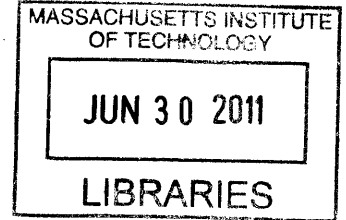


What Comes Next?

Employment Opportunities for Vietnamese American
Fisherfolk Affected by the BP Gulf Oil Spill in Louisiana

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B.A., Women's Studies (2006)
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Submitted to the Department of Urban Studies and Planning
In Partial Fulfillment of the Requirements for the Degree of

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ABSTRACT

This thesis explores potential employment opportunities in energy efficiency construction and aquaculture for Vietnamese American fisherfolk significantly impacted by the BP oil spill in Louisiana. First, the thesis explains the history of the Vietnamese American community in Louisiana and the affects of Hurricane Katrina as well as the BP oil spill on the community. This is done in order to build the case for the need to look for alternative employment for dislocated Vietnamese American fisherfolk. Second, it assesses the skills and job suitability for Vietnamese American dislocated fisherfolk. It then explores the potential growth of the energy efficiency construction and aquaculture industries in Louisiana. Finally, the thesis concludes with recommendations for how Vietnamese American fisherfolk can enter these industries and how Mary Queen of Vietnam Community Development Corporation can further explore future employment opportunities for dislocated Vietnamese American fisherfolk.

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CHAPTER 1 -- Introduction

"It took 20 years just for the shrimp to return after the Exxon Valdez oil spill. When Hurricane Katrina hit the community at least they had a place to return to. With the oil spill it's a different animal. We don't know what's going on." -Tuan Nguyen, MQVN CDC¹

On April 20, 2010 an explosion on a BP oil rig released millions of gallons of oil into the Gulf of Mexico. The surrounding communities immediately felt its impact. The Vietnamese American community in the Gulf Coast region, given its high concentration of workers in the seafood industry, is heavily impacted by the BP oil spill disaster. One Vietnamese American youth described his father as very depressed when he first heard about the spill, because he did not know what to do. He feels that his father is being forced to retired because he only knows how to shrimp. For another community member who owns a local seafood store, her business was severely impacted, "After Katrina the business is ok, but after the oil, the business is not like it used to be...People are scared, they asked lots of questions when they buy seafood."² This is a snapshot into the complex and particular challenges that Vietnamese immigrants currently face in the wake of the BP oil spill. After just a few years of re-building after Hurricane Katrina, they must now re-build after a new disaster with even deeper and more widely resonating consequences. In this thesis, I focus on the needs of the client, Mary Queen of Vietnam Community Development Corporation (MQVN CDC) and determine that there is some support for green jobs, specifically temporary energy efficiency construction jobs leading

¹ Ko, Nalea J., "Gulf Coast Asian American Fishermen Face Uncertain Future."

² Vietnamese American Young Leaders Association of New Orleans, "Breaking Through the Waves (V.2) on Vimeo."

to long term construction jobs and small scale entrepreneurial aquaculture opportunities for Vietnamese American fisherman and shrimpers affected by the BP oil spill.

The literature on workforce development shows that there are many challenges for immigrants and low-income individuals to access long-term sustainable employment through traditional workforce development channels. Workforce development via job training, welfare to work programs or preparation programs are the main methods that government and service organizations use to address the issue of unemployment in these communities. Reviews of these programs reveal that individuals who are employed through them end up in low-paying jobs that does not provide a quality standard of living.³ Further literature on workforce development in immigrant communities show that immigrants are not well served by the current system, which is focused on increasing the skills of high skilled workers or moving individuals receiving welfare into the workforce.⁴ Immigrant communities are often better served via workforce development intermediaries who combine English as a Second Language (ESL) training, adult education and job training services. These services were cut with the implementation of the 1996 Welfare Reform and 1998 Workforce Investment Acts.⁵ The literature also shows that language is a large barrier for immigrants, especially those working in immigrant heavy industries such as textiles or the seafood industry in the Gulf Coast. Current ESL programs or other language intensive programs aim to

³ Giloth, *Workforce development politics*, 252.

⁴ Ong and Loukaitou-Sideris, *Jobs and economic development in minority communities*, 203.

⁵ Ibid.

create more opportunities, but fail to acknowledge that it is not a viable path for middle-aged individuals. ⁶

This thesis adds to the literature around workforce development in immigrant communities. Given that 30% of the commercial fishing fleet in Louisiana is Vietnamese American and one third of that population has limited English proficiency, there is an opportunity to develop strategies to effectively engage Vietnamese Americans in workforce development that will move them into long-term economically sustainable careers. Workforce development literature classifies Vietnamese American fisherfolk⁷ affected by the BP oil spill as dislocated workers because they have been laid off as a result of establishment closing. They have significant work experience, firm specific skills, have attachment to their industry, have weak job search skills, and face a low chance of being recalled to their former jobs. “Jobs lost by dislocated workers are often perceived as especially good jobs, for which the individual worked many years for one employer to achieve. Also, extraordinary emotional adjustments are required as life plans and goals are changed abruptly.”⁸ However, the findings from this research can also be applied to workforce development strategies for limited English proficient individuals as well as immigrant communities.

Looking at economic development opportunities in the New Orleans region, I focus on the green economy as a viable career opportunity for Vietnamese American

⁶ Giloth, *Workforce development politics*, 261.

⁷ Fisherfolk is official defined as “people who fish for a living” by Merriam Webster dictionary. For the purposes of this thesis the term is used to refer to individuals who work in the fishing industries or fields related to the fishing industry such as shrimping, crabbing, and oyster shucking.

⁸ Barnow, *Improving the odds*, 227.

fisherfolk. This provides an opportunity to link workforce development strategies to wider economic development strategies. The green job sector is expected to grow due to the recent federal investment in sustainability initiatives. The City of New Orleans is currently in its final stages of ramping up a loan and rebate program led by Entergy New Orleans, the local utility company, to support retrofitting of residential and commercial properties. This is an opportunity to develop a program to link low-income immigrants to career track jobs in this industry.

This research focuses on Vietnamese Americans affected by the BP oil spill, their skills sets, need for different forms of livelihoods, and the potential to access the “green job” market. “Green job” in this thesis is defined as: jobs that are in businesses that produce goods or provide services that benefit the environment or conserve natural resources, energy efficiency/construction, and local fresh food production. These businesses fall into the categories of (1) energy from renewable sources, (2) energy efficiency, (3) pollution reduction and removal, greenhouse gas reduction, and recycling and reuse, (4) natural resource conservation, (5) environmental compliance, education and training, and public awareness.⁹ This thesis will specifically focus on energy efficiency construction and aquaculture (sustainable land based raising of fish), as directed by the client, MQVN CDC. The Vietnamese American fisherfolk population is diverse in skills and income levels. The research will explore the need for both replacement and temporary jobs in the case that the seafood industry recovers.

⁹ U.S. Bureau of Labor Statistics, “Green Jobs.”

Background

History of the Vietnamese American Community in New Orleans

Due to the end of the Vietnam War in 1975, many Vietnamese refugees migrated to the United States in fear of political and religious persecution as well as economic opportunities. Originally in hopes of assimilation, refugee resettlement programs scattered the Vietnamese community across the United States.¹⁰ According to the 2000 Census, Vietnamese Americans are now heavily concentrated in San Jose, California, Orange County, California and Houston, Texas. When 2000 Census data is analyzed to find the percent of individuals who claim Vietnamese ethnicity per county, concentrations of Vietnamese Americans can be found along the Western Coast of California and Washington, the East Coast in Massachusetts, Virginia, and Maryland and along the Gulf Coast in Texas, Louisiana, and Mississippi.¹¹

In this thesis, I focus on the Vietnamese communities along the Gulf Coast, concentrating on the major urban node of New Orleans, Louisiana. The community in New Orleans also has a unique history of its own. The community is very tied to the church and is strongly Catholic. In objection to the communist government, approximately 900,000 refugees from the predominantly Catholic villages of Bù Chu and Phát Diệm fled to southern Vietnam in 1954. In these villages, the priest was usually the leader and provided assistance to these communities. The community then formed their own Catholic villages in Southern Vietnam. After the fall of Saigon in 1975 and further discontent with the Communist regime, the community fled Vietnam and

¹⁰ Airriess, "Chapter 10 Creating Vietnamese Landscapes and Place in New Orleans."

¹¹ "American FactFinder."

eventually came to Fort Chaffee, Arkansas, one of four refugee resettlement centers in the United States. After visiting the camp at Fort Chaffee, Archbishop Phillip M. Hannan of New Orleans invited the Vietnamese Catholic community to resettle in New Orleans. Catholic Charities of New Orleans then assisted 1,000 refugees to find federally subsidized, low-income housing located at the Versailles Arms Apartments in New Orleans East.¹² New Orleans East was originally planned in speculation of expansion and growth of the city of New Orleans. With the building of Interstate-10, New Orleans East was a part of a series of suburban expansion including East Bank Jefferson and the West Bank. The New Orleans East Corporation who owned 32,000 acres of New Orleans East decided to build what was marketed as a planned community where one can live, work, and play. It was also marketed as a refuge for New Orleanians wanting to flee the noise and congestion of the inner city. The redevelopment of inner city in late 1975 made housing unaffordable, pushing African Americans into the suburbs.¹³ The Vietnamese American community following chain migration grew to nearly 5,000 people in 1990 and has grown to about 8,000 within a 1-mile radius of Mary Queen of Vietnam Church today, located in and around the Village de l'Est neighborhood.¹⁴ Families and social ties brought individuals to the community; and with support from the Catholic Church, as well as other social services agencies, Vietnamese American community members pulled together financial capital to open up small businesses and to invest in boats to start-up fishing and shrimping companies. These are both very profitable

¹² Leong et al., "Resilient History and the Rebuilding of a Community."

¹³ Lewis, *New Orleans--The Making of an Urban Landscape*.

¹⁴ Leong et al., "Resilient History and the Rebuilding of a Community."

businesses for Vietnamese Americans and require little English proficiency.¹⁵ Many Vietnamese Americans also previously fished and shrimped for a living in Vietnam. Vietnamese immigrants became very successful as commercial fisherman and shrimpers making up approximately 50% of commercial fisherman in Mississippi and 30% in Louisiana.¹⁶

Affects of Hurricane Katrina on the Vietnamese American Community

In 2005, Hurricane Katrina heavily impacted the Vietnamese American community. Ninety-five miles per hour winds, 20 feet above normal tide levels, and breeched levees led to flood depths between 0 and 4.5 feet in Village de l'Est, leaving about 1.5 feet of standing water in the majority of homes.¹⁷ Most homes had to be fully gutted down to the wood stumps and rebuilt. The rebuilding process was frustrating and difficult for the entire city of New Orleans due to a lack of federal, state, and local leadership. The Vietnamese American community rebuilt much faster than the rest of the city. Researchers attribute this to social capital between the church and parishioners, a sense of attachment to place by community members, and the ability of the church to form relationships with national ethnic institutions.¹⁸ One year after the storm, 80% of Village de l'Est had returned. Ethnic small businesses were heavily affected by flooding, loss of power and looting. Through determination, financial capital from friends, family, and savings, 90% of Vietnamese American businesses re-opened

¹⁵ Zhou and Bankston, *Growing Up American*.

¹⁶ Mississippi Coalition of Vietnamese American Fisherfolk and Families, *Mississippi Coalition Preliminary Report: Impact of BP Oil Spill on Vietnamese American communities and eafood industry*.

¹⁷ Airriess et al., "Church-based social capital, networks and geographical scale."

¹⁸ Ibid.

by December of 2006. These businesses provided the basic everyday needs for the community allowing residents to recover without the recovery of national chain stores.¹⁹

Residents of the Village de l'Est community also successfully fought a landfill less than one mile from the community starting in February of 2006. The landfill was a negative result of the need to quickly dispose of Hurricane Katrina debris. However, the campaign to fight the landfill provided an opportunity for the Vietnamese American community to build multiracial coalitions around issues of environmental justice.

Katrina had particularly high impacts on the fishing and shrimping industry, since the storm completely destroyed boats, homes and businesses. Four years after the storm, approximately 40% of businesses returned to full operation with many wanting to follow. As of November of 2006, approximately 20% of residents had not returned. The majority of these residents included renters, the elderly and fisherfolk. The fisherfolk in particular were unable to return due to the slow recovery of the seafood industry.²⁰

As a result of Hurricane Katrina, strong leadership emerged from the Vietnamese American community. Former Head Pastor Vien Nguyen, of Mary Queen of Vietnam Church, was an influential figure in the community's ability to return and rebuild in New Orleans East. He played a large role in the establishment of MQVN CDC and continues to serve as Chair of the Board of Directors for the organization. MQVN CDC was established in May of 2006 to help Vietnamese Americans return and rebuild their homes. Initially, MQVN CDC focused on the immediate task of recovery and emergency relief. MQVN CDC eventually transitioned to community development work

¹⁹ Ibid.

²⁰ Mary Queen of Vietnam Community Development Corporation, "Green Franchise Executive Summary."

encompassing health care, environmental and agricultural concerns, education, housing, social services, economic development, and community organizing. MQVN CDC's leadership and previous work heavily informed their reason to focus on energy efficiency construction and aquaculture. One of the major projects that MQVN CDC is in the process of developing is an Urban Agricultural Farm, inclusive of a farmers market and individual plots for commercial and leisure farming, located in the heart of the Vietnamese American community. Through pre-development research and planning for this project, MQVN CDC and Father Vien were exposed to the field of aquaculture and gained interest in researching the economic potential of the industry. The interest in energy efficiency construction was developed through MQVN CDC's on-going market research to identify new business opportunities. This research was influenced by the national discourse around green jobs combined with the large amount of financial investment through the American Recovery and Reinvestment Act. The Vietnamese American Young Leaders Association of New Orleans (VAYLA-NO) also formed post-Katrina to address the needs of disadvantage youth in the community. VAYLA-NO is focused on addressing the concerns of youth and their families regarding the BP oil spill.

Affects of the BP Oil Spill on the Vietnamese American Community

The BP oil spill has far reaching effects on the Vietnamese American community in the Gulf States. There are over 40,000 Vietnamese Americans working in the Louisiana, Mississippi, and Alabama region, 30,000 of which live in Louisiana. Approximately one in three work in the seafood industry. Approximately 80 % of

Vietnamese American households in Louisiana are dependent on income from the seafood industry, with 10,000 Vietnamese American individuals directly employed by the seafood industry.²¹ Reports of insufficient training and protective equipment for individuals through the BP Vessels of Opportunity²² program has resulted in reports of illnesses and potential long term health impacts. As of September 25, 2010 (the most recent report available), there had been 415 reports of health complaints in Louisiana related to oil spill pollutants.²³ The table below compiled by MQVN CDC shows the number of displaced Vietnamese American fisherman and their risk for unemployment as a result of the BP oil spill.

Table 1. Displaced Vietnamese American Fisherman by Parish²⁴

Louisiana Parish	BP Claims Filed*	Displaced Workers**	High Risk for Unemployment	June 2010 Unemployment Rate	Projected Unemployment Rate***
Orleans	225	180	1,371	10.3%	10.8%
Jefferson	175	144	2,216	7.5%	8.0%
Plaquemines	50	165	565	6.7%	13.2%
Terrabonne	25	172	984	6.1%	7.8%
Lafayette	25	102	787	6.3%	6.8%

Sources: Louisiana Workforce Commission, MQVN CDC/Catholic Charities Case Management Services

*Based on sample size of 500 clients from MQVN CDC and Catholic Charities Claims Assistance, July 2010

**Based on case management services by MQVN CDC and Catholic Charities, July 2010

*** Projection rate based on total loss of Vietnamese American fishermen not able to return to work

The closing of the Gulf of Mexico to fishing as a result of the BP oil spill has a significant economic impact on the Vietnamese American community. With many fisherman and shrimpers already heavily in debt due to Hurricane Katrina, the BP oil

²¹ Burrage, "Addressing Ethnic Change in the Northern Gulf of Mexico Seafood Industry."

²² A Program that BP offered after the oil spill to contract with local commercial and charter fishing boat owners to use their boats and human power to clean up the oil.

²³ Department of Health and Hospitals, *MS Canyon 252 Oil Spill Surveillance Report, Week 38 From 09/19/2010 to 09/25/2101.*

²⁴ Mary Queen of Vietnam Community Development Corporation, *JustEconomics Center-National Emergency Grant- Louisiana Gulf Oil Spill Request for Funding- August 4, 2010.*

spill further exacerbated their economic situation. A study completed by Greater New Orleans, Inc (GNO, Inc.), a regional economic development organization, in the months after the BP oil spill found that commercial fishing account for the bulk of the income in Vietnamese American families. The loss of this income creates a gap of \$13,000 in the family's ability to cover household expenses.²⁵ Many fisherfolk are very highly skilled in their trade but lack transferrable skills to other careers, making it very difficult to find other sources of income. Only 18% of those surveyed in the study had secured another job. For the Vietnamese American fisherfolk, language barriers proved to be a huge hurdle in securing new jobs. One in three Vietnamese fisherfolk are limited-English proficient. Due to the older age of many of the fisherfolk, most feel that they would not be able to learn enough English to benefit their careers.²⁶

Barriers to Workforce Development in Immigrant Communities

Linking Job Training to Economic Development: Connecting Vietnamese Americans Dislocated Workers to Green Job Development

The workforce development challenges facing immigrant communities in general, (such as language barriers, low educational attainment, and skills concentrated in declining industries), have particular impacts on the Vietnamese American fisherfolk community in New Orleans. To address these challenges, I propose the need to use a "job centered economic development" strategy. This term describes an approach focused on quality jobs for low-income individuals while taking advantage of a larger economic development strategy. Job centered economic development takes into

²⁵ IEM, *A Study of the Economic Impact of the Deepwater Horizon Oil Spill*.

²⁶ Ibid.

account the need for employment training, education, accessing good jobs, creating a career ladder, economic development, and advocating for a living wage.²⁷ In the workforce development world, efforts to link job training and placement efforts to economic development are few and far between. This thesis attempts to take a job centered economic development approach by focusing on energy efficiency construction and aquaculture as potential producers of good jobs for Vietnamese American fisherfolk.

Looking at the market for business and job opportunities in the Gulf Coast, one particular area that shows promise is the emerging “green economy.” Within the green job sector, the particular focus of this thesis is on energy efficiency and aquaculture. This focus was chosen based on guidance from MQVN CDC, the local non-profit who is the client of this thesis. Within the Vietnamese community, there is a strong history of entrepreneurship and small business development. In particular, there is a history of agriculture rooted in Vietnamese culture including backyard gardening and informal farmer markets.²⁸ There are also a number of Vietnamese small contractors with experience and skills in construction trades including HVAC, electricians, and carpentry, which can translate to skills for weatherization and retrofitting. Through this thesis I assess whether green jobs in energy efficiency and aquaculture are feasible industries for dislocated Vietnamese American fisherfolk. If they are feasible industries, strategies to connect Vietnamese American dislocated workers to “green job” development will be proposed.

²⁷ Giloth, *Workforce development politics*.

²⁸ Airriess, “Chapter 10 Creating Vietnamese Landscapes and Place in New Orleans.”

Research Question

The BP oil spill that began in April of 2010 devastated the seafood industry in the Gulf Coast. The Gulf seafood industry is estimated to sustain \$2.5 billion in losses as a result of the oil spill.²⁹ Given the significant number of Vietnamese Americans that are at risk for unemployment there is a need to develop alternative livelihoods for this population. For the purposes of this thesis, I chose to address the following research question: *Do the energy efficiency and aquaculture segments of the green job sector provide feasible job opportunities for dislocated Vietnamese American fisherfolk who lost their livelihoods in the fishing and seafood industry as a result of the BP oil spill? If so, what specific strategy and programs can MQVN CDC undertake to connect and prepare dislocated workers for these opportunities?*

An effective answer to this research question requires an assessment of the current skills sets of the fisherfolk (labor supply), an analysis of the green job sector (labor demand), along with barriers and needs for livelihood transition. When analyzed together, the conclusions will effectively inform the development of strategies to support this population.

Methodology

The purpose of this thesis is to inform the response of MQVN CDC to the BP oil spill and the organization's current work with Vietnamese American dislocated fisherfolk. Beyond assisting dislocated Vietnamese American fisherfolk with loss of income claims

²⁹ Mississippi Coalition of Vietnamese American Fisherfolk and Families, *Mississippi Coalition Preliminary Report: Impact of BP Oil Spill on Vietnamese American communities and seafood industry.*

and basic social services, MQVN CDC is also exploring options for new careers and methods of transitioning to these careers.

Through a single case study method, using the Vietnamese American community in the Greater New Orleans area as the unit of analysis, and qualitative and quantitative data as a foundation, I identify the skill sets of fisherfolk, determine the potential of green jobs in energy efficiency and aquaculture, as career options chosen by the client, and explore the barriers to livelihood transition. I will conclude by providing recommendations for next steps in energy efficiency and aquaculture career development, reflections on methods of research around identifying suitable employment, and methods of working with dislocated limited English proficient low skilled Vietnamese American fisherfolk.

To frame the issue, I use a combination of literature on the Vietnamese American immigrant experience in New Orleans, reports on the affects of Hurricane Katrina and the BP oil spill on the fisherfolk community, literature around economic development, workforce development and dislocated worker strategies in immigrants communities, and my personal and professional experiences working at MQVN CDC in New Orleans. I worked with MQVN CDC from May 2006-2009 as their Community Organizer. In that capacity, I organized to close a toxic landfill located less than 1 mile from the Vietnamese American community. I also worked on two other campaigns to ensure that the community plans were incorporated into the larger New Orleans Citywide Master Plan as well as a Language Access Campaign to ensure for equitable access to information for limited English proficient individuals in both the Vietnamese American

and Latino communities in New Orleans. After leaving MQVN CDC to pursue graduate school, I continued to work with MQVN CDC on a variety of projects. In January of 2010, I worked for one month with the Young Women's Leadership Program on a project that included program assessment and a public art display. In May of 2010, just one month after the BP oil spill, during a visit to New Orleans I was asked by MQVN CDC to serve as an interpreter for individuals filing loss of income claims as a result of the BP oil spill. I served for one-week; some of my observations from this experience are used later in Chapter 2. Most recently in November of 2010, I worked with a team of students from MIT in partnership with MQVN CDC on the second phase of a Community Health Clinic in New Orleans East for the CHASE Community Development Competition. Some of the background research on the health affects of the BP oil spill on the community used in the CHASE proposal also informed this thesis.

To identify the skill sets of fisherfolk, I used quantitative data collected by two community-based organizations working in the New Orleans Vietnamese American community: MQVN CDC and VAYLA-NO who are working directly with Vietnamese American fisherfolk in Louisiana to collect surveys and data. To determine the growing industries in the green economy, I use existing quantitative data from the United State Bureau of Labor Statistics, US Census Bureau, Louisiana Workforce Commission, and reports from a local economist.

Conversation style personal interviews with individuals involved in economic development, the green job industry, and Vietnamese American community development provided support and a holistic picture of challenges and effective

strategies, for this thesis. I interviewed a variety of individuals connected to workforce development, economic development, green jobs and the Vietnamese American fisherfolk community. The focus of the interviews is to provide more information to support the analysis of the quantitative data. In total, I interviewed seven people in the following fields; regional economic development, business development, technical assistance, workforce development, commercial fishing and city management. I chose the interviews using personal networks and organizational referrals. Four interviews were conducted in person and three over the phone with handwritten or typed notes used during each interview.

Chapter Summaries

Chapter 2 provides an analysis of the current labor supply. Community quantitative and qualitative data will reveal the skills sets, income level, and suitable jobs types for Vietnamese American fisherfolk. Chapter 3 looks at secondary economic data, existing studies in as close proximity to New Orleans as possible, Bureau of Labor Statistics data, and Louisiana Workforce Commission data to show the projections for the green job industry in energy efficiency and aquaculture at the national, state and regional level. Chapter 4 concludes by providing recommendations for MQVN CDC on what industries to pursue and methods of working with Vietnamese American fisherfolk.

CHAPTER 2-- Dislocated Fisherfolk: Skills and Job Suitability

"I've got three kids in college. I have lots of bills. This is still my life's work. This is all I know. I am so sad. What else can I say? I love my job. I want to go back to work." Tung Tran, 56 year old shrimp boat captain.³⁰

Long Term Impacts of the BP Oil Spill

The BP oil spill is the largest oil disaster in the history of the petroleum industry. Approximately 206 million gallons of crude oil was released in the Gulf Coast over a period of three months. In comparison, the Exxon Valdez oil spill that occurred in 1989 resulted in 11 million gallons. A report issued by the Kenai Fjords National Park 20 years after the Exxon Valdez spill stated that while ecosystems adapt to their new environments over time, oil can still be found on beaches.³¹ A list of species are still affected by the oil including, clams and mussels. Recent reports by the National Oceanic and Atmospheric Administration (NOAA) and the Food and Drug Administration (FDA) on October 29, 2010 reported that Gulf seafood is safe and within the safety guidelines for human consumption.³² However, another report issued in December of 2010 reported that high consumption of seafood by Gulf Coast residents could be harmful. A survey conducted by the Natural Resource Defense Council found that Gulf Coast residents consume more than the FDA assumption of three servings of fish per week, resulting in a higher consumption level of chemicals.³³ BP will provide three years

³⁰ "Spill Spreads Anxiety Among Vietnamese Fisherman."

³¹ "Kenai Fjords National Park - 20 Years Later... Exxon Valdez Oil Spill (U.S. National Park Service)."

³² "Press Announcements - NOAA and FDA Announce Chemical Test for Dispersant in Gulf Seafood."

³³ Recio, "Gulf residents' high seafood consumption putting them at risk? | McClatchy."

of compensation claims for individuals affected by the oil spill. The BP claims process has been criticized for its inability to serve the limited English speaking populations and lack of transparency. However, that is not the focus of this thesis. While there is a possibility that the Gulf Coast seafood industry will completely recover in those three years, there is a high probability that the Gulf Coast will not fully recover for decades. Therefore, there is a need to proactively plan for the future of the fisherfolk community including both new replacement career and temporary jobs in the case that the Gulf Coast does recover in a shorter time period. To do this, it is necessary to understand the current fisherfolk population, their skills sets, and future desires.

Vietnamese American Dislocated Workers

For the purpose of this thesis, I place Vietnamese American fisherfolk into the category of dislocated workers to make the case for the need to develop alternative livelihoods for this population. Dislocated workers are differentiated from unemployed workers because they are laid off as a result of an establishment or industry closing, they also have significant work experience in the industry that they were laid off from, and they have a low chance of going back to their old jobs.³⁴ Dislocated workers also face unique challenges different from usual unemployment, because they have job specific skills that are difficult to transfer to other industries. According to the Displaced Workers Surveys by the Bureau of the Census, workers with four to ten years of experience at their previous jobs experience average earning losses of about five % in their current job. For workers with ten to fifteen years of experience, average earnings

³⁴ Barnow, *Improving the odds*.

losses average 15% and for workers that had more than twenty years of experience the average loss in earnings is 30%.³⁵ It is important to look for alternative livelihoods that are tailored to the affected population because programs that are currently in place to help the unemployed such as unemployment insurance and job placement are meant to be transitory and temporary mechanisms for individuals to return to work. However, when an entire industry is permanently eliminated or downsized, about 25% of individuals in that industry are unable to find new forms of employment.³⁶

The Vietnamese American fisherfolk community falls into the category of dislocated workers due to the closing and uncertain future of the Gulf Coast seafood industry and the worker's long attachment to the industry. In the Gulf Coast Oil Spill Disaster Community Survey conducted by the Vietnamese American Young Leaders Association in New Orleans (VAYLA-NO), Louisiana 64.2% of those surveyed have ten or more years of experience in the seafood industry and 44% have twenty or more years of experience. Data on English language skills was not collected in the two surveys used in this study, American Community Survey 2005-2009 5 year estimates show that 71% of Asian and Pacific Islanders speak an Asian or Pacific Islander language at home and 38% speak English less than very well. Since 65% of the Asian population in New Orleans is Vietnamese, it can be concluded that a sizeable portion of the Vietnamese American population in New Orleans is also limited English proficient.³⁷ Fishing has become a way of life for much of this population. Given the Vietnamese American fisherfolk limited English speaking abilities and industry specific skills, it will

³⁵ Ibid.

³⁶ Ibid.

³⁷ "American Community Survey."

be difficult for Vietnamese American fisherfolk to transfer to industries outside of the seafood industry.

Current Financial Situation of Fisherfolk

The fisherfolk community is very diverse, with a broad range of occupations and wage levels. For a commercial fishing boat to function, there must be a boat owner, a boat captain, and a crew of deckhands. In the Vietnamese American community, the boat captain is often the boat owner. Captains generally earn on average \$40,000 per year, but this is also dependent on how much catch and the type of fish the captain brings in. Boat captains earn substantially more than deckhands. Deckhands usually do the majority of manual labor on the boat and are usually paid a percentage of the catch of the boat. They can make anywhere from \$300 to \$1,000 per week.³⁸ For the Vietnamese American fisherfolk community, based on a survey conducted by MQVN CDC, a local community based organization tasked with providing technical assistance to fisherfolk around the BP claims process, the average 2010 individual income of Vietnamese American fisherfolk is \$19,000 per year with 70% of individuals surveyed acting as the sole provider of the family. As the sole provider of the family with an income level around the poverty level, Vietnamese American fisherfolk do not have the financial means to stay in the seafood industry without a job that provides income and wait for the industry to rebound. The 2010 average individual income varies depending on the occupation. Vietnamese American captains average \$36,233, deckhands average \$16,583 while seafood workers such as oyster shuckers average \$9,919.

³⁸ "Fish Harvesting Crew Jobs - Deckhands and Captains - Pay and Job Info."

Deckhands and seafood industry workers are increasingly impacted due to the lack of capital and reliance on boat owners and captains for employment. Their financial situation requires immediate forms of employment to replace their loss income until the Gulf of Mexico recovers.

The closing of Gulf of Mexico waters to fishing heavily impacted boat owners. However, their higher income level and boat asset gives them an advantage over deckhands and seafood workers. The following chart was developed through a series of interviews by Seedco Financial Services, Inc., a community development financial institution, helps to profile the financial situation of families in the fishing industry in the Gulf Coast. In this study, Seedco conducted 69 interviews with fisheries that currently borrow from Seedco.

Table 2. Financial Situation of Fisheries and Their Families³⁹

Income and Expenses for Fisheries Families			
What is the annual income of each household member?		Please indicate monthly expense for the following:	
Primary	\$ 67,346	Rent or mortgage	\$ 802
Secondary	\$ 32,692	Utilities	\$ 670
Other	\$ 13,750	Food	\$ 747
Total	\$ 113,788	Medical	\$ 260
		Vehicle	\$ 1,011
Do you have another job?		Credit Cards	\$ 460
Yes	18%	Child Education	\$ 443
No	82%	Other	\$ 641
		Total	\$ 5,035

Personal and Business Debt Held by Commercial Fishermen				
	Yes	No	Mean	Median
Do you have any other business debt?*	63%	37%	\$41,020	\$24,289
Do you have a mortgage?	63%	37%	\$121,520	\$103,000
Monthly payments			\$1,126	\$1,000
Do you have personal credit card balances?	61%	39%	\$19,950	\$7,100
Monthly payments			\$629	\$360
Do you have any other personal debt?	68%	32%	\$31,884	\$20,000
Monthly payments			\$703	\$571
Total Average Debt			\$214,374	\$154,389
Total Average Payments			\$2,458	\$1,931

*Does not include value of loans held by Seedco Financial

³⁹ IEM, *A Study of the Economic Impact of the Deepwater Horizon Oil Spill*.

Based on the data collected by Seedco Financial Services, the average fisherman is usually the primary income earner with one job and a high debt to income ratio. His or her average total monthly expense is \$7,493 while monthly income is \$9,482. It is important to note that individuals, who are able to obtain a loan through Seedco and have business debt, are most likely to be boat owners or owners of seafood related businesses. This population tends to have a larger income base as well as larger expenses. They are willing to invest large sums of money or take a loan to start a business. Replacement careers in the form of entrepreneurial opportunities are suited for this population.

There is a gap of over \$30,000 in reported income between the data collected by MQVN CDC's surveys and Seedco's. This is not surprising since many small coastal fishing communities operate on a cash-based economy and have limited knowledge of proper documentation such as income tax returns to verify income levels.⁴⁰ While I served as an interpreter for MQVN CDC, I was approached by deckhands informing me that they make more than what is currently reported on their 1099-MISC tax form provided by their employer or that they are paid by cash and do not have proof of income.

The diverse financial situation and discrepancies in income require different wage levels for temporary or replacement jobs. For boat owners and boat captains, the income level of temporary, replacement jobs must be at or above the current income level. Based on the survey data and other published reports, boat owners average between \$60,000-70,000 annual income and boat captains between \$35,000-\$40,000.

⁴⁰ Vietnamese American Volunteer Law Corps, "GULF OIL SPILL."

As for deckhands and seafood workers, their income levels in the surveys are extremely low and do not reflect their actual income. To compensate for this gap, future replacement and temporary jobs must be at an income level between \$20,000 and \$25,000. This estimate is based on the 2005-2009 American Community Survey 5-year estimates showing the per capita income of New Orleans at \$23,559.⁴¹

Table 3. Existing and Proposed Annual Income for Fisherfolk

Occupation	Existing Annual Income	Proposed Annual Income
Boat Owners	\$67,346	\$60,000-\$70,000
Boat Captains	\$36,233	\$35,000-\$40,000
Deckhands	\$16,583	\$20,000-\$25,000
Seafood Workers	\$9,919	\$20,000-\$25,000

Assessment of Vietnamese American Fisherfolk

Of the 310 technical assistance surveys collected by MQVN CDC, 265 were from Vietnamese Americans and 146 were from Vietnamese Americans directly involved in the seafood industry. The remainder of Vietnamese Americans are involved in the nail salon or construction fields. Only the 146 surveys of Vietnamese Americans involved in the seafood industry either as fisherman, shrimpers, or seafood workers are used in this analysis. The 105 Gulf Coast Oil Spill Disaster Community Surveys collected by VAYLA-NO are all from individuals involved in the seafood industry. MQVN CDC surveys were collected when individuals filed for BP claims through the technical assistance that MQVN CDC provides. The VAYLA-NO surveys were collected via community social networks.

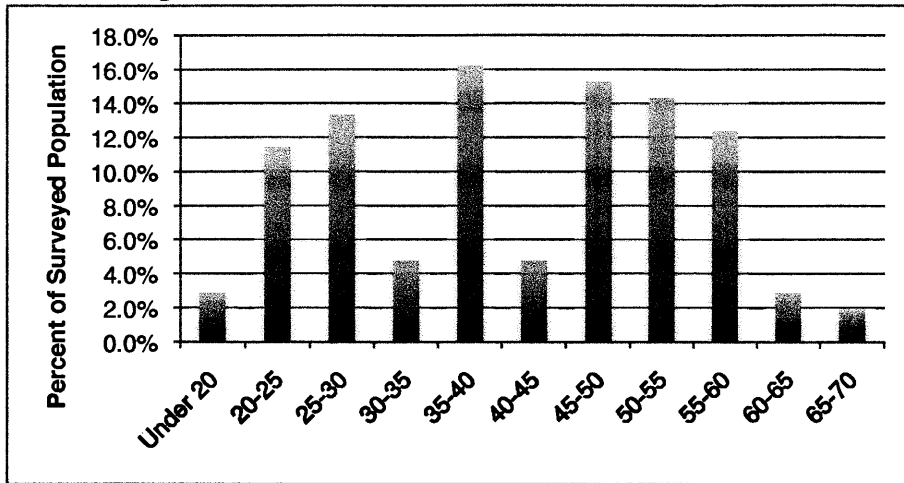
⁴¹ "American FactFinder."

Tung Tran, the individual quoted at the beginning of this chapter, represents a typical Vietnamese American fisherman. He is a 56 year-old shrimp boat captain whose boat was destroyed by Hurricane Katrina. He did not have insurance but he returned to New Orleans, borrowed \$100,000 for another boat, and within a couple months was back in business. His grandfather and father both worked in the fishing industry in Vietnam; he loves being out in the water and has never considered leaving his job. Another fisherman, Duc Pham is a deck hand on a shrimp boat. He has worked in the industry for 24 years starting at the age of 15 and knows little English. He is currently dependent on food vouchers given by Catholic Charities and says that he will manage, "If other people can survive, then I can too".⁴²

According to the surveys, approximately 70% of the individuals in the seafood industry are male. The average age of individuals in the industry is 40.7 and majority of individuals have worked in the industry for more than ten years. As stated previously in this chapter, the earning potential of dislocated workers if they are able to find new employment declines based on the length of time employed in their previous jobs. A study of displaced workers in Washington State by Louis Jacobsen found that the rate of return for retraining workers under the age of 35 through enrolling in community colleges is nearly double the rate of return for those over the age of 35. Older individuals do not have enough time left in their careers to fully benefit from retraining through community college courses.

⁴² "Spill Spreads Anxiety Among Vietnamese Fisherman."

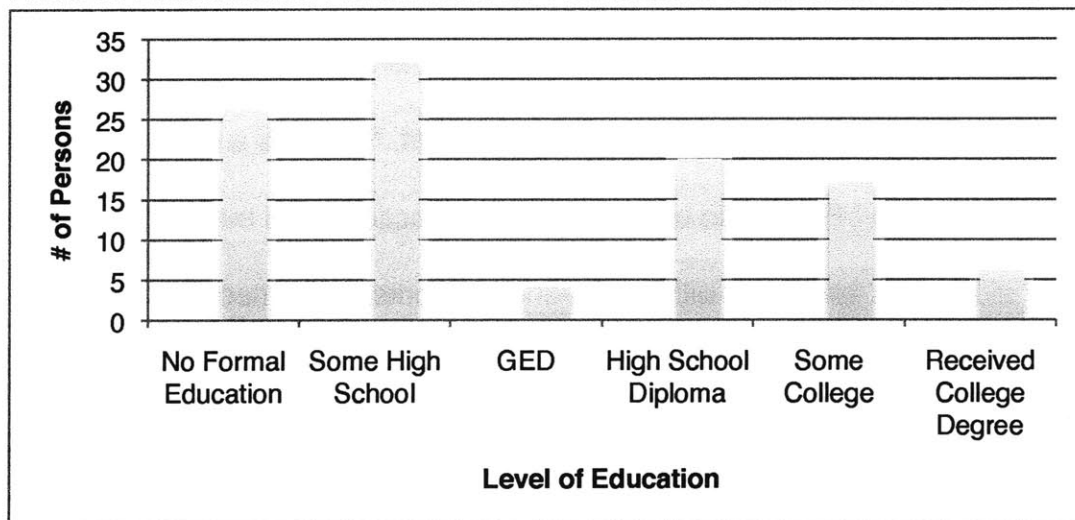
Table 4. Age of Fisherfolk



For most Vietnamese American fisherfolk, their careers began at a very young age through on the job training. For first generation Vietnamese American immigrants (individuals who were born in Vietnam and immigrated to American), the skills were passed on from older generations, and fishing was seen as a way of life rather than a career choice. For some second generation Vietnamese Americans, life on a boat is also an expectation, but due to increased educational opportunities and career options many second generation Vietnamese Americans have chosen careers in other fields such as medicine and business, but still continue to fish as a hobby. Since many fisherfolk learn their job skills from a young age, the population has low formal education. According to the survey collected by VAYLA-NO, over half of the population surveyed has less than a high school degree. Only 22% received more than a high school education and only 5% hold a college degree. Low educational attainment makes it difficult Vietnamese American fisherfolk to find other forms of employment.

For the fisherfolk population, formal education is not required to be successful. However, outside of the fishing industry, it is hard for Vietnamese American fisherfolk to identify skills that are transferrable to other industries. When asked what skills they have, most fisherfolk answered none. When asked if individuals would be willing to return to school to have another career or job, 80% answered “No,” and the other 20% who answered “Yes” did not know for what they would go back to school. In interviews with two technical assistance providers at MQVN CDC, both mentioned that the fisherfolk are hoping to go back on the water as soon as possible. Both interviewees also emphasized the fisherfolk way of life as a challenge to transition to 9-5 careers. Fisherfolk are accustomed to long yet flexible hours. They spend weeks or months out on a boat. Further both interviews both said that the fisherfolk have a strong sense of entrepreneurship and self-determination, but unfortunately do not have formal education and can not speak English. These are barriers to the fisherfolk looking for jobs, however with proper training, they can learn new skills.

Table 5. Educational Attainment of Vietnamese American Fisherfolk



As stated earlier, language barriers play a big role in the fisherfolk's ability to work in other industries. In the months after the BP oil spill, MQVN CDC advocated for BP to provide translated documents and interpreters during their town hall meetings and throughout the claims process. During my one week as an interpreter for this process, 90% of the individuals that came to MQVN CDC's office for services needed the help of an interpreter to file their claims. Some fisherfolk were also illiterate and required assistance to complete claim forms. English as a Second Language (ESL) courses are often offered as a solution for limited English proficient individuals. However, the combination of older age, limited educational attainment and lack of basic literacy are huge barriers to successful completion of an ESL course.

The surveys did not provide information on the willingness of fisherfolk to relocate for work. Given that the entire Gulf Coast is affected, relocation would require moving outside of the region for work. MQVN CDC staff expressed the need for local job creation and work related to the fishing industry. For Vietnamese American fisherfolk, there is a strong connection to the water and to the community. In focus groups conducted by GNO Inc. three months after the oil spill, few fisherfolk were willing to leave Louisiana to pursue other jobs. GNO Inc. reported that, "There is a deep feeling of rootedness and home here." For ethnic communities, connections and support from the local community along with familiarity with navigating networks is an important part of economic success.⁴³ After working with the Vietnamese American community in New Orleans for three years after Hurricane Katrina, I observed the community's ability to collectively work together to rebuild the neighborhood at a faster rate than the rest of the

⁴³ Ong and Loukaitou-Sideris, *Jobs and economic development in minority communities*, 9.

city. I also experienced the community's ability to work together to successfully close a toxic landfill in their neighborhood. When faced with adversity, the Vietnamese American community's biggest strength is the mutual aid they provide to each other.

Summary and Recommendations

The effects of the BP oil spill are varied depending on the occupation, age, and educational attainment levels of Vietnamese American fisherfolk. Deckhands and seafood workers are heavily impacted because of their reliance on boat captains and owners for jobs. They are also in great need for alternative employment because of their low-income status before the oil spill, which does not allow for much savings. Deckhands and seafood workers over the age of 35, who tend to have limited English proficiency, and low-educational levels, are also amongst the most in need of temporary and/or replacement jobs. Deckhands and seafood workers under the age of 35 have more flexibility to pursue a new career through formal education or other means because of their ability to speak English and higher educational attainment levels. Boat owners and boat captains are heavily impacted by the oil spill but have more financial flexibility to pursue alternative business ventures and to wait for the seafood industry to recover. Based on the assessment of Vietnamese American fishfolk' skills and job suitability, the following recommendations are divided into the four areas of job creation, career transition and training, entrepreneurial opportunities, and educational opportunities. Each recommendation stresses the importance of creating local jobs with skills that can be learned through on the job training while addressing the different needs of differing age groups, experience, and language proficiency skills.

Table 6. Career Path Recommendations for Fisherfolk

	RECOMMENDATIONS	SUITABLE GROUP
Educational	Support for younger fisherfolk to return to school for a college degree or certification in a specific skill such as construction, etc.	Deckhands and Seafood Workers Under 35
Entrepreneurial	Support for entrepreneurial fisherfolk to learn skills to open new business. Provide support to navigate grants and loans processes.	Boat Owner & Boat Captains
Career Transition and Training	On the job training ; if classroom training is required, training should be oral and visual rather than textbook heavy. Work with fisherfolk to identify existing informal yet marketable skills and look at ways to transition and build skills that are marketable outside of the Fishing industry.	Boat Owner, Boat Captains, Deckhands, and Seafood Workers
Job Creation	Target jobs that do not require a high- proficiency in English. Find and support careers that are connected to the water or seafood since fisherfolk are heavily connected to life on the water. Develop jobs that are local since many Vietnamese Americans have strong social networks and a strong sense of place in New Orleans. Develop jobs that are in the rage of proposed annual income level based on occupation.* * Refer to Table X in this Chapter	Boat Owner, Boat Captains, Deckhands, and Seafood Workers

Chapter 3 – Green Jobs: Career Opportunities for Vietnamese American Dislocated Workers

“We’re trying to find out from them what they would like to do. We need to start getting folks who are interested in different industries. Some displaced fishermen have expressed an interest in changing industries if necessary. Ideas to create “green” jobs, raise free-range chickens or work in food production have been proposed. There is a chance the Gulf Coast waters might not be safe for years. -Tuan Nguyen⁴⁴

Characteristics of Suitable Jobs for Vietnamese American Fisherfolk

In Chapter 2, the skills of Vietnamese American fisherfolk were assessed through analysis of data collected by local organizations, personal narratives and personal interviews. From that analysis, the typical profile of a Vietnamese American fisherfolk is a middle aged individual, with ten or more years of experience in the seafood industry, has less than a high school education, is limited English proficient, and would like to return to the seafood industry as soon as possible. The United States labor market policy of increased competitiveness results in firms and the federal government focusing on workforce initiatives around skill building (i.e. computer skills, literacy programs, etc.). The underlying belief of this policy is that investing in skills acquisition is the path to increased competitiveness globally for the U.S. economy and will also result in the increased stability of low-income communities.⁴⁵ However, one of the biggest criticisms of these federally funded employment-training programs is that they only focus on the supply side of the labor market (the individuals who need jobs). This supply focused

⁴⁴ Ko, Nalea J., “Gulf Coast Asian American Fishermen Face Uncertain Future.”

⁴⁵ Giloth, *Jobs and Economic Development*, 5.

strategy results in low-wage work rather than career path jobs.⁴⁶ For immigrant communities, studies show that beyond the match of job skills of individuals to available jobs, there also needs to be access to social services and support. In a study of Latinos in the Pico Union District of the city of Los Angeles, California, informal associations through churches and recreation centers allowed for individuals to advance economically.⁴⁷ The support network that the Vietnamese American community in New Orleans East provides through the church and other social institutions is an important piece to the successful transition of Vietnamese American fisherfolk to new careers.

Through the criticisms and findings from these studies along with the analysis from Chapter 2, the following is a list of criteria and characteristics that inform development and connection of suitable new jobs for displaced Vietnamese American fisherfolk:

- Vietnamese American fisherfolk rely on informal associations such as churches, community groups, and extended family for survival, especially during tough economic situations such as Hurricane Katrina and the BP oil spill. These associations are currently centered in the Versailles community in New Orleans East. The fisherfolk will be more likely to succeed during this transitional stage, if **suitable jobs are developed in the New Orleans region.**
- Many fisherfolk are limited English proficient and poorly educated. **Suitable jobs must required limited interaction where English is required.**

⁴⁶ Ibid., 85.

⁴⁷ Ong and Loukaitou-Sideris, *Jobs and economic development in minority communities*, 8.

- Most fisherfolk have learned their skills while on the job or through older family members. Most do not have a high school let alone a college degree and are unlikely to thrive in formal educational settings such as college or trade schools. **Suitable jobs should require skills that can be learned through shadowing, on the job training or apprenticeship programs.**
- A small portion of the fisherfolk population is accustomed to running a business, whether it's a seafood corner store or owning and captaining a boat. **Jobs that provide entrepreneurial opportunities would be suitable for this population.**
- Given the strong connection of Vietnamese American fisherfolk to the water, a **suitable job would allow for the fisherfolk to continue working in a seafood related industry or with interaction with coastal waters.**
- To properly provide for individuals dependent on the fisherfolk, **income of new career must be at or above the proposed income level (See Table 3).**

Green Jobs As A Possible Career

MQVN CDC, the client of this thesis, expressed interest in green jobs as possible career opportunities for dislocated Vietnamese American fisherfolk. This chapter will attempt to determine whether green jobs are a viable career option in the New Orleans region and for the available skills sets of Vietnamese American fisherfolk. "Green jobs" in this thesis are defined using the Bureau of Labor Statistics (BLS) definition of the term. The BLS defines green jobs as jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources and jobs in which

workers are involved in making the production process more environmentally friendly or use fewer natural resources. These goods, services, and duties fall into five categories: (1) energy from renewable sources, (2) energy efficiency, (3) pollution reduction and removal, greenhouse gas reduction, and recycling and reuse, (4) natural resource conservation, (5) environmental compliance, education and training, and public awareness.⁴⁸

Data on these 5 categories of green jobs defined by the BLS is difficult to find since BLS just received funding at the beginning of fiscal year 2010 to collect data on green jobs. With this funding, the BLS also identified industries using North American Industry Classification System codes that fall into the categories of green jobs. These codes are used throughout this study to determine the growth of green jobs. For the New Orleans metro area, the Louisiana Workforce Commission recently provided \$814,222 to conduct research on green jobs in Louisiana and Mississippi. The research will provide 10 year green job projections at the state level using a statewide green jobs survey. However, the study's completed completion date is at the end of 2011.

The green jobs identified by MQVN CDC as potential career paths for Vietnamese American fisherfolk are in the production of goods and services in energy efficiency and natural resources conservation. Specifically, construction jobs in the field of energy efficiency (i.e. weatherization and retrofitting buildings) and land based sustainable and organic aquaculture.

Energy efficiency construction is suitable for this population for multiple reasons. Based on the survey data used in the skills assessment of Vietnamese American

⁴⁸ U.S. Bureau of Labor Statistics, "Green Jobs."

fisherfolk in the previous chapter approximately, 10% of individuals who completed MQVN CDC's survey identified their occupation as construction, welding, laborer or painters. These individuals were not included in the data used to gain an understanding of the fisherfolk population since they do not fit in the category of fisherfolk. However, this data shows that there are individuals in the community already working in these fields and can provide a base for apprenticeship or hiring opportunities. Both of the technical assistance providers interviewed from MQVN CDC stated that many of the fisherfolk have experience with welding on their boats and have expressed interest in the construction field. Beyond the existing skills and interest, energy efficiency constructions jobs are fit for a limited English proficiency population because only one person on the construction crew would need to know English well in order to communicate with the client. The remainder of the crew can work on a project without the need to speak English. Energy efficiency construction skills also can be taught through apprenticeship programs and on the job training. Certification for these skills may be a challenge since exams are often conducted in English. However, MQVN CDC can advocate federally for certification to occur through project completion or for examinations to be translated into Vietnamese or conducted orally.

Sustainable land based aquaculture is also an industry that is suitable for Vietnamese American fisherfolk and follows the criteria identified previously in this Chapter. Land based aquaculture technology is scalable and can be viable in many different environments in rural and urban areas. This also provides and opportunities for fisherfolk to raise fish in a different environment. While it is not the same as being on

boats in the Gulf of Mexico there is still a connection to raising and harvesting fish. Since the market for aquaculture is fairly new to the New Orleans region and there is a threat of decreased availability of Gulf fish, aquaculture provides entrepreneurial opportunities for individuals who are willing to take a risk in the creation of a new industry. The skills needed to work in land-based aquaculture can be learned while on the job and through shadowing and required limited knowledge of English to complete. One draw back of establishing an aquaculture park in New Orleans is the large upfront capital cost to build the infrastructure of the aquaculture park along with the necessary support services for the operation to be successful (growing, processing, storing, and selling of the fish). However, MQVN CDC is in the process of fundraising and gathering technical expertise from The Ocean Foundation to build the infrastructure necessary for workers to enter and thrive in this field.

Table 7. Suitable Job Criteria for Vietnamese American Fisherfolk

JOB CRITERIAS	Energy Efficiency Construction	Aquaculture
Local jobs located in New Orleans	X	X
Low English Proficiency Requirement	X	X
Skills attainable through on the job training	X	X (A small portion, some positions require college level courses)
Entrepreneurial Opportunities		X
Connection to Water and Seafood		X
Industry Growth	To be determined	To be determined
Annual income must be above \$20,000	To be determined	To be determined

Potential of Green Jobs in the New Orleans Region

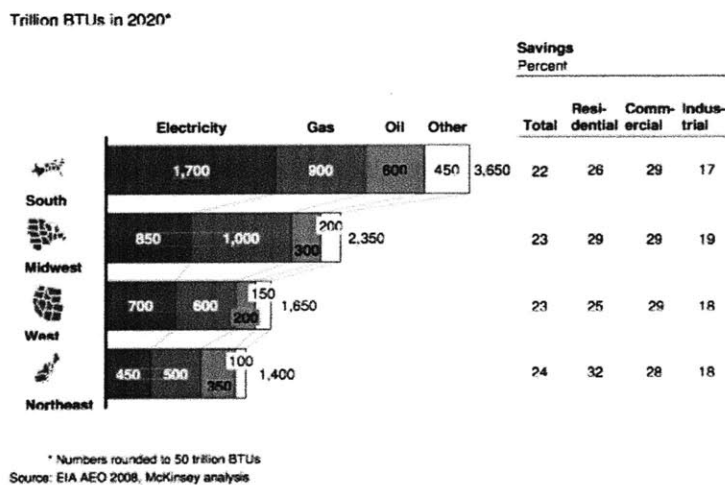
Jobs In Energy Efficiency Construction

At a national level, the United States economy has the potential to benefit from energy efficiency initiatives. A study completed by McKinsey & Company published in 2009 stated that:

“Energy efficiency offers a vast, low cost energy resource for the U.S. economy... If executed at scale, a holistic approach would yield gross energy savings worth more than \$1.2 trillion, well above the \$520 billion needed through 2020 for upfront investment in efficiency measures. Such a program is estimated to reduce end-use energy consumption in 2020 by 9.1 quadrillion BTUs, roughly 23 percent of projected demand...”

According to the same report by McKinsey & Company, an analysis of Census regions reveals that the South region has the highest energy usage with the potential to improve its energy savings by 22 percent in 2020.⁴⁹

Table 8. Energy Efficiency End-Use Potential Across Census Regions



The bars at the left depict the end-use energy efficiency potential in the four Census regions in 2020, by fuel type, and measured in trillion BTUs, with the total for the region at the right end of the bar. The table on the right displays the potential energy savings in the Census region as a percent of BAU consumption in 2020; the total savings in percent is a weighted average of the savings in the three sectors -- residential, commercial, and industrial.

⁴⁹ Granade et al., *Unlocking energy Efficiency in the U.S. Economy*.

The United State currently uses much more oil than it is currently able to produce. At the peak of domestic oil production, the US imported 21% of its oil. In 2007, the number had increased to 59%, and by 2030, based on current consumption rates, the number is expected to rise to 65%, making America extremely dependent on foreign oil.⁵⁰ In the wake of the recent BP oil spill there is a further urgency to reevaluate the dangers of off shore drilling to the ecosystem and individuals connected to it. While the majority of demand of oil comes from transportation needs, residential and commercial construction sectors also rely on oil and electricity for heating, cooling and lighting. The projected new construction of over 36 million new homes and 20 billion square feet of commercial space by 2030 creates an additional demand for 790 billion kilowatt hours of electricity. This does not include the existing 4, 006 billion kilowatt hours of electricity generated in 2007, responsible for 41% of carbon dioxide emissions in the United States.⁵¹

With the need to decrease carbon dioxide emissions, existing government funding in programs to reduce the heating bills and oil usage of low-income individuals such as the Weatherization Assistance Programs, and more recent investment into energy efficiency improvements from the American Recovery and Reinvestment Act of 2009, there is potential for job growth in the energy efficiency sector. In the “U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy” report prepared for The United States Conference of Mayors and the Mayors Climate Protection Center, findings show that there is potential for the creation of 4.2 million green jobs by 2038,

⁵⁰ Global Insight, *Current and Potential Green Jobs in the U.S. Economy*.

⁵¹ *Ibid.*

with 81,000 jobs in residential and commercial retrofitting. The definition of green jobs used in this report is similar to the BLS definition stated above. Green jobs in the “U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy” study is defined as workers in activity that produces electricity using renewable or nuclear fuels, agriculture and forestry jobs using soy or corn from transportation, manufacturing jobs that produce goods for renewable power, equipment providers in renewable and energy efficiency production, energy efficiency construction, and support services for these industries such as legal, research and engineering.⁵²

In another study that focused on only the renewable energy and energy efficiency sectors by the American Solar Energy Society (ASES), there is more promise in the creation of jobs by the renewable energy sector with a smaller portion of jobs created by the energy efficiency sector. Using three scenarios (base, moderate and advanced) ASES projections from 2006- 2030 are promising. A base case scenario means that there is no major change in policy to increase the renewable energy market. A moderate scenario assumes that there will be an increase in federal and state initiatives in the renewable energy and energy efficiency sectors with approximately 15% of all electricity coming from renewable and energy efficiency technologies. Finally, an advanced scenario assumes approximately 30% of electricity is generated from renewable or energy efficiency sources.⁵³

⁵² Ibid.

⁵³ Bezdek, *Renewable Energy and Energy Efficiency: Economic Drivers for the 21st Century*.

Table 9. U.S. Renewable Energy and Energy Efficiency Industries in 2030

	Revenues (Billions of 2006 Dollars)			Total Jobs Created (Direct Plus Indirect - Thousands)		
	Base Case	Moderate Scenario	Advanced Scenario	Base Case	Moderate Scenario	Advanced Scenario
RE	\$95	\$227	\$597	1,305	3,138	7,918
EE	\$1,818	\$2,152	\$3,933	14,953	17,825	32,185
Total	\$1,913	\$2,379	\$4,530	16,258	20,963	40,103

Source: Management Information Services, Inc. and American Solar Energy Society, 2007

According to the U.S. Metro Economic report, as of 2006, there were 6,651 existing green jobs in Louisiana; by 2038, the projection is 52,627. For the New Orleans Metropolitan area, in 2006, there were 1,514 existing green jobs; by 2038, the number of green jobs is expected to reach 11,981. An even larger increase is in the city of Baton Rouge, which is located approximately one hour west of New Orleans. In Baton Rouge there is a projected 17,458 green jobs by 2038, growing from an existing 3,470 jobs in 2006.⁵⁴

Beyond projections, the City of New Orleans has taken steps to support energy efficiency improvements in New Orleans. In 2007, the Louisiana State Legislature passed Act 371 to create the largest state renewable energy tax credit in the United States. This allows for a 50% tax credit for residential installation of photovoltaic systems from the state of Louisiana. By combining this with the 30% federal tax credit, the owner's cost gets reduced to 20%.⁵⁵ In 2007, the City of New Orleans also began to

⁵⁴ Global Insight, *Current and Potential Green Jobs in the U.S. Economy*.

⁵⁵ Dadakis, "Picking up the PACE."

plan for energy efficiency improvements, by creating the Energy Policy Task Force. The Task Force produced a report titled *Energy Hawk* in October of 2007, outlining a goal to support energy efficiency and renewable energy over a 6-12 month period. In 2007, the Office of Recovery Management, a new office formed after Hurricane Katrina to take charge of the recovery also prepared the GreenOLA report. While both reports were created separately, they both called for the New Orleans City Council to exercise their regulatory powers over EntergyNO, a New Orleans' utility company, to create more energy efficiency and renewable energy programs.⁵⁶ In December of 2007, New Orleans City Council passed resolution R-07-600 to express the council's commitment to energy efficiency.

In 2008, the New Orleans City Council with EntergyNO passed Resolution R-08-601 to set aside \$1.955 million for residential use in the EntergyNO Energy Smart Plan. The Entergy Smart Plan is a citywide energy efficiency program to be developed with city government and community groups.⁵⁷ In April 2009, an agreement in principal was approved by the City Council, which would provide \$3.1 million per year through system benefits charges for the Energy Smart Plan. At this time, EntergyNO also began a pilot program for the Energy Smart Program called Quick Start. More than 500 customers participated in this program resulting in a reduction of 3,000 kilowatts preventing 9,300 tons of carbon emissions. In February 2011, the New Orleans City Council approved the final plan for the Energy Smart program. EntergyNO has allocated over \$11 million for the next three years and is expected to make over 7,000 cash incentives available for

⁵⁶ Ibid.

⁵⁷ Entergy New Orleans, Inc., "The Energy Smart New Orleans Plan."

residents and businesses per year. “We want to transform the market by creating a demand for energy-efficiency experts, builders and contractors, creating a “green work force,” Cathy Herren, director of energy efficiency programs for Entergy New Orleans.⁵⁸

With this large investment by EntergyNO in energy efficiency improvements, it seems natural to assume that there will be job creation and development of a new “green work force.” However, research shows that the skills used in conventional construction projects are similar to those used in green constructions. In the report on the Green Economy by Global Insight, research shows that similar contractors are completing construction projects that are both green and conventional with difference being in the materials being used.⁵⁹ For individuals currently in the construction industry, or with skills in the construction industry the transition to green construction requires learning new techniques but these skills should be easy to develop. The delay in the completion of these projects is due to a lack of knowledge transfer between green construction and materials and existing contractors.⁶⁰ In an interview with Louisiana Green Corps (LA Green Corps), an organization based in New Orleans dedicated to providing green job skills training to unemployed, under-employed or disadvantaged residents through completion of sustainable projects, a representative stated that many of the graduates from the weatherization training conducted by LA Green Corps were unable to find long term jobs in weatherization, since most of the job contracts in green jobs were not 40 hours per week jobs. Instead, many graduates entered construction jobs that were not specific to energy efficiency. Through the experiences at LA Green

⁵⁸ Thompson, “Entergy readies program to save energy | NOLA.com.”

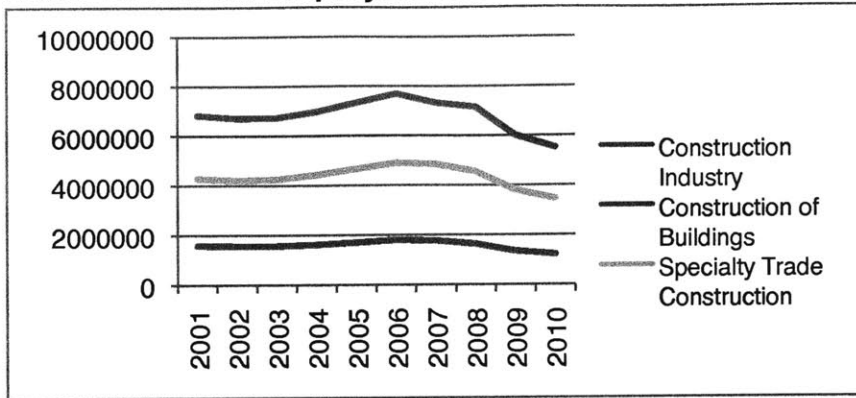
⁵⁹ Global Insight, *Current and Potential Green Jobs in the U.S. Economy*.

⁶⁰ Ibid.

Corps as a job training mechanism for disadvantaged individuals, LA Green Corps did express that certified training such as CPR, first aid, asbestos and lead awareness, and basic construction certification from the National Center for Construction and Research are extremely useful to the trainees in many fields. Another representative from the City of New Orleans working with the GreenOLA program stated that for the targeted Vietnamese American population, the best jobs would be in energy efficiency, specifically certified electricians.

To further understand the construction industry where the Bureau of Labor Statistics (BLS) currently classifies energy efficiency, I completed an analysis of the industry looking at employment numbers over the last decade. Using the available time series data for national data from the BLS, the construction industry has declined since its peak in 2006. While this is not specifically focused on the energy efficiency sector, it also provides an outlook into the broader construction industry. Despite the projected growth in energy efficiency jobs from other reports, there is decline in the construction industry as a whole. Assuming that there is a growth in energy efficiency related construction, it may be difficult for Vietnamese American fisherfolk to enter the industry since individuals who are losing their jobs in construction most likely possess skills that would put them at an advantage to learn energy efficiency related construction.

Table 10. Annual Employees for the Construction Industry



Source: Bureau of Labor Statistics

Given the increase in demand for post-Katrina rebuilding, the construction industry in New Orleans has received a boost since 2005. However, almost six years after Katrina, this is no longer the case. Based on 2008-2018 projections by the Louisiana Workforce Commission, the construction industry in Louisiana is expected to decline by 1.6%, resulting in a loss of 2,160 jobs over the ten year time period. The construction industry in this analysis includes the sub sectors of construction of buildings, heavy and civil engineering construction, and specialty trade contractors. Energy efficiency construction falls into the buildings and specialty trade contractors. The construction of buildings sector is projected to decline by 11.5% with a loss of 3,345 jobs between 2008-2018. However, the specialty trade contractors sector is projected to increase by 2.3% with an increase in 1,533 jobs. Combined, the two sub sectors are projected to have a loss of 1,812 jobs over ten years.

Table 11. Louisiana 2008-18 Projected Construction Industry Employment

		2008	2018	Employment	Percent
	NAICS	Average	Projected	Change	Change
Industry Sectors	CODE	Employment	Employment	2008 - 2018	2008 - 2018
Construction	23	134,966	132,806	-2,160	-1.6
Construction of buildings	236	29,122	25,777	-3,345	-11.5
Heavy and civil engineering construction	237	40,359	40,011	-348	-0.9
Specialty trade contractors	238	65,485	67,018	1,533	2.3

Source: Louisiana Workforce Commission

To focus on the New Orleans region, the Louisiana Workforce Commission also provides 2008-2018 projections for the Regional Labor Market Area 1 which includes New Orleans and its surrounding parishes of Jefferson, Plaquemines, St. Bernard, St. Charles, St. James, St John the Baptist, and St. Tammany. This region covers the Southeast section of Louisiana. For Southeast Louisiana, the construction industry projections are worse than those of the State of Louisiana. The construction industry in Southeast Louisiana is expected to decline by 11.4% from 2008-2018. The construction of buildings sub sector is expected to decline by 9%, and the specialty trade contractors by 7.3%, resulting in a loss of 1,917 jobs in the two sub sectors and 3,747 in the overall construction industry. This projected decline in the construction industry may generate a workforce that would compete with Vietnamese American fisherfolk for jobs in energy efficiency construction.

Table 12. Regional Labor Market Area 1 2008-18 Projected Construction Industry Employment

		2008	2018	Employment	Percent
	NAICS	Average	Projected	Change	Change
Industry Sectors	CODE	Employment	Employment	2008 - 2018	2008 - 2018
Construction	23	32,967	29,220	-3,747	-11.4
Construction of buildings	236	6,764	6,152	-612	-9.0
Heavy and civil engineering construction	237	8,398	6,568	-1,830	-21.8
Specialty trade contractors	238	17,805	16,500	-1,305	-7.3

Source: Louisiana Workforce Commission

Despite the passing of the Energy Smart program and increased funding for energy efficiency in New Orleans, this still does not guarantee the need for a new workforce of energy efficiency construction workers. 2018 projections at the national, state and local level show that the construction field is declining overall. However, specialty trade construction which includes the subfields of electrical, plumbing, heating, air conditioning, and drywall insulation shows the least decline at the national and New Orleans regional level and some growth at the state level. The construction industry at the national level also provides a good income above the level of most fisherfolk. For non-supervisory construction workers in 2010, the average hourly wage was \$22.66 per hour resulting in an annual income of \$47,132.

Based on data analysis, energy efficiency jobs have the potential to add new jobs especially in specialty trade construction. However, the gains are not enough to support training for Vietnamese American fisherfolk for this field alone. Instead, green jobs in the energy efficiency sector are best viewed as transition jobs into construction and electrical fields and only applicable to a segment of the dislocated population –those

with a background in construction related field and individuals who are interested in construction as a long-term career.

Jobs in Aquaculture

Within the green jobs Industry, MQVN CDC is also interested in exploring sustainable land based aquaculture as a potential industry for dislocated Vietnamese American fisherfolk to enter. As mentioned previously in this chapter, MQVN CDC believes that aquaculture is a suitable industry for Vietnamese American fisherfolk, because it provides a connection to water and harvesting of fish, entrepreneurial opportunities, and skills can be learned through on the job training. While aquaculture does provide a connection to fish, small scale entrepreneurial opportunities and some of the skills can be learned through on the job training, commercial scale aquaculture requires a large overhead to build the proper infrastructure. Skills requirements vary from basic farming skills to classroom training. Furthermore, the animal production industry based on national BLS data is expected to decline and employs few individuals.

Aquaculture is the production and sale of farm-raised aquatic plants and animals. The production of fish and shellfish can happen in many different facilities including ponds (levee, watershed, etc.), recirculation systems, cages, and raceways. Watershed and levees are standing water ponds created when levees or dams are built and soil is excavated. Cages are floating fixtures in waterways where fish are feed and grown. Raceways are long tanks where fresh water continuously flows and is then discarded, while recirculation systems are tank systems where the water is filtered and reused. Each method of aquaculture has its advantages and disadvantages. However, the most

sustainable way of raising fish is through the use of recirculation tanks. The majority of aquaculture currently produced in the South is in levees and watershed ponds.⁶¹

Hawaii has one of the most developed agriculture industries in the United States. There are currently over 100 aquaculture farms in the state of Hawaii. In 2003 the products from these farms were valued at over 27 million dollars. Hawaii is successful in the production of seafood because of the large consumption of seafood on the islands, their need to import over 70% of consumed products, and their ability to export to other countries and U.S. mainland. Despite the large number of aquaculture farms in Hawaii, in 2003, there were only 942 people employed, both part-time and full-time in commercial aquaculture including research, training and technology transfer surrounding the aquaculture industry. While aquaculture jobs include farm and production managers that require hands-on farming experience, many employers in Hawaii also like to see formal coursework in agriculture, aquaculture, marine biology, oceanography and other marine related fields.⁶² Many experts claim that aquaculture can be scaled to fit the needs of a specific neighborhood or even be backyard operations, however, aquaculture farms that operate at a small-scale are usually family-run and only employ a small number of individuals, many part-time.⁶³

Furthermore, national, state, and local employment data do not show positive change for the animal and crop production industries. The follow is a series of data analysis for the agriculture industry sub sector of animal production. Aquaculture is

⁶¹ Beem, *Aquaculture: Realities and Potentials When Getting Started*.

⁶² "FAQ — Hawaii Department of Agriculture."

⁶³ Karr and Buttner, "East meets West: Hawai'i, a lesson for aquaculture development in the United States. Part II: aquaculture today."

currently classified in animal production sector. Although this sector also includes other forms of animal production, this is the most detailed data available from the BLS and does help to give a broad overview of the larger industry. According to BLS data, at the national level animal production will experience an average annual rate of change of 0.4% from 2008-2018 resulting in a loss of 36,700 jobs. In 2009, the animal production industry had 860,600 and is expected to decline to 823,900 in 2018. The animal production industry experienced even greater declines between 1998-2008 with a loss of 259 jobs at an average annual rate of 2.6%. In 2008, the average national hourly wage was \$10.66 resulting in an average national annual salary of \$22,160.

Table 13. Employment in Agriculture Industry, 1998, 2008 and Projected 2018

Industry	2007 NAICS	Employment						
		Thousands of jobs			Change		Average annual rate of change	
		1998	2008	2018	1998-2008	2008-18	1998-2008	2008-18
Agriculture, forestry, fishing, and hunting⁽³⁾	11	2,528.0	2,098.3	2,020.1	-429.7	-78.2	-1.8	-0.4
Crop production	111	1,085.3	950.6	880.7	-134.7	-69.9	-1.3	-0.8
Animal production	112	1,119.6	860.6	823.9	-259.0	-36.7	-2.6	-0.4
Forestry	1131, 1132	17.1	16.8	18.0	-0.3	1.2	-0.2	0.7
Logging	1133	122.7	82.0	100.2	-40.7	18.2	-4.0	2.0
Fishing, hunting and trapping	114	57.8	47.0	47.1	-10.8	0.1	-2.0	0.0
Support activities for agriculture & forestry	115	125.5	141.3	150.1	15.8	8.8	1.2	0.6

Source: Bureau of Labor Statistics

At the state level, Louisiana's agriculture, fishing, forestry, and hunting industry as a whole is expected to decline by 17.9% between 2008-2010 losing 3,501 jobs during that time. Animal production alone is expected to lose 153 jobs with a 12.6% loss between 2008-2018. The projected increase in employment in the fishing, hunting, and

trapping industry will result in an increase of 37 jobs over ten years. However, the analysis completed by the Louisiana Workforce Commission was created before the BP oil spill, which had a significantly negative impact on this particular sub industry. At the Regional Labor Market Area covering Orleans, Jefferson, Plaquemines, St. Bernard, St. Charles, St. James, St John the Baptist, and St. Tammany Parishes, the agriculture, fishing, forestry, and hunting industry is expected to decline by 11.1% losing 117 jobs between 2008-2018. Specific animal production data was not available at this level.

Table 14. Louisiana 2008-2018 Projected Agriculture Industry Employment

		2008	2018	Employment	Percent
	NAICS	Average	Projected	Change	Change
Industry Sectors	CODE	Employment	Employment	2008 - 2018	2008 - 2018
Agriculture, Fishing, Forestry, and Hunting	11	19,566	16,065	-3,501	-17.9
Crop production	111	6,384	4,223	-2,161	-33.9
Animal production	112	1,215	1,062	-153	-12.6
Forestry and logging	113	5,490	4,435	-1,055	-19.2
Fishing, hunting and trapping	114	225	262	37	16.4
Agriculture & forestry support activities	115	6,252	6,083	-169	-2.7

Source: Louisiana Workforce Commission

Table 15. Regional Labor Market Area 1 2008-2018 Projected Agriculture Industry Employment

		2008	2018	Employment	Percent
	NAICS	Average	Projected	Change	Change
Industry Sectors	CODE	Employment	Employment	2008 - 2018	2008 - 2018
Agriculture, Fishing, Forestry, and Hunting	11	1,053	936	-117	-11.1
Crop production	111	490	150	-340	-69.4
Animal production	112	-	-	-	-
Forestry and logging	113	-	-	-	-
Fishing, hunting & trapping	114	26	12	-14	-53.8
Agriculture & forestry support activities	115	465	725	260	55.9

Source: Louisiana Workforce Commission

Aquaculture has the potential to be viable in the New Orleans regions due to the warm weather and land for the recirculation system, it also provides an entrepreneurial opportunity for a small backyard system, which is suitable for a small section of Vietnamese American fisherfolk who have small business management experience. However the aquaculture industry does not suit the criteria for the majority of Vietnamese American fisherfolk who have limited English proficiency and lack formal education. The majority of jobs in the aquaculture industry requires both hands on and some formal education. For MQVN CDC, aquaculture could be undertaken at a small scale to provide a small number of jobs for dislocated Vietnamese American fisherfolk.

Summary and Recommendations

Aquaculture and energy efficiency construction have limited potential to provide reemployment opportunities for displaced fisherfolk. Energy efficiency construction has the potential to create new short term jobs due to the increase in support and funding for energy efficiency retrofits in the City of New Orleans. Individuals who enter this industry will eventually be competing against the larger construction workforce which is expected to decline over the next ten years at the regional, state and national levels. Aquaculture, on the other hand, will not produce a large number of jobs over the next ten years, but has the potential to create entrepreneurial opportunities for small business owners. As a result of the BP oil spill, shortage and the uncertainty of seafood provides an opportunity for the aquaculture industry to expand in the Gulf Coast. Neither of these industries fulfill all the requirements identified at the beginning of this chapter, but can be modified to suit certain sectors of the affected fisherfolk population. Energy efficiency

construction can be a viable temporary career path for 3-5 years, during which time a dislocated Vietnamese American fisherman with some previous knowledge in construction can learn a specialty trade to eventually pursue a career in construction. Aquaculture on the other hand can be a viable career for enterpreneurial dislocated Vietnamese American fisherfolk who previously owned a boat or owned a seafood business, provided they can access capital required for the facilities and start-up.

Table 16. Suitable Job Criteria and Recommendations for Vietnamese American Fisherfolk

JOB CRITERIAS	Energy Efficiency Construction	Aquaculture
Local jobs located in New Orleans	X	X
Low English Proficiency Requirement	X	X
Skills attainable through on the job training	X	X (A small portion, some positions require college level courses)
Entrepreneurial Opportunities		X
Connection to Water and Seafood		X
Industry Growth	X (Yes, but temporary)	X (Not currently, but there is potential)
Annual income must be above \$20,000	X	X
	Suitable for deckhand, seafood workers, and boat captains with previous construction experience or interest in construction.	Suitable for entrepreneurial boat owners or captains.

CHAPTER 4-- Conclusion: Recommendations for MQVN CDC

Vietnamese American fisherfolk are one sector of a larger population that will continue to be affected for an indefinite amount of time from the BP Gulf Oil Spill. Addressing the employment needs of dislocated Vietnamese American fisherfolk is extremely challenging. The population is diverse in age, occupation, English proficiency skills, and education level, requiring a variety of career training, job development, and educational needs. Within the Vietnamese American fisherfolk community is a subgroup that is at a huge disadvantage in the job market. This group of fisherfolk is middle aged, lacks English proficiency skills, only has skills in the seafood industry and lacks the financial means to provide for themselves and their families while transitioning to a new career. For these reasons, it is essential for organizations such as MQVN CDC, with connections to the local community as well as language and cultural proficiency to attempt to work with the population to find employment opportunities.

Aquaculture or Energy Efficiency Construction Careers?

After a series of data analysis and interviews with key informants around green jobs, specifically energy efficiency construction and aquaculture, I conclude that energy efficiency construction and aquaculture have the potential to provide jobs to a small sector of the dislocated population, but both sectors do not create enough jobs to support a large training effort in these industries for all dislocated Vietnamese American fisherfolk. Energy efficiency construction in the New Orleans region will not create a demand for a “green workforce” specifically dedicated to energy efficiency, but instead can create the need for a temporary green workforce that will transition into long-term

traditional construction careers. The population of fisherfolk that is most suitable for energy efficiency construction training are: deckhands, seafood workers, and boat captains with previous construction experience or interest in the construction industry. For Vietnamese American fisherfolk, this industry could provide a temporary job to wait for the Gulf Coast seafood industry to recover (the number of years it could take for the Gulf Coast to fully recover from the BP oil spill is uncertain). Energy efficiency construction also provides an opportunity for Vietnamese American fisherfolk to test whether they are interested in a career in construction before pursuing a certificate program. Overall the construction industry is expected to decline, but there are segments in specialty trade construction that show promise. More detailed research and analysis of this sub sector of construction can be useful for future training programs.

While aquaculture will not create large numbers of jobs, it does provide entrepreneurial opportunities for a segment of dislocated Vietnamese American fisherfolk who own or captain a boat. Support in the form of grants and loans for small business as well as technical assistance to develop business plans are potential services that MQVN CDC can provide to help these entrepreneurial fisherfolk succeed.

Working with Vietnamese American Fisherfolk Populations

While the sectors of aquaculture and energy efficiency construction are not fully suitable for the dislocated Vietnamese American fisherfolk population, the needs identified in Chapter 2 help to identify effective methods in working with Vietnamese American fisherfolk regardless of the identified career transition. Given the low skill, low educational attainment, and limited English proficiency of the Vietnamese American

fisherfolk population, more efforts need to be made to enhance English language skills before a disaster happens. Improving English language skills will provide them with more options if a future disaster occurs. This is an area where MQVN CDC, government institutions, and funders can provide support. Waiting until a disaster strikes and jobs are lost before taking steps to broaden an individual's career is too late.

Even though proficiency in English will provide a broader range of opportunities for this population, it is important to recognize that because of the age of Vietnamese American fisherfolk, learning English is not always the best option. Older age combined with local educational attainment in their native language makes it very difficult for this population to learn English. Better approach as mentioned in Chapter 2 include developing training for jobs that do not require high proficiency in English, on the job training, and classroom training that is oral and visual rather than textbook heavy.

Another aspect of working with the Vietnamese American fisherfolk community is the need to disburse information in a timely and informative way. Information must be disbursed in both Vietnamese and English. Many Vietnamese American fisherfolk gather their information through informal social s and through word of mouth. To best outreach to this population, community based organizations like MQVN CDC and VAYLA-NO, the local church, radio stations, and local Vietnamese televisions must be used.

Methods of Finding Suitable Employment for Vietnamese American Dislocated Fisherfolk

It is very important to find suitable employment for Vietnamese American dislocated fisherfolk. In this thesis the client chose the industries of energy efficiency construction and aquaculture as potential industries for the affected population and neither one is clearly feasible for most of this population. As stated at the beginning of this thesis, I attempted to take a job centered economic development approached by focusing on these two industries as potential producers of good jobs for dislocated Vietnamese American fisherfolk. The job centered economic development approach⁶⁴ in theory seems ideal. It encompasses the many components to quality stable jobs for individuals: living wage, career ladders, training, education, etc. However, in practice the approach has its limitations and is too large in scope for an organization like MQVN CDC to accomplish. For the Vietnamese American fisherfolk population the approach is difficult to apply, since education is not a good financial option. Another approach that could be useful in solving the problems that the fisherfolk face is a population centered economic development approach. This approach focuses on the need of the affected population and their skills sets to first create a list of job criterion. The criteria would then be used to identify suitable industries within a larger industry scan to further research. To use a population centered approach, MQVN CDC can start by using the analysis in

⁶⁴ Job centered economic development takes into account the need for employment training, education, accessing good jobs, creating a career ladder, economic development, and advocating for a living wage.

chapter 2 to develop a list of job criterion. Following that step, MQVN CDC can do a broad industry scan to see which industries match these job criterion and not just energy efficiency or aquaculture. Lastly, given the diverse occupations that exist within the fisherfolk population an occupation based approach might be most useful. This approach focuses on the existing occupational skills and scans across industries for jobs in these occupations. For example, a deckhand has skills related to working on a boat and solving mechanical problems; looking across industries, the deckhand can work in an auto mechanic shop, fix air conditioning systems or learn to drive a commercial boat for swamp tours. Using the analysis from Chapter 2, MQVN CDC can determine a list of skills that fisherfolk have, then cross reference those skills with a variety of occupations and see where the fisherfolk can potentially work. These other approaches to economic development can result in an increase in employment opportunities for Vietnamese American fisherfolk and other populations in similar situations.

Next Steps for MQVN CDC

MQVN CDC has a large and challenging problem to address as a result of the BP oil spill. MQVN CDC also has an opportunity to address the needs of dislocated Vietnamese American fisherfolk. For the two industries that MQVN CDC is interested in pursuing, there is potential for employment. The follow are some next steps that MQVN CDC can take to further pursue their quest to provide employment opportunities for the fisherfolk community.

For aquaculture, there is a need to work with entrepreneurs to start their own business. The next best step for MQVN CDC is to research the financial feasibility of small-scale aquaculture projects. A business plan for potential entrepreneurs that shows the potential profit and opportunity cost of an aquaculture project would properly inform whether entrepreneurs and MQVN CDC should continue to invest in the project.

For the energy efficiency construction industry, MQVN CDC can start by finding deckhands and seafood workers who have experience in construction and find out whether they are interested in short term employment through energy efficiency construction or have long term career interests in the construction industry. For this particular population the most important piece of their career transition is job training. MQVN CDC is well positioned to develop the curriculum for job training in energy efficiency construction that addresses the language, education level and cultural needs of Vietnamese Americans fisherfolk. To develop this curriculum MQVN CDC should start conversations with Louisiana Green Corps as well as Louisiana Clean Tech. Louisiana Clean Tech is entity in New Orleans that is mainly charged with energy efficiency job training. Further research to find potential employers of energy efficiency jobs is important to the future placement of dislocated Vietnamese American fisherfolk in these jobs. Since the Energy Smart Program (utilities sponsored retrofit program) just began in February 2011, I was unable to research key employers for this thesis. In the next phases, MQVN CDC must talk to Entergy and the individuals in charge of hiring to advocate for the hiring of Vietnamese American fisherfolk.

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