Design for the Wild
A Field Guide for Designers working to Protect the Environment

Emma Teal Laukitis

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Committee:
Karen Cheng
Annabelle Gould
Dominic Muren

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Abstract

Design for the Wild:
A Field Guide for Designers Working to Protect the Environment

Emma Teal Laukitis

Chair of the Supervisory Committee:
Professor Karen Cheng
School of Art + Art History + Design

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This document was created from my experience working with advocates for Bristol Bay, Alaska to protect the world's last great salmon fishery from the proposed Pebble Mine. Read along to discover design's power to protect the environment and the wild places we love and depend on.

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DESIGN FOR THE WILD

A Field Guide for Designers Working to Protect the Environment

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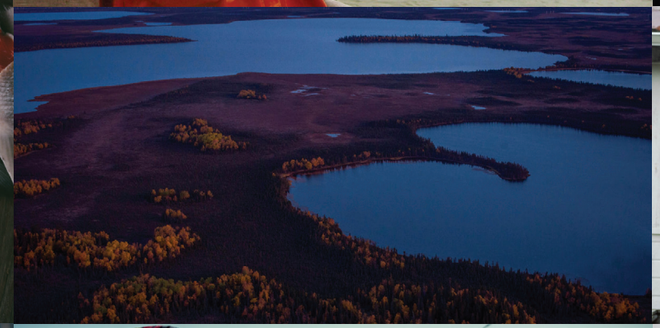






How do we protect the wild places we love?

Photo by Thorey Munro, a second generation Bristol Bay fisherman, taken of her crew from the wheelhouse of her boat during the summer salmon season.

Emma Teal Laukitis
2018 Graduate Thesis

Division of Design
University of Washington

Thesis Committee
Karen Cheng, Professor, VCD *Thesis Chair*
Annabelle Gould, Associate Professor, VCD
Dominic Muren, Senior Lecturer, Design

ABOUT THE AUTHOR

I grew up in a village in western Alaska where life revolves around the ocean. My family's work as commercial fishermen followed the seasons, the tides, and the life cycles of the salmon. Salmon are integral to the economies and traditions of Alaska's coastal communities; fishermen agree that their work on the water is an identity more than an occupation.

I have returned to Alaska to fish every summer of my life – and plan to continue doing so as long as there are salmon to catch. As a designer I am curious about the ways I can help preserve the wild abundance of Alaska's oceans and the livelihood of those, like my family, who depend upon it. I believe that designers can use their strengths as creative thinkers and makers to work in interdisciplinary teams working on real environmental and social problems. If we are proactive about putting our knowledge, skills and values into practice, design can be a powerful tool that will help us protect the wild places we love.

Learn more about Emma's work: aksalmonsisters.com
Get in touch: e.laukitis@gmail.com

FIELD GUIDE CONTENTS

Strategies for Designers Working to Protect the Environment

INTRODUCTION

My interest in "Design for the Wild" stems from an urgent issue facing my own community of commercial fishermen in Alaska. Plans to develop what would be the largest open-pit copper and gold mine in North America threaten the world's last, great wild salmon fishery. For more than a decade, the people whose livelihoods depend on the abundant salmon runs, clean water and wild landscape of the Bristol Bay watershed in southwest Alaska have fought to defend their land from a copper and gold mine called Pebble, that, according to EPA scientists, would result in a complete loss of fish habitat. No mine of this size and type has operated without impacts to ground and surface water in North America.

Industrial development and human behavior continues to mold the future of wild lands today. Clear cutting, oil drilling, mining, roads and human sprawl have shrunk many natural reserves, and as a result, animals are struggling to find habitat, shelter and food, and people are losing places to fish, hike and seek respite from their busy work life. We notice the way our favorite wild places are changing around us and we wonder how we might play a part in their protection. As designers, we also notice our discipline expanding to confront increasingly complex social and environmental problems.

Known as design for social impact, design for social change, or sometimes design for good, the field of social design increasingly attracts designers who crave a chance to do work that makes a positive contribution to society, as an alternative to designing things that promote consumption of goods and services – a model that has become increasingly recognized as an unsustainable one. These designers want to work closely with communities that need their help most and actively participate in combating complex social problems (see page 66 for more resources on social design).

Though "social design" has applied to innumerable contexts, including environmental issues, the intersection of design and environmental advocacy is relatively unexplored. While there is no shortage of inspiring awareness and advocacy projects that designers can draw from, it is harder to find detailed information on the process behind these projects or the insights gained from experience, such as navigating the potential pitfalls or financial realities of working with a non-profits or citizen organizations. How does a designer get started working for environmental cause they care about? How does a designer make something that will help create a lasting impact?

Examples of how design has successfully supported environmental advocacy efforts, insights and methods used during the design process, as well as a greater understanding of how environmental decisions are made, would help create a common language that designers could integrate into their own practice when designing for the wild.

This field guide attempts to do these things. For a look at some of the rewards and challenges of working with an environmental advocacy group, I have included in the following pages insights from my own design experience working with NGOs whose efforts are helping protect Bristol Bay from the Pebble Mine in Alaska. Green spreads dig into the nitty-gritty of environmental issues – who's involved, how decisions are made, and how design is most effectively used.

Read on to discover design's power to help protect the environment and wild places you love and depend on.

FOCUS ON LOCAL IMPACT

A wild place you know and love is in danger. You want to help protect it, and you wonder how your skills as a designer might be most useful. Maybe you want to defend the place where your friends and family recreate from proposed mining activities. Maybe you want to protect important plant and wildlife habitat from new city development. Maybe you want to see to it that more clean solar and wind energy is utilized in your community. If you're passionate about an issue that affects many people – say climate change or ocean acidification – try to zero-in on ways you can get involved on a local level; this will allow you to work with people face-to-face, build a network, and witness the impacts of your work first-hand. Solving a big problem like climate change is a noble quest, but changing the world is difficult to do as an individual designer. Start locally, dig into an issue you care about, and learn as much as you can about it before designing anything.

Consider also who you want to work with. Get to know the non-profits, organizations and advocacy groups involved in the issue you've chosen and find people you could see yourself working well with in your community. You will make biggest impact if you can team up with people who have already given time and brainpower to organizing and strategizing around your issue and you will likely have a more enjoyable experience if you can connect with them in person.

A broad community coalition has advocated to keep Bristol Bay free from the risks of mining development. Here, young Bristol Bay fishermen make their voices heard during the salmon season. Photo by Luke Strickland

BRISTOL BAY AND THE PEBBLE MINE

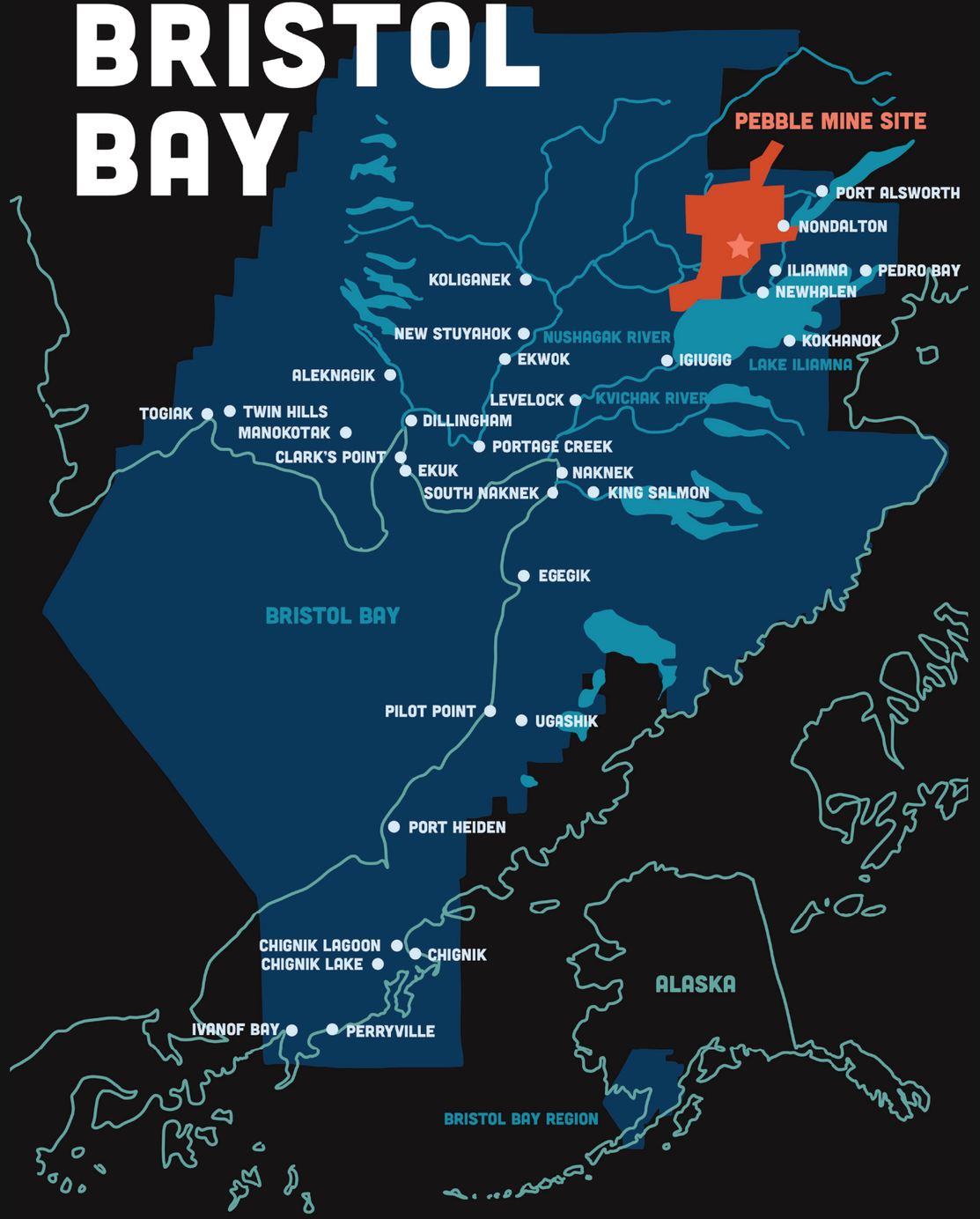
I have been involved with an ongoing issue facing my own community of commercial fishermen in Alaska. Bristol Bay, the world's last great salmon fishery, is threatened by plans to develop the largest open-pit mine in North America—the Pebble Mine. According to EPA scientists, this gold and copper mine would result in a complete loss of fish habitat.

Fish have sustained the native Alaskans for thousands of years and a thriving commercial fishery for the last century in Bristol Bay. Its clean water and wild landscape provide a vibrant livelihood and sustainable food source that deserves protection for future generations.

The Pebble Mine has finally begun its permitting process through the Army Corps of Engineers, after over a decade of continued resistance from stakeholders at the local, state and federal level. I knew that the fight against the mine needed to be stronger now than ever if we were to keep the mine from impacting Bristol Bay's watershed, and wanted to see how my work as a designer might help environmental advocates protect this place.

The Bristol Bay watershed provides habitat for 29 fish species, more than 190 bird species, and 40 terrestrial animals. Photo by Scott Dickerson

PROTECT BRISTOL BAY



THE BRISTOL BAY REGION IS LOCATED IN SOUTHWEST ALASKA.

Its 31 villages are situated along waterways leading to the eastern arm of the Bering Sea. At 40 million acres, the Bristol Bay region is larger than 15 states, with a diverse landscape including eight major watersheds of winding streams and rivers, vast wetlands of lakes and tundra, alder and spruce forests, and an immense mountain barrier and volcanic land forms that make up the Aleutian Range. Bristol Bay is referred to as "America's Fish Basket" because it is one of the most productive marine ecosystems in the world and home to the world's largest salmon fishery.

The Pebble Deposit, one of the world's largest-known copper and gold deposits lies beneath the headwaters of the rivers that help sustain Bristol Bay's legendary salmon run.

The developer of the mine – Pebble Limited Partnership, owned by the Canadian company Northern Dynasty Minerals – has faced fierce opposition from the region's tribal groups, residents, commercial fishermen, and environmentalists.

"The Pebble Mine has yet to be built because the process of getting state and federal permits for a project of this size is long, but also because it's highly controversial. The mine pits two of Alaska's biggest industries — fishing and mining, both of which are extractive, but only one of which is "sustainable"— against each other in a classic resource war: weighing gold against salmon is weighing money against nature."

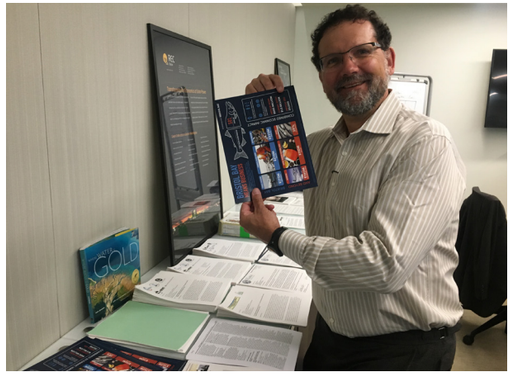
THE ATLANTIC, MARCH 14, 2014
Is Pebble Mine the Next Keystone XL?

IMMERSE YOURSELF

In order to design something impactful, you will need to understand the needs of the people or wild place you're trying to protect. It is necessary that you gain a thorough knowledge of the community and experience firsthand the lives and environment of the stakeholders affected.

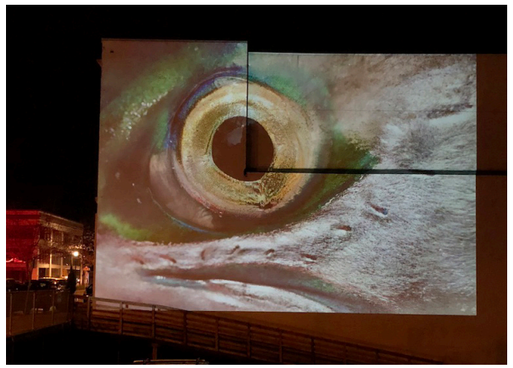
Maybe you're interested in helping because your livelihood or lifestyle is being affected by changes threatening your immediate environment. Although it may not seem like it, this is a helpful position to be in as a designer. You're already familiar with the challenges that face your community, and you have likely already spent time building relationships with the people within it. You feel activated by the urgency of the situation, and you can now dig deeper to learn from the perspectives around you.

Negotiating the wide range of perceptions, interests, enterprises, and ways of interacting among community members is often the biggest obstacle for designers who want to get involved in environmental advocacy, especially if they're unfamiliar with the affected community. Remember, swooping in on a problem from the outside and proposing a solution without building trust in the affected community first is not the best approach. Avoid being a "design savior" and spend time with the people and place you want to help protect. You can immerse yourself by taking a trip to the place at risk, regularly visiting community leaders, attending community events, conducting focus groups, signing up for community newsletters, volunteering to help at clean-ups or rallies, and sitting in on public hearings. The point of getting immersed in a community is to hear as many points of view as possible, make connections, ask questions, and build trust. Immersion often opens up new opportunities that can lead to new discoveries.



LEFT Attorney and lobbyist Peter Van Tuyn holds up the infographic I designed about the economic story of Bristol Bay, in Washington D.C.

RIGHT The best part of being immersed in a fishing community is the smoked salmon snacks at community meetings.

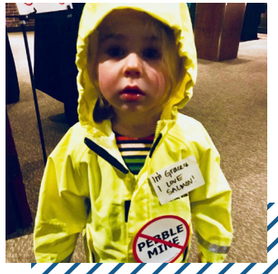


LEFT Slide show projection in Astoria, Oregon by Bristol Bay photographers at the annual Fisher Poet's Gathering.

RIGHT A panel of experts, including Deputy Director Lindsay Layland of United Tribes of Bristol Bay, provided fishermen at the Pacific Marine Fish Expo with information about how they could send their comments to their elected leaders.

DIGGING INTO THE PEBBLE MINE

My process was about discovering strategies that advocates for Bristol Bay were already implementing, then deciding how design could be used to assist their efforts. I immersed myself in the community by attended panels from Bristol Bay advocates, events, film showings, rallies, and workshops. I signed up for newsletters from advocacy groups, Google alerts, and mobile action alerts. I read every news articles I could find that had been published about the Pebble Mine issue to date, read environmental impact studies through EPA.gov, requested information through FOIA.gov, found campaign websites, mapped out all of the organizations and stakeholders involved, created diagrams of the mine's permitting process, collected creative projects related to my topic, and made a spreadsheet of important people who would be helpful to meet or interview.



A young salmon supporter at chef Tom Douglas's Stop Pebble Mine dinner event in Seattle, Washington.

EMMA LAUKITIS
MASTER OF DESIGN THESIS 2017
UNIVERSITY OF WASHINGTON

COMMITTEE
KAREN CHENG
ANNABELLE GOULD

DESIGN FOR THE WILD

HOW CAN DESIGNERS MOST EFFECTIVELY SUPPORT ENVIRONMENTAL ADVOCACY EFFORTS?

DESIGN + ENVIRONMENTAL ADVOCACY

Traditionally, visual design has been used for public education, campaigns to influence legislation, boycotts, direct action protests and community organizing. Design has helped advocates tell a specific story, integrate an environmental message into popular culture through mass media, or communicate to a target audience of decision-makers or stakeholders.

ALASKA'S PEBBLE MINE: A CASE STUDY

Plans to develop what would be the largest open-pit mine in North America threaten the world's last, great wild salmon fishery. How might design help advocates for Bristol Bay successfully oppose mining interests?

A RESOURCE FOR DESIGNERS

The outcome of my project will be a resource for designers who want to help in environmental advocacy situations, guided by my experience with the Pebble Mine conflict.

TARGETED DESIGN FOR IMPACT

How can designers work with diverse stakeholders to facilitate their participation in the environmental decision-making process?

Who is involved? **Stakeholders**	Private Citizens	NGOs	Scientific Community	Business & Industry	Governmental Entities
What do they care about? **Priorities**	Quality of life Cultural values Employment History	Cultural values Social norms Environment Wildlife	Consensus	Economic interest	Political + economic power
What can they do? **Participation**	Voting Campaign contributions Communication with legislators Attending public meetings	Campaign contributions Open meetings Social media platforms Lobbying Communication with media	Communication with legislators	Open meetings Lobbying Campaign contributions	Political advertisements Public comment periods Facilitation of voter participation

PHOTOS | BRIAN ADAMS & SCOTT DICKERSON

SHARE YOUR PERSPECTIVE

- As a designer, have you contributed to environmental advocacy efforts? What rewards or challenges did you experience?
- If you wanted to use your design skills for environmental advocacy, would you know what to do or where to start?
- When it comes to environmental issues, what motivates you to act?
- What do you think design has the power to do in advocacy situations?

PRESENTING IDEAS TO THE PUBLIC

Presenting my initial research and questions to a public audience at a poster show at the University of Washington's School of Art + Art History + Design helped me understand how other designers have contributed to environmental advocacy efforts, and how people are motivated to get involved in environmental issues.

Talking with the public was a useful exercise as it helped me organize my thoughts and test out my ideas in front of an audience. I could tell right away when people connected to something I said, or if I would need to reframe my ideas and explain them differently in the future. The direct and indirect feedback I got from this experience helped me focus my design process.

I ASKED

"When it comes to environmental issues, what motivates you to act?"

THEY ANSWERED

"Environmental messages that show dire consequences like icebergs and polar bears are effective, because it shows people exactly how bad it is and what's at stake. But there needs to be a call to action too."

"Environmental messages that let people add their own response, customize, or personalize to fit their lives are effective."

"Environmental messaging all just seems to be a bummer."

"I'll do something if a friend convinces me that it's important – that way I feel like I can ask questions and have someone to do it with."

Photo by Phillip Carpenter

WHO IS INVOLVED IN ENVIRONMENTAL ISSUES?

Before working with the Bristol Bay coalition, I had not realized the range of stakeholders typically involved in an environmental issue like the Pebble Mine. It was helpful to diagram how these stakeholders organize and how they are influenced when devising a strategy. The people working to protect a wild place, I refer to here as "advocates," and the people working to utilize wild places for development, I refer to as their "opponents."

ENVIRONMENTAL ADVOCATES

Typically, an advocacy group forms around a mission to defend the environment from an urgent threat. These groups are often made up of diverse stakeholders such as tribes, local governments, environmentalists, businesses, and community organizations. Their efforts and decisions are influenced and informed by the scientific community, effected residents, recreation and tourism, politicians, lawyers, activists, artists, and the media. Usually, the members of advocacy groups have primary careers outside the group's efforts, and either volunteer their time or skills, or treat their role in the group as a secondary occupation. Environmental advocacy groups are often at a disadvantage compared to their opponents when it comes to centralized communication, organization, hierarchy, systematic structure, financial resources, and strategy.

OPPONENTS

The opponents of environmental advocacy groups are often natural resource developers, stakeholders in the extraction industry, or pro-development politicians. With some environmental issues, like climate change or ocean pollution, the opponent is not a singular group or person, but instead a behavior or attitude that is systematic, or what we might call a "Wicked Problem." Opponent groups are influenced and supported by shareholders, businesses, politicians, community groups, legal teams, and the media. Compared to advocacy groups, their opponents are typically an organization made up of individuals or teams who treat their work as their primary career, enjoy the benefits of an organized workplace structure with centralized communication, and stable, typically robust, financial resources, and a well-defined strategy in the form of a business plan.

ENVIRONMENTAL STAKEHOLDERS & THEIR PRIORITIES

DECISION-MAKERS	RE-ELECTION, JOB CREATION, CONSTITUENT SUPPORT
SCIENTIFIC COMMUNITY	ENHANCE UNDERSTANDING, ASSESS ECOLOGICAL INFORMATION AND RISKS
NGOS/CONSERVATION GROUPS	ECOLOGICAL DIVERSITY, WILDLIFE
COMMUNITY ORGANIZATIONS	HUMAN HEALTH, CULTURAL VALUES, COMMUNITY WELLBEING
LOCAL BUSINESSES	RESOURCE SUSTAINABILITY, REGIONAL ECONOMY, PROFITS
EFFECTED INDIVIDUALS	RECREATION, WAY OF LIFE, COMMUNITY AESTHETICS, HISTORY, HERITAGE
RESOURCE EXTRACTORS/ DEVELOPERS	PROFITS

Apayo Moore is an Alaskan Native artist living in Dillingham, Alaska. Through her artwork, she spreads awareness for the traditional values important to her community in Bristol Bay and works with groups who prioritize protecting subsistence and sustainable resources. Apayo also works for a local non-profit whose goal is to educate locals on mining and risks it poses to subsistences practices.

"Some people are really inspired by the fight, but I am inspired by the love and the camaraderie. You can see it in all these groups that used to battle each other, but that are now just working together – the sport fishermen, the commercial fishermen and the subsistence fishermen. All of the old stereotypes go away, and love for this place comes in."

APAYO MOORE

Bristol Bay resident & artist

JOIN THE ADVOCATE COMMUNITY

As you immerse yourself in the community, you will meet people with interesting stories, advocates with years of experience, policy-makers, businesspeople, campaign strategists, economists, scientists, journalists, attorneys and others involved in the future of wild places. Consider community and organizational members as partners in all aspects of the design process; It's important to build strong relationships with the communities and organizations you work with to learn how you can best help them.

You will meet people while immersing yourself in the community who share your passion and have expertise helpful to your project. You might decide to work with a campaign strategist, a filmmaker, and a donor who wants to support your project. In this case, you can think of your team as a group of advisors and use their knowledge and experience in the field to help guide your design decisions and strategy.

Remember that there's no need to reinvent the wheel. If an advocacy group or network is already attempting to do the kind of work you want to do, join them. Working with an established group is helpful for feedback and support, but designers should be prepared to give up a certain amount of control and let the group's input inform their design decisions in order to mobilize the group's assets, strengths, and resources. In this case, you can think of your team as a client.

It is good to keep in mind that some communities or organizations will be skeptical of efforts from outsiders. They may have seen other volunteers try to make an impact in a short period of time without success, or people coming in with preconceived notions about how to solve things. A few conversations with community leaders will rarely win over a community, and it might take some grit and determination to convince people why design can be a useful tool for environmental change, and why they should work with you. Build trust by helping community members in their daily operations, volunteer your time, or quickly meet one of their basic design needs. Show them that you're serious about partnering with them to carry out a shared goal.

As you build trust and begin to understand what strategies will help you reach your shared goals, you will become an invested partner and your designs will reflect the personality and ethos of the piece of the world you're trying to protect.

One way that some Bristol Bay residents have been resisting the development of the Pebble Mine is through art – wooden fish with sayings about protecting land, water, and fish decorate a wall of a downtown building in Dillingham. Photo by Brian Adams

Bristol Bay resident and village council member Christina Salmon points out the proposed Pebble Mine site, at the headwaters of two of the region's major rivers systems. Photo by Brian Adams.

TEAMING UP WITH SALMON ADVOCATES

Because I grew up in Alaska's commercial fishing industry, and own a business that celebrates the sustainable fisheries of the North Pacific, I was fortunate to know many of the stakeholders working to protect Bristol Bay. In some respects, it was easy for me to get involved as a designer because the community I wanted to help already knew me, my work, and the reason why I wanted to help them protect this place.

I teamed up with an advocacy group called Businesses for Bristol Bay, a national coalition of businesses committed to advancing the long-term productivity of Bristol Bay and its renewable salmon economy. I helped them design infographics that leaders of their business partners, including members from the fishing, retail, outdoor recreation, food, jeweler, and tech industries could use while lobbying decision-makers on the federal level. These infographics told the story of Bristol Bay's economic impact, and how its salmon fishery was crucial to their business success.

I also formed a team with a leader from Salmon State – an initiative that works to protect salmon habitat and promote policies that will guarantee Alaska remains home of the world's largest, healthiest and most abundant wild salmon resource – my business partner and the owner of Drifter's Fish, one of Alaska's favorite small-scale direct seafood marketers. Together, we developed the "We Are Bristol Bay" project – a campaign to last the Pebble Mine's permitting process, which empowers stakeholders to define the importance of this place through their stories and protect it for future generations.

I felt strongly about working not only with advocacy groups, but with people from the Bristol Bay watershed. Locals, comprised of Alaskan Natives, sport and commercial fishermen, are most intimately connected to the land and the resources at stake – and part of the We Are Bristol Bay project became a storytelling platform that highlighted Bristol Bay's many voices.


PEBBLE MINE
TIDE BOOK

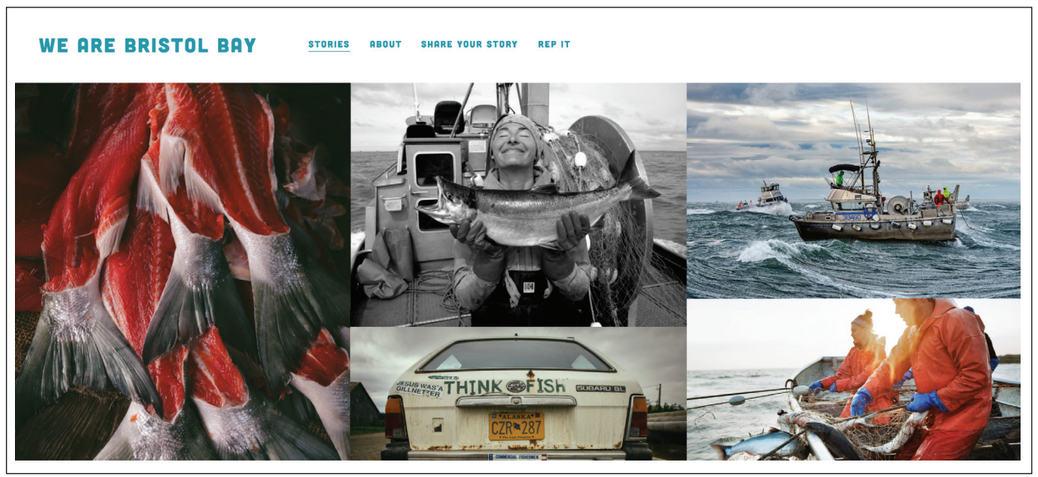
THE "WE ARE BRISTOL BAY" CAMPAIGN

We Are Bristol Bay is a people's campaign to protect the world's largest wild salmon fishery & its way of life, through its many voices. We Are Bristol Bay is a collection of stories about a remote and wild region in Southwest Alaska. These stories are written by those who call Bristol Bay home, who work there during the salmon season, who travel there to hunt and fish, who subsist on its natural abundance, and who have explored its remote and rugged landscape.

The content generated from the website (wearebristolbay.org) and social media movement (#wearebristolbay) is available to efforts working to protect Bristol Bay and its way of life. The campaign's purpose is to celebrate the things worth protecting there, and to give people a tangible and impactful way to contribute to its protection.

Proceeds from We Are Bristol Bay merchandise are donated to the Alaska Wild Salmon Fund, which invests in leaders addressing the most urgent threats facing wild salmon in Alaska – currently, Bristol Bay and the Pebble Mine. The campaign includes an online web platform, social media account, shirts, mugs, stickers and Action Packs full of resources for citizen advocacy.

We Are Bristol Bay "Action Packs" include a map of the proposed Pebble Mine site, a list of contact information for key decision-makers, postcards, stickers, and a patch for solidarity.



JOIN THE COMMUNITY (wearebristolbay.org) SHARE YOUR STORY (#wearebristolbay)

ABOVE The We Are Bristol Bay Campaign exhibited in the Henry Art Gallery for the University of Washington MFA and MDES thesis show.

T-shirt hangtags and t-shirt

RIGHT Campaign t-shirts and mugs

DEVELOP A STRATEGY

A strategy is important to ensure that your efforts are truly making a difference and helps avoid spending vast amounts of time and energy on efforts that don't win. Many don't think about strategy until after launching a campaign or organizing a protest. For example, in November 2005, the White House published a document called the "National Strategy for Victory in Iraq." The Iraq War was launched in March 2003.

Leaders fail to appreciate the importance of developing a strategy, how tactics fit into a strategy, and the difference between the two. Environmental advocacy groups often don't spend time developing a campaign strategy, only to find themselves surprised when their campaigns lose. In general, people struggle with the concept of strategy because we don't like to answer the hard questions, but a strategy clearly articulates the way forward, and when challenged, can offer a convincing and realistic plan to success.

All too often, strategy and tactics are confused or used interchangeably. Tactics are the everyday actions that a campaign undertakes. Petitions, mailings, rallies, lobbying visits, and press releases are all tactics, not strategies. Developing tactics is the easy part of planning. It's the fun part, very often the creative part, and the part that can be most deceiving as to whether you are winning your campaign.

A strategy, by contrast, includes a clear goal, and a target. A strategy also articulates the specific venue and method that you will use to achieve victory. A strategy is a plan to get a law enacted, not a bill introduced in Congress. A strategy is a plan to end or win a campaign, not to start a campaign.

Take time to answer the hard questions with your team. Questions like: *why are we doing these things? Will this really help win our campaign? What is it going to take to influence the key decision makers we need?* Often these questions challenge long-held assumptions, expose weaknesses in advocacy efforts, and force your team to face the reality of what will truly take to win the issue, not just work on the issue.

ASK YOURSELF

I found Patagonia's book Tools for Grassroots Activists to be a truly excellent resource for campaign strategy. To ensure success in your efforts, the book recommends that you ask yourself the following questions:

– Do you have a clear goal?

– Do you have a careful plan that, if followed and well implemented, will guarantee that you will achieve your goal?

– If you asked your teammates or partners what your strategy is, would they all say the same thing?

If you answered "yes" to these questions, congratulations, you are on your way to success! If you answered "no," or "I might," or "I hope so," stop what you're doing and fix the problem before you do anything else. Hope, on its own, is not a strategy.

SOURCE: Tools for Grassroots Activists by Patagonia Books

PAST & PRESENT ADVOCATE STRATEGIES TO STOP PEBBLE MINE

PAST	PRESENT
Obama Administration EPA Administrator: Gina McCarthy	**Trump Administration** EPA Administrator: Scott Pruitt
Federal level strategy	**State level strategy**
Influence EPA to invoke restrictions on mining activity through the Clean Water Act Build broad and deep support by unifying sport, commercial and subsistence fishermen in Bristol Bay	Convince state leaders to vote against Pebble Mine Pass bills instate that limit mining activity and ensure protection for salmon habitat Designate protected areas where the Pebble Mine plans to build its infrastructure Make Bristol Bay a symbol of corruption through the frame of Scott Pruitt's EPA Build support amongst business leaders who depend on Bristol Bay's fishery to influence decision-makers at Federal level Ensure a fair and normal process is upheld through Pebble Mine's permitting process Convince investors that the Pebble Mine is too big of a financial risk

STRATEGIES FOR PROTECTING BRISTOL BAY

Many of the advocacy groups I spoke with had evolving strategies. Under the Obama administration, headway had been made on the executive level and through the EPA to solidify protections for Bristol Bay. However, when the administration changed, President Trump and his EPA director Scott Pruitt were eager to fast-track Pebble Mine's development. Advocates realized that the best way to keep fighting the mine was no longer at the executive level, but at the state level, urging Alaska's typically pro-development politicians to stand up for our last wild salmon fishery and its sustainable economy. Once the mine began the permitting process, some of the groups' strategies focused on making sure the mine was not fast-tracked, and a fair and normal NEPA process was upheld. Some groups' strategies focused on building big business support against Pebble Mine to influence the Trump administration's ultimate decision. Some groups' strategies were to propose new legislation on the state-level that would ultimately make it impossible for the mine to be built.

A local Bristol Bay fisherman's Subaru sports bumper stickers showing pride for gillnetting, the gear type common to the commercial salmon fishery. Photo Camrin Dengel

FIND YOUR TARGET

Finding a target is part of an effective strategy. Too often communication and design solutions aim to influence too many people and spend time and resources trying to target people who can't help advocates reach their goal. Usually there are a handful of people who will ultimately determine the fate of the environment you hope to protect and can secure your goal. They may be U.S. senators, city council members, state agency directors, or corporate leaders. Determine who these people are. Ask, "If this person is on my side, and enthused to act for my cause, will that bring about success?" If the answer is yes, they are your primary targets and will be the focus of your design strategy.

You should focus on the decision makers who can give you what you want. For example, when it comes to land decisions in Congress, congressmen who represent an area are looked to for decisions on that area. Most other members of Congress follow the lead of the local representative on land issues. You can often influence the entire elected body by getting the most local elected official on board. Congress rarely passes public land conservation legislation without local support.

Don't focus on people who already agree with you. Use design to convince decision-makers who will truly deliver success to your efforts, even if it feels challenging to reach them. You will start to think creatively about how you can influence your targets.

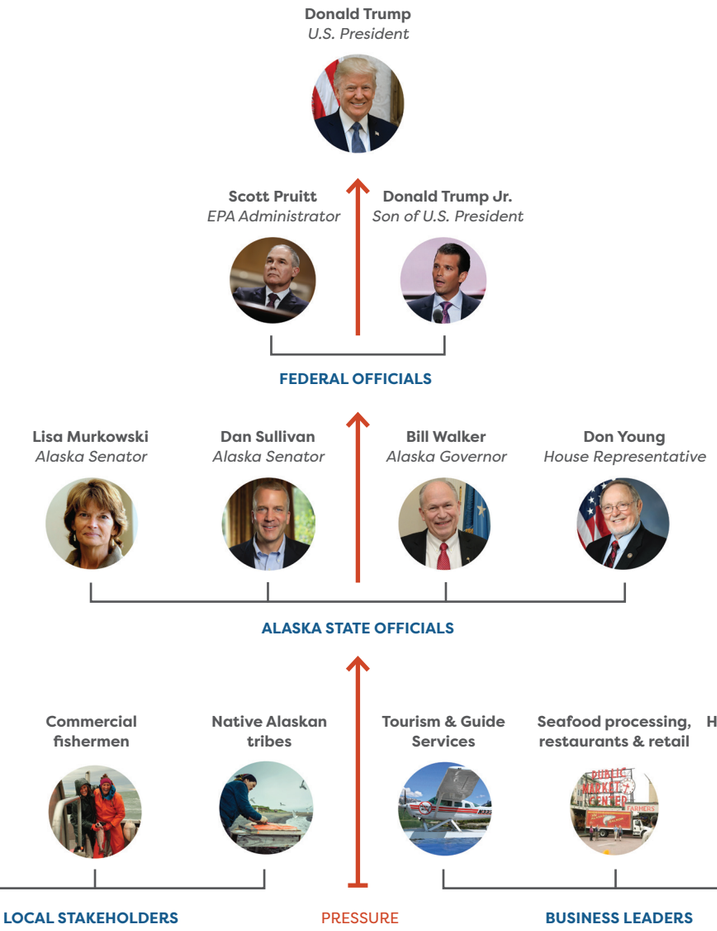
When it comes to interactions with their constituents, decision-makers care about things that make them look good, responsive, and hardworking to the people of their district. In practice, that means that they care about some things very much, and other things very little. Keep this is mind when you think about how you can influence them.

WHAT DO DECISION-MAKERS CARE ABOUT?

DECISION-MAKERS CARE A LOT ABOUT	DECISION-MAKERS DON'T CARE MUCH ABOUT
Verified constituents from their district	People from outside their district
Advocacy that requires effort — the more effort, the more they care: calls, personal emails, and showing up in person in the district	Form letters, a tweet, or a Facebook comment
Local press and editorials, maybe national press	Wonky D.C.– based news
An interest group's endorsement	Your personal analysis of their actions
Groups of constituents, locally famous individuals, or big individual campaign contributors	A single constituent
Concrete asks that entail a verifiable action — like vote for a bill or make a public statement, etc.	General ideas about the world
A single ask in your communication — letter, email, phone call, office visit, etc.	A laundry list of all the issues you're concerned about

SOURCE: indivisible.org

TARGETS FOR BRISTOL BAY COALITION STRATEGY



TARGETS FOR BRISTOL BAY

Targets for the Bristol Bay coalition's strategy ranged from the state level to the federal level – depending on the particular advocacy group's strategy. Some aimed to influence business leaders in food, tourism, and retail industries and mobilize local stakeholders to testify during public comment periods, to put pressure on state and federal officials. Some aimed to influence Scott Pruitt, the EPA administrator and also Donald Trump Jr., who visits Bristol Bay regularly to hunt and fish with his own family, with the assumption that he, in turn, might influence his father's decision-making.

"The scale of the fish that come through here is remarkable. If you've eaten wild salmon, it's likely to have come from here. This place has some of the biggest salmon runs – sockeye – in the world. It's part of the reason why it's so critical that we make sure we protect this incredible natural resource. Not just for the people whose livelihood depend on it but for the entire country."

BARACK OBAMA

United States President 2009-2017

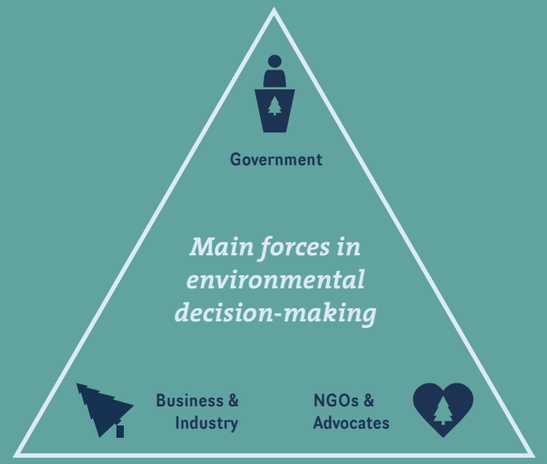
As part of his Alaska tour in 2015, President Obama traveled to Bristol Bay. Obama placed restrictions on the Pebble Mine's development at the end of his presidency, but they were promptly rolled back by the EPA under his successor, Donald Trump.

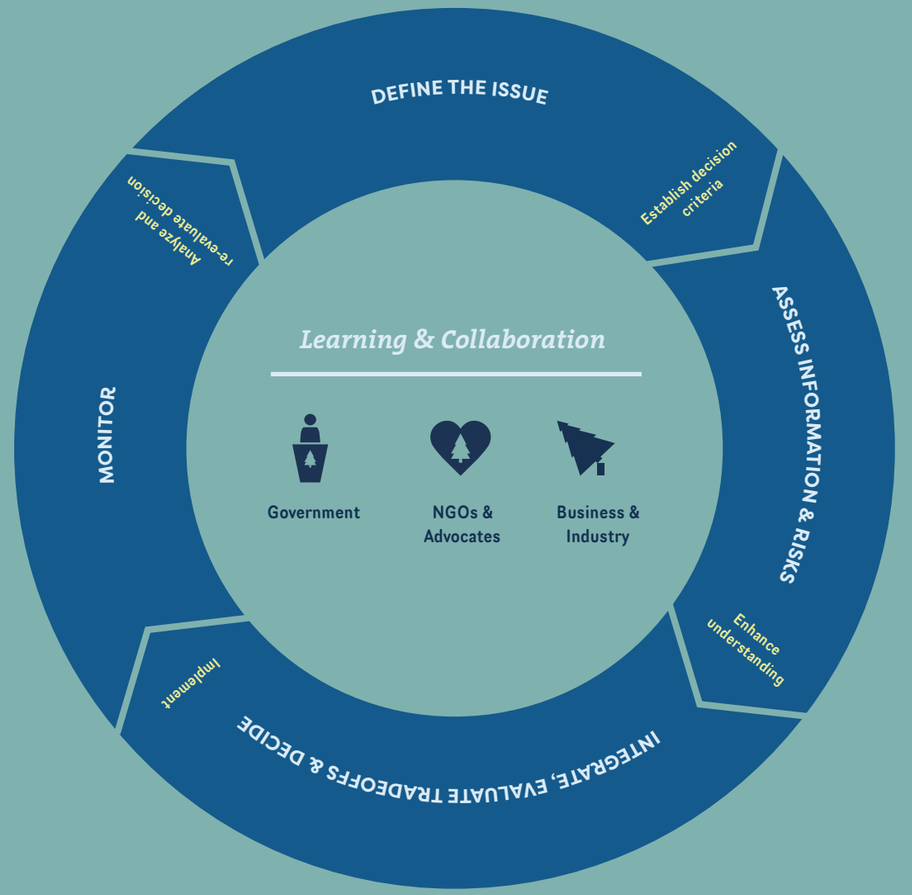
HOW DOES ENVIRONMENTAL DECISION-MAKING WORK?

Understanding the process behind environmental decision-making can help you decide where there might be opportunities to engage your strategy or influence your target. It's also important to gauge how long it will take for a decision to be made, which is often several years due to the processes in place that ensure proper assessment of possible risks, alternatives and stakeholder feedback.

THE IDEAL DECISION-MAKING FRAMEWORK

Environmental decisions typically anchor themselves on three entities – businesses, government, and advocacy groups or NGOs. Facilitating interaction between them, and focusing on sustainable use of earth's resources, have been key challenges on the federal, state, and local level. Ideally, within the framework established by government structures, citizens, community groups, organizations, businesses, and government staff work to thoroughly understand environmental issues, assess available options, decide on courses of action, and implement and evaluate those decisions. One way to confront an environmental issue is through a systematic process, similar to the scientific method, to gather and analyze information needed for decision-making. Though it's not guaranteed that the process will follow the "ideal" model here, it is useful to have a framework for government, advocates and industry to work together collaboratively





AN IDEAL ENVIRONMENTAL DECISION-MAKING MODEL

THE NEPA PROCESS

One of the most important methods used to gather data for public environmental issues is through the National Environmental Policy Act (NEPA), established in 1970. NEPA requires the federal government provide information about the environmental effects of and alternatives to action that the government may take to decision-makers and the public, with the intention of improving the quality of final decisions before they happen.

NEPA mandates opportunities for public input in the environmental decision-making process. Public hearings and written comment periods offer citizens opportunities to air their concerns, opinions, and information about problems and proposed policies.

The federal agency with the greatest expertise and capacity to manage the NEPA process for the proposed project becomes the lead agency for that project. A lead agency might be the Environmental Protection Agency (EPA), Forest Service (USFS), Corps of Engineers (COE), National Parks Service, Department of Defense (DOD), Department of Energy (DOE), and will be appointed by the Council on Environmental Quality (CEQ). The lead agency is the single point of contact for the public and coordinates with all other local, state, and federal agencies with jurisdiction in the project area.

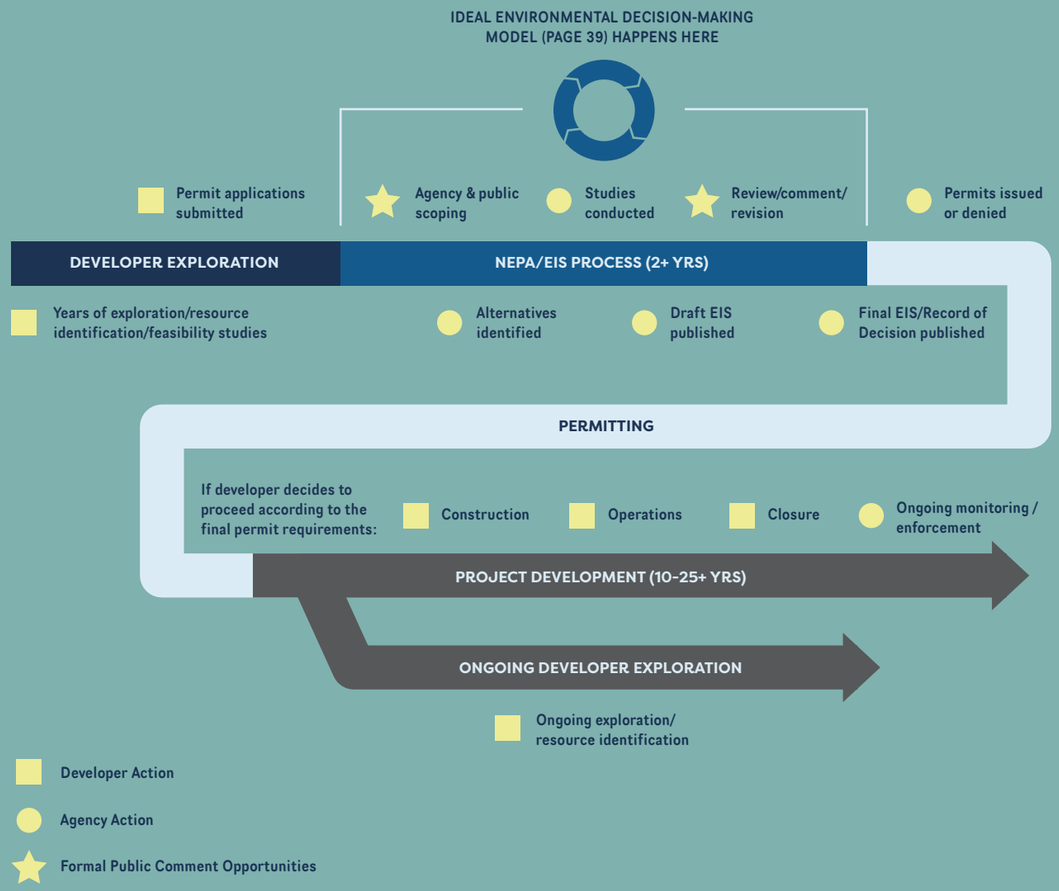
One of the most important provisions of NEPA for disseminating information about planned actions is the requirement that a federal agency prepare a detailed statement, known as the Environmental Impact Statement (EIS), when it proposes to take any major federal action significantly affecting the quality of the human environment. An EIS describes the positive and negative effects of a proposed action, and it usually also lists one or more alternative actions that may be chosen instead of the action described in the statement.

Once information gathering has been completed, the lead agency consults with all of the other state and federal agencies that have participated in the NEPA/EIS process to write a Record of Decision (ROD). In some cases, the ROD is the final decision-making step. In others, the lead federal agency will submit a draft ROD to the Council on Environmental Quality (CEQ) for their consideration. In the end the Federal CEQ either approves or amends the ROD for final publication and the permitting will be issued or denied for the project.

The criteria upon which the draft and final decisions are made are defined in NEPA, which charges the government with protecting the environment and acting in the best interest of the long term social and economic interest of the public welfare. However, the NEPA process is limited; even if the statement predicts negative impacts of the project, decision makers can still proceed with the proposal.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESS

For proposed large resource developments



BE TRANSPARENT ABOUT PROCESS

The advocacy group you work with may show up to meetings with fixed ideas of how design should be used. Maybe they want a brochure to promote the group's work. Maybe someone suggests that you create a series of social media graphics, or an infographic, or that you update their website. Though it always feels nice to have somewhere to get started, it's possible that these ideas are premature and will lead design solutions in the wrong direction. Be prepared to address more fundamental questions about what goals and strategies are going to make the biggest impact before you start designing anything.

In your initial conversations with your team, be transparent about the way you work and the process you follow when designing. Unpack the typical design phases and steps you take along the way – such as ideation based on your research, prototyping your ideas, and soliciting and integrating feedback from your target audience.

As a designer, you are equipped with a proven problem solving process and can tackle the issue at hand with a fresh perspective. Let the group you're working with know at the beginning of the project that you follow a process that may lead you to an unexpected solution. Invite group members to ask questions, or make suggestions along the way.

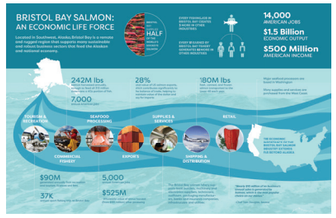
TEACH YOUR TEAM ABOUT THE DESIGN PROCESS

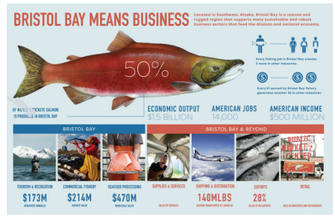
INSPIRATION
In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.

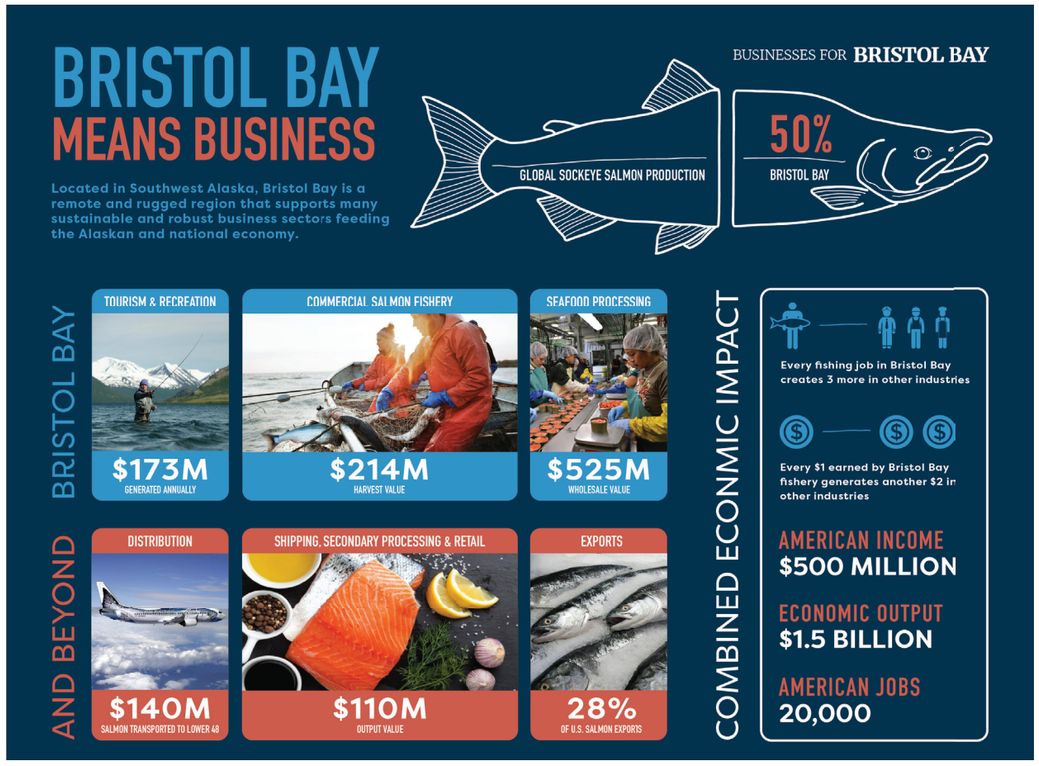
IDEATION
Here you'll make sense of everything you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.

IMPLEMENTATION
Now is your chance to bring your solution to life. You'll figure out how to create your design and maximize its impact in the world.

SOURCE: IDEO's Human Centered Design Toolkit







ITERATIONS OF INFOGRAPHICS

Designing infographics for Businesses for Bristol Bay required an initial meeting to solidify the target audience and story we wanted to tell. I worked with an economist to gather data from economic reports on Bristol Bay's commercial fishery, choosing statistics that helped tell the story of the downstream industries benefitting from the fishery. I made three preliminary visual iterations and presented them to the group, who helped me narrow down the information and figures that seemed most important. My initial iterations were more complex than my final infographic. Though I felt explanatory text and a rich data set would feel legitimate, my team preferred a 1-pager with the "top hits," or talking points that a business leader could use to communicate Bristol Bay's impact without having to get swamped down by details. The final design was a highly simplified version of what I started with, and my team was excited to get it into the hands of the business leaders in their coalition.

Salmon fishermen from Graveyard Point on the Nushagak River, one of the major tributaries that would be impacted by the Pebble Mine's waste water in Bristol Bay. Photo taken by Corey Arnold, pictured here in the red cap.

HOW IS DESIGN USED TO PROTECT THE ENVIRONMENT?

TRADITIONAL USES OF DESIGN FOR THE WILD

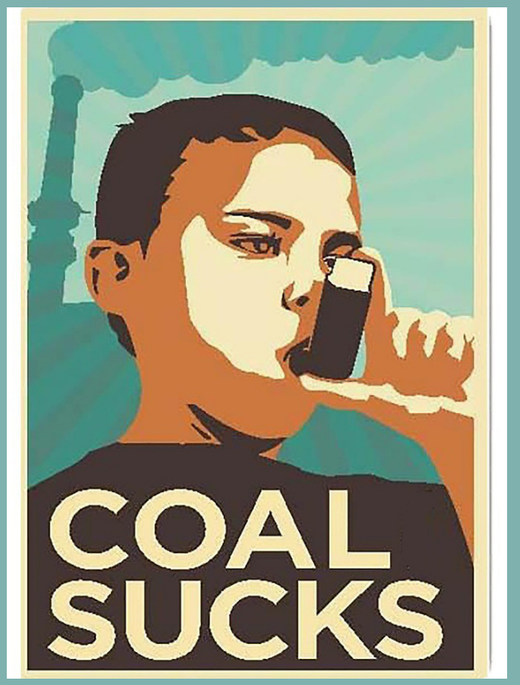
Traditionally, design for the wild has been about tactics. Design has most commonly been used for posters, resistance symbols, flyers, t-shirts, protest signs, banners, buttons and other awareness campaign materials. These artifacts have helped draw attention to a problem and expressed a particular stance, often in the form of direct action or protest. Though individual expression and grassroots action is necessary for molding public opinion and pressuring decision-makers, the success of these often one-off responses hinge on exposure and typically have limited reach. Most are reactionary without providing a call to action, which makes it hard for others to feel empowered to get involved or do what they can to help.

Design is not commonly considered when it comes to more strategic, coordinated, and proactive modes of advocacy. Environmental advocates use official political and legal changes to influence legislation, litigation and electoral politics. Could design effectively contribute to their efforts?

TRAITS OF TRADITIONAL DESIGN FOR THE WILD

1. All about tactics
2. Reactive
3. Targeted at the public
4. Grassroots, organic
5. Pressuring the system (protest)
6. Individual or one-off response
7. Artifact-based design
8. Personal expression
9. Success hinges on exposure
10. Drawing attention to the problem

OPPOSITE PAGE: Environmental awareness campaigns by the World Wildlife Fund, Sierra Club, and United Nation's Climate Change Convention, protestors carrying "no Pebble Mine" symbols, and a collection of environmental buttons.



UNTRADITIONAL USES OF DESIGN FOR THE WILD

A single logo or poster design rarely addresses the totality of an environmental issue. Instead, design is most powerful when designers and advocates work together to uncover the root of the problem, which is often part of a larger, messier system of stakeholders and processes. Design is a powerful tool for communication, persuasion, and storytelling – assets crucial to advocacy – and when crafted for a specific audience, whether it's a public demographic or a single decision-maker, can be a key tool for an advocacy group's success.

Designers could use their creative problem solving skills to help interdisciplinary teams in the scientific, business, government and advocacy community establish a common vision and systems for sharing that vision with the public. They could clarify complex information or data with graphics that increase the group's ability to communicate succinctly; help raise awareness around environmental issues in a way that empowers stakeholders to take responsibility; re-frame a traditional narrative of an environmental issue; model future scenarios and the consequences of an environmental conflict through an immersive experience; provide systems that make civic engagement more accessible; increase the efficiency of a process; or improve the advocacy group's social and human capital with better social ties, networks, and support.

These less traditional design responses focus on interactions rather than objects, strategy rather than tactics, and are often carried out by teams of diverse stakeholders, rather than an individual designer. They have the potential to be more effective because they are attempting to address the root of a systematic problem, rather than its symptoms and communicate our planet's vulnerability in a way that anyone can understand.

TRAITS OF UNTRADITIONAL DESIGN FOR THE WILD

1. Strives for strategy
2. Proactive
3. Targeted at decision makers
4. Coordinated diverse stakeholders
5. Working with the system (advocacy)
6. Co-design
7. Interaction design
8. Community's voice
9. Success hinges on access to target
10. Proposing a solution to the problem

OPPOSITE PAGE (CLOCKWISE):

A protest cemetery dedicated to all the things lost due to the Deepwater Horizon oil spill in Grand Isle, Louisiana by Joel Sartore.

A targeted campaign by Greenpeace to get toymaker Lego to stop distributing at Shell gas stations after threatening the Arctic with a deadly oil spill.

The Surging Seas project is an interactive map that combines sea level rise with various economic and population indicators by Stamen Design.

"The Story of Stuff" is a video that has been watched by over 12 million people about the role of waste on our planet, made by environmentalist Annie Leonard and designer Jonah Sachs (Free Range Studios).

Resistbot is a free tool that helps you contact your elected officials and discover opportunities for civic engagement.

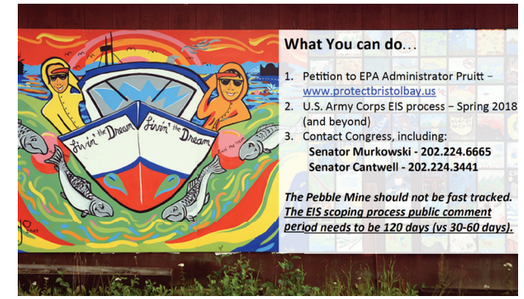
Bristol Bay youth on the shores of the Nushagak River, taking a break on an afternoon from subsistence fishing with his family. Photo by Corey Arnold

PROMISE ONLY WHAT YOU CAN DELIVER

It is easy to get overwhelmed with design opportunity when working with an environmental advocacy group. Often times, NGOs have limited or unsustained resources, which means design is rarely prioritized when it comes to campaign strategy.

Asking the advocacy group or non-profit you're working with how design might help their efforts might open up the flood gates to the group's communication needs. Even while an advocacy group's purpose is to protect the environment, they still have operational tasks to think about and fundraising to do so that they can continue that work. Once your team starts thinking about all the ways design can help their efforts, they might be able to stop!

Avoid trying to solve all of the group's design needs, even once you witness their needs up close. You must try to accurately estimate the time and resources that you can realistically contribute. If you are attempting a project as a solo designer, don't create elaborate designs that deserve the attention of design armies. Make a list of the problems you see and identify what already exists in the community that you can build upon. Does the community have a service infrastructure, unique skills, or resources that you can utilize?



Examples of communications used by the Bristol Bay Coalition

STEARING CLEAR OF DESIGN DISTRACTIONS

I interviewed leaders of the Bristol Bay coalition, and asked them how design might help their efforts. Most people had not considered this question before and were unfamiliar with ways design could be useful to their goals, beyond branding or visually-pleasing annual reports. They spoke of some of the creative efforts that had come out of the Pebble Mine debate, like a 2008 documentary called *Red Gold* by Ben Knight and Travis Rummel, which was a successful tool for storytelling and raising awareness outside of the Bristol Bay community. They mentioned how a "new" *Red Gold* was needed – something to inspire change and share the story of why this place is important and worth protecting, with a current look at the urgent threat facing Bristol Bay.

Once I teamed up with two advocacy groups, I saw design opportunity everywhere in their communications. The flyers and informational handouts used to raise awareness and connect people to the cause were hard to follow and had so much bold text it seemed to scream. The presentations given by advocates were full of re-purposed graphics and the same four photographs again and again. Maps of the Pebble Mine site differed blatantly in size, depending on the motives of the user. Even the symbol that represented the resistance against Pebble Mine seemed to scare people away rather than invite them to get involved. I had to remind myself to stay focused on ways I could make the most impact with the time I had, because once my team realized my ability to communicate visually, they had many requests beyond the scope of our shared goal, such as designing infographics for other organizations they were part of. When these requests arose, I reminded them that I was doing this work for graduate studies, and had only time to work on the things that were essential to our projects together – the rest would have to wait.

"Bristol Bay is the last place on earth that salmon thrive. We should care about that as a society. We can talk about the economics of the commercial fishery and the sport fishery all day. But when it comes down to it, this is an indigenous rights issue that all people should be concerned about. We'll do whatever it takes. Whether it's in the courtroom, whether it's laying in front of bulldozers. Our people will do whatever it takes to protect this place."

ALANNAH HURLEY
Executive Director of the United Tribes of Bristol Bay

Photos by Brian Adams

DESIGN WITH THE COMMUNITY'S VOICE

The work you produce when designing for the wild might be significantly different from your personal design aesthetic. While the cause may need your fresh perspective to gain traction and momentum, your design also needs to connect to the style of your target audience in some way. It's important that your design helps change behavior and that encourages interaction, rather than just looking good.

Highlight aesthetics that are authentic to the community or place you're working with. Take inventory of the colors, typefaces, materials and other style elements you come across through your research. Collect content as you go – photographs, video and audio recordings, objects, quotes, and feature these in your design work. Consider local languages, cultural norms, and the things that make a place beautiful and unique; let the final design mirror its authentic visual language.

REPRESENTING BRISTOL BAY

The infographic I designed for Business for Bristol Bay was a 1-pager made for business leaders to use when meeting with decision-makers to show how Bristol Bay salmon is vital to their business success. The visual language of the infographic needed to feel appropriate to the target audience – in this case business leaders and decision-makers, so I used compelling photos of stakeholders in Bristol Bay's economy to drive the point home that real people depend on this resource and the many jobs it supports.

The materials I designed for the We Are Bristol Bay campaign were informed by the colors of salmon and the sea, the traditional clothing worn by Alaskan Natives, commercial and sport fishermen of the area, and type that mirrored both the ruggedness of Bristol Bay's wild landscape and its strong sense of community. I wanted to celebrate many of the cultural aspects of life in Bristol Bay – so developed a system of icons including wild foods, tools, and objects common to the area that could be used throughout the campaign.

“We’ve watched salmon runs repeatedly throughout history disappear because of poor human management. This is a life-source, and food-source, and way of life for many people in this region and especially in our community, who rely on this and who can tie any aspect of their lives to fish in one way or another.”

CHRISTINA SALMON

Bristol Bay Resident, village council member, manager at Iliaska Environmental

Looking down on Bristol Bay by Alaskan photojournalist Ash Adams

GIVE COMMUNITIES OWNERSHIP

As designers, it is sometimes difficult to hand off your work and watch it be used in ways you had not intended or did not foresee. It's hard to lose control of something you have many days, even years, thinking about and perfecting. Perhaps you create a new symbol for a campaign and proudly present it to the advocacy group you've been working with – only to see it the next day used in a presentation on top of a strange photo collage background, or mashed into the corner of a visually unfortunate flyer. These consequences are some of the realities of designing for the real world. Environmental advocacy groups are hardly to blame! They are excited to have a beautiful new visual asset that they can use to connect people to the cause, inspire engagement, and built social capitol. Though they may not be experts in design, they know that your work holds the potential to create the change you've imagined together and want to put it to use immediately.

The best thing you can do for your own designerly sanity and for the group's success is to teach your team how to use your works the way you designed it to be used. Sometimes this teaching occurs throughout the design process as you and your group make collaborative design decisions. It is best to consider how you will hand off your design deliverables early on so that you can think through the operational systems and best practices for future use together. This usually means building something that a non-design expert can effectively use. Don't code a complicated website that no one knows how to update if you plan on handing it off to your team and not being available for support.

Michael Beirut designed Hillary Clinton's 2016 campaign logo for presidency – a simple "H" with an arrow emerging naturally from the geometry of the letter form, pointing forward, towards the future. "It wasn't clever or artful,""he admitted, "I didn't care about that. I wanted something that you didn't need a software tutorial to create, something as simple as a peace sign or a smiley face. I wanted a logo that a five-year-old could make with construction paper and kindergarten scissors."

The most important use of your design skills might be empowering the people who work night and day to protect the environment with a new visual tool. The good news is that if you set up your systems right, energy will continue to be put towards the cause, even if your time and work lead you elsewhere. A community with the tools to tell their own story well is a powerful one. Planning for longevity is really about the system more than the artifact.

Set up Dropbox folders with the visual assets you've created and share them with your team. Include instructions for usage or best practices that non-designers might overlook. Your team will be excited to learn how to most appropriately present the work you've created together.

Consider writing a project agreement to be signed by everyone who is involved. Outline ongoing roles, structure, terms, and other important project details. Make sure everyone has read and agreed to the draft before it's finalized and signed.

Losing control of your work can be difficult as a designer. Here's an example of an event invitation made by one of the advocacy groups I worked with on the We Are Bristol Bay Campaign.

I realized it would be helpful to set up some easy design guidelines that could be followed in programs like Power Point or Microsoft Word. I made a Dropbox folder with compelling photographs, the typefaces I used when creating the campaign, and visual assets with some tips on how to use them.

Everyone wins if you can teach your advocate teammates a little about design in the end. That way they'll feel empowered to make something that looks great and your conscience will be clear.

Michael Beirut's Hillary Clinton 2016 campaign logo was simple and easy for her supporters to engage with.

DEFINING ROLES FOR CAMPAIGN SUCCESS

Ownership over the We Are Bristol Bay campaign was the most challenging part of the project, since our team was made up of four people from three different organizations. It was easy to imagine what could be designed together but more difficult to imagine how the campaign would be run and implemented once produced. We shared the same goal but had different styles for communicating those goals to the public, informed by our professional experiences. There is a certain neutrality that felt important to those of us who were business owners, and a certain assertiveness of our team member who worked in advocacy. We wrote up a contract together outlining our ongoing individual roles, including terms of the project, operations, communication pathways, partnerships, and funding. When writing the contract, we made sure everyone defined their own roles and felt comfortable with the chain of command. This helped sharpen up all the pieces of our team's puzzle and clear away lingering questions about how best to keep our campaign sustained and effective.

ADDITIONAL RESOURCES

TOOLS & INSPIRATION FOR DESIGNERS

WEBSITES
www.epa.gov
www.foia.gov
https://actipedia.org
www.indivisible.org
www.patagonia.com/actionworks
https://artisticactivism.org
https://solutions.thischangeseverything.org

DESIGNERS
Amplifier (amplifier.org)
Beehive Design Collective (beehivecollective.org)
Colleen Carcoran (placeandpage.la/work)
Geoffrey Holstad (holstadholstad.tumblr.com)

MAPPING
Google Tour Builder, Google Earth, Google Outreach

TIMELAPSE
Shows changes on Earth over past 30 years (https://earthengine.google.com/timelapse)

DATA VISUALIZATION
Google Fusion Tables (maps, pie charts, timelines)

ADVERTISING
Google Non-profits: free advertising in Google search results with Google ad Grants (https://www.google.com/nonprofits/)

GRANTS & COMPETITIONS
SAPPI "Ideas that Matter": supports designers who partner with organizations to bring great ideas to life (https://www.sappi.com/ideas-matter)

EPA's P3 (people, prosperity and the planet) Student Design Competition: open to teams of college students working to design solutions for a sustainable future. (https://www.epa.gov/P3)

Core77 Design for Social Impact Award: Awards projects specifically designed to directly benefit social, humanitarian, community or environmental causes (http://designawards.core77.com/Design-for-Social-Impact)

COLLABORATION
Google Docs: create a campaign plan corroboratively (https://www.google.com/docs/about)

Smart Chart 3.0: A communication planning tool that helps you set goals, identify priority audiences, craft compelling messages, puts high-value communication activities (http://www.smartchart.org, http://spitfirestrategies.com)

Frog Design Collective Action Toolkit: Created to help bring groups together to accomplish a shared goal. It consists of an action map and activities six areas that offer different ways to develop solutions to make change happen in a community or organization. (https://www.frogdesign.com/work/frog-collective-action-toolkit)

IDEO's Human-Centered Design Toolkit: Why human-centered design can impact the social sector (https://www.ideo.com/post/design-kit)

FRAMEWORKS
David Rose Spectrum: Understanding audience and their receptivity to messaging (http://kellyludwig.com/kcai-embeds/va_receptivity-handout.pdf)

Social Design Pathways: mapping skills, resources and ambitions of a project by its group members (http://www.socialdesignpathways.com)

LEARN MORE ABOUT BRISTOL BAY & THE PEBBLE MINE

www.wearebristolbay.org
www.epa.gov/bristolbay
http://www.savebristolbay.org
www.pebblepartnership.com
http://pebblewatch.com
http://www.bristolbayvision.org
www.regulations.gov
http://www.standforsalmon.org
www.alaskawaterwars.org
www.b4bb.org
http://utbb.org

BIBLIOGRAPHY

BOOKS

Alinsky, Saul. Rules for Radicals: A Pragmatic Primer for Realistic Radicals. New York: Vintage Books, 1971 (reissue 1989)

Amatullo, Mariana, Bryan Boyer, Liz Danzico, and Andrew Shea. LEAP dialogues: career pathways in design for social innovation. Pasadena, CA: Designmatters at ArtCenter College of Design, 2016.

Bohle, Stephan. Cause and Effect: Visualizing Sustainability. Berlin: Die Gestalten Verlag, 2012.

Brown, Michael J. Building Powerful Community Organizations: A Personal Guide to Creating Groups That Can Solve Problems and Change the World. Arlington, Mass: Long Haul Press, 2007.

Fuad-Luke, Alastair. Design activism: beautiful strangeness for a sustainable world. London: Earthscan, 2009.

Gallagher, Nora and Myers, Lisa. Tools for Grassroots Activists: Tools for Success in the Environmental Movement. California. Patagonia Books. 2016.

Glaser, Milton, and Mirko Llić. The design of dissent / Socially And Politically Driven Graphics. Gloucester, MA: Rockport, 2006

Johnson, Carl. Where water is gold: life and livelihood in Alaska's Bristol Bay. Seattle, WA: Braided River, 2016.

Kenneth I. Maton. Influencing Social Policy. Applied Psychology Serving the Public Interest. Oxford University Press 2017.

Maton, Kenneth I. Influencing social policy: applied psychology serving the public interest. Oxford: Oxford University Press, 2017.

Moggridge, Bill, Baumann, Caroline, Payson, Caroline, Smith, Cynthia E., Freeman, Sarah. Design and Social Impact. New York, NY: Smithsonian's Cooper Hewitt, National Design Museum.

Papanek, Victor J. 2012. Design for the real world: human ecology and social change. Chicago: Academy Chicago Publishers.

Robert Cox, Phaedra C. Pezzullo. Environmental Communication and the Public Sphere. Sage Publications, 2015.

Shea, Andrew Bern. Designing for social change: strategies for community-based graphic design. New York: Princeton Architectural, 2012.

Simmons, Christopher. Just design: socially conscious design for critical causes. Cincinnati, OH: How Books, 2011.

Top, Peleg, and Jonathan Cleveland. Designing for the greater good: the best in cause-related marketing and nonprofit design. New York: Collins design, 2010.

ARTICLES

"Advocacy And The Slow Art Of Influencing Policy". 2013. The Guardian. Accessed May 14 2018. https://www.theguardian.com/global-development-professionals-network/2013/jun/28/advocacy-how-to-influence-government-policy.

"Arctic National Wildlife Refuge - Spitfire Strategies". 2018. Spitfire Strategies. Accessed May 14 2018. http://www.spitfirestrategies.com/casestudies/arctic-national-wildlife-refuge-campion/.

Braund, S. J. (2017). Set the net: The heritage significance of fish camp and wild salmon in bristol bay, alaska (Order No. 10601062). Available from ProQuest Dissertations & Theses Global. (1929520517). Retrieved from https://search.proquest.com/docview/1929520517?accountid=14784

Donkersloot, Rachel, "Ecological crisis social change and the life paths of young Alaskans: An analysis of the impacts of shifting patterns in human-environment interaction in the fisheries-dependent region of Bristol Bay Alaska" (2005). Graduate Student Theses, Dissertations, & Professional Papers. 5432.

Gilman, S. (2016, Jun 27). "Putting art in environmental advocacy." High Country News. https://search.proquest.com/docview/1823789112?accountid=14784

Robert J. Brulle (2010) From Environmental Campaigns to Advancing the Public Dialog: Environmental Communication for Civic Engagement, Environmental Communication, 4:1, 82-98, DOI: 10.1080/17524030903522397

Ryan Kelty & Ruth Kelty (2010) Human Dimensions of a Fishery at a Crossroads: Resource Valuation, Identity, and Way of Life in a Seasonal Fishing Community, Society & Natural Resources, 24:4, 334-348, DOI: 10.1080/08941920903476814

"The Designer's Guide To Working For Nonprofits". 2013. Creative Bloq. Accessed May 14 2018. https://www.creativebloq.com/graphic-design/doing-your-bit-how-get-most-out-socially-responsible-design-10134853.

Visualizing Information for Advocacy. 2018. Opensocietyfoundations.Org. Accessed May 21 2018. https://www.opensocietyfoundations.org/sites/default/files/visualizing_20080311.pdf.

"Stop Raising Awareness Already" (Stanford Social Innovation Review). 2018. Ssir.Org. Accessed May 21 2018. https://ssir.org/articles/entry/stop_raising_awareness_already.

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