	No. of		
	Establishments		
Гуре of Entity	(FRIA)	% SBA Small	
Fish Primary Processors	18	78%	
Fish Secondary Processors	10	100%	
Fish Producers/hatcheries	624	100%	
Fish Feed Mills	14	86%	
Fish Live Loaders, Haulers, Wholesalers	11	100%	
Fish Importers, Brokers	165	100%	
Total	842		

Sources: 2003 NASS, USDC, FDA, DNB, Census of Agriculture, Economic Census, DHS/CBP

FSIS updated Table 3 of the Appendix A - Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

Available here:

http://www.fsis.usda.gov/wps/wcm/connect/1ff464d1-ae27-4d78-831db21ccce26ec5/Catfish_Impact_Analysis.pdf?MOD=AJPERES

The table is replicated as Table 5 in the Regulatory Flexibility Act Assessment of the Final Regulatory Impact Analysis (FRIA)

OMB mid-year discount factor

7%	3%
0.94	0.97
0.87	0.94
0.82	0.92
0.76	0.89
0.71	0.86
0.67	0.84
0.62	0.81
0.58	0.79
0.54	0.77
0.51	0.74

Wage/Hour Data used in FRIA

Category	Wag	ge/Hour	Benefits	1	Total	OCC	Hours per Year	Annual Salary
QC Manager	\$	25.87	0.33	\$	34.41	11-3051	2,087	71,813.67
Supervisors/QC Tech	\$	19.01	0.33	\$	25.28	51-1011	-	-
Production Workers	\$	13.54	0.33	\$	18.00	51-9000	-	-

Additional Costs Associated with the Development of a Sanitation SOP

<u> Step One - Sanita</u>			
No. of Processes	No. of Establishments	Time (Hours) /1	One Time Cost
1 - Typical	4	8	\$1,101
2 - Complex	10	8	\$2,753
	0		¢1, 000
2 - Not Complex Place	9 5	4	\$1,239
Total	28		\$5,093

For further discussion see Table 6 of the Appendix A -Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

/1 QC Manager Wage Rate

Step Two - Sanitation S	OPs recordkeeping and	l record storage		
		Record-keeping		
	No. of	Time	Review Time	Recurring
Recordkeeping	Establishments	(Hours/Day) /1	(Hours/Day) /2	Cost /3
One Shift	8	0.25	0.17	\$18,299
Two Shifts	4	0.5	0.34	\$18,299
Not Affected	16	-	-	-
Total				\$36,598
	No. of Establishments	Additional Storage Space	Annual Additional	Recurring
Record storage	Affected	(square feet)	Storage Cost /4	Costs
One Shift	8	6	\$58	\$462
Two Shifts		7	\$67	\$270
Not Affected	16	-	-	-
Total				\$732
Total Recordkeepi	ng and Record Sto	orage Recurring (Costs	\$37 , 330
/1 Production Worker Wa	nga Data			

For further discussion see Table 7 of the Appendix A -Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

/1 Production Worker Wage Rate

/2 QC Tech Wage Rate

/3 Operating Days Per Year - 260 /4 Recordkeeping storage costs were based on a national survey of storage costs showing an average annual cost of \$8.40 per square foot in 1994, which was updated to \$9.63 per square foot.

Step Three - Sanita				
				Recurring Cost
Personnel	No. of Establishments	No. of Shifts	Time (Hours)	per Training
Verification:			-	

For further discussion see Table 8 of the Appendix A -

	17	1	2	\$860
QC Tech	17	1	Z	\$800
Qe reen	6	2	2	\$607
Sub-Total	23			\$1,466
Recordkeeping:				
Production Worker	17	1	2	\$612
FIGURCHOIL WOLKER	6	2	2	\$432
Sub-Total	23			\$1,044
Total				\$2,510

готтигата изсазотот эсс тибіс о от ате другним л Executive Order 12866 - Preliminary Regulatory Impact

/1 Training Period occurs every 4 years

Step Four - Sanitation SOPs ongoing additional domestic

			Cost Per	Cost	
Туре	No. of Establishments	Time (Hours)	Establishment	One Time	Recurring
Additional Sanitation	3	0.17	\$796		\$2,387
Additional Water	3	-	\$160		\$480
Additional Cleaning					
Equipment	23	-	\$130	\$2,990	
Total				\$2,990	\$2,867

For further discussion see Sanitation SOPs Ongoing Additional Implementation Costs section of the Appendix A - Executive Order

Step Five - Total Costs for Sanitation SOPs

	Costs			
Measure	One-time	Recurring		
Plan Development, Validation and Reassessment	\$5,093			
Recordkeeping and Record Storage		\$37,330		
Training (years 1, 4, 7 & 10)		\$2,510		
Additional Ongoing Implementation	\$2,990	\$2,867		
Total	\$8,083	\$42 , 707		

Annualization Table

	Costs								
	Plan	Recordkeeping		Additional		Net PV	of Cost	discount	year
Year	Development	and Storage	Training	Ongoing	Total Direct	7 Percent	3 Percent	factor 7%	discount
1	\$5,093	\$37,330	\$2,510	\$5,857	\$50,790	\$47,467	\$49,310	0.935	0.971
2	-	\$37,330		\$2,867	\$40,197	\$35,109	\$37,889	0.873	0.943
3	-	\$37,330		\$2,867	\$40,197	\$32,812	\$36,786	0.816	0.915
4	-	\$37,330	\$2,510	\$2,867	\$42,707	\$32,581	\$37,945	0.763	0.888
5	-	\$37,330		\$2,867	\$40,197	\$28,660	\$34,674	0.713	0.863
б	-	\$37,330		\$2,867	\$40,197	\$26,785	\$33,664	0.666	0.837
7	-	\$37,330	\$2,510	\$2,867	\$42,707	\$26,596	\$34,725	0.623	0.813
8	-	\$37,330		\$2,867	\$40,197	\$23,395	\$31,732	0.582	0.789



9	-	\$37,330		\$2,867	\$40,197	\$21,864	\$30,807	0.544	0.766
10	-	\$37,330	\$2,510	\$2,867	\$42,707	\$21,710	\$31,778	0.508	0.744
10-year Present V	/alue					\$296,979	\$359,310		
Annualized Total						\$42,283	\$42,122		

Step Two - Sanitation SOPs recordkeeping and record storage

	No. of Establishments	Record-keeping Time	Review Time	
Recordkeeping	Affected	(Hours/Day) /1	(Hours/Day) /2	Recurring Cost /3
One Shift	8	0.25	0.17	\$18,299
Two Shifts	4	0.5	0.34	\$18,299
Not Affected	16	-	-	-
Total				\$36,598
	No. of	Additional		
	Establishments	Storage Space	Annual Additional	
Record storage	Affected	(square feet)	Storage Cost /4	Recurring Costs
One Shift	8	б	\$58	\$462
Two Shifts	4	7	\$67	\$270
Not Affected	16	_	-	_
Total	\$732			
Total Recordkeepin	\$37,330			

/1 Production Worker Wage Rate

/2 QC Tech Wage Rate

/3 Operating Days Per Year - 260

/4 Recordkeeping storage costs were based on a national survey of storage costs showing an average annual cost of \$8.40 per square foot in 1994, which was updated to \$9.63 per square foot. Annual storage costs for sanitation SOP records were assumed to be \$60 per establishment.

Additional costs associated with the development of a HACCP Plan

<u>Step One - Development</u>	of a HACCP Plan	1					
			Cost				
Firms	No. of Establishment s	Per Process	Reassessment per process	One Time	Recurring		
One Process	4	\$8,000		\$32,000	•		
Two Process	11	\$6,000		\$132,000	•		
Total				\$164,000	\$1,820		

Step Two - Projected additional domestic cost of HACCP training

Establishment/ Type of	No. of Establishment	No. of Additional Employees per establishment	No. of Additional Employees	per	training Cost training eriod /1
One shift:					
QC Manager	2	8	16	\$	22,022.40
QC Technician	3	5.3	16	\$	16,179.20
Two shifts:					
QC Manager	3	5.3	4	\$	5,505.60
QC Technician	3	5.3	4	\$	4,044.80
Total	11			\$	47,752.00

For further discussion see HACCP Plan Development, Validation, and Reassessment Additional Costs section and Table 10 of the Appendix A -

For further discussion see HACCP Training Additional Costs section and Table 11 of the Appendix A - Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

/1 Total Training Hours = 40

Step Three - HACCP additional personnel additional domestic cost

	No. of Establishment		Percent of	Recurring Cost per Establishment
Shift / Process	S	HACCP Employees	time	/1
One shift:				
One Process	2	2	5%	\$7,181
Two Processes	3	12	10%	\$21,544
Two shifts:				
One process	3	б	5%	\$10,772
Two processes	3	6	10%	\$21,544
				\$61,042

For further discussion see HACCP Personnel Additional Costs section and Table 12 of the Appendix A - Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

Step Four - HACCP additional domestic costs for recordkeeping and monitoring (certification)

	No. of Establishment	HACCP Processes in		Time Per CCP		
Shift / Task /Process	S	Plans	CCPs per Plan		Recurring Cost	
One Shift:						
Recordkeeping /1:						
1 process	4	1	5	3	\$4,680	
2 processes	11	2	5	3	\$25,740	For further discussion see HACCP Recordkeeping and Record Storage Addition
Monitoring /2:						Costs section and Table 13 of the Appendix A - Executive Order 12866 -
1 process	4	1	5	1	\$2,191	Preliminary Regulatory Impact Analysis (February 24, 2011).
2 processes	11	2	5	1	\$12,050	
Two shifts:						
Recordkeeping:						
1 process	1	1	5	3	\$1,170	
2 processes	2	2	5	3	\$4,680	
Monitoring:						
1 process	1	1	5	1	\$548	
2 processes	2	2	5	1	\$2,191	
					\$53,250	

/1 Production Worker Wage Rate

/2 QC Tech Wage Rate

Step Five - Additional Storage Costs

Туре	No. of Establishment s	Additional square feet per establishment	Additional Annual Cost per establishment	Recurring Total Record Storage Costs /1
Additional Record				
Storage	18	6.23	\$60	\$1,080

For further discussion see HACCP Recordkeeping and Record Storage Additional Costs section of the Appendix A - Executive Order 12866 - Preliminary Regulatory Impact Analysis (February 24, 2011).

/1 Recordkeeping storage costs were based on a national survey of storage costs showing an average annual cost of \$8.40 per square foot in 1994, which was updated to \$9.63 per square foot. Annual storage costs for sanitation SOP records were assumed to be \$60 per establishment.

Step Six. HACCP additional domestic costs for Other - Process Control Laboratory Testing

Туре	No. of Establishment s	One	Time Cost	Recu	urring Cost /1
Primary establishments Secondary	7	\$	7,350.00	\$	6,125.00
Establishments Total	5 12	\$ \$	5,250.00 12,600.00	\$ \$	4,375.00 10,500.00

Number of Samples in Baseline - 30 Testing Cost Per Sample - \$35 Additional Ongoing Samples - 25

First year / One-time Cost Measure Plan development, valid \$ 164,000.00 \$ 1,820.00 Training (years 1 & 6) \$ 47,752.00

Additional Personnel - 1	\$ 61,041.62	\$ 61,041.62
Recordkeeping and certi	\$ 53,249.73	\$ 53,249.73
Record Storage	\$ 1,079.91	\$ 1,079.91
Other Costs	\$ 12,600.00	\$ 10,500.00
	\$ 339,723.26	\$ 127,691.26

Annualization Table of additional costs associated with the development of a HACCP plan

	Additional Cost							Net PV of Cost			
	Plan Development, Validation,			Recordkeeping and	Record		Total			nt	OMB mid- year discou nt factor
Year	Reassessment	Training	Personnel	Certification	Storage	Other Ongoing	Direct	7 percent	3 percent	7%	3%
1	\$164,000	\$47,752	\$61,042	\$53,250	\$1,080	\$12,600	\$339,723	\$317,498	\$329,828	0.935	0.971
2	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$111,530	\$120,361	0.873	0.943
3	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$104,234	\$116,856	0.816	0.915
4	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$97,415	\$113,452	0.763	0.888
5	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$91,042	\$110,148	0.713	0.863
б	\$1,820	\$47,752	\$61,042	\$53,250	\$1,080	\$10,500	\$175,443	\$116,905	\$146,931	0.666	0.837
7	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$79,520	\$103,825	0.623	0.813
8	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$74,317	\$100,801	0.582	0.789
9	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$69,456	\$97,865	0.544	0.766
10	\$1,820	\$0	\$61,042	\$53,250	\$1,080	\$10,500	\$127,691	\$64,912	\$95,014	0.508	0.744
10-year Present Value								\$1,126,830	#########		
Annualized Total								\$160,435	\$156,512		

Additional costs associated with the New Labels

Type of Product	Fresh			zen
Type of label	Pre-printed	Sticker	Pre-printed	Sticker
No. of Establishments	33	33	33	33
Average No. of				
Additional Labels per				
Establishment	3	3	4	4
Average No. of				
Additional Labels				
Setups/ Plates	99	99	132	132
One-Time Average Cost				
per Label Setup	\$310	\$260	\$310	\$260
Average No. of Additional Recurring Labels per				
Establishment	7,000	4,600	7,000	4,600
Average No. of Additional Recurring Labels	231,000	151,800	231,000	151,800
Recurring Average Costs				
per Label	\$0.03	\$0.03	\$0.005	\$0.005
Total One-Time Average (\$131,670			
Total Additional Recuring	\$13,398			
Annualized Total Costs (7	\$30,918			
Annualized Total Costs (3	\$28,384.16			

For further discussion see New Labels: Additional Domestic Costs section and Table 15 of the Appendix A - Executive Order 12866 -Preliminary Regulatory Impact Analysis (February 24, 2011).

Additional domestic cost of new government office space¹

	Per	
One Time Costs	Establishment	Total
Additional Space ²	\$900	\$13,500
Furnishing	\$200	\$3,000
Reaccuring Costs		
Annual Heating and Cooling	\$480	\$7,200
Total One-Time Average Costs		\$16,500
Total Additional Recuring Costs	\$7,200	
Annualized total Costs (7 percent over	\$9,396	
Annualized total Costs (3 percent over	\$9 <i>,</i> 078	

1- From the PRIA: The proposal requires provision of Government office space and some equipment in each of the approximately 23 catfish and catfish products processing establishments, and in each of the approximetly 10 catfish and catfish products furhter processing establishments. FSIS assumes that it would occupy the existing 18 NMFS offices of the 23 establishments, leaving 15 plants that will incure additional costs.

2- From the PRIA: FSIS assuems that it would need a 150 square feet of securable office and projects that this space would costs \$6 per square foot.

Table A-15B. Additional domestic cost of pre-harvest actions

Additional Annual Costs	Per Establishment	No. of Establishments	Total
Recordkeeping			
(2 hours x \$34.41 per hour)	\$69	624	\$42,944
Additional Storage Space			
(3 square feet X \$9.63 per square foot)	\$29	624	\$18,027
Total Recurring Costs			\$60,971
Annualized total Costs (7 percent over 10		\$60,971	
Annualized total Costs (3 percent over 10		\$60,971	

harvest actions - for live-fish

loaders/haulers/wholesalers¹

Additional Annual	Per	
Costs	Establishment	Total
Records		
Recordkeeping ²	\$69	\$757
Additional Storage		
Space ³	\$29	\$318
Total Recordkeeping Cos	sts	\$1,075
Fleet		
Old Trucks ⁴	\$10,800	\$54,000
New New ⁵	\$5,400	\$32,400
Total Additional		
Equipment Costs		\$86,400
Old Trucks ⁴	\$2,160	\$10,800
New Trucks ⁵	\$1,080	\$6,480
Total Opperating Costs		\$17,280
Total One-Time Costs		\$86,400
Total Additional Recuri	-	\$18,35 5
Annualized Total Costs		\$29,851.46
Annualized Total Costs	(3 percent over	\$28,188.51

1- From the PRIA - FSIS assumes 11 firms that conduct pre-harvest actions would incure additional costs.2- 2 hours x \$34.41 per hour

3- 3 square feet X \$9.63 per square foot

4- 5 establishments will upgrade 6 old trucks each at a cost of \$1,800 per truck and with \$360 in opperating costs.

5- 6 establishments will upgrade 6 trucks each at a cost of 900 per truck and with 180 in opperating costs.

Table A-15D. Importers re-inspection costs

Additional Annual Costs	No.of Establishments	Cost Per Establishment	Cost			
Records						
Re-inspection Recordkeeping ¹	165	\$138	\$22,711			
Additional Storage Space ²	165	\$29	\$4,767			
Sub-Total Recurring Records Costs						
Re-inspection Space						
Additional Storage Space ³	165	\$54	\$8,910			
Sub-Total One Time Re-inspection Costs						
Annualized Total Costs (7 percent over 10 years)						
Annualized Total Costs (3 percent	t over 10 years)		\$28,492			

1- 4 hours x \$34.41 per hour

2-3 square feet X \$ 9.63 per square foot

3-9 square feet X \$6.00 per square foot

Table A-15E. Reduced payment fees for inspection and certifications - Additional reduced domestic cost^a for domestic industry¹

	Per Establishment	Total
Pounds of Product Currently Subject to USDC inspection (pound per establishment)	218,000	3,270,000
Cost Per Pound for FDA USDC Inspection	\$0.01	\$35,970
Annual Cost Savings From Reduced Fees		\$35 , 970
Annualized Total Costs (7 percent over 10 years)		\$35 , 970
Annualized Total Costs (3 percent over 10 years)		\$35 , 970

1- FSIS assumes 15 plants are currently inspected by FDA USDC

	Costs										
						Net PV					
Year	S&B	Travel	Transport	Comms	Supplies	Equipment Training Testing A		Annual Total	7 percent	3 percent	
1	\$1,494,990	\$125,100	\$1,800	\$11,232	\$3,600	\$36,000	\$1,258,300	\$65,000	\$2,996,023	\$2,800,021	\$2,908,760
2	\$1,816,929	\$277,605	\$2,100	\$14,904	\$4,200	\$10,000	\$558,000	\$65,000	\$2,748,740	\$2,400,856	\$2,590,951
3	\$1,816,929	\$232,500	\$2,100	\$14,904	\$4,200	\$0	\$640,500	\$65,000	\$2,776,136	\$2,266,154	\$2,540,558
4	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$36,000	\$156,600	\$65,000	\$2,478,237	\$1,890,635	\$2,201,882
5	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$10,000	\$156,600	\$65,000	\$2,452,238	\$1,748,412	\$2,115,322
6	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$O	\$156,600	\$65,000	\$2,442,239	\$1,627,367	\$2,045,337
7	\$1,816,929 \$382,500 \$2,100 \$14,904 \$4,200 \$36,000 \$156,600 \$65,00					\$65,000	\$2,478,240	\$1,543,323	\$2,015,036		
8	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$10,000	\$156,600	\$65,000	\$2,452,241	\$1,427,227	\$1,935,822
9	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$O	\$156,600	\$65,000	\$2,442,242	\$1,328,418	\$1,871,775
10	\$1,816,929	\$382,500	\$2,100	\$14,904	\$4,200	\$36,000	\$156,600	\$65,000	\$2,478,243	\$1,259,813	\$1,844,046
Total Annual Costs							\$25,744,580				
10-year Present Value 7 percent							\$18,292,227				
10-year Present Value 3 percent							\$22,069,488				
Annualized Total 7 Percent							\$2,604,402				
Annua	Annualized Total 3 Percent							\$2,587,217			

Table A-16 and A-17 - Exhibit A-A. Summary Table of FSIS and other Agencies Schedule of Costs

Average annual costs \$2,5

\$2,574,458

year	year
0.935	0.971
0.873	0.943
0.816	0.915
0.763	0.888
0.713	0.863
0.666	0.837
0.623	0.813
0.582	0.789
0.544	0.766
0.508	0.744

Entity	Cost Savings (Annual)	Annualized Cost Savings (.07)	Annualized Cost Savings (.03)
FDA	\$150,000	\$150,000	\$150,000
USDC	\$1,340,000	\$1,340,000	\$1,340,000
Total	\$1,490,000	\$1,490,000	\$1,490,000

Reduced Costs to Government (FDA and USDC)

Costs Summary

		Recurring	Annualized (Savi	
New Measure	One-Time	(Savings)	7 percent	3 percent
Ind	ustry Costs			
Sanitation SOPs	\$8,083	\$42,707	\$42,283	\$42,122
HACCP Plans - Validation	\$339,723	\$127,691	\$160,435	\$156,512
Pre-Harvest Actions - for Producers	\$0	\$60,971	\$60,971	\$60,971
Pre-Harvest Actions - for Haulers	\$86,400	\$18,355	\$29,851	\$28,189
Labels	\$131,670	\$13,398	\$30,918	\$28,384
Government Office Space and Equipment	\$16,500	\$7,200	\$9,396	\$9,078
Re-inspection at Import Establishments	\$8,910	\$27,477	\$28,663	\$28,492
Other - Reduced Payments	\$0	(\$35,970)	(\$35,970)	(\$35,970)
Sub-Total Industries Costs	\$591 , 286	\$261,829	\$326,548	\$317 , 777
Age	ency Costs:			
Additional Costs to FSIS Inspection		\$2,574,458	\$2,604,402	\$2,587,217
Reduced Costs to FDA		\$150,000	(\$150,000)	(\$150,000)
Reduced Costs to Commerce Dept NOAA NMFS		(\$1,340,000)	(\$1,340,000)	(\$1,340,000)
Sub-Total Agency Additional Costs	\$0	\$1,384,458	\$1,114,402	\$1,097,217
Total Net Costs		\$1,440,949	\$1,414,995	

Table 1. Projected Summary Additional Annualized Average Net Direct Costs (Domestic) of the Final Rule

Affected Sectors of the domestic economy	A	dditional annualized 7 percent	d cos	cost, over 10 years, 3 percent		
Siluriformes Fish Industry	\$	326.55	317.78			
Federal Government Agencies	\$	1,114.40		1,097.22		
Total	\$	1,440.95	\$	1,414.99		
TOTAL	Ş	1,440.93	Ş	1,414.99		
		20000000		20000000		
Pounds Produced		388000000		388000000		
Pounds Produced (thousands)		388000		388000		
cost/pound (Industry)	\$	0.0008	\$	0.0008		
Breakeven Analysis						
Salmonella COI	\$	2,423.00	\$	2,423.00		
Salmonella COI (thousands)	\$	2.42	\$	2.42		
Illnesses Avereted		595		584		

Table 4. Projected Summary Additional Annualized Average Net Direct Costs and Break-Even Assessment

Affected Sectors of the domestic	Ad	ditional annualized discounted		Assessment of Salmonellosis Illnesses Reduced Needed to Break Even on Annualized Costs,		
economy	7 percent		3 percent	7 percent	3 percent	
Siluriformes Fish Industry	\$	326.55	\$ 317.78	135	131	
Federal Government Agencies	\$	1,114.40	\$ 1,097.22	460	453	
Total	\$	1,440.95	\$ 1,414.99	595	584	