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The Effects of Regulations on the U.S. Salmonid Industry: Wisconsin 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 findings from the state of Wisconsin (Figure 1).

The total statewide on-farm regulatory cost burden for Wisconsin was $476,481 per year (adjusted for coverage). Per farm, annual regulatory costs averaged $38,118 and $2.45 per pound. The greatest percentage of the increased regulatory costs on farms were related to manpower costs (60%), followed by direct costs, which included testing for fish health certificates and effluent discharges (20%). Costs associated with farm-level changes constituted 16% of the increased costs, while the cost of permits was 4% of the regulatory cost (Table 1).

In addition to the increased on-farm costs, regulatory actions resulted in lost sales revenue, which included: $104,000 per year in lost market sales, $376,000 per year in lost revenue from reduced production capacity, and $23,000 per year of lost sales due to thwarted attempts at expansion. Per farm, lost market sales were $10,400 per year, the value of lost production averaged $37,630 per year, and lost sales revenue due to thwarted expansion attempts averaged $23,000 per year. Regulatory costs on farms constituted 28% of total costs on Wisconsin salmonid farms, and lost sales revenue comprised 22% of total costs.

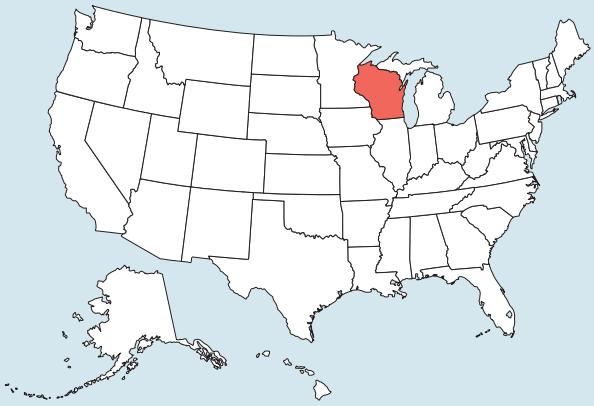

Figure 1. State surveyed

The total on-farm regulatory cost burden for Wisconsin was $476,481 per year.

Table 1. Wisconsin on-farm regulatory costs

Cost category	% of total regulatory costs
Direct costs (testing, etc.)	20%
Manpower	60%
Farm-level changes	16%
Permits/licenses	4%

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Respondents reported that the most problematic regulations were those associated with processing, followed by those related to EPA effluent discharge permitting, fish health testing for certificates for interstate transport, and state regulations (Figure 2). In terms of costs, EPA effluent discharge regulations comprised the greatest percent of regulatory costs (49%), followed by county and local regulations (35%), food safety (9%), fish health testing for certificates (4%), and water access regulations (3%) (Figure 3).

In summary, the regulatory costs on salmonid farms in Wisconsin cost less per farm, on average, but at a substantially greater average cost per pound of fish and a substantially greater percentage of total costs than the national average (Table 2). Wisconsin trout farmers tend to be smaller-scale than many trout farms in other states, which results in lower costs per farm but greater costs per pound of fish produced. Lost revenue as a percentage of total costs was less than that of the national average.

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 Wisconsin 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).

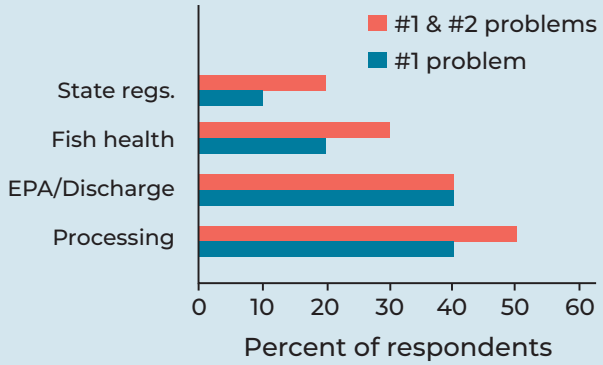

Figure 2. Most problematic regulations in Wisconsin

In summary, the regulatory costs on salmonid farms in Wisconsin cost less per farm, on average, but at a substantially greater average cost per pound of fish, and a substantially greater percentage of total costs than the national average.

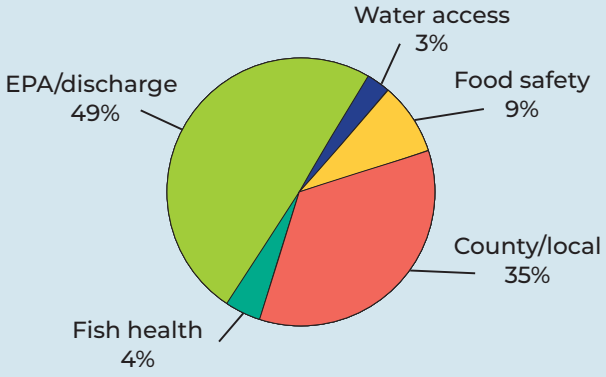

Figure 3. Types of regulations in Wisconsin: percent of total regulatory costs

Table 2. Summary of national and Wisconsin study results

Regulatory burdens and impacts	National findings	Wisconsin
BURDEN		
Total national on-farm regulatory cost burden	$16.1 million/year	$476,481/year
Per farm average regulatory cost	$150,506/farm	$38,118/farm
Average regulatory cost per pound of production*	$1.23/pound	$2.45/pound
Percent regulatory costs of total farm costs	12%	28%
IMPACT		
Lost market sales	$7.1 million/year	$104,000/year
Lost revenue from reduced production	$5.3 million/year	$376,000/year
Estimated lost revenue due to thwarted expansion attempts	$40.1 million/year	$23,000/year
Percent lost revenue sales of total costs	28%	22%

* Averaged by farm

Table 3. Regulatory reforms with potential to reduce regulatory costs

Regulatory reforms

• Reduce regulatory redundancy
• For farms with history of good performance:
  ◦ Reduce frequency of effluent testing
  ◦ Reduce frequency of fish health testing
• Adopt uniform fish health testing standards
• Develop clear appeal procedures for farmers
• Adopt risk-based approaches to environmental management

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