

CHAPTER 8

SMALL BUSINESS FLEXIBILITY ANALYSIS

8.1 INTRODUCTION

This chapter analyzes the projected effects of incremental pollution control costs on small entities. This analysis is required by the Regulatory Flexibility Act (RFA) as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA). The RFA acknowledges that small entities have limited resources and makes it the responsibility of the regulating federal agency to avoid burdening such entities unnecessarily. If, based on an initial assessment, a regulation is likely to have a significant economic impact on a substantial number of small entities, the RFA requires a regulatory flexibility analysis.

EPA has determined that the proposed rule will not have a significant economic impact on a substantial number of small entities. Despite this determination, EPA prepared a small business flexibility analysis that examines the impact of the proposed rule on small entities along with regulatory alternatives that could reduce that impact. This small business flexibility analysis would meet the requirements for an initial regulatory flexibility analysis (IRFA) and is summarized below.

The Chapter is organized as follows: Section 8.2 provides EPA's initial assessment; Section 8.3 describes the components of the small business flexibility analysis; Section 8.4 presents the analysis of economic impacts to small entities in the concentrated aquatic animal production (CAAP) industry; and Section 8.5 summarizes the steps EPA has taken to minimize the impacts to small entities under the proposed rule.

8.2 INITIAL ASSESSMENT

EPA guidance on implementing RFA requirements suggests the following must be addressed in an initial assessment. First, EPA must indicate whether the proposal is a rule subject to notice-and-

comment rulemaking requirements. EPA has determined that the proposed concentrated aquatic animal production effluent limitations guidelines (ELG) are subject to notice-and-comment rulemaking requirements.

Second, EPA should develop a profile of the affected small entities. EPA has developed a profile of the AAP industry that covers all affected operations, including small entities. The industry profile information is provided in Chapter 2 of this report, while Chapter 7 presents the projected economic impacts to the industry. Much of the discussion in these two chapters applies to small businesses. Additional information on small businesses in the AAP industry is also provided below in Sections 8.3 and 8.4.

Third, EPA's assessment needs to determine whether the rule would affect small entities and whether the rule would have an adverse economic impact on small entities. EPA has determined that some small entities may incur incremental compliance costs as a result of the rule, if promulgated as proposed. EPA examines the impacts of these compliance costs in Section 8.4.

8.3 SMALL BUSINESS FLEXIBILITY ANALYSIS COMPONENTS

Section 603 of the RFA requires that an IRFA must contain the following:

- An explanation of why the rule may be needed.
- A short explanation of the objectives and legal basis for the proposed rule.
- A description of, and where feasible, an estimate of the number of small business entities to which the proposed rule will apply.
- A description of the proposed reporting, recordkeeping, and other compliance requirements (including estimates of the types of small entities that will be subject to the requirement and the type of professional skills necessary for the preparation of the report or record).
- An identification, to the extent practicable, of all relevant federal rules that may duplicate, overlap, or conflict with the proposed rule.

- A description of “any significant regulatory alternatives” to the proposed rule that accomplish the statement objectives of the applicable statutes and minimize any significant economic impact of the rule on small entities.

Each of these issues are addressed in the following subsections.

8.3.1 Need for Objectives of the Rule

The Agency is considering this action because the operation of CAAP facilities may introduce a variety of pollutants into receiving waters. Under some conditions, these pollutants can be harmful to the environment. According to the 1998 USDA Census of Aquaculture (USDA, 2000), there are approximately 4,200 commercial aquatic animal production (AAP) facilities in the United States that might qualify as a small business. Aquaculture has been among the fastest-growing sectors of agriculture until a recent slowdown that began several years ago caused by declining or level growth among producers of several major species. EPA analysis indicates that many CAAP facilities have treatment technologies in place that greatly reduce pollutant loads. However, in the absence of treatment, pollutant loads from individual CAAP facilities such as those covered by the proposed rule, can contribute up to several thousand pounds of nitrogen and phosphorus per year, and tens to hundreds of thousands of pounds of TSS per year. These pollutants can contribute to eutrophication and other aquatic ecosystem responses to excess nutrient loads and BOD effects. In recent years, Illinois, Louisiana, North Carolina, New Hampshire, New Mexico, Ohio and Virginia have cited the AAP industry as a potential or contributing source of impairment to water bodies (EPA, 2000). Several state authorities have set water quality based permit requirements for CAAP facilities in addition to technology based limits based on best professional judgement (EPA, 2002a).

Another area of potential concern relates to non-native species introductions from CAAP facilities, which may pose risks to native fishery resources and wild native aquatic species from the establishment of escaped individuals (Hallerman and Kapuscinski, 1992; Carlton, 2001; Volpe et al., 2000). CAAP facilities also employ a range of drugs and chemicals used therapeutically that may be released into receiving waters. For some investigational drugs, as well as for certain application of approved drugs, there is a concern that further information is needed to fully evaluate risks to ecosystems

and human health associated with their use in some situations (EPA, 2002b). Finally, CAAP facilities also may inadvertently introduce pathogens into receiving waters, with potential impacts on native biota. The proposed rule attempts to address a number of these concerns. These regulations are proposed under the authority of Section 301, 304, 306, 308, 402, and 501 of the Clean Water Act, 33 U.S.C.1311, 1314, 1316, 1318, 1342, and 1361.

8.3.2 Small Entity Identification

The RFA/SBREFA defines several types of small entities, including:

- Small governments,
- Small organizations, and
- Small businesses.

These are described in Sections 8.3.2.1 through 8.3.2.3, respectively.

8.3.2.1 Small Governments

The RFA/SBREFA defines “small governmental jurisdiction” as the government of a city, county, town, school district, or special district with a population of less than 50,000. For the purposes of the RFA, States and tribal governments are not considered small governments but rather as independent sovereigns (EPA, 1999).¹ Federal facilities, regardless of their production levels, are not part of small governments.

¹See Section 11.2 where impacts on these entities are analyzed in accordance with Unfunded Mandates Reform Act requirements.

8.3.2.2 Small Organizations

The RFA/SBREFA defines “small organization” as any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. For the purpose of this rulemaking, EPA considers many of the non-profit organizations that produce salmon for the State of Alaska to be “small.” These non-profit facilities have assumed what is usually a State function, which is to raise fish (in this case salmon) in hatcheries to be released into the wild to supplement wild populations, and sustain the Alaska commercial and recreational fishing industries.

8.3.2.3 Small Businesses

The Small Business Administration (SBA) sets size standards to define whether a business entity is small and publishes these standards in 13 CFR 121. The standards are based either on the number of employees or annual receipts. Table 8-1 lists the North America Industry Classification System (NAICS) codes potentially in scope of the proposed rule and their associated SBA size standards as of January 1, 2002 (SBA, 2000 and SBA, 2001).

**Table 8-1
Small Business Size Standards**

NAICS Code	Description	Size Standard (Annual Revenues)
112511	Finfish Farming and Fish Hatcheries	\$0.75 million
112512	Shellfish Farming	\$0.75 million
112519	Other Animal Aquaculture	\$0.75 million

When making classification determinations, SBA counts receipts or employees of the entity and all of its domestic and foreign affiliates (13 CFR.121.103(a)(4)). SBA considers affiliations to include:

- stock ownership or control of 50 percent or more of the voting stock or a block of stock that affords control because it is large compared to other outstanding blocks of stock (13 CFR 121.103(c)).
- common management (13 CFR 121.103(e)).
- joint ventures (13 CFR 121.103(f)).

EPA interprets this information as follows:

- Sites with foreign ownership are not small (regardless of the number of employees or receipts at the domestic site).
- The definition of small is set at the highest level in the corporate hierarchy and includes all employees or receipts from all members of that hierarchy.
- If any one of a joint venture's affiliates is large, the venture cannot be classified as small.

EPA's estimate of the number of small entities in the AAP industry is presented in Section 8.3.5 below.

8.3.3 Description of the Proposed Reporting, Recordkeeping, and Other Compliance Requirements

In the proposed rule, flow-through and recirculating facilities would be subject to compliance with numeric limitations; however, EPA proposes to provide an alternative compliance provision that would allow facilities to develop and implement a BMP plan to control solids provided that the permitting authority determines the plan will achieve the numeric limitations. Also flow-through facilities that segregate the bulk discharge from off-line settling discharge would develop and implement the solids control BMP plan. Larger flow-through facilities and all recirculating and net pen facilities within the scope of the proposed rule would also develop a BMP plan to address mortalities, non-native species, and drugs and chemicals storage. These facilities would also be required to report to the permitting authority whenever an investigational new animal drug is used or drug or chemical is used for a purpose that is not in accordance with its label requirements.

EPA estimates that each plan will require 40 hours per facility to develop the plan. The plan will be effective for the term of the permit (5 years). An additional two hours per month (comprised of 1 hour of a manager's time and 1 hour of a laborer's time) or 24 hours per year are assumed to be required for implementation. EPA does not believe that the development and implementation of these BMPs will require any special skills. All of the CAAP facilities within the proposed scope should currently be permitted, so incremental administrative costs of the regulation are negligible. However, Federal and State permitting authorities will incur a burden for tasks such as reviewing and certifying the BMP plan and reports on the use of drugs and chemicals. EPA estimated these costs at approximately \$10,011 for the three-year period covered by the information collection request (EPA, 2002, Table 9) or roughly \$3,337 per year.

8.3.4 Identification of Relevant Federal Rules That May Duplicate, Overlap, or Conflict with the Proposed Rule

EPA identified Federal rules that have an impact on the CAAP industry and believes that there are no such rules that would duplicate, overlap or conflict with the proposed rule. EPA has identified two sets of Federal rules, however, the implementation of which would be supplemented by the proposed rule requirements – specifically, the reporting requirements proposed for certain drugs and chemicals. The proposed rule requires reporting of investigational new animal drugs and any drug that is not used according to label requirements. Regulations administered by the Food and Drug Administration published at 21 CFR Part 511 impose restrictions on such usage, but typically do not require reporting of the usage after discharge to waters of the United States. Similarly, the proposed rule requires reporting of the usage (and discharge) of chemicals when such usage does not comply with label requirements. Some such chemicals would be pesticides subject to regulatory requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which is administered by EPA. EPA has not published FIFRA requirements to require the reporting proposed in the rule for CAAP facilities.

8.3.5 Significant Regulatory Alternatives

EPA took steps to minimize the regulatory burden associated with the rulemaking. EPA reviewed effluent characteristics from the aquatic animal production industry and determined that several

sectors were not within the scope of the rule (see Development Document for more details as well as Section 6.1.1 of this report). EPA is not proposing regulations for discharges from:

- closed ponds,
- lobster pounds,
- alligator pens,
- crawfish facilities,
- molluskan shellfish production in open waters,
- aquariums.

In addition, EPA proposed an annual production threshold of 100,000 pounds before a facility is in the scope of the regulation. The number of facilities to which the proposed rule would apply after excluding: (1) ponds, lobster pounds, alligator pens, crawfish, molluskan shellfish production in open waters, and aquariums, and (2) facilities with annual production of less than 100,000 pounds, is estimated in sections 8.3.5.1 and 8.3.5.2 below.

8.3.5.1 Evaluation of the Number of Small Entities Based on Publicly Available Data

8.3.5.1.1 *Small Facilities*

Prior to receipt of the screener survey data, EPA's primary data source for an upper bound estimate of the number of small entities in the AAP industry was the Census (USDA, 2000). The reasons why the USDA data provide an "upper bound" estimate include:

- The aquaculture revenues for a site might be underestimated when costs are evaluated on a species-by-species basis. EPA developed cost models for various production system/species combinations. The USDA data are given by species and revenue category. When USDA presents the data on an industry basis, it identifies 4,028 sites with aquatic animal production. When the data are presented on a species basis, the counts sum to 4,789 sites. This indicates that as many as 761 sites raise more than one species (compare Table 2-8 and Table 2-9 in the industry profile). EPA therefore loses any economies of scale that might occur when treating effluents from multiple species on

a combined basis. EPA's cost estimates might be an overestimate and, if the revenues against which the costs are compared are based only on one species, the facility revenues might be an underestimate.

- Total site revenues might be underestimated. The Census data report only aquatic animal production revenues, not revenues from all agricultural products produced at that site (whether it is a farm, facility, or single-facility company).
- The USDA revenue data are on an individual site basis while the SBA small business definitions are based on total company revenues. An individual facility can have revenues less than the SBA size standard while the total company revenues may or may not exceed the size standard depending on the revenues from the other facilities owned by the company. For example, a company in NAICS code 112511 (finfish farming) that owns eight facilities, each with \$100,000 in annual revenues, would exceed the size standard and hence would not be classified as a small business.

EPA is aware that classifying operations as “small” solely on the basis of aquaculture revenues at individual facilities will likely overestimate the number of small entities, and intends to conduct a company level analysis using the detailed survey data for final promulgation.

While a small facility might be part of a large company, the inverse is not possible. If the revenues from a single species at a single site exceed that SBA standard for a small business, that site must belong to a large company. EPA requested a special tabulation of the USDA *Census of Aquaculture* data (USDA, 2002).² The special tabulation provides information for a new revenue category that corresponds to the SBA size standard for a small AAP business. EPA used the special tabulation data to examine the distribution of aquatic animal operations by revenue and species and to estimate the number of small entities in the industry. USDA data identify a minimum of 261 aquatic animal production facilities that are not small, implying that as much as 94 percent of the total AAP facilities might be considered small. On the basis of this estimate, EPA initiated the SBAR process.

²EPA requested data for alligators, baitfish, carp, catfish, crawfish, frogs, mollusks, ornamentals, perch, salmon, shrimp, sport fish, striped bass, tilapia, trout, turtles, and walleye. USDA provided as much data as possible without compromising confidentiality. The observations for each species matched the total count presented in Table 2 of the Census. The special tabulation reflected 4,489 observations.

8.3.5.1.2 Summary

The Census (USDA, 2000) identified approximately 4,800 facility/species combinations. Specifically, it identified 4,028 facilities with aquaculture activities, while the facility counts by species sum to 4,789 facilities. In approximate terms, EPA proposed to exclude catfish (1,370 operations), baitfish (275 operations), ornamental fish (345 operations), crawfish (563 operations), molluscan shellfish (535 operations) in addition to the 20 farms that raise algae and other sea vegetables – or a total of 3,108 operations. In other words, EPA proposed to exclude approximately 65 percent of the aquatic animal production operations from the scope of the regulation based on technical reasons.

An alternative approach is to estimate the number of facilities with production systems for which EPA is proposing guidelines and standards (i.e., flow-through systems, recirculating systems, and net pens systems). A coarse measure of the size of the regulated community might be to assume that the count for trout, salmon, and other food fish operations given in the Census represent an approximation of the number of these production systems (996 farms).

EPA also proposed an annual production threshold of 100,000 pounds before a facility is in the scope of the proposed regulation. This would exempt approximately 453 of the 561 trout operations and about 319 of the 435 food fish operations listed Table 2 of the Census (USDA, 2000). This results in a regulated community of about 224 operations. Even though this is only 224 out of 4,789 – or about five percent of the aquatic animal production industry – this count might still be an over estimate if any of the trout and food fish production facilities use pond systems for production. The number of small facilities, then, is some fraction of the 224 facilities that are within the regulated community yet have revenues of \$750,000 or less. Because the Census data do not cross reference production systems by revenue and species, EPA cannot provide a better estimate of the number of small facilities, except to say that it is a small fraction of the original industry.

8.3.5.2 EPA Screener Survey Data

Table 8-2 summarizes facility counts based on the screener survey data and information submitted by the state of Alaska. EPA identified a universe of almost 1,500 aquatic animal production

facilities. About 1,000 of these are potentially small commercial facilities (i.e., earn less than \$750,000 per year in revenues). Many of the remaining 500 facilities produce less than 475,000 pounds per year and/or earn less than \$750,000 per year in revenues, but are not small businesses based on other criteria (e.g., federal or state ownership).

**Table 8-2
Estimated Number of Facilities**

Description	Number of Facilities					
	All Facilities			Small Facilities		
	Screeners	Alaska	Sum	Screeners (Commercial)	Alaska	Sum
Universe	1,446	31	1,477	973	26 ¹	999
Meeting definition of a CAAPF	600	25	625	318	16 ²	334
Annual production in excess of 100,000 pounds	118	18	136	36	12 ³	48

Source: Tetra Tech e-mail, 29 May 2002.

¹ Excludes two State and three Federal/Tribal facilities.

² Six facilities have less than 20,000 pounds in annual production. Five facilities that belong to a large nonprofit organization are counted as a single entity.

³ Eighteen facilities with 100,000 pounds or more in annual production minus one State facility and five facilities that belong to a large nonprofit organization.

Table 8-2 indicates that the community considered for regulation is about 9 percent of the original universe of AAP operations (i.e., 136 of 1,477 facilities). The number of small facilities within the proposed regulated community, however, is only about 5 percent of the original universe of small entities (i.e., 48 of 999 facilities). EPA identified 48 small facilities (including 36 commercial facilities and 12 Alaskan facilities). An additional 81 commercial facilities earn less than \$750,000 per year, and are thus considered small, but are not within the proposed scope (i.e., they produce less than 100,000 pounds per year).

8.4 POTENTIAL IMPACTS FROM PROMULGATED RULE ON SMALL ENTITIES

EPA examined potential impacts on all facilities that earn less than \$750,000 per year before concluding that it would not regulate facilities with annual production ranging from 20,000 to 100,000 pounds. Section 8.4.1 presents EPA's impact analysis on facilities that fall within this production range. Section 8.4.2 and 8.4.3 present projected impacts small facilities in the regulated community.

8.4.1 Small Facilities with 20,000 to 100,000 Pounds Annual Production

EPA identified 81 commercial and 78 non-commercial flow through facilities, as well as one non-commercial recirculating facility in the screener data, that: (1) earn less than \$750,000 per year, and (2) whose annual production is more than 20,000 but less than 100,000 pounds. Table 8-3 summarizes EPA's analysis of these facilities.

EPA examined a lower cost option for facilities in the 20,000 to 100,000 pounds of annual production range based on the BMP plan. Total annualized compliance costs for these 160 facilities total \$208,000 under the BMP Option. Even with these relatively minimal requirements, 85 percent of commercial flow through facilities (69 of 81) and 49 percent of all facilities (78 of 160) exceed the 1 percent threshold. Furthermore, 32 percent of all facilities (51 of 160) are projected to incur costs exceeding 3 percent of revenues. Based on these results, EPA is not proposing any guidelines and limitations for facilities with 20,000 to 100,000 pounds of annual production.

Table 8-3
Facilities with 20,000 - 100,000 Pounds Annual Production
Estimated Compliance Costs and Facilities Showing Impacts
at 1% and 3% Revenue Test Thresholds

Subcategory	Number of Facilities	BMP Option		
		Total Annualized Compliance Costs (\$2000)	Revenue Test Threshold	
			1%	3%
Flow Through Commercial	81	\$102,743	69	45
Flow Through Non-Commercial	78	\$104,087	8	6
Recirculating Non-Commercial	1	\$1,424	1	0
Total	160	\$208,254	78	51

8.4.2 Small Commercial Facilities

EPA identified 36 small facilities with (1) flow-through or recirculating systems, (2) annual production above 100,000 pounds, and (3) annual revenues at or below \$750,000.³ Of these, approximately 17 (which represents 5 percent of the total small CAAPs or 47 percent of the small CAAPs within the scope of the proposed rule) incur compliance costs greater than 1 percent of aquaculture revenue and 10 small commercial entities (which represents less than 3 percent of the total small CAAPs or 28 percent of the small CAAPs within the scope of the proposed rule) incur compliance costs greater than 3 percent. For commercial facilities, EPA assumed that the facility is equivalent to the business, an assumption that will be re-examined when detailed survey data is available.

³As noted in Section 8.2.3, small facilities might belong to large companies. Given the predominance of foreign-ownership of salmon aquaculture and the dominance of a single firm in trout aquaculture, there is a good probability of small facilities belonging to large firms, but EPA will need to have the detailed questionnaire data to conduct further evaluations.

8.4.3 Nonprofit Organizations

EPA estimates that 17 Alaskan facilities within scope of the proposed rulemaking meet the definition of a small nonprofit organization. EPA guidance recommends a test for nonprofit organizations that calculates annualized compliance costs as a percentage of total operating expenditures (EPA, 1999). EPA used the sum of operator-reported revenues and enhancement tax revenues as a proxy for total operating expenditures.

For commercial facilities, EPA assumed that the facility is equivalent to the business, an assumption that will be re-examined when detailed survey data is available. However, because sufficient data is available to determine the parent nonprofit association (and its revenues) for the small Alaskan nonprofit facilities, EPA analyzed small entity impacts at the level of the parent association. EPA determined that 12 small Alaskan nonprofit facilities within scope of the proposed rule are owned by 8 small nonprofit associations. Of the 6 small Alaskan nonprofit associations for which EPA had data, 3 associations incur compliance costs greater than 1 percent of revenues and 1 association incurs compliance costs greater than 3 percent.

8.5 REGULATORY FLEXIBILITY ANALYSIS

EPA has chosen to minimize economic impacts to small business establishments in the aquatic animal production industry by tailoring its proposed guidelines to differences in species, production systems, and facility size. Specifically, EPA is :

- not proposing regulations for discharges from: ponds, lobster pounds, alligator pens, crawfish operations, molluskan shellfish production in open waters, or aquariums;
- proposing to exclude facilities that produce less than 100,000 pounds of aquatic animals per year;
- proposing to set less stringent guidelines (Option 1 instead of Option 3) for facilities that produce more than 100,000 pounds, but less than 475,000 pounds of aquatic animals per year in flow through production systems.

Furthermore, EPA finds that 17 small commercial facilities, and three small nonprofit associations are expected to incur costs exceeding 1 percent of revenues. EPA intends to make its final determination of the impact of the aquatic animal production rulemaking on small businesses based on analyses of the detailed survey data. At this time, the Agency sees no basis for finding that the regulation would impose a significant impact on a substantial number of small entities, specifically, based on restrictions in the scope of the proposed rule as well as the estimates of (low) costs of compliance.

8.6 REFERENCES

- Alaska. 2002. Alaska Department of Community & Economic Development. Division of Investments. *Fisheries Enhancement Revolving Loan Fund: Program Overview*. February.
- Amos, Kevin H. and Andrew Appleby. 1999. Atlantic Salmon in Washington State: A Fish Management Perspective. Washington Department of Fish and Wildlife. September. www.wa.gov/wdfw/fish/atlantic/manage.htm downloaded 10 October 2001.
- Berge, Alsak. 2002. The world's 30 largest salmon farmers. www.intrafish.com/intrafish-analysis/Top30/print.php3 downloaded 30 April 2002.
- Carlton, J.T. 2001. *Introduced Species in U.S. Coastal Waters. Environmental Impacts and Management Priorities*. Prepared for the Pew Oceans Commission, Arlington, VA., 28 pp.
- Coons, Ken. 2001. Seaboard completes sale of ContiSea to Fjord Seafood. www.seadffod.com/news/current/40389.html downloaded 26 April 2002.
- Frank, A.D. 2000. Personal communication between A. David Frank, USDA, NASS, LA state office and Maureen F. Kaplan, ERG, dated 24 August.
- Hallerman, E.M., and A.R. Kapuscinski, 1992. Ecological Implications of Using Transgenic Fishes in Aquaculture. *ICES March Science Symposium* 194:56-66.
- Heritage. 2001. Heritage Salmon website. Company information and links to George Weston Ltd and Heritage Aquaculture. www.heritagesalmon.com/history.shtml and links to www.eston.ca and www.heritageaquaculture.com downloaded 10 October.
- Idaho. 2002. Clear Springs Foods. Hagerman.Idaho. www.inidaho.com/activities/Description.asp?ID=135 downloaded 13 May 2002.
- Jensen, Bent-Are. 2001. Norwegian imperialism in the USA. *IntraFish*. 2 February. www.intrafish.com/article.php?articleID=9965 downloaded 31 October.

Lee, Michael and André Ranieri. 2002. In search of the Snake: the river as industry. Part 5 of series carried in Tri-city Herald. <www.tri-cityherald.com/dams/snakesearch/part5.html> downloaded 13 May 2002.

LexisNexis. 2002. Directory of Corporate Affiliations. Link from Hoovers.com. Search on Clear Springs Foods, Inc. 13 May 2002.

PSBJ. 2000. Puget Sound Business Journal. Heard and Overheard. 26 May. <seattle.bcentral.com/seattle/stories/2000/o5/29/tidbits.html> downloaded 10 October 2001.

SBA. 2001. Small Business Administration. 13 CFR Parts 107 and 121 Size eligibility requirements for SBA financial assistance and size standards for agriculture. Direct Final Rule. 65 FR 100:30646-30649. 7 June.

SBA. 2000. Small Business Administration. 13 CFR Part 121 Small business size regulations: Size standards and the North American Industry Classification System; Final Rule. 65 FR 94:30836-30863. 15 May.

Seaboard Corporation. 2001. 2001 Annual report. Downloaded from company website. <www.seaboardcorp.com> downloaded 26 April 2002.

Stolt Sea Farm. 2001. Information downloaded from company web site. <www.stoltseafarm.com/company_information_intro.asp> downloaded 10 October.

USDA. 2002. United States Department of Agriculture. National Agricultural Statistics Service. Special tabulation request from EPA for the *Census of Aquaculture* data. March.

USDA. 2000. United States Department of Agriculture. National Agricultural Statistics Service. *1998 Census of Aquaculture*. Also cited as 1997 Census of Agriculture. Volume 3, Special Studies, Part 3. AC97-SP-3. February.

U.S. EPA. 2002a. U.S. Environmental Protection Agency. *Response to Public Comments on the Proposed Issuance of the General National Pollutant Discharge Elimination System (NPDES) Permit for Aquaculture Facilities in Idaho and Associated, On-site Fish Processors*. Prepared by EPA-Region 10, Seattle, WA. 20pp.

U.S. EPA. 2002b. U.S. Environmental Protection Agency. *Response to Comments in Regard to Authorization to Discharge Under the National Pollutant Discharge Elimination System*. Prepared by EPA-Region 1, Boston, MA. 64 pp.

U.S. EPA. 2000. U.S. Environmental Protection Agency. *National Water Quality Inventory: 1998 Report to Congress*. EPA 841-R-00-001. U.S. Environmental Protection Agency, Office of Water, Washington, DC. <<http://www.epa.gov/305b/98report/toc.html>>. Accessed December 2001.

U.S. EPA. 1999. U.S. Environmental Protection Agency. *Revised Interim Guidance for EPA Rulewriters: Regulatory Flexibility Act as amended by the Small Business Regulatory Enforcement Fairness Act*. Washington, DC. 29 March.

Volpe, J.P., E.B. Taylor, D.W. Rimmer, and B.W. Glickman. 2000. Evidence of Natural Reproduction of Aquaculture-Escaped Atlantic Salmon in a Coastal British Columbia River. *Conservation Biology*. 14(June):899-903.