identifying the unique barriers that are restricting a particular audience from participating in the target activity; in this case, target shooting. Ideally, the effort should be specifically designed to address these barriers (and only these barriers) and incorporate the unique learning needs of the target audience. If the effort is designed without an understanding of the audience and their barriers to participation, it may deliver an experience that is enjoyable, but one that does not ultimately address the audience's needs and may not motivate them to become independent participants.

Moving from left to right, one can begin looking at each result according to an "if, then" logic. **If** an audience in need of a shooting sports R3 effort is targeted, and their barriers to recreational shooting are understood and addressed by the effort, **then** the target audience will benefit from the effort. Again, selecting participants exclusively from the target audience and understanding their specific barriers to participation are likely two of the most crucial factors contributing to the effectiveness of an R3 effort.

If the right audience attends, **then** they can have a positive experience because the effort was designed with their specific needs, desires, and barriers to recreational shooting in mind.

If the participants have a positive experience, **then** they can gain knowledge and/or skills.

If the participants gain more knowledge and skills, **then** their motivation (as well as confidence and interest) to go target shooting will increase.

If their motivation to go target shooting increases sufficiently, **then** participants will likely be faced with two different paths forward. Either the R3 effort provided them with sufficient skills, knowledge, and motivation to go target shooting on their own, or it made them realize they need more skills and knowledge (or additional tools like social support) before having the confidence or motivation to go target shooting themselves.

If the effort succeeds in motivating its participants to go target shooting on their own, then it has achieved the ultimate outcome because the desired behavior change has been realized. If, however, the participants only express a desire to learn more shooting sports skills or knowledge, program implementers are faced with a choice of either re-designing the effort to better address the audience's needs or providing participants with next steps by directing them to another existing R3 effort (e.g., the Shooting Sports R3 Effort II) that can sufficiently motivate to target shooting independently.

The basic results chain illustrated above can serve as a starting point for R3 implementers to design, plan and evaluate numerous types of R3 efforts. Below are two examples of how this basic logic can be customized for recruitment, retention, or reactivation-type efforts. These examples are adapted from previous work done by WMI and its partners in developing R3 evaluation toolkits and best practices for hunter, angler, and shooting sports R3 efforts (Council to Advance Hunting and the Shooting Sports, 2016; Recreational Boating and Fishing Foundation, 2016).

Example 1: Basic Angling Skills Training with Fishing
Definition: An event or class that includes only basic angler education (e.g. casting, fish ID, regulations, basic tackle, knots, fish cleaning, cooking, aquatic education, fisheries management, etc.) with on-the-water fishing experience. The target of the training could be youth, urban residents, ethnic groups, families, etc. Partners may include schools, parks, church groups, day-camps, youth organizations, conservation/service organizations, etc.

As with any R3 effort, the need for the effort should be clearly identified BEFORE an effort is developed. More specifically, for this example, a need for skills training and a first fishing trial experience should be identified as a participation barrier for a particular target audience before the effort is developed.

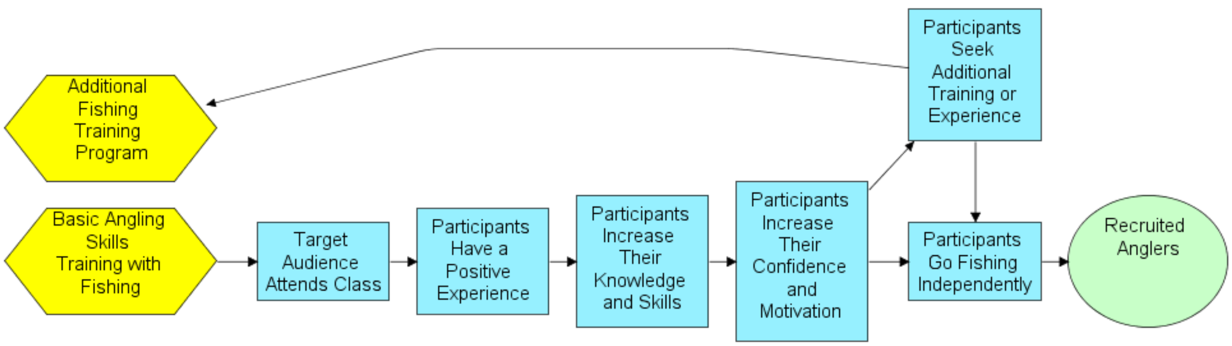
In general, R3 planners should identify the type and content of the effort needed using the following steps:

1. Confirm that more anglers are needed or desired. This can be assessed using license purchasing data, a review of the demographics and ages of current anglers, or other existing data or needs assessments.
2. Identify and select a specific target audience(s) in need of, and receptive to, an angler recruitment effort.
3. Using existing data, surveys, focus groups, or other reliable human dimensions research, conduct an initial assessment of the target audience's barriers to fishing and what may motivate them to try fishing.
4. Based on identified barriers and motivations, determine the most appropriate recruitment effort for the target audience (class, self-learning tool, targeted communication, etc.), and design it to address the audience's specific barriers and increase their motivation to go fishing.
5. Use a results chain to plan the effort and set up a framework to measure the recruitment of the target audience (i.e., their future fishing participation) and the effectiveness of the effort in addressing the audience's barriers to fishing.

For the purposes of this example, we will assume that steps one through four above were completed and revealed that a basic angling skills training with fishing class is the best way to meet the initial needs of the target audience. Note that this is a simplified example; it is likely that a needs assessment may reveal that multiple efforts over time are needed to address the audience's barriers to fishing and establish a complete pathway to independent participation.

A results chain for this effort could be customized from the basic results chain in Figure 1 as in the below:

Figure 2: Results chain for a basic angling skills training with fishing class.



The results, or "if, then" statements in this results chain are very similar to those in Figure 1. The primary difference is that these were drafted to be slightly more specific in what it is assumed the audience needs to experience in order to become anglers. Thus, each result is a hypothesis of sorts that can be measured. If each result is assessed for its impact on participants, class implementers will have the information needed to determine which elements of the class are effective, which need to be improved or omitted, and ultimately, which elements of the class are most critical to creating new anglers.

In order to understand which elements of the class are effective and which may need improvement, one or more objectives must be developed to assess each result. These objectives must be time-sensitive, contain a metric that can be validated, be specific to the audience, and be stated as simply as possible. For the results chain in Figure 2, the following are examples of how objectives could be written to measure each result:

Result: Target Audience Attends Class
Objective: X% of the participants who attend the class represent the target audience.

Result: Participants Have a Positive Experience
Objective: At the end of the class, at least X% of participants indicate that they had a positive experience.

Result: Participants Increase Their Knowledge and Skills
Objective 1: At the end of the class, at least X% of participants indicate that their fishing skills increased.
Objective 2: At the end of the class, at least X% of participants indicate that their fishing knowledge increased.

Result: Participants Increase Their Confidence and Motivation
Objective 1: At the end of the class, at least X% of participants indicate that the skills and knowledge they gained at the class sufficiently prepared them to go fishing on their own.
Objective 2: At the end of the class, X% of participants indicate they have a greater interest in going fishing. Note: "Interest" is used here as an indicator of "motivation."

Result: Participants Go Fishing Independently
Objective 1: After attending the class, at least X% of the target audience indicate that they went fishing independently.

Result: Participants Seek Additional Training or Experience
Objective: At the end of the class, X% of the participants indicate that they need additional skills, knowledge or experience before the will go fishing independently.

Using the above objectives, class implementers can draft simple participant surveys that include questions necessary to assess how well each objective was met (these are program outputs). Note that, depending on the objectives, a pre- and post-class survey may be necessary. Or, as in the case of the "Participants Go Fishing Independently" objective, a survey is not necessary if the participant's license purchases can be documented by the state fish and wildlife agency license sales database. It is recommended that class administrators develop surveys with the assistance of a human dimension specialist in order to develop questions that can collect accurate and un-biased participant opinions and experiences.

Using the above combination of pre-class planning, results chain development, and measurable objectives, implementers can create an evaluation system that will allow them to assess the degree to which their class is creating the desired behavior change its participants (this is the ultimate outcome), as well as identify specifically where their class needs improvement.

Example 2: Electronic Self-Learning Tools
Definition: Self-learning, "how-to" information tools on hunting. These may be electronic and print media, video, etc. Topics might include game ID and biology; maps; gear selection; effective hunting techniques; where-to-hunt; etc.

In this example, as with the previous, a need to develop self-learning tools should be identified BEFORE the effort is developed or delivered to a target audience, and an assessment of the resources, tools or support needed by the target audience should be completed.

In general, implementers should identify the needed type and content of this form of R3 resource using the following steps:

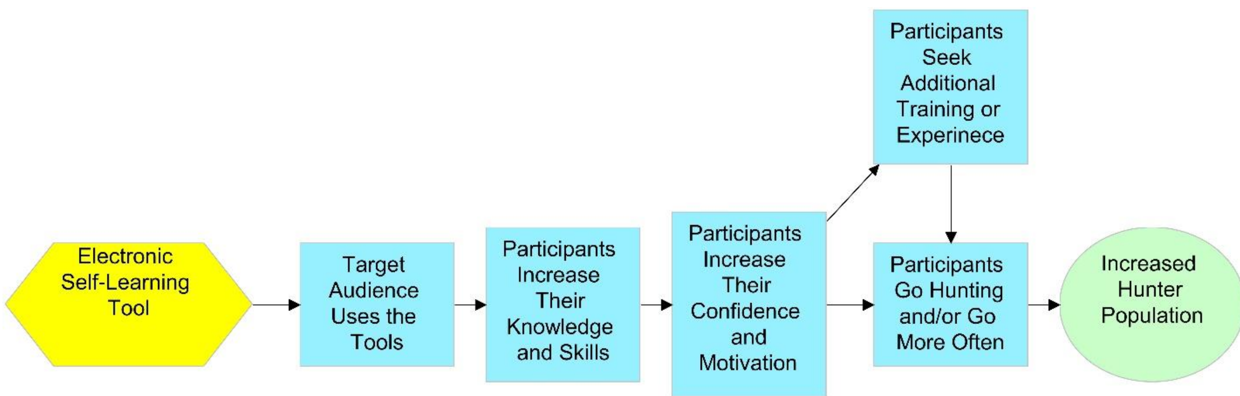
1. Use hunting license databases, focus groups, surveys, and other methods to identify first-time license buyers and assess information resources they need in order to start or continue hunting.

2. Based on the assessment of the target audience's information needs (where to hunt, how process game, which gear to use, where to go, etc.), identify self-learning tools best suited to provide that information (videos, emails, mobile apps, websites, etc.).
3. Design the tool(s) to specifically address the target audience's information needs and preferred delivery method(s).
4. Promote the tools to the target audience using their preferred communication medium.

For the purposes of this example, assume that steps one through three above have been completed, and the results indicated that the best way to meet the target audience's needs are through a web-based self-learning tool that provides local information on where to go hunting for different species, where local shooting ranges are located, how to field dress game, where public hunt access is located, and how to cook game, and searchable rules and regulations.

A results chain for this effort could be customized from the basic results chain (Figure 1) as in the below:

Figure 3: Results chain for an electronic self-learning tool.



When compared with Figure 1, the above results chain is very similar but somewhat simplified in that skills and knowledge are combined into one result, as are confidence and motivation. This is a perfectly acceptable modification of the core results chain. If the results (skills and knowledge; confidence and motivation) are measured, effort-specific customization is encouraged if it provides clarity and utility to implementers.

As with all other R3 efforts, objectives should be developed for each result in the results chain. These objectives must be time-sensitive, contain a metric that can be validated, be specific to the audience, and be stated as simply as possible. For the above results chain, examples of how measurable objectives could be written are as follows:

Result: Target Audience Uses the Tools
Objective: X% (or X number) of the users represents the target audience.
Note: Publicly available web content cannot be driven to only one specific audience. However, the target audience must be among those accessing and using the web-based tools and be in sufficient numbers to validate the success of the tools' development.

Result: Participants Increase Their Knowledge and Skills

Objective 1: After using the tools, at least X% (or X number) of the target audience indicate that their hunting skills increased.

Objective 2: After using the tools, at least X% (or X number) of the target audience indicate that their hunting knowledge increased.

Result: Participants Increase Their Confidence and Motivation

Objective 1: After using the tools, at least X% (or X number) of the target audience indicate that they have greater confidence in their hunting -related skills.

Objective 2: After using the tools, at least X% (or X number) of the target audience indicate that they have greater motivation to go hunting.

Result: Participants Go Hunting Again and/or More Often

Objective 1: After using the tools, at least X% (or X number) of the target audience indicate that they increased their hunting activity as a result of using the tools.

Result: Participants Seek Additional Training or Experience

Though not required to measure the effectiveness of this effort, this result recognizes that there will likely be individuals who want or need additional resources or training beyond the scope of this tool(s). These individuals should be directed to other self-learning tools or R3 efforts that address their learning needs. In this way, their “natural pathway” can be extended. An embedded “Want to learn more?” questionnaire could be used to collect their contact information and identify their needed resources.

Measuring the above results could require a combination of website analytics, embedded surveys (with response incentives), sample target audience surveys, and hunting license sales database queries. It would be unrealistic to attempt surveying all users, but the above objectives must be measured in a significant sample of the target audience to improve and justify the tool(s) over time.

Recommendation 2: R3-vested Organizations should adopt and invest in Customer Relationship Management systems to increase the nuance and real-time tracking of R3 evaluation metrics.

As state fish and wildlife agencies seek to increase revenue from, and relevancy to, more constituencies, they are increasingly recognizing the need for automatic, individual customer tracking for effort evaluation, nuanced customer demographic profiles, automated marketing tools, and access to powerful data analysis in formats easily comprehensible for staff not trained in advanced social science. Multiple reports recommendations, research findings, and recruitment, retention and reactivation (R3) implementation experiences are coalescing around a critical, and singular solution to all of the previously mentioned needs. That is, an organizational Customer Relationship Management (CRM) system that can integrate all of their event, licensing, marketing, and evaluation data streams into one platform.

Simply put, customer relationship management is the process of managing existing, potential, and past customers. The purpose of such a process is to use known information (data) about each audience your organization engages with to improve their relationships and experiences while expanding your reach to new audiences. A CRM software platform is used to automate the aggregation and analysis of said data streams, as well as the actions taken to leverage it, such as sending an email or pulling a report. This approach has been adopted by nearly every leading company in the world to manage their customers and grow their business. It is important for fish and wildlife agencies to realize that their role as Public Trust managers requires remarkably similar customer service and management models as those used by leading consumer businesses. It is likely that most agencies neither recognize the evolution of their customer base nor understand the dramatic expansion of expectations, needs, and values of those who want to engage with nature in the 21st century. The diversity and scope of these new customer needs requires a commensurate capacity increase by state fish and wildlife agencies to meet and manage them.

Specifically, agencies need the ability to:

1. Create efficiencies in data collection and synthesis that can unburden IT staff, R3 coordinators, marketers, and social science staff from having to pull and analyze periodic data reports to evaluate engagement efforts and gauge return on investment of marketing and outreach programs.
2. Collect and reflect granular customer demographic data in an application-friendly way that can be understood and applied by non-technical staff.
3. Implement fully automated R3 marketing, email, and advertising campaigns known to lift license sales.
4. The ability to segment out content and messages to diverse demographics by meeting them at their expectations throughout the year – not by conducting "one-off" or semi-annual marketing efforts, but by continual engagement with them to address their fluctuating motivations over time.
5. Integrate all their data streams: event registration, customer ID numbers, license purchase records, and customer profile data.

In addition to the above, research related to best practices for the R3 of outdoor participants has documented the critical need for agencies to improve the ability to track and engage customers in order to improve the efficiency and effectiveness of their R3 efforts. Application of these best practices within the constraints of state fish and wildlife agencies has clearly indicated that leveraging data and automated marketing tools is essential to the successful implementation of customer tracking and effort evaluation at a scale needed to drive policy and practice change. However, integrating and implementing a CRM may involve changes of a magnitude that cause many agencies to struggle with knowing where to begin.

With knowledge of what a quality CRM should achieve and what an agency should expect to get out of one, agency staff will be better equipped to select a system that will not only solve their current data management challenges, but also be able to adapt and grow with their agency's future customer engagement goals. Currently, there are many CRM systems and CRM look-alikes available to agencies, but little guidance has been developed to help agency staff determine how to select a system that will serve the specific needs of their agency and achieve both current and future data needs. The purpose of this summary is to provide that guidance and summarize critical considerations specific to agencies that must be made before a CRM system is selected.

To begin, it helps to focus on the specific functionality that is most useful to a fish and wildlife management agency. Knowing what functionality is critical, what is desired, and what is nice to have will help agencies begin to navigate their many choices.

Agencies should focus on four primary areas when comparing CRMs. These are:

1. Marketing/R3 Staff Access
2. Data Integrations
3. Marketing Automations
4. Reporting Capabilities

1. Marketing/R3 Staff Access

To fully drive results and staff efficiencies, agencies must ensure that their CRMs are fully accessible by those who rely on them to drive results day in and day out. Marketing Coordinators, R3 Coordinators, and other outreach staff should have direct access to these data analytics and marketing tools without navigating cumbersome gatekeeper processes or relying on internal or external IT experts, graphic designers, etc., to accomplish their marketing objectives.

While powerful, the tools should not be complicated to the point of making them inaccessible to non-technical users. An effective CRM should empower marketers to analyze data, draw insights, develop and activate campaigns, and evaluate results themselves. The capability to free staff from reliance on others to do routine marketing tasks (reports, visualizations, lists, segmentation, emails, evaluation, etc.) drives significant efficiencies throughout an agency and enables marketers to spend more time developing, activating, and evaluating campaigns critical to driving engagement and participation.

2. Data Integrations

The primary purpose of a CRM is to consolidate data about your customers. Therefore, the CRM that you choose must include ready access to the data needed to form actionable insights.

Effective CRMs create a single repository of data across platforms ranging from mobile, licensing and permitting, campground management software, volunteer and event management systems, and potentially much more. Essentially, CRMs enable a unified view of an agency's customers and potential customers across their interactions with the agency.

A CRM should enable your agency to gather data from many sources, both within and outside your agency. Assembling this data empowers you to deduct sound insights and act expediently to have the best chance to lead current and potential customers to their next steps or participation opportunities.

The table below details the types of data that agencies should consider integrating into their CRMs.

Data Type	Critical	Highly Desired	Nice to have
Customer Data: This is data specific to people who have previously purchased a product from your agency (customer ID, contact info, demographics, etc.)	✓		
Agent Data: This is data specific to where customers purchased their products (sales channel, name, location, chain, etc.)	✓		
Product Data: This is data specific to the purchased product (licenses, tags, price, seasons, etc.)	✓		
Transaction Data: This is data specific to an individual transaction (date, products purchased, prices, etc.)	✓		
Event: This is data specific to an agency event that a customer may have attended (name, type, date, location, etc.)	✓		
Certification: This is data specific to a certification that a customer may have earned (type, number, date, etc.)	✓		
Marketing: Data derived from on-going customer engagement is essential to improving ROI	✓		
Prospect Data: This is data from people who have not purchased a product from your agency but have in some way expressed an interest in learning more (name, contact information, interest, etc.)		✓	

Associated Data: The ability to integrate other data sources, such as harvest report data, campground reservation data, state, and national conservation organization data, etc., from within and outside of your agency allows you to leverage your CRM capabilities fully.			✓

3. Marketing Automations

Thanks to the application of R3 best practices, fish and wildlife management agencies have demonstrated that targeted marketing campaigns can easily and effectively increase fishing and hunting participation rates. In particular, license renewal reminders and lapsed license campaigns have shown great promise and high ROIs.

To replicate, scale, and build upon the many successfully implemented R3 efforts, agencies must take next step in securing modern, automated marketing tools that leverage data collected in a CRM system. Significant efficiencies can be realized when a CRM and Marketing Automation tool are fully integrated into a single platform solution. Recruitment, retention, and lapsed license buying campaigns should all be automated with the ability to easily target different customer segments with personalized messaging unique to their motivations and demographics.

Marketing Automation Task	**Critical**	**Highly Desired**	**Nice to have**
Analytics/ROI Tracking	✓		
Campaign Segmentation	✓		
Contact Management	✓		
Email Drip Campaigns	✓		
Customer Journey Mapping	✓		
Persona Capabilities		✓	
Dynamic Content Capabilities (same list, different message based on segmentation)	✓		
WYSIWYG Email Builder		✓	
A/B Testing Capabilities		✓	
Email Deliverability Optimization		✓	
Landing Pages/Web Forms		✓	
Lead Management		✓	
Integrated SMS Capabilities		✓	
Integrated Survey Capabilities	✓		
Integrated Direct Mail Capabilities			✓

4. Reporting/Analytics Capabilities

One of the single most significant pain points that many agency marketing and R3 professionals have is the ability to access reports at the level of detail and frequency needed to gain timely, actionable insights. Powerful analytical tools that deliver more than traditional website reports, quarterly dashboard analytics, or high-level metrics are essential to identifying and understanding critical, but sometimes nuanced, opportunities to engage and convert customers.

Modern reporting tools must enable agencies to build custom ad hoc reports on any data field included in their CRM. They must also provide the ability to visualize those reports in dashboards customized for the exact needs of each individual. Finally, automating and sharing reports and visualizations is an important driver of agency staff efficiency.

Reporting/Analytics Feature	**Critical**	**Highly Desired**	**Nice to have**
Build Reports	✓		
Filter Reports	✓		
Share Reports & Report Data		✓	
Subscribe to and Schedule Reports			✓
Work with Report Data in other Tools		✓	
Build Dashboards		✓	
Filter Dashboards		✓	
Share Dashboards			✓
Subscribe to and Schedule Dashboards		✓	

APPENDIX A

Interview Guide

Introduction: Hi, this is Bob Byrne, I am working as a consultant with Matt Dunfee (WMI) and Swanny Evans (CAHSS) on an AFWA MultiState Conservation Grant funded project that examines available R3 evaluation resources, as well as get input from people such as yourself on potential barriers to effective R3 evaluations and or R3 evaluation needs. Both Matt and Swanny are on the line with me. Thank you for your time and willingness to share your insights with us.

Before we delve into the questions, I want to assure you that this conversation is confidential among the people on the line. You will not be quoted, or have any thoughts attributed to you with out your expressed permission. In addition, this conversation is being recorded to ensure that I can capture and report your information and thoughts accurately. The recorded file will not be shared with anyone who is not on the line.
Is that OK? Do you have any questions regarding the project or process?

Name____
Title____
Agency/Organization____
How long have you been in this position? ______________________________
Generally, describe your job responsibilities:

Have you been in other positions that involved R3 prior to your current role?
If yes, what was your title and how long were you in that role?
Probe for other areas of responsibilities:

Job Responsibilities	Approximate % of time
Hunting	
Angling	
Shooting Sports	
Trapping	
Boating	
Hunter Education	
Wildlife-related recreation activities	
Other duties	

Probe, as needed, to determine if they are:

a) Implementer of programs/ events (they conduct programs/ events)
b) Facilitator of programs/ events
c) Program designer
d) Trainer
e) In charge of volunteer management

Can you describe what general R3 training or R3 evaluation training you received when you took the job as (R3 Coordinator)?

Type of training	Specific Name of Training	Year	Helpfulness Scale 1 Least 2 3 4 5 Most
Regional R3 training			
State-specific			
National R3 Meeting			
NCTC R3 Training			
Internal Organization/ Agency training by organization/agency			
Internal Organization/ Agency training by third party expert or consultant			
Partner Training			
One-on-one with expert			
Other			

Probe for specific training(s). Which were helpful, which weren't.

What training do you wish you would have received?

Probe is this need for general evaluation training or evaluation training specific to your program.

In your opinion, and again I want to reassure you that this conversation is confidential and you will not be quoted, or have any thoughts attributed to you without your expressed permission, what are the biggest barriers/obstacles to effective evaluation in your R3 efforts?

Listen for barriers linked to *confidence, capacity, or expertise*.

What do you need to overcome these barriers?

What existing evaluation training resources do you find the most useful?

What existing evaluation training resources do you find the least useful?

What evaluation resource do you wish existed?

How familiar are you with the following resources?

Probe for level of familiarity: a) aware of; b) quickly scanned; c) have read: i) executive summary; ii) body; iii) appendices

Ask them about how useful each was and/or how they would change it or what they wish it contained.

Resource	Level of familiarity
National R3 Clearinghouse (online repository)	
National R3 Community (online community)	
National Hunting and Shooting Sports Action Plan	
Best Practices Workbook for Hunting and Shooting Recruitment and Retention	
Best Practices Workbook for Boating, Fishing and Aquatic Resources Stewardship Education	
Best Practices Guide to Program Evaluation for Aquatic Educators	

Recommendations and Strategic Tools for Effective Angler Recruitment, Retention and Reactivation (R3) Efforts	
Angler R3 Plan Development – Guiding Document for State Agencies	
Standard Pre-Program, Post-Program and Follow-up Program Surveys for R3	
Questionnaire Design: Asking Questions with a Purpose	
Natural Pathways Final Report	
Note: other resources may be added as they are identified	

Notes: Fill this out with the results of the literature review. Also ask them about how useful each was and/or how they would change it or what they wish it contained.

Does your Organization/ Agency have an R3 Strategic plan?

Yes	Latest update
No	
In progress	Expected completion date

For partner events, as a condition for receiving Agency/Organization support, do you require the partner to conduct outcome-based evaluations?

If yes, do you provide a set of questions for them? Is delivery of the evaluations to the participants electronic or paper?

For Organizations:

What have you done to incentivize (or provide resources to) local chapters to conduct evaluations?

In your opinion is there anything would help to achieve this?

Are there any other thoughts regarding R3 evaluation that you would like to share?