



Chapter 173-503 WAC

Small Business Economic Impact Statement for the Proposed Amendments to Instream Resources Protection Program—Lower and Upper Skagit Water Resources Inventory Area (WRIA 3 and 4)

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Small Business Economic Impact Statement
Chapter 173-503 WAC
Instream Resources Protection Program - Lower and Upper Skagit
Water Resources Inventory Area (WRIA) 3 and 4

The Washington State Department of Ecology (Ecology) is proposing an amendment to Chapter 173-503 WAC. The main features of this proposed rule amendment are creating reservations of a limited amount of water for specific future uses that are not subject to the established in-stream flows, establishing closures for tributaries, and setting forth conditions for future water right permitting. The proposed rule amendment also changes previously interruptible water supplies into uninterruptible water supplies, and potentially reduces in-stream flow levels. It provides additional benefits to various out-of-stream water users, and also potentially reduces various environmental values.

This Small Business Economic Impact Statement (SBEIS) finds that the dominant impact of this proposed rule amendment is that it will provide disproportionate benefits to small business. Some small businesses will also experience net costs and these will also be disproportionate. Overall, this amendment would constitute a cost reducing change to the existing rule under RCW 19.85.030 (2) (e), which reduces the disproportionate impact of the existing rule.

1. Background

Water availability is a critical issue in Washington and will become even more so as time passes. Decisions related to out-of-stream water use have been controversial; caught between the need to consider environmental impacts, especially the impacts on salmon populations listed under the federal Endangered Species Act, and human demands for water.

Ecology adopted Chapter 173-503 WAC, *In-stream Resources Protection Program—Lower and Upper Skagit Water Resources Inventory Area (WRIA 3 and 4)*, on April 14, 2001. The 2001 Skagit rule established the in-stream flow levels in WRIA 3 and 4, and made all future consumptive uses subject to this in-stream flow. The in-stream flow levels were established through scientific investigations that were conducted under a cooperative agreement between state, local and tribal governments in the Skagit River basin. A memorandum of agreement was signed by the City of Anacortes, Public Utility District Number 1 of Skagit County, Skagit County, Washington State (both the Department of Ecology and Department of Fish and Wildlife) and the Upper Skagit, Swinomish and the Sauk-Suiattle Indian Tribes that outlined actions that would provide for more coordinated management of water resources in the Skagit basin. An important element of the agreement was to establish in-stream flows for the Skagit River. Ecology conducted rule making that established the 2001 in-stream flow rule. After the rule was adopted, it was challenged in *Skagit County v. Washington State Department of Ecology*. The legal challenge is based in part on the fact that an SBEIS was not conducted during the original rule making. Ecology recognizes that conducting an SBEIS is a faster and more cost-effective approach as part of this rule-making amendment than litigation over whether a SBEIS was or is necessary.

Ecology has determined that the existing Skagit in-stream flow rule has an impact on small business. The proposed rule amendment reduces business costs due to limitations on access to water. Therefore it would constitute a cost reducing change to the existing rule under RCW 19.85.030 (2) (e), which reduces the disproportionate impact of the existing rule.

1.1 The Requirements of Small Business Impact Analysis

Ecology is issuing this SBEIS under Chapter 19.85 RCW as part of this rule adoption process.

The objective of this SBEIS is to identify and evaluate the various requirements and costs that the proposal might impose on businesses. In particular, the SBEIS examines whether the proposed rule amendment imposes a disproportionate impact on small businesses as compared to large businesses. The purpose and contents of an SBEIS are contained in RCW 19.85.040.

1.2 Baseline

An SBEIS is limited to analyzing the changes the proposed rule amendment creates, given the existing legal setting. Therefore, this analysis focuses on proposed changes to current water management policy for the Skagit River basin.

The current legal structure is defined by the 2001 Skagit watershed management rule and other applicable administrative rules and laws. Costs and benefits associated with implementing other rules should have been considered when those rules (WACs) were developed and adopted. Laws (RCWs) are not subject to our review.

Accordingly, this analysis evaluates the economic impact on businesses of changes to how water would be managed resulting from the proposed rule amendment.

2. Brief Description of the Proposed Rule Amendment and How the Changes Affect Business

The proposal creates reservations of limited amounts of water for specific uses while leaving in place the in-stream flows set in the 2001 rule. It also establishes closures for tributaries, and sets forth conditions for future water right permitting. There are several impacts to small businesses in WRIA 3 and 4, however, the negative impacts are small compared to the positive impacts the rule will have on small businesses:

- A. **Water reservations:** The water reservations are not subject to the in-stream flows. The existing in-stream flow rule limits new water uses to 200 cfs. Under present conditions, this 200 cfs is available for only interruptible water rights as the in-stream flows are not met during several days in the year. This rule amendment proposes establishing reservations that authorize withdrawals of up to 25 cfs as uninterruptible water rights.
- 10 cfs would be available for agricultural irrigation, and

- 15 cfs would be available for domestic, municipal, commercial and industrial water supply, and stockwatering uses.
- The remaining 175 cfs of the 200 cfs would remain available for other users as an interruptible supply. This part of the water is unchanged in its status.

The major change made by the proposed rule amendment is to convert 25 cfs of the interruptible water supply to an uninterruptible water source.

This alters the usability of the water and, therefore, changes its economic value; this change is a benefit to water users including businesses. Currently, any post 2001 groundwater withdrawal, including those via permit-exempt wells in continuity with the Skagit River or its tributaries, is legally required to curtail use during low flow periods. Under the proposed reservations, the future water needs of most businesses could be met without curtailment. Moreover, the ability to use water during low flows should be a net benefit to small businesses from this rulemaking because most businesses require a reliable year around water supply. The existing regulatory framework only allows for interruptible new rights. Currently, businesses that require a reliable water supply must either connect to an uninterruptible public water supply, have a well and on-site storage, or obtain water from other uninterruptible sources.

B. Sub-basin closures: Certain tributary sub-basins of the Skagit River in WRIAs 3 and 4 will be closed to further appropriation when the reservation for that particular sub-basin is fully allocated. For most areas in the Skagit Basin, the reservations should be adequate to fulfill the expected future water needs for at least 20 years. The sub-basins subject to earlier closure are tributary basins to the Skagit Basin where the demand is mostly for domestic water for residences. However, in some sub-basins such as the Nookachamps, Fisher, Carpenter and Hansen Creeks, the projected demand for water exceeds the reservation quantities. If population can be used as an indicator of business potential, this could affect 10% to 13% of the new business applications. Public water supplies from outside of the basin will likely be required to meet the maximum anticipated demand. If public water supplies are not made available, a water supply may be available through a purchase or transfer of existing water rights or approval of a mitigation plan. Presently, large public water systems such as the Public Utility District of Skagit County (Skagit PUD) provide water service in some parts of these sub-basins. Over time, the Skagit PUD or other large public water systems should be able to provide service to most areas of the Nookachamps, Fisher, Hansen and Carpenter sub-basins. Once the reservation water is allocated in a particular sub-basin, a basin closure will be in effect. Tributary closures will not reduce the remaining 175 cfs of interruptible water and that water from other areas of the Skagit River basin that remain open could still be used. Tributary closures may, however, move the economic gain from the reservation from one tributary to another area.

For those businesses that may eventually require future water from a specific closed sub-basin after the closure, any withdrawal would require continual mitigation, not just during low flow periods as was the case under the previous

rule. This could necessitate water leasing or transfers of existing water rights or could lead to a change in the proposed location of a business. Furthermore, businesses requiring water in a closed basin would also have the option of obtaining water supply from outside of the closed basin.

Those with existing water rights will not be affected by these closures.

- C. **Water right permitting:** The proposal sets forth a framework for future water right permitting. The applicants seeking water rights for a new public water supply must first demonstrate there is no service from an existing public water supply. If they can be served by the existing public water supply, Ecology cannot approve such a water right request.

Connecting to a public water supply could be a cost to some businesses. This will only impose a substantive cost for companies for which the cost of hooking up is greater than the cost of developing a new water source such as drilling a well. Connection costs are likely to be lower than the cost of a well and other development costs (see the gain in section 3 below). Most businesses that require reliable water supply for domestic uses are likely to have either already connected, already have a well and on-site storage, or already have obtained water in other ways.

The Skagit County Critical Areas Ordinance also requires connections to public water systems under specific conditions. Consequently, for some areas this is not a new legal requirement.

- D. **Reduced flows:** The Skagit River and its tributaries will have reduced in-stream flows as a consequence of the reservations. This will slightly reduce the amount of water in the river during low flow periods and could potentially indirectly impact in-stream benefits such as ecosystem services, recreation, etc. For businesses that provide guide services such as rafting, fishing and bird watching, or those dependent on dilution for waste removal, there could be a very minor impact. However, given the limited size of the reservation and the expected impact on streams, Ecology anticipates that the proposed rule would have a negligible impact on businesses which depend on the in-stream flow.
- E. **Metering:** The requirement to meter water use was set in Chapter 173-173 WAC, a rule that already exists and costs were considered there. Water source metering under Chapter 173-173 WAC has only been required on water users withdrawing water authorized under water right permits, certificates and claims, and not for users using permit exempt ground water wells, except in certain locations with depressed or critical salmon stocks. WRIA 3 and 4 has several depressed or critical salmon stocks. Despite the presence of depressed or critical salmon stocks in some areas of the basin, Ecology acknowledges that requiring water source meters changes current practices, regardless of the existing requirements. The change may result in costs to individuals and businesses using permit exempt wells that were not previously required to meter. Business users of

permit exempt well water will likely experience the “in pipeline” costs outlined in the SBEIS for Chapter 173-173 WAC in 2001.

However, the metering will help other businesses obtain water. Actual use is likely to be less than the maximum allowed use outlined in the rule amendment proposal. When calculating what water is available for a new applicant, the actual use rather than the standard accounting value can be subtracted from the total available water to determine whether there is enough water for a new water user. Thus the metering allows more accurate accounting of water use, which can result in more users having access to water from within the reservation. Thus, in the long term, the metering significantly reduces costs to those who would otherwise be without water.

3. Costs to Businesses by Listed Type of Cost

Most costs for this proposal do not fit neatly into the cost categories listed in Chapter 19.85 RCW. The costs are easier to understand as they affect water projects. The water projects themselves can include many of the listed items such as reports, records, professional services, equipment, supplies, labor, administration, and sometimes foregone revenue. However, they also include land use and water rights transfers, which are not listed in the RCWs. Professionals in these fields are comfortable talking about “installed costs” which may include everything above. Thus the costs in this document are not parsed out to the listed costs. Rather, they are estimated under the part of the rule that generates the cost or gain. Further, businesses will experience very different impacts, either gains or losses, from the proposed rule amendment, depending on the place, the time, and what they wish to do with the water.

Reporting and Recordkeeping: Metering is required under WAC 173,173. The requirement is not new but it represents a change for permit exempt wells from current practices. The department anticipates implementing the rule to minimize reporting and recordkeeping costs associated with metering, such as having a local entity read and record the meter readings. The department cannot significantly change the reporting standards since they are outlined in a different WAC. Additionally, metering can potentially allow more users to access the reservation, if most water users consume less water than the default water use figures.

Additional Professional Services: Most affected projects will require some form of professional service. There is the potential for both increased and decreased costs.

Costs of Equipment, Supplies, Labor, and Increased Administrative Costs: These costs may be reduced or increased, depending on the impact of the rule for a specific business. Once the closures are in effect, some businesses may have costs associated with either public water hookups, developing tanks and pipelines for storage, or construction of mitigation options. These costs are not called out separately but are included in the descriptions below. However, more companies should save these same costs if they can make use of the uninterrupted reservations.

Revenue Impacts: Revenue impacts could be experienced if a company has to wait to ‘open for business’ because of an indirect effect of the proposed rule amendment.

- a) Example of a gain: Under the existing rule, if a company finds that its potential gain for an option is less than the cost of mitigation or a water right transfer, then the revenue associated with that option would be foregone. However, this option value is, by definition, less than the value of the mitigation. In most cases, and in most places, the proposed amendments should reduce this kind of “income potential” loss.
- b) Example of a loss: Closures may cause business to forgo the potential net income from an option they might have exercised.
- c) Example of a loss: Those required to connect to water systems to obtain new or additional water could also experience an increased cost through waiting for water and foregoing the potential for revenue for a time. However, this is likely to be a limited number of entities since connection may already be the preferred alternative.
- d) To the extent that increased costs yield increased prices for businesses, gross revenues could be reduced. This scenario assumes that the business in question has sufficient market power to affect market clearing prices. Offsetting this is the net benefit to businesses that will now be able to get water during periods of low flows via the reservation and avoid expensive on-site storage or other mitigation alternatives. This will likely lower costs to some potential water users and, to that extent, may increase revenues.

Other Compliance Requirements: The scenarios that may create costs not explicitly listed in Chapter 19.85 RCW are the same as those listed under *Revenue Impacts* above. Potential costs also include effects of land use on the value of land. For businesses that require water for location specific activities, this might change the highest-valued use of the land. Water users in these locations are already required to curtail use during low flow periods. This makes irrigation, or other business uses, difficult without transfers of uninterruptible rights or the expense of supplemental storage. However, evaluation of past permitted uses by businesses indicates that the predominant uses are for multiple domestic systems and irrigation. Since 1985, Ecology has issued an average of approximately 2 permits to business entities per year. The majority were issued prior to 1992. Only one permit has been issued since 2001, under the existing rule. In these areas, domestic uses under the proposed rule amendments would still be served by individual wells through the reservation. Thus the possibility of a land value shift only remains likely for agriculture. Forecast agricultural demand is greater than the reservation. Some agriculture will not be able to obtain water from the 10 cfs that is reserved for agriculture. For those entities, future irrigation uses should be similar under both the existing and the proposed rule amendments since permits under the existing rule would already be interruptible. The interruption periods already generally fall during the most important irrigation periods.

4. List Of Affected Industries

No industries are required to comply with the proposed rule amendment unless they seek to obtain new water rights in the covered area. However, requirements affecting water use are likely to translate into changes in costs, benefits, and property values based on impacts to the highest valued uses in the watershed. As such, existing business owners of undeveloped property are likely to be the industries that will be “required to comply” either directly, in terms of attempting to acquire water, or indirectly in terms of changes in asset values.

Therefore, the following list is provided indicating Standard Industrial Classification (SIC) codes for existing developable properties in the Skagit watershed.¹

Table 4.1. Industries

SIC Code	Description	SIC Code	Description
0181	Ornamental Nursery Products	5143	Dairy Products, nec. dried or canned
0191	General Farms, Primarily Crop	5148	Fresh fruits and vegetables
0241	Dairy Farms	5154	Livestock
0652	Unassigned	5172	Petroleum products, nec
0783	Ornamental Shrub and Tree Services	5191	Farm supplies
1521	Single-family housing construction	5193	Flowers & florists' supplies
1611	Highway and Street Construction	5221	Unassigned
1794	Excavation work	5261	Retail nurseries and garden stores
2011	Meat packing plants	5271	Mobile Home Dealers
2015	Poultry Slaughtering & Processing	5399	Misc. general merchandise stores
2411	Logging	5431	Fruit and vegetable markets
2421	Sawmills and planing mills, general	5499	Miscellaneous food stores
2441	Nailed Wood Boxes and Shook	5541	Gasoline service stations
2653	Corrugated and solid fiber boxes	5941	Sporting goods and bicycle shops
2951	Asphalt Paving Mixtures and Blocks	6021	National commercial banks
4011	Railroads, line-haul operating	6162	Mortgage banks and correspondents
4213	Trucking, Exceptional	6515	Mobile home site operators
4222	Refrigerated Warehousing and Storage	6531	Real estate agents and managers
4225	General Warehousing and Storage	6552	Subdividers and developers, nec
4492	Towing and Tugboat Service	6792	Oil royalty traders
4812	Radiotelephone Communications	7032	Sporting and recreational camps
4899	Communication Services, nec	7033	Trailer parks and campsites
4924	Natural Gas Distribution	7992	Public golf courses
4925	Mixed, manufactured or liquefied petroleum gas production	7999	Amusement and recreation, nec
4941	Water supply	8322	Individual and family services
5031	Lumber, plywood, and millwork	8641	Civic and social organizations
5032	Brick, stone and related materials	8661	Religious organizations
5099	Durable goods, nec		

5. Calculation of Business Benefits and Compliance Costs

The dominant expected business impact is the benefit provided by access to water through the reservation. This would constitute a cost reducing feature under Chapter 19.85.030 RCW.

¹ The table was constructed based on data provided by the Skagit County Assessor and by the Washington State Employment Security Department.

Disproportional Costs/Benefits to Small Business

The distribution of compliance costs can be analyzed by evaluating previous water right permits and existing business-owned developable parcels. In the past, permitted business water uses have been predominately small businesses as defined by Chapter 19.85 RCW. Since 1985, approximately 37 permits have been issued to businesses or private owners for irrigation. Of those permits only two have been for large businesses. However, all permits issued previously except one were issued prior to 1992 and the existing in-stream flow rule. Permitted users authorized since the current rule was adopted must restrict use or mitigate during low flow periods making the interruptible water relatively less desirable than the uninterrupted water obtained before the existing rule was put in place. Therefore, the historical rate of permits may overstate the expected number of future permits. However, it is still reasonable to anticipate that a majority of future applications will also be from small businesses.

The reservation will yield a net benefit to most business-owned parcels in the basin since on-site storage will no longer have to be provided in order to convert an interruptible right into water that can be used year around. The exact amount will depend on the size of parcels, ownership, business size and zoning; the distribution of benefits (avoided costs) is shown in Table 5.1.

Table 5.1. Distribution of Benefits (Avoided Costs) for Business-Owned Exempt Well Development²

	Number of Businesses³	Average Employment (No. of Employees)	Average Benefit per Employee⁴ (\$1000)	Median Benefit Per Employee (\$1000)
Small Businesses	45	6-15	497.0	55.5
Large Businesses	12	273-699	16.4	16.4

The numbers in Table 5.1 represent the average avoided storage costs (net benefits) for small and large businesses. As can be seen in Table 5.1, it appears likely that most businesses will benefit from the proposed rule amendment and that small businesses will benefit disproportionately. These values represent the median avoided cost. For small businesses it exceeds that for large businesses by a factor of 3.4. It is important to note that the large avoided costs are based on the assumption of full development of all parcels. If a business (small or large) developed only a portion of their parcels, then the avoided costs would be smaller. Regardless, the data suggests that the impacts of the proposed rule amendment will be disproportionately beneficial to small businesses.

² Costs assume full development of all business-owned developable parcels at a cost of \$30,000 per well/storage unit. Based on businesses in Skagit and Snohomish counties for which employment, acreage and number of potential wells could be estimated.

³ The total number of businesses represents all businesses located in the county listed as owner of the parcel and where Employment Security data could be located.

⁴ Cost comparisons use the largest 10% of businesses required to comply.

If a business with land near a tributary decides to develop after the tributary is closed this ratio may reflect the relative costs rather than a gain.

Access to Water:

If an agricultural business is unable to access water from the reservation, the approximate value of an uninterrupted acre foot of water is \$65 per year. Based on this, on a per acre foot basis, the cost of lack of access to water is disproportionate. Thus the impact on agriculture will depend on whether the farm obtains water. For a farm obtaining an acre foot from the reservation, the impact is disproportionate and positive. For a farm, unable to obtain an acre foot due to a closure, the impact is disproportionate and a loss. For farms obtaining water from the reservation, the gain is disproportionate at the same rates.

Table 5.2. Distribution of Impact for 1 AF of Water

Farms by value of sales:	Number of farms	Value of an AF
Less than \$2,500	345	\$ 1.3000
\$2,500 to \$4,999	69	\$ 0.4334
\$5,000 to \$9,999	79	\$ 0.5418
\$10,000 to \$24,999	98	\$ 0.0929
\$25,000 to \$49,999	42	\$ 0.0433
\$50,000 to \$99,999	55	\$ 0.0217
\$100,000 or more	184	\$ 0.0325

Income distribution based on 2002 Census of Agriculture for Skagit County

Hookups:

The costs of connecting to an existing system can range from \$8,000 to \$35,000 depending on the complexity. However, some of that cost (all, in some cases) will likely be returned via latecomer agreements. A well with storage can easily cost \$40,000 to \$50,000 depending on the depth of the well, geology and tank type. On-site storage for a low flow period can cost approximately \$25,000-\$30,000 by itself.⁵ For most businesses, this makes connecting to the system the less expensive alternative. This will create an extra step for those wishing to obtain a water right. Even if a business happens to be in an area with a high water table, and happens to be located exactly the maximum distance from the water supply line and happens to need the smallest possible storage, then the hook up may cost more. The cost differential would, in this instance, be small. This cost is unlikely to vary based on employment. It will therefore, by definition, impose a disproportionate cost if 2 companies large and small have similar circumstances.

Metering:

Metering is required by Chapter 173-173 WAC. The metering WAC was evaluated in 2001 at the time of adoption. The numbers below are a quote from that SBEIS as published by the Code Reviser. Most of the meters referenced in the proposed rule amendment will be on pipe. The costs are disproportionate, however, the gain to the additional small businesses which will then be able to obtain water will also be disproportionate. The costs outlined in the SBEIS for the 2001 metering rule found a disproportionate impact and are as follows:

The impacts of the amortized costs of the metering and measuring devices and systems were calculated per \$100 of revenue as shown in the table below.

⁵ Cost assumes two-15,000 gallon underground potable-water rated tanks.

The estimated impacts are generally disproportionate with respect to small businesses, but are not large relative to revenues in either case.

*COSTS PER \$100 OF REVENUE (2001 DOLLARS)
PIPEFLOW*

<i>SIC Group</i>	<i>Small Businesses</i>	<i>Large Businesses</i>
<i>01 – 02</i>	<i>\$ 0.06</i>	<i>\$ 0.003</i>
<i>15</i>	<i>0.05</i>	<i>0.0001</i>
<i>20</i>	<i>0.01</i>	<i>0.0002</i>
<i>24</i>	<i>0.08</i>	<i>0.002</i>
<i>26</i>	<i>0.08</i>	<i>0.0002</i>
<i>28</i>	<i>0.06</i>	<i>0.0001</i>
<i>32</i>	<i>0.02</i>	<i>0.0009</i>

As was explained above, in-so-far as these metering costs provide additional permits under the reservation, there will be a gain to business.

6. Cost Reducing Features

Reducing, modifying, or eliminating substantive regulatory requirements.

This proposed rule amendment reduces the substantive requirement that exists now for some water right holders, who must cease use during low flow.

Simplifying, reducing, or eliminating record keeping and reporting requirements.

More record keeping is required under this proposed rule amendment due to metering. However, it will likely create further water availability which is a larger gain.

Reducing the frequency of inspections.

This proposed rule amendment creates more inspections by individuals of their water meters. However, this is part of what will likely create further water availability which is a larger gain.

Delaying compliance timetables.

Some companies will no longer have to stop using water during low flows, thus eliminating a compliance timetable.

Reducing or modifying fine schedules for noncompliance.

It is not legal to do this.

Any other mitigation techniques.

See above.

7. Conclusions

All impacts, positive and negative, are disproportionate. This proposed rule amendment constitutes a cost reducing addition to the existing rule. This proposed rule amendment maximizes the net benefits to out-of-stream users from the available water. These users include businesses. The small businesses reap a disproportionate share of the net gain from this rule. Some businesses may experience costs associated with closures, monitoring, or hook ups. There is a remote possibility that some businesses dependent on river flows will experience costs. However, the dominant impact should be to reduce costs for businesses, especially the small ones.

8. How Was Small Business Involved In The Development Of This Rule?

The proposed rule amendment has been developed relatively quickly under a court order and is based on conversations during the past two years with local governmental and tribal stakeholders. After the filing of the CR-102, official public hearings will be held to consider the proposal and allow small businesses to provide additional input.

