
APPENDIX D

**ENVIRONMENTAL EVALUATION
OF YEAR 2020 IMPACTS**

AND

A FORECAST GREATER THAN THE NEW FORECAST

forecast demand. As noted in the FAA guidance, the 1996 Master Plan Update has identified the Port's capital improvement plan, and provides a realistic assessment of needs for accommodating 15.7 million enplaned passengers, which is expected to now occur in year 2005. The plan also reflects the longer-term needs, associated with 19 million enplanements, in a more conceptual fashion.

Some of the environmental approvals identified by the Final EIS and this Supplemental EIS, may expire within the next 3-5 years. FAA Environmental Guidelines (FAA Order 5050.4A, Paragraph 102) states "Time Limitations for Environmental Documents b. With regard to approved final impact statements....(1) If major steps toward implementation of the proposed action (such as the start of construction, substantial acquisition, or relocation activities) have not commenced within 3 years from the date of approval of the final statement, a written reevaluation of the adequacy, accuracy, and validity of the final statement shall be prepared...." The Clean Air Act Conformity rules specifically note that a conformity determination "lapses 5 years from the date of the final conformity determination" (40 CFR Part 51.857(a)).

6. Additional planning will be undertaken at Sea-Tac in the future, encompassing facility requirements and environmental impacts, based on forecasts of short-term, intermediate and long-term conditions. If these efforts are undertaken around the year 2000, it is anticipated that aviation industry conditions could stabilize, making air travel demand less volatile and forecasting less uncertain.

Although year 2020 has been determined to not be reasonably foreseeable, the FAA and the Port have prepared this appendix to extrapolate the impacts to the year 2020, based on information in this Supplemental EIS for earlier years. The following scenario's were considered and are listed in **Table D-1**:

- Case 1: new Port forecast and impacts, with an estimate of impacts in year 2020.
- Case 2: Aviation demand grows 10% faster than predicted by the new forecast, and that the Do-Nothing and "With Project" are capable of accommodating all of the passenger demand.
- Case 3: Aviation demand grows 10% faster than predicted by the new forecast, and that under the Do-Nothing alternative, aircraft operations and passenger levels are constrained (or for whatever reason, does not increase) beyond the new Port forecast for year 2010.

Aviation activity levels considered by these scenarios could be as follows:

TABLE D-1
SUMMARY OF ACTIVITY ASSOCIATED WITH TEST CASES

<u>Operations</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2020</u>
Do-Nothing				
New Forecast	409,000	445,000	460,000	460,000
Case 1	409,000	445,000	460,000	460,000
Case 2	449,900	460,000	460,000	460,000
Case 3	449,900	460,000	460,000	460,000
"With Project"				
New Forecast	409,000	445,000	474,000	n/a
Case 1	409,000	445,000	474,000	532,000
Case 2	449,900	489,500	521,400	585,200
Case 3	449,900	489,500	521,400	585,200

<u>Enplanements</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2020</u>
Do-Nothing				
New Forecast	13,700,000	15,700,000	17,900,000	n/a
Case 1	13,700,000	15,700,000	17,900,000	22,300,000
Case 2	15,070,000	17,270,000	19,690,000	24,530,000
Case 3	15,070,000	17,270,000	17,900,000	17,900,000
“With Project”				
New Forecast	13,700,000	15,700,000	17,900,000	n/a
Case 1	13,700,000	15,700,000	17,900,000	22,300,000
Case 2	15,070,000	17,270,000	19,690,000	24,530,000
Case 3	15,070,000	17,270,000	19,690,000	24,530,000

Table D-2 presents a summary of the probable key impacts of these cases. This assessment focused on the Preferred Alternative - Alternative 3 (North Unit Terminal), as the “With Project” as well as Alternative 1 (Do-Nothing). The extrapolation from the impacts presented in the Final and Supplemental EIS’s was performed based on professional estimates of how the various environmental impacts would change in accordance with alternative aviation activity.

The Master Plan Update improvements were designed to accommodate 19 million annual enplanements. As is discussed in Chapter 2, it is anticipated that additional master plans will be undertaken for Sea-Tac in the future. Those plans would identify if and how activity beyond the 19 million enplanements would be accommodated. Thus, this analysis assumes that the “With Project” is limited to the improvements proposed by this Master Plan Update. Assumptions for improvements beyond this plan is speculative and would be the subject of future studies.

(A) Case 1: Current Forecast, Extrapolated through Year 2020

Extrapolating from the new Port forecast, activity in the year 2020 was estimated as listed in **Table D-1**. This case assumes that the unconstrained passenger demand could be accommodated by the Do-Nothing Alternative, through continued spreading of the peak periods. Based on the analysis documented in Chapter 5 of this Supplemental EIS, as well as the Final EIS, impacts in year 2020 were estimated:

- **Noise and Land Use:** As shown in **Table D-2**, with implementation of the proposed Master Plan Update improvements, the 2020 noise exposure impacts are likely to be about 14% greater than the 2010 “With Project” improvements, and about 30% greater than the Do-Nothing impacts. As is noted in Section 5-3 of the Supplemental EIS, noise impacts are anticipated to be less than current conditions in the future, whether or not the improvements are undertaken at Sea-Tac Airport. In the Do-Nothing condition, year 2020 impacts would be 63% less than current impacts. “With Project” impacts in year 2020 could be 53% of current conditions.
- **Air Quality:** An evaluation of the emissions inventory associated with year 2020 activity was evaluated in addition to the pollutant levels that could be experienced along International Blvd. As year 2020 aircraft operations would be the same as year 2010 in the Do-Nothing condition, the aircraft emissions inventory would be the same (2,014 tons

of CO and 1,802 tons of NOx). In the "With Project" condition, year 2020 would accommodate more aircraft operations, yet with the improvements, operations would be more efficient. As a result, CO emissions would be decrease over Do-Nothing by about 108 tons (from 2,014 to 1,906 tons). NOx levels would increase by 200 tons.

Based on the dispersion results for year 2010, the impacts in year 2020 were estimated. As is shown, concentrations "With Project" would be equal to or lower than the Do-Nothing alternative.

- Surface Transportation - Impacts to the surface transportation system were considered. As described in Section 5-1, use of the regional roadway system is expected to grow each year in the future. **Table D-2** lists airport related traffic levels for each year, which is also expected to continue to grow in proportion to growth in passengers and aircraft operations. Regardless of the improvements undertaken at Sea-Tac Airport, intersections along International Boulevard in the immediate airport area are expected to operate at LOS D or worse (with most intersections operating at LOS F) by 2020. Improvements associated with the SR 509 Extension could alleviate congestion along International Boulevard, but that project would provide benefits to both the Do-Nothing and "With Project" alternatives.
- Water Resources (Floodplains, Streams, Wetlands, etc.): As no other improvements are proposed by this Master Plan Update improvement program to address demand above 19 million enplaned passengers, no other impacts to water resources beyond that identified by the Final EIS would be expected.
- Property Acquisition - As no other improvements are proposed by the Master Plan Update improvement program to address demand above 19 million enplanements, no acquisition beyond that identified by the Final EIS would be expected.
- Socio-Economic Impacts - As activity levels grow, the level of personnel needed at the Airport would be expected to increase. While the aircraft operations levels would differ between the Do-Nothing and "With Project", all annual enplaned passengers would be accommodated. As the passenger levels would be the same, employment levels would be the same for the Do-Nothing and "With Project" in year 2020. It is anticipated that employment could increase from 392,330 jobs in 2010 to 488,770 jobs in 2020.
- Earth/Fill Requirements - As no other improvements are proposed to address demand above 19 million enplanements, no other earth/fill requirements beyond that identified by the Final EIS would be expected.

(B) Case 2: Demand Grows at a Faster Rate than Forecast

The second case reflects a greater growth in aviation demand than is presently forecast. To estimate the effects of a greater rate of growth over what is now forecast, this case considered a 10% greater growth. As a result of this elevated activity level assumption, aviation demand and associated delay and congestion would be substantially greater than now forecast - year 2000 average delay in the Do-Nothing would be approximately 17-18 minutes, and at 460,000 operations reach about 20 minutes. "With Project" the delay would be reduced to 5 minutes in 2000, 7 minutes in 2005, 9 minutes in 2010, and 14 minutes in 2020. Landside improvements would also be needed earlier in time; based on these forecasts, landside improvements could be needed about 5 years earlier than presented by the new forecasts in this Supplemental EIS.

This case assumes that the entire passenger demand could be accommodated by existing facilities through the year 2020 (at 24.5 million enplaned passengers). To accommodate this level of demand, extreme delay conditions would result. It should be noted that Case 3, which follows, examines conditions assuming that the Do-Nothing enplaned passenger levels could be constrained beyond about 17.9 million enplaned passengers. Assuming that the existing facilities can accommodate this demand, the following analysis was performed:

- Noise and Land Use: **Table D-2** lists the impacts associated with a forecast that could be 10% greater than the new Port of Seattle forecast described in Chapter 2 of the Supplemental EIS. Relative to Case 1, the Do-Nothing alternative with Case 2 would only differ in year 2000, where the existing airfield could accommodate more traffic. The "With Project" Case 2 could accommodate the demand and thus noise impacts would be greater. As the table shows, Case 2 noise related housing impacts would be as much as 16% greater than the new forecast examined by this Supplemental EIS. If demand were to grow faster than is now forecast, noise impacts would be expected to be greater. By 2020, "With Project" 65 DNL noise impacts could reach 17,470 people in contrast to 11,630 people in 2020 under the Do-Nothing.
- Air Quality: Based on the 10% higher activity levels, an emissions inventory was estimated. As is shown, the greater growth in aircraft activity, relative to the new Port forecast, would result in greater emissions in years 2000, and 2005 for the Do-Nothing alternative. As activity would reach the maximum capacity of 460,000 operations between 2005 and 2010, emissions would be the same as the new forecast. While activity levels would be greater "With Project" the emissions inventory would show aircraft contributing less pollution in comparison to the Do-Nothing, because the Master Plan Update improvements would provide substantial delay reduction.

An extrapolation of the dispersion analysis shows that while concentrations at the intersections would be greater, the "With Project" levels would not exceed those of the Do-Nothing. It would be anticipated that, based on the worst-case weather and activity levels examined, that the concentrations at the most severely congested intersections could increase by 10% to as much as 40%.

- Surface Transportation - Using the 10% increase in the new Port forecast, the impacts on the airport and regional airport system were considered. **Table D-2** shows how the greater passenger demand could affect airport traffic levels. Regional traffic would be expected to be the same for the Do-Nothing and "With Project". Because most intersections along International Boulevard are operating at poor levels of service today,

the greater levels of airport growth could degrade conditions. Regardless of the improvements undertaken at Sea-Tac Airport, intersections along International Boulevard in the immediate airport area are expected to operate at LOS D or worse (with most intersections operating at LOS F) by 2020. Similar to Case 2, improvements associated with the SR 509 Extension could alleviate congestion along International Boulevard, but that project would provide benefits to both the Do-Nothing and "With Project" alternatives.

- Water Resources (Floodplains, Streams, Wetlands, etc.): As no other improvements are proposed to address demand above 19 million enplanements, no other impacts to water resources beyond that identified by the Final EIS would be expected.
- Property Acquisition: As no other improvements are proposed to address demand above 19 million enplaned passengers, no acquisition beyond that identified by the Final EIS would be expected.
- Socio-Economic Impacts: If activity were to grow faster than now forecast, the level of personnel needed at the Airport would be expected to be greater. The level of employment would be expected to increase in direct proportion to the increase in enplaned passengers. As the Do-Nothing and "With Project" forecasts would be the same, the employment levels would be expected to be the same. Whereas the new forecasts anticipate 236,800 jobs in 2000, a 10% increase in enplanements would increase employment to 260,480 jobs. By 2010, jobs would be expected to reach 537,650.
- Earth/Fill Requirements: As no other improvements are proposed by the Master Plan Update improvements to address demand above 19 million enplanements, no other earth/fill requirements beyond that identified by the Final EIS would be expected.

(C) Case 3: Demand Grows at a Faster Rate than Forecast - is Constrained by Do-Nothing

A number of commentors on the Master Plan Update EIS questioned the assumption that the number of passengers served under the Do-Nothing alternative would be the same as the number served by the "With Project" alternatives. The February, 1996 Final EIS (Volume 4 - Appendix R) discussed the basis for that assumption. Also, in the event that that assumption proves incorrect, the Final EIS presented an analysis of potential impacts of higher forecasts under the "With Project" alternatives, and lower forecasts under the Do-Nothing alternative. Similar to that analysis, Case 3 in this Supplemental EIS analyzes the potential differences in impacts between a "With Project" alternative with a 10% higher forecast and a Do-Nothing alternative in which enplanements are held constant at the 2010 level under the Port's new forecast (17.9 million enplanements). The 17.9 million level was assumed, for analysis and comparison purposes, as the maximum level of passengers served at the Airport due to terminal and landside facility constraints, declining passenger activity due to increasing delay, or other factors. This assumption enables a contrast of the 10% higher forecast with a Do-Nothing unconstrained (Case 2) with a constrained Do-Nothing (Case 3). The following summarize the impacts:

- Noise and Land Use: Case 2 and Case 3 noise exposure conditions are identical, as both cases assume that "With Project" demand is 10% greater than now forecast, yet the Do-Nothing aircraft operations levels are constrained at 460,000.

- Air Quality: Similar to noise impacts, the aircraft emissions inventory for Case 3 would be the same as Case 2, as the aircraft activity levels of the two cases are the same. The intersection Carbon Monoxide concentration analysis shows that when passenger levels exceed the 17.9 million enplanement level, that the difference between the "With Project" and Do-Nothing pollutant levels could require institution of mitigation measures. The results of the existing and future 8-hour CO evaluation for the Final EIS and this Supplemental EIS show exceedance of the ambient air quality standards regardless of whether improvements occur at Sea-Tac. The results of the Case 3 test, show that 8-hour CO levels at the two intersections could exceed the AAQS and "With Project" concentrations would be greater than the Do-Nothing. If this condition occurred, at the South 188th Street intersection, mitigation should be considered to abate about 2 ppm, and at the South 170th Street intersection about 1 ppm in mitigation should be considered. This mitigation could be accomplished through alterations to the geometry of the intersections to add additional or high capacity turn-lanes, improved signalization or other measures that would be considered in the future planning processes.
- Surface Transportation: As noted previously, many of the intersections along International Boulevard are expected to continue to operate at a poor level of service in the future regardless of the improvements undertaken at Sea-Tac. Nevertheless, as shown in **Table D-2**, the amount of traffic to and from the Airport would be approximately 12-39% higher under the "With Project" alternative compared to the Do-Nothing alternative. In any event, mitigation of impacts through intersection and roadway improvements, transit improvements, demand management activities, and/or other measures should be considered in future planning processes.
- Water Resources (Floodplains, Streams, Wetlands, etc.): As no other improvements are proposed to address demand above 19 million annual enplanements, no other impacts to water resources beyond that identified by the Final EIS would be expected.
- Property Acquisition: As no other improvements are proposed to address demand above 19 million enplanements, no acquisition beyond that identified by the Final EIS would be expected.
- Socio-Economic Impacts: If the Do-Nothing condition were not able to accommodate the forecast passenger demand, economic conditions could suffer, particularly if the passenger demand were not satisfied within the region. By 2010, this could result in the loss of 39,230 potential jobs. By 2020, this could increase to a loss of 145,320 jobs (With Project 537,650 jobs versus Do-Nothing 392,330 jobs) or about 40% of the potential jobs.
- Earth/Fill Requirements: As no other improvements are proposed to address demand above the 19 million enplanements, no other earth/fill requirements beyond that identified by the Final EIS would be expected.

~~Jobs lost~~
Potential jobs
go to Paint
Field instead.
Trigger Clean Air

TABLE D-2
SUMMARY OF IMPACTS ASSOCIATED WITH ALTERNATIVE FORECAST ASSUMPTIONS

Aircraft Noise Impacts (65 DNL and greater noise exposure)		Aircraft Emissions Inventory - Annual Tons of Pollutants Emitted	
Master Plan Update Forecast	New Port Forecast (SEIS)	10% Faster Growth (Case2)	10% Faster Growth (Case3)
1994 Existing	1994 Existing		
Population	Population	Population	Population
31,800	31,800	31,800	31,800
Housing	Housing	Housing	Housing
13,620	13,620	13,620	13,620
Alt 1 Do-Nothing			
2000	2000		
8,970	3,870	5,510	12,940
n/a	n/a	5,510	12,940
2005	2005		
n/a	n/a	4,660	10,950
2010	2010	4,660	10,950
9,450	4,060	5,060	11,940
10,800	4,610	11,630	11,630
Alt. 3 (North Unit Terminal)			
2000	2000		
9,890	4,020	5,510	12,940
n/a	n/a	5,510	12,940
2005	2005		
n/a	n/a	5,110	12,120
2010	2010	5,110	12,120
9,860	4,190	6,410	15,340
11,240	4,740	7,370	17,470
Alt 1 (Do-Nothing)			
2000	2000		
976	1,234	1,393	1,624
n/a	n/a	1,681	1,728
2005	2005		
n/a	n/a	1,681	1,728
1,245	1,525	1,802	2,014
1,875	2,047	1,802	2,014
Alt. 3 (North Unit)			
2000	2000		
986	1,234	1,393	1,624
n/a	n/a	1,676	1,774
2005	2005		
n/a	n/a	1,676	1,774
1,249	1,524	1,868	2,096
1,833	1,906	2,096	2,202
Alt 1 (Do-Nothing)			
2000	2000		
1,234	1,476	1,393	1,624
1,524	1,613	1,676	1,774
1,698	1,784	1,868	2,096
1,906	2,002	2,096	2,202
New Port Forecast (SEIS)			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Carbon Monoxide			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Nitrogen Oxides			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Carbon Monoxide			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Nitrogen Oxides			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Carbon Monoxide			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014
Nitrogen Oxides			
2000	2000		
1,476	1,476	1,393	1,624
1,626	1,626	1,681	1,728
1,802	1,802	1,802	2,014
1,802	1,802	1,802	2,014

TABLE D-2
SUMMARY OF IMPACTS ASSOCIATED WITH ALTERNATIVE FORECAST ASSUMPTIONS

Carbon Monoxide Concentrations at Receptor 2 (ppm) Note: AAQS 9 ppm								
	Master Plan Update Forecast		New Port Forecast (SEIS)		10% Faster Growth (Case2)		10% Faster Growth (Case3)	
	International Blvd./S 188th	International Blvd./S. 170th	International Blvd./S 188th	International Blvd./S. 170th	International Blvd./S 188th	International Blvd./S. 170th	International Blvd./S 188th	International Blvd./S. 170th
Alt 1 (Do-Nothing)								
2000	12.18	9.31	19.1	13.0	21.0	14.3	21.0	14.3
2005	na	na	18.1	13.0	19.9	14.3	19.9	14.3
2010	11.55	8.96	18.3	13.2	20.1	14.5	18.3	13.2
2020	10.43	9.45	22.8	16.4	25.1	18.1	18.3	13.2
Alt. 3 (North Unit)								
2000	12.18	9.03	18.9	12.8	20.8	14.1	20.8	14.1
2005	na	na	17.8	12.3	19.6	13.5	19.6	13.5
2010	10.57	8.96	17.8	12.5	19.6	13.8	19.6	13.8
2020	10.22	9.10	22.2	15.6	24.4	17.1	24.4	17.1
Annual Average Daily Number of Vehicles Accessing Sea-Tac Airport (Total Airport Traffic - Table O-B-1)								
	Master Plan Update Forecast		New Port Forecast (SEIS)		10% Faster Growth (Case 2)		10% Faster Growth (Case 3)	
Alt 1 (Do-Nothing)								
2000	86,465		89,810		100,240		100,240	
2005	n/a		101,440		110,170		110,170	
2010	110,750		114,040		124,500		111,000	
2020	120,300		141,100		154,380		111,000	
Alt. 3 (North Unit)								
2000	83,645		85,860		102,770		102,770	
2005	n/a		97,640		109,470		109,470	
2010	105,140		113,290		123,890		123,890	
2020	129,055		140,420		153,750		153,750	
Wetland Impact (Acres)								
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2 and 3)			
	Alt 1	Alt 3	Alt 1	Alt 3	Alt 1	Alt 3		
Wetlands Filled	1.7	10.4	1.7	12.23	1.7	12.23		
Note: The Master Plan Update EIS wetland impacts reflect the information reported in the Final EIS. Subsequent refinement of that evaluation has identified 12.23 acres of wetland impact								
Stream Relocations (Linear Feet)								
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2 and 3)			
	Alt 1	Alt 3	Alt 1	Alt 3	Alt 1	Alt 3		
Relocation	2,200	6,100	2,200	6,100	2,200	6,100		

TABLE D-2

SUMMARY OF IMPACTS ASSOCIATED WITH ALTERNATIVE FORECAST ASSUMPTIONS

	Floodplain Impacts (Acres)					
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2 and 3)	
	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>
Displaced Floodplain	0.00	7.2	0.00	7.2	0.00	7.2

	Property Acquisition (total units of property)							
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2)		10% Faster Growth (Case 3)	
	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>
Single Family	0	391	0	391	0	391	0	391
Apt/Condos	0	260	0	260	0	260	0	260
Business	0	105	0	105	0	105	0	105

	Socio-Economic Impacts (Loss of Taxes - Property Taxes and Sales Taxes expressed in millions)							
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2)		10% Faster Growth (Case 3)	
	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>
Lost Taxes	0	\$2.4	0	\$2.4	0	\$2.4	0	\$2.4

	Socio-Economic Impacts (Total Jobs - not including construction jobs)							
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2)		10% Faster Growth (Case 3)	
	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>
2000	205,690	205,690	236,800	236,800	260,480	260,480	260,480	260,480
2005	n/a	n/a	312,290	312,290	343,520	343,520	343,520	343,520
2010	335,344	335,344	392,330	392,330	431,560	431,560	392,330	431,560
2020	418,632	418,632	488,770	488,770	537,650	537,650	392,330	537,650

	Amount of Earth/Fill Needed (Million Cubic Yards)							
	Master Plan Update FEIS		New Port Forecast (SEIS)		10% Faster Growth (Case 2)		10% Faster Growth (Case 3)	
	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>	<u>Alt 1</u>	<u>Alt 3</u>
Fill Needed	2.4	23	2.4	23	2.4	23	2.4	23

Source: Synergy Consultants, Inc. - extrapolated from the *Supplemental and Final Environmental Impact Statement*; May 1997