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Fish Consumption Advisory Infographic

User's Guide and Suggestions for
Use in Social Marketing Campaigns

Chesapeake Bay Program



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Intended Use of Document

The Chesapeake Bay Program developed the Fish Consumption Advisory (FCA) infographic and this accompanying user guide in order to help partners better communicate the dangers of toxic contaminants in locally caught fish and the subsequent risks to human health.

The FCA infographic is intended to raise awareness about the risks of consuming contaminated fish by highlighting safe angling and cooking practices in a simple, easy-to-understand and relevant fashion. The infographic (pictured on Page 4) features four panels that collectively promote the safe catching, sharing, preparing and consumption of fish.

This User Guide provides context around the proper use of the infographic, geared toward those who use it to promote safe fish consumption and protect human health.

- [Panel Usage](#) provides specific detail for effectively highlighting each panel, including tips on how to engage communities and bring awareness to fish consumption issues.
- [Tips for Success](#) and subsequent sections provide guidance on how non-profits, stakeholders and other community groups can use [behavior change](#) tactics to develop engagement strategies that are unique to the intended community.

I. Background

The Chesapeake Bay and its contributing waters are impaired by pesticides, pharmaceuticals, metals and other chemicals. These pollutants enter the water through multiple methods including accidental leaks, improper disposal, stormwater, agricultural runoff and deposition from the air. Through a process called bioaccumulation, these pollutants make their way through the food web. Bioaccumulation begins with small, bottom-dwelling organisms absorbing [contaminants](#) through either physical contact or feeding habits. As fish consume this contaminated prey, the toxins remain and continue to move through the food web into larger species fished and consumed by people. When fishing in potentially polluted waterways, it is important to choose the fish you keep carefully. Due to differences in feeding pattern, size and other factors, certain fish are more likely to have high levels of toxic contaminants than others.

Fish consumption advisories are public health notices that warn people about the possible health risks associated with eating fish or shellfish from a certain waterway. They are issued when there is concern that the contaminant levels of locally caught fish or shellfish may be dangerous for human consumption. The suggested restrictions are put in place for health and safety. A contaminated fish may not look sick. The absence of open wounds or lesions does not mean that a fish is safe to eat. Therefore, it is important to know which species are at risk by consulting up-to-date local advisories.

Multiple [research studies](#) have shown fish advisories to be largely ineffective due to a combination of practical and social factors. Practical factors include information not reaching the correct audience—for example, advisories placed on fishing licenses when at-risk subsistence fishers do not have licenses, or advisories placed at the water's edge when the affected women and children are not the ones fishing. Practical factors also address the inaccessibility of advisories due to technical or jargon-heavy wording and language barriers. Social factors include matters of perception and behavior, including but not limited to the fact that symptoms of contamination are delayed, contaminated fish do not appear ill, there is a cultural emphasis or primary need surrounding fish consumption and a distrust of the message deliverer.

In 2016, the Chesapeake Bay Program contracted a consultant to conduct a [literature review](#) on effectiveness factors and to develop recommendations from that research, the findings of which informed the development of the FCA infographic and accompanying User Guide. Factors impacting effectiveness largely fell into two categories: the information contained in the advisory itself and how that information was delivered to the public.

Chesapeake Bay Program partners, non-profit organizations and community members provided feedback on the draft infographic, culminating in a final four-part panel infographic that follows the full path of safe fish consumption. The infographic focuses on Polychlorinated biphenyls, or PCBs, the primary contaminant in urban waterways. Throughout this User Guide, additional information about FCAs can be found by following the [hyperlinks](#) provided.

Outreach efforts surrounding contaminated fish are an opportunity to highlight the importance of stewardship, as reduced pollution leads to safer fish. Engagement tools such as FCAs serve to instill a sense of stewardship in those that live, work and play throughout the Chesapeake Bay

watershed and its waterways, and these efforts are transferable to other ecosystems. By being good stewards of the environment, we can all play a role in keeping our local waterways clean and healthy so that one day, there will be no need for consumption advisories.

II. Key Points

- Both the U.S Environmental Protection Agency and the U.S. Food and Drug Administration encourage fish consumption as part of a healthy, balanced diet.
- FCAs are location specific. Pollution may be worse in one geographic location, requiring certain fish species to be under advisory for their size, their feeding habits, the frequency in which they are eaten and recommended portion size.
- The following people should be particularly aware of the risks of eating contaminated fish:
 - Women who are pregnant or may become pregnant.
 - Nursing mothers.
 - Children.
- The literature review (see Appendix) recommended outreach materials feature striking visual imagery, multi-lingual content and bold, direct, non-technical language.

III. Placement and Promotion

Guidance for Individual Panel Usage

This portion of the User Guide provides instructions on how to use each of the four panels, including suggested locations, additional information about the panel and tips for its successful use. It is intended to help the user determine the appropriate location for the FCA infographic, as well as how each panel should be used to ensure the appropriate message is delivered to the intended audience(s).

 FISH WARNING: Catch, Share & Prepare Responsibly		 ADVERTENCIA: Pesca, Comparte y Prepara tu Pescado Responsablemente	
 <p>Choose Safer Fish Keep the fish species with less pollution.</p>	 <p>Share Safer Fish Polluted fish may cause cancer, developmental issues and other harm to pregnant women, children and adults.</p>	 <p>Escoger los Pescados más Saludables Elija las especies de pescados menos contaminados.</p>	 <p>Comparta los Pescados más Saludables Consumir pescados contaminados puede causar cáncer, problemas en el desarrollo y otros daños a mujeres embarazadas, niños y adultos.</p>
 <p>Prepare Fish Safely Cut off the skin and fat before cooking. Discard the oil after cooking.</p>	 <p>Enjoy Fish Safely Follow local advisories. Eat the suggested portion size. Do not exceed the suggested frequency.</p>	 <p>Prepara el Pescado de Manera Segura Remueva la piel y la grasa antes de cocinar. Descarte el aceite usado al terminar.</p>	 <p>Disfrute del Pescado de Manera Segura y Saludable Siga las recomendaciones locales. Ingiera solo las porciones sugeridas. No exceda la frecuencia recomendada.</p>
<p>For Your Friends' and Family's Health Go to for more information about safe fish consumption where you live.</p>		<p>Por la Salud de sus Amigos y Familiares Ve a para más información sobre el consumo saludable de pescado en el área donde vives.</p>	

[English PDF](#)

[Spanish PDF](#)

The infographic features the full fish consumption message in four separate panels:

1. Choose Safer Fish.
2. Share Safer Fish.
3. Prepare Fish Safely.
4. Enjoy Fish Safely.

While the infographic is intended to be most effective when used in its entirety, each panel can be used to highlight different aspects of safe fish consumption, public health, stewardship or environmental protection, depending on the goal of outreach and engagement.

The use of the infographic may vary depending on the objectives of the organization. Individual panels of the infographic can be isolated to draw connections to the intended message. The list of suggested locations for each panel section provides settings where the information portrayed in that particular panel could be especially useful or relevant.

The sections below suggest locations for posting each one of the individual panels, context for usage and tips to optimize community programs using each. These examples are not exhaustive and are intended to provide organizations with ideas for the messages to have the greatest impact.

Panel 1: Choose Safer Fish



Choose Safer Fish

Keep the fish species with less pollution.



Escoger los Pescados más Saludables

Escoja las especies de pescados menos contaminadas.

Suggested locations

- Marinas.
- Riverbanks.
- Waterways.
- Bait and tackle shops.
- Schools.
- Summer camps.
- Extracurricular programs.
- Park facilities.
- Health departments.
- Places where fishing licenses are sold.

Context

This panel is intended to promote awareness of the types of fish that are less-safe to eat and encourage the keeping of safer fish. Some fish, because of their size, the food they eat and other factors are more likely to contain toxics than others.

A contaminated fish may not look sick. The absence of open wounds or lesions does not mean that a fish is safe to eat. Therefore, it is important to know which species are at risk. Local advisories contain important information about which fish and waterways may be contaminated and recommend which fish to avoid. The restrictions are put in place only for health and safety.

Highlighting the dangers of eating contaminated fish can also be used as an opportunity to stress the importance of stewardship. These toxic contaminants exist because of humans and human behavior. By being a good steward and taking care of the environment, we can restore the health of the water and the fish that live there, eventually leading to the removal of these restrictions.

Tips for use

Clearly identify which fish are safer to eat versus those which are not based on species and size. This information can be found on each state's and District of Columbia's official fish consumption advisory websites.

- [Delaware](#)

- [District of Columbia](#)
 - [Maryland](#)
 - [New York](#)
 - [Pennsylvania](#)
 - [Virginia](#)
 - [West Virginia](#)
- Explain that species information varies by location.
 - Provide local caution levels.
 - Example: “Here on the (*body of water name*), there is an orange caution (*eat sparingly only those fish under X inches in length*) on *white perch and channel catfish*. There is a red caution (*DO NOT EAT*) on *blue catfish*.”
 - Include an image of each fish and list identifying characteristics. Images and information on fish in the Chesapeake Bay watershed can be found here:
 - [Chesapeake Bay Program Field Guide: Fish](#)
 - Keep detailed information of where local advisories are placed.
 - Identify locations of physical signs by the water.
 - Example: “Pictures of each fish under the advisory are on a metal sign posted to fishing dock #4 in the Bladensburg Park portion of the Anacostia River.”
 - Include websites, local organizations and anywhere signs or advisories are posted, such as bait shops.
 - Keep a list of sign locations to allow for updates in the event the advisory changes.
 - Provide background science and contaminant information. Audiences need to understand why some fish are safer than others at that particular time in that body of water.
 - Example: “In our area, PCBs are the most common contaminant that affects human health. These chemicals, which concentrate in the fat and skin of a fish, remain in the environment and accumulate as they move up the food chain.”
 - Example: “PCBs are manmade chemicals that can leak into waterways and move up the food chain. Depending on feeding patterns, some fish species will accumulate more PCBs than others. As fish grow larger, they are also more likely to harbor PCBs. Therefore, you are currently advised not to keep or consume the following species and sizes:...”

Panel 2: Share Safer Fish



Share Safer Fish

Polluted fish may cause cancer, developmental issues and other harm to pregnant women, children and adults.



Comparta los Pescados más Saludables

Consumir pescados contaminados puede causar cáncer, problemas en el desarrollo y otros daños a mujeres embarazadas, niños y adultos.

Suggested locations

- Sport fields.
- Recreational gathering spaces.
- Marinas.
- Riverbanks.
- Waterways.
- Women, Infant and Children (WIC) Program Centers.
- Medical offices.
- Health clinics.
- Bait and tackle shops.
- Park facilities.
- Health departments.
- Places where fishing licenses are sold.
- Community gathering spaces.
- Places of worship.

Context

Many people who fish recreationally or for sustenance often share their catch with others in their family or community. This panel is intended to encourage those who fish to share their catch responsibly, and to assist those who obtain fish from others to be well-informed. By highlighting the value and importance of community, the message can be shared more effectively.

Tips for Use

- Focus on the community aspect of sharing food. Emphasize that by sharing safer fish with your community, you are protecting them. The recreational angler has a responsibility to be informed when sharing their catch.
- People who consume locally caught fish also have a responsibility to be informed on local advisories and consider any risk factors in their households (e.g. women of child-bearing age and children).

- Use the importance of fellowship and community as a vehicle to deliver the message. Examples may include:
 - List upcoming community events, park get-togethers, church dinners or any other event with the community at which fish might be shared.
 - Focus on the positive influence these types of events can have on a community and emphasize that choosing safer fish is healthy.

- The pregnant woman and child in the infographic are intended to highlight the increased risk for these populations, including women of childbearing age who may become pregnant. Consuming contaminated fish is more dangerous for these groups because contaminants cause more damage at developmental stages.

- The cooler with ice in the infographic is intended to draw attention to properly and safely handling food.
 - Even fish that are not contaminated can become a health risk if not kept safely. Highlight the importance of keeping the fish on ice, not leaving dead fish out for too long and the danger zone for bacterial contamination:
 - Bacteria grows most rapidly at temperatures between 40- and 140-degrees Fahrenheit. Perishable should never be left unrefrigerated for longer than two hours. When temperatures are above 90 degrees, it should not be left out more than one hour.

- Polychlorinated biphenyls, or PCBs, are known to cause a variety of adverse health effects. Used in coolants and lubricants, they have been shown to cause cancer and other serious health concerns in animals. PCBs can impact an animal's immune, reproductive, nervous and endocrine systems. Human studies support evidence for potential carcinogenic and non-carcinogenic effects of PCBs. The different health effects of PCBs may be interrelated. Alterations in one system may have significant implications for the other systems of the body. The potential health effects of PCB exposure are discussed in greater detail below. (Source: [EPA](#))

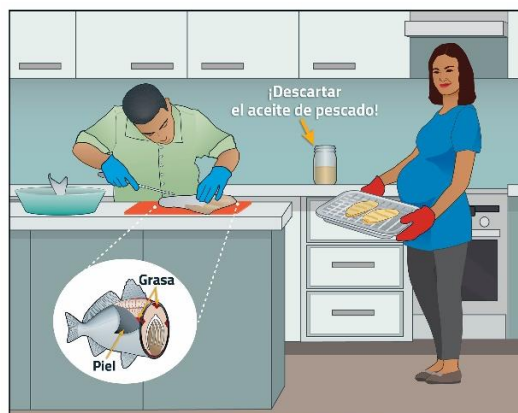
- Analogies can help explain how contaminants from fish cause cumulative damage over time to the body, causing neurological issues and potentially cancer. Smoking and heavy alcohol use are widely understood as severely damaging to health over time. Like secondhand smoke impacting non-smokers, giving away contaminated fish can cause significant harm to family, friends and community that do not know where the catch came from or that it is dangerous.

Panel 3: Prepare Fish Safely



Prepare Fish Safely

Cut off the skin and fat before cooking.
Discard the oil after cooking.



Prepare el Pescado de Manera Segura

Remueva la piel y la grasa antes de cocinar. Descarte el aceite usado al terminar.

Suggested locations:

- Grocery stores.
- Farmers markets.
- WIC Centers.
- Medical offices.
- Health clinics.
- Health departments.
- Fish cleaning stations.

Context

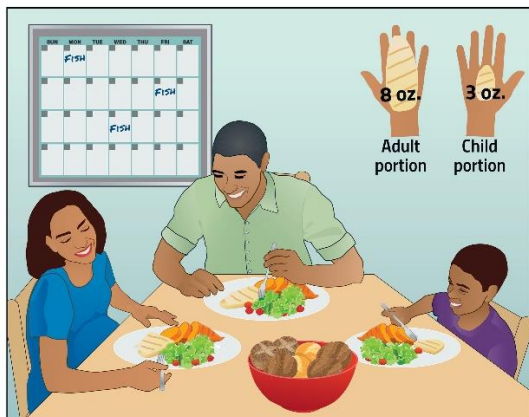
PCBs concentrate in the skin and fat of a fish. This is different from mercury, which is present throughout the entire fish. If consuming fish from potentially contaminated waterways, it is important to prepare the fish in a way that reduces the risk of exposure to PCBs. This includes removing the skin and the fat before cooking and discarding the oil responsibly after cooking. The PCBs that were concentrated in the fat will be present in the oil after cooking, so it is important to discard it and not to use it in the dish.

Tips for Use

- Pair the infographic with a filleting tutorial and guidelines.
 - Include picture tutorials for filleting, recommendations for wearing gloves and step-by-step instructions for safe knife handling,
- Provide recipes and cooking techniques that include safe preparation methods.
 - Provide several options for ways to cook a fillet; focusing on the culinary culture of the community you are trying to reach.
 - Consider choosing recipes that are simple and inexpensive.
 - If you are partnering with a local chef or restaurant, appeal to them for signature dishes or specialty recipes created for your safe consumption campaign.
 - Explain the importance of discarding the cooking oil due to the presence of PCBs. You may also want to pair this with a message about properly disposing of

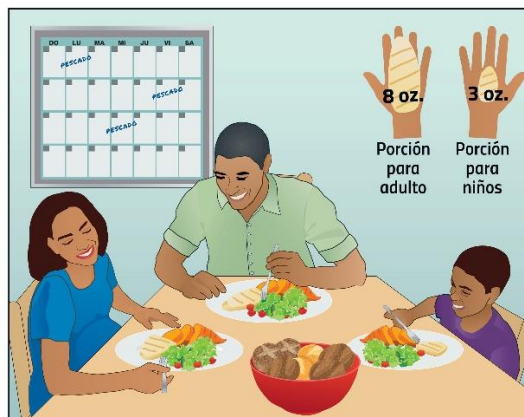
oil in general. Improperly disposed oil can clog drains, cause blockages and harm the wildlife that depend on our rivers and streams. Oil should not be poured down drains.

Panel 4: Enjoy Fish Safely



Enjoy Fish Safely

Follow local advisories. Eat the suggested portion size. Do not exceed the suggested frequency.



Disfrute del Pescado de Manera Segura y Saludable

Siga las recomendaciones locales. Ingiera solo las porciones sugeridas. No exceda la frecuencia recomendada.

Suggested locations:

- Grocery stores.
- Farmers markets.
- WIC centers.
- Medical offices.
- Health clinics.
- Schools.
- Summer camps.
- Extracurricular programs.
- Health departments.
- Fish cleaning stations.
- Places where fishing licenses are sold.
- Community gathering spaces.
- Places of worship.

Context

This panel is intended to provide guidance around enjoying fish safely. Fish can be a very important part of a healthy diet. When consuming potentially contaminated fish, it is important to limit consumption. Local advisories will provide specific information about which fish should be avoided altogether, and which should be limited.

Tips for Use

- Emphasize the importance of fish in a healthy diet. This panel can be used in conjunction with other information about a healthy lifestyle and the importance of diet and nutrition. If applicable, include details for other campaigns that focus on health, nutrition and exercise.
- Like Panel 2, this panel depicts a pregnant woman and child. These populations are at higher risk for harm from PCBs and should therefore reduce their intake of potentially contaminated fish.
- The infographic illustrates suggested portion sizes. When using this, break down recommended portion size by age, gender and the health of men, women, children and the elderly. Include reasoning for suggested portions and visuals of comparative size

- (e.g. a deck of cards, a cell phone, an index card or diameter of a golf ball as appropriate).
- The calendar represents the suggested frequency of consuming fish. You may want to include other calendar visuals that include specific recommendations for the local area.
 - Social marketing campaigns are used to encourage changes in behavior. Consider implementing one that includes suggestions for healthy fish consumption.
 - Example: “Every tenth day is seafood day!” or “It is Fish15! Have a family fish dinner on the 15th of every month.”
 - Portion size and frequency should be broken down by your specific targeted species. This should include visuals of portion size and each fish species for ease of identification.

IV. Tips for Success

When using this FCA infographic to engage your community and promote the safe consumption of fish, consider these tips when conducting outreach and follow-up:

- Highlight that fish and seafood are part of a healthy diet.
 - Fish are generally low in fat and high in protein. Fish contain many vitamins and minerals and are the primary food source for long-chain omega-3 fatty acids. Studies suggest that omega-3 fatty acids are important during fetal brain and eye development and may help to prevent heart disease in adults. Health experts recommend that regular consumption of fish be [included as part of a healthy diet](#).
- Be clear and direct about risks from contaminants.
 - Do not incite fear about eating fish, but do not use euphemisms for the medical risks either. Use the terms “cancer” and “developmental issues” when discussing those specific [health risks](#) associated with eating contaminated fish.
- Focus on changing the behavior, not just delivering information.
 - Target changing behavior at each stage of the consumption process. (Choose, Share, Prepare, Enjoy).
- Focus on empowering people to make choices that support a healthy lifestyle.
 - The response to traditional FCA communications is that choice is being taken away or rights are removed. Instead, send the positive message that knowledge is power. People are empowered by the knowledge that enables them to choose safer fish (see image in Panel 1).
- Draw connections to stewardship.
 - A community feels a stronger sense of environmental responsibility through its involvement in restoring and protecting its local waterways.
- Know your audience and work with them.
 - The best resource for feedback on the outreach materials you create is the community you are targeting.

- It is important to partner early with local organizations and individuals to ensure they are involved in developing the campaign and outreach materials.
- Help consumers know where to find local FCAs.
 - Ensure anglers and consumers have access to up-to-date local advisories and know where to find them in various formats. Examples include websites, signs, printed materials and fishing license pamphlets.
 - There is space in the infographic files to list a URL to FCAs in your area (see the [“Managing and Customizing Files”](#) section for more detail).
- Don’t use jargon, internal acronyms or buzzwords. Use simple phrases.
 - Rather than “consumption,” use “eat;” rather than “polychlorinated biphenyls,” use “chemicals.”
- Include a means of measuring success and getting feedback from the target audience.
 - Is the engagement strategy working? How will you know if it is changing behavior?

V. Tips to Encourage Behavior Change

Campaigns that focus solely on information delivery have proven to be unsuccessful at changing behavior. Social marketing is an approach that develops and integrates marketing concepts into other approaches to influence changes in human and organizational behaviors to benefit the social good.

Work with the community you are targeting from the outset to develop effective engagement. Consider their values, attitudes, needs and demographics when tailoring the infographic. The questions below will help you to develop your engagement plan. An example is provided in the form of a pilot study conducted by the Chesapeake Bay Program with the FCA infographic. For additional information, refer to the “Developing a Social Marketing Plan” document found in the Appendix.

Questions for developing engagement.

The first step in successful community engagement is to conduct audience research. Following that, develop a strategy to engage with the community, using the below questions as a guide. Remember, there is no one-size-fits-all plan for engaging with a community using this infographic.

1. ***Why this community?***
2. ***How will you engage with this community and learn about them?***
3. ***What did you learn from your community research?***
4. ***What are the barriers to advisory compliance for this community?***
5. ***What element of the community makes them potentially open to change?***
6. ***How will you use the infographic and move beyond to outreach (method of engagement)? Why did you choose this approach?***

7. ***Who are the engagement partners?***
8. ***How will you measure success for future change?***

Example: Chesapeake Bay Program Fish Consumption Advisory Pilot

The Chesapeake Bay Program conducted a pilot study of the infographic for three straight years (2017-2019) during the annual Festival del Rio Anacostia on the Anacostia River at Bladensburg Waterfront Park in Bladensburg, Maryland.

1. ***Why this community?***
According to [data](#) submitted by watershed jurisdictions at the time of the pilot study, the highest areas of concern in the Chesapeake Bay watershed were urban environments on polluted rivers containing the contaminant polychlorinated biphenyls (PCBs). The literature review and watershed demographics for the Chesapeake Bay watershed (the [EJ Screen](#) tool can be an effective instrument for determining areas of concern) determined that the ideal community in which to pilot the infographic would be a Hispanic or Latino community with a high rate of subsistence fishers. This helped us to identify the Anacostia and its surrounding neighborhoods as the targeted area.

2. ***How will you engage with this community and learn about them? What did you learn?***
The pilot study began while the infographic was still in development, which allowed for the opportunity to gain community feedback on the draft. Connecting with Hispanic and Latino environmental and community organizations in the Washington, D.C. area provided an understanding of what work was already underway in these communities regarding FCAs. The network of organizations had just completed the inaugural Festival del Rio Anacostia, a hybrid environmental education and cultural celebration festival held in October at the close of National Hispanic Heritage month on the banks of the Anacostia River.

The Chesapeake Bay Program was invited to join the festival planning committee, which included members of local organizations who were trusted sources and members of the target community. At the 2017 festival, attendees were invited to provide feedback on English and Spanish poster-sized versions of the draft infographic.

3. ***What are the barriers to advisory compliance for this community?***
Language was a significant barrier. Misconceptions were another: though contaminants are not apparent to the naked eye, many residents assume fish that look healthy are safe to eat. Necessity is an oft-overlooked barrier to compliance in a subsistence community. If the family relies on a caught fish for their dinner and only happens to catch a species under advisory, the family must make the decision to either eat a contaminated fish or forgo that food.

Cultural practices were also a consideration. The frying of the entire fish is a traditional preparation, though dangerous concerning PCB contamination. Sharing a catch with the rest of the community was common, therefore the individual eating the fish may not be aware of its contamination status. Mistrust of outsiders, which include governmental organizations, was also a factor.

A sense of community helplessness is common in those that border contaminated waterways. There is the sense that the health of the river is a product of its urban location, therefore that residents do not have the power to change it. This feeling of powerlessness contributes to a certain level of disconnect with the water.

4. *What element of the community makes them potentially open to change?*

Community members enjoy fish and being able to share the fun of food with the rest of the community. Community members have a strong sense of family and an enjoyment of the outdoors, even if they do not have a connection to the environment.

5. *How will you use the infographic and move beyond to outreach? (Method of engagement) Why did you choose this approach?*

Using these ties to the community, and the relationships with trusted partners, the Chesapeake Bay Program hosted a booth at the 2018 Festival del Rio Anacostia. Based on the above factors, we wanted to cover the full chain of fish consumption behaviors using all four panels while concentrating on panel three (Prepare Fish Safely).

We worked with festival partners to develop a fish filleting and cooking demonstration that minimized contaminant exposure, while drawing in festivalgoers. English and Spanish poster-sized infographics were displayed prominently.

Fillets were then prepared using a simple recipe that featured familiar, traditional ingredients. FCA information was given and questions answered during the demonstration. Samples of the prepared fish were then offered to the audience.

The dynamic nature of the presentation and the promise of a reward (samples) kept the audience engaged in the demonstration. At its close, festivalgoers were invited to take a recipe card (offered in both English and Spanish) featuring the dish they had just sampled. On the back of the card were tips about safe fish consumption and links to the Chesapeake Bay Program website for more information. The booth demonstration was repeated in 2019.

6. *Who are the engagement partners?*

Partners included the Latino Outreach Subcommittee of the Anacostia Watershed Citizens Advisory Committee, Guate Marimba, Despertar Maya Ma'am, Asociacion

de Guatemaltecos Sin Fronteras, Parks and Recreation Maryland-National Capital Park and Planning Commission, Anacostia Watershed Society, Chispa (Maryland League of Conservation Voters), Metropolitan Washington Council of Governments, Interstate Commission on the Potomac River Basin, Friends of Sligo Creek, Anacostia Watershed Society, Profish, Chesapeake Bay Trust and Anacostia Riverkeepers. Profish donated the seafood.

During the event, Anacostia Riverkeepers hosted free fishing. Representatives directed festivalgoers to our demonstration table while in turn, our representatives directed people toward fishing on the river. With the full cycle of fish consumption represented, both organizations were able to more successfully incorporate discussions of stewardship considerations into their presentations and answer questions.

7. *How will you measure success for future change?*

Festivalgoers were not handed the recipe and FCA info cards outright but had to choose to take them from the table. The number of cards taken helped gauge audience interest and receptivity.

The strengthening of community and partnership relationships was apparent in the 2019 festival. The Chesapeake Bay Program was a relatively unknown entity to this community at its festival debut in 2017. Anacostia Watershed Society saw requests and inquiries from partner organizations and members of the public requesting the demonstration return at the 2019 festival.

While positive signs, we cannot be certain the demonstration was truly effective rather than simply engaging. A measurement method must be devised that tracks actual change.

Options for the future include establishing a baseline for unsafe fish consumption, or for the number of people who were pan-frying rather than whole-frying their fish. After conducting the filleting and cooking demonstration, a survey would have to be done to determine if those numbers had changed.

Other considerations for improvement include determining the ideal size for the filleting demonstration specimen. The demonstration fish should be large enough for attendees to see the filleting technique without being so large that it falls into the dangerous size range for that species regarding contamination.

Fish Consumption Advisory Pilot 2020

The pandemic of 2020 and the cancellation of gatherings necessitated by global health and safety concerns brought significant challenges for all those involved in outreach and community

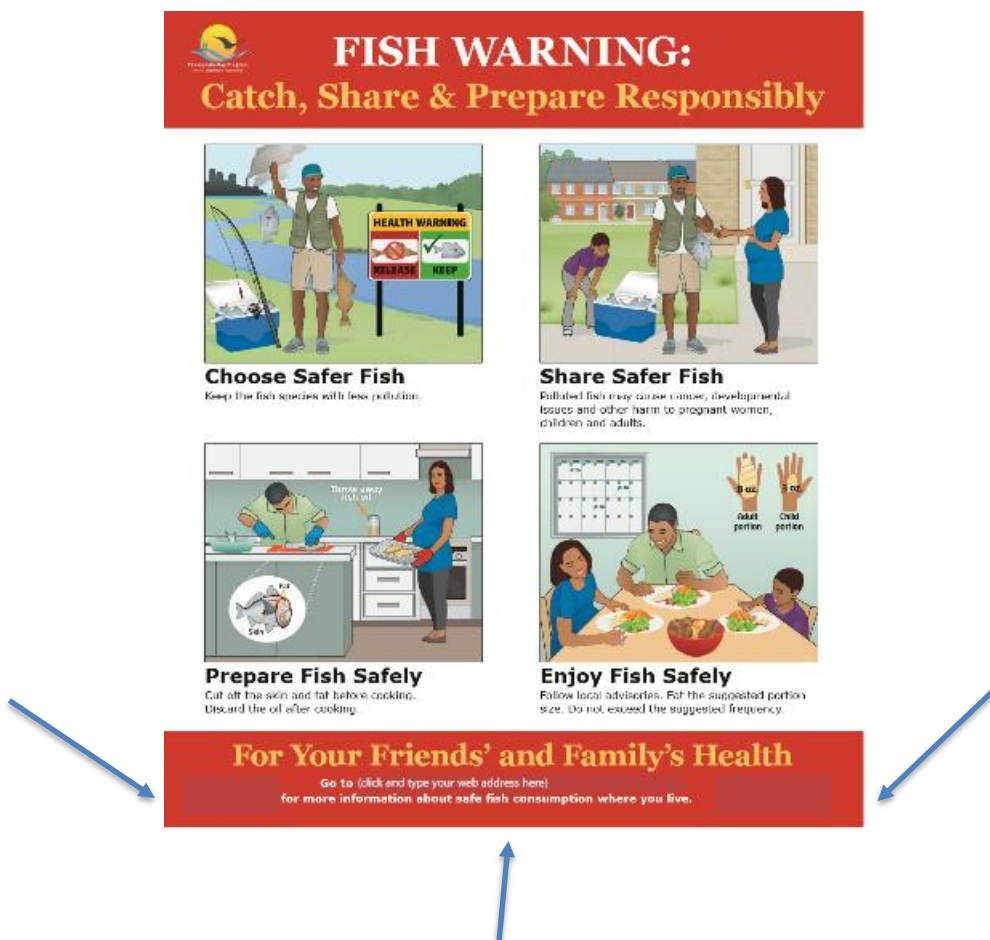
engagement. Yet challenges can also bring opportunities for unexplored avenues, which we chose to embrace with the fish consumption project.

Our research shows trusted speakers, local community voices, highlighting food and Spanish language materials to be effective in outreach with our target community. Therefore, we developed a partnership with local restaurant Riviera Tapas to feature the fish consumption infographic and develop two short videos. In the [first](#), Chef Hugo Bonilla prepares a fish-based meal while speaking with Chesapeake Bay Program’s Caitlyn Johnstone about toxic contaminant concerns and the connection with our food (English audio, Spanish subtitles). In the [second](#), Chef Bonilla speaks directly to the community in Spanish about safely enjoying fish.

A special thanks to Riviera Tapas’ Patricia Rivera and Hugo Bonilla for their knowledge, fellowship and engagement. The full-size infographic poster remains onsite at Riviera Tapas. Both videos were featured in the 2020 virtual Festival del Rio Anacostia and can be found in the project resources.

VI. Managing and Customizing Files

The bottom of the PDF entitled “fish adv infographic_English with bleed” is editable. Click the center text box to insert a web address, such as with local fish consumption advisory information (see below). Click the text box on the right and/or left side to insert a logo or QR code (see below).



VII. Appendices ([individual files](#)):

- Literature Review Summary
- Developing a Social Marketing Plan
- Infographic Public Comment
- Pilot Project Recipe Cards
- Videos (English and Spanish)