

Appendix 16A

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**Regional Economic Impacts of
Water Conveyance Facility Construction**

Regional Economic Impacts of Water Conveyance Facility Construction

The tables in this appendix represent detailed estimates of the economic effects of constructing the proposed water conveyance facility under various alternatives. Results were developed using estimated construction expenditures as an input to the IMPLAN model, which applies multipliers to generate estimates of employment and income change for the five-county Delta region. Further discussion of this analytical approach is provided in Chapter 16, *Socioeconomics*, Section 16.3.1.2. Model results are presented by alternative, economic sector, and year of construction. Results are also presented in terms of direct and total effects; total effects incorporate direct, indirect, and induced economic effects.

1 **Table 16A-1. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 1A:**
2 **Construction-Related Impacts**

Agriculture	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	23	0.0	1.3
Manufacturing and construction ^b	2,433	7,192	327.3	344.6
Transportation, utilities, & warehousing	0	201	0.4	14.2
Trade	0	935	0.0	37.5
Information	0	93	0.0	7.0
Financial, insurance, & real estate	0	762	0.0	34.6
Services	0	3,102	0.0	153.9
Government	0	40	0.0	3.6
Total	2,433	12,348	327.7	596.7
Year 2				
Agriculture	0	19	0.0	1.0
Manufacturing and construction ^b	2,714	6,395	248.2	261.6
Transportation, utilities, & warehousing	0	162	0.8	11.7
Trade	0	767	0.0	30.7
Information	0	75	0.0	5.6
Financial, insurance, & real estate	0	626	0.0	28.3
Services	0	2,505	0.0	123.4
Government	0	33	0.0	3.0
Total	2,714	10,582	249.0	465.3
Year 3				
Agriculture	0	22	0.0	1.2
Manufacturing and construction ^b	4,004	7,895	261.9	276.5
Transportation, utilities, & warehousing	0	182	0.7	13.1
Trade	0	891	0.0	35.6
Information	0	86	0.0	6.4
Financial, insurance, & real estate	0	730	0.0	32.8
Services	0	2,873	0.0	140.5
Government	0	38	0.0	3.5
Total	4,004	12,716	262.6	509.6
Year 4				
Agriculture	0	20	0.0	1.1
Manufacturing and construction ^b	4,390	7,593	215.1	227.7
Transportation, utilities, & warehousing	0	156	0.0	10.9
Trade	0	810	0.0	32.3
Information	0	77	0.0	5.7
Financial, insurance, & real estate	0	666	0.0	29.7
Services	0	2,579	0.0	125.3
Government	0	35	0.0	3.2
Total	4,390	11,935	215.1	435.9

Agriculture	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	14	0.0	0.8
Manufacturing and construction ^b	3,658	5,778	142.1	150.8
Transportation, utilities, & warehousing	0	111	0.0	7.7
Trade	0	589	0.0	23.5
Information	0	55	0.0	4.1
Financial, insurance, & real estate	0	486	0.0	21.6
Services	0	1,856	0.0	89.7
Government	0	26	0.0	2.3
Total	3,658	8,915	142.1	300.4
Year 6				
Agriculture	0	11	0.0	0.6
Manufacturing and construction ^b	3,636	4,960	88.1	94.2
Transportation, utilities, & warehousing	0	82	0.0	5.7
Trade	0	463	0.0	18.4
Information	0	42	0.0	3.1
Financial, insurance, & real estate	0	384	0.0	16.9
Services	0	1,426	0.0	68.1
Government	0	21	0.0	1.9
Total	3,636	7,389	88.1	208.8
Year 7				
Agriculture	0	2	0.0	0.1
Manufacturing and construction ^b	676	796	7.8	8.5
Transportation, utilities, & warehousing	0	11	0.0	0.8
Trade	0	66	0.0	2.6
Information	0	6	0.0	0.4
Financial, insurance, & real estate	0	56	0.0	2.4
Services	0	198	0.0	9.3
Government	0	3	0.0	0.3
Total	676	1,136	7.8	24.4
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	165	172	0.4	0.5
Transportation, utilities, & warehousing	0	2	0.0	0.1
Trade	0	13	0.0	0.5
Information	0	1	0.0	0.1
Financial, insurance, & real estate	0	11	0.0	0.5
Services	0	36	0.0	1.7
Government	0	1	0.0	0.1
Total	165	235	0.4	3.4

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-2. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 1B**
2 **(Unlined Canal): Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	12	0.0	0.6
Manufacturing and construction ^b	2,599	4,569	132.3	140.0
Transportation, utilities, & warehousing	0	97	0.3	6.9
Trade	0	491	0.0	19.6
Information	0	47	0.0	3.5
Financial, insurance, & real estate	0	404	0.0	18.1
Services	0	1,567	0.0	76.3
Government	0	21	0.0	1.9
Total	2,599	7,208	132.6	266.9
Year 2				
Agriculture	0	12	0.0	0.7
Manufacturing and construction ^b	3,011	4,930	128.7	136.4
Transportation, utilities, & warehousing	0	101	0.6	7.4
Trade	0	513	0.0	20.4
Information	0	48	0.0	3.6
Financial, insurance, & real estate	0	422	0.0	18.8
Services	0	1,623	0.0	78.6
Government	0	22	0.0	2.0
Total	3,011	7,673	129.3	268.0
Year 3				
Agriculture	0	19	0.0	1.0
Manufacturing and construction ^b	5,735	8,261	168.6	179.6
Transportation, utilities, & warehousing	0	148	0.6	10.7
Trade	0	800	0.0	31.8
Information	0	74	0.0	5.5
Financial, insurance, & real estate	0	662	0.0	29.3
Services	0	2,486	0.0	119.2
Government	0	35	0.0	3.2
Total	5,735	12,484	169.2	380.3
Year 4				
Agriculture	0	20	0.0	1.1
Manufacturing and construction ^b	6,279	8,684	160.2	171.0
Transportation, utilities, & warehousing	0	146	0.0	10.1
Trade	0	818	0.0	32.5
Information	0	75	0.0	5.6
Financial, insurance, & real estate	0	678	0.0	29.9
Services	0	2,527	0.0	120.7
Government	0	36	0.0	3.3
Total	6,279	12,985	160.2	374.3

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	17	0.0	0.9
Manufacturing and construction ^b	5,512	7,435	127.8	136.8
Transportation, utilities, & warehousing	0	121	0.0	8.4
Trade	0	689	0.0	27.4
Information	0	63	0.0	4.7
Financial, insurance & real estate	0	572	0.0	25.2
Services	0	2,118	0.0	100.9
Government	0	31	0.0	2.8
Total	5,512	11,045	127.9	307.0
Year 6				
Agriculture	0	12	0.0	0.7
Manufacturing and construction ^b	4,702	5,851	75.8	81.8
Transportation, utilities, & warehousing	0	86	0.0	6.0
Trade	0	511	0.0	20.2
Information	0	46	0.0	3.4
Financial, insurance, & real estate	0	426	0.0	18.6
Services	0	1,544	0.0	72.9
Government	0	23	0.0	2.1
Total	4,702	8,499	75.8	205.6
Year 7				
Agriculture	0	4	0.0	0.2
Manufacturing and construction ^b	1,543	2,047	33.5	35.9
Transportation, utilities, & warehousing	0	33	0.0	2.3
Trade	0	188	0.0	7.4
Information	0	17	0.0	1.3
Financial, insurance, & real estate	0	156	0.0	6.8
Services	0	575	0.0	27.3
Government	0	8	0.0	0.8
Total	1,543	3,028	33.5	82.0
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	245	266	1.3	1.5
Transportation, utilities, & warehousing	0	3	0.0	0.2
Trade	0	21	0.0	0.8
Information	0	2	0.0	0.1
Financial, insurance, & real estate	0	17	0.0	0.7
Services	0	60	0.0	2.8
Government	0	1	0.0	0.1
Total	245	370	1.3	6.3
^a Includes direct, indirect & induced effects.				
^b Includes natural resources and mining.				

1 **Table 16A-3. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 1B – (Lined**
2 **Canal): Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	12	0.0	0.7
Manufacturing and construction ^b	2,608	4,581	132.5	140.2
Transportation, utilities, & warehousing	0	97	0.3	6.9
Trade	0	492	0.0	19.6
Information	0	47	0.0	3.5
Financial, insurance, & real estate	0	405	0.0	18.1
Services	0	1,571	0.0	76.4
Government	0	21	0.0	1.9
Total	2,608	7,226	132.8	267.4
Year 2				
Agriculture	0	13	0.0	0.7
Manufacturing and construction ^b	3,028	4,965	129.8	137.6
Transportation, utilities, & warehousing	0	102	0.6	7.5
Trade	0	517	0.0	20.6
Information	0	49	0.0	3.6
Financial, insurance &, real estate	0	426	0.0	19.0
Services	0	1,636	0.0	79.2
Government	0	23	0.0	2.0
Total	3,028	7,728	130.5	270.2
Year 3				
Agriculture	0	19	0.0	1.1
Manufacturing and construction ^b	5,780	8,333	170.4	181.6
Transportation, utilities, & warehousing	0	150	0.6	10.8
Trade	0	807	0.0	32.1
Information	0	75	0.0	5.5
Financial, insurance, & real estate	0	668	0.0	29.5
Services	0	2,510	0.0	120.4
Government	0	36	0.0	3.2
Total	5,780	12,597	171.0	384.2
Year 4				
Agriculture	0	20	0.0	1.1
Manufacturing and construction ^b	6,326	8,762	162.3	173.3
Transportation, utilities, & warehousing	0	147	0.0	10.3
Trade	0	826	0.0	32.8
Information	0	76	0.0	5.6
Financial, insurance, & real estate	0	685	0.0	30.2
Services	0	2,553	0.0	122.0
Government	0	37	0.0	3.3
Total	6,326	13,106	162.3	378.6

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	17	0.0	0.9
Manufacturing and construction ^b	5,568	7,524	130.0	139.1
Transportation, utilities, & warehousing	0	123	0.0	8.6
Trade	0	698	0.0	27.7
Information	0	64	0.0	4.7
Financial, insurance, & real estate	0	579	0.0	25.5
Services	0	2,146	0.0	102.3
Government	0	31	0.0	2.8
Total	5,568	11,181	130.1	311.6
Year 6				
Agriculture	0	12	0.0	0.7
Manufacturing and construction ^b	4,726	5,886	76.5	82.6
Transportation, utilities, & warehousing	0	86	0.0	6.0
Trade	0	514	0.0	20.4
Information	0	46	0.0	3.4
Financial, insurance, & real estate	0	429	0.0	18.7
Services	0	1,555	0.0	73.4
Government	0	23	0.0	2.1
Total	4,726	8,551	76.5	207.2
Year 7				
Agriculture	0	5	0.0	0.2
Manufacturing and construction ^b	1,571	2,087	34.3	36.7
Transportation, utilities & warehousing	0	33	0.0	2.3
Trade	0	191	0.0	7.6
Information	0	17	0.0	1.3
Financial, insurance, & real estate	0	159	0.0	7.0
Services	0	587	0.0	27.9
Government	0	9	0.0	0.8
Total	1,571	3,088	34.3	83.9
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	245	267	1.3	1.5
Transportation, utilities, & warehousing	0	3	0.0	0.2
Trade	0	21	0.0	0.8
Information	0	2	0.0	0.1
Financial, insurance, & real estate	0	17	0.0	0.7
Services	0	60	0.0	2.8
Government	0	1	0.0	0.1
Total	245	371	1.3	6.3

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

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1 **Table 16A-4. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 1C –**
2 **(Unlined Canal): Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	16	0.0	0.9
Manufacturing and construction ^b	2,747	5,677	197.3	208.2
Transportation, utilities, & warehousing	0	133	0.3	9.4
Trade	0	651	0.0	26.0
Information	0	63	0.0	4.7
Financial, insurance, & real estate	0	533	0.0	24.0
Services	0	2,109	0.0	103.4
Government	0	28	0.0	2.5
Total	2,747	9,209	197.6	379.1
Year 2				
Agriculture	0	14	0.0	0.8
Manufacturing and construction ^b	3,016	5,324	155.1	164.1
Transportation, utilities, & warehousing	0	115	0.7	8.4
Trade	0	574	0.0	22.9
Information	0	55	0.0	4.1
Financial, insurance, & real estate	0	472	0.0	21.1
Services	0	1,832	0.0	89.1
Government	0	25	0.0	2.2
Total	3,016	8,411	155.8	312.7
Year 3				
Agriculture	0	19	0.0	1.0
Manufacturing and construction ^b	4,915	7,611	180.5	191.6
Transportation, utilities, & warehousing	0	147	0.6	10.6
Trade	0	768	0.0	30.6
Information	0	72	0.0	5.4
Financial, insurance, & real estate	0	634	0.0	28.2
Services	0	2,414	0.0	116.5
Government	0	34	0.0	3.0
Total	4,915	11,698	181.1	386.9
Year 4				
Agriculture	0	18	0.0	1.0
Manufacturing and construction ^b	5,300	7,649	156.9	167.1
Transportation, utilities, & warehousing	0	134	0.0	9.4
Trade	0	741	0.0	29.4
Information	0	68	0.0	5.1
Financial, insurance, & real estate	0	613	0.0	27.1
Services	0	2,303	0.0	110.5
Government	0	33	0.0	3.0
Total	5,300	11,559	156.9	352.5

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	4,794	6,606	120.7	128.9
Transportation, utilities, & warehousing	0	110	0.0	7.7
Trade	0	621	0.0	24.7
Information	0	57	0.0	4.2
Financial, insurance, & real estate	0	515	0.0	22.7
Services	0	1,916	0.0	91.5
Government	0	28	0.0	2.5
Total	4,794	9,867	120.7	283.0
Year 6				
Agriculture	0	11	0.0	0.6
Manufacturing and construction ^b	4,194	5,318	74.3	80.0
Transportation, utilities, & warehousing	0	80	0.0	5.6
Trade	0	471	0.0	18.7
Information	0	42	0.0	3.1
Financial, insurance, & real estate	0	392	0.0	17.2
Services	0	1,430	0.0	67.7
Government	0	21	0.0	1.9
Total	4,194	7,767	74.3	194.8
Year 7				
Agriculture	0	3	0.0	0.2
Manufacturing and construction ^b	1,128	1,450	21.3	22.9
Transportation, utilities, & warehousing	0	22	0.0	1.6
Trade	0	130	0.0	5.1
Information	0	12	0.0	0.9
Financial, insurance, & real estate	0	108	0.0	4.7
Services	0	395	0.0	18.7
Government	0	6	0.0	0.5
Total	1,128	2,126	21.3	54.6
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	236	254	1.1	1.3
Transportation, utilities, & warehousing	0	3	0.0	0.2
Trade	0	19	0.0	0.8
Information	0	2	0.0	0.1
Financial, insurance, & real estate	0	16	0.0	0.7
Services	0	56	0.0	2.6
Government	0	1	0.0	0.1
Total	236	352	1.1	5.8

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-5. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 1C – (Lined**
2 **Canal): Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	16	0.0	0.9
Manufacturing and construction ^b	2,775	5,712	197.8	208.7
Transportation, utilities, & warehousing	0	133	0.3	9.5
Trade	0	655	0.0	26.2
Information	0	63	0.0	4.7
Financial, insurance, & real estate	0	536	0.0	24.1
Services	0	2,118	0.0	103.8
Government	0	28	0.0	2.5
Total	2,775	9,262	198.1	380.5
Year 2				
Agriculture	0	14	0.0	0.8
Manufacturing and construction ^b	3,068	5,429	158.6	167.8
Transportation, utilities, & warehousing	0	118	0.7	8.6
Trade	0	586	0.0	23.4
Information	0	56	0.0	4.2
Financial, insurance, & real estate	0	481	0.0	21.5
Services	0	1,870	0.0	91.0
Government	0	25	0.0	2.3
Total	3,068	8,579	159.3	319.5
Year 3				
Agriculture	0	19	0.0	1.0
Manufacturing and construction ^b	5,053	7,833	186.2	197.7
Transportation, utilities, & warehousing	0	151	0.6	10.9
Trade	0	791	0.0	31.5
Information	0	74	0.0	5.5
Financial, insurance, & real estate	0	653	0.0	29.0
Services	0	2,487	0.0	120.0
Government	0	35	0.0	3.1
Total	5,053	12,044	186.8	398.8
Year 4				
Agriculture	0	18	0.0	1.0
Manufacturing and construction ^b	5,443	7,888	163.2	173.8
Transportation, utilities, & warehousing	0	139	0.0	9.7
Trade	0	766	0.0	30.4
Information	0	71	0.0	5.3
Financial, insurance, & real estate	0	633	0.0	28.0
Services	0	2,382	0.0	114.4
Government	0	34	0.0	3.1
Total	5,443	11,931	163.3	365.7

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	16	0.0	0.8
Manufacturing and construction ^b	4,965	6,877	127.4	136.0
Transportation, utilities, & warehousing	0	116	0.0	8.1
Trade	0	649	0.0	25.8
Information	0	59	0.0	4.4
Financial, insurance, & real estate	0	538	0.0	23.7
Services	0	2,003	0.0	95.8
Government	0	29	0.0	2.6
Total	4,965	10,286	127.4	297.1
Year 6				
Agriculture	0	11	0.0	0.6
Manufacturing and construction ^b	4,266	5,423	76.5	82.4
Transportation, utilities, & warehousing	0	82	0.0	5.7
Trade	0	482	0.0	19.1
Information	0	43	0.0	3.2
Financial, insurance, & real estate	0	401	0.0	17.6
Services	0	1,462	0.0	69.2
Government	0	22	0.0	1.9
Total	4,266	7,926	76.5	199.7
Year 7				
Agriculture	0	3	0.0	0.2
Manufacturing and construction ^b	1,212	1,572	23.8	25.6
Transportation, utilities, & warehousing	0	24	0.0	1.7
Trade	0	142	0.0	5.6
Information	0	13	0.0	0.9
Financial, insurance, & real estate	0	118	0.0	5.2
Services	0	432	0.0	20.5
Government	0	6	0.0	0.6
Total	1,212	2,311	23.9	60.3
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	237	255	1.1	1.3
Transportation, utilities, & warehousing	0	3	0.0	0.2
Trade	0	20	0.0	0.8
Information	0	2	0.0	0.1
Financial, insurance, & real estate	0	16	0.0	0.7
Services	0	57	0.0	2.6
Government	0	1	0.0	0.1
Total	237	353	1.1	5.8

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-6. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 3:**
2 **Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	19	0.0	1.0
Manufacturing and construction ^b	1,818	5,994	282.2	296.7
Transportation, utilities, & warehousing	0	169	0.3	11.9
Trade	0	780	0.0	31.3
Information	0	77	0.0	5.8
Financial, insurance, & real estate	0	634	0.0	28.9
Services	0	2,590	0.0	128.6
Government	0	33	0.0	3.0
Total	1,818	10,297	282.5	507.2
Year 2				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,034	5,103	207.0	218.0
Transportation, utilities, & warehousing	0	133	0.7	9.7
Trade	0	623	0.0	25.0
Information	0	61	0.0	4.6
Financial, insurance, & real estate	0	508	0.0	23.0
Services	0	2,044	0.0	100.8
Government	0	23	0.0	2.0
Total	2,034	8,511	207.7	384.0
Year 3				
Agriculture	0	17	0.0	0.9
Manufacturing and construction ^b	2,713	5,890	214.1	225.8
Transportation, utilities, & warehousing	0	143	0.6	10.3
Trade	0	688	0.0	27.5
Information	0	67	0.0	5.0
Financial, insurance, & real estate	0	563	0.0	25.4
Services	0	2,236	0.0	109.8
Government	0	29	0.0	2.7
Total	2,713	9,634	214.8	407.4
Year 4				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,849	5,412	172.5	182.2
Transportation, utilities, & warehousing	0	119	0.0	8.3
Trade	0	601	0.0	24.0
Information	0	58	0.0	4.3
Financial, insurance, & real estate	0	493	0.0	22.1
Services	0	1,932	0.0	94.4
Government	0	26	0.0	2.3
Total	2,849	8,656	172.5	338.5

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	11	0.0	0.6
Manufacturing and construction ^b	2,578	4,341	118.3	125.3
Transportation, utilities, & warehousing	0	88	0.0	6.1
Trade	0	457	0.0	18.2
Information	0	43	0.0	3.2
Financial, insurance, & real estate	0	376	0.0	16.8
Services	0	1,451	0.0	70.4
Government	0	20	0.0	1.8
Total	2,578	6,787	118.3	242.4
Year 6				
Agriculture	0	8	0.0	0.4
Manufacturing and construction ^b	2,320	3,324	67.0	71.4
Transportation, utilities, & warehousing	0	58	0.0	4.0
Trade	0	320	0.0	12.7
Information	0	30	0.0	2.2
Financial, insurance, & real estate	0	265	0.0	11.7
Services	0	995	0.0	47.7
Government	0	14	0.0	1.3
Total	2,320	5,013	67.0	151.5
Year 7				
Agriculture	0	1	0.0	0.1
Manufacturing and construction ^b	482	569	5.7	6.2
Transportation, utilities, & warehousing	0	8	0.0	0.5
Trade	0	48	0.0	1.9
Information	0	4	0.0	0.3
Financial, insurance, & real estate	0	40	0.0	1.7
Services	0	142	0.0	6.6
Government	0	2	0.0	0.2
Total	482	813	5.7	17.6
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	111	115	0.2	0.3
Transportation, utilities, & warehousing	0	1	0.0	0.1
Trade	0	8	0.0	0.3
Information	0	1	0.0	0.1
Financial, insurance, & real estate	0	7	0.0	0.3
Services	0	24	0.0	1.1
Government	0	0	0.0	0.0
Total	111	157	0.2	2.2

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-7. Regional Economic Impacts By Affected Sector – Delta Region, Alternatives 4, 4A, 2D**
2 **and 5A:¹ Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	66	67	0.0	0.0
Transportation, utilities, & warehousing	0	1	0.0	0.0
Trade	0	5	0.0	0.2
Information	0	0	0.0	0.0
Financial, insurance, & real estate	0	4	0.0	0.2
Services	0	13	0.0	0.6
Government	0	0	0.0	0.0
Total	66	90	0.0	1.1
Year 2				
Agriculture	0	1	0.0	0.1
Manufacturing and construction ^b	747	752	0.0	0.4
Transportation, utilities, & warehousing	0	10	0.5	1.0
Trade	0	55	0.0	2.1
Information	0	5	0.0	0.3
Financial, insurance, & real estate	0	46	0.0	2.0
Services	0	154	0.0	6.9
Government	0	3	0.0	0.2
Total	747	1,025	0.5	13.0
Year 3				
Agriculture	0	14	0.0	0.7
Manufacturing and construction ^b	2,427	4,928	167.6	176.9
Transportation, utilities, & warehousing	0	119	1.0	8.8
Trade	0	564	0.0	22.4
Information	0	54	0.0	4.1
Financial, insurance, & real estate	0	462	0.0	20.7
Services	0	1,822	0.0	88.8
Government	0	24	0.0	2.2
Total	2,427	7,988	168.6	324.6

¹ Regional economic impacts for Alternatives 2D and 5A would be similar to impacts for Alternatives 4 and 4A. However, due to construction of two more intakes, Alternative 2D would likely result in more economic impacts. Due to construction of only one intake, Alternative 5A would likely result in slightly less economic impacts.

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 4				
Agriculture	0	12	0.0	0.6
Manufacturing and construction ^b	1,743	4,028	153.3	161.5
Transportation, utilities, & warehousing	0	98	0.0	6.8
Trade	0	480	0.0	19.1
Information	0	47	0.0	3.5
Financial, insurance, & real estate	0	392	0.0	17.6
Services	0	1,566	0.0	76.7
Government	0	21	0.0	1.8
Total	1,743	6,644	153.3	287.8
Year 5				
Agriculture	0	10	0.0	0.5
Manufacturing and construction ^b	1,124	3,193	139.0	146.3
Transportation, utilities, & warehousing	0	85	0.0	5.9
Trade	0	403	0.0	16.1
Information	0	40	0.0	3.0
Financial, insurance, & real estate	0	328	0.0	14.8
Services	0	1,328	0.0	65.4
Government	0	17	0.0	1.5
Total	1,124	5,402	139.0	253.4
Year 6				
Agriculture	0	12	0.0	0.6
Manufacturing and construction ^b	1,572	3,877	154.8	163.0
Transportation, utilities, & warehousing	0	97	0.0	6.7
Trade	0	471	0.0	18.8
Information	0	46	0.0	3.4
Financial, insurance, & real estate	0	384	0.0	17.3
Services	0	1,543	0.0	75.7
Government	0	20	0.0	1.8
Total	1,572	6,451	154.8	287.4
Year 7				
Agriculture	0	14	0.0	0.8
Manufacturing and construction ^b	2,207	4,979	185.9	196.0
Transportation, utilities, & warehousing	0	120	0.0	8.3
Trade	0	589	0.0	23.4
Information	0	57	0.0	4.3
Financial, insurance, & real estate	0	481	0.0	21.6
Services	0	1,918	0.0	93.9
Government	0	25	0.0	2.3
Total	2,207	8,185	185.9	350.6

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 8				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,272	5,045	185.9	196.0
Transportation, utilities, & warehousing	0	121	0.0	8.3
Trade	0	594	0.0	23.6
Information	0	58	0.0	4.3
Financial, insurance, & real estate	0	485	0.0	21.8
Services	0	1,932	0.0	94.5
Government	0	25	0.0	2.3
Total	2,272	8,274	185.9	351.7
Year 9				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,278	5,071	187.4	197.5
Transportation, utilities, & warehousing	0	122	0.0	8.4
Trade	0	597	0.0	23.8
Information	0	58	0.0	4.3
Financial, insurance, & real estate	0	488	0.0	21.9
Services	0	1,944	0.0	95.1
Government	0	26	0.0	2.3
Total	2,278	8,320	187.4	354.2
Year 10				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,194	4,977	186.7	196.7
Transportation, utilities, & warehousing	0	120	0.0	8.3
Trade	0	590	0.0	23.5
Information	0	57	0.0	4.3
Financial, insurance, & real estate	0	482	0.0	21.6
Services	0	1,921	0.0	94.1
Government	0	25	0.0	2.3
Total	2,194	8,187	186.7	351.6
Year 11				
Agriculture	0	14	0.0	0.8
Manufacturing and construction ^b	2,114	4,915	187.9	198.0
Transportation, utilities, & warehousing	0	120	0.0	8.3
Trade	0	587	0.0	23.4
Information	0	57	0.0	4.3
Financial, insurance, & real estate	0	479	0.0	21.5
Services	0	1,915	0.0	93.8
Government	0	25	0.0	2.3
Total	2,114	8,113	187.9	352.4

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 12				
Agriculture	0	15	0.0	0.8
Manufacturing and construction ^b	2,248	5,250	201.5	212.3
Transportation, utilities, & warehousing	0	129	0.0	8.9
Trade	0	628	0.0	25.0
Information	0	61	0.0	4.6
Financial, insurance, & real estate	0	513	0.0	23.1
Services	0	2,050	0.0	100.4
Government	0	27	0.0	2.4
Total	2,248	8,673	201.5	377.5
Year 13				
Agriculture	0	8	0.0	0.4
Manufacturing and construction ^b	1,723	3,128	94.0	99.3
Transportation, utilities, & warehousing	0	67	0.0	4.6
Trade	0	341	0.0	13.6
Information	0	33	0.0	2.4
Financial, insurance, & real estate	0	280	0.0	12.5
Services	0	1,092	0.0	53.0
Government	0	15	0.0	1.3
Total	1,723	4,964	94.0	187.2
Year 14				
Agriculture	0	1	0.0	0.1
Manufacturing and construction ^b	486	560	4.8	5.2
Transportation, utilities, & warehousing	0	7	0.0	0.5
Trade	0	46	0.0	1.8
Information	0	4	0.0	0.3
Financial, insurance, & real estate	0	39	0.0	1.7
Services	0	136	0.0	6.3
Government	0	2	0.0	0.2
Total	486	795	4.8	16.1

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-8. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 5:**
2 **Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	10	0.0	0.5
Manufacturing and construction ^b	886	2,950	139.5	146.6
Transportation, utilities, & warehousing	0	83	0.2	5.9
Trade	0	385	0.0	15.4
Information	0	38	0.0	2.9
Financial, insurance, & real estate	0	313	0.0	14.2
Services	0	1,278	0.0	63.5
Government	0	16	0.0	1.5
Total	886	5,073	139.6	250.5
Year 2				
Agriculture	0	8	0.0	0.4
Manufacturing and construction ^b	1,004	2,558	104.8	110.4
Transportation, utilities, & warehousing	0	67	0.4	4.9
Trade	0	314	0.0	12.6
Information	0	31	0.0	2.3
Financial, insurance, & real estate	0	256	0.0	11.6
Services	0	1,030	0.0	50.8
Government	0	13	0.0	1.2
Total	1,004	4,277	105.2	194.2
Year 3				
Agriculture	0	8	0.0	0.5
Manufacturing and construction ^b	1,317	2,914	107.6	113.5
Transportation, utilities, & warehousing	0	72	0.3	5.2
Trade	0	343	0.0	13.7
Information	0	33	0.0	2.5
Financial, insurance, & real estate	0	280	0.0	12.6
Services	0	1,115	0.0	54.8
Government	0	15	0.0	1.3
Total	1,317	4,780	108.0	204.1
Year 4				
Agriculture	0	7	0.0	0.4
Manufacturing and construction ^b	1,372	2,671	87.4	92.3
Transportation, utilities, & warehousing	0	60	0.0	4.1
Trade	0	300	0.0	12.0
Information	0	29	0.0	2.2
Financial, insurance, & real estate	0	245	0.0	11.0
Services	0	965	0.0	47.2
Government	0	13	0.0	1.2
Total	1,372	4,290	87.4	170.4

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	6	0.0	0.3
Manufacturing and construction ^b	1,254	2,148	60.0	63.5
Transportation, utilities, & warehousing	0	44	0.0	3.1
Trade	0	228	0.0	9.1
Information	0	22	0.0	1.6
Financial, insurance, & real estate	0	188	0.0	8.4
Services	0	726	0.0	35.2
Government	0	10	0.0	0.9
Total	1,254	3,370	60.0	122.1
Year 6				
Agriculture	0	3	0.0	0.2
Manufacturing and construction ^b	987	1,445	30.6	32.5
Transportation, utilities, & warehousing	0	26	0.0	1.8
Trade	0	141	0.0	5.6
Information	0	13	0.0	1.0
Financial, insurance, & real estate	0	117	0.0	5.2
Services	0	440	0.0	21.1
Government	0	6	0.0	0.6
Total	987	2,191	30.6	67.9
Year 7				
Agriculture	0	1	0.0	0.0
Manufacturing and construction ^b	249	295	3.0	3.3
Transportation, utilities, & warehousing	0	4	0.0	0.3
Trade	0	25	0.0	1.0
Information	0	2	0.0	0.2
Financial, insurance, & real estate	0	21	0.0	0.9
Services	0	74	0.0	3.5
Government	0	1	0.0	0.1
Total	249	422	3.0	9.2
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	52	54	0.1	0.1
Transportation, utilities, & warehousing	0	1	0.0	0.0
Trade	0	4	0.0	0.2
Information	0	0	0.0	0.0
Financial, insurance, & real estate	0	3	0.0	0.1
Services	0	11	0.0	0.5
Government	0	0	0.0	0.0
Total	52	73	0.1	1.0

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

1 **Table 16A-9. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 7:**
2 **Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	21	0.0	1.1
Manufacturing and construction ^b	2,018	6,434	298.4	313.7
Transportation, utilities, & warehousing	0	179	0.4	12.7
Trade	0	832	0.0	33.4
Information	0	82	0.0	6.2
Financial, insurance, & real estate	0	676	0.0	30.8
Services	0	2,758	0.0	136.9
Government	0	35	0.0	3.2
Total	2,018	11,018	298.7	537.9
Year 2				
Agriculture	0	16	0.0	0.9
Manufacturing and construction ^b	2,256	5,516	219.9	231.6
Transportation, utilities, & warehousing	0	142	0.7	10.3
Trade	0	669	0.0	26.8
Information	0	65	0.0	4.9
Financial, insurance, & real estate	0	546	0.0	24.7
Services	0	2,190	0.0	108.0
Government	0	29	0.0	2.6
Total	2,256	9,174	220.6	409.8
Year 3				
Agriculture	0	18	0.0	1.0
Manufacturing and construction ^b	3,141	6,544	229.2	241.8
Transportation, utilities, & warehousing	0	156	0.7	11.2
Trade	0	754	0.0	30.1
Information	0	73	0.0	5.5
Financial, insurance, & real estate	0	617	0.0	27.8
Services	0	2,441	0.0	119.7
Government	0	32	0.0	2.9
Total	3,141	10,635	229.9	440.1
Year 4				
Agriculture	0	16	0.0	0.9
Manufacturing and construction ^b	3,360	6,128	186.1	196.7
Transportation, utilities, & warehousing	0	131	0.0	9.1
Trade	0	669	0.0	26.7
Information	0	64	0.0	4.8
Financial, insurance, & real estate	0	549	0.0	24.6
Services	0	2,143	0.0	104.5
Government	0	29	0.0	2.6
Total	3,360	9,729	186.1	369.9

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	11	0.0	0.6
Manufacturing and construction ^b	2,937	4,809	125.9	133.1
Transportation, utilities, & warehousing	0	89	0.0	6.2
Trade	0	456	0.0	18.2
Information	0	43	0.0	3.3
Financial, insurance, & real estate	0	375	0.0	16.8
Services	0	1,460	0.0	71.1
Government	0	20	0.0	1.8
Total	2,937	7,264	125.9	251.1
Year 6				
Agriculture	0	9	0.0	0.5
Manufacturing and construction ^b	2,763	3,873	74.0	78.9
Transportation, utilities, & warehousing	0	66	0.0	4.6
Trade	0	368	0.0	14.6
Information	0	34	0.0	2.5
Financial, insurance, & real estate	0	305	0.0	13.5
Services	0	1,139	0.0	54.5
Government	0	16	0.0	1.5
Total	2,763	5,811	74.0	170.6
Year 7				
Agriculture	0	1	0.0	0.1
Manufacturing and construction ^b	547	646	6.4	7.0
Transportation, utilities, & warehousing	0	9	0.0	0.6
Trade	0	54	0.0	2.1
Information	0	5	0.0	0.3
Financial, insurance, & real estate	0	45	0.0	2.0
Services	0	161	0.0	7.5
Government	0	2	0.0	0.2
Total	547	923	6.4	19.9
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	129	134	0.3	0.4
Transportation, utilities, & warehousing	0	1	0.0	0.1
Trade	0	10	0.0	0.4
Information	0	1	0.0	0.1
Financial, insurance, & real estate	0	8	0.0	0.4
Services	0	28	0.0	1.3
Government	0	0	0.0	0.0
Total	129	183	0.3	2.6

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.

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1 **Table 16A-10. Regional Economic Impacts By Affected Sector – Delta Region, Alternative 9:**
2 **Construction-Related Impacts**

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 1				
Agriculture	0	7	0.0	0.4
Manufacturing and construction ^b	1,922	2,793	58.1	61.9
Transportation, utilities, & warehousing	0	49	0.0	3.4
Trade	0	271	0.0	10.8
Information	0	25	0.0	1.9
Financial, insurance, & real estate	0	225	0.0	9.9
Services	0	845	0.0	40.6
Government	0	12	0.0	1.1
Total	1,922	4,227	58.1	129.9
Year 2				
Agriculture	0	7	0.0	0.4
Manufacturing and construction ^b	2,146	2,973	55.1	58.8
Transportation, utilities, & warehousing	0	50	0.0	3.5
Trade	0	280	0.0	11.1
Information	0	26	0.0	1.9
Financial, insurance, & real estate	0	232	0.0	10.2
Services	0	866	0.0	41.4
Government	0	12	0.0	1.1
Total	2,146	4,446	55.1	128.5
Year 3				
Agriculture	0	9	0.0	0.5
Manufacturing and construction ^b	3,087	4,177	72.5	77.5
Transportation, utilities, & warehousing	0	68	0.0	4.7
Trade	0	388	0.0	15.4
Information	0	35	0.0	2.6
Financial, insurance, & real estate	0	322	0.0	14.2
Services	0	1,193	0.0	56.9
Government	0	17	0.0	1.6
Total	3,087	6,209	72.5	173.4
Year 4				
Agriculture	0	9	0.0	0.5
Manufacturing and construction ^b	3,209	4,298	72.3	77.4
Transportation, utilities, & warehousing	0	69	0.0	4.8
Trade	0	396	0.0	15.7
Information	0	36	0.0	2.7
Financial, insurance, & real estate	0	329	0.0	14.5
Services	0	1,216	0.0	57.9
Government	0	18	0.0	1.6
Total	3,209	6,371	72.3	175.1

	Employment		Income (million\$)	
	Direct	Total ^a	Direct	Total ^a
Year 5				
Agriculture	0	6	0.0	0.3
Manufacturing and construction ^b	2,277	2,873	39.4	42.4
Transportation, utilities, & warehousing	0	43	0.0	3.0
Trade	0	254	0.0	10.1
Information	0	23	0.0	1.7
Financial, insurance, & real estate	0	211	0.0	9.2
Services	0	769	0.0	36.4
Government	0	11	0.0	1.0
Total	2,277	4,190	39.4	104.1
Year 6				
Agriculture	0	7	0.0	0.4
Manufacturing and construction ^b	2,798	3,490	45.7	49.3
Transportation, utilities, & warehousing	0	51	0.0	3.6
Trade	0	305	0.0	12.1
Information	0	27	0.0	2.0
Financial, insurance, & real estate	0	255	0.0	11.1
Services	0	923	0.0	43.6
Government	0	14	0.0	1.2
Total	2,798	5,073	45.7	123.3
Year 7				
Agriculture	0	1	0.0	0.0
Manufacturing and construction ^b	318	408	6.0	6.4
Transportation, utilities, & warehousing	0	6	0.0	0.4
Trade	0	37	0.0	1.4
Information	0	3	0.0	0.2
Financial, insurance, & real estate	0	30	0.0	1.3
Services	0	111	0.0	5.3
Government	0	2	0.0	0.1
Total	318	598	6.0	15.3
Year 8				
Agriculture	0	0	0.0	0.0
Manufacturing and construction ^b	85	86	0.0	0.0
Transportation, utilities, & warehousing	0	1	0.0	0.1
Trade	0	6	0.0	0.2
Information	0	1	0.0	0.0
Financial, insurance, & real estate	0	5	0.0	0.2
Services	0	17	0.0	0.8
Government	0	0	0.0	0.0
Total	85	117	0.0	1.4

^a Includes direct, indirect & induced effects.

^b Includes natural resources and mining.