

COMMUNITY READINESS FOR ECONOMIC DEVELOPMENT:

ASSESSING READINESS FOR OCEAN RENEWABLE ENERGY ALONG THE OREGON COAST

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Ocean Renewable Energy

There is tremendous energy in ocean waves and the ocean represents a largely untapped renewable energy resource. The ocean is an appealing energy source because of its ability to provide large amounts of clean, renewable energy (PCCI, INC., 2009). The United States' coasts have the potential to supply abundant quantities of renewable energy (Bureau of Ocean Energy Management). The clean energy industry is also a strong economic development strategy for the country. Additionally, the Pacific Northwest is a key ocean energy development area because it is one of only a few areas in the world with abundant wave power resources (Bureau of Ocean Energy Management).

In Oregon

Oregon is at the forefront in reducing energy use and promoting renewable alternatives to fossil fuels (Kitzhaber). The State of Oregon supports ocean energy and believes it is important to Oregon's future because of its ability to support a stable, healthy electrical grid, future electricity needs, and sustainability goals as well as create jobs and energy independence on Oregon's coast (Oregon Wave Energy Trust). The development of ocean energy in Oregon can help build resiliency into the State's economic development strategy (Kitzhaber).

In January 2013, the State of Oregon adopted the new Territorial Sea Plan Part 5 (Oregon Wave Energy Trust, 2013). Part 5 of the Territorial Sea Plan includes policies and maps governing renewable energy development in state waters. Specifically, the plan identifies four sites designated as Renewable Energy Facility Site Suitability Areas (REFSSA). The report identified these sites as ideal for wave energy technology based on "access to electrical grid connections, access to deep-water ports and service ports, ocean bottom type, bathymetry, and avoidance of conflict with ocean resources and the users of those resources" (Oregon Wave Energy Trust, 2013). Renewable energy companies will be encouraged to develop these areas first. In addition, the report identifies Resources and Uses Management Areas (RUMA) available for ocean energy development. It is important to understand if the communities are ready for ocean energy development; however, all of the decision factors for identifying the four REFSSAs focus only on technical and environmental feasibility and do not address community readiness.

Oregon's ocean resource, available infrastructure, and political support from the state make Oregon optimal for ocean renewable energy testing and development. However, it is important for Oregon to develop the ocean energy industry wisely and carefully.

Ocean Energy Industry

The ocean energy industry is in its infancy compared to the wind and solar energy industries (ECONorthwest, 2009). Many ocean technologies have not been deployed on a large scale and are in the early stages of development. Due to the infancy of the industry and lack of developments within the United States, the industry faces many challenges to development. For the successful development of ocean energy in the nation and in Oregon, these key challenges need to be overcome (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011). Addressing the key challenges is necessary for ocean energy development to be successful. If ocean energy development begins without the proper support system in place, the project and the industry have a higher chance of delay and/or failure.

Community Readiness

The Community Readiness Model provides a step-by-step process for assessing a community's readiness (Jumper-Thurman, Edwards, Plested, & Oetting, 2003). The theory explains a set of nine developmental stages a community may go through. Each of the nine stages moves the community toward implementing and sustaining a program or project. Additionally, the Community Readiness Model outlines strategies at each stage that can help move the community to the next stage.

Although the community readiness theoretical model originally evaluated drug and alcohol abuse programs, a variety of disciplines use the model today (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). In fact, the community development field has been moving towards a concept of community readiness for years and the economic development field has adapted the community readiness model to assess a community's readiness for economic development.

Purpose

The adoption of the Territorial Sea Plan Part 5 allows the development of Oregon state waters. The Territorial Sea Plan identifies Coos County as one of the areas suitable for ocean wave energy, making Coos County a prime location to test the theory of community readiness (Figure 4).

This study applies the theory of community readiness, customized to the ocean energy industry, to the Coos County region. The study uses a scorecard assessment tool customized for ocean energy development to assess Coos County's readiness.

Ultimately, this study aims to understand (1) how well the community readiness theory works when evaluating a specific industry and (2) if Coos County is ready to develop ocean renewable energy along its coast.

Findings

Overall, 31 percent of respondents believe the Coos County region is prepared for ocean renewable energy development. However, 62 percent believe the region is neither prepared nor unprepared and 8 percent believe the region is unprepared.

The respondents' overall perception of the Coos County region's ability for ocean renewable energy is also reflected throughout their readiness assessment responses. By averaging the readiness scores from all assessment categories, the Coos County region receives a community readiness for ocean renewable energy score of 5; the preparation stage (Table 1. Coos County's Readiness for Ocean Renewable Energy Development Table 1).

Table 1. Coos County's Readiness for Ocean Renewable Energy Development

| Assessment Metric | Readiness Score | Readiness Stage |
|---|------------------------|------------------------|
| Economic Development | 4 | Preplanning |
| Infrastructure and Services | 5 | Preparation |
| Workforce | 6 | Initiation |
| Community Development | 5.5 | Preparation/Initiation |
| Civic | 5 | Preparation |
| Communication | 4 | Preplanning |
| Ocean Renewable Energy Readiness | 5 | Preparation |

The Coos County region's readiness score indicates that the region is in the preparation stages for ocean renewable energy.

The readiness assessment of the Coos County region shows that the area is not completely ready for ocean energy development. However, many of the challenges identified by the ocean industry are already mitigated in the Coos County region.

The Coos County region is at the preplanning stage or above for all assessment categories related to ocean energy development. Each category has areas stable and ready for ocean energy development, such as port infrastructure to support the industry. However, each category also has areas for capacity building, such as determining access to needed manufacturing facilities.

The region is in the preparation stage of readiness for ocean renewable energy. This means the region is not ready for ocean energy development currently but has capacity in place to begin preparing for development.

Overall, the Coos County region is on its way to being ready for ocean renewable energy development. The industry has the potential for success if the region builds additional capacity in all the assessment categories. Therefore, ocean renewable energy development is possible in the Coos County region in the future. However, although the region offers the technical pieces the industry requires, the industry will need to spend time building community and stakeholder support for any development to be successful.

CHAPTER I: PURPOSE

The purpose of this study is to test the community readiness theory for economic development specifically for the ocean renewable energy industry. This study is a prototype economic development tool that may be replicable for other ocean energy development areas and projects or other economic development projects.

Community readiness is a theoretical model created by the Tri-Ethnic Center for Prevention Research, at Colorado State University, to understand a community's level of readiness for implementing a community alcohol and drug abuse prevention program. Other disciplines now use the community readiness model to evaluate specific projects or programs. Because communities are at different levels of capacity and different stages of readiness for implementing programs, understanding a community's level of readiness is an important factor in determining whether a program will be effective and supported by the community.

A community readiness assessment for economic development evaluates a community on different categories related to economic development. Each category contains detailed questions or statements used to understand the level of readiness for each category.

Scope of this Study

This study tests the community readiness theory on Coos County, an Oregon community designated for ocean energy development by the Oregon Territorial Sea Plan. The adoption of the Territorial Sea Plan Part 5 allows the development of Oregon state waters. The study applies the theory of community readiness customized for ocean renewable energy in the Coos County region. The study is based on a scorecard assessment tool for each of the community readiness categories customized for ocean renewable energy development.

The assessment evaluates the Coos County region on six assessment metric categories: (1) economic development capacity; (2) infrastructure and services capacity; (3) workforce capacity; (4) community development capacity; (5) civic capacity; and (6) communication.

This is a technical study not a political study. Rather than focusing on the political aspects of ocean renewable energy development in the Coos County region, this assessment focuses on the economic development capacity and support needed for ocean renewable energy development. The assessment focuses on local professionals' perceptions of the Coos County region's level of community readiness for ocean renewable energy development.

Ultimately, this study aims to understand (1) how well the community readiness theory works when evaluating a specific industry and (2) if Coos County is ready to develop ocean renewable energy along its coast.

What Makes This Study Different

The Community Readiness Theory is being adapted for use in the community and economic development field and other communities use the theory broadly. For example, other communities use the Community Readiness Theory to understand if their community is ready for economic development in general. Their assessment covers whether the community has what is needed for economic growth and if the community can support growth of any industry.

This study is different because it focuses on a community's readiness for a *specific industry*. While this study does cover questions about the Coos County region's ability to support general economic growth, the focus of the assessment is on the region's ability to support the ocean renewable energy industry. This assessment covers the specific needs of the ocean renewable energy industry, such as specific port infrastructure needed for development. Additionally, this study focuses on an emerging industry with many documented challenges. Because of this, it is even more important to understand if the community is ready and can support this type of development. This research informs the Coos County region about its ability to develop the ocean energy industry and points to areas for capacity building within the community.

Finally, all of this research aims to understand how well the Community Readiness Theory works when evaluating a specific industry. Not only does this research identify the Coos County region's readiness for ocean energy development, it also evaluates the assessment itself by understanding areas where the assessment worked well and areas for improvement. Other communities and other industries can use the methods and results of this study to conduct a readiness assessment of their own.

Organization of this Report

This report includes six chapters:

Chapter 2: Ocean Renewable Energy explains the context of ocean renewable energy in the United States and in Oregon. This chapter also details the current challenges facing the ocean energy industry and provides lessons learned from an ocean energy project in Cape Cod.

Chapter 3: Community Readiness describes the Community Readiness Theory and how to conduct a community readiness assessment.

Chapter 4: Community Readiness for Economic Development explains how the Community Readiness Theory is adapted for use in the economic development field. This chapter also explains the assessment categories used for economic

development readiness assessments and the implications for local governments and organizations.

Chapter 5: Coos County's Readiness explains the findings from the Coos County region's readiness assessment. This chapter also outlines areas for capacity building within the Coos County region and the implications for the ocean renewable energy industry.

Chapter 6: Analysis of Community Readiness Assessment provides a description of how well the Community Readiness Theory worked in evaluating the ocean renewable energy industry. This chapter also provides areas for improvement for future readiness assessments.

This report also includes two appendices:

Appendix A: Coos County Readiness Assessment Tool

Appendix B: Readiness Assessment Tool Results

CHAPTER 2: OCEAN RENEWABLE ENERGY

There is tremendous energy in ocean waves and the ocean represents a largely untapped renewable energy resource. The ocean is an appealing energy source because of its ability to provide large amounts of clean, renewable energy (PCCI, INC., 2009). Today, a variety of methods exists to capture renewable energy from the ocean.

Ocean energy draws energy directly from surface waves or from pressure fluctuations below the surface. The energy drawn from waves is converted into electricity by offshore or onshore systems. Wave power devices extract energy directly from the surface motion of ocean waves, while offshore wind turbines harness the energy of strong, consistent winds found over the ocean (Bureau of Ocean Energy Management). These technologies are designed to be installed in nearshore, offshore, and far offshore locations (Bureau of Ocean Energy Management).

Researchers speculate that various forms of ocean renewable energy can generate a significant portion of global energy (ECONorthwest, 2009). Interest in harnessing the power of the ocean to produce renewable energy is growing around the world because it is a predictable and reliable energy source (Oregon Wave Energy Trust). Future ocean energy facilities that utilize these technologies are currently planned in Ireland, Spain, United Kingdom, Germany, Portugal, France, Norway, Denmark, Sweden, Belgium, and the United States (Ocean Energy Europe, 2014).

In the United States

A clean energy revolution is taking place across America (U.S. Department of Energy). There is a growing interest in the United States to solve the increasing energy prices and depletion of natural resources through developing renewable sources of energy, including ocean energy (PCCI, INC., 2009).

In 2011, President Obama called for the United States to generate 80 percent of electricity through clean energy sources by 2035 (National Offshore Wind Strategy). Following in June of 2013, President Obama developed the Climate Action Plan that again challenged the United States to permit 20 gigawatts of clean energy on public lands by 2020 (Bureau of Ocean Energy Management). An important part of the Climate Action Plan involves the responsible development of all of America's renewable energy sources, such as solar, wind, geothermal, bioenergy, and water (U.S. Department of Energy).

The United States' coasts have the potential to supply abundant quantities of renewable energy (Bureau of Ocean Energy Management). The increased supply of renewable

energy can help reduce the nation's greenhouse gas emissions, diversify the energy supply, provide cost-competitive electricity to coastal communities, and stimulate economic growth (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).

The clean energy industry is also a strong economic development strategy for the country. Each year the clean energy industry generates hundreds of billions in economic activity and opportunities still exist to invent, manufacture, and export clean energy technologies (U.S. Department of Energy). The growth in the industry is expected to grow rapidly in the next few years, especially with the development of ocean energy along the nation's coasts. Additionally, ocean energy has the potential to create permanent operations and maintenance jobs as well as manufacturing and installation jobs in the United States (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).

The high potential of ocean renewable energy spurred the U.S. Department of Energy (DOE) to create strategies to encourage and support the development of a world-class ocean energy industry in the United States (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011). These strategies will guide the DOE to promote and accelerate responsible commercial ocean energy development in the U.S. (National Offshore Wind Strategy). The Pacific Northwest is a key ocean energy development area because it is one of only a few areas in the world with abundant wave power resources (Bureau of Ocean Energy Management).

In Oregon

Oregon is at the forefront in reducing energy use and promoting renewable alternatives to fossil fuels (Kitzhaber). This can be seen through Oregon's record of successfully pursuing clean energy policies, programs, and practices through public and private initiatives. Because of these initiatives, Oregon ranks second in the nation in the clean energy economy, fourth in the nation for energy efficiency, and fifth in the nation for green jobs per capita; making Oregon a national leader in energy efficiency, renewable resource development, and clean energy job growth.

In 2007, the Oregon State Legislature passed the Oregon Renewable Portfolio Standard (RPS) that requires electricity providers to supply 25 percent of the state's electricity from renewable resources by the year 2025 (Conway, 2009). The Department of Energy identified Oregon as well suited for ocean energy because of its substantial wave resource and existing coastal infrastructure (Economic Impact Analysis of Wave Energy Phase One). The Oregon entire coast has enough wave resources to provide up to 500 megawatts (MW) of energy (Oregon Wave Energy Trust). Oregon can capitalize on its 300 miles of coastline, characterized by powerful waves and constant winds, to create ocean renewable energy.

The ocean energy industry is also good for Oregon's economy. Green industries are growing faster than the overall economy and states with more green industries do better during recessions than those without green industries. The renewable energy industry also has a multiplier effect creating jobs in other industries including manufacturing, causing green jobs to be more accessible to workers without college degrees (Kitzhaber). The State of Oregon supports ocean energy and believes it is important to Oregon's future because of its ability to support a stable, healthy electrical grid, future electricity needs, and sustainability goals as well as create jobs and energy independence on Oregon's coast (Oregon Wave Energy Trust). The development of ocean energy in Oregon can help build resiliency into the State's economic development strategy (Kitzhaber).

Oregon's ocean resource, available infrastructure, and political support from the state make Oregon optimal for ocean renewable energy testing and development. However, it is important for Oregon to develop the ocean energy industry wisely and carefully.

Key Challenges facing Ocean Renewable Energy

The ocean energy industry is in its infancy compared to the wind and solar energy industries (ECONorthwest, 2009). Many ocean technologies have not been deployed on a large scale and are in the early stages of development. Due to the infancy of the industry and lack of developments within the United States, the industry faces many challenges to development. For the successful development of ocean energy in the nation, and in Oregon, these key challenges need to be overcome (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011). The following are the key challenges currently facing ocean renewable energy development in the United States:

1. **Infrastructure:** The ocean renewable energy industry requires specific infrastructure needs to be successful. These needs include grid connection and operation, specialized ocean vessels, special portside infrastructure, and undersea electricity transmission lines. Many coastal communities do not have all of these infrastructure pieces in place, which significantly increases the risk and uncertainty for ocean energy developers as well as increases development costs (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).
2. **Siting and Permitting:** The ocean renewable energy industry requires industrial zoned land and buildings along the coast for development. Additionally, each segment of the ocean energy industry has different siting needs and it is important to understand the needs of the industry segment for each development. However, communities do not have established sites or permitting processes for ocean energy development. Additionally, ocean energy policy on all levels—local, state, and federal—are difficult to navigate and create unique permitting challenges of their own for ocean energy developers. These

challenges increase the cost of development and damage the development of the supply chain and other supporting infrastructure (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).

3. **Financing:** The development of an ocean energy facility requires capital investments of billions of dollars for each project. These costs are difficult for developers to bear alone causing public financial support and/or private support necessary to the viability of any project (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).
4. **Public Support:** Public acceptance of ocean renewable energy is crucial to the development of ocean energy and the long-term success of the industry. Public support is needed for financial support, infrastructure improvements, siting, and permitting of the ocean energy industry (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).
5. **Stakeholder Support:** Stakeholder support for ocean renewable energy is also crucial to development and industry success. Ocean energy development can potentially compete with stakeholders' other interests such as fishing, recreation, view shed, navigation, tourism, and military uses. Stakeholders will have concerns that need to be addressed and may try to stop ocean energy development. Without stakeholder support, ocean energy development will most likely be unsuccessful (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).
6. **Workforce:** A workforce skilled in all areas of ocean renewable energy, such as technology, manufacturing, and maintenance, is crucial to the development of ocean renewable energy facilities. Not all coastal communities have a skilled workforce in these areas making it difficult for ocean energy developers to find employees for their operations. Workforce development focusing on curricula for ocean renewable energy and associated fields is needed (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).

All of these challenges need to be addressed for ocean energy development to be successful. If ocean energy development begins without the proper support system in place, the project has a higher chance of delay and/or failure.

Lessons from Cape Cod

Addressing the key challenges is necessary for ocean energy development to be successful. If ocean energy development begins without the proper support system in

place, the project has a higher chance of delay and/or failure. Nantucket Sound off Cape Cod, Massachusetts is the perfect example of the potential issues surrounding ocean energy development. In 2001, Cape Cod began pursuing ocean wind energy off the Nantucket Sound (Zeller, 2013). Thirteen years later Cape Cod does not have a single wind turbine in the ocean.

Development in Cape Cod experienced many key challenges cited for ocean renewable energy. The complicated permitting and regulatory process took over ten years to navigate. The project has received dozens of lawsuits from a wide range of stakeholders including environmentalists, fishermen, and Native Americans. The project also receives strong community opposition from Save Our Sound, a community alliance committed to protecting the Nantucket Sound (Save Our Sound). On the other hand, many community members and community groups do support ocean renewable energy development in Cape Cod.

Currently the project faces a siting challenge by both the regulatory process and local, wealthy property owners who oppose the development (Zeller, 2013). All of these issues have and continue to extend the timeline and the project budget by years and millions of dollars.

As the first proposed offshore ocean wind project in the country, Cape Cod and the Nantucket Sound were bound to experience issues and setbacks. However, these issues are avoidable in future projects by addressing the key challenges of ocean renewable energy development. Thus, to ensure the success of projects and avoid the issues in Cape Cod, it is necessary to understand if a community is ready for ocean energy development before moving forward with a project.

CHAPTER 3: COMMUNITY READINESS

All communities implement a project or program at some point in time. However, if the community is not ready for the new project or program, or ready for change, then the new idea will fail (The University of Oklahoma Health Sciences Center, 2000). Many well-intended and well-designed community projects fail because the design did not take into account the community's preparedness to carry out the needed work. The result is an ineffective project, which wastes time and resources causing frustration throughout the community (Scherer MPH, Ferreira-Pinto PhD, Ramos, & Homedes). Researchers and practitioners understand that for a community effort to be successful it must be community specific, culturally relevant, and consistent with the community's capabilities (The University of Oklahoma Health Sciences Center, 2000). Researchers have also found that communities vary in their interest and willingness to try different projects or programs (The University of Oklahoma Health Sciences Center, 2000). Community readiness is an innovative approach to understanding if a community is ready to implement a project or program (The University of Oklahoma Health Sciences Center, 2000). Readiness is an important factor because it indicates what can be done in a community and what needs to be done to implement a project or program (Jumper-Thurman, Edwards, Plested, & Oetting, 2003).

The Community Readiness Model

Community Readiness is a theoretical model created by the Tri-Ethnic Center for Prevention Research, at Colorado State University, to understand a community's level of readiness for implementing a community alcohol and drug abuse prevention program (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). The community readiness theory is the result of a series of failures experienced by faculty of the Tri-Ethnic Center for Prevention (Oetting, Jumper-Thurman, Plested, & Edwards, 2001). Faculty from the center participated in a series of tests for a media campaign aimed at drug use prevention. The faculty's role was to train media teams to implement the drug use prevention campaign in their community. Although the trainees received extensive training from the center's faculty, the programs failed in each community. All of the programs failed because the communities were not ready to implement a full-fledged drug use prevention program.

After the failures, the Tri-Ethnic Center for Prevention realized that a new prevention program is only appropriate when the community is ready (Oetting, Jumper-Thurman, Plested, & Edwards, 2001). The center recognized that new programs would only be successful by understanding community's readiness for the program compared to the level of readiness needed to install the prevention program. If the community was not ready, they needed to help move the community to a higher level of readiness. Center

faculty developed the Community Readiness Model to characterize and assess a community's readiness to take action on an issue (Kelly, Edwards, Comello, Plested, Jumper-Thurman, & Slater, 2003).

The Community Readiness Model is based on two research theories: psychological readiness for treatment and community development theory (The University of Oklahoma Health Sciences Center, 2000). Psychological readiness assesses an individuals' readiness to and for change, while community development theory focuses on community-level, collective action. Both of these concepts are important when asking a community to make a change, such as implementing an alcohol and drug prevention program, or any type of program or project. The Community Readiness Model builds on these theories by helping a community reach consensus on an issue and identify its level of readiness for change.

The Community Readiness Model provides a step-by-step process for assessing a community's readiness (Jumper-Thurman, Edwards, Plested, & Oetting, 2003). The theory explains a set of nine developmental stages a community may go through. Each of the nine stages moves the community toward implementing and sustaining a program or project. Additionally, the Community Readiness Model outlines strategies at each stage that can help move the community to the next stage.

Benefits of Using the Community Readiness Model

The Community Readiness Model has many benefits (Tri-Ethnic Center for Prevention Research, 2014). These benefits include:

- Measuring a community's readiness on several dimensions to help focus initial efforts;
- Helping identify a community's weaknesses, strengths, and likely obstacles moving forward;
- Working within the community's culture to identify the appropriate actions for the community's level of readiness; and
- Aiding in identifying resources and partnerships to ensure success of the intervention.

The Community Readiness Model is unique because it allows researchers and practitioners to accurately describe the community's developmental level concerning a specific topic; provides the tools to help focus and direct community efforts toward a desired goal; and helps maximize resources while minimizing the chance of failure (Jumper-Thurman, Edwards, Plested, & Oetting, 2003).

Community Readiness Assessment

Each community falls into a different stage of readiness. Communities undergo a community readiness assessment to determine the community's appropriate stage of readiness. The results from each category are then evaluated together to determine to community's overall stage of readiness.

Stages of Readiness

The Tri-Ethnic Center for Prevention created the Community Readiness Model with nine stages of developmental readiness (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). Each stage represents a community's capacity to implement a new program or project. A community's capacity and likelihood of success increases as it moves up the stages of readiness.

The community readiness model has nine stages of readiness:

1. No Awareness: The community and/or leaders have little or no recognition of the need for a program or project.
2. Denial: The community and/or leaders deny the need for a program or project.
3. Vague Awareness: The community and/or leaders have a general feeling that there is a need for a program or project.
4. Preplanning: The community and/or leaders begin to recognize the need for a program or project.
5. Preparation: The community and leaders are planning and focusing on practical details of a program or project.
6. Initiation: The community and leaders are starting to implement a program or project. The program or project is still viewed as a new effort.
7. Stabilization: The community and leaders are running one or two programs or projects. The programs or projects are viewed as stable.
8. Confirmation/Expansion: The community and leaders support expanding or improving efforts. The community and leaders are planning new efforts.

9. **Professionalization:** The community and leaders have sophisticated knowledge of the program(s) and/or project(s). High-trained staff run the programs, leaders are supportive, and community involvement is high.

The stages of community readiness are qualitative descriptions of a community's readiness for change (Oetting, Donnermeyer, Plested, Edwards, & Kelly, 1995). The stages are in a hierarchy, or ladder, to show the stage a community can go next. Throughout the process of starting a new program, it is possible for a community to move up or down the stages of readiness. For example, if the program experiences a setback the community can move from initiation back to the preparation stage. Alternatively, if a community is making great strides toward implementing a new program it can move from preplanning to stabilization quickly.

It is important to note that one stage of readiness is not better than another (Jumper-Thurman, Edwards, Plested, & Oetting, 2003). The intent of the stages of readiness is not to point out that a community is not ready to implement a program, but rather to identify a community's stage of readiness in order to help move the community toward achieving its goal.

The community readiness stages are extremely versatile (Oetting, Donnermeyer, Plested, Edwards, & Kelly, 1995). The readiness scale can assess a community's readiness to implement a local, state, or federally initiated program. The readiness scale can also measure a community's ability to support a new program (Donnermeyer, Plested, Edwards, Oetting, & Littlethunder, 1997). The scale can also identify the progress a community has made on the readiness scale towards implementing a new program. Finally, the readiness scale can identify if a community is ready to implement additional programs.

Assessment Approach

Based on the knowledge that a community effort is successful only if it is community specific, the Community Readiness Model focuses on key informant surveys to assess a community's stage of readiness (The University of Oklahoma Health Sciences Center, 2000). Key informant surveys have a long successful history in needs assessments because of its ability to obtain fact-based, specific data about a community. This data allows the researcher or practitioner to make an informed decision and successfully determine the community's stage of readiness.

Community members are the best way to assess a community because they are the ones who know and understand what is happening within the community. A key informant can be anyone in the community from a local decision maker to a person who is knowledgeable about the specific topic (The University of Oklahoma Health Sciences Center, 2000). Because it is unlikely that one person will have a complete understanding of the community, the key informant survey focuses on people from different

backgrounds and areas of expertise related to the topic (Jumper-Thurman P. , Plested, Edwards, Foley, & Burnside, 2003).

The readiness assessment evaluates a community on different categories identified for the specific program or issue (Jumper-Thurman P. , Plested, Edwards, Helm, & Oetting, 2001). The original community readiness assessment evaluated five categories related to drug prevention: knowledge of efforts; leadership; community climate; knowledge of the issue; and resources (Tri-Ethnic Center for Prevention Research, 2014). Once the key informants answer the assessment questions, a level of readiness from one to nine is assigned to each category for each survey (Tri-Ethnic Center). The evaluator reviews the rating from all surveys on the five dimensions to determine the best overall readiness stage for each assessment dimension (The University of Oklahoma Health Sciences Center, 2000). Each category will receive a community readiness score meaning a community can be at a different level of readiness for each category (Tri-Ethnic Center for Prevention Research, 2014). For example, Table 2 shows potential scores of a community.

Table 2. Potential Category Scores

| Category | Readiness Score | Readiness Stage |
|----------------------|------------------------|------------------------|
| Knowledge of Efforts | 3 | Vague Awareness |
| Leadership | 5 | Preparation |
| Community Climate | 2 | Denial |
| Knowledge of Issue | 3 | Vague Awareness |
| Resources | 1 | No Awareness |

Finally using the score from each category, the evaluator assigns the community the stage of readiness that best represents the aggregate results; however, the evaluator must pay close attention to the cut off scores within each category. For example, if four of the dimensions—knowledge of efforts; leadership; knowledge of the issue; and resources—all receive high ratings but community climate scores low on the stages of readiness, it suggests the community is not ready to implement a new program. In this case, community climate receives extra weight in the overall assessment because even though the community is ready in all other dimensions, if the community does not support the initiative it will most likely fail.

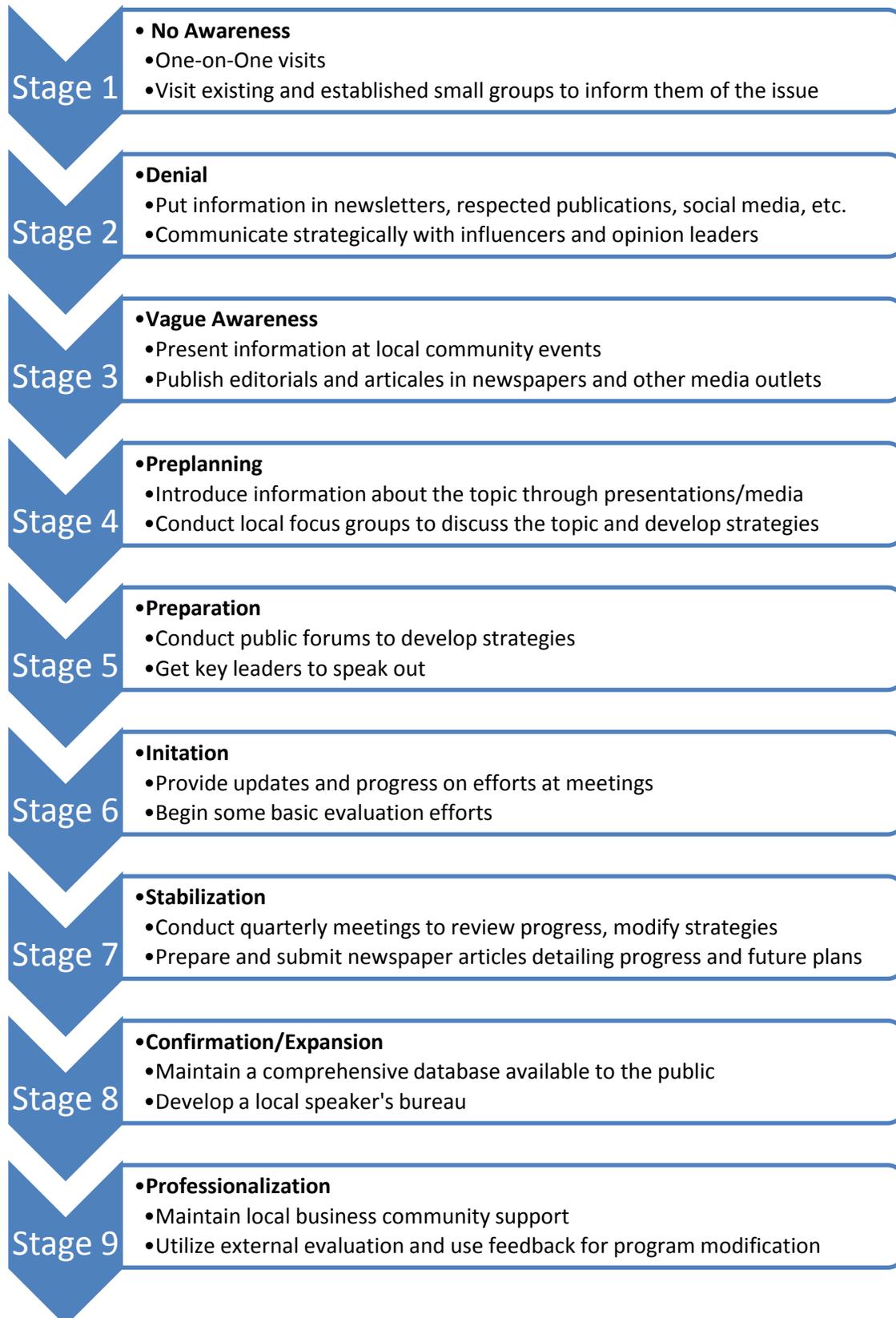
Communities can also perform a Community Readiness Assessment during or after the implementation of a project (Kelly, Edwards, Comello, Plested, Jumper-Thurman, & Slater, 2003). Performing an assessment during or after implementation serves two purposes: (1) to assess the overall effectiveness of activities and (2) to provide insight into key outcomes—such as shifts in community norms—not available through other evaluation methods.

Next Steps

The Community Readiness Model not only identifies a community's level of readiness, it also helps move a community towards implementation. The Community Readiness Model uses the final readiness score to develop a plan of action for the community to implement the project or program (Tri-Ethnic Center for Prevention Research, 2014). The goal is to move the community from its current level of readiness to the next higher level of readiness. Movement to the next level of readiness can occur in different ways. For example, the community can focus on moving a category that received a low level of readiness score or the community can focus on moving all categories to the next level of readiness.

Community members should be involved with developing strategies to move to the next level of readiness (Jumper-Thurman P. , Plested, Edwards, Foley, & Burnside, 2003). When community members are involved with the planning process there is a higher chance for community investment in the project. Community members are encouraged to create their own ideas to move the community to the next level of readiness; however, professionals can provide input and direction for the action plan (The University of Oklahoma Health Sciences Center, 2000). Figure 1 shows example strategies to use in each stage of readiness. It is important to note that these strategies are examples and methods chosen must be appropriate to the community and the program (Oetting, Jumper-Thurman, Plested, & Edwards, 2001).

Figure 1. Strategies to Raise Community Readiness Levels



Previous Applications of Community Readiness

The Tri-Ethnic Center for Prevention developed the Community Readiness Model for drug and alcohol prevention programs with the broader aim of adapting the program for use in different topic areas (Oetting, Donnermeyer, Plested, Edwards, & Kelly, 1995). The result is a model with an organic system that is flexible to different topics and situations (Oetting, Jumper-Thurman, Plested, & Edwards, 2001). The validation of the Community Readiness Model comes from the many communities that have adapted the model to tackle their community problems (Jumper-Thurman, Edwards, Plested, & Oetting, 2003). Since 1995, communities across the country and internationally have used the Community Readiness Model for a variety of research projects and contexts (Kelly, Edwards, Comello, Plested, Jumper-Thurman, & Slater, 2003).

Examples of problems addressed by the model include (Tri-Ethnic Center for Prevention Research, 2014):

- Drug and alcohol use
- HIV/AIDS
- Child abuse
- Environmental trauma
- Heart health
- Head injury
- Transportation
- Intimate partner violence
- Hepatitis C
- Animal control
- Obesity/nutrition
- Taxation (e.g. tobacco taxes)
- Youth substance-use prevention

In all situations, the communities were able to adapt the Community Readiness Model to their culture. The flexibility of the model allowed each community to achieve success in addressing their community problem.

CHAPTER 4: COMMUNITY READINESS FOR ECONOMIC DEVELOPMENT

The Community Readiness Model offers a structure to follow, allowing other communities to utilize the assessment. Other disciplines now use the Community Readiness Model to evaluate specific projects or programs. Because communities are at different levels of capacity and different stages of readiness for implementing programs, understanding a community's level of readiness is an important factor in determining whether a program will be effective and supported by the community.

How does Community Readiness relate to Economic Development?

Although the Community Readiness Theoretical Model originally evaluated drug and alcohol abuse programs, a variety of disciplines use the model today (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). In fact, the community development field has been moving towards a concept of community readiness for years and the economic development field has adapted the community readiness model to assess a community's readiness for overall economic development.

Community readiness for economic development gauges a community's readiness for economic development in general and identifies the community's stage of readiness to support economic growth. An economic development community readiness assessment (1) provides a basis for understanding how community dynamics relate to economic development and (2) provides information about a community's economic development readiness across different categories. This helps the community understand the level of economic development it is capable of undertaking effectively and documents areas needed to build capacity (Oregon Economic and Community Development Department, 2001).

The Oregon Economic and Community Development Department, currently known as Business Oregon, created a guidebook and readiness assessment tool to help communities assess their business and economic development capacity and to identify next steps in achieving their economic development goals. The following national and state departments and/or organizations have also adopted community readiness assessments for economic development:

- The National Association of Counties (National Association of Counties, 2004);
- Michigan (Pure Michigan, 2012);
- Arkansas (Entergy Arkansas, Inc.);
- Wyoming (Wyoming Business Council, 2010);
- Georgia (Georgia Institute of Technology Economic Development Institute, 2002);
- Nebraska (Nebraska Community Foundation, 2012);

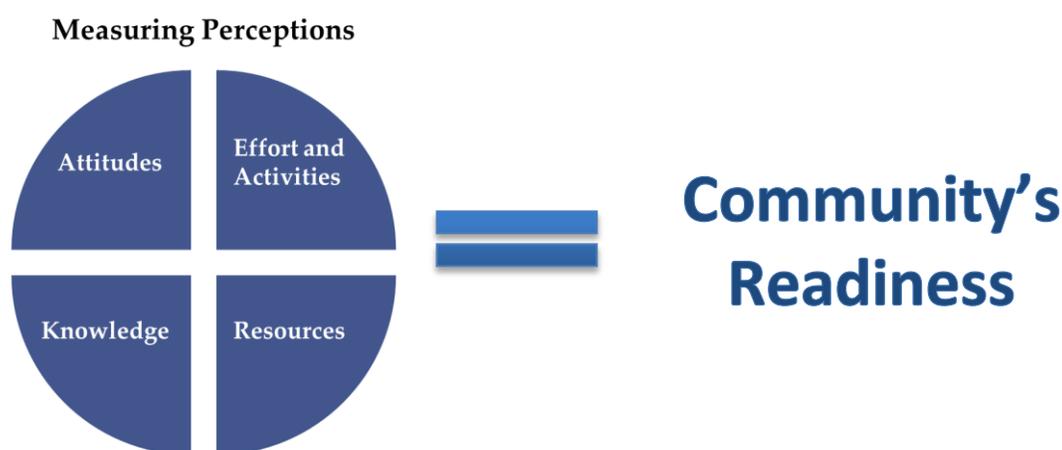
- Louisiana (Louisiana State University College of Agriculture); and
- Parts of Canada (Grow Our Region).

Community Readiness Assessment

Assessment Approaches

A community readiness assessment measures perceptions of stakeholders to assess a community's readiness (Figure 2) (Tri-Ethnic Center for Prevention Research, 2014).

Figure 2. Assessing Community Readiness



Source: Tri-Ethnic Center for Prevention Research

Communities can assess their economic development community readiness using four different approaches: (1) interviews with key informants, (2) stakeholder group discussions with a trained facilitator, (3) self-assessment with an assessment tool completed by an economic development professional or staff person, or (4) a community-wide survey of community members. The research does not indicate which assessment method is most effective; however, the Tri-Ethnic Center for Prevention Research suggests using key informant interviews while most of the communities identified using community readiness for economic development use some variation of a self-assessment tool (Edwards, Jumper-Thurman, Plested, Oetting, & Swanson, 2000). The following are descriptions of each assessment approach:

1. **Interviews with Key Informants:** An interviewer asks key informants, those who are likely to know about economic development, a set of questions related to the evaluation metrics. The interviewer takes each descriptive statement from the interviewee and assigns the statement a value of 1 to 9 based on the stages of community readiness. The interviewer uses the value from each evaluation

metric and assigns the community a readiness stage (Jumper-Thurman P. , Plested, Edwards, Helm, & Oetting, 2001).

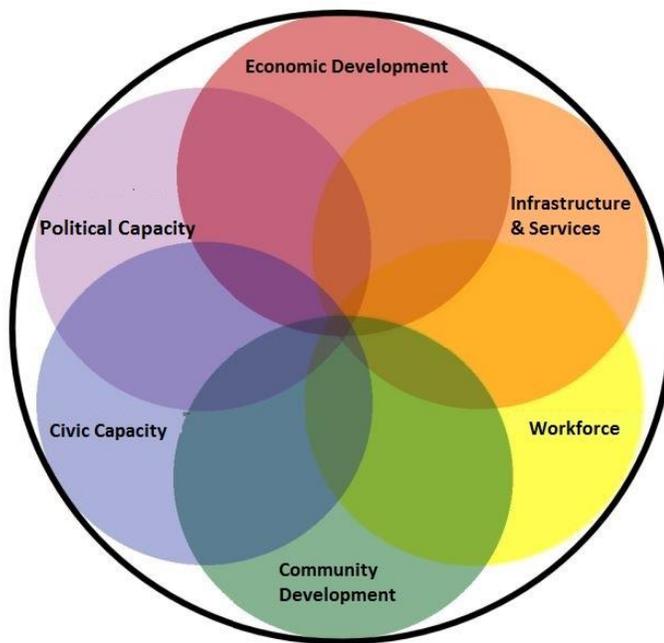
2. Stakeholder Group Discussions with a Trained Facilitator: The community holds group discussions with stakeholders and a trained facilitator. The facilitator guides the group through questions related to the evaluation metrics. The group discusses each question and assigns a value of 1 to 9 based on the stages of community readiness. The group uses the value from each evaluation metric and assigns the community a readiness stage (Oregon Economic and Community Development Department , 2001).
3. Self-assessment with an Assessment Tool: An individual with economic development knowledge, most likely an economic development staff person, evaluates the community using a predetermined assessment tool/scorecard. The assessment tool has a series of questions or statements related to the evaluation metrics. The individual answers the statements according to a likert scale. For likert scales, each choice is assigned a value. For example, on a five choice likert scale, the best choice receives a 5 and the worst choice receives a 1. The assessment tool totals the score and assigns the community a readiness stage (Oregon Economic and Community Development Department , 2001).
4. Community-wide Survey of Community Members: The community-wide survey uses an assessment tool or scorecard similar to the self-assessment tool, which is distributed to community members. The community members take a survey of questions related to the evaluation metrics. Participants answer the survey questions using a likert scale. For likert scales, each choice is assigned a value. For example, on a five choice likert scale, the best choice receives a 5 and the worst choice receives a 1. The survey results are totaled and the community receives a readiness stage (Nebraska Community Foundation , 2012).

Assessment Metrics

A community readiness assessment evaluates a community on different categories related to economic development. Each category contains detailed questions or statements used to understand the level of readiness for each category. The following are the categories identified from existing community assessment tools (

Figure 3):

Figure 3. Economic Development Assessment Metrics



Source: Tri-Ethnic Center for Prevention Research; Adapted for Economic Development

1. Economic Development Capacity: evaluates the community’s ability for economic development. Questions cover topics such as the community’s economic development vision, economic development plan, business incentives, access to financial capital, economic development groups and programs, etc.
2. Infrastructure and Services Capacity: evaluates the community’s existing infrastructure and services, as well as the capacity for growth. Questions cover topics such as public services, access to modes of transportation, telephone and internet access, number of large users utilities can handle, availability of land and buildings, etc.
3. Workforce Capacity: evaluates the community’s existing workforce and the community’s ability to educate the workforce. Questions cover topics such as availability of capable and productive workforce, organizations providing education, job shadow and internship programs, entrepreneurship programs, etc.

4. Community Development Capacity: evaluates the community's capacity for community development. Questions include topics such as public transportation, community members' view of the community, quality of life, comprehensive land use plans, etc.
5. Civic Capacity: evaluates the community's civic capacity for economic development. Evaluation covers community members' support and commitment for economic development. The evaluation also evaluates how informed the community is about economic development and their involvement in economic development efforts.
6. Political Capacity: evaluates the community's political capacity for economic development. Evaluation covers the commitment of local leaders including politicians, business people, professionals, labor, community activists, and community groups/organizations.

Implications for Local Governments and Organizations

Local governments and organizations can adapt the Community Readiness Model and assessment tools to evaluate and identify a community's readiness for specific economic development projects and/or efforts. A potential starting point is to evaluate a community based on the six assessment metric categories: economic development capacity; infrastructure and service capacity; workforce capacity; community development capacity; civic capacity; and political capacity. Local governments and organizations can also add assessment metric categories specific to the economic development project. The evaluator can adapt the questions and measurements in each assessment metric category to evaluate the capacity for the identified project. For example for an ocean energy project, workforce capacity would evaluate a community's ability to educate a workforce for ocean energy careers.

Creating an assessment tool will allow local governments and organizations to identify a community's stage of readiness for economic development. This information will allow local governments and organizations to identify if the community is ready for a specific economic development project, if the community is almost ready and areas to focus capacity building, or if the community needs to begin the process of preparing for economic development. The community readiness framework and assessment tool can aid local governments, organizations, and the Economic Development Administration in developing economic development projects in the appropriate locations.

Potential Steps for Implementing a Community Readiness Assessment

This section outlines broad steps local governments and organizations could take to conduct a community readiness assessment. Each community assessed will require a customized strategy to account for community differences. The evaluator can use multiple assessment strategies during a community assessment. I recommend using a mixed strategy approach of combining a predetermined assessment tool with stakeholder interviews. This approach allows the evaluator to ask each key stakeholder/stakeholder group the same questions to receive a well-rounded viewpoint of the community.

The following steps are intended as a starting point:

Step 1. Determine Assessment Metrics

Before conducting a readiness assessment of a community, it is important to determine the assessment categories and associated evaluation questions for each category. Each community may require a different set of evaluation questions and assessment categories. Local governments and organizations could create an assessment tool or scorecard that is customizable for each economic development project.

Step 2. Determine Readiness Criteria

It is important to decide upfront the level of readiness considered acceptable for economic development. This can include identifying the overall stages of readiness and/or the stages for each assessment category considered acceptable for development. This step will help ensure the evaluation process is equitable and transparent for all projects and all communities.

Step 3. Identify Evaluator

The next step is to identify the individual or group conducting the assessment. I suggest having an outside organization conduct the community readiness assessment to help ensure objectivity. Local governments and organizations can have an outside organization conduct the assessment, hire a trained facilitator, or use an outside consultant.

Step 4. Identify Stakeholders

It is important to involve the community in the community readiness assessment to share their local knowledge. Identifying all possible stakeholders is important to help ensure all viewpoints are included in the assessment. In this step the evaluator, with the help of the local government or organization, should identify the stakeholders in the

community regarding the economic development project, and invite the stakeholders to participate in the community readiness assessment.

Step 5. Conduct Assessment

After laying the foundation for the assessment by determining the assessment metrics and stakeholder groups, the responsible party is ready to conduct the community readiness assessment. The assessment uses the predetermined assessment tool to conduct the assessment with individual stakeholders and/or stakeholder groups. The responses from the stakeholder interviews are recorded for each category and each question.

Step 6. Compare Stakeholder Responses

The evaluator compares the stakeholder responses from each category upon completion of the assessment tool. This step identifies any discrepancies in answers between groups. Areas of discrepancy need either more discussion or future capacity building. The evaluator then assigns each category a readiness stage.

Step 7. Evaluate Community Readiness

The evaluator is ready to determine the overall community readiness based on the readiness stage from each assessment category. The evaluator looks at the information as a whole to determine the community's overall level of readiness for the economic development project ranging from no awareness to professionalization.

Step 8. Develop an Action Plan

Based on the community's stage of readiness and areas needing further capacity building, the local government or organization can develop a specific set of actions to address inadequacies.

CHAPTER 5: COOS COUNTY'S READINESS

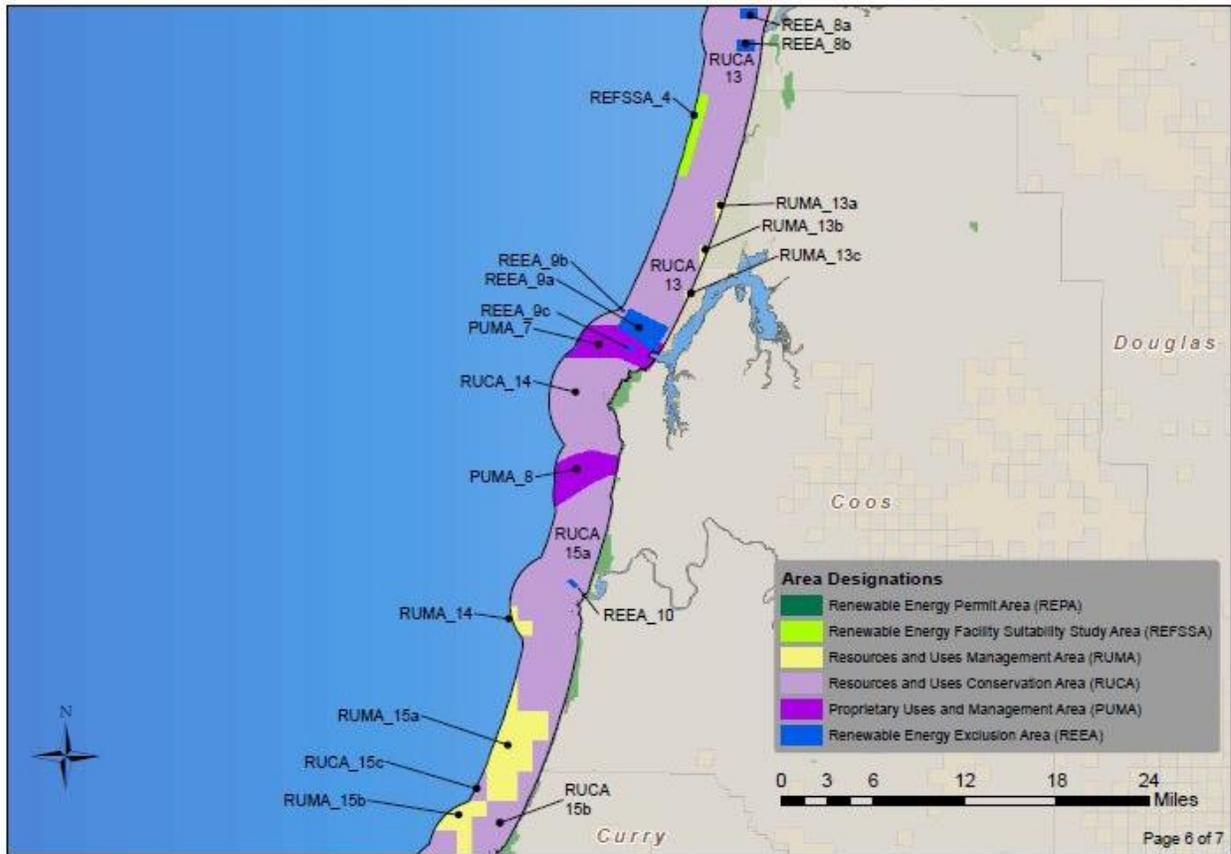
In January 2013, the State of Oregon adopted the new Territorial Sea Plan (Part 5) (Oregon Wave Energy Trust, 2013). Part 5 of the Territorial Sea Plan includes policies and maps governing renewable energy development in state waters. Specifically, the plan identifies four sites designated as Renewable Energy Facility Site Suitability Areas (REFSSA). The report identified these sites as ideal for ocean energy technology based on “access to electrical grid connections, access to deep-water ports and service ports, ocean bottom type, bathymetry, and avoidance of conflict with ocean resources and the users of those resources” (Oregon Wave Energy Trust, 2013). Renewable energy companies will be encouraged to develop these areas first. In addition, the report identifies Resources and Uses Management Areas (RUMA) available for ocean energy development. It is important to understand if the communities are ready for ocean energy development; however, all of the decision factors for identifying the four REFSSAs focus only on technical and environmental feasibility and do not address community readiness.

Coos County

The adoption of the Oregon Territorial Sea Plan Part 5 allows the development of Oregon state waters. The Territorial Sea Plan identifies Coos County as one of the areas suitable for ocean wave energy, making Coos County a prime location to test the theory of community readiness (Figure 4).

This study applies the theory of community readiness, customized to the ocean energy industry, to understand if the Coos County region is ready to develop ocean renewable energy along its coast. The study uses a scorecard assessment tool customized for ocean energy development to assess Coos County's readiness.

Figure 4. Territorial Sea Plan Part 5 – Coos County Renewable Energy Areas



Source: Oregon Territorial Sea Plan, Part 5: Use of the Territorial Sea for the Development of Renewable Energy Facilities or Other Related Structures, Equipment or Facilities.

Assessment Tool Methodology

After an extensive literature review of the Community Readiness Theory, its purpose, and previous applications, I created a customized assessment tool for ocean renewable energy development. Conducting the assessment involved five steps: (1) Review of Other Assessment Tools, (2) Creation of Assessment Tool, (3) Identification of Respondents, (4) Implementation, and (5) Analysis.

Review of Other Assessment Tools

Although Community Readiness is new in the field of economic development, eight communities have developed basic assessment tools for economic development: Michigan, Arkansas, Wyoming, Georgia, Nebraska, Louisiana, Oregon, and Canada. I reviewed each community's assessment tool for the following elements: (1) Structure,

(2) Question Categories, (3) Question Content, (4) Assessment Metric, and (5) Analysis Method. I used these examples to help create my assessment tool.

Creation of Assessment Tool

I created a customized assessment tool for the ocean renewable energy industry through the examples of other communities' assessment tools and by reviewing the development needs of the ocean energy industry (Advanced Research Corporation, 2009). Additionally, I reviewed the current key challenges facing the ocean energy industry in the United States (U.S. Department of Energy: Energy Efficiency & Renewable Energy, 2011).

I used the information about the ocean energy industry to adapt five of the six assessment categories—economic development; infrastructure and service capacity; workforce capacity; community development capacity; and civic capacity—from other economic development assessment tools to the ocean energy industry. For example, questions in the workforce capacity section evaluated Coos County's ability to educate a workforce for ocean energy careers. I did not use the sixth assessment category, political capacity, for the assessment because of the politically sensitive nature of ocean energy development in Coos County. Instead, the assessment tool included a section on how to best communicate with key stakeholders in the Coos County region regarding ocean energy development.

I also used the nine stages of community readiness to create likert scales for the assessment tool to assess Coos County's level of readiness. Additionally, each assessment category included a place for respondents to comment on Coos County's readiness in the specific topic area. The assessment tool used for the study is located in Appendix A.

Identification of Respondents

The literature review of the Community Readiness Theory stressed the importance of community members as the best resource for understanding a community's readiness. Therefore, this assessment targeted thirty professionals in the Coos County region. Because the assessment categories covered a broad range of topics, I identified professionals knowledgeable in each specific category: economic development capacity; infrastructure and service capacity; workforce capacity; civic capacity; community development capacity; and communication. Each respondent could be knowledgeable in more than one assessment category.

Implementation

The purpose of the assessment tool was to understand targeted professionals' *perceptions* of Coos County's level of community readiness for ocean renewable energy. I did not intend the tool as a survey of all community members. Therefore, to engage respondents, I made personal phone calls requesting respondents to complete the assessment tool.

I implemented the assessment tool through Qualtrics, a high-quality online survey tool. Each respondent received a personalized survey link to ensure only targeted respondents could fill out the assessment tool.

Analysis

I analyzed the assessment tool in three steps:

1. I used basic central tendencies to assign each question in each category a level of readiness. The assessment included three likert scales: 9-point scale for the stages of readiness, 5-point agreement scale, and 4-point need scale. I analyzed each likert scale differently.
 - a. 9-point likert scale: Actionable questions used the 9-point likert scale, meaning the questions covered topics the Coos County region could take action on. For example, the Coos County region can take action on infrastructure improvements for ocean renewable energy development. The 9-point likert scale represented the nine stages of community readiness. I analyzed these questions by using a score of 1 through 9, related to the nine stages of readiness, for each question. I multiplied the number of respondents that answered the question by the score for the likert chosen. I then averaged the total score by the number of respondents to assign each question a level of readiness.
 - b. 5-point agreement scale: Questions that represented the community's agreement for the statement used a 5-point likert scale. Questions on the agreement likert scale received any of the nine stages of readiness based on a qualitative assessment of the question and the level of agreement by respondents. I qualitatively compared what the question asked to the percentage of respondents who either agreed or disagreed for each question. The readiness scale directly related to the nature of the question and the level of agreement or disagreement. For example, a question about economic development in general versus a specific question about the ocean energy industry could receive a different level of readiness even if the answer distribution is the same.

- c. 4-point needed scale: Questions about something the Coos County region needs used a 4-point likert scale. Questions on the needed likert scale received any of the nine stages of readiness based on a qualitative assessment of the question and the level of need indicated by respondents. I qualitatively compared what the question asked to the percentage of respondents who thought the item was either needed or not needed for each question and assigned the question a level of readiness for the Coos County region.

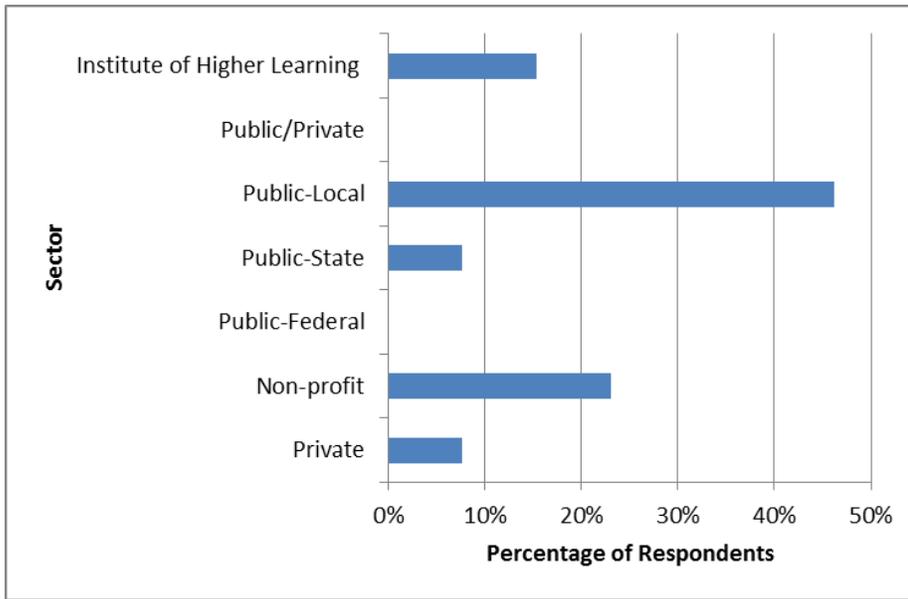
I also flagged questions with contradicting answers among respondents within each likert scale as areas for future discussion or possible capacity building.

2. After assigning each question a level of readiness, I used these scores to evaluate and assign the assessment category a level of readiness. I averaged the level of readiness for each question to receive the initial level of readiness for each category. I also used the flagged questions and additional comments for the category to adjust the level of readiness up or down depending on the content of the comments. For example, if the comments indicated that the Coos County region was not ready then I adjusted the level of readiness down; however, if the comments indicated that Coos County was very ready then I adjusted the level of readiness up.
3. Finally, I used the readiness score from each assessment category to assign the Coos County region a level of readiness. I also used the respondents' overall assessment of how prepared or unprepared the Coos County region is for ocean renewable energy to adjust the overall level of readiness.

Assessment Respondents

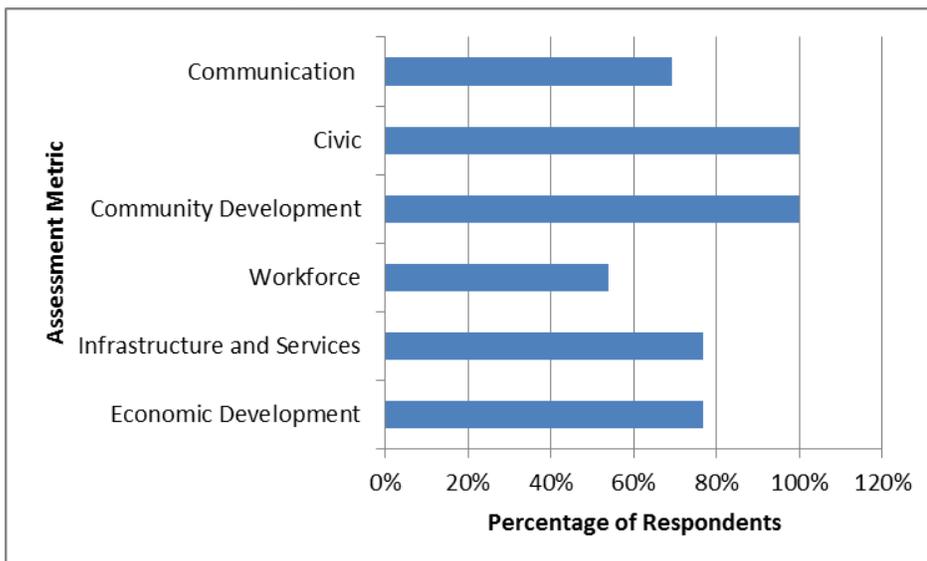
Thirteen respondents took the Coos County readiness assessment. Respondents represented five different sectors within the community (Figure 5).

Figure 5. Respondents by Sector



The assessment tool asked respondents questions about Coos County’s readiness for ocean renewable energy related to six assessment categories. All respondents could answer questions about community development, civic capacity, and communication (Figure 6). Respondents could also answer questions about economic development, infrastructure and services capacity, and/or workforce capacity if they self-identified themselves as knowledgeable about the topic at the beginning of the assessment.

Figure 6. Respondents by Area of Knowledge



Assessment Category Readiness

The readiness assessment asked questions in six assessment categories: economic development, infrastructure and services, workforce, community development, civic

capacity, and communication. Each category received its own level of community readiness.

Economic Development Capacity

The readiness assessment covered questions about Coos County's economic development capacity in general and for ocean renewable energy development. Ten respondents self-selected to answer the questions about economic development. Questions covered four topics: economic development as a priority, financial resources, land and buildings, and economic development plans.

Economic Development as a Priority

All respondents agree that economic development is a high priority for the Coos County Region. One respondent commented that economic development is a high priority, most notably promoting activities that already exist, such as commercial crabbing. Although the region supports economic development, ocean renewable energy is not as high of a priority. A respondent commented that ocean renewable energy would provide great benefits to the local and national community; however, the Coos County region has not done a lot of studying or planning regarding ocean renewable energy. This indicates that while respondents believe ocean renewable energy could provide benefits to the community, the community is currently not treating the opportunity as a priority. Additionally the common perception, as mentioned by a respondent, is that ocean renewable energy will interrupt existing economic development activities that already bring millions of dollars into the economy; therefore, those activities receive the most attention.

The Coos County region receives a community readiness score of five (preparation) for economic development as a priority. While economic development in general is a high priority indicating the community has a stable economic development program (stage 7), the community places less attention on ocean renewable energy indicating the community is in the preparation stage of considering ocean renewable energy as a priority.

Financial Resources

Over 70 percent of survey respondents agree that the Coos County region has financial resources available for business and industrial development. Respondents also believe the Coos County region needs financial incentives to subsidize ocean renewable energy development in the county; 71 percent believe the county needs financial incentives while 14 percent believe they are critical. Additionally, over 80 percent believe the community needs financial incentives to address the above cost of ocean renewable energy as a utility.

The Coos County region receives a community readiness score of four (preplanning) for financial resources. The ocean renewable energy industry cites financing as a key

challenge because ocean energy facilities require billions of dollars in capital investment for each project. The high cost of development therefore increases the cost of ocean renewable energy to consumers. Providing financial resources is critical for the success of any ocean renewable energy project and the Coos County region recognizes the importance. However, the region only agrees these financial resources are necessary but currently does not have ocean renewable energy specific financial resources available. This indicates the region recognizes the need for the resources and is in the preplanning stage (stage 4).

Land and Buildings

Over 60 percent of respondents agree the Coos County region has industrial zoned *land* that would allow activities that support ocean renewable energy development. However, only 25 percent agree the region has industrial zoned *buildings* for ocean renewable energy development and 50 percent *disagree*. While it is unclear if the region has the necessary land and buildings for ocean renewable energy, the respondents believe the region needs predetermined sites and a streamlined permitting process. Fifty-seven percent of respondents believe the region needs a list of predetermined sites and a streamlined permitting process for ocean renewable energy development and 14 percent believe the two are critical for the region.

The Coos County region receives a community readiness score of four (preplanning) for land and buildings. The ocean renewable energy industry cites siting and permitting as key challenges for development. The industry requires industrial zoned land and buildings for development but many coastal communities do not have available or predetermined sites for development. In addition, the industry cites the permitting process as difficult and hard to navigate. It is unclear whether the region has industrial zoned buildings for ocean renewable energy but it does have available industrial zoned land. The region also recognizes the need to address the siting and permitting challenges of the industry, indicating the region is in the preplanning stage (stage 4) for land and buildings.

Economic Development Plans

The Coos County region has a comprehensive land use plan for the county and each of its cities. The assessment asked respondents if the region's comprehensive plans impede ocean energy development, such as not allowing ocean renewable energy power lines to come to shore. Survey respondents did not agree with each other whether the comprehensive plans do or do not impede ocean renewable energy development. Strongly disagree, disagree, neither disagree nor agree, and agree all received 25 percent of responses. Therefore, it is unclear if comprehensive plans impede ocean energy development.

The readiness assessment also asked questions about economic development plans. A majority of respondents (71 percent) believe the region needs an economic development plan that considers regional and statewide strategies and opportunities

for ocean energy while, 14 percent believe the plan is somewhat needed. Additionally, nearly 60 percent of respondents believe the region needs an economic development plan that targets the ocean renewable energy industry, while 29 percent believe it is somewhat needed. A respondent also commented that the Coos County region needs to refresh their current economic development plan.

The Coos County region receives a community readiness score of three (vague awareness) for economic development plans as they pertain to ocean renewable energy. While current plans do not necessarily stop ocean renewable energy development, the plans do not target or support ocean energy development. Additionally, current economic development plans are outdated and need updating. The Coos County region has a general feeling that the region needs economic development plans that target the industry and are therefore in the vague awareness stage (stage 3).

Economic Development Readiness

Overall, by averaging the readiness score for the economic development categories, Coos County receives an economic development readiness score of four (Table 3). The readiness score indicates that the Coos County region has the necessary pieces and support in place to begin planning for ocean renewable energy development.

Table 3. Coos County Economic Development Readiness

| Category | Readiness Score | Readiness Stage |
|-----------------------------|-----------------|--------------------|
| Priority | 5 | Preparation |
| Financial Resources | 4 | Preplanning |
| Land and Buildings | 4 | Preplanning |
| Economic Development Plans | 3 | Vague Awareness |
| Economic Development | 4 | Preplanning |

Infrastructure and Services Capacity

The readiness assessment covered questions regarding Coos County’s infrastructure and services capacity for ocean renewable energy development. Ten respondents self-selected to answer the questions about infrastructure and services. Questions covered five topics: manufacturing, transportation, port infrastructure, utilities, and infrastructure improvements.

Manufacturing

Ocean renewable energy development requires access to different types of manufacturing services, such as concrete, fiber-reinforced plastics, steel, and machinery manufacturing. Respondents’ perceptions of access to manufacturing services range

from strongly agree to disagree in all categories. Over 60 percent of respondents agree that the Coos County region has access to a concrete manufacturer that can adapt and modify designs for the ocean energy industry, while 12 percent disagree. Access to steel manufacturing and large water pump manufacturing are the two categories where respondents do not disagree about access. Over 35 percent of respondents agree the region has access to a steel manufacturer and a large water pump manufacturer that can produce customized products for the ocean energy industry; however, 50 percent of respondents did not know about access.

The Coos County region may have access to a manufacturer that works with fiber-reinforced plastics but it is unclear. Thirty-seven percent of respondents believe the region has access to fiber-reinforced plastic while 25 percent of respondents do not; the largest disagree of all manufacturing services. Additionally, over 30 percent of respondents agree that the region has access to a general-purpose machinery manufacturer, while 12 percent disagree. Finally, a small possibility exists that the region may have access to a power distribution and transformer equipment manufacturer; however, only 25 percent of respondents agree.

The Coos County region receives a community readiness score of five (preparation) for access to manufacturing. The region does have access to a concrete manufacturer, indicating the region is stable (stage 7) in this area. However, the region may have access to the other needed manufacturing services but it is unclear from the respondents' answers. This indicates that, regarding manufacturing as a whole, the region is in the preparation stage (stage 5) of gaining access to all needed manufacturing services.

Transportation

The Coos County region's access to transportation services is high. The ocean renewable energy industry requires movement of large items and equipment. Over 60 percent of respondents strongly agree and 37 percent of respondents agree that the region has access to a transportation company able to transport large items. The road system in Coos County can also support the transportation of large items and equipment; over 70 percent of respondents agree. Additionally, all respondents agree the region has access to a rail service that can ship large items and access industrial land along the coast.

The Coos County region receives a community readiness score of seven (stabilization) for transportation. The regions' roadway and railroad can support the transportation of large items and access sites along the coast indicating Coos County's transportation access for the ocean renewable energy industry is stable (stage 7).

Port Infrastructure

The Coos County region also has strong port infrastructure. All respondents agree the region has access to barges and/or tugboats capable of transporting large devices from manufacturing sites to development sites along the coast. Over 80 percent of

respondents agree the region has access to a survey vessel needed to map the topography along the coast and over 60 percent agree the region has a dock or mooring site available for ocean renewable energy. However, only 37 percent of respondents agree the region has access to a cable deployment vessel needed for ocean renewable energy development, while 25 percent disagree.

The Coos County region receives a community readiness score of six (initiation) for port infrastructure. The ocean renewable energy industry cites infrastructure as a key challenge to development. The industry requires specific infrastructure to be successful, such as specialized ocean vessels and special portside infrastructure. The Coos County region already has in place or has access to most of the port infrastructure needed for ocean renewable energy. For this reason, the region is capable of starting to initiate (stage 6) ocean renewable energy development.

Utilities

Half of the respondents agree that the region's electrical grid is capable of supporting ocean renewable energy. However, for the region's utilities to support ocean renewable energy development additional planning is needed. Twenty-five percent of respondents believe the private and public energy providers are actively taking steps for the electrical grid to support and connect to ocean energy generating facilities, while other respondents believe the region is making little progress to date, is planning to start taking action, or has not considered taking these steps.

Respondents range from believing the region has an infrastructure development plan (e.g. utilities, sites, buildings) to support Coos County growth and development to believing the region has not considered creating such a plan. Additionally, respondents range from thinking the region is starting to develop a capital improvement plan that identifies current utility capabilities and considers if current infrastructure allows for ocean renewable energy development to thinking the region has not considered this type of plan either.

The Coos County region receives a community readiness score of four (preplanning) for utilities. According to respondents, the region's electrical grid is capable of supporting ocean renewable energy. However, the region has not taken many steps to plan for the future of utilities in the future if the region does develop ocean renewable energy. Some respondents do believe the region has begun the process of planning, indicating that the region may be in the preplanning stages (stage 4) of utility capacity for ocean renewable energy in Coos County.

Infrastructure Improvements

Development of ocean renewable energy in the Coos County region will require infrastructure improvements to support development. Twenty-five percent of respondents believe the Coos County Region has taken steps to support infrastructure improvements and/or development for ocean renewable energy and are actively

making progress; twenty-five percent believe the region has made little progress to date; and over thirty percent believe the region will start improving infrastructure to support ocean renewable energy soon. Additionally, the cities within the region will also require infrastructure improvements. Twelve percent of respondents believe the cities have made little progress to date to support infrastructure improvements and/or development for ocean renewable energy, while around thirty percent believe the cities are planning to make improvements soon. For both the county and its cities, 12 percent of respondents believe infrastructure improvement have not been considered. One respondent shows confidence in the region’s ability to make infrastructure improvements. The respondent commented that the current infrastructure would need modification or repurposing for the ocean renewable energy industry but that these changes can be made quickly.

The Coos County region receives a community readiness score of five (preparation) for infrastructure improvements. Respondents believe the county and its cities are beginning to take steps to improve current infrastructure to support ocean renewable energy development. These actions show that the region is in the beginning to prepare for ocean renewable energy development (stage 5).

Infrastructure and Services Readiness

Overall, by averaging the readiness score for infrastructure and services categories, Coos County receives an infrastructure and services readiness score of five (Table 4). The readiness score indicates that the Coos County region has begun the process of preparing for ocean renewable energy development.

Table 4. Coos County Infrastructure and Services Readiness

| Category | Readiness Score | Readiness Stage |
|------------------------------------|------------------------|------------------------|
| Manufacturing | 5 | Preparation |
| Transportation | 7 | Stabilization |
| Port Infrastructure | 6 | Initiation |
| Utilities | 4 | Preplanning |
| Infrastructure Improvements | 5 | Preparation |
| Infrastructure and Services | 5 | Preparation |

Workforce Capacity

The readiness assessment covered questions about Coos County’s workforce capacity in for ocean renewable energy development careers. Seven respondents self-selected to answer the questions about workforce capacity. Questions covered four topics: education provider, mechanical and electrical, manufacturing, and maritime.

Education Provider

All respondents agree that the Coos County region has at least one organization providing or able to provide workforce education and training. One respondent commented that the region has two different workforce groups in the county. The respondent also said the county has potential workers that are highly qualified and trainable for almost any skill. Additionally, these workers are well suited to new endeavors and have excellent work ethics.

The Coos County region receives a community readiness score of seven (stabilization) for education provider. The region is highly capable of workforce training and education indicating that the region is stable (stage 7) in providing education to a potential ocean renewable energy workforce.

Mechanical and Electrical

Fifty percent of respondents agree that the Coos County region has a workforce of local mechanical and electrical engineers, while 33 percent disagrees. Also, 32 percent of respondents believe the region has a program to train a workforce of mechanical and electrical engineers that has been running almost a year or more. Additionally, fifty percent of respondents agree that region has workforce skilled in mechanical and electrical equipment maintenance, replacement, and repair.

Respondents vary on their agreement of the region's ability to train a workforce skilled in mechanical and electrical equipment maintenance, replacement, and repair. Over 30 percent believe the region has had a program for almost a year or more, while 16 percent believe the region is actively making progress on creating a program, and 33 percent does not believe the region has considered a training program for mechanical and electrical equipment maintenance, replacement, and repair.

The Coos County region receives a community readiness score of six (initiation) for mechanical and electrical workforce capacity. Respondents believe the county either has an existing capable workforce or potentially has the ability to train a workforce for these careers. This indicates the region can initiate (stage 6) a program if needed.

Manufacturing

Over 80 percent of respondents agree the region has a workforce of capable manufacturing fabricators and over 80 percent believes the region has an existing program to train a capable workforce. Eighty percent of respondents also believe the region has a workforce of capable welders and has the capacity to train a capable workforce. However, only about fifty percent agree the region has a workforce skilled in electrical component design and manufacturing. Additionally, about fifty percent believe the region has a program in existence to train a workforce skilled in electrical component design and manufacturing, while 33 percent does not think the region has even considered this type of educational program. Finally, respondents vary on their agreement that the region has a workforce skilled in advanced concrete product

manufacturing. Fifty percent believes the region does have a skilled workforce, while 33 percent disagree. In addition, 32 percent believe the region has a program to train a workforce in advanced concrete manufacturing, while 16 percent believe the region is making little progress to date on this effort, and 16 percent do not believe the region has considered this type of program.

The Coos County region receives a community readiness score of six (initiation) for manufacturing workforce capacity. The Coos County region has a capable workforce of manufacturing fabricators and welders as well as the ability to train a capable workforce in these areas. However, the region does not have as large of a workforce skilled in the other manufacturing areas nor as many existing programs to train a workforce in these areas. This indicates that the region could potentially initiate (stage 6) programs to train a manufacturing workforce if needed.

Maritime

The Coos County region's maritime workforce capacity is not as high as its mechanical, electrical, and manufacturing workforce capacities. Fifty percent of respondents agree the region has a workforce of able-bodied seamen and capable ocean divers; however, respondents differ on their perception of the region's ability to train a workforce with these skills. Sixteen percent believe the region has an existing program operating for over a year to train seamen, 16 percent believe the region is actively making progress or considering such a program, and 16 percent believes the region has not considered a training program. Respondents believe there is less progress on a program to train a workforce of capable ocean divers. Sixteen percent believe the region is actively making progress on an ocean diving program, while 33 percent believes the region has not considered this type of program, and 16 percent does not believe the region needs a program. However, there is a stronger belief that the region has the workforce capacity for maritime vessel operations. Over 80 percent of respondents agree the region has a workforce for maritime vessel operations and 32 percent believe there is a program in place to train a workforce. Additionally, sixteen percent believe the region is considering a program to train a workforce for maritime vessel operation.

The Coos County region receives a community readiness score of four (preplanning) for maritime workforce capacity. While the Coos County region has a workforce with maritime skills, fewer programs exist to train a future workforce. If the region needed to train a maritime workforce, it is in the preplanning stages (stage 4) of building capacity.

Workforce Capacity Readiness

Overall, by averaging the readiness score for the workforce capacity categories, Coos County receives a workforce capacity readiness score of six (Table 5). The readiness score indicates that the Coos County region has the capacity to initiate a capable workforce as well as workforce training programs.

Table 5. Coos County Workforce Capacity Readiness

| Category | Readiness Score | Readiness Stage |
|---------------------------|------------------------|------------------------|
| Education Provider | 7 | Stabilization |
| Mechanical and Electrical | 6 | Initiation |
| Manufacturing | 6 | Initiation |
| Maritime | 4 | Preplanning |
| Workforce | 6 | Initiation |

Community Development Capacity

The readiness assessment covered questions about Coos County’s community development capacity in general and for ocean renewable energy development. Thirteen respondents answered the questions about community development. Questions covered two topics: overall community development capacity and ocean energy community development capacity.

Overall Community Development Capacity

Forty-five percent of respondents *disagree* that the Coos County region has a clear vision for the present and future, while thirty percent of respondents agree. However, 60 percent of respondents agree that the region feels a sense of pride and attachment to the community and is optimistic about its future. Additionally, over 80 percent agree the region can see a project through to completion.

The Coos County region has a recognized community and economic development group with structures and procedures that sustain positive action in the community (over 90 percent of respondents agree). Sixty-eight percent of respondents agree the region has a culture of entrepreneurship that recognizes and rewards new ideas, innovation, partnerships, and collaboration. The Coos County region also cooperates with neighboring communities on economic development efforts according to sixty-eight percent of respondents.

Although the region is optimistic about its future and has a culture of entrepreneurship, one respondent commented on community development support from community members. The respondent commented that the community opposes change, especially community members who are happy with the status quo. These community members tend to speak out against potential opportunities, sometimes driving the opportunity away. However, there are many if not more community members that do support change and want to see family wage jobs in the community.

The Coos County region receives a community readiness score of six (initiation) for overall community development capacity. The region strongly supports community development, with the exception of some community members. This indicates that the region is capable of initiating (stage 6) new community development projects.

Ocean Energy Community Development Capacity

Over 75 percent of respondents agree the Coos County region can support growth associated with the ocean energy industry. However, respondents vary on their view of the comprehensive plan. Twenty-three percent of respondents agree the comprehensive plan includes areas for ocean renewable energy development, while 30 percent strongly disagree/disagree.

The Coos County region receives a community readiness score of five (preparation) for ocean energy community development capacity. While respondents believe the Coos County region can support growth from the ocean renewable energy industry, more work exists to have a comprehensive plan that includes areas for ocean energy development. Therefore, the region is in the preparation stages (stage 5) of planning and focusing on details for ocean renewable energy development.

Community Development Readiness

Overall, by averaging the readiness score for the workforce capacity categories, Coos County receives a community development capacity readiness score of 5.5 (Table 6). The readiness score indicates that the Coos County region is in between preparing for ocean renewable energy and being able to initiate a development.

Table 6. Coos County Community Development Readiness

| Category | Readiness Score | Readiness Stage |
|------------------------------|------------------------|-------------------------------|
| Overall Capacity | 6 | Initiation |
| Ocean Energy Capacity | 5 | Preparation |
| Community Development | 5.5 | Preparation/Initiation |

Civic Capacity

The readiness assessment covered questions about Coos County’s civic capacity in general and for ocean renewable energy development. Thirteen respondents answered the questions about civic capacity. Questions covered two topics: economic development process and support.

Economic Development Process

Questions about the economic development process focused on aspects related to community members. Over 60 percent of respondents agree that Coos County community members are well informed about economic development activities, while 15 percent disagree. Respondents also agree, 61 percent, that the community and economic development process is open and participatory; community members are willing to contribute and explore new ideas. Additionally, 68 percent of respondents believe the region appropriately engages a diverse set of community stakeholders in economic development decisions, while 23 percent do not.

A respondent also commented that the community does participate in the economic development process; however, participation is on a project-by-project basis. This respondent believes there is no overarching opportunity allowing the majority of citizens to help develop the region's future.

The Coos County region receives a community readiness score of six (initiation) for economic development process. The economic development process is open to community members and community members participate; however, more work exists to enable community members to participate in all of the regions' economic development projects. This indicates that the region is in the initiation stage (stage 6) of the economic development process, but has not yet reached the stabilization stage.

Support

Nearly 70 percent of respondents agree that community members encourage and support economic development activities and over 75 percent believe community members support overall economic growth in Coos County. Over 75 percent of respondents agree community members are receptive to new industry; however, only 37 percent agree community members are receptive to the *ocean energy industry*. On the other hand, 15 percent of respondents *disagree* that community members are receptive to the *ocean energy industry* and another 33 percent neither agree nor disagree.

Respondents have mixed views on community members' support for the ocean energy industry. Some respondents agree community members support the research and responsible development of ocean-based renewable energy (30 percent); ocean renewable energy development in Coos County (37 percent); and the creation of an ocean renewable energy cluster in Oregon (30 percent). However, between 15 and 23 percent disagree about community support in these three areas.

The Coos County region receives a community readiness score of four (preplanning) for support. Coos County community members support economic development activities in general and are receptive to new industry. However, the community does not have a high level of support for the ocean energy industry. This indicates that the community is in the preplanning stage (stage 4) for the ocean energy industry and is beginning to recognize the need to support the industry, but does not support the industry completely.

Civic Capacity Readiness

Overall, by averaging the readiness score for the workforce capacity categories, Coos County receives a civic capacity readiness score of 5 (Table 7). The readiness score indicates that the Coos County region is in preparation stage of gaining community support for ocean renewable energy.

Table 7. Coos County Civic Capacity Readiness

| Category | Readiness Score | Readiness Stage |
|------------------------------|------------------------|------------------------|
| Economic Development Process | 6 | Initiation |
| Support | 4 | Peplanning |
| Civic Capacity | 5 | Preparation |

Communication

The readiness assessment asked respondents to provide recommendations on how best to communicate and engage with stakeholder groups about ocean renewable energy. Between 7 and 11 respondents answered questions about communication. Questions covered six stakeholder groups: local leaders, local economic development and planning professionals, private sector, local fishing industry, community members, and other local stakeholders.

Assessing Coos County's readiness level for communication involved a different method than the other five assessment metrics. Respondents offered their recommendations for how to communicate with each stakeholder group. I compared these recommendations to the example actions for raising community readiness levels from the Tri-Ethnic Center for Prevention research to determine the readiness level for each stakeholder group.

Local Leaders

Eleven respondents offered recommendations for how to communicate with local leaders. Recommendations included:

- Use the existing leadership supported ocean use group in the Coos County region;
- Give presentations to local government members, including the cities, county, and the port;
- Discuss proposals with local governments;
- Contact each leader with an email and a phone call; and
- Provide basic informational concepts at public meetings;

These methods of communication with local leaders range from stage 1 (no awareness) to stage 6 (initiation).

Local Economic Development and Planning Professionals

Ten respondents offered recommendations for how to communicate with local economic development and planning professionals. Recommendations included:

- Presentations;
- Direct contact or meetings;

- Email and a phone call;
- Contact through Business Oregon, Oregon Economic Development Association, and other economic development organizations;

These methods of communication with local economic development and planning professionals include strategies from stage 2 (denial) to stage 6 (initiation).

Private Sector

Ten respondents offered recommendations for how to communicate with the private sector. Recommendations included:

- Public meetings;
- Presentations with question and answer sessions; and
- Contact through the Chamber of Commerce and other business associations.

These methods of communication with the private sector includes strategies from stage 3 (vague awareness) to stage 5 (preparation).

Local Fishing Industry

Nine respondents offered recommendations for how to communicate with the local fishing industry. Recommendations included:

- Using the existing Ocean Use Group;
- Reaching out to Local Fishermen organizations;
- Public Meeting;
- Contacting the Ports of Coos Bay and Port of Bandon;
- Presentations (education) in meetings and then question and answer session; and
- Reaching out to the Southern Oregon Ocean Resource Coalition and all of the Seafood Commodity Commissions.

These methods of communication with the local fishing industry includes strategies from stage 3 (vague awareness) to stage 5 (preparation).

Community Members

Ten respondents offered recommendations for how to communicate with community members. Recommendations included:

- Public Meetings;
- Media advertising: TV, radio, flyers;
- Service clubs and Chambers of Commerce;
- Presentations (education) in meetings and then question and answer session;
- Southwest Oregon Community College;
- Open house; and

- Presentations to the Commissioner/Council meetings that air on the local government access TV.

These methods of communication with community members includes strategies from stage 2 (denial) to stage 5 (preplanning).

Other Local Stakeholders

Nine respondents offered recommendations for how to communicate with other local stakeholders. Recommendations included:

- Local Ocean Use Group;
- Public meeting;
- Similar to local community members, find any organizations that the stakeholders belong to and working through them; and
- Presentations (education) in meetings and then question and answer session.

These methods of communication with the other local stakeholders includes strategies from stage 3 (vague awareness) to stage 5 (preparation).

Communication Readiness

The strategies to communicate with the six stakeholder groups include strategies identified by the Tri-Ethnic Center for Prevention in stage 2 (denial) all the way to stage 6 (initiation). However, a majority of recommendations fall within the preplanning stage (stage 4), such as introducing information through presentations and the media, presenting information at local community events, and reaching out to existing community organization. The Coos County region therefore receives a communication readiness score of 4 because respondents suggest actions used to move communities from stage 4 to stage 5 of readiness.

Additionally, it is important the community readiness assessment engage key stakeholder groups to share their local knowledge. Identifying all possible stakeholders is important to help ensure all viewpoints are included in the assessment. Therefore, it is important to identify an initial list of stakeholders conduct interviews with up to 20 key individuals that represent the stakeholder group. The interviews will help identify each stakeholder group's key issues and position on those issues and classifies them based on the model below (Figure 1).

Figure 7. Stakeholder Assessment Model



Source: OnProjects.net

Coos County’s Readiness for Ocean Renewable Energy

Overall, 31 percent of respondents believe the Coos County region is prepared for ocean renewable energy development. However, 62 percent believe the region is neither prepared nor unprepared and 8 percent believe the region is unprepared.

The respondents’ overall perception of the Coos County region’s ability for ocean renewable energy is also reflected throughout their readiness assessment responses. By averaging the readiness scores from all assessment categories, the Coos County region receives a community readiness for ocean renewable energy score of 5; the preparation stage (Table 8).

Table 8. Coos County's Readiness for Ocean Renewable Energy Development

| Assessment Metric | Readiness Score | Readiness Stage |
|---|-----------------|------------------------|
| Economic Development | 4 | Preplanning |
| Infrastructure and Services | 5 | Preparation |
| Workforce | 6 | Initiation |
| Community Development | 5.5 | Preparation/Initiation |
| Civic | 5 | Preparation |
| Communication | 4 | Preplanning |
| Ocean Renewable Energy Readiness | 5 | Preparation |

The Coos County region's readiness score indicates that the region is in the preparation stages for ocean renewable energy. The region has many of the needed pieces in place for ocean renewable energy, such as:

- A community that makes economic development a priority and recognizes the need for financial incentives for the ocean energy industry, a streamlined permitting process, and predetermine sites suited for ocean renewable energy development;
- Access to some needed manufacturing services, a roadway and railroad that can support the transportation of large items and access sites along the coast, needed port infrastructure, and an electrical grid capable of supporting ocean renewable energy;
- A capable workforce ready for ocean energy careers and the ability to train a new workforce;
- A region that strongly supports community development;
- Community members' support for community and economic development activities and openness to new industries; and
- The ability to communicate with local stakeholders.

However, the Coos County region is not completely ready for ocean renewable energy development. If the region wants to develop the ocean industry, the region needs to take steps to increase capacity and support for ocean renewable energy development.

Next Steps

The Coos County region has areas for capacity building in all six of the readiness assessment categories. By building capacity in each category, the readiness score can increase for the individual category. If each of the assessment categories reaches further capacity and the readiness score increases, the Coos County region's overall readiness for ocean renewable energy will also increase. Below are areas for capacity building in each category:

Economic Development

- Create economic development plans that target the ocean energy industry;
- Update the comprehensive plan(s) to target the ocean energy industry;
- Consider regional and statewide opportunities for ocean energy;
- Determine a list of buildings and land suitable for ocean energy development;
- Create a streamlined permitting process; and
- Develop financial incentives for ocean energy development.

Infrastructure and Services

- Determine if the region has access to the following manufacturers:
 - Fiber-reinforced plastics
 - Steel
 - General-purpose machinery
 - Power distribution and transformer equipment
 - Large high-pressure water pumps
- Gain access to a cable deployment vessel;
- Develop a capital improvement plan that identifies current utility capabilities and considers if current infrastructure allows for ocean renewable energy development;
- Take steps for the electrical grid to support and connect to ocean energy generating facilities;
- Take steps to support infrastructure improvements and/or development for ocean renewable energy; and
- Improve current infrastructure to support ocean renewable energy development.

Workforce

- Develop programs to train a workforce skilled in:
 - Mechanical and electrical equipment maintenance, replacement, and repair;
 - Advanced concrete product manufacturing;
 - Electrical component design and manufacturing;
 - Ocean diving; and
 - Maritime vessel operations.

Community Development

- Create a clear vision for the present and future of the Coos County region; and
- Update the comprehensive plan(s) to include areas for ocean renewable energy development.

Civic Capacity

- Create opportunities for community members to help develop the region's future; and

- Build community support for the ocean renewable energy industry.

Communication

- Contact local leaders, professionals, and businesses to discuss ocean renewable energy development;
- Give presentations to local government members, including the cities, county, and the port;
- Provide basic informational concepts at public meetings;
- Use existing professional and community groups to provide information about ocean renewable energy development;
- Provide information through media advertising, such as TV advertisements, radio advertisements, and flyers;
- Hold an open house about ocean renewable energy development; and
- Conduct focus groups with stakeholders.
- Conduct a stakeholder assessment.

Implications for the Ocean Energy Industry

The Pacific Northwest is as a key ocean energy development area because of its abundant ocean resources and existing infrastructure. Specifically, the State of Oregon identified the Coos County region as ideal for ocean renewable energy development through the Territorial Sea Plan. However, the industry is in its infancy and experiences many key challenges related to infrastructure, siting and permitting, financing, public support, stakeholder support, and workforce. Therefore, it is important for the ocean renewable energy industry to locate in areas where these challenges are not as prevalent.

The readiness assessment of the Coos County region shows that the area is not completely ready for ocean energy development. However, many of the challenges identified by the ocean industry are already mitigated in the Coos County region.

The Coos County region is at the preplanning stage or above for all assessment categories related to ocean energy development. Each category has areas stable and ready for ocean energy development, such as port infrastructure to support the industry. However, each category as also areas for capacity building, such as determining access to needed manufacturing facilitates.

The region is in the preparation stage of readiness for ocean renewable energy. This means the region is not ready for ocean energy development currently but has capacity in place to begin preparing for development.

Overall, the Coos County region is on its way to being ready for ocean renewable energy development. The industry has the potential for success if the region builds additional capacity in all the assessment categories. Therefore, ocean renewable energy development is possible in the Coos County region in the future. However, although the region offers the technical pieces the industry requires, the industry will need to spend time building community and stakeholder support for any development to be successful.

CHAPTER 6: ANALYSIS OF COMMUNITY READINESS ASSESSMENT

Overall, the community readiness assessment for ocean renewable energy development in the Coos County region worked well. The assessment provided valuable information about the Coos County region's capabilities for supporting ocean renewable energy development in the six assessment categories: economic development, infrastructure and services, workforce, community development, civic capacity, and communication.

Assessment Metrics

Overall, the assessment metrics for community readiness assessment were appropriate for the Coos County region, the ocean energy industry, and the targeted respondents. The benefit of the assessment metrics is that the ocean energy industry understands what it needs for success. Because of this, and the challenges already documented for the industry, creating questions for the assessment categories was not difficult. However, the ocean energy industry is in its infancy and it is difficult to fully understand what is needed for the industry to be successful. For example, while we know the industry needs economic development support, infrastructure, a capable workforce, and a community with a strong community development capacity, the demand of the infrastructure and the number of employees needed is hard to estimate. Additionally, it is not fully understood what to prepare for because the industry is not yet developed in Oregon.

The assessment metrics, which covered technical aspects of ocean energy development, such as economic development, infrastructure and services, and workforce capacity were the most useful in the readiness assessment. These categories asked questions regarding concrete pieces needed for ocean energy development that the respondents could answer. However, the infrastructure questions were difficult for respondents to answer if they were not knowledgeable about the specific piece of infrastructure. This was most prevalent where many survey respondents responded that they did not know about access to specific manufacturers. Questions regarding civic capacity, however, were more difficult for the respondents to answer. One respondent commented that these questions were difficult to answer because they could only base their answer on what they had heard about the community's perception of the ocean energy industry.

Respondents

Targeting respondents knowledgeable in each of the assessment category provided useful information about the region's capacity. However, because the respondents are not experts in the ocean renewable energy field, many respondents did not know the answers to the infrastructure questions. Additionally, the respondents did well in

answering all of the questions, except those regarding civic capacity. Engaging community members to understand their civic capacity may be more useful in a future community readiness assessment.

Finally, engaging respondents from all stakeholder groups is important. However, for this assessment it was difficult to get local leaders to commit to participating in the assessment. This readiness assessment successfully engaged one local leader. For a community readiness assessment to be fully comprehensive, involving local leaders is extremely important. Future community readiness assessments need strategies to engage local leaders and get them invested in the assessment.

Assessment Approach

Research on the Community Readiness Theory revealed four potential approaches to conduct a community readiness assessment: (1) interviews with key informants, (2) stakeholder group discussions with a trained facilitator, (3) self-assessment with an assessment tool completed by an economic development professional or staff person, or (4) a community-wide survey of community members.

This assessment used a combined approach of a self-assessment completed by key informants. Using this assessment approach provided many benefits over the other approaches.

Using a self-assessment tool allowed the key informants to complete the assessment on their own schedule. This allowed the community readiness assessment to reach a larger number of respondents than more time intensive approaches, such as personal interviews with each key respondent. The assessment tool used in this study required a minimal time commitment of 20 minutes. Many respondents contacted were willing to complete the assessment because it did not take a large amount of time out of their day. While personal interviews may have yielded more complete explanations of the readiness in each category, the number of key respondents would have been limited. This can be seen by the fact that even with a 20-minute self-assessment only 13 of 30 respondents contacted were willing to complete the assessment.

The same holds true for stakeholder group discussions with a trained facilitator. This approach also requires a large time commitment by key informants. This approach can provide a beneficial space for respondents to discuss the readiness of each category together to reach a consensus, but it also requires all respondents to be available at the same time and to have enough time to attend the meeting.

Additionally, a self-assessment tool completed by key stakeholders is more beneficial than a self-assessment completed by an economic development professional. This approach allowed many perspectives on the same issue, rather than only one perspective. Respondents offered different perspectives on many questions throughout the assessment, highlighting areas for further discussion and capacity building. This provided a level of detail that would have been lost if only one economic development

professional completed the assessment. Furthermore, having key respondents knowledgeable in all assessment categories provided expert knowledge that one economic development professional is unlikely to have.

A self-assessment tool completed by key stakeholders is more beneficial than community-wide survey of community members for all technical assessment categories. It is unlikely that community members would be knowledgeable about economic development, infrastructure and services, and workforce capacity. However, a community-wide survey of community members to gauge civic capacity readiness would be more beneficial than asking key respondents to answer questions about civic capacity.

Finally, while the self-assessment completed by key stakeholders provided useful information about the region's readiness for ocean renewable energy development the questions provided limited explanation of the respondents' answers. Following up with respondents' about their answers and the results as a whole could provide additional understanding of the community's readiness for ocean renewable energy development.

Assessment Improvements

While the readiness assessment worked well for the Coos County region, areas for improvement exist. The following is a list of improvements for future readiness assessments:

1. Develop strategies to engage local leaders;
2. Engage local community members regarding civic capacity;
3. Conduct follow-up interviews with respondents to further understand the community's readiness.

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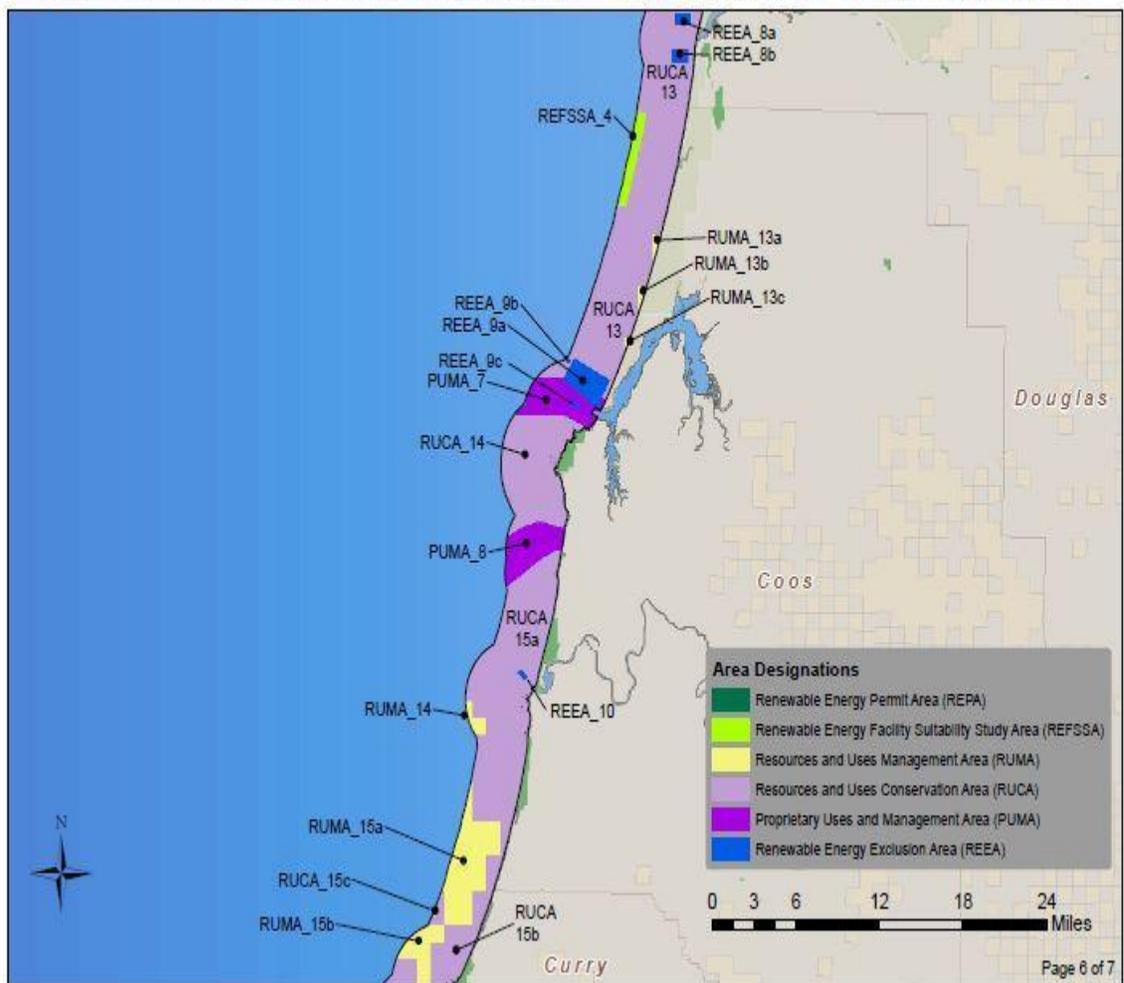
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APPENDIX A: COOS COUNTY READINESS ASSESSMENT TOOL

Thank you for taking the time to complete this survey about community readiness for ocean renewable energy development. The following questions will explore specific areas related to ocean renewable energy in the Coos County Region. Ocean energy is a renewable energy source, which draws energy directly from surface waves, wind, or from pressure fluctuations below the surface. The energy drawn from the ocean can be converted into electricity by offshore or onshore systems. Oregon’s territorial sea has been identified as a favorable location for renewable energy facilities. In January 2013, the State of Oregon adopted the new Territorial Sea Plan (Part 5). Part 5 of the Territorial Sea Plan includes policies and maps governing renewable energy development in state waters. Specifically, the plan identifies four sites designated as Renewable Energy Facility Site Suitability Areas (REFSSA). The Coos County Region was identified as one of the areas suitable for ocean renewable energy (See map below).

Territorial Sea Plan Part Five Appendix B - Plan Map Area Designation Index



The purpose of this survey is to understand your perception of the Coos County Region’s level of community readiness for ocean renewable energy development. A community readiness assessment is a qualitative tool that evaluates a community on different categories to understand the level of readiness for each category and the community as a whole. This survey asks questions about the Coos County Region on the following categories: Economic Development Capacity, Community Development Capacity, Civic Capacity, Infrastructure and Services Capacity, Workforce Capacity, and Communication. Throughout this survey, Coos County Region means all businesses, organizations, community members, and local governments in Coos County. Survey Directions: Please fill out the questions to the best of your ability. You will have different question numbers depending on your area(s) of knowledge. Please do not skip a question. If you feel you cannot answer the question, please answer “Don’t Know”. You can leave the survey at any time and return later to finish the survey. Please use the navigation buttons located at the bottom of the survey screen to navigate between pages. Please do not use the navigation buttons on your browser. Please complete this survey at your earliest convenience. We will close the survey on June 6th . If you have questions, please contact Leigh Anne Michael at lmichael@uoregon.edu or 541-346-3651.

Please indicate if you consent to taking this survey.

- Yes (1)
- No (2)

1. Please check the areas where you are knowledgeable. (Check all that apply.)

- Economic Development Capacity: Knowledgeable about the Coos County Region’s planning and economic development activities. (1)
- Infrastructure Capacity: Knowledgeable about the Coos County Region’s infrastructure and services; including port infrastructure such as barges and tugboats. (2)
- Workforce Capacity: Knowledgeable about the Coos County Region's current and future workforce. (3)

Economic Development Capacity

2. Please indicate your level of agreement or disagreement with the following statements about the Coos County Region:

| | Strongly Disagree (1) | Disagree (2) | Neither Disagree nor Agree (3) | Agree (4) | Strongly Agree (5) | Don't Know (6) |
|---|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| A. Economic development is a high priority. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. Financial resources are available for business and industrial development (revolving loan funds, venture capital, lending institutions, etc.). (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. There is industrially zoned land ready to build or occupy at a reasonable market rate for ocean renewable energy shoreside development. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| D. There are industrially zoned buildings that are ready to occupy or renovate at a reasonable market rate for | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|---|---|---|---|---|---|---|
| <p>ocean renewable energy shoreside development. (4)</p> <p>E. The region's Comprehensive Plans have significant impediments to ocean energy. For example: shoreside zoning that prohibits energy related infrastructure, such as a power line coming to shore. (5)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
|---|---|---|---|---|---|---|

3. Please indicate the Coos County Region's need for the following items:

| | Critical (1) | Needed (2) | Somewhat Needed (3) | Not Needed (4) | Don't Know (5) |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| A. Financial incentives available to subsidize renewable ocean energy development. (1) | <input type="radio"/> |
| B. Financial incentives to address the above market energy cost of ocean energy to consumers. (2) | <input type="radio"/> |
| C. An economic development plan that targets the ocean energy industry. (3) | <input type="radio"/> |
| D. An economic development plan that considers regional and statewide strategies and opportunities for ocean renewable energy. (4) | <input type="radio"/> |
| E. A list of predetermined land available and approved | <input type="radio"/> |

| | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <p>for ocean renewable energy shoreside industrial needs. (5)</p> <p>F. A streamlined permitting process for shoreside ocean renewable energy development. (6)</p> | <input type="radio"/> |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|

4. Do you have any other comments about the Coos County Region's Economic Development Capacity? (Please write your answer in the box below.)

Infrastructure and Services Capacity

5. Please indicate your level of agreement or disagreement with the following statements. The Coos County Region:

| | Strongly Disagree (1) | Disagree (2) | Neither Disagree nor Agree (3) | Agree (4) | Strongly Agree (5) | Don't Know (6) |
|---|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| A. Has access within a reasonable distance to a concrete manufacturer capable of manufacturing large concrete forms while working with ocean energy developers to adapt and modify designs as changes occur.. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. Has access within a reasonable distance to a manufacturer that works with fiber-reinforced plastics (FRPs). (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. Has a transportation company within a reasonable distance able to transport large ocean renewable | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|--|---|---|---|---|---|---|
| <p>energy equipment and materials, such as large concrete and steel forms. (3)</p> | | | | | | |
| <p>D. Has barges or tugboats capable of transporting large devices and components from manufacturing facilities along the coast. (4)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>E. Has access within a reasonable distance to a steel manufacturer and fabricator capable of working with ocean energy developers to adapt and modify designs as changes occur. (5)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>F. Has access within a reasonable distance to a general-purpose machinery manufacturer able to manufacture</p> | ○ | ○ | ○ | ○ | ○ | ○ |

| | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <p>customized parts and machinery for ocean renewable energy. (6)</p> <p>G. Has access within a reasonable distance to a power distribution and transformer equipment manufacturer capable of manufacturing customized equipment based on ocean energy developers' designs. (7)</p> <p>H. Has access within a reasonable distance to a cable deployment vessel for use by the ocean renewable energy industry. (8)</p> <p>I. Has access within a reasonable distance to a survey vessel to map out and determine bottom</p> | <input type="radio"/> |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|

| | | | | | | |
|--|---|---|---|---|---|---|
| <p>composition and topography along the coast. (9)</p> | | | | | | |
| <p>J. Has access within a reasonable distance to a manufacturer capable of manufacturing large high-pressure water pumps customized for ocean renewable energy. (10)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>K. Has a rail service able to ship large materials, such as large piping, with access to industrial land along the coast. (11)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>L. Has a dock or mooring site available and appropriate for ocean renewable energy. (12)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>M. The electrical grid is capable of supporting additional energy</p> | ○ | ○ | ○ | ○ | ○ | ○ |

| | | | | | | |
|---|---|---|---|---|---|---|
| <p>generation. (13)</p> <p>N. The road system can support the transportation of large equipment, large concrete structures, and/or large metal structures. (14)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
|---|---|---|---|---|---|---|

6. Please answer the following questions about the Coos County Region's Infrastructure and Services Capacity for ocean renewable energy development.

| | Yes, we have been doing this/had this for over a year (1) | Yes, we have been doing this/had this for less than a year (2) | We are almost finished with this (3) | We are actively making progress (4) | We have made little progress to date (5) | We are starting this soon (6) | We are planning to do this (7) | We are considering doing this (8) | We have not considered this (9) | We do not need this (10) | Do n't Know (11) |
|---|---|--|--------------------------------------|-------------------------------------|--|-------------------------------|--------------------------------|-----------------------------------|---------------------------------|--------------------------|-----------------------|
| A. The Coos County Region has taken steps to support infrastructure improvements and/or development for ocean renewable energy. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. The County has taken steps to support infrastructure improvements and/or developm | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ent for ocean renewable energy. (2) | | | | | | | | | | | |
| C. The Cities have taken steps to support infrastructure improvements and/or development for ocean renewable energy. (3) | <input type="radio"/> |
| D. Private and Public energy providers have taken steps for the electrical grid to support and connect to ocean energy generating facilities. (4) | <input type="radio"/> |
| E. Has an Infrastructure | <input type="radio"/> |

| | | | | | | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <p>Development Plan (e.g. utilities, sites, buildings) to support Coos County growth and development. (5)</p> <p>F. Has a capital improvement plan that identifies current utility capabilities and considers if current infrastructure allows for ocean renewable energy development. (6)</p> | <input type="radio"/> |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|

7. Do you have any other comments about the Coos County Region's Infrastructure and Services Capacity? (Please write your answer in the box below.)

Workforce Capacity

8. Please indicate your level of agreement or disagreement with the following statements. The Coos County Region:

| | Strongly Disagree (1) | Disagree (2) | Neither Disagree nor Agree (3) | Agree (4) | Strongly Agree (5) | Don't Know (6) |
|---|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| A. Has at least one organization providing or able to provide workforce education and training. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. Has a workforce of local mechanical and electrical engineers. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. Has a workforce of capable manufacturing fabricators. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| D. Has a workforce of capable welders. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| E. Has a workforce skilled in mechanical and electrical equipment maintenance, replacement, and repair. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <p>F. Has a workforce skilled in electrical component design and manufacturing (6)</p> | <input type="radio"/> |
| <p>G. Has a workforce skilled in advanced concrete product manufacturing (7)</p> | <input type="radio"/> |
| <p>H. Has a workforce of certified able-bodied seamen. (8)</p> | <input type="radio"/> |
| <p>I. Has a workforce for maritime vessel operations. (9)</p> | <input type="radio"/> |
| <p>J. Has a workforce of capable ocean divers. (10)</p> | <input type="radio"/> |

9. Please answer the following questions about Workforce Capacity for ocean renewable energy development. The Coos County Region:

| | Yes, we have been doing this/had this for over a year (1) | Yes, we have been doing this/had this for less than a year (2) | We are almost finished with this (3) | We are actively making progress (4) | We have made little progress to date (5) | We are starting this soon (6) | We are planning to do this (7) | We are considering doing this (8) | We have not considered this (9) | We do not need this (10) | Do n't Know (11) |
|---|---|--|--------------------------------------|-------------------------------------|--|-------------------------------|--------------------------------|-----------------------------------|---------------------------------|--------------------------|-----------------------|
| A. Has a program to train a workforce of mechanical and electrical engineers. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. Has a program to train a workforce of capable manufacturing fabricators. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. Has a program to train a workforce of capable welders. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| D. Has a | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | | | | | | |
|--|---|---|---|---|---|---|---|---|---|---|---|
| <p>program to train a workforce skilled in mechanical and electrical equipment maintenance, replacement, and repair. (4)</p> | | | | | | | | | | | |
| <p>E. Has a program to train a workforce skilled in electrical component design and manufacturing. (5)</p> | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>F. Has a program to train a workforce skilled in advanced concrete product manufacturing. (6)</p> | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| <p>G. Has a program to train a workforce of certified able-bodied seamen. (7)</p> | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| | | | | | | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| H. Has a program to train a workforce for maritime vessel operations . (8) | <input type="radio"/> |
| I. Has a program to train a workforce of capable ocean divers. (9) | <input type="radio"/> |

10. Do you have any other comments about the Coos County Region's Workforce Capacity?
(Please write your answer in the box below.)

Community Development Capacity

11. Please indicate your level of agreement or disagreement with the following statements. The Coos County Region:

| | Strongly Disagree (1) | Disagree (2) | Neither Disagree nor Agree (3) | Agree (4) | Strongly Agree (5) | Don't Know (6) |
|--|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| A. Has a clear vision for the present and future. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. Feels a sense of pride and attachment to the community and is optimistic about its future. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. Has a culture of entrepreneurship that recognizes and rewards new ideas, innovation, partnerships, and collaboration. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| D. Can see a project through to completion. (4) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| E. Can support growth associated with the ocean energy industry. (5) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| F. Has a recognized community and economic development | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|--|--|--|--|--|--|--|
| <p>group with structures and procedures that sustain positive action in the community. (6)</p> <p>G. Cooperates with neighboring communities on economic development efforts. (7)</p> <p>H. Has a comprehensive plan that includes areas for ocean renewable energy development. (8)</p> | <input type="radio"/> <input type="radio"/> |
|--|--|--|--|--|--|--|

12. Do you have any other comments about the Coos County Region’s Community Development Capacity? (Please write your answer in the box below.)

Civic Capacity

13. Please indicate your level of agreement or disagreement with the following statements about the Coos County Region:

| | Strongly Disagree (1) | Disagree (2) | Neither Disagree nor Agree (3) | Agree (4) | Strongly Agree (5) | Don't Know (6) |
|---|-----------------------|-----------------------|--------------------------------|-----------------------|-----------------------|-----------------------|
| A. Community members are well informed about economic development activities. (1) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| B. The community and economic development process is open and participatory; community members are willing to contribute and explore new ideas. (2) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| C. The region appropriately engages a diverse set of community stakeholders in economic development decisions. (3) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| D. Community members | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| encourage and support economic development activities. (4) | | | | | | |
| E. Community members are receptive to new industry. (5) | <input type="radio"/> |
| F. Community members are receptive to the ocean energy industry. (6) | <input type="radio"/> |
| G. Community members encourage the research and responsible development of ocean-based renewable energy. (7) | <input type="radio"/> |
| H. Community members support ocean renewable energy development in Coos County. (8) | <input type="radio"/> |
| I. Community members | <input type="radio"/> |

| | | | | | | |
|--|---|---|---|---|---|---|
| <p>support overall economic growth in Coos County. (9)</p> <p>J. Community members support the creation of an ocean renewable energy cluster in Oregon. (10)</p> | ○ | ○ | ○ | ○ | ○ | ○ |
|--|---|---|---|---|---|---|

14. Do you have any other comments about the Coos County Region's Civic Capacity? (Please write your answer in the box below.)

Communication

Please provide your recommendations regarding how best to communicate and engage with the following groups about ocean renewable energy.

15. Local Leaders (Please write your answer in the box below).

16. Local Economic Development and Planning Professionals (Please write your answer in the box below).

17. Private Sector (Please write your answer in the box below).

18. Local Fishing Industry (Please write your answer in the box below).

19. Community Members (Please write your answer in the box below).

20. Local Stakeholders (Please write your answer in the box below.)

21. Overall, in your opinion, how prepared or unprepared is the Coos County Region to support ocean renewable energy development.

- Very unprepared (1)
- Unprepared (2)
- Neither prepared nor unprepared (3)
- Prepared (4)
- Very prepared (5)
- Don't know (6)

22. If you responded very unprepared or unprepared, please list the three most important actions the region should take to increase preparedness for ocean renewable energy:

1. (1)
2. (2)
3. (3)

23. Do you have any additional comments about the Coos County Region's readiness for ocean renewable energy? (Please write your answer in the box below.)

Please answer the following questions about yourself.

24. What sector do you work in?

- Private (1)
- Non-profit (2)
- Public - Federal (3)
- Public - State (4)
- Public - Local (5)
- Public/Private (6)
- Institute of Higher Learning (7)

25. As part of this study, you can also participate in a thirty minute follow-up interview about your survey responses. If you choose to participate, your survey responses will not be confidential but will remain anonymous.

- Yes (1)
- No (2)

26. If yes, please provide (a) contact person, (b) email address, and (c) phone number.

Contact Person (1)

Email Address (2)

Phone Number (3)

Thank you for completing the survey! Your responses are important! Community members are the best source of information to understand community readiness in Coos County. Please advance to the next screen for your responses to be saved.

APPENDIX B: READINESS ASSESSMENT TOOL RESULTS

My Report

Last Modified: 06/01/2014

1. Please indicate if you consent to taking this survey.

| # | Answer | Bar | Response | % |
|---|--------|---|----------|------|
| 1 | Yes |  | 15 | 100% |
| 2 | No | | 0 | 0% |
| | Total | | 15 | |

| Statistic | Value |
|--------------------|-------|
| Min Value | 1 |
| Max Value | 1 |
| Mean | 1.00 |
| Variance | 0.00 |
| Standard Deviation | 0.00 |
| Total Responses | 15 |

2. 1. Please check the areas where you are knowledgeable. (Check all that apply.)

| # | Answer | Bar | Response | % |
|---|---|--|----------|-----|
| 1 | Economic Development Capacity: Knowledgeable about the Coos County Region's planning and economic development activities. |  | 10 | 67% |
| 2 | Infrastructure Capacity: Knowledgeable about the Coos County Region's infrastructure and services; including port infrastructure such as barges and tugboats. |  | 10 | 67% |
| 3 | Workforce Capacity: Knowledgeable about the Coos County Region's current and future workforce. |  | 7 | 47% |

| Statistic | Value |
|-----------------|-------|
| Min Value | 1 |
| Max Value | 3 |
| Total Responses | 15 |

3. 2. Please indicate your level of agreement or disagreement with the following statements about the Coos County Region:

| # | Question | Strongly Disagree | Disagree | Neither Disagree nor Agree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|-------------------|----------|----------------------------|--------|----------------|-----------------|------|
| 1 | A. Economic development is a high priority. | 0.00% | 0.00% | 0.00% | 12.50% | 87.50% | 8 | 4.88 |
| 2 | B. Financial resources are available for business and industrial development (revolving loan funds, venture capital, lending institutions, etc.). | 0.00% | 0.00% | 25.00% | 62.50% | 12.50% | 8 | 3.88 |
| 3 | C. There is industrially zoned land ready to build or occupy at a reasonable market rate for ocean renewable energy shoreside development. | 0.00% | 0.00% | 33.33% | 50.00% | 16.67% | 6 | 3.83 |
| 4 | D. There are industrially zoned buildings that are ready to occupy or renovate at a reasonable market rate for ocean renewable energy shoreside development. | 0.00% | 50.00% | 25.00% | 25.00% | 0.00% | 8 | 2.75 |
| 5 | E. The region's Comprehensive Plans have significant impediments to ocean energy. For example: shoreside zoning that prohibits energy related infrastructure, such as a power line coming to shore. | 25.00% | 25.00% | 25.00% | 25.00% | 0.00% | 4 | 2.50 |

| Statistic | A. Economic development is a high priority. | B. Financial resources are available for business and industrial development (revolving loan funds, venture capital, lending institutions, etc.). | C. There is industrially zoned land ready to build or occupy at a reasonable market rate for ocean renewable energy shoreside development. | D. There are industrially zoned buildings that are ready to occupy or renovate at a reasonable market rate for ocean renewable energy shoreside development. | E. The region's Comprehensive Plans have significant impediments to ocean energy. For example: shoreside zoning that prohibits energy related infrastructure, such as a power line coming to shore. |
|--------------------|---|---|--|--|---|
| Min Value | 4 | 3 | 3 | 2 | 1 |
| Max Value | 5 | 5 | 5 | 4 | 4 |
| Mean | 4.88 | 3.88 | 3.83 | 2.75 | 2.50 |
| Variance | 0.13 | 0.41 | 0.57 | 0.79 | 1.67 |
| Standard Deviation | 0.35 | 0.64 | 0.75 | 0.89 | 1.29 |
| Total Responses | 8 | 8 | 6 | 8 | 4 |

4. 3. Please indicate the Coos County Region's need for the following items:

| # | Question | Critical | Needed | Somewhat Needed | Not Needed | Total Responses | Mean |
|---|--|----------|--------|-----------------|------------|-----------------|------|
| 1 | A. Financial incentives available to subsidize renewable ocean energy development. | 14.29% | 71.43% | 0.00% | 14.29% | 7 | 2.14 |
| 2 | B. Financial incentives to address the above market energy cost of ocean energy to consumers. | 33.33% | 50.00% | 0.00% | 16.67% | 6 | 2.00 |
| 3 | C. An economic development plan that targets the ocean energy industry. | 0.00% | 57.14% | 28.57% | 14.29% | 7 | 2.57 |
| 4 | D. An economic development plan that considers regional and statewide strategies and opportunities for ocean renewable energy. | 0.00% | 71.43% | 14.29% | 14.29% | 7 | 2.43 |
| 5 | E. A list of predetermined land available and approved for ocean renewable energy shoreside industrial needs. | 14.29% | 57.14% | 14.29% | 14.29% | 7 | 2.29 |
| 6 | F. A streamlined permitting process for shoreside ocean renewable energy development. | 14.29% | 57.14% | 14.29% | 14.29% | 7 | 2.29 |

| Statistic | A. Financial incentives available to subsidize renewable ocean energy development. | B. Financial incentives to address the above market energy cost of ocean energy to consumers. | C. An economic development plan that targets the ocean energy industry. | D. An economic development plan that considers regional and statewide strategies and opportunities for ocean renewable energy. | E. A list of predetermined land available and approved for ocean renewable energy shoreside industrial needs. | F. A streamlined permitting process for shoreside ocean renewable energy development. |
|--------------------|--|---|---|--|---|---|
| Min Value | 1 | 1 | 2 | 2 | 1 | 1 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 2.14 | 2.00 | 2.57 | 2.43 | 2.29 | 2.29 |
| Variance | 0.81 | 1.20 | 0.62 | 0.62 | 0.90 | 0.90 |
| Standard Deviation | 0.90 | 1.10 | 0.79 | 0.79 | 0.95 | 0.95 |
| Total Responses | 7 | 6 | 7 | 7 | 7 | 7 |

5. 4. Do you have any other comments about the Coos County Region's Economic Development Capacity? (Please write your answer in the box below.)

Text Response

For A, B, C, and D in #3 above are statewide policy issues that would benefit ocean energy developers but not necessarily local citizens and the unemployed in Coos County. Terrific incentives are already available in Coos County for traded sector companies that provide permanent year-round jobs with good wages and benefits. Is there a need to segregate ocean energy development? In addition local leaders are quite familiar with "ocean energy developers" including OSU. It might be a good ideal to add survey questions like: 1. What is your opinion of Oregon Energy Development projects in Oregon to date? 2. In your opinion have ocean energy developers always been upfront and forth coming? The survey presents ocean energy development as a brand new opportunity when in fact this is an opportunity that has been around for some time and may have developed a PR problem locally in some cases. I think it's important to allow for knowledgeable citizens to provide feedback on their exposure to date. Near shore ocean energy development is already controversial locally. This survey naively ignores this fact. Perhaps the survey could ask respondents to weigh near-shore vs. deep water development? For E, this information has been in place in place for all water dependent manufacturing in the estuary plan. For F Again, why would ocean energy be segregated from other industrial development activities?

The County needs to refresh current plan.

The Coos County region definitely supports ocean energy development. At this point, not a lot of study or planning has been invested in looking at this type of development. It appears to be a good fit for this area, but will need some state and/or federal help to perform the requisite studies and planning that will reasonable assure successful and compatible ocean energy development. The reward is the great local and national benefits that will accrue from such development.

The main issue in recent years we have faced with alternative energy projects is the concept of impacting existing uses to create energy projects. For example the wave energy development proposals have been in conflict with commercial crabbing grounds. That industry provides millions of dollars into the local economy, so impacting their fishing grounds was not a smart opportunity for the area.

| Statistic | Value |
|-----------------|-------|
| Total Responses | 4 |

6. 5. Please indicate your level of agreement or disagreement with the following statements. The Coos County Region:

| # | Question | Strongly Disagree | Disagree | Neither Disagree nor Agree | Agree | Strongly Agree | Don't Know | Total Responses | Mean |
|----|---|-------------------|----------|----------------------------|--------|----------------|------------|-----------------|------|
| 1 | A. Has access within a reasonable distance to a concrete manufacturer capable of manufacturing large concrete forms while working with ocean energy developers to adapt and modify designs as changes occur.. | 0.00% | 12.50% | 0.00% | 50.00% | 12.50% | 25.00% | 8 | 4.38 |
| 2 | B. Has access within a reasonable distance to a manufacturer that works with fiber-reinforced plastics (FRPs). | 0.00% | 25.00% | 0.00% | 37.50% | 0.00% | 37.50% | 8 | 4.25 |
| 3 | C. Has a transportation company within a reasonable distance able to transport large ocean renewable energy equipment and materials, such as large concrete and steel forms. | 0.00% | 0.00% | 0.00% | 62.50% | 37.50% | 0.00% | 8 | 4.38 |
| 4 | D. Has barges or tugboats capable of transporting large devices and components from manufacturing facilities along the coast. | 0.00% | 0.00% | 0.00% | 62.50% | 37.50% | 0.00% | 8 | 4.38 |
| 5 | E. Has access within a reasonable distance to a steel manufacturer and fabricator capable of working with ocean energy developers to adapt and modify designs as changes occur. | 0.00% | 0.00% | 12.50% | 12.50% | 25.00% | 50.00% | 8 | 5.13 |
| 6 | F. Has access within a reasonable distance to a general-purpose machinery manufacturer able to manufacture customized parts and machinery for ocean renewable energy. | 0.00% | 12.50% | 12.50% | 25.00% | 12.50% | 37.50% | 8 | 4.50 |
| 7 | G. Has access within a reasonable distance to a power distribution and transformer equipment manufacturer capable of manufacturing customized equipment based on ocean energy developers' designs. | 0.00% | 12.50% | 12.50% | 25.00% | 0.00% | 50.00% | 8 | 4.63 |
| 8 | H. Has access within a reasonable distance to a cable deployment vessel for use by the ocean renewable energy industry. | 0.00% | 25.00% | 0.00% | 25.00% | 12.50% | 37.50% | 8 | 4.38 |
| 9 | I. Has access within a reasonable distance to a survey vessel to map out and determine bottom composition and topography along the coast. | 0.00% | 0.00% | 0.00% | 75.00% | 12.50% | 12.50% | 8 | 4.38 |
| 10 | J. Has access within a reasonable distance to a manufacturer capable of manufacturing large high-pressure water pumps customized for ocean renewable energy. | 0.00% | 0.00% | 14.29% | 42.86% | 0.00% | 42.86% | 7 | 4.71 |
| 11 | K. Has a rail service able to ship large materials, such as large piping, with access to industrial land along the coast. | 0.00% | 0.00% | 0.00% | 62.50% | 37.50% | 0.00% | 8 | 4.38 |
| 12 | L. Has a dock or mooring site available and appropriate for ocean renewable energy. | 0.00% | 0.00% | 12.50% | 25.00% | 37.50% | 25.00% | 8 | 4.75 |
| 13 | M. The electrical grid is capable of supporting additional energy generation. | 0.00% | 0.00% | 12.50% | 25.00% | 25.00% | 37.50% | 8 | 4.88 |
| 14 | N. The road system can support the transportation of large equipment, large concrete structures, and/or large metal structures. | 0.00% | 0.00% | 12.50% | 62.50% | 12.50% | 12.50% | 8 | 4.25 |

| Statistic | A. Has access within a reasonable distance to a concrete manufacturer capable of manufacturing large concrete forms while working with ocean energy developers to adapt and modify designs as changes occur.. | B. Has access within a reasonable distance to a manufacturer that works with fiber-reinforced plastics (FRPs). | C. Has a transportation company within a reasonable distance able to transport large ocean renewable energy equipment and materials, such as large concrete and steel forms. | D. Has barges or tugboats capable of transporting large devices and components from manufacturing facilities along the coast. | E. Has access within a reasonable distance to a steel manufacturer and fabricator capable of working with ocean energy developers to adapt and modify designs as changes occur. | F. Has access within a reasonable distance to a general-purpose machinery manufacturer able to manufacture customized parts and machinery for ocean renewable energy. | G. Has access within a reasonable distance to a power distribution and transformer equipment manufacturer capable of manufacturing customized equipment based on ocean energy developers' designs. | H. Has access within a reasonable distance to a cable deployment vessel for use by the ocean renewable energy industry. | I. Has access within a reasonable distance to a survey vessel to map out and determine bottom composition and topography along the coast. | J. Has access within a reasonable distance to a manufacturer capable of manufacturing large high-pressure water pumps customized for ocean renewable energy. | K. Has a rail service able to ship large materials, such as large piping, with access to industrial land along the coast. | L. Has a dock or mooring site available and appropriate for ocean renewable energy. | M. The electrical grid is capable of supporting additional energy generation. | N. The road system can support the transportation of large equipment, large concrete structures, and/or large metal structures. |
|--------------------|---|--|--|---|---|---|--|---|---|--|---|---|---|---|
| Min Value | 2 | 2 | 4 | 4 | 3 | 2 | 2 | 2 | 4 | 3 | 4 | 3 | 3 | 3 |
| Max Value | 6 | 6 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 |
| Mean | 4.38 | 4.25 | 4.38 | 4.38 | 5.13 | 4.50 | 4.63 | 4.38 | 4.38 | 4.71 | 4.38 | 4.75 | 4.88 | 4.25 |
| Variance | 1.70 | 2.79 | 0.27 | 0.27 | 1.27 | 2.29 | 2.55 | 2.84 | 0.55 | 1.57 | 0.27 | 1.07 | 1.27 | 0.79 |
| Standard Deviation | 1.30 | 1.67 | 0.52 | 0.52 | 1.13 | 1.51 | 1.60 | 1.69 | 0.74 | 1.25 | 0.52 | 1.04 | 1.13 | 0.89 |
| Total Responses | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 8 | 8 | 8 |

7. 6. Please answer the following questions about the Coos County Region's Infrastructure and Services Capacity for ocean renewable energy development.

| # | Question | Yes, we have been doing this/had this for over a year | Yes, we have been doing this/had this for less than a year | We are almost finished with this | We are actively making progress | We have made little progress to date | We are starting this soon | We are planning to do this | We are considering doing this | We have not considered this | We do not need this | Don't Know | Total Responses | Mean |
|---|---|---|--|----------------------------------|---------------------------------|--------------------------------------|---------------------------|----------------------------|-------------------------------|-----------------------------|---------------------|------------|-----------------|------|
| 1 | A. The Coos County Region has taken steps to support infrastructure improvements and/or development for ocean renewable energy. | 12.50% | 0.00% | 0.00% | 12.50% | 25.00% | 12.50% | 12.50% | 12.50% | 12.50% | 0.00% | 0.00% | 8 | 5.63 |
| 2 | B. The County has taken steps to support infrastructure improvements and/or development for ocean renewable energy. | 12.50% | 0.00% | 0.00% | 12.50% | 0.00% | 12.50% | 12.50% | 25.00% | 12.50% | 0.00% | 12.50% | 8 | 6.75 |
| 3 | C. The Cities have taken steps to support infrastructure improvements and/or development for ocean renewable energy. | 0.00% | 0.00% | 0.00% | 0.00% | 12.50% | 0.00% | 25.00% | 12.50% | 12.50% | 0.00% | 37.50% | 8 | 8.63 |
| 4 | D. Private and Public energy providers have taken steps for the electrical grid to support and connect to ocean energy generating facilities. | 0.00% | 0.00% | 0.00% | 25.00% | 12.50% | 0.00% | 12.50% | 0.00% | 12.50% | 0.00% | 37.50% | 8 | 7.75 |
| 5 | E. Has an Infrastructure Development Plan (e.g. utilities, sites, buildings) to support Coos County growth and development. | 12.50% | 12.50% | 0.00% | 12.50% | 0.00% | 25.00% | 0.00% | 0.00% | 12.50% | 0.00% | 25.00% | 8 | 6.25 |
| 6 | F. Has a capital improvement plan that identifies current utility capabilities and considers if current infrastructure allows for ocean renewable energy development. | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 12.50% | 0.00% | 12.50% | 25.00% | 0.00% | 50.00% | 8 | 9.50 |

| A. The Coos County Region has taken steps to support | B. The County has taken steps to support | C. The Cities have taken steps to support | D. Private and Public energy providers have taken steps for the | E. Has an Infrastructure Development Plan | F. Has a capital improvement plan that identifies current utility |
|--|--|---|---|---|---|
|--|--|---|---|---|---|

| Statistic | Steps to support infrastructure improvements and/or development for ocean renewable energy. | infrastructure improvements and/or development for ocean renewable energy. | infrastructure improvements and/or development for ocean renewable energy. | taken steps for the electrical grid to support and connect to ocean energy generating facilities. | Development Plan (e.g. utilities, sites, buildings) to support Coos County growth and development. | identifies current utility capabilities and considers if current infrastructure allows for ocean renewable energy development. |
|--------------------|---|--|--|---|--|--|
| Min Value | 1 | 1 | 5 | 4 | 1 | 6 |
| Max Value | 9 | 11 | 11 | 11 | 11 | 11 |
| Mean | 5.63 | 6.75 | 8.63 | 7.75 | 6.25 | 9.50 |
| Variance | 6.27 | 9.64 | 5.13 | 9.93 | 14.79 | 3.43 |
| Standard Deviation | 2.50 | 3.11 | 2.26 | 3.15 | 3.85 | 1.85 |
| Total Responses | 8 | 8 | 8 | 8 | 8 | 8 |

8. 7. Do you have any other comments about the Coos County Region's Infrastructure and Services Capacity? (Please write your answer in the box below.)

| Text Response | |
|---|-------|
| You need to define "access" in # 5. I answered as if that capacity was available locally (within the county). #6 assumes ocean energy development is a priority for the county, region, cities and utilities. That discussion has not occurred locally so most of these questions are premature. | |
| N/A | |
| Most infrastructure will require modification or "re-purposing" to be viable for ocean renewable energy. There is excess capacity on one hand, and under capacity on another. However, the infrastructure needs can be met relatively quickly. Infrastructure can be modified quicker than a renewable energy company can navigate the permitting morass. | |
| Statistic | Value |
| Total Responses | 3 |

10. 9. Please answer the following questions about Workforce Capacity for ocean renewable energy development. The Coos County Region:

| # | Question | Yes, we have been doing this for over a year | Yes, we have been doing this for less than a year | We are almost finished with this | We are actively making progress | We have made little progress to date | We are starting this soon | We are planning to do this | We are considering doing this | We have not considered this | We do not need this | Don't Know | Total Responses | Mean |
|---|--|--|---|----------------------------------|---------------------------------|--------------------------------------|---------------------------|----------------------------|-------------------------------|-----------------------------|---------------------|------------|-----------------|------|
| 1 | A. Has a program to train a workforce of mechanical and electrical engineers. | 16.67% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 33.33% | 0.00% | 33.33% | 6 | 7.17 |
| 2 | B. Has a program to train a workforce of capable manufacturing fabricators. | 66.67% | 16.67% | 0.00% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 6 | 1.67 |
| 3 | C. Has a program to train a workforce of capable welders. | 66.67% | 16.67% | 0.00% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 6 | 1.67 |
| 4 | D. Has a program to train a workforce skilled in mechanical and electrical equipment maintenance, replacement, and repair. | 16.67% | 16.67% | 0.00% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 33.33% | 0.00% | 16.67% | 6 | 6.00 |
| 5 | E. Has a program to train a workforce skilled in electrical component design and manufacturing. | 0.00% | 16.67% | 0.00% | 0.00% | 33.33% | 0.00% | 0.00% | 0.00% | 33.33% | 0.00% | 16.67% | 6 | 6.83 |
| 6 | F. Has a program to train a workforce skilled in advanced concrete product manufacturing. | 0.00% | 16.67% | 0.00% | 16.67% | 16.67% | 0.00% | 0.00% | 0.00% | 16.67% | 0.00% | 33.33% | 6 | 7.00 |
| 7 | G. Has a program to train a workforce of certified able-bodied seamen. | 16.67% | 0.00% | 0.00% | 16.67% | 0.00% | 0.00% | 0.00% | 16.67% | 16.67% | 0.00% | 33.33% | 6 | 7.33 |
| 8 | H. Has a program to train a workforce for maritime vessel operations. | 16.67% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 16.67% | 16.67% | 0.00% | 33.33% | 6 | 7.00 |
| 9 | I. Has a program to train a workforce of capable ocean divers. | 0.00% | 0.00% | 0.00% | 16.67% | 0.00% | 0.00% | 0.00% | 0.00% | 33.33% | 16.67% | 33.33% | 6 | 9.00 |

| A. Has a program to train a | B. Has a program to train a | C. Has a program to train a | D. Has a program to train a workforce skilled in mechanical | E. Has a program to train a workforce skilled | F. Has a program to train a workforce | G. Has a program to train a | H. Has a program to train a | I. Has a program to train a |
|-----------------------------|-----------------------------|-----------------------------|---|---|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|
|-----------------------------|-----------------------------|-----------------------------|---|---|---------------------------------------|-----------------------------|-----------------------------|-----------------------------|

11. 10. Do you have any other comments about the Coos County Region's Workforce Capacity? (Please write your answer in the box below.)

| Text Response | |
|--|-------|
| Most folks are not going to know these answers. Personally, I find myself thinking that a lot of public investment would be necessary. Would the development payoff be adequate? | |
| N/A | |
| We have two different workforce groups in the county. Some potential workers are highly qualified and "trainable" for almost any necessary skill. While not abundant, these workers are well suited to new endeavors, and have an excellent work ethic. We have another group who are poorly educated, not super motivated, and are probably not well suited to technical work. These folks are capable of laborer type positions, and may well be content with that. We have Southwestern Oregon Community College in Coos Bay. The college is well suited for workforce training. We also have South Coast Business and Economic Development Corp. in Coos Bay. These folks specialize in workforce training issues. | |
| We have the people that want to work but not highly trained skills | |
| Statistic | Value |
| Total Responses | 4 |

13. 12. Do you have any other comments about the Coos County Region's Community Development Capacity? (Please write your answer in the box below.)

| Text Response | |
|--|-------|
| N/A | |
| <p>Lots of capabilities. A significant amount of interest in the subject. Unfortunately, a faction of the community will oppose anything that makes a change of any type. These are generally the folks who have "made theirs" and don't care about jobs, or economic opportunities. They already have theirs and are more interested in keeping status quo rather than providing job opportunities and economic enhancements. They tend to make a lot of noise, and often drive off potential opportunities, but there is an equally large (probably MUCH larger, actually) group who want to see family wage jobs, and the ability of their children to live and work in their own communities. School enrollments are down all over the area because younger families (those with school age children) have had to leave the area to find gainful employment.</p> <p>There has been little regional coordination on planning for and executing economic development projects, although every city and county does have an state approved comprehensive land use plan.</p> | |
| Statistic | Value |
| Total Responses | 3 |

15. 14. Do you have any other comments about the Coos County Region's Civic Capacity? (Please write your answer in the box below.)

Text Response

So, if I base my answers on what read or hear I would answer that community members do not support ocean energy. Obviously some do and most seem to support deep water wind. However, the question leaves no option but a general answer.

N/A

The Community participates in economic development proposals on a project by project basis. There is no over arching forum to enable the majority of citizens to help develop the regions future.

| Statistic | Value |
|-----------------|-------|
| Total Responses | 3 |

16. 15. Local Leaders (Please write your answer in the box below).

Text Response

There is already a leadership supported ocean use group in the Coos County Region.

Presentations to local government members, including cities, county and port.

Invite local Political governments as a whole to discuss proposals, reps from each Agency.

Email, followed by a phone call. That always works with me. I often answer the email and a phone call is not necessary, but should remain on the table as a tool if needed. Engaging local elected officials may best be accomplished where you have them as a "captive audience" such as conferences (get on the conference program) and training sessions.

For elected officials I would recommend attending a city council/county commissioners meeting(s) and providing some basic informational concepts.

Presentations (education) in meeting and then questions and answer session.

Coos County Commissioners and their planning commission.

County Commissioners John Sweet, Melissa Cribbins and Bob Main SCDC Director (they are in the process of hiring their new director Port of Coos Bay Executive Director David Koch and Port Commissioners City of Coos Bay: Crystal Shoji: Mayor; Rodger Craddock: City Manager City of North Bend: Mayor Rick Wetherell; City Manager Terrence O'Connor

Coos County City Mayors Port of Coos Bay Commissioners Coos County Commissioners City Administrators Rick Skinner Knife River Materials Eric Farm Campbell Global Ken Messerle, former state senator Pam Plummer 2014 Chamber president

Get on the City Council and County Commission agenda's for short presentations

Reach out to the County, City of North Bend, City of Coos Bay and Oregon International Port of Coos Bay

| Statistic | Value |
|-----------------|-------|
| Total Responses | 11 |

17. 16. Local Economic Development and Planning Professionals (Please write your answer in the box below).

| Text Response | |
|---|-------|
| Presentations | |
| Direct contact or meetings. | |
| Development & Planning meeting that includes reps from each Agency within the county. | |
| Again, email and then a followup phone call might work best. Most of these folks are government employees, so that is the best avenue for them. | |
| through Biz Oregon and the Oregon Economic Development Association | |
| Presentations (education) in meeting and then questions and answer session. | |
| South Coast Development Council and their newly hired executive director. | |
| Crystal Shoji: Independent Consultant, Mayor of Coos Bay Margaret Barber: CCD Business Development Corp New SCDC Director | |
| Chris Clafin Business Oregon Crystal Shoji, Shoji Planning Greg Aldridge, Coquille Indian Tribe | |
| Reach out to the County, South Coast Development Council, Port of Coos Bay, and planning professionals such as Shoji Planning and SHN | |
| Statistic | Value |
| Total Responses | 10 |

18. 17. Private Sector (Please write your answer in the box below).

| Text Response | |
|---|-------|
| Chamber of Commerce | |
| Chamber and town hall meetings. | |
| Town Hall Meeting | |
| If you can get their contact info from a database somewhere, direct contact would probably work best. Email and phone calls to start. Another potential would be to engage their professional associations. | |
| Chambers of Commerce | |
| Presentations (education) in meeting and then questions and answer session. | |
| Pacific Power, Port of Coos Bay, Knutson Towboat Company, Sause Brothers, local lending institutions, Bandon Dunes Resort | |
| more information to the public | |
| John Knutson, Knutson Towboat Roger Gould, attorney Jayson Wartnik, CPA Mark Wall, Roseburg Resources | |
| Reach out to the Bay Area Chamber of Commerce and Boost Southwest Oregon | |
| Statistic | Value |
| Total Responses | 10 |

19. 18. Local Fishing Industry (Please write your answer in the box below).

| Text Response |
|--|
| Existing Ocean use group |
| Local fishermen organizations, Oczma. |
| Town Hall Meeting |
| Reaching these folks will be a tough sell. Perhaps using the local commodity commissions would work. |
| Ports of Coos Bay and Bandon |
| Presentations (education) in meeting and then questions and answer session. |
| I would start with the Port of Coos Bay for contacts. |
| Contact Port of Coos Bay and Port of Bandon |
| Reach out to the Southern Oregon Ocean Resource Coalition and all of the Seafood Commodity Commissions |

| Statistic | Value |
|-----------------|-------|
| Total Responses | 9 |

20. 19. Community Members (Please write your answer in the box below).

| Text Response |
|---|
| Public Meetings |
| News media, flyers, town hall meetings. |
| Town Hall Meeting |
| Media advertising, hands down. Most folks watch TV at least. Radio advertising can also work, but there are a lot more radio stations than local TV stations. |
| service clubs and chambers of commerce |
| Presentations (education) in meeting and then questions and answer session. |
| County commissioners, city councils, president of Southwest Oregon Community College. |
| not much information about what's going on |
| Open house |
| provide presentations to the commissioner/council meetings that will be aired on the local government access TV |

| Statistic | Value |
|-----------------|-------|
| Total Responses | 10 |

21. 20. Local Stakeholders (Please write your answer in the box below.)

| Text Response | |
|--|--|
| Local ocean use group | |
| All of the above. | |
| Town Hall Meeting | |
| Similar to local community members. Finding any organizations that the stakeholders belong to and working through them . | |
| Port Districts, local economic development organizations and chambers of commerce | |
| Presentations (education) in meeting and then questions and answer session. | |
| same as 19; ask the local leaders | |

| Statistic | Value |
|-----------------|-------|
| Total Responses | 7 |

22. 21. Overall, in your opinion, how prepared or unprepared is the Coos County Region to support ocean renewable energy development.

| # | Answer | Bar | Response | % |
|---|---------------------------------|--|----------|-----|
| 1 | Very unprepared | | 0 | 0% |
| 2 | Unprepared |  | 1 | 8% |
| 3 | Neither prepared nor unprepared |  | 8 | 62% |
| 4 | Prepared |  | 3 | 23% |
| 5 | Very prepared |  | 1 | 8% |
| 6 | Don't know | | 0 | 0% |
| | Total | | 13 | |

| Statistic | Value |
|--------------------|-------|
| Min Value | 2 |
| Max Value | 5 |
| Mean | 3.31 |
| Variance | 0.56 |
| Standard Deviation | 0.75 |
| Total Responses | 13 |

23. 22. If you responded very unprepared or unprepared, please list the three most important actions the region should take to increase preparedness for ocean renewable energy:

| 1. | 2. | 3. |
|---|---|--|
| town hall sessions to involve and inform the community about the necessity of the development for Oregon's future and the way it would deal with impacts to other resources and businesses. | A true collaborative approach to the development of the projects, i.e. the concerns, questions and idea given by the public are addressed in a timely matter. | A clear definition of the positive benefits the region will see due to such a project. |

| Statistic | Value |
|-----------------|-------|
| Total Responses | 1 |

24. 23. Do you have any additional comments about the Coos County Region's readiness for ocean renewable energy? (Please write your answer in the box below.)

| Text Response |
|--|
| Question 21 assumes support. What if the region opposes ocean energy development - at least in some forms? Doesn't that make readiness irrelevant? I think the survey should split a few hairs. Kinda seems all or nothing at this point and you probably don't want to go "there". |
| The Bay Area is probably the most logical location from which to work on projects along the south coast. It probably has the most resources available to assist with such projects. |
| Coos County is ready to expand one technology and improve industrial growth. |
| So many initiatives have come and gone that people are reluctant to build their hopes up only to have them dashed on the rocks. I believe the community would get behind a renewable energy facility but won't commit itself until it sees that the initiative is not just another flash in the pan. |
| The readiness at this point is more conceptual and civic. Specific plans and programs to help make ocean renewable energy a reality have not yet been developed. |
| community needs more information |
| None |
| No |

| Statistic | Value |
|-----------------|-------|
| Total Responses | 8 |

25. 24. What sector do you work in?

| # | Answer | Bar | Response | % |
|---|------------------------------|---|----------|-----|
| 1 | Private |  | 1 | 8% |
| 2 | Non-profit |  | 3 | 23% |
| 3 | Public - Federal | | 0 | 0% |
| 4 | Public - State |  | 1 | 8% |
| 5 | Public - Local |  | 6 | 46% |
| 6 | Public/Private | | 0 | 0% |
| 7 | Institute of Higher Learning |  | 2 | 15% |
| | Total | | 13 | |

| Statistic | Value |
|--------------------|-------|
| Min Value | 1 |
| Max Value | 7 |
| Mean | 4.23 |
| Variance | 3.69 |
| Standard Deviation | 1.92 |
| Total Responses | 13 |

26. 25. As part of this study, you can also participate in a thirty minute follow-up interview about your survey responses. If you choose to participate, your survey responses will not be confidential but will remain anonymous.

| # | Answer | Bar | Response | % |
|---|--------|-----|----------|-----|
| 1 | Yes | | 7 | 54% |
| 2 | No | | 6 | 46% |
| | Total | | 13 | |

| Statistic | Value |
|--------------------|-------|
| Min Value | 1 |
| Max Value | 2 |
| Mean | 1.46 |
| Variance | 0.27 |
| Standard Deviation | 0.52 |
| Total Responses | 13 |