

## The Effects of Regulations on the U.S. Salmonid Industry: New York Findings\*

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A national survey of the U.S. salmonid (trout, salmon, arctic char) industry was conducted in 2017–2018 to measure the farm-level costs of regulations. This fact sheet reports the findings from the state of New York (Figure 1).

The total statewide on-farm regulatory cost burden for New York was \$21,798 per year (adjusted for coverage). Per farm, annual regulatory costs averaged \$3,597 and \$1.70 per pound. The majority of the increased regulatory costs on farms were related to direct costs, which included testing for fish health certificates and effluent discharges (81%). Increased manpower costs were 16% of the regulatory cost burden, while the cost of permits constituted only 3% of the regulatory cost burden (Table 1). There were no lost sales revenues due to regulations reported in New York. Regulatory costs on farms constituted 23% of total costs on New York salmonid farms.

Respondents reported that the most problematic regulations were those associated with testing for fish health certificates for interstate transport (Figure 2). In terms of costs, fish health testing required for certificates for interstate transport comprised 95% of total regulatory costs, with an additional 5% of costs associated with county and local regulations (Figure 3).

\* Engle, C.R., J. van Senten, and G. Fornshell. 2019. Regulatory costs on U.S. salmonid farms. *Journal of the World Aquaculture Society* 50(3):522–549; DOI: 10.1111/jwas12604



Figure 1. State surveyed

*The total on-farm regulatory cost burden for New York state was \$21,798 per year.*

Table 1. New York on-farm regulatory costs

Cost category	% of total regulatory costs
Direct costs (testing, etc.)	81%
Manpower	16%
Farm-level changes	0%
Permits/licenses	3%

In summary, the regulatory costs on salmonid farms in New York cost less per farm, on average, but with a greater average cost per pound of fish and a greater percentage of total costs than the national average (Table 2). No lost revenue due to regulations was reported by New York respondents to the survey. Trout farms in New York tend to be fairly small; thus, regulatory costs overall were lower per farm, but substantially greater per pound, and constituted a substantial percentage of total farm costs. Respondents in New York also reported that fish health testing regulations implemented a number of years ago in the state resulted in a number of small-scale trout farms exiting the business.

Study results showed that the regulatory cost burden on the U.S. salmonid industry has increased farm costs substantially and constrained the industry's ability to increase product supply to meet strong market demand, which is being met by increasing trout and salmon imports. Innovative regulatory monitoring and compliance frameworks that reduce the on-farm regulatory cost burden are needed. The types of regulatory reforms with potential to reduce regulatory costs in New York include: reduced frequency of testing for effluent discharge and fish health certificates, adoption of uniform fish health testing standards, adoption of risk-based approaches to environmental management, and development of clear appeals processes for aquaculture farmers (Table 3).

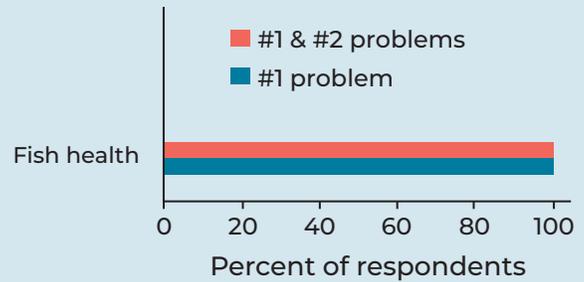


Figure 2. Most problematic regulations in New York

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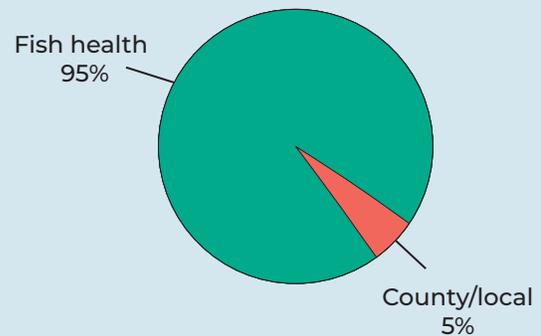


Figure 3. Types of regulations in New York: percent of total regulatory costs

Table 2. Summary of national and New York study results

Regulatory burdens and impacts	National findings	New York
<b>BURDEN</b>		
Total national on-farm regulatory cost burden	\$16.1 million/year	\$21,798/year
Per farm average regulatory cost	\$150,506/farm	\$3,597/farm
Average regulatory cost per pound of production*	\$1.23/pound	\$1.70/pound
Percent regulatory costs of total farm costs	12%	23%
<b>IMPACT</b>		
Lost market sales	\$7.1 million/year	\$0
Lost revenue from reduced production	\$5.3 million/year	\$0
Estimated lost revenue due to thwarted expansion attempts	\$40.1 million/year	\$0
Percent lost revenue sales of total costs	28%	0%
* Averaged by farm		

Table 3. Regulatory reforms with potential to reduce regulatory costs

Regulatory reforms
<ul style="list-style-type: none"> <li>• Reduce regulatory redundancy</li> <li>• For farms with history of good performance:                             <ul style="list-style-type: none"> <li>◦ Reduce frequency of effluent testing</li> <li>◦ Reduce frequency of fish health testing</li> </ul> </li> <li>• Adopt uniform fish health testing standards</li> <li>• Develop clear appeal procedures for farmers</li> <li>• Adopt risk-based approaches to environmental management</li> </ul>

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