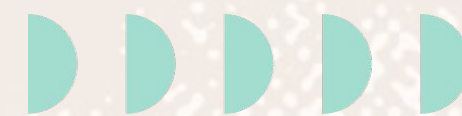
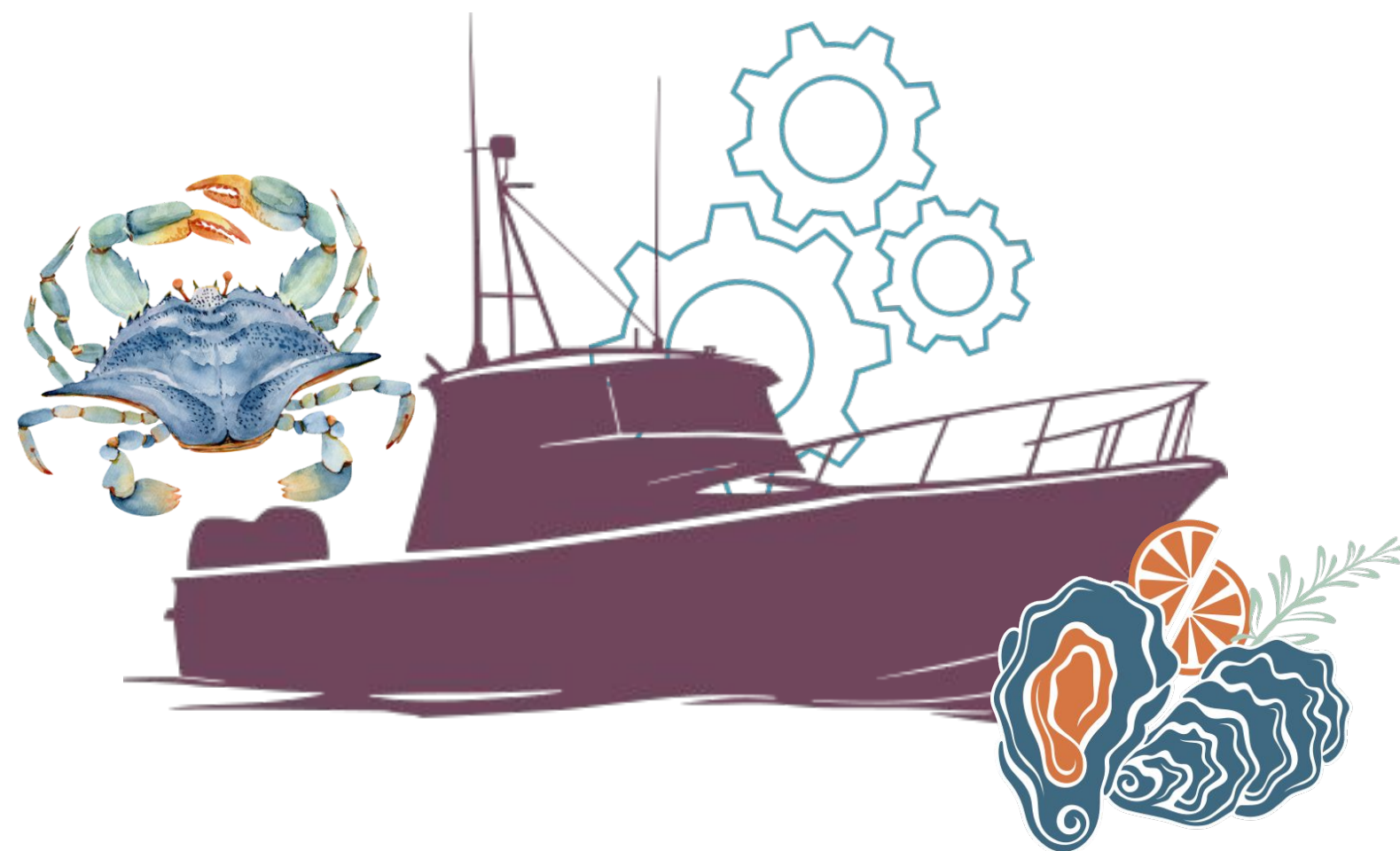




# MARINE: SERVICES

Pacific County  
506 STUDIO





# INTRODUCTION

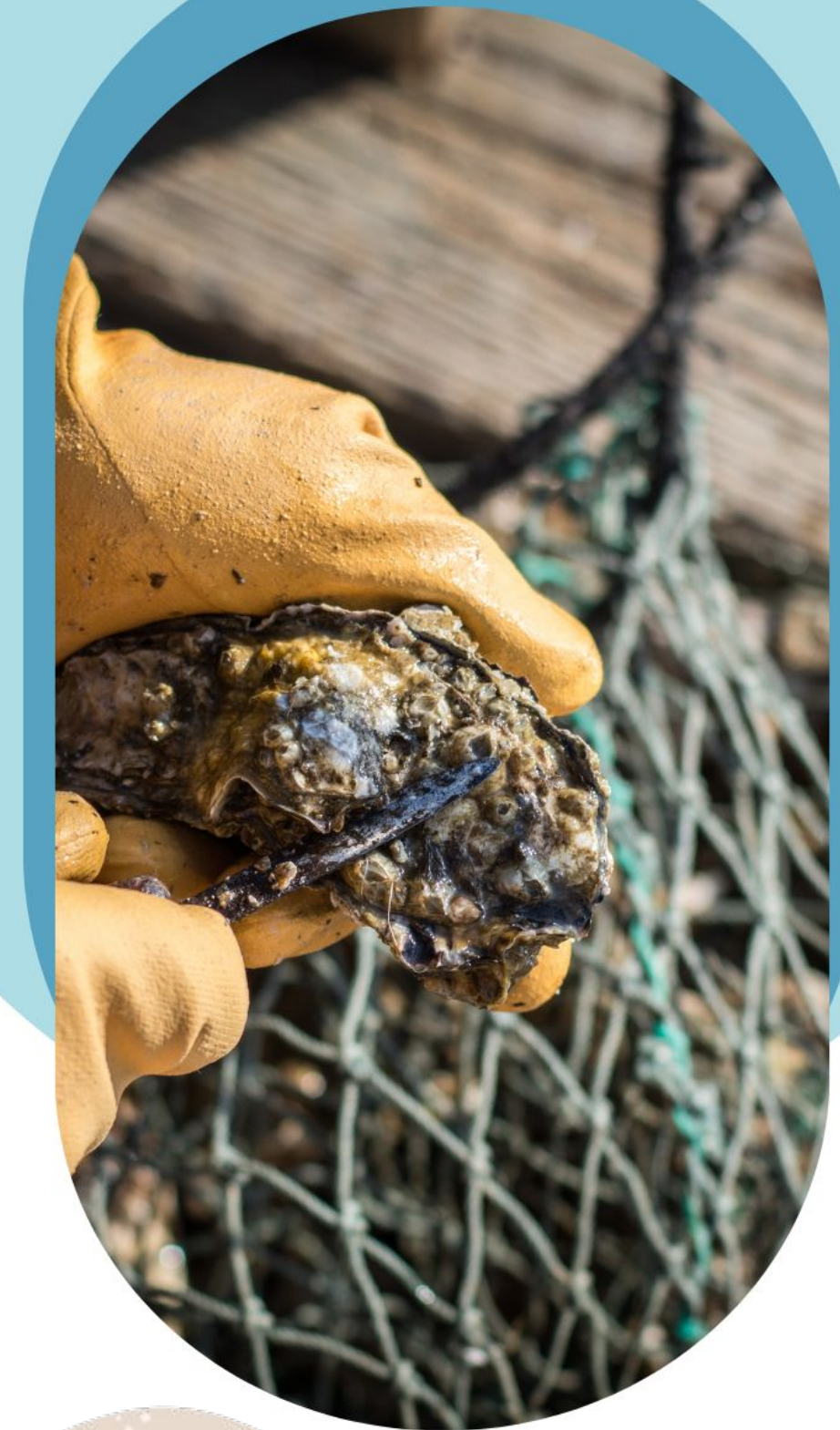
- **Objective: Research maritime education programs for applicability and analyze the Initial Conditions for Pacific County in preparation for the site process**
- **Scopes of Research**
  - ➔ **Pacific County Current Educational Opportunities**
  - ➔ **Pacific County Economic Market Data Research**
  - ➔ **Regional Maritime Educational Case Studies**
  - ➔ **National Maritime Educational Case Studies**





# METRICS

- Financial: Costs, funding, & affordability
- Outcomes: Skills, objectives, & certifications
- Demographics: Race, gender, & financial status
- Program Details: Credit hours, length, & size





# **PACIFIC COUNTY EDUCATIONAL PROGRAMS**

## **➤ Grays Harbor College**

**-Facilities in Raymond and Ilwaco (currently housing Adult Basic Education and GED programs)**

## **➤ Potential Funding Sources:**

**WSG: Washington Sea Grant**

**BFET: Basic Food Education and Training Program**

**EAG: Early Achievers Grant**

**WF: Workforce First Program**

**WRT: Worker Retraining Program**



# PACIFIC COUNTY INITIAL MARKET RESEARCH

Supersector	Number of Establishments Private Q1 2024	Employment Private Mar 2024	% change in employment since 2017
Service - Providing			
Education and Health Services	47	665	23.38%
Trade, Transportation, and Utilities	96	741	-2.76%
Financial Activities	53	227	14.65%
Leisure and Hospitality	103	909	-11.58%
Information	11	43	-21.82%
Other Services	42	152	-15.08%
Total Service Providing	426	3128	4.48%
Goods - Producing			
Construction	66	290	29.46%
Manufacturing	32	712	-6.56%
Natural Resources and Mining	72	551	-31.30%
Total Goods - Producing	174	1553	-13.14%
Total - All Industries	600	4681	-2.11%

Figure 1: Green indicates the largest employment or growing sectors. Red indicates highlighted sectors with shrinking employment. BLS Pacific County Private Ownership Industry Data. Adapted from (Bureau of Labor Statistics, 2024) and (Bureau of Labor Statistics, 2017)



# PACIFIC COUNTY SWOT ANALYSIS

## Strengths:

- **Shellfish Production:** Largest West Coast producer, with nearly 50 million pounds of clams and oysters annually.
- Economic cornerstone supporting thousands of jobs and tourism/charter boat sectors.

## Opportunities:

- **Underutilized Educational Facilities:** Grays Harbor College could bridge gaps by enhancing workforce adaptability to technological advancements in the marine services sector.

## Weaknesses:

- **High School Graduate Unemployment:** 7.5% unemployment rate for high school graduates, higher than those without or with higher education.
- **Slow Population Growth:** Declining civilian labor force (7,985 in 2024, down from 8,293 in 2023).

## Threats:

- **Environmental Concerns & Workforce Challenges:** Need for tech advancements to address climate change (WAC 173-26-360). Failure to adapt workforce may impact the local economy.



# PNW MARITIME PROGRAMS

## ➤ Accreditation

: The U.S. Coast Guard, Marine Trades Accredited Programs, and ACCSC (for community colleges).

## ➤ Job Placement

: Washington programs: 73%, unclear on Alaska and Oregon

## ➤ Graduation Rates

: Washington schools report 77%, Alaska and Oregon report 41% and 48% respectively



# PNW MARITIME PROGRAMS



## Skagit Valley College

Marine propulsion,  
vessel systems,  
composites.



## Maritime Institute of Technology and Graduate Studies

AB to Mate, Mate to  
Master, MSC,  
Apprenticeship, NSAP



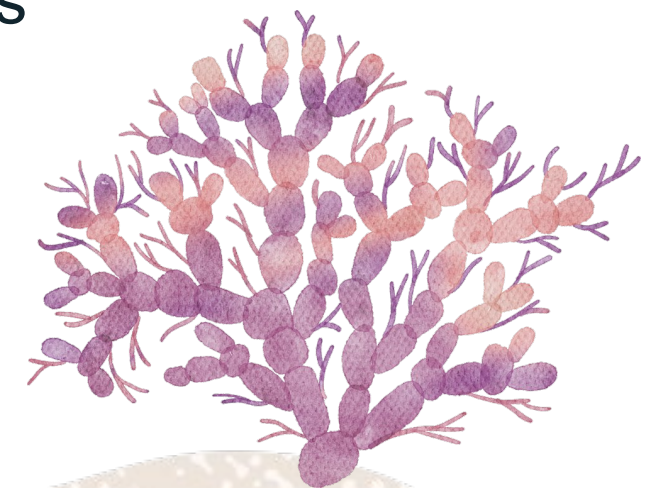
## Clatsop Community College

USCG-approved  
STCW courses,  
on-vessel training.



## Average Metrics

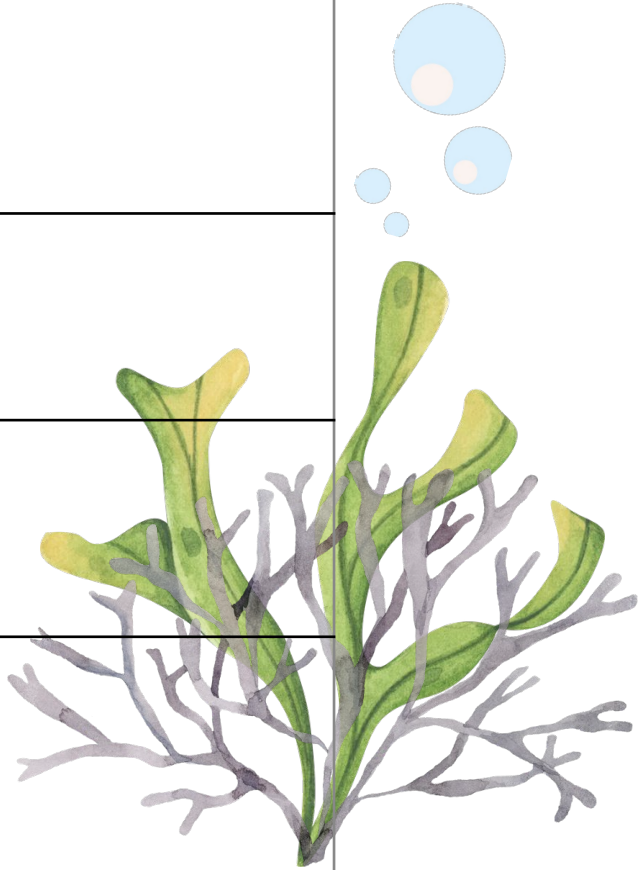
- Class sizes: 10-95 students
- Cost varies by residency status and program length.
- Programs range: weeks to two years





# NATIONAL CASE STUDIES

K12	NY Harbor School	Port of LA High School	S. Broward High School & Inlet Grove High School
Mechanical / Electrical	X (NOCTI Marine Mechanics)		X(Marine Service Technology Yamaha University) : Four-stroke, two-stroke, Diesel engines operation; 12-volt electrical systems
Vessel Building		X (The U.S. Coast Guard STCW through El Camino College) : Includes Engine repair as support on ABE engines	
Vessel Operation	X (US Power Boating Certificate, FCC Marine Operators Permit, USCG Limited Masters License)		
Welding	X (Metal Fabrication, American Welding Society/SENSE Program Entry Level Welder 1 exam)	X (National Center for Construction Education Research (NCCER))	
Physical Cert	X (Diving, American Academy of Underwater Sciences (AAUS) Scientific Diver Final Exam, Red Cross CPR)	X (Red Cross CPR)	<b>Legend</b> X : Valuable cross over skill for other industries



➤ **Environment**  
Islands and Coastal, in or near Brackish Waters

➤ **Facilities**  
Smaller Student body  
Building sq ft 7,000 to 80,000 sqft

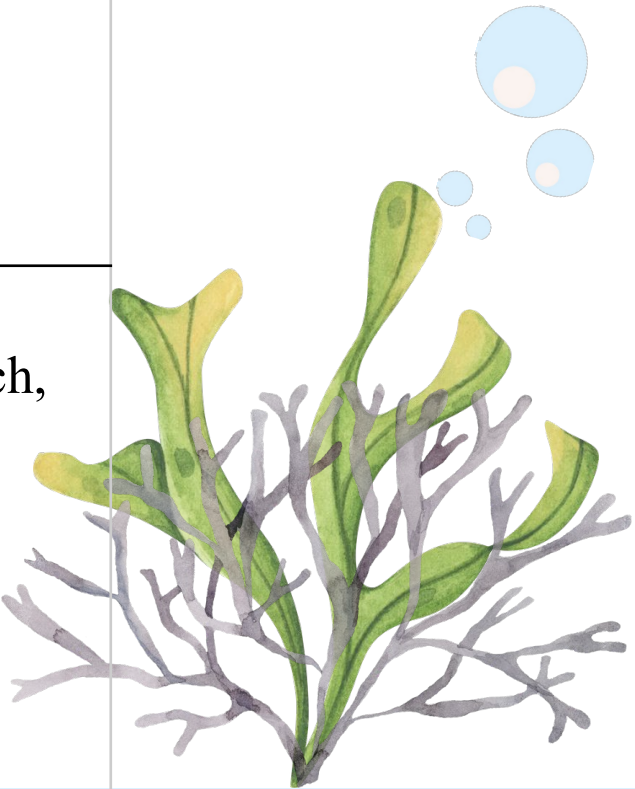
➤ **Skills**  
Engine repair and boat building

➤ **Cost/ Funding**  
Donations from Community largest impact

➤ **Free Lunch**  
Accessibility to low income residents: 60% range

# NATIONAL CASE STUDIES

Colleges	Maine Maritime	Cal Maritime	Florida Tech
Skills/ Subjects	Engineer license (steam and motor); Operations; Maintenance; Manufacturing	Water safety; Shipboard maintenance; Operations; Management; Small boat handling; Fall/Spring: rowboats, work boats, tug boats, and T-boat	Field intensive ocean research investigates <ul style="list-style-type: none"><li>Coastal engineering</li><li>Corrosion and materials</li><li>Shipbuilding</li><li>Fluid dynamics</li><li>Engineering</li><li>Underwater vehicles</li></ul>
Facilities	<ul style="list-style-type: none"><li>500 ft training ship</li><li>Steam and diesel engine simulator labs</li><li>Machine shop; Electrical/electronics lab</li><li>Full-service boat yard/shop</li></ul>	<ul style="list-style-type: none"><li>Navigation Lab; Training Ship Golden Bear (500 ft);</li><li>Boathouse</li><li>Marina</li></ul>	<ul style="list-style-type: none"><li>139 acre campus on the Space Coast</li><li>Labs for fluid mechanics, wave dynamics, underwater tech, corrosion and bio-fueling, instrumentation, materials, electronics</li><li>Small craft for shallow water testing</li><li>Autonomous underwater vehicles</li></ul>



➤ **Environment**  
Coastal, in or near  
Brackish Waters

➤ **Facilities**  
Smaller Class size

➤ **Skills**  
Engine repair  
and boat building

➤ **Cost/ Funding**  
Sits average with colleges  
across the country.

➤ **Pell Grants**  
Accessibility to low income  
residents: 20% range



**THANK  
YOU**

