



## California North Coast Offshore Wind Studies

### Stakeholder Benefits and Concerns



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## **EXECUTIVE SUMMARY**

This report examines stakeholder perceptions of offshore wind energy in Humboldt County, California. Local interest in offshore wind energy has skyrocketed in recent years due to improvements in technology, consumer and investor confidence, combined with increased interest in low-carbon energy sources and quantification of offshore wind resources. A successful project on the West Coast of the United States must not only overcome economic and technology challenges, but it must also successfully work with local communities and government agencies to address concerns, impacts, and potential community benefits.

This study aims to identify stakeholder perceptions of offshore wind energy development in Humboldt County including: potential benefits and benefits agreements, development concerns, and perceptions of the development process so far. The project team conducted 41 interviews with stakeholders between May 2018 and January 2020, and it also observed 14 public meetings and two industry conferences. The 41 interviews included stakeholders from the energy industry (5), local governments (8), environmental groups (11), fishermen<sup>1</sup> (13), and labor/business (4). The project team attended two tribal meetings in February 2020, with government leaders and staff from 10 regional tribal nations to present preliminary results of the team's research and obtain tribal input and preference for ongoing engagement with researchers on this topic.

### **Stakeholder Perceptions**

Thirty out of 41 stakeholders cited emissions reductions or climate change as a direct benefit of proposed offshore wind energy generation in Humboldt County. Stakeholders felt that the project could be an opportunity to move away from fossil fuels, pursue more renewable energy locally, and work to prevent the worst impacts of climate change. The second most cited benefit of offshore wind energy generation (24 out of 41) was jobs and economic benefits. Stakeholders said that offshore wind would represent a new industry that could offer a perhaps more sustainable workforce that would benefit the county as a whole. Similarly, 16 out of 41 stakeholders (including five fishermen) cited potential port infrastructure upgrades as a benefit to the project. Finally, 20 out of 41 stakeholders cited energy independence and local control as a benefit. One environmental group representative said that they “really like local control” and “think that people who live and work and are based in that community...have more of a stake in the community's well-being” (environmental group stakeholder interview, 2018). At meetings with the research team, tribal leaders and staff expressed interest in further feasibility information, and a desire for greater understanding regarding possible community benefits. Tribes expressed support for economic development potential, including workforce development for tribal members, particularly if the industry could be developed with more widespread regional economic and social benefit.

The most common project concerns expressed by stakeholders were impacts to the environment and the local fishing industry. Thirty-five out of 41 stakeholders, including all government and environmental group stakeholders along with several fishermen and members other interest groups, mentioned either impacts to the environment in general or specifically to birds, fish or mammals. In addition, 32 out of 41 stakeholders were concerned about the impacts of offshore wind to the local Humboldt County commercial fishing fleet. Fishing fleet concerns included the ability to access fishing grounds and the Humboldt Bay channel, loss of fishing grounds, and increased ocean hazards with the installation of new offshore floating wind turbines. Concerns about the impact to the local fishing industry came up in every fishing and wind industry interview. Notably, only 13 stakeholders discussed the visual impacts of offshore wind and, out of that, only five stakeholders mentioned it as a concern. In meetings and public documents to date, tribal representatives have expressed a need for renewable energy but also several concerns that include the religious and cultural importance of the ocean and viewshed; effects on tribal

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<sup>1</sup> The term “fishermen” is used throughout the document to describe individuals who engage in fishing -- regardless of gender -- as it tends to be the preferred term among both men and women who fish in the North Coast region.

resources and the environment; confidentiality and thoroughness of data collection; and long-term impacts for future generations, among others (Gates, 2017).

### **Development Process**

This study also captured information about stakeholders' perceptions of the development process as they had experienced it so far. Themes related to the process included stakeholders' access to information, stakeholders being able to trust developer or government information, and stakeholders being able to follow and understand a fast-moving and highly complicated development process. Fourteen stakeholders expressed a belief that the BOEM leasing process lacked transparency and commented that they were distrustful of either the process itself or the entities involved. When describing an ideal development process during interviews, many stakeholders expressed a preference for a process that is open and transparent, accessible to the public, and community-based. The ability to work directly in the process, and to trust that input is being heard and addressed, are key attributes that stakeholders interviewed said they value. In meetings and public comments, tribal representatives expressed concerns about the development and consultation process to date, with several comments suggesting that the government consultation with tribes to date had not been adequate, and another comment suggesting the process had been adequate, but would be far more useful and productive with more factual information to review.

### **Conclusion**

Understanding stakeholder perceptions of offshore wind energy is key to a successful development process. Having accessible knowledge of what stakeholders consider to be the benefits (including climate change mitigation and port development in this case) and of what they are concerned about (including environmental impacts and impacts to the fishing fleet), can be utilized by government agencies and developers to design a project and process that responds and adapts to community needs. Information about stakeholder values and needs can also be used to facilitate the development of a more equitable project where respective costs and benefits are more evenly distributed among various groups. Additionally, gaining information about perceptions of the process can help agencies, developers, and planners design a process with the best chance for success.

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## 1. INTRODUCTION

Interest in offshore wind energy has skyrocketed in recent years due to improvements in technology, consumer and investor confidence, and increased interest in low-carbon energy sources. Global offshore wind installed capacity surpassed 18 gigawatts (GW) in 2017 (Global Wind Energy Council, 2019). By 2050, the International Renewable Energy Association estimates that installed capacity will increase by 500 GW (International Renewable Energy Agency, 2018). As of 2018, there were a total of 105 grid-connected offshore wind farms in Europe and one grid-connected commercial offshore wind farm in the United States (Selot, Frail, Brindley, & Miro, 2019; Office of Energy Efficiency and Renewable Energy, 2019). There are currently 15 active offshore wind leases in the United States, totaling 21 GW of potential capacity (BOEM, 2019), with additional plans to open up leasing opportunities in California, Oregon, and Washington.

According to Pew Research Center, 83% of Americans support more development of wind farms (Pew Research Center, 2016). Despite this large support, project development in local communities still faces many hurdles, both in the public and permitting spheres (Storrow, 2019; Gloden, 2018). To be successful, a project on the West Coast would need to not only overcome economic and technological challenges, but it would also need to successfully work with local communities and government agencies to address concerns and impacts and to provide community benefits. Understanding the human dimensions of renewable energy development is pivotal not only for project completion, but also for the monetary bottom line, as delays in permitting and development processes can drive up project costs (Goodrich, James, & Woodhouse, 2012). In addition, information about stakeholder values and needs can be used to facilitate the development of more equitable projects where respective costs and benefits are more evenly distributed among various groups.

This study aims to identify stakeholder perceptions of offshore wind energy development in Humboldt County, California, including: potential benefits and benefits agreements, development concerns, and perceptions of the development process so far. The project team conducted 41 interviews with stakeholders between May 2018 and January 2020 and observed and/or presented at 14 public meetings, two industry conferences, and two regional tribal meetings in order to address the two key research questions. While community perceptions can be dynamic, this analysis provides a snapshot of stakeholder perceptions of offshore wind energy generation in Humboldt County during the time period when the interviews were being conducted.

This case study uses semi-structured interviews, participant observation, and document analysis to answer the following research questions:

1. How do stakeholders perceive the potential offshore wind energy development off the coast of Humboldt County?
  - a. What do stakeholders view as the potential benefits and concerns related to the project?
  - b. What are stakeholders' perceptions of potential community benefits packages?
2. How do stakeholders perceive the development process of offshore wind energy in Humboldt County as it has proceeded so far?

## 2. METHODS

The project team employed a mixed-methods approach, including semi-structured interviews, participant observation, and document analysis, to explore stakeholder perceptions of offshore wind energy in Humboldt County.

### 2.1 Semi-Structured Interviews

Researchers conducted 38 semi-structured interviews with 41 individual stakeholders across five groups: energy industry (5), government (8), environmental groups (11), fishermen (13), and labor/business (4).

One stakeholder was formerly both a labor representative and a commercial fisherman and offered perspectives for both categories. Interviews lasted between 15-90 minutes and occurred at locations most comfortable for participants.

Stakeholder groups were selected by the project team for their immediate association with offshore wind energy in Humboldt County. Immediate association was determined by ocean user groups (e.g. fishermen) and those who might be involved in the building or permitting of the project (e.g. elected officials, labor, developers, and environmental groups). While the term stakeholder itself is a contested term, this research uses ‘stakeholder’ to describe immediate participants who would be likely to interact with the process either during permitting, public meetings, through lawsuits, or during project development and implementation (Mitchell, Agle, & Wood, 2003). These stakeholder groups are not intended as an exhaustive listing of community members or entities that might be engaged in or impacted by a potential offshore wind energy project, but instead provide a limited snapshot into local groups/communities that could be expected to play a significant role in the development process.

Interviews were conducted by two different researchers during two time periods: May 2018 to August 2018 and July 2019 to January 2020 (Table 1). All participant observation and meeting data were collected between February 2018 and January 2020 in California and Oregon. It is important to note that the interview responses represent stakeholder’s views at the time of the interviews, based on the information that the interviewees had available. As some stakeholders were interviewed later in time than others, some respondents may have had more project information than others. Additionally, perceptions in processes such as these can change dynamically based on increased information and changed circumstances (Russell et al. 2020). This study provides a snap-shot of stakeholder perceptions during this window of time, and it is notable that most interviewees had little information about the scale, parameters, and potential impacts of a potential offshore wind project.

A list of interview questions is provided in Appendix 1. Data collection and subsequent analysis were obtained in collaboration with a grant-funded project by Humboldt State University’s Schatz Energy Research Center. Grant funding was provided by California’s Ocean Protection Council. The data was collected in compliance with HSU IRB #17-210, participation was voluntary and interviewees had the opportunity to select whether they could be directly quoted and what level of confidentiality they hoped to maintain.

*Table 1: Description of stakeholder categories and number of interviews.*

<b>Stakeholder Group</b>	<b>Description</b>	<b>Interviewees (2018)</b>	<b>Interviewees (2019-2020)</b>	<b>Total</b>
Government (GOV)	Elected officials and staff	4	4	8
Energy Industry (EI)	Developers, consultants	5	0	5
Environment (ENV)	Local and state environmental non-profits	9	2	11
Fishing (FSH)	Commercial fishermen, retired fishermen, processor	7	6	13
Trade/Business (TD)	Local labor union/association leaders, business group leader	1	3	4
Total		26	15	41

## 2.2 Participant Observation

Researchers attended 14 public meetings and two industry conferences between February 2018 and May 2019 (Table 2). Meetings included 11 different hosts in five different cities. Observers paid particular attention stakeholder attendance, public questions and comments related to offshore wind energy

generation, and the contents of host presentations. Meeting notes were transcribed and coded with stakeholder interviews to determine key themes and answer research questions.

*Table 2: List of public meetings attended between February 2018 and September 2019.*

<b>Date</b>	<b>Location</b>	<b>Host</b>	<b>Title</b>
2/9/18	Eureka, CA	State of California	State of California General Plans Guidelines Update
3/13/18	Sacramento, CA	Pacific Ocean Energy Trust (POET)	California Offshore Wind Industry Summit
4/18/18	Eureka, CA	California Energy Commission (CEC)/Bureau of Ocean Energy Management (BOEM)	Offshore Wind Outreach Meet ‘n Greet
4/19/18	Blue Lake, CA	State of California/BOEM	Offshore Wind Outreach Meeting with Environmental NGOs
4/19/18	Eureka, CA	Humboldt Fishermen’s Marketing Association (HFMA)	General Meeting, Meet and Greet with State of California and BOEM
4/20/18	Arcata, CA	CEC	CEC Integrated Energy Policy Report Workshop: North Coast Energy Perspective
6/27/18	Arcata, CA	Humboldt Baykeeper	Redwood Coast Energy Authority (RCEA) Update on Offshore Wind Energy Proposal
7/18/18	Arcata, CA	Northcoast Environmental Center	BOEM Leasing Process Informational Session
8/2/18	Eureka, CA	BOEM/CEC	Offshore Wind and Databasin
8/14/18	Eureka, CA	Humboldt County	EIR Scoping: proposed onshore wind farm at Bear River Ridge
8/20/18	Eureka, CA	RCEA	Monthly Board Meeting
9/18/18 – 9/19/18	Portland, OR	POET	Ocean Renewable Energy Conference
12/4/18	Eureka, CA	RCEA	Stakeholder Update Meeting
12/5/18	Eureka, CA	Humboldt Bay Initiative	Offshore Wind Energy Development
5/3/19	Eureka, CA	California State Senate Committee on Fisheries and Aquaculture	California Fisheries and Wildlife: Can they coexist with offshore wind energy development?
9/25/19	Eureka, CA	RCEA	Redwood Coast Offshore Wind Project Stakeholder Workshop

### **2.3 Tribal Engagement**

In February 2020, the project team presented preliminary results from the larger project team’s research on feasibility of offshore wind development on California’s north coast to groups of regional tribal governments, agencies and staff. The sessions included a tribal outreach meeting convened by the California Energy Commission on February 5, 2020 at the Bear River Band of Rohnerville Rancheria and a presentation to the North Coast Tribal Chairperson’s Association at the Blue Lake Rancheria on February 24, 2020. Representatives from ten tribal nations with lands in Humboldt County attended one or both of the meetings. The purpose of presenting preliminary draft research results to tribes was to 1) provide substantive information about the feasibility of offshore wind development based on initial

research results, 2) obtain feedback and input from tribal governments, agencies and staff representatives, and 3) discuss how tribes would prefer to engage with researchers regarding offshore wind topics moving forward. Comments from the meetings suggest that tribes are interested in engaging with researchers, the state, federal agencies and others to gain more information about the most recent findings, to better record tribal views on offshore wind now that more detailed information about the potential parameters and impacts is available, and to engage with and inform regional decision-making.

**2.4 Document/Procedural Analysis**

Document analysis includes materials from public meetings (presentations and agendas) as well as material from agency websites. Leasing and procedural information was obtained from the Bureau of Ocean Energy Management (BOEM) website to understand and accurately describe the process as it unfolds.

**2.5 Data Analysis**

Data were analyzed with thematic coding, also known as inductive coding, techniques which identify key themes discussed during interviews and meetings. The research team selected 25 codes nested under three main umbrella codes: benefits, concerns, and process. These codes are based on both the research questions and preliminary thematic review of the data (see Appendix B for a complete list of codes). Coding was done with Dedoose© software. Each interview was uploaded to the software and coded individually, line by line. Excerpts were then compiled and re-read for broad trends.

**3. RESULTS**

All stakeholders discussed or were directly asked about their perceptions of offshore wind energy generation in Humboldt County, including perceived benefits and potential concerns. This section discusses perceived benefits, concerns, and stakeholder perceptions of the process so far.

**3.1 Benefits**

Stakeholders were asked to discuss both direct project benefits and possibilities for community benefits to be outlined in an agreement with developers. Many development projects, renewable energy or otherwise, include funding or other resources in what is often dubbed a ‘community benefits package’ (Aitken, 2010; Bristow et al., 2012; Walker et al., 2017). These packages can be a mechanism to ensure a community benefit outside of the direct project aims. Figure 1 depicts the most commonly cited benefits of offshore wind with the number of interviewees who cited them.

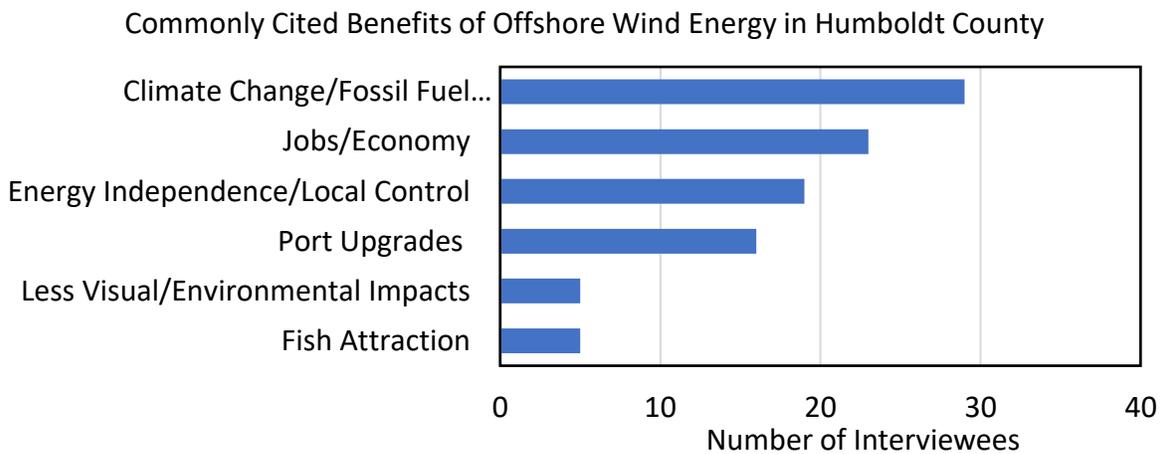


Figure 1: Number of interviewees who noted specific perceived benefits from offshore wind energy development in Humboldt County (n = 41).

### **3.1.1 Emissions Reduction and Climate Change**

Thirty out of 41 stakeholders cited emissions reductions or climate change as a direct benefit of proposed offshore wind energy generation in Humboldt County. Stakeholders felt that the project was an opportunity to move away from fossil fuels, pursue more renewable energy locally, and work to prevent the impacts of climate change. One local government official said that while “change is always a challenge,” an offshore wind project is the best response to climate change and Humboldt County’s renewable energy goals (GOV stakeholder interview, 2019). An environmental group stakeholder even said that, depending on who the developer is, they wished the project would be fast tracked. They said “it would be nice to treat this like a climate crisis...and make it happen sooner” (ENV stakeholder interview, 2018). Another environmental group stakeholder said that “greenhouse gas emissions and global climate change are probably the scariest thing that we have facing the North Coast” (ENV stakeholder interview, 2019). The Wiyot Tribe (2019) submitted a letter to BOEM indicating their “Support for Redwood Coast Energy Authority’s Offshore Wind Project.” The letter listed potential environmental benefits as a major reason for this support. Their letter stated, “therefore, in partnership with local partners, the Tribe is in support of clean energy projects that will reduce or eliminate potential threats to culturally important species from nonrenewable energy sources (e.g. fossil fuels).” The Wiyot Tribe (2019) letter describes their support for a locally-led offshore wind development because it can help reduce the impacts from non-renewable energy generation on the Pacific Ocean, local water resources, and ecosystems. The Blue Lake Rancheria Tribe has publicly commented in support of offshore wind as a part of a portfolio of clean energy, stating “[zero-carbon] energy ... improves the climate, reducing catastrophic economic impacts of severe storms, flooding, landslides, widespread drought and wildlife, among others.” (BLR 2018)

### **3.1.2 Jobs and Economic Benefit**

The second most cited benefit of offshore wind energy generation in Humboldt County (24 out of 41) was jobs and economic benefits. Stakeholders said that offshore wind was a new industry that could offer a more sustainable workforce that would benefit the county as a whole. A local government official said:

The important thing to remember is that the resource potential is quite large and the economic benefits for Humboldt County would also be significant. We could sustain our county with a sustainable resource production. And isn’t that what we’ve been talking about all along? (GOV stakeholder interview, 2019).

Labor and trade interviewees said they are supportive of and interested in a project as long as unionized labor is successfully negotiated and utilized. Put simply, one labor union leader said, “we’re pro because we want to work on it” (TD stakeholder interview, 2018). Labor and trade stakeholders said they would be interested in working directly with developers to negotiate a project labor agreement where the use of union labor for the project would be laid-out, largely through attorneys. An offshore wind energy project, a labor stakeholder said, would increase membership and work hours for the community and could potentially lead to additional apprenticeship programs (TD stakeholder interview, 2018). Another trade stakeholder said that it “would be a big cash boost that this area extremely needs since the failing of the timber industry” (TD stakeholder interview, 2019).

Sixteen out of 41 stakeholders (including 5 fishermen) cited potential port infrastructure upgrades as another benefit to the project. One local government official said that port upgrades like modern dock facilities would be the single biggest benefit “because if you get that then...the other things will follow” (GOV stakeholder interview, 2019). Fishermen who cited port infrastructure as a benefit agreed that the development associated with a wind project would potentially improve the harbor for all, including the likely need for dredging that new industry would require (FSH stakeholder interviews). However, impacts to the bay and harbor were also a concern among fishermen. This is discussed in section 3.3.2.2. Additionally, dredging was also listed by fishermen as a stipulation in a community benefits package or memorandum of understanding (MOU). In a 2018 meeting with the Humboldt Fishermen’s Marketing Association, BOEM was asked by several fishermen about benefits to the fishing fleet. BOEM

emphasized that port improvements, dredging, and marine debris removal could be added to mitigation requirements on leases (HFMA meeting, April 2018).

At the Pacific Ocean Energy Trust's California Offshore Wind Energy Summit in 2018, labor researcher Robert Collier noted that the key is in the details—while there is promise for jobs generally, logistics such as local expertise really determines how many local and permanent jobs might exist with a project. He cautioned attendees to consider all the logistics in the matter, including the current state of the port of Humboldt Bay and costs for its infrastructure upgrades—especially in light of past ‘boom and bust’ industries that have already affected workers in the area (California Offshore Wind Energy Summit, 2018).

In a public comment in response to BOEM's proposed oil and gas leasing program, the Blue Lake Rancheria (2018) expressed their opposition to BOEM's plan to expand oil and gas drilling in the outer continental shelf (OCS) in all areas. In the letter, the Tribe stated their preference for the development of zero-carbon energy from sources including offshore wind. They specifically outlined the economic benefits that could be derived from the development of these types of energy projects.

More long-term, well-paying, and healthier jobs can be created through zero-carbon energy than in fossil fuel extraction. Indeed, much work has been done by the U.S. Department of Energy and others to quantify job creation and related economic benefits of decarbonized energy – including offshore wind, and wind energy in general, as just one example of a much more productive source of both energy and jobs, and which could be deployed in the OCS. These jobs in low- and zero-carbon energy have multiple economic co-benefits. They do not harm ... existing fishing, tourism, and other interlinked economic sectors that rely on clean, healthy oceans. ... It is past time to stop promoting expansion of oil and gas drilling over our national competitiveness, economic strength, and healthy jobs and environment (BLR 2018).

At the end of the letter the Tribe “urge[s] all the agencies and administration stakeholders” to “embrace the secure, economically and technically superior technologies of today” including “offshore wind.” This comment was made in a broad way before the Tribe had information about specific ideas for offshore wind development on the north coast. However, the comment suggests that potential economic and environmental benefits of offshore wind development could be an important consideration to some tribes in the region. It will be important to ensure consistent engagement with tribes when more specific information about offshore wind developments on the north coast is available to better capture their perspectives on potential benefits and concerns. Further, the California Energy Commission (CEC) convened a California Offshore Renewable Energy (CORE) tribal informational meeting on November 21, 2016 at Trinidad Rancheria, attended by several northern California tribes, the Tribal Advisor to Governor, CEC, and the Bureau of Ocean Energy Management (BOEM), where tribes expressed strong interest in more information regarding economic benefits for tribal nations and the region.

### ***3.1.3 Energy Independence***

Finally, 20 out of 41 stakeholders cited energy independence and local control as a benefit of offshore wind production in Humboldt County. One environmental stakeholder said that they “really like local control” and “think that people who live and work and are based in that community...have more of a stake in the community's well-being” (ENV stakeholder interview, 2018). A fisherman said that while he's not an expert, local control can be a comfort since “things are changing pretty drastically” with big utilities (FSH stakeholder interview, 2019). Stakeholders were primarily excited that their own local agency, the Redwood Coast Energy Authority (RCEA), is taking the lead and creating a potential framework for incorporating local concerns and benefits into the development process (stakeholder interviews). In an offshore wind meet and greet in April of 2018, Matthew Marshall with RCEA reiterated that local control of energy resources was one motivation for the authority getting involved (CEC and BOEM public meeting, April 2018). Tribes in both February 2020 meetings expressed interest in understanding how the region's energy resilience could be improved by offshore wind generation.

### **3.1.4 Other Benefits**

Other benefits listed include the potential for offshore wind infrastructure to act as a fish attraction device (FAD) and promote nutrient rich waters (cited by four fishing and one environmental stakeholder); the offshore location reducing visual impacts compared to land-based wind turbines (cited by two government and one environmental stakeholder); and the potential for an offshore location to have less of an environmental impact than an onshore project (cited by two government and two environmental stakeholders).

One trade/business stakeholder associated with a local chamber of commerce also hoped that an offshore floating array of wind turbines would increase tourism in the area. They said that her organization has “had a look at what's happened over on the East Coast, and some of those projects have turned out to be quite impactful for tourism there” (TD stakeholder interview, 2019).

### **3.2 Community Benefits Packages**

Outside of these direct benefits, stakeholders discussed what benefits they would like to see incorporated into a community benefits package. Perhaps the most vocal about the need for a community benefits package as it relates to project development were fishermen. Fishermen interviewed were careful to suggest that their discussion of benefits packages should not be taken as support for the project—their first preference would be for no development at all (FSH interviews). In fact, two fishermen were very explicit in saying that they saw no single benefit or advantage of the offshore wind project at all (FSH stakeholder interviews 2019). One of these fishermen explained that:

“People talk about compensation and this and that, but...I’ve never been in this business to be compensated for something that I didn’t produce. Fishing is a unique business. People work hard. People go out and make their own money. And I don’t want a handout” (FSH stakeholder interview, 2019).

Another fisherman said that “if it comes out negative we’re going to be against it. Regardless of its potential benefits to the community. We’re not going to take a hit voluntarily so someone else can benefit” (FSH stakeholder interview, 2018). A fisherman associated with the Humboldt Fishermen’s Marketing Association said that “overall my job is to say no until we (marketing association members) have further discussion and dialogue” (FSH stakeholder interview, 2018).

However, most fishermen felt that the discussion of a community benefits package was required regardless of fleet support. These fishermen feel that their opposition of a project does not negate the fact that they may see negative impacts such as a loss of fishing grounds and should thus be compensated accordingly. One now-retired fisherman was clear that, “obviously we’ve got to get all these folks in line with the concept of: you pay to play. You’re not here to just extract resources from us, even though that resource is this thing you can’t see way offshore...do the right thing” (FSH stakeholder interview, 2018).

When discussing what compensation might look like, fishermen overwhelmingly cited an interest in developing general fund for the fleet where compensation could be held and utilized in ways that benefit the fleet as whole. Most fishermen said, that if a project moves forward, they should be compensated for their losses as a community, not individually (FSH stakeholder interviews). Some fishermen cited an existing fund set up in Central California as a potential template for benefits. As part of a mitigation package for the development of an undersea cable in Morro Bay, fishermen have access to grant funding for things such as repacking life rafts at the end of the season (FSH stakeholder interviews). The non-

profit mutual benefit corporation that was established for this purpose is called the Central California Joint Cable/Fisheries Liaison Committee<sup>2</sup>. One fisherman said:

“It has been positive only because the Morro Bay Fisherman’s Association is very strong and they...are well organized and they did not allow those companies to run over them. In other places that has not been the case and Morro Bay is the exception to the rule” (FSH stakeholder interview, 2018).

Ideas for what a compensation fund could be used for include: paying for mandatory safety trainings, federally regulated life-raft inspections, and “matching” funds to work with the city on development projects. The fund could also potentially be helpful, fishermen said, in addressing the lack of ice and cold storage at the Humboldt Bay port facilities (FSH stakeholder interviews, 2018). Fishermen use ice and cold storage to keep fish cold while at sea, and to store fish safely upon return to shore. One fisherman said that the last ice facility (which burned down and is no longer operational) was also paid for by a community fund (FSH stakeholder interview, 2018). A government official associated with the Humboldt Bay Harbor, Recreation, and Conservation District also cited a funding need for a dry dock for boat repair and a new maritime museum (GOV stakeholder interview, 2019).

On the non-monetary side, fishermen think that they could also benefit from increased harbor dredging which is needed for both their use and for the wind industry. The local fishing fleet itself is seasonally plagued with sediment build up and shoaling (which causes increased wave heights due to changes in water depth) in the Bay channel and marina (Squier, 2019). In a public meeting in June of 2018, RCEA indicated that fishermen had also discussed the possibility of using the offshore wind area for data collection and real-time fishing conditions (Humboldt Baykeeper meeting, 2018).

Individual payments to fishermen on their own, however, was not a popular idea among fishermen interviewed. Fishermen explained that the history of salmon disaster relief funds and other government money has caused long-lasting tension between fishermen who receive funds and those that do not (FSH stakeholder interview, 2018). One fisherman said that the problem “is that once you bring in compensation, with compensation comes a lot of animosity. It wouldn't necessarily be fair for everybody” (FSH stakeholder interview, 2018). One fisherman also noted that individual payments to fishermen do not help with the long-term sustainability of the fleet (FSH stakeholder interview, 2018). This was echoed in a California State Senate Committee on Fisheries and Aquaculture meeting where one panelist said that individual payments to fishermen really only amount to an early retirement check (May, 2019).

Environmental group stakeholders that were interviewed mentioned development of Humboldt Bay as something they would like included in a community benefits package. This includes improving or replacing the existing jetties and cleaning up brownfield sites around the bay where pulp and paper mills used to exist. Other environmental stakeholders also mentioned the possibilities of electric vehicle (EV) charging infrastructure, job training, and more data on wildlife through project monitoring (ENV stakeholder interviews, 2018).

Perhaps the biggest similarity between the fishing community and environmental group stakeholders was their wariness about compensation from developers. Two environmental stakeholders mentioned that while additional money for local projects would be beneficial, it would have to be structured as an application and grant process rather than payments directly to local organizations or fishermen. Organizations would likely not accept payments from a developer over worries the money would be perceived as a bribe to move the project forward (ENV stakeholder interview, 2018). One stakeholder mentioned that their organization was criticized several years ago for accepting grant money from a

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<sup>2</sup> The Central California Joint Cable/Fisheries Liaison Committee administers the Commercial Fishing Industry Improvement Fund as a mitigation to offshore telecommunications cable construction. More information can be found at: <http://www.cencalcablefishery.com/commercial-fishing-industry-improvement-fund.html>.

company who was simultaneously working on an unrelated and controversial development project. The stakeholder said that the monies were in no way accepted in return for project support, but the appearance of a connection was unhelpful altogether (ENV stakeholder interview, 2018). Similarly, several fishermen stated that if money was involved it should be in the form of a fund to help the whole fleet, rather than payments to individual fishermen (FSH stakeholder interviews, 2018).

All offshore wind energy industry stakeholders acknowledged the importance of community benefits packages to the development process. One developer said that their existence “is a given...in any offshore wind project in the United States” (EI stakeholder interview, 2018). Another developer thought that entering into a MOU with the fishing community was the first step to proactively discussing a community benefits agreement (EI stakeholder interview, 2018).

One local government official, however, was skeptical about the idea of including funding for development projects in a community benefits package itself. They wondered about the details of a project after money is obtained. For instance, who would run an ice storage facility? If an agreement is made for a developer to pay for dredging, what happens when the project is decommissioned and the developer leaves the area? They explained that:

“If energy prices drop, if something happens and the company goes belly up, then I don’t know what...you would do then. I mean sure if they want to try and milk some money out of this project or...you know try to leverage some community, more community benefits than the ones that are already going to be happening because of the project, go for it. It’s all in the negotiation. At some point you break it” (GOV stakeholder interview, 2018).

In any case, wind industry and government stakeholders thought that RCEA might be well suited to act as a conduit between developers and local entities for the purposes of community outreach/benefits discussions and power purchasing agreements. As described above, many other stakeholders view RCEA and local control in general as a potential benefit of the project (stakeholder interviews). An MOU between the local Humboldt Fishermen’s Marketing Association and RCEA was negotiated in 2018 in which the entities agreed to cooperate to identify potential impacts to the fishing fleet. This agreement states that HFMA and RCEA will work together to identify and mitigate impacts and also to “seek out and cooperate as appropriate on mutually beneficial grant or public funding opportunities” such as the Bay and Port of Humboldt Bay harbor improvements (Redwood Coast Energy Authority; Humboldt Fishermen’s Marketing Association, 2018).

At the February 5, 2020 meeting, tribal representatives commented on potential opportunities for greater local capacity and workforce development in offshore wind-related skillsets (e.g., local research using tribal expertise, operations, electricians, IT, maintenance roles). Tribal representatives also commented on the ability of the offshore wind project to help Humboldt County segment and island its electrical grid, a need underscored by the recent Public Safety Power Shutoffs. Tribal representatives asked about exploration of a 50-150MW “branch” to serve Humboldt County and tribal nations connected to the grid when the larger electrical grid is not operational. Attendees also commented that tribal communities and other communities would benefit greatly from more reliable and clean local energy generation (CEC, 2020).

### **3.3 Stakeholder Concerns**

While stakeholders list several potential benefits of the project, including reducing dependency on fossil fuels and providing increased jobs and resources to the community, stakeholders interviewed also expressed various concerns with offshore wind in Humboldt County. Figure 2 depicts the most commonly cited concerns of offshore wind with the number of interviewees who cited them.

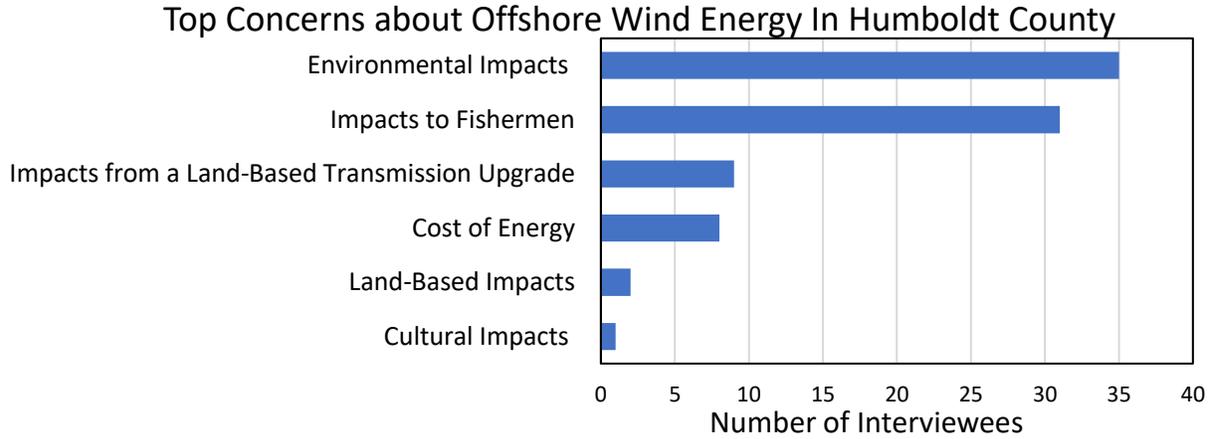


Figure 2. The most commonly cited concerns from offshore wind in Humboldt County among interviewees (n = 41).

### 3.3.1 Environmental Impacts

The biggest project concerns among stakeholders are impacts to the environment and wildlife. Thirty-five out of 41 stakeholders, including all government and environmental group stakeholders along with several fishermen and members other interest groups, mentioned either impacts to the environment in general or to birds, fish or mammals (Figure 2). An environmental stakeholder (2018) emphasized the key importance, “now more than ever,” of protecting already vulnerable avian and mammal populations. Figure 3 depicts the most commonly cited environmental concerns related to offshore wind with the number of interviewees who cited them.

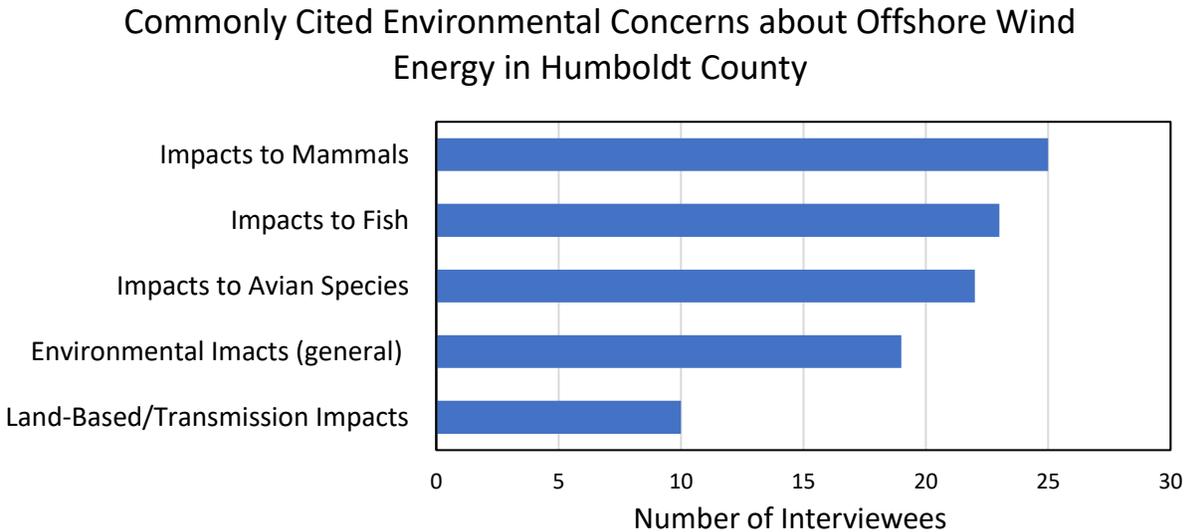


Figure 3. The most commonly cited environmental concerns from offshore wind in Humboldt County among interviewees (n = 41). Statements were coded as “general” if they were blanket concerns for the ‘environment’ as a whole or if they were not specific to one category (e.g. concern about wildlife).

#### 3.3.1.1 Marine Mammals

Twenty-five out of 41 stakeholders listed impacts to marine mammals as a concern with offshore wind in Humboldt County. Fourteen of those 26 specifically mentioned whale entanglement as a concern. Concerns included the available data on whale migration patterns and if whales would successfully be able to navigate the infrastructure, as well as additional ocean noise impacting whale's ability to communicate, among other concerns. Fishermen were concerned about the impact of additional whale entanglement on the fishing fleet itself. Whale entanglement in California is a significant and contentious issue that culminated in a 2018 lawsuit by the Oakland Center for Biological Diversity which closed the crab season three months early in 2018 (Phillips, 2019). Fishermen specifically wanted clarification about who would be responsible if a whale gets entangled. One fisherman said:

“We brought this up. If the crab gear's entangled on their cable, you know...so it collected a bunch of traps and a whale gets caught within it...who gets the credit for catching the whale? Probably not...wind power people even though the reason the whale got caught to begin with is because there was buoys and crab gear tangled all over [the offshore wind equipment]” (FSH stakeholder interview, 2018).

One wind industry stakeholder interviewed did not see entanglement as a concern, arguing that the size of the mooring lines for floating offshore wind technology were too large to pose a risk (EI stakeholder interview, 2018). At an offshore renewable energy conference in Seattle in 2018, a presentation by graduate students attempted to address the whale entanglement issue by showing a simulation of a whale in the backdrop of the (indeed) very large mooring lines (POET conference, 2018). The likelihood of significant debris accumulation, including stray fishing gear, leading to increased entanglement risk was not addressed in public meetings or by interviewees for this project. Regional tribes have expressed the need for more information on whale and other marine mammal entanglement risks from floating offshore wind systems (CEC, 2016).

### 3.3.1.2 *Birds*

Twenty-two out of 41 stakeholders mentioned a concern about potential impacts to avian species. One environmental stakeholder with a particular interest in birds emphasized that offshore areas of Humboldt County see species that are endangered or vulnerable in their traditional nesting areas, including some types of albatrosses and shearwaters. They said that while an offshore floating wind energy array would affect nesting, it could start “killing birds that are coming in and nesting off the grounds here” (ENV stakeholder interview, 2018). An environmental group representative with a state-wide organization said that there have been significant efforts to spread awareness of the unique haven that Humboldt Bay provides for avian species. They said that while reducing warming temperatures from climate change is key for the survival of avian species, efforts to protect Humboldt Bay as habitat are also key (ENV stakeholder interview, 2019).

### 3.3.1.3 *Fish Populations*

Twenty-four stakeholders, including 11 out of 13 fishermen, were concerned about an offshore wind project's impact to fish populations. Fishermen in particular are concerned about invasive noises and equipment that can change fish behavior, such as vibrations repelling fish away from their normal habitats (FSH stakeholder interviews). One fisherman said:

“With the amount of energy these things put off, is that going to repel fish? Is that going to...there's a big cable running to these things from land all the way out. Is [that] going to create a dead zone around that cable running all the way to the wind mills?” (FSH stakeholder interview, 2019).

Another fisherman was concerned about efforts to increase and preserve fish habitat. They said that:

“The Pacific Fisheries Management Council designates habitat areas of particular concern and those are the ones that...really merit protection because they're considered to be important habitat

for commercial fisheries...There's some overlap of these habitat areas of particular concern with the Humboldt Call Area" (FSH stakeholder interview, 2019).

#### 3.3.1.4 *Land Impacts*

Other environmental concerns were related to land-based impacts. Nine stakeholders (including six environmental group stakeholders) were concerned about the environmental impacts of additional or upgraded transmission lines and two stakeholders were concerned about land-based impacts in general, like additional power lines or construction on Humboldt Bay. One environmental stakeholder said that:

"Looking forward to what BOEM wants to do with like a max build out of the offshore wind resource, you know somewhere between 3 to 4 gigawatts of energy, that's going to require like, that would require a huge new...transistors and blah blah blah. I don't even know the terminology but you know we're going to need to have...more and bigger lines coming out of Humboldt County to serve that export energy market. So that...that's the other concern is, you know, how could it impact forests, how could it impact public lands?" (ENV stakeholder interview, 2018).

#### 3.3.2 *Impacts to the Fishing Fleet*

Aside from environmental concerns, impacts to the local fishing fleet have been the most discussed topics in public meetings, and 32 out of 41 stakeholders mentioned it as a concern, including every fishing and energy industry stakeholder interviewed. Fishermen and other stakeholders expressed concerns related to the loss of fishing grounds for the local fleet, safety concerns, potential displacement from bay resources due to the entrance of a large new industry, climate change and fisheries, and the ability of the fleet to mobilize and be engaged in planning discussions (stakeholder interviews).

##### 3.3.2.1 *Loss of Ground & Potential Crowding*

In terms of the leasing area itself, several fishermen said that trawl fishermen, who fish near 600 fathoms<sup>3</sup> or more, are particularly impacted (FSH stakeholder interviews). One fisherman said that the proposed lease area could impact the dover grounds as well as longline fisherman catching black cod and other species (FSH stakeholder interview, 2019). Another fisherman said in a public meeting that there are "only four or five [trawlers] left" (HFMA meeting, April 2018). A fishing stakeholder interviewed who trawls said that they "basically feels like [he's] losing part of [his] job" (FSH stakeholder interview, 2019). They said that even if the project did not prohibit all fishing within the potential project's floating wind turbine array, the connecting cables between the array and landfall would make it impossible for him to fish in the area regardless. At a HFMA meeting with BOEM in 2018, another fisherman said that "from a draggers point of view, there's no good scenario here" and they said that the potential lease area looked like "it was drawn with a crayon" (April 2018)<sup>4</sup>. When fishermen asked BOEM in the meeting about the status of fishing in a lease, they replied that the agency is not the one who "regulates fishing" and that fishermen would have to work that out with the developers or the state (April 2018).

Fishermen with other gear types said they would like to know what limitations on fishing will exist within a proposed lease area or wind turbine array. If the lease area is deemed a no-fishing zone altogether, fishermen say a domino effect will occur where every fisherman could have their grounds impacted, and potential crowding of remaining fishing grounds or port relocation may occur. Fishermen also expressed a desire to know how the subsea cable connecting the array to the shore would impact their fishing area. This includes both fishing near the cable and the cable's effects on the fish populations itself, including vibrations or electric wavelengths that might be emitted. One fisherman said:

"They're going to have to run a cable and if they say we don't want you fishing over the cable then that's further loss of grounds that will extend all the way to the shore. I don't know about that" (FSH stakeholder interview, 2018).

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<sup>3</sup> A fathom is equal to 6 feet and describes the depth of water (Oxford Dictionary).

<sup>4</sup> This meeting occurred before the official call area was announced in 2019.

Two developers interviewed said that trawling or longlining within the array would be “tough” and said that they would have to be careful with their site selection from the start (EI stakeholder interviews 2018). During public and private meetings, RCEA, BOEM and others have attempted to collect data to develop a lease area with the least fishing impact to begin with, although several stakeholders reported that BOEM did not make it clear how exactly information or data about fishing existing fishing data played into the selection of the final call area (stakeholder interviews; public meetings).

### 3.3.2.2 *Safety & Displacement from Bay Resources*

At the same time, regardless of the lease area, fishermen were also worried about how the entrance of an offshore wind industry could affect their use of resources and space within Humboldt Bay. Fishermen expressed concerns about their access into and out of the Bay as well as their gear storage and dock space. One fisherman said that conditions on the Humboldt bar (where vessels enter and exit the Humboldt Bay through the channel between the jetties) play a large factor on when fishermen can and cannot navigate the bay channel. Depending on the tide, there sometimes is only be a short window of time to safely cross, either coming into or out of the Bay. Increased boat traffic during these periods can be a major safety concern (FSH stakeholder interviews). In terms of dock access, the Humboldt Bay Harbor, Recreation, and Conservation District’s call for proposals to occupy Redwood Terminal 1 for the offshore wind industry has caused further consternation. One fisherman said in a 2019 public meeting that there is an ongoing battle between the fishermen and the Harbor District over access to Terminal 1. The fishermen said that the terminal is “100% occupied by the fleet” despite the district’s attempt to solicit bidders for the site (California State Committee on Fisheries and Aquaculture, May 2019).

In addition, some stakeholders mentioned skepticism that the offshore wind turbine apparatus itself would stay safely moored in North Coast’s rough seas and could thus present a navigational hazard (stakeholder interviews). Fishermen mentioned the difficulty of keeping existing NOAA buoys in place and wondered if the confidence of developers in their mooring lines was justified (FSH stakeholder interviews). On top of becoming a navigational and safety hazard, fishermen expressed concerns that turbines coming loose could also damage placed crab traps and other gear (FSH stakeholder interview, 2018; HFMA meeting, April 2018).

### 3.3.2.3 *Fishing and Climate Change*

Most government stakeholders also considered fishing impacts a concern. However, one local government stakeholder felt like the fishermen should recognize that our need to rapidly respond to climate change is a bigger danger to local landings than a floating wind turbine array. They said:

“I hope they see that there’s a lot of writing on the wall for them. That the fishing industry’s not going to be around for much longer. You know? So we have to be radical” (GOV stakeholder interview, 2018).

Fishermen in public meetings and in interviews, however, frequently point out that they recognize the need to move to renewable energy and to help prevent the impacts of climate change. However, they do not feel like they should be negatively impacted disproportionately when there are potentially other sites for renewable technology (stakeholder interviews, public meetings).

### 3.3.2.4 *Mobilization of the Fleet & Having a Voice*

Some fishermen feel that coming together to communicate concerns, or even to show up to public meetings can be difficult for them as a fleet. One fisherman said that:

“Fishermen are notoriously independent. It’s difficult to get five fishermen to agree on where to go for lunch so we don’t always speak with one voice let’s say” (FSH stakeholder interview, 2018).

Fishermen would rather be fishing, not attending meetings, one fisherman associated with the fishermen’s marketing association said in an interview (FSH stakeholder interview, 2018). Another now-

retired fisherman said that “the realities are: the fishing industry needs some really bitchin’ lobbyists” (FSH stakeholder interview, 2018). Even if fishermen do show up to meetings and voice their concerns, they often feel like their opinions are not heard. One fisherman said:

“I feel every time something like this happens, I just feel like we are railroaded. I mean, we have no say, really. We...have a say because the law says we get to have a say but the minds are already made up. So what we say really doesn’t matter” (FSH stakeholder interview, 2019).

### **3.3.3 Concerns Related to Project Scale**

Stakeholders were also concerned about the scale of a project—both in terms of actual equipment impacts and potential future expansion of use the technology in the area once an initial project gains a foothold. As noted above, fishermen and other stakeholders were concerned that the size of the turbines and associated infrastructure would be too big for the Bay and that construction of turbines on the Bay and their transport to sea would inhibit or displace other uses. For example, land-based assembly activities could take up substantial space on the waterfront and displace other working waterfront uses, such as those related to mariculture, fishing, and gear storage. Additionally, transport of the turbines could cause back-ups and slowdowns to occur for other vessels looking to enter and exit the channel.

Stakeholders were also concerned about the potential environmental impacts of transmission upgrades that might be necessary to support larger scale installations. An increase in the scale of offshore wind operations off Humboldt County – to support more and/or larger turbines and generation of energy beyond what is needed locally – could be highly scrutinized, especially if a land-based corridor is required for new power lines. One environmental stakeholder said that while they’re positive about renewable energy locally, construction of on-shore infrastructure to export energy is a “whole other thing” (ENV stakeholder interview, 2018). Another stakeholder, a retired fisherman and labor representative, connected the wariness about scale to the boom and bust economy of decades past. They said he:

“Won’t say the death of, but the great curtailment of a timber industry that ran roughshod over the community for a number of decades...we need to reinvent ourselves and maybe that reinvention really is that all industries are boutique here. We don’t do anything on a big scale. And the one thing that we do have here that is on a big scale is making sure that we survive” (FSH stakeholder interview, 2018).

### **3.3.4 Visual Impacts**

Sixteen stakeholders discussed the visual impacts of offshore wind and out of that only five stakeholders mentioned it as a personal concern. Two of those five were government stakeholders who worried about the public response to visual concerns and lamented that the topic needed to be adequately addressed. Two of the 16 stakeholders mentioned that while they were not personally concerned with visual impacts, they lamented that they expect it is a big factor for others. One environmental stakeholder that was concerned about visual impacts connected the issue with the larger problem of ocean industrialization and wondered if we should treat the ocean like any other piece of used land onshore (ENV stakeholder interview, 2018). They said:

“I mean there's something so fundamental to how humans relate to and view the ocean especially somewhere where there is not a bunch of oil rigs you know and things already there. And to mar that vista in any way it seems like...not to be like just romantic and poetic but I mean it does seem like it could have really a profound impact on people's ocean-going experience” (ENV stakeholder interview, 2018).

Most stakeholders who mentioned visuals were either unsure of what the visual impacts might be or felt that the wind array would be too far offshore to be a big concern (stakeholder interviews). One local government stakeholder said that:

“If people said ‘oh you can’t build this because it’s going to block my view of the sunset’ or something I’d say I’m sorry but that, that’s not going to bother me whatsoever” (GOV stakeholder interview, 2018).

A fisherman speculated that an offshore location would be ideal for developers who are avoiding visual impacts, however, “you don’t want to tell a fisherman that that’s why they’re putting that project 20 miles offshore. Because fishermen...not only will they have to look at it, they have to dodge it” (FSH stakeholder interview, 2018).

### **3.3.5 Tribal Concerns**

In addition to potential benefits for tribal nations and the region, tribes have also expressed concerns in public meetings and documents about a proposed offshore wind development in Humboldt County. In a 2017 memo to Jean Thurston, the BOEM coordinator for the California Intergovernmental Renewable Energy Task Force, California Energy Commission Tribal Liaison, Thomas Gates, outlined key concerns tribes expressed regarding offshore wind energy potential development in Humboldt County (2017). These concerns include:

- Religious and cultural importance of the ocean and viewshed;
- Effects to tribal resources, both biological and cultural, onshore and offshore, including burial and archeological sites and wildlife;
- Confidentiality and thoroughness of data collection related to cultural resources;
- Impacts to offshore rock outcrops and geography;
- Long-term impacts for future generations;
- Noise and vibration, especially as it impacts the sea floor and wildlife;
- Harbor development; and
- Long-term monitoring and cyber-attacks (Gates, 2017).

Federally recognized tribes are members of the California Intergovernmental Renewable Energy Task Force formed by governor Jerry Brown in 2016. California is required to consult with non-federally recognized tribes as well, and an adjacent tribal task force has been created as an avenue to discuss concerns. During a 2018 California Energy Commission Energy Policy Workshop, Vice Chair of the Yurok Tribe, Frankie Myers, said that he was unsatisfied with offshore wind outreach so far, and stated that he did not feel there had been sufficient tribal consultation by either BOEM or RCEA, stating that “even a postcard would be nice” (CEC meeting, April 2018).

## **3.4 Stakeholder Perceptions of the Development Process**

In addition to collecting information about stakeholders’ perceptions of the potential benefits and concerns related to offshore wind development in Humboldt County, the interviews also captured information about stakeholders’ perceptions of the development process as they had experienced it so far. In conversations about the development process, stakeholders discussed the BOEM leasing process, RCEA’s local efforts to develop offshore wind, and their perceptions of the community engagement effort to date.

### **3.4.1 Clarity and Transparency**

Stakeholders interviewed expressed some frustrations with the process so far, especially as it related to accessing information. One environmental group stakeholder said that they wanted to remain engaged and cared about the renewable energy prospect for Humboldt County, but they wished that “their only resource isn’t trying to navigate through BOEM’s website and process and flow charts and you know all of that” (ENV stakeholder interview, 2018). Seven stakeholders mentioned that they have been confused about the process so far despite the number of meetings that have occurred on the North Coast. This number includes four environmental stakeholders, two energy industry stakeholders, and one fishing stakeholder (stakeholder interviews). BOEM’s process flow chart appeared in at least four of the 15

meetings attended, and seemed to solicit more questions rather than clarity for participants of public meetings (public meetings, 2018). See appendix C for a copy of the process flow chart.

Some of these stakeholders were also confused about how RCEA's efforts to obtain an unsolicited lease request with a consortium of partners related to the larger federal BOEM leasing process. One environmental group stakeholder said that they felt like BOEM was attempting to use RCEA outreach and meetings as their own outreach process, potentially even listing engagement with groups they didn't actually meet with (ENV stakeholder interview, 2018). In one meeting, RCEA Director Matthew Marshall introduced BOEM for a presentation covering the federal leasing process. One fisherman attended the meeting and provided a statement to BOEM about the need to create an agreement between RCEA and the fishing community. However, they had meant to address RCEA, not the federal government (BOEM and CEC public meeting, August 2018). One developer said that BOEM representatives were visibly confused about the statement, and a representative from RCEA had to clarify that the fisherman meant to address them, not representatives on the federal side (EI stakeholder interview, 2018). The confusion between the entities made one interviewee on the development side consider a new public relations effort to clear the air (EI stakeholder interview, 2018).

#### *3.4.1.1 Trust*

Outside of general confusion and process complexity, fourteen stakeholders stated that they felt like the BOEM leasing process lacked transparency and/or that they were distrustful of either of the process itself or the entities involved. Some of these stakeholders indicated that they did not trust government entities to characterize the project sincerely, some questioned the motives of BOEM or RCEA, and some (particularly fishermen) were skeptical about whether statements made by the agencies and developers during initial public outreach would remain true during the process implementation (stakeholder interviews). This includes ten fishing stakeholders, two environmental stakeholders, and one local government official.

Some stakeholders communicated that they felt BOEM was simply going through the motions and checking boxes on their to-do list rather than listening and incorporating community concerns into their meeting materials and process design. An energy industry stakeholder said that they felt that BOEM would like to just stay in its comfort zone and follow the process they want to follow without addressing the local RCEA effort (EI interview, 2018). One government official felt that it was hard to trust the federal government in general, much less under the Trump administration (GOV stakeholder interview, 2018). A fisherman said that "it doesn't matter how many times we interview with BOEM. I ultimately feel as though...they will do whatever...they want to do in the ocean" (FSH stakeholder interview, 2018). An environmental stakeholder said that BOEM "can cross their T's and dot their I's and then just kind of forge ahead" (ENV stakeholder interview, 2018). Another fisherman was only convinced that BOEM would take local concerns into account if it doesn't interrupt their "bottom-line" (FSH stakeholder interview, 2018). On the state side, an environmental group stakeholder felt like the California State Representatives at public meetings also seemed distrustful of BOEM. She said that "you can see from the body language of all the California state agency reps that they're not feeling too great about this BOEM situation either" (ENV stakeholder interview, 2018).

When asked by the HFMA whether or not other stakeholders could participate in the California intergovernmental task force process, BOEM confirmed that they could attend the meeting and give public comment, but they could not have a seat at the table due to federal law. One fisherman replied, "Everyone's knows that if you're not at the table, you're on the menu" (HFMA meeting, April 2018).

#### *3.4.2 Tribal Procedural Comments and Concerns*

Local tribes have expressed similar comments and concerns about the development process in Humboldt County. In the memo to Jean Thurston cited above, California Energy Commission Tribal Liaison, Thomas Gates, outlined key concerns that tribes have expressed in meetings regarding the development process. To start, as required by law, BOEM is only allowed to include federally recognized tribes in its

tribal consultation process. As such it has heavily relied on the State of California to compile the totality of tribal concerns, including those from non-federally recognized tribes. In that vein, the state convened a California Offshore Renewable Energy (CORE) tribal informational meeting on November 21, 2016 at Trinidad Rancheria. The state also created a State Tribal Offshore Renewable Energy Working Group in 2017 that included both federally and non-federally recognized tribes. Initial meetings with tribes before and after the creation of this group, however, only included coastal tribes and not inland tribes. Participating tribes commented that inland tribes too have cultural and religious values associated with ocean development that should be taken into consideration (Gates, 2017). Further, tribes said that the function of the parallel group should be clearly defined with stated goals (Gates, 2017). As stated above, at least one Yurok Tribal Council member has said publicly that they does not believe adequate consultation with tribes has occurred (CEC public meeting, April 2018). One other tribal representative commented that outreach had been happening to some extent since 2016.

Additionally, while the Advisory Council on Historic Preservation (ACHP) regulations, as required by Section 106 of the National Historic Preservation Act (NHPA), require that tribes be consulted at every step of the process, the statute does not “prohibit adverse effects” (Suagee, 2010). Tribes in state meetings have said they are concerned that by the time they are consulted, investment obligations will render their project comments moot in the first place (Gates, 2017). Mr. Gates also mentioned that tribes would prefer to be involved, and provide input on, the construction process and mitigation measures (Gates, 2017).

Also of note is a desire by tribes to work with lead agencies on creating “inadvertent discovery” burial agreements...prior to project construction” (Gates, 2017). The Native American Graves Protection and Repatriation Act (NAGPRA) would require that a project be stopped if a burial site was found (Suagee, 2010). Perhaps in response to a lack of teeth in the consultation regulations, tribes also said that they might consider registering certain sites as state or national historic places, which would potentially stop or interrupt project siting (Gates, 2017; Suagee, 2010).

During the February 2020 tribal meetings described above, tribal leaders and staff were appreciative of the substantial information provided, and commented they would welcome ongoing engagement with and access to the research as it evolves.

In their letter of support for RCEA’s proposed Offshore Wind Project, the Wiyot Tribe (2019) stressed the importance of transparency and local control in potential offshore wind developments. The Tribe said they supported RCEA’s proposal because of their “proven track record of community engagement and transparent public process. [ . . . ] We trust them to ensure that local resources are developed with security, sustainability, and affordability in mind.” The letter also stated that the Tribe believes “that direct community involvement and local stakeholder support are essential to the viability and success of an offshore wind project.”

### ***3.4.3 Hopes for the Future***

Stakeholders also listed several aspects of the process so far that they deemed positive. For one, some in the environmental community appreciate BOEM’s ability to elicit and employ biological experts and amass information in a centralized way (stakeholder interviews). One example is the California Offshore Wind Energy gateway, a website where stakeholders can view, upload, curate data on everything from annual landings to whale migrations<sup>5</sup>. One environmental group stakeholder personally knows one of the BOEM biological scientists and appreciates their involvement in the project (ENV stakeholder interview, 2018). Another environmental group stakeholder said that BOEM was able to present offshore data that they could not obtain from RCEA (ENV stakeholder interview, 2018).

Moving forward, stakeholders said that they would like to see a process that is open and transparent, accessible to the public, and community-based. This includes 17 stakeholders who expressed a desire for

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<sup>5</sup> This website can be accessed at: <https://caoffshorewind.databasin.org/>

the community to remain centered in the project, including in order to give input, to benefit from the project directly, and perhaps to have a direct ownership or a public-private partnership in a project (stakeholder interviews). The ability to work directly in the process, and to trust that input is being heard and addressed, is a key attribute that stakeholders interviewed say they value. It is also important to consider this positivity for local benefit and control in light of current distrust in the process. When asked about RCEA involvement in the process, one stakeholder said, “thank god we have them” (GOV stakeholder interview, 2018). In the meantime, one wind industry stakeholder said, “we’re aiming for a barista, hotel clerk, waiter/waitress kind of grassroots movement [in support of offshore wind]” (EI stakeholder interview, 2018).

#### **4. CONCLUSION**

Understanding stakeholder perceptions of offshore wind energy is key to a successful development process. Having accessible knowledge of what stakeholders perceive to be the potential benefits, including climate change and port development, and of what they perceive to be potential concerns, including environmental impacts and impacts to the fishing fleet, can be utilized by government agencies and developers to design a project and process that is more equitable and suits current community needs. Data collected by the project team indicate that there are cross-cutting concerns about both the environmental impacts and impacts to the local fishing fleet. Data shows that community members also perceive potential environmental (through fossil fuel reduction) and economic benefits from the development of offshore wind. The data also show that scale and process matter to stakeholders in the region. Stakeholders seemed wary about project scale and potential infrastructure upgrades. They also expressed concerns about their ability to obtain information and provide meaningful comments during the development process. Stakeholders expressed concerns about how the process has proceeded so far and indicated a preference for a transparent process with extensive community engagement and opportunities for more local control.

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## **APPENDIX A - INTERVIEW QUESTIONS**

This appendix provides a list of the interview questions used during the stakeholder interviews.

- Who are you? What might be your connection to wind energy development in the area? How long been working/doing what you are doing?
- What might be the potential (negative) impacts of offshore wind in this location on your entity? (List your top concerns -- follow-up on each concern to get detailed information about it)
- Are there locations that would be preferable (or not preferred) when considering placement of an offshore wind facility? Where? Why?
- What might be potential benefits to your group/entity of developing off-shore wind in this area? (List top benefits -- follow-up on each concern to get detailed information about it)
- Do you support efforts to develop an offshore wind project in HumCo? Why or why not? What would you like to see in the project in order to win and/or maintain your support?
- Some large-scale energy projects develop what are called “community benefits packages” (explain). Would you be interested in a community benefits package related to this project? If so, what would you like to see in the package?
- Have you engaged in discussion surrounding offshore wind development so far? What has been your involvement? How have you felt about the way the process is proceeding?
- If offshore development were to proceed how would you like to see the development process run and managed?
  1. How to engage with the public and stakeholders?
  2. How are decisions made?
  3. Who is in control?

## **APPENDIX B - CODES**

This appendix includes the list of codes developed by the project team to organize and interpret stakeholder interview data and meeting notes. The list shows a hierarchy of codes with the codes on the far left the “parent codes”, the ones to the right of those “sub-codes”, and the ones further to the right “sub-sub codes.” See section 2.0 Methods for further detail.

### Benefits

- Community Benefits Package/Payments
- Energy Independence/Local Control
- Jobs/Economy
- Other
- Port Upgrades
- Reduce Emissions/Climate Change

### Concerns

- Cost
- Environmental Impacts
  - Birds
  - Fish
  - Land-Based
  - Land-Based Transmission Upgrade
  - Marine Mammals
  - Mitigation
- Impacts to Fishermen
- Other
- Scale/Change of Scale
- Visual Impacts

### Process

- Clarity/Transparency
- Hopes for Process in the Future
- Local Relationships
- Meetings/Stakeholder Outreach
- Other
- Siting/Location/Scale
- Trust

**APPENDIX C - BOEM FLOW CHART**

This appendix includes the Bureau of Ocean Energy Management’s leasing process flow chart as seen in North Coast public meetings.

