Methods for Assessing Community Readiness for Ocean Renewable Energy

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About the Community Planning Workshop

Community Planning Workshop (CPW) is one of the core programs of the University of Oregon's Community Service Center (CSC) (csc.uoregon.edu). Established in 1977, CPW provides students the opportunity to address planning and public policy problems for clients throughout Oregon. Students work in teams under the direction of faculty and Graduate Teaching Fellows to develop proposals, conduct research, analyze and evaluate alternatives, and make recommendations for possible solutions to planning problems in rural Oregon communities.

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INTRODUCTION

This report describes a methodology for conducting a "community readiness assessment" for Ocean Renewable Energy. This methodology was applied in a 2015 evaluation of Oregon's South Coast region developed as a partnership between the Oregon Wave Energy Trust and the University of Oregon's Community Planning Workshop.

A community readiness assessment for economic development evaluates a community's readiness on different categories related to economic development. A community readiness assessment does not evaluate if the community does or does not support the development. Broadly, a community readiness assessment is based on (1) a review of academic and professional literature, (2) a targeted survey of economic and community development professionals and community leaders, (3) key person interviews, and (4) focus group meetings with community stakeholders.

Background

In January 2013, the State of Oregon adopted the new Territorial Sea Plan Part 5.1 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.

The adoption of the Territorial Sea Plan Part 5 allows the development of energy facilities in Oregon state waters. OWET is in the process of gaining entitlements for pilot projects on the North Coast (Clatsop County) in partnership with the Oregon Military Department. Other regions of the coast where identified development zones exist may not be as ready for development of wave energy.

In summary, the TSP sets the stage for deployment of ocean energy technology on the South Coast. Ocean energy development has the potential for significant contributions to the local economy. A key question is whether the Coos County region is prepared to accommodate development of ocean renewable energy.

¹ http://www.oregon.gov/LCD/OCMP/pages/ocean_tsp.aspx



Purpose of This Report

The purpose of this report is to document methods used to conduct a community readiness for economic development specifically for the ocean renewable energy industry. This methodology 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 used to understand a community's level of readiness for implementing a specific project or program. 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 six general categories of economic development. Each category contains a detailed set of metrics that are used to assess the level of readiness for each general category.

The methodology is based on a scorecard assessment tool that includes specific metrics for each of the community readiness categories related ocean renewable energy development. The assessment evaluates a region on six assessment categories: (1) economic development capacity; (2) infrastructure and services capacity; (3) workforce capacity; (4) community development capacity; (5) civic capacity; and (6) communication.

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 have used the Community Readiness Theory to understand if their community is generally ready for economic development. Their assessment covers whether the community has what is needed for economic growth and if the community can support growth of any industry.

This methodology is different from tools used by other economic development organizations because it focuses on a community's readiness for a *specific industry*. While this study includes an assessment of 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, such as infrastructure, siting and permitting, financing, public support, stakeholder support, and workforce. The industry experiences challenges in these areas because (1) the industry does not completely understand the pieces needed to support development and (2) the public does not completely understand the benefits and/or impacts of the industry.

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² In its initial conception, community readiness was 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.

COMMUNITY READINESS FOR ECONOMIC DEVELOPMENT

Chapter 2 provides an overview of the community readiness theory and model. It defines the stages of community readiness, describes how the model has been adapted to economic development, and discusses the approach used to conduct the community readiness assessment for ocean renewable energy development in Coos County.

What is Community Readiness?

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). 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. The community readiness model has nine stages of readiness:

- 1. <u>No Awareness</u>: The community and/or leaders have little or no recognition of the need for a program or project.
- 2. <u>Denial</u>: The community and/or leaders deny the need for a program or project.
- 3. <u>Vague Awareness</u>: The community and/or leaders have a general feeling that there is a need for a program or project.
- 4. <u>Preplanning</u>: The community and/or leaders begin to recognize the need for a program or project.
- 5. <u>Preparation</u>: The community and leaders are planning and focusing on practical details of a program or project.
- 6. <u>Initiation</u>: The community and leaders are starting to implement a program or project. The program or project is still viewed as a new effort.
- 7. <u>Stabilization</u>: The community and leaders are running one or two programs or projects. The programs or projects are viewed as stable.
- 8. <u>Confirmation/Expansion</u>: The community and leaders support expanding or improving efforts. The community and leaders are planning new efforts.
- 9. <u>Professionalization</u>: 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 community readiness theory suggests that each community falls into a different stage of readiness and that stages of "readiness" can be measured. Communities undergo a community readiness assessment to determine the community's stage of readiness. The 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 six categories related to drug prevention. A level of readiness, from 1 to 9, is assigned to each category (Tri-Ethnic Center). The results from each category are then evaluated together to determine to community's overall stage of readiness.

Benefits of Using the Community Readiness Model

The Community Readiness Model is an action-oriented approach to reaching identified community goals and objectives. The Community Readiness Model has several identified 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).

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). 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.

Community readiness for economic development gauges a community's readiness for economic development projects 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).

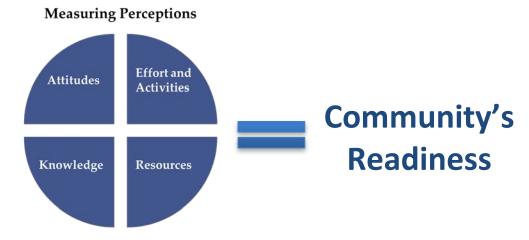
Business Oregon (the Oregon Economic and Community Development Department) created a guidebook and readiness assessment tool to help communities assess their business and economic development capacity and to identify next steps in achieving their economic development goals. The following national and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

- The National Association of Counties (National Association of Counties,
- Michigan (Pure Michigcan, 2012);
- Arkansas (Entergy Arkansas, Inc.);
- Wyoming (Wyoming Business Council, 2010);
- Georgia (Georgia Institute of Technology Economic Development Institute,
- Nebraska (Nebraska Community Foundation, 2012);
- Louisiana (Lousianna State Univesity College of Agriculture); and
- Parts of Canada (Grow Our Region).

Community Readiness Assessment

A community readiness assessment measures perceptions of stakeholders to assess a community's readiness along four dimensions (Figure 3) (Tri-Ethnic Center for Prevention Research, 2014). The dimensions of community readiness are attitudes, knowledge, resources, and effort and activities.

Figure 1. Assessing Community Readiness



Source: Tri-Ethnic Center for Prevention Research

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 4).

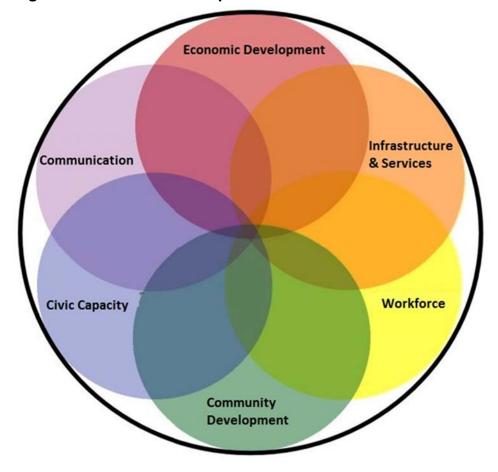


Figure 2. Economic Development Assessment Metrics

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

Following is a description of the six assessment categories and specific metrics used to measure economic development readiness.

- 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, and economic development groups and programs.
- 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,
 and availability of land and buildings.

- 3. Workforce Capacity: evaluates the community's existing workforce and the community's ability to educate the workforce. Metrics cover topics such as availability of capable and productive workforce, organizations providing education, job shadow and internship programs, and entrepreneurship programs.
- 4. Community Development Capacity: evaluates the community's capacity for community development. Metrics include topics such as public transportation, community members' view of the community, and quality of life, comprehensive land use plans.
- 5. Civic Capacity: evaluates the community's civic capacity for economic development. Metrics cover community 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. Commination Capacity: evaluates the community's capacity for communication. Evaluation covers the level and type of communication between the ocean renewable energy industry and local stakeholders. The evaluation also identifies the best way(s) to engage with local stakeholders in the region.

Action Planning

The purpose of the assessment isn't simply to understand readiness; it is to develop specific action steps to create a higher level of readiness. The Community Readiness Model uses the final readiness score to develop a plan of action for the community to implement the project (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).

STEPS IN CONDUCTING A COMMUNITY READINESS ASSESSMENT 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 I. 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. CPW suggests 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.

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