3.11. SOCIOECONOMICS

3.11.1. Affected Environment

Socioeconomic resources are defined as the basic characteristics associated with the human environment, particularly population and economic activity. This section discusses the region's population and housing, economic activity, and education and childcare. It also addresses the potential effects construction and operation of the proposed project could have on socioeconomics.

3.11.1.1. EXISTING CONDITIONS

Socioeconomic resources described in this section include Kitsap County with emphasis on NAVBASE Kitsap Bangor, the cities of Bremerton and Poulsbo, the community of Silverdale, and portions of Jefferson County, as appropriate.

3.11.1.1.1. POPULATION AND HOUSING

NAVBASE Kitsap Bangor employs 11,500 military personnel and 14,900 DoD civilians (Kitsap Economic Development Alliance 2010). It is estimated that NAVBASE Kitsap Bangor and the surrounding military installations also support up to 15,000 retired military personnel and DoD civilians from the U.S. Navy, Coast Guard, and Marine Corps in Kitsap County. Approximately 9,900 of the total number of retirees are military retirees once assigned to NAVBASE Kitsap Bangor or Bremerton. It is estimated that approximately 25 percent of the active duty military population resides on the base. Housing for NAVBASE Kitsap Bangor is privatized with the exception of the Jackson Park community, part of NAVBASE Kitsap Bremerton, which remains as government-owned military family housing. The current military family housing inventory on NAVBASE Kitsap Bangor includes 1,279 units. Unaccompanied bachelor housing on NAVBASE Kitsap Bangor includes 952 permanent rooms and 113 transient rooms.

Population figures for Kitsap County, the cities of Bremerton, Bainbridge Island, and Poulsbo, and the community of Silverdale are presented in Table 3.11–1. Based on these figures, the number of military personnel and DoD civilians associated with NAVBASE Kitsap Bangor comprises approximately 10.5 percent of Kitsap County's population. The city of Bremerton is the largest city in Kitsap County, comprising 15.0 percent of the county's population. Between 2000 and the census in 2010, Kitsap County's population increased at an annual average rate of 0.8 percent per year.

Population in Kitsap County is projected to increase at an average annual rate of 0.1 percent for the next 30 years, reaching a population of 320,475 persons in 2040, assuming a consistent medium rate of growth. As depicted in Table 3.11–2, the most growth is anticipated during the 5-year period from 2015 to 2020. The growth rate in Kitsap County and the state are anticipated to be consistent with each other between 2015 and 2040 (Washington State Office of Financial Management 2012).

Table 3.11–1. Demographic Characteristics

Location	2000 Population	2010 Population
City of Bainbridge Island	20,308	23,025
City of Bremerton	37,259	37,729
City of Poulsbo	6,813	9,200
Silverdale CDP[1]	15,816	19,204
Kitsap County	231,969	251,133
State of Washington	5,894,121	6,724,540

Sources: U.S. Census Bureau 2000a, 2010a-e

1. The unincorporated community of Silverdale is a Census Designated Place (CDP). A CDP is defined as a statistical entity comprising a dense concentration of population that is not within an incorporated place but is locally identified by a name.

Table 3.11–2. Population Projections for Kitsap County and Washington State

Year	Kitsap County		Washington State	
	Number	Percent Increase	Number	Percent Increase
2010	251,133	n/a	6,724,540	n/a
2015	262,032	4.3%	7,022,200	4.4%
2020	275,546	5.2%	7,411,977	5.6%
2025	289,265	5.0%	7,793,173	5.1%
2030	301,642	4.3%	8,154,193	4.6%
2035	311,737	3.3%	8,483,628	4.0%
2040	320,475	2.8%	8,790,981	3.6%

Source: Washington State Office of Financial Management 2012

Housing characteristics for Kitsap County, the cities of Bremerton, Bainbridge Island, Poulsbo, and the community of Silverdale are presented in Table 3.11–3. There were 107,367 housing units in Kitsap County at the time of the 2010 Census, of which 97,220 units were occupied. The homeowner vacancy rate in the county was 2.2 percent and the rental vacancy rate was 8.6 percent. The total number of vacant rental units in the county numbered 10,147 units (U.S. Census Bureau 2010b).

Table 3.11–3. 2010 Census Housing Characteristics

Location	Housing Units	Occupied Units	Vacant Units	Homeowner Vacancy Rate	Rental Vacancy Rate
City of Bainbridge Island	10,584	9,470	1,114	2.4	6.3
City of Bremerton	17,273	14,932	2,341	4.2	11.4
City of Poulsbo	4,115	3,883	232	2.1	5.8
Silverdale CDP	8,555	7,828	727	1.6	9.1
Kitsap County	107,367	97,220	10,147	2.2	8.6
State of Washington	2,885,677	2,620,076	265,601	2.4	7.0

Source: U.S. Census Bureau 2010a-e

3.11.1.1.2. ECONOMIC ACTIVITY

Employment characteristics for the region are presented in Table 3.11–4. The civilian labor force in Kitsap County included an estimated 119,378 persons in 2010, of which an estimated 109,244 were employed. The unemployment rate was 8.5 percent. Median household income was $59,549, and persons below the poverty level represented 9.4 percent of the population (U.S. Census Bureau 2010g). The nationwide recession beginning in 2007 resulted in higher rates of unemployment and unemployment insurance claims. The decline in the housing market resulted in a particularly high rate of unemployment and unemployment insurance claims in the construction industry. According to the state of Washington's Employment Security Department, the number of initial unemployment insurance claims in the construction industry in July 2006 was 53 claims as compared to 396 initial claims in July 2009 and 235 initial claims in July 2012 (Washington State Employment Security Department 2012). The same trend is shown in the number of continuing unemployment insurance claims during the same time period. In July 2006, the number of continuing claims was 246 claims as compared to 1,117 claims in July 2009 and 457 claims in July 2012.

Table 3.11–4. Estimated 2010 Employment Characteristics

Location	Civilian Labor Force	Employment	Unemployment Rate
City of Bainbridge Island	11,032	10,335	6.3
City of Bremerton	17,411	15,177	12.8
City of Poulsbo	4,011	3,708	7.6
Silverdale CDP	9,157	8,433	7.9
Kitsap County	119,378	109,244	8.5
State of Washington	3,380,744	3,124,821	7.6

Source: U.S. Census Bureau 2010g

Government and government enterprises comprise the largest employment sector in the region, accounting for over one-third of all jobs in Kitsap County, as depicted in Table 3.11–5. The military accounted for 8.9 percent of total employment in Kitsap County overall, as compared to military employment in the state of Washington accounting for 2.2 percent of total employment (U.S. Bureau of Economic Analysis 2012). In terms of private employment, primary industries in Kitsap County are professional and technical services, retail trade, and health care. The military, specifically the Navy, has the largest economic impact on Kitsap County. It is estimated that the direct impact of military bases in Kitsap County includes 27,375 jobs (uniformed and civilian) and $1.1 billion in annual payroll. Furthermore, much of the private industry in the county is related to military activities, including defense-related suppliers and contractors. The military presence in Kitsap County is estimated to support 46,935 total jobs, representing 48 percent of all jobs in the county, and providing $1.8 billion in annual wages (Washington State Office of Financial Management 2004).

Tribal and state commercial hatcheries and chum salmon fisheries that occur in Hood Canal provide an opportunity for subsistence, recreational, and income-generating activities, which contribute to local and rural businesses in the area. Current economic analyses estimate that

chum salmon production in the Hood Canal region generates over $6 million in local personal income (WDFW 2012).

Table 3.11–5. 2010 Employment by Industry in Kitsap County and Washington State

Industry	Kitsap County		Washington State	
	Number	Percent of total	Number	Percent of total
Total	122,084	100.0%	3,793,568	100.0%
Private				
Farm employment	679	0.6%	83,537	2.2%
Forestry, fishing, and related activities	(D)	N/A	36,226	1.0%
Mining	(D)	N/A	6,779	0.2%
Utilities	140	0.1%	5,300	0.1%
Construction	5,846	4.8%	200,663	5.3%
Manufacturing	1,892	1.5%	277,335	7.3%
Wholesale trade	1,596	1.3%	133,450	3.5%
Retail Trade	13,680	11.2%	383,760	10.1%
Transportation and warehousing	1,278	1.0%	108,207	2.9%
Information	1,594	1.3%	113,007	3.0%
Finance and insurance	3,858	3.2%	166,015	4.4%
Real estate and rental and leasing	5,269	4.3%	173,021	4.6%
Professional and technical services	8,073	6.6%	272,870	7.2%
Management of companies and enterprises	299	0.2%	34,261	0.9%
Administrative and waste services	5,047	4.1%	186,278	4.9%
Educational services	1,837	1.5%	69,909	1.8%
Health care and social assistance	13,568	11.1%	384,753	10.1%
Arts, entertainment, and recreation	2,997	2.5%	90,052	2.4%
Accommodation and food services	7,117	5.8%	240,984	6.4%
Other services, except public administration	6,244	5.1%	195,140	5.1%
Government				
Federal, civilian	16,068	13.2%	75,691	2.0%
Military	10,846	8.9%	81,698	2.2%
State and local	13,256	10.9%	474,632	12.5%

Source: U.S. Bureau of Economic Analysis 2012

3.11.1.1.3. EDUCATION AND CHILDCARE

There are no primary or secondary schools on the base. Central Kitsap School District #401 in Silverdale serves the educational needs of the region's youth, including military dependents associated with NAVBASE Kitsap Bangor. Enrollment in the district is approximately 11,416 students in the elementary through high school grades (Central Kitsap School District 2012). Military family dependents comprise 26 percent of the district's students, and a total of 50 percent of the student body are in families economically tied to the military sector in Kitsap County. The Navy Region Northwest Child Development Center located on NAVBASE Kitsap Bangor provides care for children from birth to 5 years of age. Services are primarily for families seeking full-time care. The center has the capacity to care for 156 children (Navylifepnw.com 2012).

3.11.1.2. CURRENT REQUIREMENTS AND PRACTICES

There are no governing regulations with regard to socioeconomics. No consultations or permits are required.

3.11.2. Environmental Consequences

3.11.2.1. APPROACH TO ANALYSIS

The evaluation of impacts on socioeconomics considers the magnitude of any increases in employment and population created by the proposed action and the resulting impact on supporting services such as housing and education, as well as to regional economic activity.

The economic impact analysis was conducted using the Impact Analysis for Planning (IMPLAN) economic forecasting model (MIG 2011). The IMPLAN model uses data from the U.S. Bureau of Labor Statistics and the U.S. Bureau of Economic Analysis to construct a mathematical representation of a local economy using region-specific spending patterns, economic multipliers, and industries. In this analysis, the IMPLAN model provided representations of the 2011 Kitsap County economy. Economic impacts are analyzed by introducing a change to a specific industry in the form of increased employment or spending; the IMPLAN model mathematically calculates the resulting changes in the local economy. In this analysis, the IMPLAN model estimates the economic effects of the estimated number of construction workers, construction expenditures, and the operations personnel on spending and employment in Kitsap County. The economic impact analysis separates effects into three components: direct, indirect, and induced. Direct effects are the additional employment and income generated directly by the expenditures of the personnel and construction expenditures. To produce the goods and services demanded by the change in employment and construction expenditures, businesses, in turn, may need to purchase additional goods and services from other businesses. The employment and incomes generated by these secondary purchases would result in the indirect effects. Induced effects are the increased household spending generated by the direct and indirect effects. The total effect from the economic impact analysis is the total number of jobs created throughout the ROI by the direct, indirect, and induced effects.

3.11.2.2. LWI PROJECT ALTERNATIVES

3.11.2.2.1. LWI ALTERNATIVE 1: NO ACTION

Under the No Action Alternative, the LWI would not be built and overall operations would not change from current levels. Therefore, there would be no socioeconomic impacts and socioeconomic conditions would be similar to those described in Section 3.11.1.

3.11.2.2.2. LWI ALTERNATIVE 2: PILE-SUPPORTED PIER

Construction of Alternative 2 would generate approximately 500 direct jobs, including the approximately 100 onsite construction jobs, and the related income would provide short-term benefits to the Kitsap County area during construction.

CONSTRUCTION

The direct, indirect, and induced economic impacts of construction workers and an estimated amount of construction expenditures for the LWI sites are summarized in Table 3.11–6. For every $100 million spent by the Navy in construction expenditures, an estimated 919 direct jobs and an estimated 426 indirect and induced jobs would be created using 2013 dollars. The project cost is estimated to be approximately $54.4 million, for a total economic impact of 500 direct jobs and 233 indirect and induced jobs. Total incremental economic output to the region would be about $80.4 million (Table 3.11–6). These new jobs created by the required construction workers and potential construction expenditures would be focused within the following industries: food services, real estate establishment, health care, architectural engineering, wholesale trade, and retail stores. Based on the economic analysis for the Proposed Action, construction would provide a substantial short-term economic benefit to the local and regional economy.

Table 3.11–6. Economic Impact of Construction of LWI Alternative 2

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Construction Expenditures and Employment (Non-Recurring)				
Output	$54,400,000	$10,259,676	$15,746,143	$80,405,817
Income	$25,261,873	$3,976,436	$4,853,673	$34,091,982
Employment	500	99	134	733

Source: Analysis using the IMPLAN computer program (MIG 2011) in 2013 dollars

Employment of 100 construction workers represents approximately 1.7 percent of the existing construction industry in Kitsap County. As discussed in Section 3.11.1, the recession has resulted in a higher rate of unemployment in the local economy, particularly in the construction industry. It is anticipated that the job creation from the required construction workers and estimated expenditures would be accommodated by labor resources in Kitsap County. However, the local housing market in Kitsap County is expected to support any incoming temporary construction workers. The construction period would last about 27 months. Because the socioeconomic impacts related to construction employment and expenditures would occur only for the duration of the construction period, no permanent or long-lasting socioeconomic impacts are anticipated as a result of construction associated with Alternative 2.

No direct impacts to commercial or recreational fishing are anticipated because the area affected by water construction activities is not open to commercial or recreational fishing. Project impacts on fish populations (Section 3.3.2.2) are not expected to be sufficient to affect commercial or recreational fishery harvest or hatcheries.

Tribal shellfishing occurs for subsistence and commercial reasons. The construction of the southern portion of the LWI would result in eliminating access to a portion of the shellfish beds typically harvested by tribes. An estimated 0.68 acre (0.28 hectare) of oyster beds would be temporarily inaccessible during construction due to the presence of construction equipment and activities. Consequences to American Indian traditional resources are described in more detail in Section 3.14.

OPERATION/LONG-TERM IMPACTS

Because there would be no change in operations, there would be no operational impacts on socioeconomics from the LWI project. After construction, the tribes would be able to continue to harvest shellfish within the restricted area. However, long-term impacts due to the presence of structures would include the loss of an estimated 1,880 square feet (175 square meters) of shellfish beds to which the tribes would permanently no longer have access. Oyster density at the south LWI location is approximately 2.3 oysters per square foot (25.3 per square meter) (Leidos and Grette Associates 2013b). The presence of the pier structures could result in the loss of approximately 368 dozen oysters. If all these oysters were harvested for commercial purposes, the associated socioeconomic impact could be up to $2,208 per year, assuming an average price of $6 per dozen oysters. [1] The tribes harvest an average of approximately 30,000 dozen oysters per year at NAVBASE Kitsap Bangor, with an estimated commercial value of $180,000. Therefore, the $2,208 annual loss would represent approximately 1.2 percent of annual tribal income from this source.

3.11.2.2.3. LWI ALTERNATIVE 3: PSB MODIFICATIONS (PREFERRED)

CONSTRUCTION

The overall construction schedules for LWI Alternative 3 would be similar to those described under Alternative 2; however, the duration of in-water work would be shorter for Alternative 3 than for Alternative 2 (one in-water work season compared to two). Additionally, the project cost for Alternative 3 would be approximately $32.6 million, for a total economic impact of 300 direct jobs and 139 indirect and induced jobs. The total economic output to the region would be about $48.2 million (Table 3.11–7).

[1] Clam harvest information was not available for the impact analysis. The actual area of oysters in the structural footprint of the south LWI under Alternative 2 (i.e., oysters under piles and steel plate anchors) would be approximately 770 square feet (72 square meters). The dollar estimate ($2,208) was based on oyster values (available data) for the larger area of the shellfish habitat under the pier (i.e., the entire oyster area bound by the pier footprint, 1,880 square feet [175 square meters]), as opposed to the smaller area of oysters actually under piles and steel plate anchors.

Table 3.11–7. Economic Impact of Construction of LWI Alternative 3

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Construction Expenditures and Employment (Non-Recurring)				
Output	$32,600,000	$6,148,262	$9,436,108	$48,184,368
Income	$15,138,549	$2,382,938	$2,908,635	$20,430,122
Employment	300	59	80	434

Source: Analysis using the IMPLAN computer program (MIG 2011) in 2013 dollars

Where tribal shellfishing occurs for commercial and subsistence, the construction of the southern portion of the LWI would result in eliminating access to a portion of shellfish beds typically harvested by tribes. An estimated 0.64 acre (0.26 hectare) of oyster beds would be temporarily (up to 2 years) inaccessible during construction due to the presence of construction equipment and activities. Consequences to American Indian traditional resources are described in more detail in Section 3.14.

OPERATION/LONG-TERM IMPACTS

Operations associated with the Alternative 3 would not impact socioeconomic resources. After construction, the tribes would be able to continue to harvest shellfish within the restricted area. Shellfish bed recovery in the construction area is expected within 3 years. However, long-term impacts due to disturbance from the pontoon feet would include the loss of an estimated 1,880 square feet (175 square meters) of oyster beds to which the tribes would permanently no longer have access. Oyster density at the south LWI location is approximately 2.3 oysters per square foot (25.3 per square meter) (Leidos and Grette Associates 2013b). Pontoon disturbance therefore could result in the loss of approximately 368 dozen oysters. If all of these oysters were harvested for commercial purposes, this loss could be up to $2,208 per year, assuming an average price of $6 per dozen oysters. [2] The tribes harvest an average of approximately 30,000 dozen oysters per year at NAVBASE Kitsap Bangor, with an estimated commercial value of $180,000. Therefore, the $2,208 annual loss would represent approximately 1.2 percent of annual tribal income from this source.

3.11.2.2.4. SUMMARY OF LWI IMPACTS

Impacts on socioeconomics associated with the construction and operation phases of the LWI project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.11–8.

[2] Clam harvest information was not available for the impact analysis. The 1,880 square-foot (175-square meter) area is the entire disturbance footprint of the PSB feet on the intertidal zone, not just in the Devil's Hole delta oyster beds (420 square feet). Therefore, while the dollar estimate ($2,208) was based on oyster values (available data) the overall area impacted included both clam and oyster habitat.

Table 3.11–8. Summary of LWI Impacts on Socioeconomics

Alternative	Environmental Impacts on Socioeconomics
LWI Alternative 1: No Action	No impact.
LWI Alternative 2: Pile-Supported Pier	*Construction:* Approximately 500 direct temporary jobs generated for duration of construction as a result of an expected $54.4 million in construction expenditures; a total of 233 indirect and induced jobs generated. Direct economic output of $54.4 million in construction expenditures would generate an additional $26 million in total economic output. Potential socioeconomic impact on tribes who would no longer have access to a portion of their shellfish beds for commercial harvest. No impacts to commercial or recreational fishing. *Operation/Long-term Impacts:* Potential long-term socioeconomic impact on tribes who would no longer have access to a portion of their shellfish beds for commercial harvest, up to $2,208 per year.
Alternative	**Environmental Impacts on Socioeconomics**
LWI Alternative 3: PSB Modifications (Preferred)	*Construction:* Approximately 300 direct temporary jobs generated for duration of construction as a result of an expected $32.6 million in construction expenditures; a total of 139 indirect and induced jobs generated. Direct economic output of $32.6 million in construction expenditures would generate an additional $48.2 million in total economic output. Potential socioeconomic impact on tribes who would no longer have access to a portion of their shellfish beds for commercial harvest. No impacts to commercial or recreational fishing. *Operation/Long-term Impacts:* Potential long-term socioeconomic impact on tribes who would no longer have access to a portion of their shellfish beds for commercial harvest, up to $2,208 per year.
Mitigation: Impacts on tribal harvests would be mitigated in accordance with a Memorandum of Agreement between the Navy and the affected tribes (Section 3.14.2).	
Consultation and Permit Status: No consultations or permits are required. Consultations related to American Indian Tribes are discussed in Sections 3.13 and 3.14.	

3.11.2.3. SPE PROJECT ALTERNATIVES

3.11.2.3.1. SPE ALTERNATIVE 1: NO ACTION

Under the No Action alternative, the SPE would not be constructed or operated and there would be no construction expenditures in the ROI. Therefore, socioeconomic conditions under the No Action alternative would be the same as those described as existing conditions in Section 3.11.1.

3.11.2.3.2. SPE ALTERNATIVE 2: SHORT PIER (PREFERRED)

CONSTRUCTION

The direct, indirect, and induced economic impacts of construction workers and an estimated amount of construction expenditures for SPE Alternative 2 are summarized in Table 3.11–9. For every $100 million spent by the Navy in construction expenditures, an estimated 919 direct jobs and an estimated 426 indirect and induced jobs would be created using 2013 dollars. The project cost for SPE Alternative 2 is estimated to be approximately $89 million, for a total economic impact of 818 direct jobs and 380 indirect and induced jobs. Total economic output to the region would be about $131.5 million (Table 3.11–9). These new jobs created by the required construction workers and potential construction expenditures would be temporary, however, and would only last for the duration of the construction activities. The local housing market in Kitsap

County is expected to support any incoming temporary construction workers. Construction of the SPE would generate about two years of beneficial economic stimulus to the ROI.

No direct impacts to commercial or recreational fishing are anticipated because the area affected by water construction activities is not open to commercial or recreational fishing. Project impacts on fish populations (Section 3.3.2.2) are not expected to be sufficient to affect commercial or recreational fishery harvest or hatcheries. Tribal shellfishing is not expected to be affected because the areas involved in construction are not within the tribal shellfish beds.

Table 3.11–9. Economic Impact of Construction of SPE Alternative 2

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Construction Expenditures and Employment (Non-Recurring)				
Output	$89,000,000	$16,785,132	$25,761,153	$131,546,285
Income	$41,329,167	$6,505,566	$7,940,752	$55,775,485
Employment	818	161	219	1,198

Source: Analysis using the IMPLAN computer program (MIG 2011) in 2013 dollars

OPERATION/LONG-TERM IMPACTS

Operation of SPE Alternative 2 would not affect local or regional socioeconomic conditions over the long term, because there would be no anticipated change in the number of military and civilian personnel based at NAVBASE Kitsap Bangor as a result of operating the pier extension and associated support facilities.

3.11.2.3.3. SPE ALTERNATIVE 3: LONG PIER

CONSTRUCTION

SPE Alternative 3 would be similar to SPE Alternative 2 in terms of the timeframe of construction activities; however, construction expenditures related to this alternative would be approximately $116 million (Table 3.11–10). Therefore, impacts on socioeconomic conditions from construction of Alternative 3 would be greater than the economic stimulus estimated under Alternative 2. Total economic output to the region under this alternative is summarized in Table 3.11–10.

Table 3.11–10. Economic Impact of Construction of SPE Alternative 3

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
Construction Expenditures and Employment (Non-Recurring)				
Output	$116,000,000	$21,877,250	$33,576,334	$171,453,579
Income	$53,867,229	$8,479,165	$10,349,744	$72,696,138
Employment	1,066	209	285	1,560

Source: Analysis using the IMPLAN computer program (MIG 2011) in 2013 dollars

OPERATION/LONG-TERM IMPACTS

Operation of SPE Alternative 3 would not affect local or regional socioeconomic conditions over the long term, because there would be no anticipated change in the number of military and civilian personnel based at NAVBASE Kitsap Bangor as a result of operating the pier extension and associated support facilities.

3.11.2.3.4. SUMMARY OF SPE IMPACTS

Impacts on socioeconomics associated with the construction and operation phases of the SPE project alternatives, along with mitigation and consultation and permit status, are summarized in Table 3.11–11.

Table 3.11–11. Summary of SPE Impacts on Socioeconomics

Alternative	Environmental Impacts on Socioeconomics
SPE Alternative 1: No Action	No impact.
SPE Alternative 2: Short Pier (Preferred)	*Construction:* Approximately 818 direct temporary jobs generated for duration of construction as a result of an expected $89 million in construction expenditures; a total of 380 indirect and induced jobs generated. Direct economic output of $89 million in construction expenditures would generate an additional $42.5 million in total economic output. No impacts to commercial or recreational fishing. *Operation/Long-term Impacts:* No impact.
SPE Alternative 3: Long Pier	*Construction:* Approximately 1,066 direct temporary jobs generated for duration of construction as a result of an expected $116 million in construction expenditures; a total of 494 indirect and induced jobs generated. Direct economic output of $116 million in construction expenditures would generate an additional $55.5 million in total economic output. No impacts to commercial or recreational fishing. *Operation/Long-term Impacts:* No impact.
Mitigation: Any impact on tribal harvests would be mitigated in accordance with a Memorandum of Agreement between the Navy and affected tribes (Section 3.14.2).	
Consultation and Permit Status: No consultations or permits are required. Consultations related to American Indian Tribes are discussed in Sections 3.13 and 3.14.	

3.11.2.4. COMBINED IMPACTS OF THE LWI AND SPE PROJECTS

The project cost for LWI would range from $32.6 million to approximately $54.4 million and the cost for SPE would range from $89 million to $116 million, depending on the alternative, for combined construction expenditures ranging from $121.6 million to $170.4 million. For every $100 million in construction costs by the Navy, approximately 919 direct jobs and 426 direct and induced jobs are created. Construction of the two projects would overlap in time and collectively would create up to an estimated 1,566 direct jobs and 726 indirect and induced jobs. Based on the economic analysis, construction would provide a substantial benefit to the local and regional economy. Independently or in combination, operation of the two projects would not have significant economic impacts.

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