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## The WQW Annual Program Report – July 2022

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D'Aniello Institute for Veterans & Military Families

JPMorgan Chase & Co., Founding Partner

# The WQW Annual Program Report

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PREPARED FOR

& QUIET WATERS

JULY 2022

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## Introduction

Warriors & Quiet Waters (WQW) is a nonprofit organization committed to enabling Post-9/11 combat veterans and their loved ones to thrive. WQW provides a secure environment that is created by their volunteers, guides, and other veterans that feels like a home. Through outdoor experiences, veterans find space to make meaning of their service and discover what a purposeful life means to them. Through this reflection, veterans can find a new mission in life after service as they step away from stress, learn new skills, find peace and meaning through nature, connect with a life-long community, and find their path to personal growth and resiliency.

The D'Aniello Institute for Veterans and Military Families (IVMF) at Syracuse University is the first interdisciplinary national institute in higher education focused on the social, economic, education, and policy issues impacting veterans and their families. Through its professional staff and experts, the IVMF delivers leading programs in career, vocational, and entrepreneurship education and training, while also conducting actionable research, policy analysis, and program evaluations. The IVMF Evaluation and Capacity Building team provides a variety of evaluation services and technical assistance designed to empower organizations, government, and private sector partners to measure, improve, and communicate the impact of their programs that serve the military-connected community.

In early 2021, Warriors & Quiet Waters engaged the Evaluation and Capacity Building team at the IVMF to help measure and communicate the impact of their programs and better tell the story of the participant journey to thriving. The purpose of this evaluation was to test the hypothesis that participants experience a type of transformation or improvement during or immediately after a Fishing Expedition (FX), and that this effect is sustained for some individuals or can be enhanced through participation in additional FXs.

WQW runs weeklong (Monday through Friday) FXs through all seasons for combat warriors and their families. The FXs vary with the season (e.g., Ice FX in the winter) and who is served (i.e., Warriors, Caregivers, Couples, Families). Most FXs occur in the warmer months and serve Warriors (first-time Warriors or returning Warriors); however, there are a few special FXs throughout the year that serve niche purposes or serve as a pilot FX to inform upcoming programming. The evaluation results covered here include all standard FXs beginning in March 2021 through the end of the calendar year.

## Methods

The IVMF team typically begins evaluation projects with a discovery phase, which includes information gathering, research, interviews, and site visits, as observing the program is a highly effective way to begin. However, since travel and direct program observation were not possible at the time due to the COVID-19 pandemic, the team was unable to visit until the fall of 2021.

Instead, the IVMF used virtual tools to start by conducting informal interviews with staff, participants, volunteers, and board members. With impressions and insights from these conversations, along with current WQW reports and materials, the IVMF decided on the following approach. The IVMF began by building on the model WQW used to develop a theory of how and why the program works – a theory of change (ToC). This theory became the basis from which a series of surveys were designed – pre-FX, post-FX, and a final annual survey. Questions were designed to align with the theory to most effectively measure and evaluate elements of the program. Survey distributions were built into existing operational processes to obtain the highest possible response rates.

#### Theory of Change

The theory of change (ToC) developed for this evaluation mirrored WQW's core belief that their programs support participants in climbing the "Successful Reintegration Ladder." Based on Maslow's five Hierarchy of Needs (Physiological Needs, Safety Needs, Love and Belonging, Esteem, Self-Actualization), the "Successful Reintegration Ladder" adds another rung - "Sense of Purpose" - to the ladder (Maslow, 1947).





WQW's FX structure is designed to meet the physical, safety, and belonging needs almost immediately. Through the FX and over repeated FXs, participants gain esteem, an understanding of their potential, and a sense of purpose. These last three are largely participant driven, with the support and facilitation of WQW.

How WQW participants progress through this ladder is what IVMF described in their working theory of change (Appendix II). In summary, when participants arrive in Montana they are welcomed and made to feel at home – almost instantly. The participant is **Valued** and provided for, and the bottom two rungs of the ladder are established. The participant **Learns** fly fishing in **Nature** while in a small **Community.** The sense of community, love, and belonging grows as participants build shared experiences and learn the common language of fly fishing in addition to their military language and culture. Participants are given time for **Reflection** and in the context of this space many experience **Healing** and **Personal Growth**. Some develop the **Confidence** to then pursue further healing the growth. To support upward progression, WQW encourages participants to return for additional FXs and to take part in an FX with their spouse/partner or family.

#### Survey Development and Administration

After the theory was complete, the team developed the pre-program, post-program, and annual surveys to measure the identified program elements. All FX participants were surveyed, and custom questions were made for specific groups (i.e. Caregivers, Families). Children were not surveyed.

The surveys were programmed into Qualtrics, a robust survey tool that allows evaluators to control the types of questions participants are asked, based on specific criteria.

#### Pre-Program Survey

The purpose of the pre-program survey was to establish a baseline for all participants in the areas the theory addressed. This baseline would serve as a point of reference for the surveys that would follow. The survey was designed to be brief and initially included several redundant questions for testing. Questions were finalized in May of 2021 and used throughout the remainder of the year.

The pre-program survey was administered to incoming participants four days before they arrived in Montana for their FX. The survey could not be sent farther in advance due to the timing of FX registration finalization.

Before the survey was sent, WQW program staff reached out to participants to let them know about the evaluation effort and the IVMF, and told them that they would be receiving a survey to complete before their FX. The IVMF team has found in the past that advance notice in conjunction with encouragement from program staff helps improve response rates, and for WQW this held true.

The IVMF also sent one personal follow-up if a survey still hadn't been completed after auto reminders from Qualtrics. However, it was made clear the participants were not required to complete the survey, and it was a not a requirement for participation in the program.

#### Post-Program Survey

The purpose of the post-program survey was to assess short-term outcomes and discover the immediate effects of FX participation, along with assessing participants' feelings about their overall experience. The survey was sent within two days of the participant returning home from their FX, and nearly all were completed within a week of their return.

The post-program survey included all the same questions asked in the pre-program survey (to assess changes in sentiment as a result of FX participation), except for a few questions that were not relevant, because more than one week would be required to reasonably assess change (e.g. feelings of isolation). Also included were a set of questions about participants' fishing experience, with the idea that participants might be able to express themselves better when relating to their fishing experience directly.

Additional questions were added over the year to get feedback on specific programmatic elements. At the end of the survey, one open-ended question asked participants react to their experience. Participants were also able to indicate if they wanted this information attributed to them. Many of the comments seen throughout this report came directly from comments left on the post-program survey.

#### Annual Survey

The purpose of the annual survey was to more broadly relate participants' experiences from FXs to several core themes of WQW's work and mission. In December 2021, the survey was sent to all participants from 2016 through 2021. For participants who took the pre- and post-program surveys in 2021, the annual survey served as a long-term follow up. For participants from earlier years, the Annual survey provided a window into the experience of WQW alumni.

Because the annual survey was distributed at the end of the year, the IVMF team was able to use preand post-program survey results from throughout 2021 to help inform annual survey content. The goal was to more deeply understand some of the most consistent themes that emerged from participant pre-/post-program survey responses. Some of these key themes included: the impact of fishing and how participants continue to stay engaged with fishing, the impact of being out in nature, and an improved sense of belonging and a desire for community.

We also included questions regarding fishing behavior, skills development, and local fishing environment to better understand how much people were fishing after their FX. These questions also served to test if fishing behavior could be a proxy or outcome for self-actualization and improvements in confidence, mood, and wellbeing. More on this in the Results section.

Another noteworthy element that the IVMF added to the annual survey was a set of questions about the photos taken by Mike MacLeod during FXs. Mike is a well-known and respected photographer and veteran who has been taking candid photos of FX participants for over seven years. When the IVMF was able to do a site visit, the team was struck by MacLeod's role and wanted to explore how program participants felt about the value of the photos.

## **Results & Discussion**

#### Survey Response Rates

#### Pre-/Post-Program Surveys

The IVMF team began sending surveys to participants in March 2021 and continued through the end of October 2021. The pre-program survey response rate for the 2021 year was 92% and the post-program survey response rate was 90%, which are both excellent.

The team believes there were four main causes for the high response rates: 1) participants having a positive FX experience and feeling loyal toward the program, 2) program staff letting them know in advance about the evaluation effort & surveys and giving them a "heads up" about hearing from the IVMF, 3) the auto-reminders and personal follow-ups to encourage survey completion, and 4) the surveys were kept short, with the pre-program survey taking less than five minutes for the majority of the participants, and about ten minutes for the post-program survey.

#### Annual Survey

The annual survey was sent to 427 participants from FXs between 2016 - 2021, and 150 responded, for a response rate of 35%. Based on the IVMF team's previous experience fielding surveys, this a strong response rate.

Of those who responded, 65% had most recently participated in an FX as a Warrior, 13% as a spouse or caregiver, and 22% as an alumni volunteer or guide.

Sixty percent of the survey sample had attended only one FX at time of survey, followed by 15% who had attended two FXs, 8% who had attended three FXs, 6% who had attended four FXs, and 11% who had attended five or more FXs, according to administrative data.

#### Results by Theme

All surveys were designed to capture changes for the participants across the identified outcome themes before and immediately after an FX, and at the point of the annual survey. Therefore, the results are arranged by theme, which represent a blend of the outcome themes identified as part of the WQW theory of change as well as emergent themes from the survey data.

Each subsection presents a combination of results from the pre-program, post-program, and annual surveys, in some cases broken down by different subpopulations of respondents depending on trends that the team observed in the results (e.g., breakdowns by Warriors attending WQW for the first time versus those who have attended before, etc.).

Finally, there were data gathered from questions that appeared only on the annual survey that can provide a snapshot of the lasting effects of program elements, such as fly fishing itself and the impact of the photos provided by Mike MacLeod.

In sum, the results below are organized within the following themes:

- Nature and Time for Reflection
- Community and Relationships
- Sense of Purpose
- Mental Health & Wellbeing
- Value of Fishing and Fishing Community Annual Survey Only
- Impact of Photos Annual Survey Only

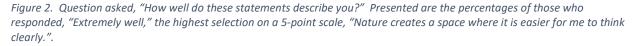
#### Nature and Time for Reflection

While in Montana, participants spend most of their day outside – regardless of the weather. Gear is provided and participants have commented that they were afraid they might be uncomfortable, but that even in the most extreme conditions they were well provided for.

I had some reservations about the Ice Fishing trip because I am not a big fan of the cold. After the first 20 min on the ice, I realized I had nothing to worry about. The gear provided by WQW kept me warm and I never got cold! If this hold other warriors back from going to an ice fishing FX, they have nothing to worry about! - Warrior

In each survey we asked Warriors how well the following statements described them: "Nature creates a space where it is easier for me to think clearly" and "I feel better when I spend time outside in nature". On the annual survey Warriors were also asked to state how much time they spend in nature apart from their work.

Americans do not typically spend much time outside or in nature. A large study conducted in 2015-2016 found that close to 60% of adults spend five or fewer hours outside in nature per week (Kellert, 2017). Therefore, it is easy to imagine that many people do not realize or know how good it feels to be outside. This appears to be the case with first-time Warriors, who were less likely to feel that nature creates a space to think clearly or helps them feel better, compared to Alumni Warriors. However, after participating in WQW for the week, Warriors' post-program survey results show a change in attitude toward the appreciation of nature's benefits.



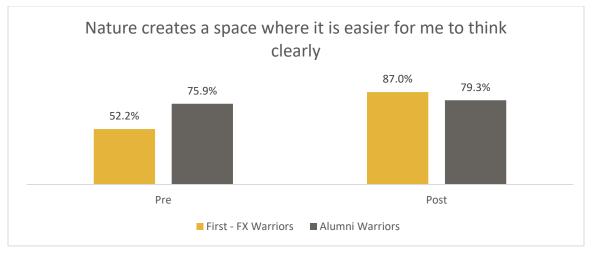
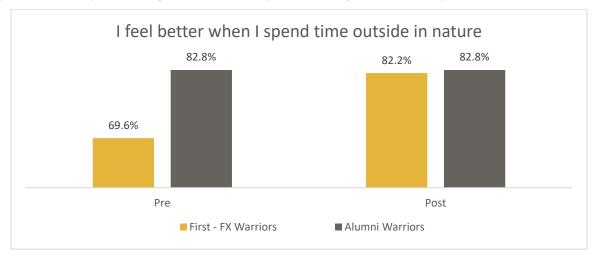


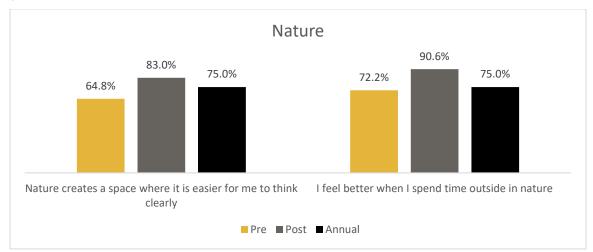
Figure 3. Question asked, "How well do these statements describe you?" Presented are the percentages of those who responded, "Extremely well," the highest selection on a 5-point scale, to "I feel better when I spend time outside in nature."



For first-time Warriors, there was a 66% increase in reporting, "Nature creates a space where it is easier for me to think clearly" and an 18% increase in reporting, "I feel better when I spend time outside in nature".

Among the 54 WQW participants who took all three surveys (pre-program, post-program, annual), the results were similar. For both nature questions, for the annual survey, 75% stated that nature created a space to think and feel better when outside describe them "extremely well", compared to the pre- and post-program survey responses of 65% and 75% respectively.

Figure 4. Question asked, "How well do these statements describe you?" Presented are the percentages of those who responded, "Extremely well," the highest selection on a 5-point scale. Respondents include the 54 people who took all three surveys.



From these results, it appears that WQW Warriors have discovered the value of spending time in nature from their first visit to Montana and they have a sustained desire to spend time in nature.

It was also apparent that throughout the year of evaluating pre- and post-program surveys that the experience of being out in nature was new and impactful for many, as supported by studies that show that nature does impact wellbeing and symptoms of PTS. [Bettmann et al., 2021; Bowler et al., 2010].

*Fly fishing calmed me and allowed me to connect mentally and emotionally with nature and my husband. - Spouse* 

WQW has really reinvigorated my love for the outdoors and my love for fishing. - Warrior

Fly fishing at WQW gave me an opportunity to connect with people who shared the same experiences and appreciation for the outdoors as myself. - Warrior

Being outdoors in such a beautiful environment with no pressure, stress or responsibilities was absolutely amazing! - Caregiver

It's very difficult to put into words an experience that WQW gives you. It opens your heart in such an amazing way to people and nature alike. It's healing and very therapeutic... - Spouse

#### Community and Relationships

Relationships and belonging are critical components of personal growth, and the WQW program attempts not only to bring Warriors together to form connections with each other, but also improve the individual Warrior's relationships with family through Couples and Families FXs.

First, many WQW participants commented on the sense of belonging and family created by the WQW staff and volunteers. Based on Maslow's Hierarchy of Needs, after physiological and safety needs are met, people need to have a sense of love and belonging before they can progress. WQW clearly places an emphasis on this and participant feedback supports WQW's success in valuing each person with love and belonging.

I am usually a pretty stand off person and was really caught of guard by how a group of guides, companions, moms and fellow warriors felt like family within just hours of arriving. - Warrior

But WQW opened me up a bit further. My guide was soooo patient and calm spoken and gave guidance that I understood. My companion cheered me on every step. My house mom gave me hugs. - Warrior

WQW provided me much a needed break from things going in my life, I have been feeling very alone lately and having a lot of thoughts about survivors' guilt. This has been the hardest years since I got out and was struggling for a connection. Thanks to the WQW team, taking time and making me feel part of the family. -Warrior

WQW participants also mention the connections they make with each other. Reintegration into civilian life can be lonely and at WQW, Warriors are finding understanding in each other. On the annual survey 69% of Warriors "Agreed" or "Somewhat agreed" that they are still connected to people they met at WQW.

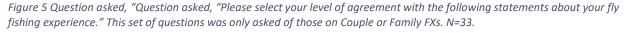
Fly fishing at WQW gave me an opportunity to connect with people who shared the same experiences and appreciation for the outdoors as myself. It was a good chance to slow down from everything happening in my life - Warrior

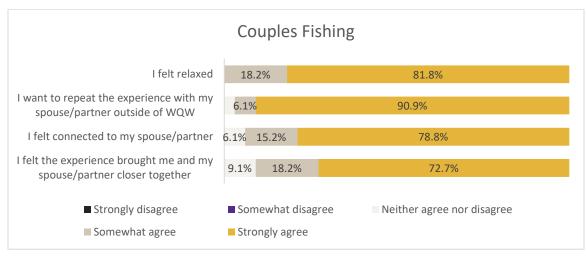
To be connected with other vets who understand without any words being said is amazing.-Warrior

WQW held Family FXs for the first time this past year in addition to Couples FXs. This is a unique time to bring families and spouses together. Many Warriors long to bring their spouse so that they too may share the experience.

WQW gave my wife and I a starting point to learn how to fly fish and how to grow in the sport.. it was great seeing her learning something new and having a lot of fun doing it. I had some growth not only in my relationship with my spouse but also personally - Warrior

To have the opportunity to share that with my spouse is priceless. Then for us to learn together and to connect and cheer for one another was great. It gave us space from the world. We now can escape together in common to the great outdoors. -Warrior





We asked WQW partcipants to rate their level of agreement with the statement, "I have someone in my life who provides me with support and encouragement." When responses to this question were compared across a variety of groups – first-time Warrior participants, alumni Warrior participants, those

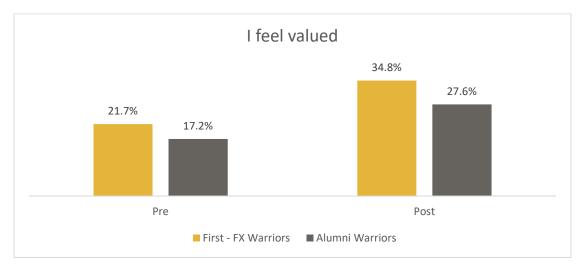
who took the pre-/post-programs surveys, and those who took all three surveys, the results varied widely. For some groups there was a 10 point or more positve difference from the pre-program survey to the post-program survey, for some a 10 point decrease, and for others an increase in those selecting "strongly disagree" or "somewhat disagree." When investigated further, no trend was sustained.

The annual survey also asked respondents questions about relationships. As you can see below, roughly two thirds of respondents "Strongly agreed" that they had someone in their life who provideed support and encouragement.

- 63.8% My spouse/partner is someone I can go to for support when I'm upset
- 61.4% I feel emotionally connected to my spouse/partner
- 66.4% My spouse/partner and I have a strong marriage/partnership

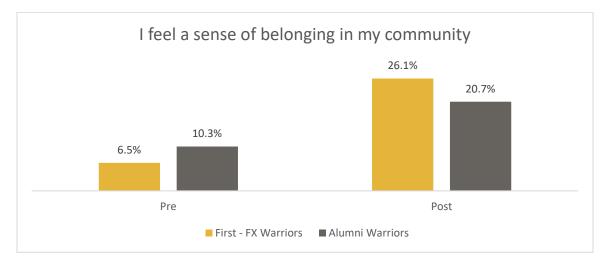
It can be concluded the idea of believing that there is someone who provides support and encouragement carries with it complex feelings and meaning and should be further explored.

Figure 6. Question asked, "Question asked, "Please select your level of agreement with the following statements." Presented are the percentages of those who responded, "Strongly agree," the highest selection on a 5-point scale, to "I feel valued."



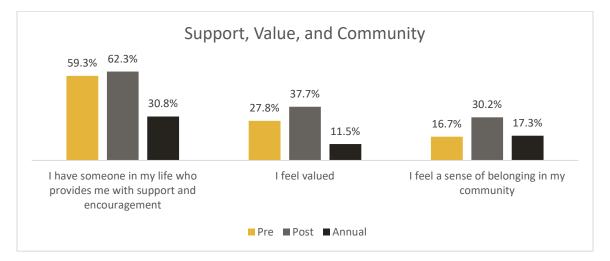
The participant responses to the statement, "I feel valued" were consistent and generally followed a trend. It appears that alumni Warriors have an increased sense of feeling valued, but this is only true for some. On the pre survey 6.8% of alumni Warriors selected "Strongly disagree" or "Somewhat disagree," while on the post-survey that percentage rose to 17.2%.

Figure 7. Question asked, "Please select your level of agreement with the following statements." Presented are the percentages of those who responded, "Strongly agree," the highest selection on a 5-point scale, to "I feel a sense of belonging in my community."



The clearest, most consistent trend of this theme was for the statement, "I feel a sense of belonging in my community." Community was left undefined in the survey and participants could have interpreted community in a variety of ways. Unlike the other two statements mentioned in this section, there was no increase in negative responses in the post-program survey, and responses did not fall below pre-program survey levels in the on the annual survey. This question appears in valided scales and the mean of this question couple with two other related quesitons in the Belongingness scale is 3.9 (Su et al., 2014). The post survey mean for Warriors was 3.54, a significant increase from 3.19.

Figure 8. Question asked, "Please select your level of agreement with the following statements?" Presented are the percentages of those who responded, "Strongly agree," the highest selection on a 5-point scale. Respondents include the 54 people who took all three surveys.



Although respondents to the annual survey appreciated the connections they made at WQW, when compared to data in the pre- and post-program surveys, the annual survey showed a drop in their sense of value, belonging in their communities, and having someone to support them between the time they attended the program and the time they took the annual survey.

The IVMF team believes this may reflect the high hopes and excitement for participation in the program and the immediate feeling of comfort and community while at WQW, along with the drop when time

has passed and respondents are again living in their "regular" life. This data supports the assumption that WQW is a transformative experience that Warriors seek to recapture when they return.

Furthermore, even though the trend is generally positive, both the pre-program and annual surveys showed that 29% of the population still felt isolated from others "Very often" or "Fairly often" at the time of survey. For first-time Warriors, the percentage of those who felt isolated was 35% on the pre-program survey. The populations from these two surveys were not the same, but the persistent presence of almost one third of respondents stating that they are often isolated suggests that WQW is reaching people who may desperately need connection and community.

One comment on the annual survey seems to suggest a possible explanation for why feelings of community or belonging decrease after an FX:

"One part of coming that makes me a little sad is that I was content with my life and **now after** spending time with new friends and the easy comradery[sic] of military makes me realize that I am a little lonely. Now I get to find a new normal and I will probably do that by spending more time out in nature." -Spouse

This quote suggests that one reason some of the results may dip further than expected, and further than some of the other data in the annual survey, is that people don't realize what they're missing until they find it at WQW, and therefore have a new perspective on their situation in their "regular" life.

There are many other possible causes of this dip in the annual survey, including a minor self-selection bias in the sample, people's situations changing prior to and after attending WQW, as well as the timing of the survey being toward the end of the year, during the winter holiday periods of time, in which some may tend to feel more isolated or down. Whatever the cause, the story of community and isolation is a complicated one that we intend to explore further.

#### Sense of Purpose

The ultimate goal of the WQW program is to help Warriors move forward on the ladder to selfactualization by helping them feel a stronger sense of purpose or sense of meaning in their life, as well as increase their understanding about how to use it. Warriors' sense of purpose or meaning increased over the week they spent on their first FX. Between the pre- and post-program surveys, first-time Warriors had an 115% improvement in strongly agreeing they continue to gain clarity about what a meaningful life is for them. We will explore what contributes to this significant increase and what program elements are likely to continue to encourage individual growth in this area. Figure 9. Question asked, "Please select your level of agreement with the following statements." Presented are the percentages of those who responded, "Strongly agree," the highest selection on a 5-point scale, to "I continue to gain clarity about what a meaningful life is for me"

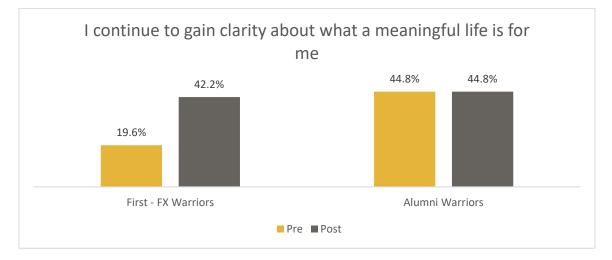
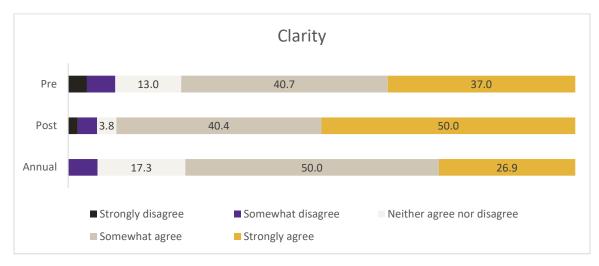
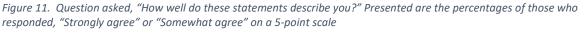


Figure 10 Question asked, "Please select your level of agreement with the following statements: I continue to gain clarity about what a meaningful life is for me." Respondents include the 54 people who took all three surveys.



For alumni Warriors, as with other outcomes, the increases were smaller, but the starting point for all data points was higher than it was for first-time Warriors, particularly in clarity and meaning. These data support the hypothesis that the first FX is an extremely important life event.



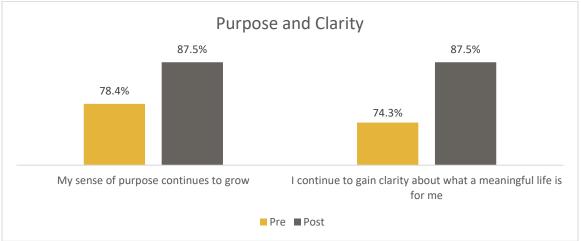
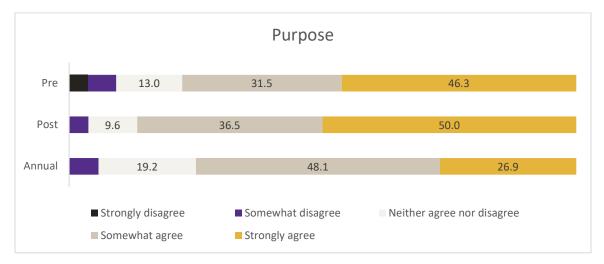


Figure 12 Question asked, "Please select your level of agreement with the following statements: My sense of purpose continues to grow." Respondents include the 54 people who took all three surveys.



While those who give positive responses to the questions on purpose and meaning increased between the pre- and post-program surveys, the percentages of those who answered negatively, "Strongly disagree" decreased to less than 1%.

Finally, the team included a few qualitative responses related to sense of purpose, to further illustrate the impact that WQW has had on their participants right after an FX.

*Obviously WQW alone did not do this but it is like a foot hold, a starting point to continue recovering from which I can reference.- Warrior* 

"WQW has changed my life! I have a sense of purpose and belonging now! I get up ready to face every day and whatever may come! I credit this to the hard work and help WQW has done to help me. Thank you!"- Warrior

*I was hesitant to come, my husband had wanted to go for years, but I am so grateful for the chance to learn and grow together. - Spouse* 

I will forever be grateful for the profound impact WQW has made on me and my family. The tools and connections reach beyond any wound and perpetuates the lasting effects of purposeful healing.-Warrior

The fulfillment and sense of purpose was motivating! The conservation FX helped me to continue to see that I'm still a capable person - Warrior

WQW is the reason I was able to go back to school I can't thank you enough. I'm two years in and I graduate... this spring semester. I don't fish nearly enough honestly because of school but in the summer I do get out and fish and cruise the trails with my kids and find great secret spots.-Warrior

I believe my experience at and with WQW came at the optimal time, as I was exiting the Army. WQW bridged the gap between my purpose in the military and where I was headed as a civilian. They provided me with tools to get me through hard times and showed me how important community was to the success of overcoming obstacles related to my service and challenges I was about to face. WQW invigorated me into finding a purpose, which has made me a better team leader as a student and clinician. I am confident that I would not have been as successful as I have been a leading or navigating the challenges I have faced since I left the Army.-Warrior

#### Mental Health & Wellbeing

Results from the pre- and post-program surveys show big differences in feelings of stress, anger, confidence, and getting a good night's sleep. While somewhat unsurprising due to participants being out of their "regular" environments and away from most of their responsibilities, the amount of change is meaningful because it suggests that WQW can provide a respite from stress and anger while providing a positive stimulus to encourage growth.

The graphs presented below are of those who took the pre-program, post-program, and annual surveys. Respondents reported a 66% decrease in feeling nervous and stressed while at WQW, a 36% decrease in feeling angry, and a 205% increase reporting a good night's sleep while at WQW. Respondents also reported an 18% increase in feeling confident they can handle their personal problems while at WQW. While positive responses decreased in the annual survey, they were still better than the pre-program survey responses.

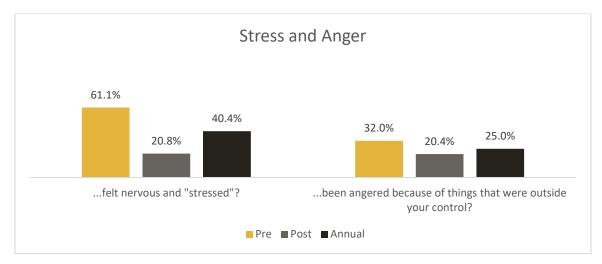


Figure 13. Question asked, "In the last week, how often have you...?" Presented are the percentages of those who responded, "Very often" and "Fairly often" on a 5-point scale. Respondents include the 54 people who took all three surveys.

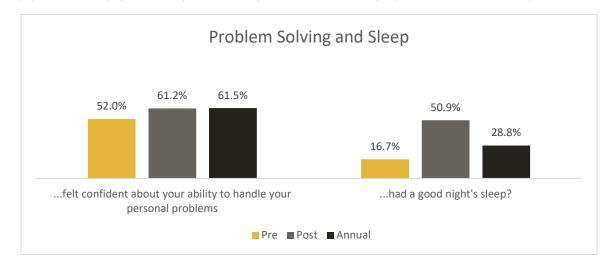


Figure 13. Question asked, "In the last week, how often have you...?" Presented are the percentages of those who responded, "Very often" and "Fairly often" on a 5-point scale. Respondents include the 54 people who took all three surveys.

The above figures include the percentage of those who responded positively to the statements. However, looking at those who responded negatively can also be insightful and confirming. For example, prior to attending WQW, only 6% of the respondents indicated that they "Never" or "Almost never" felt nervous or stressed within the past week, compared to 45% after attending. This represents an increase of 598% (or 6 times), a major reduction in stress.

Interestingly, even participants' perception of how well their life was going improved from the preprogram to the post-program survey. The change was most clearly seen in a shift from scores around 5 at pre-program and to 6 at post-program and increased scores of 9 or 10.

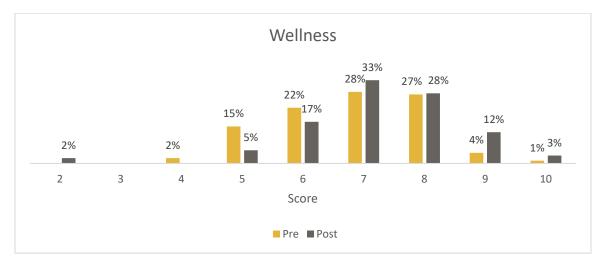


Figure 14. Question asked, "On a scale from 0-10, generally how well is your life going right now?" Presented are the percentages for each of the scores selected.

It is not surprising that participants feel less stress and are able to relax while at WQW, but it can also not be taken for granted. As several participants so clearly articulated, it was this environment that allowed them to reset or gain a new sense of wellness. By creating the time and space at WQW reflection and healing can occur spontaneously and naturally.

WQW provided me with a respite that I did not even realize I needed as much as I did. - Warrior

That was enough for me, my mind is still on a high almost a week later, nothing has been able to upset me. Flying, driving, and people's political/religious/COVID nonsense usually get me worked up, but I'm seeing it from the outside lately, I recognize the triggers and just step outside of my mind, go back to standing in the cold water, sun on my face, with an occasional shot of excitement from a fish hittin.- Warrior

*It allowed me the ability to reset and find inner peace - something that has been lacking for a while. – Warrior* 

WQW has shown me peace and happiness. When I was there I felt a great weight lifted off of my shoulders.- Warrior

WQW was an absolutely phenomenal experience. It was something I really needed and didn't even realize it until it helped me clear my mind and turn a page in the book of life I had been stuck on for some time. – Warrior

*I have anxiety and tend to be sort of a control freak. Fly fishing calmed me and allowed me to connect mentally and emotionally with nature and my husband – Spouse* 

Fishing is a way for me to decompress and be at peace. – Warrior WQW offered me a great tool to deal with stress, anxiety and isolation -Warrior

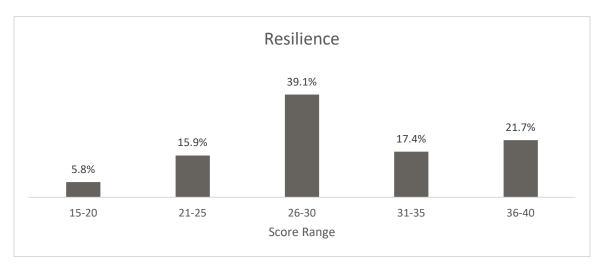
#### Resilience

To assess the long-term outcomes of WQW on Warriors, particularly related to aspects of mental health and wellbeing, we used the CD-RISC 10, a validated resilience scale. The CD-RISC 10, is a shortened (10 item) version of the original CD-RISC 25 (25 item) scale developed in 2003 (Conner-Davidson Resilience Scale, 2022). This scale was chosen because it is a widely known and reliable scale, and because the items best matched the outcome categories WQW developed. The items on the 10-item scale are as follows, and respondents are asked to rate each from 0-4 ("Not true at all" to "True nearly all the time"):

- 1. I am able to adapt when changes occur.
- 2. I can deal with whatever comes my way.
- 3. I try to see the humorous side of things when I am faced with problems.
- 4. Having to cope with stress can make me stronger.
- 5. I tend to bounce back after illness, injury, or other hardships.
- 6. I believe I can achieve my goals, even if there are obstacles.
- 7. Under pressure, I stay focused and think clearly.
- 8. I am not easily discouraged by failure.
- 9. I think of myself as a strong person when dealing with life's challenges and difficulties.
- 10. I am able to handle unpleasant or painful feelings like sadness, fear and anger.

In the annual survey, 138 respondents answered this question. Out of a possible high score of 40, the mean score was 29.6, the median 29, and the mode 27. Although truly comparable populations using this scale are not available, research suggests that veteran populations have mean resilience scores ranging from 23.6 to 31 (CD-RISCMelvin, et. al., 2012, Pietrzak et. al. 2014, and Wingo et al. 2017).

Figure 15. Question stated, "Please indicate how much you agree with the following statements as they apply to you over the LAST MONTH." Resilience scores are from the Annual survey representing 138 responses.



The table below lists the mean scores for each of the items on the scale (mode and median for each item was 3). As you can see, the top three items (gold) are: "I think of myself as a strong person when dealing with life's challenges," "I am able to adapt when changes occur," and "I can deal with whatever comes my way." Each of these top items are in line with characteristics generally accepted as prevalent in military and veteran communities: adaptability, flexibility, and strength in the face of adversity. The bottom three items (grey) are: "I try to see the humorous side of things when I am faced with problems," "Having to cope with stress can make me stronger," and "I am not easily discouraged by failure." Although these items may not be generally viewed as characteristics a veteran population may struggle with, it gives valuable insight to things with which WQW alumni may be struggling and are elements that could be worked into future programming.



Figure 16. Question stated, "Please indicate how much you agree with the following statements as they apply to you over the LAST MONTH." Resilience scores are from the Annual survey representing 138 responses.

#### Fly Fishing Activity and Impact

As with all FX participants, the vast majority of alumni felt fly fishing helped them to relax, learn about themselves, provide a sense of accomplishment, and build their self-confidence.

A highlight for me was seeing my wife catching her first fish and the look of joy and accomplishment on her face when she had to figure out how to 'fight' the fish and when to reel in and when to let the fish run - Warrior

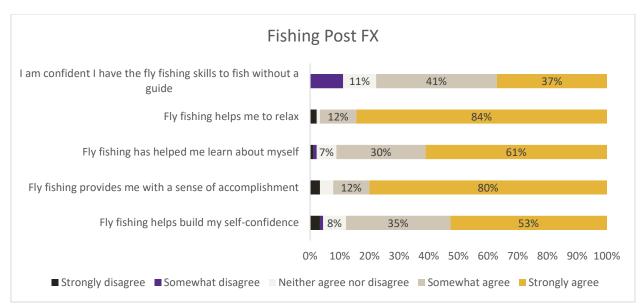


Figure 17. Please select your level of agreement with the following statements about fly fishing. Post Survey

WQW teaches Warriors how to fly fish and provides Warriors with the gear needed for fly fishing with the expectation that they will continue. One of WQW's goals in equipping participants with the fly fishing experience, training, and gear is for participants to continue to fish. In the annual survey, we asked about the frequency of fishing and conditions that supported or discouraged fly fishing.

- 91% of Warriors reported fishing last year.
- Of the 91% of Warriors that fished, 75.7% had fished in the last three months, and 93.5% had fished in the last six months. Given the survey was administered in December, the last three-month percentage was higher than expected.
- 94.5% of participants reported fishing helps them relax, 94.5% said fishing reduces their stress, and 93% said it restored/refreshed them. These percentages were even higher for Warriors specifically, with 96.3% reporting fly fishing helps them relax and reduces their stress.
- 85.5% of participants reported using the waders provided to them by WQW, and of those, 60.5% reported using them at least monthly.

Many fly fishing shops are the closest thing to a hub or community center for people who fly fish. Nearly half of the respondents were satisfied with their local fly fishing stop (48%), but 17% were dissatisfied. Another option that we looked at in the annual survey was fly fishing clubs, and 43% of respondents selected "Not Applicable" when asked to state their satisfaction with their local club. These results indicate that fly fishing clubs may not be prevalent in every area, respondents are unaware of them, or that respondents simply aren't joining them.

This may be an area WQW could assist with as they go through their program transformation. Alumni could be provided with tools or resources on how to create an effective and welcoming fly fishing club in their local community.

When Warriors were asked what their mental state was when they decided to go fishing<sup>1</sup>, ranging from "terrible" to "amazing," 36.1% reported they felt good to amazing when they decided to go fishing,

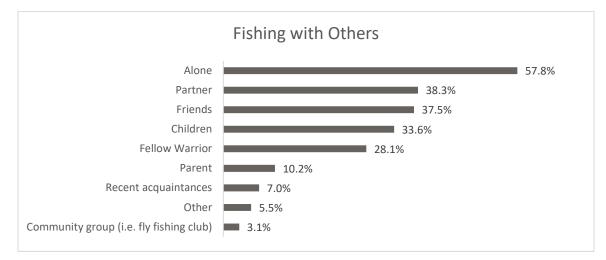
<sup>&</sup>lt;sup>1</sup> "When you decide to go fishing what is most commonly your mental state? With 0 being terrible to 100 being amazing"

though 28.8% reported they felt more on the terrible side, with the rest feeling "average". This finding indicates that some Warriors may use fly fishing to help them when they aren't feeling well, though others may only want to fish when they are feeling good. This may be an area to explore further in future programming.

#### Fishing with Others

Participants were asked who they fished with, allowing for multiple response selections. 57.8% reported that they had fished alone, but only 20.3% indicated that they fished alone exclusively. We also asked how satisfied people were with their fishing buddy and 54% were "Satisfied," 30% were "Neither," and 16% were "Dissatisfied" with their fishing buddy.

Figure 18. Question asked, "Who did you fish with this year typically? Check all that apply." Percentages are of PEOPLE who selected each option out of all the people who responded to this question in anyway (N=128). Percentages total more than 100%.



Given the importance of social connections, we examined if the number of different types of people participants reported fishing with was related to their responses to the outcome questions. We found Warriors who fished with a variety of people (fellow Warrior, partner/spouse, parent, children, friends, community group, acquaintances) had stronger outcomes compared to Warriors who fished alone or with only one other person. For example, not surprisingly they were more likely to have fished in the past year, they felt more able to deal with their problems, felt more supported and emotionally connected to their spouse/partner, and, unsurprisingly, reported fewer barriers to fishing. This is also supported by literature which showed that there are several benefits both from being in nature (Walter, et. al., 2021; Vella, et.al., 2013; Bennet et.al., 2017) and from camaraderie and social support (Bird, 2015) on elements of mental health and wellbeing.

The value of the Couples and Family FXs is further seen in the comments that talk about how impactful it is for families to fish together. Many respondents commented on how they want their friends to experience WQW. This further points to the impact and importance of relationships and belonging in a Warrior's growth and progression to self-actualization and a sense of purpose.

I left WQW properly equipped mentally and physically to continue experiencing the joys of fly fishing. I have also had the opportunity to share the joys of fly fishing with my family members.-Warrior

Participating in an FX can change your life. It reignited my love for the outdoors, and drives me to share that love with my family and friends. - Warrior

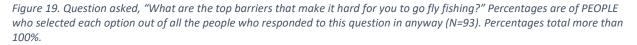
WQW was an amazing experience unlike any other for my husband and I. Learning to fly fish together was a great bonding experience and one we can continue to grow with. - Spouse

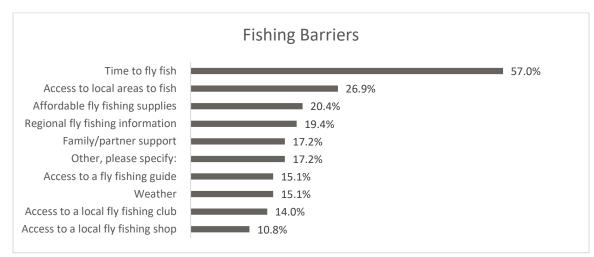
WQW has taught me a new skill that I can share with my wife and daughters for years to come. I had minimal fishing experience before attending this FX. The program has given me a skill I can pass down by spending quality time with friends and family. - Warrior

#### Fly Fishing Barriers

Respondents were asked in a multi-select question to check all the fly fishing barriers that they experience. The most frequent barrier was time (57.0%) and the second most frequent was local fishing access (26.9%). The team asked a separate question on how satisfied participants were with the distance to desired fishing spots. Of the 140 people who responded to this question 57% were "Satisfied," 24% were "Neither," and 19% were "Dissatisfied.

The comments from those who selected, "Other" to the question about barriers (17.2%, see Fig.20 below) further reinforced the significance of the barrier of distance or travel required to get to fishing spots. One respondent said, "I just wait until I'm back in Montana" and another said that since they can't drive they are unable to leave their home. In summary, a sizable minority of participants are unsatisfied with the distance to fishing places or consider access to fishing places a barrier.





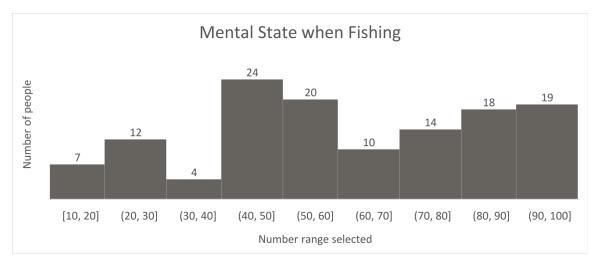
The other common theme of those who selected other was not having confidence in their abilities. One respondent said, "Was hoping to find some fellow vets with some experience to continue to learn," and two others alluded a "lack of comfort" or "anxiety" doing something they are not familiar with. It may be that participants are not looking so much for a guide as they are for companions or more experience. This is something to further unpack in future surveys.

Survey responses did not show that any particular barrier significantly related to how often or the last time a participant fished; in other words, those who fished less did not report specific barriers more often than those that fished more. However, there was a significant correlation between the number of barriers reported and the amount of fishing (r = -.544, p < .01) and recency of fishing reported (r = -.273, p < .01). Meaning, those who had more barriers also fished less often and less recently. It may be that a greater variety of obstacles is harder to overcome than fewer obstacles, even if they are large. This might suggest that any effort WQW can do to support in the elimination of any obstacle, however small,

might have an impact on fishing activity. There was no clear trend or critical number of barriers that prevented people from fishing or fishing less often.

Whether people are fishing or not fishing because they have the support of others or face barriers that are hard to overcome, it may be worth remembering that the motivation or reason people go fishing varies widely. As discussed above, participants were asked, "When you decide to go fishing what is most commonly your mental state? With 0 being terrible to 100 being amazing" and 47 people (37%) selected numbers less than 50, 20 people (16%) selected a number between 50 and 60, and 61 people (48%) selected a number greater than 60. More people state that they are fishing when they are in a positive mental state. This could impact programming and how WQW messages to participants when they should fish. Is it something that will make them feel better when they are doing poorly? Or is it something that if done during good times will maintain a healthy mental outlook?

Figure 20. Question asked, "When you decide to go fishing what is most commonly your mental state? With 0 being terrible to 100 being amazing." Histogram bars represent the number of people who selected the number range indicated on the horizontal axis. N=128



#### Impact of Photos

In September 2021 two members of the evaluation team visited WQW and accompanied staff and Warriors on a solo FX. Based on this site visit we suspected that the photography by Mike McLeod, who is a well-known and respected photographer and veteran who has been taking candid photos of FX participants for over seven years, might have an impact on participants. Therefore, we asked two questions in the annual survey about participants' use of the photos taken during their FX. We found the photography was both an important service allowing for full immersion and concentration during the FX (not worried about taking pictures themselves) and a bold and constant reminder of the FX. Those who used the photos in different ways (downloaded on their phone, on their computer, shared photos with family/friends, shared on social media, made prints, framed photos on display) were more likely to say that they were doing well in most areas evaluated in the survey. This finding was also supported by the open response comments.

I think the pictures are extremely important. I suffer from TBI and thus have memory issues; the pictures are very important to me as they bring back the memories from my amazing experience at WQW. I have several of Mike's photos printed out and I also have all of them on my computer and look at them almost monthly. - Warrior

It's hard to get motivated to get out and fish alone (sometimes). Looking at the pictures from the FX help me remember how much fun I had and served as motivation to put to use the equipment and coaching I received. – Warrior

It is extremely important that Mike captures the warriors out participating. What emotions/joy it brings the warriors to be able to look back on their experience with WQW is invaluable. - Warrior

The photos are a part of the experience. Mike is able to capture the candid moments that aren't staged. So the expressions you see on the warriors is genuine. I have a photo mike took on my wall at home. Mike is an integral part of WQW. The photos he has taken have allowed me to share my FX with family and friends. -Warrior

Mike is an incredible asset to WQW. When he is around, you know you will get quality photos of your FX experience and you don't have to worry about taking pics...which is important to being in the moment when fly fishing or any other WQW events! - Caregiver

Figure 21. The question stem varies in the figure below the percentages are of those who responded to the scale indicated on the far left of the vertical axis. N=24 for those who did not report using photos or used them in one way. N=114 for those who reported using the photos in 2 or more ways.

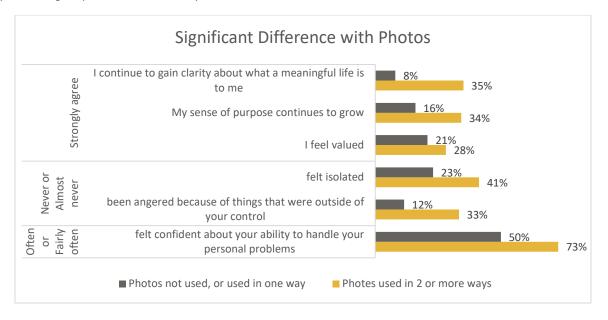
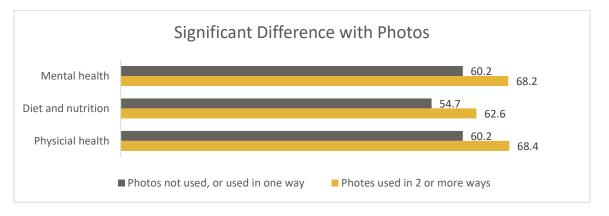


Figure 22. The question asked, "How well do you feel you're doing in the following areas? With 0 being the worst possible and 100 being the best possible." N=24 for those who did not report using photos or used them in one way. N=114 for those who reported using the photos in 2 or more ways.



#### Volunteering

One of the factors that makes WQW special is that alumni feel compelled not only to share the experience with their loved ones, but also to come back and contribute to the positive WQW experience of other Warriors.

The desire to return to Montana as a volunteer was a compelling theme across all groups. In the annual survey participants had the opportunity to comment about their WQW experience in an open response question. The open response questions were coded based on the themes that participants shared. One of the themes was volunteering and giving back. Volunteers that freely mentioned the importance of giving back to WQW had higher scores across the domains measured, such as lower stress, greater resilience, better physical and mental health, and they felt less isolated. This will be an area for further study, but at first glance it appears by giving back, they are gaining a sense of purpose, which leads to greater thriving.

WQW helped me get in touch with myself and decide to get help with mental issues. I feel more relaxed and in control now. WQW has also inspired me to give back and help others with Warrior issues.-Warrior

*I hope to volunteer as a companion in future WQWs to give back to the program and other vets.-Warrior* 

*I love volunteering with/for WQW, my world has absolutely changed with WQW. WQW is my respite, whether volunteering or participating, I look forward to my returns. – Warrior* 

I would love to figure out a way to give back to the program, even though it was just a week it was very meaningful to spend that time with my wife and also the other couples.-Warrior

*Grateful for the (first) opportunity to reflect on what was important. Ready to volunteer and pay it forward. – Warrior* 

The team across the board have impacted me in a way words can't describe. It has made me find a way to give back to my community and Veterans any way I can. -Warrior

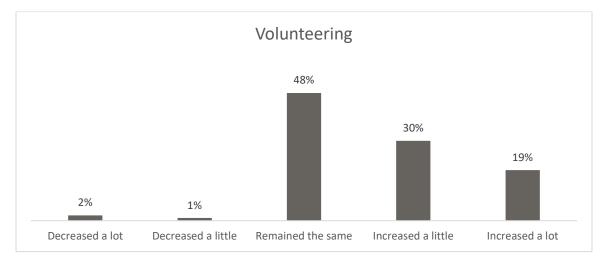


Figure 23. The question asked, "After participating in WQW my volunteer engagements have:." Presented are the percentages of those who responded.

## Conclusions

Across all FXs, we found significant improvements in nearly all domains investigated, including the value of being out in nature, the value of community, and wellbeing. Responses indicate improvements in feelings of gratitude and the desire to give back after participating in the WQW program. The core areas that make WQW unique (i.e., spending time in nature) and the core areas that lead to self-actualization and a sense of purpose (I.e., community and wellbeing) were assessed immediately before and after the FX. Increases in these domains suggest that the core areas were correctly identified and are indeed crucial elements of both the WQW model and personal growth. Some improvements were statistically significant while others were less so – these are noted in the tables in Appendix I. Even without statistical significance, the trend across all categories points to improvement and growth across all domains evaluated.

The IVMF will continue to build on the evaluation work through the 2022 FXs. The second year of evaluation will further explore the longitudinal impact of WQW, insight into the alumni and volunteer experience, and a review of the new experiences WQW is piloting.

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## Appendix I

Table 1 Pre and Post Survey Results for All Participants

	Means (r	า=96)
Survey Question	Pre	Post
Please select your level of agreement with the following statements (1-5 scale):	I	
***My sense of purpose continues to grow	4.07	4.39
I enjoy learning new things	4.58	4.73
****I continue to gain clarity about what a meaningful life is for me	3.94	4.33
****Nature creates a space where it is easier for me to think clearly	4.53	4.75
***I feel better when I spend time outside in nature	4.65	4.80
I feel a sense of belonging in my community	3.41	3.72
I feel valued	4.01	4.08
In the last week, how often have you? (1-5 scale):	I	
****felt nervous and "stressed"?	2.23	3.26
**felt confident about your ability to handle your personal problems	3.66	3.88
****been angered because of things that were outside your control?	2.70	3.38
****had a good night's sleep?	2.76	3.46
On a scale of 0-10:	I	
****Generally, how well is your life going right now?	6.81	7.29
***How hopeful do you feel about your life right now?	7.19	7.67

(\*Marginally Significant at p<.10; \*\*Significant at p<.05; \*\*\*Significant at p<.01; \*\*\*\*Significant at p<.001)

Table 2 Pre and Post Survey Results for Warriors Participants Only

		Means (n=67)	
Survey Question	Pre	Post	
Please select your level of agreement with the following statements (1-5 scale):			
**My sense of purpose continues to grow	4.00	4.28	
I enjoy learning new things	4.51	4.66	
<b>**I</b> continue to gain clarity about what a meaningful life is for me	3.87	4.19	
***Nature creates a space where it is easier for me to think clearly	4.53	4.78	
**I feel better when I spend time outside in nature	4.67	4.81	

***I feel a sense of belonging in my community	3.19	3.54
I feel valued	3.96	3.99
In the last week, how often have you? (1-5 scale):		
****felt nervous and "stressed"?	2.10	3.22
**Felt confident about your ability to handle your personal problems	3.51	3.78
****been angered because of things that were outside your control?	2.62	3.26
had a good night's sleep?	2.60	3.37
On a scale of 0-10:		
***Generally, how well is your life going right now?		
***How hopeful do you feel about your life right now?	6.93	7.50
		l

(\*Marginally Significant at p<.10; \*\*Significant at p<.05; \*\*\*Significant at p<.01; \*\*\*Significant at p<.001)

Table 3 Pre and Post Survey Results for First FX Warriors Participants Only

	Means (	n=42)
Survey Question	Pre	Post
Please select your level of agreement with the following statements (1-5 scale):		
**My sense of purpose continues to grow	4.00	4.31
I enjoy learning new things	4.58	4.72
****I continue to gain clarity about what a meaningful life is for me	3.74	4.21
***Nature creates a space where it is easier for me to think clearly	4.42	4.79
**I feel better when I spend time outside in nature	4.62	4.81
<b>***</b> I feel a sense of belonging in my community	3.14	3.67
*I feel valued	4.00	4.21
In the last week, how often have you? (1-5 scale):		
****Felt nervous and "stressed"?	2.12	3.33
**felt confident about your ability to handle your personal problems	3.42	3.77
***been angered because of things that were outside your control?	2.70	3.33
****had a good night's sleep?	2.65	3.53
On a scale of 0-10:		
**Generally, how well is your life going right now?	6.53	7.07
***How hopeful do you feel about your life right now?	6.67	7.38

(\*Marginally Significant at p<.10; \*\*Significant at p<.05; \*\*\*Significant at p<.01; \*\*\*\*Significant at p<.001)

Table 4 Annual Survey Significant Results by Photos Used

Use of Photos Taken During FX	Photos Not used, or used in only one way (n=24)	Photos Used in 2 or more ways (n=114)
***On a scale from 0-10, generally how well is your life going right now?	6.08	7.10
How well do you feel you're doing in the following areas? With 0 bein being the best possible.	g the worst poss	ible and 100
** Physical health	60.23	68.36
**Diet and nutrition	54.69	62.62
*Mental health	60.15	68.21
In the last week, how often have you:	·	
**felt confident about your ability to handle your personal problems	3.50	3.92
***been angered because of things that were outside your control?	2.46	3.11
**felt isolated from others	2.65	3.20
**** I'm still connected to people I met at WQW	2.84	3.84
*I feel valued	3.67	4.01
*My sense of purpose continues to grow	3.76	4.07
** I continue to gain clarity about what a meaningful life is for me	3.68	4.11
Resiliency		
***I am able to adapt when changes occur	3.67	4.07
**I can deal with whatever comes my way	3.75	4.12

(\*Marginally Significant at p<.10; \*\*Significant at p<.05; \*\*\*Significant at p<.01; \*\*\*\*Significant at p<.001)

Table 5 Annual Survey Significant Results by Fishing with Others

Questions significantly associated with fishing status	Fished alone or with only one other person (n=83)	Fished with more than one other person (n=45)			
Please select your level of agreement with the following statements (1-	Please select your level of agreement with the following statements (1-5 scale):				
***My spouse/partner is someone I can go to for support when I am upset	4.12	4.65			
****I feel emotionally connected to my spouse/partner	4.10	4.65			
***My spouse/partner and I have a strong marriage/ partnership	4.21	4.66			

In the last week, how often have you? (1-5 scale):		
*felt confident about your ability to handle your personal problems	3.72	3.96
***Number of Barriers to Fly Fishing Reported	1.63	1.00
****Number of times Fishing in 2021	2.84	3.91

About how many times did you go fishing in 2021 (not including time spent at WQW, if applicable)? (N=150)	Percentage	
None	11.9%	
1-2 times	18.5%	
3-5 times	24.5%	
6-10 times	10.6%	
More than 10 times	33.8%	

About how long ago did you last fish? (N=128)	Percentage
Can't remember	1.6%
In the past week	14.8%
In the past month	18.0%
About 3 months ago	39.8%
About 6 months ago	19.5%
About 6-12 months ago	6.3%

Please select your level of agreement with the following statements about fly fishing	Strong disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly Agree
provides me with a sense of accomplishment (N=128)	3.1%	0%	9.4%	27.3%	60.2%
helps me to relax (N=128)	3.9%	0.8%	0.8%	12.5%	82.0%
reduces my stress (N=127)	3.9%	0%	1.6%	16.5%	78.0%
refreshes/restores me (N=128)	3.1%	0%	3.9%	15.6%	77.3%

Please state how satisfied you are with the following aspects of fly fishing in your	Dissatisfied	Neither Satisfied or Dissatisfied	Satisfied
area?			

Local fly fishing shop (N=120)	17.5%	34.2%	48.3%
Local fly fishing club (N=82)	28.0%	53.7%	18.3%
Fly fishing buddy (N=105)	16.2%	29.5%	54.3%
Distance to desired fishing spots (N=140)	18.6%	24.3%	57.1%

What are the top barriers that make it hard for you to go fly fishing? (N=93)	Percentage
Time to fly fish	57.0%
Access to local areas to fish	26.9%
Affordable fly fishing supplies	20.4%
Regional fly fishing information	19.4%
Family/partner support	17.2%
Other, please specify:	17.2%
Access to a fly fishing guide	15.1%
Weather	15.1%
Access to a local fly fishing club	14.0%
Access to a local fly fishing shop	10.8%

Who did you fish with this year typically? (N=128)	Percentage
Alone	57.8%
Partner	38.3%
Friends	37.5%
Children	33.6%
Fellow Warrior	28.1%
Parent	10.2%
Recent acquaintances	7.0%
Community group (i.e. fly fishing club)	3.1%

When you decide to go fishing what is most commonly your mental state? With 0 being terrible to 100 being amazing. (N=128)	Number	Percentage
0-20	7	5%
21-30	12	9%

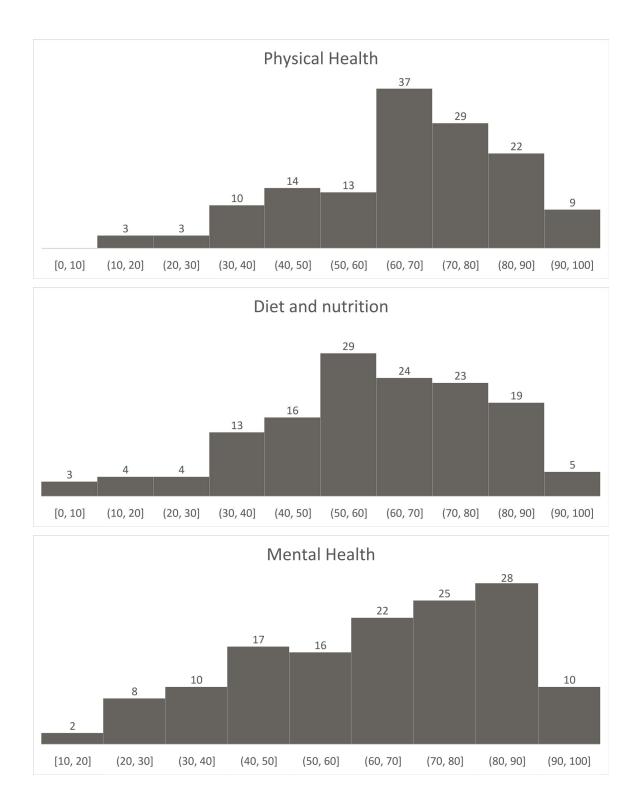
31-40	4	3%
41-50	24	19%
51-60	20	16%
61-70	10	8%
71-80	14	11%
81-90	18	14%
91-100	19	15%

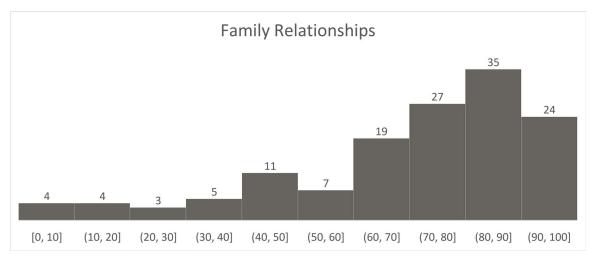
Since your first WQW FX have you used your waders? (N=145)	Percentage
Yes	82.1%
No	13.9%

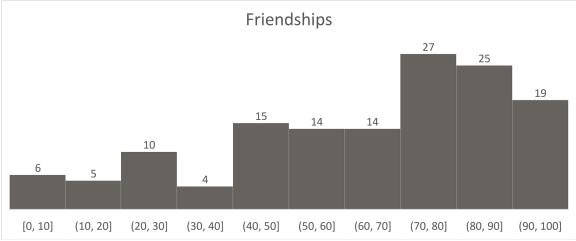
Approximately how often have your used the waders? (N=124)	Percentage
Weekly	8.1%
Monthly	52.4%
Yearly	37.9%
Only when at WQW	16%

How have you used WQW FX photos taken by Mike MacLeod? Please select all that apply. (N=144)	Percentage
Downloaded to my phone	71.5%
Downloaded to my computer	61.8%
I have shared photos with family and/or friends	80.6%
I have shared photos on social media	52.1%
I made prints of the photos	29.2%
I have framed photos displayed	31.3%
I have not used photos taken by Mike	7.6%

The following 5 histograms represent the distribution of people who selected a number in response to the question, "How well do you feel you're doing in the following areas? With 0 being the worst possible and 100 being the best possible. Please slide marker to select level." Responses are grouped into bins of 10 points.







Please select your level of agreement about your partner or spouse, if applicable.	Strong disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly Agree
My spouse/partner is someone I can go to for support when I am upset (N=127)	3.1%	4.7%	4.7%	23.6%	63.8%
I feel emotionally connected to my spouse/partner (N=127)	1.6%	6.3%	4.7%	26.0%	61.4%
My spouse/partner and I have a strong marriage/partnership (N=125)	2.4%	4.8%	4.0%	22.4%	66.4%

Please select your level of	Strong	Somewhat	Neither	Somewhat	Strongly
agreement with the following	disagree	disagree	agree nor	agree	Agree
statements.			disagree		

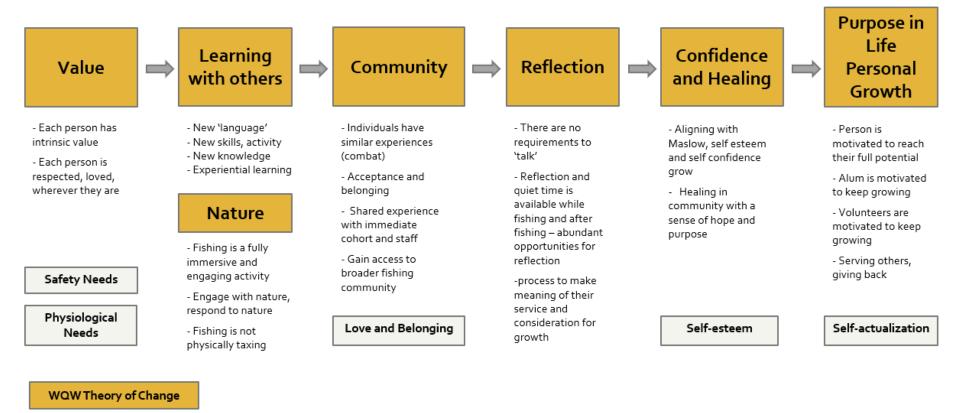
I'm still connected to people I met at WQW (N=139)	11.5%	8.6%	10.8%	40.3%	28.8%
I feel valued (N=138)	0%	6.5%	18.8%	47.8%	26.8%
I feel a sense of belonging in my community (N=138)	5.1%	13.0%	23.9%	37.0%	21.0%

Outside of work, approximately how many hours per week would you (Ideally/Actually) spend in nature?	Ideally N (%)	Actual N (%)
1 hour	5 (3.3%)	33 (21.9%)
2 hours	5 (3.3%)	31 (20.5%)
3 hours	2 (1.3%)	17 (11.3%)
4 hours	15 (9.9%)	12 (7.9%)
5 hours	14 (9.3%)	9 (6.0%)
6 hours	98 (64.9%)	35 (23.2%)

After participating in WQW my volunteer engagements have:	N (%)
Decreased a lot	3 (2.0%)
Decreased a little	2 (1.3%)
Remained the same	66 (43.7%)
Increased a little	41 (27.2%)
Increased a lot	26 (17.2%)

## Appendix II

## **Theory of Change**



Maslow Hierarchy of Needs