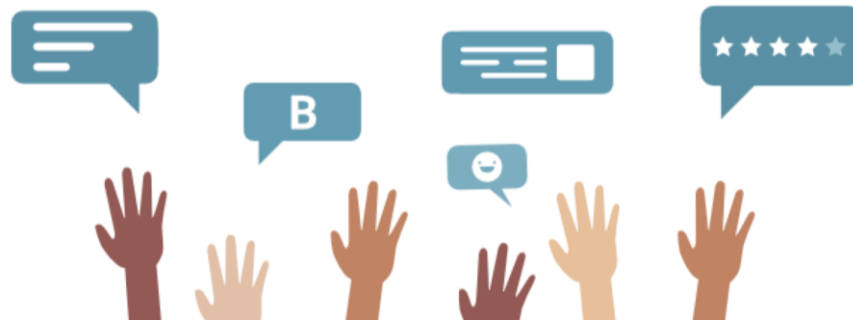


# Survey waste water treatment in Akureyri

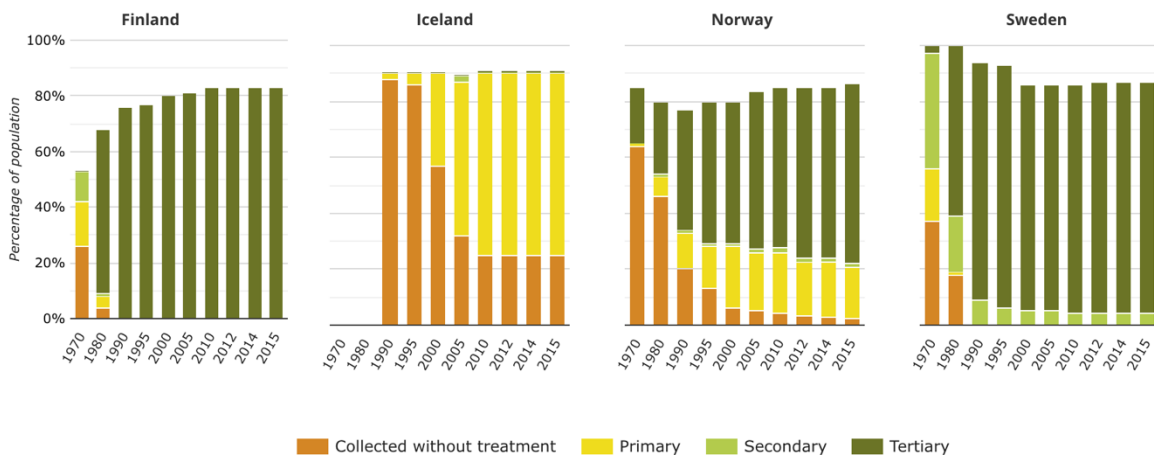


<https://forms.office.com/r/uxyMWbDnXe>

The City of Akureyri has an output of wastewater that is comparable to a town that is twice as large. This problem is exacerbated by the arrival of 200.000 tourists per year. Historically, wastewater was pumped directly into Eyjafjörður without treatment. Over the last 7 years, Norðurorka has implemented collection of wastewater, implemented pumping stations, and started monitoring water quality. In the summer of 2020, a preliminary treatment facility was added that filters out everything that is larger than 3mm.

While this is an improvement, unfortunately preliminary treatment alone does not remove potentially harmful substances like disease-causing fecal bacteria, chemicals, microplastics, or heavy metals.

Most places in Europe use secondary and/or tertiary wastewater treatment to decrease the burden on the environment – not so Iceland:



<https://www.eea.europa.eu/data-and-maps/indicators/urban-waste-water-treatment/urban-waste-water-treatment-assessment-4>

In Iceland, we are still working on implementing preliminary treatment for all municipalities, to filter out large items like wet wipes and other rubbish. While the natural environment has some capacity to remove certain pollutants, others can be particularly problematic as they do not easily break down and can pose a risk to wildlife, including fish, whales, and birds, as well as the marine and coastal habitats themselves. Therefore, it is very important that we are all aware that everything we flush down the toilet, every chemical we use for cleaning and washing, will end up in the sea.

The survey of which we present here first results is a student-initiated project at the University of Akureyri, within the green flag project (<https://landvernd.is/graenfaninn/>), and is part of the activities of the environmental council of the University of Akureyri.

The survey was released in January 2022 from the **Environmental Council of the University of Akureyri (UNAK)**. Since then, **333 participants** have responded to it. The survey was advertised via social media and via word-by-mouth.

## The results show that:

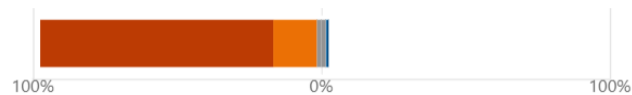
### 80,5% of the participants consider wastewater treatment as very important:

1. Hversu mikilvægt er að þínu mati að hreinsa skólþvatn á Íslandi áður en því er losað í hafið? / In your opinion, how important is it to treat waste water in Iceland before discharging it into the ocean?

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■ mjög mikilvægt / very important ■ mikilvægt / important ■ hvorki né/ neutral  
■ ekki sérstaklega mikilvægt/ rather unimportant ■ alls ekki mikilvægt / unimportant

Your answer



### 62% of participants did not know that the sewage plant in Akureyri conducts filtering, only:

2. Vissir þú að á Akureyri er engin alhliða skólþhreinsun, við síum aðeins skólþvatnið okkar u.p.b. (3 mm) og öll kemísk efni og lífrænn úrgangur fer í hafið?

Did you know that in Akureyri, there is no comprehensive waste water treatment, we only filter our waste water roughly (3mm) and all chemicals and organic waste go to the ocean?

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● Já / Yes 126  
● Nei / No 205



### 69% were not aware of the low sewage treatment standards based on Icelandic law:

3. Vissir þú að Ísland er meðal þeirra Evrópulanda með lægstu kröfur um hreinsun skólps?  
Did you know that Iceland is among the European countries with the lowest standards on waste water treatment? <https://www.eea.europa.eu/data-and-maps/indicators/urban-waste-water-treatment/urban-waste-water-treatment-assessment-4>

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### 90% of the participants think that the Icelandic law should be changed:

4. Finnst þér að breyta eigi íslenskum lögum þannig að full hreinsun á skólpmatni verði skylda?  
Do you think that Icelandic law should be changed, such that full waste water treatment becomes obligatory, and that makes stricter requirements for the industry?

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### 96% of participants would like to improve the current wastewater treatment in Akureyri:

5. Vatnshreinsistöðin á Akureyri var hönnuð til að stækka hana til að fullhreinsa skólps (fjarlægja lífrænan úrgang og kemísk efni). Finnst þér að við ættum að stækka verksmiðjuna til að fá betri meðhöndlun á skólpmatninu okkar?  
The water treatment plant in Akureyri was designed to be extended to fully treat waste water (removing organic waste and chemicals). Do you think we should extend the plant to get better treatment of our waste water?

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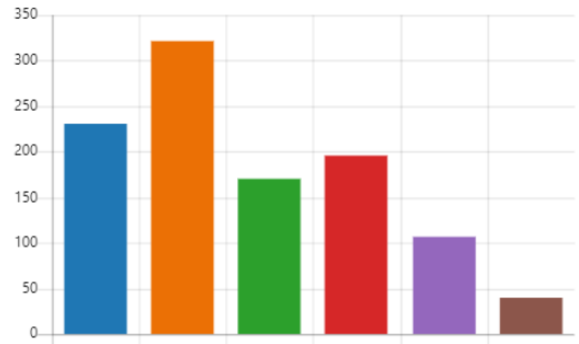
The most common answer of **why sewage treatment is important** was “**protecting the environment**” followed by “**protecting our health**”:

6. Hver er mikilvægasta ástæðan fyrir því að stækka núverandi skólphreinsistöð á Akureyri? Veldu eins margar og þú vilt.

What are the most important reasons to extend the current waste water treatment plant in Akureyri? Choose as many as you like.

[More Details](#)

- Að vernda heilsu okkar / Protecting our health 231
- Að vernda umhverfið / Protecting the environment 321
- Tryggja stöðug veiðiskilyrði í framtíðinni í Eyjafirði / Ensuring stable fishing conditions in the future in Eyjafjörður 170
- Að halda höfninni og umhverfinu hreinu og fallegu fyrir okkur og ferðamennina / Keeping the local environment clean and beautiful for us and visiting tourist 195
- Fylgja alþjóðlegum stöðlum / Keeping up with international standards 106
- Annað / Other 40



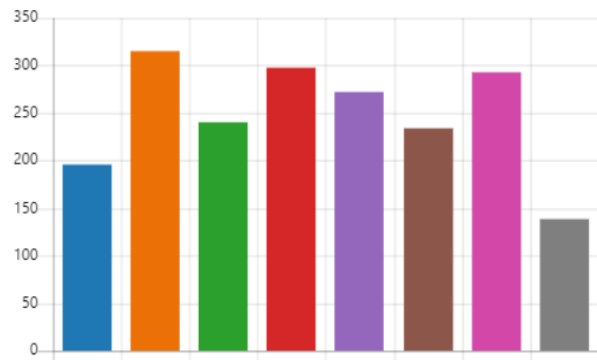
Participants are willing to contribute with actions like: “**Not throwing wet wipes, floss and other rubbish into the toilet**”, “**Throw left-overs from the kitchen into the organic waste instead of into the toilet**” or “**Collect and return paint and other chemicals instead of pouring them into the sink**” among others:

7. Hvað ertu tilbúin(n) að leggja af mörkum til að draga úr áhrifum skólps á umhverfið?

What are you willing to contribute to lower the impact of sewage on the environment?

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- Nota minna vatn, þannig að skólphreinsunin verður skilvirkari. / Use less water, so the sewage treatment gets more effective 196
- Ekki henda blautklútum, tannþræði og öðru rusli í klósettið. / Not throwing wet wipes, floss and other rubbish into the toilet 315
- Safna fitu í eldhúsinu og koma með hana á endurvinnslustöðvamar í stað þess að hella henni í vaskinn. / Collect fat in the kitchen and bring it to the recycling stations instead of pouring it into the sink 240
- Henda matarafgöngum í lífrænan úrgang í stað þess að henda í klósettið / Throw left-overs from the kitchen into the organic waste instead of into the toilet 297
- Nota umhverfisvottuð hreinsiefni (t.d. fyrir uppþvottavél, þvottavél o.s.frv.) / Use environmentally certified cleaning products (e.g. for the dishwasher, washing machine, etc.) 272
- Nota umhverfisvænu prógrómmen í þvottavélinni og uppþvottavélinni, þau þurfa minna vatn. / Use the environmental friendly program at the washing machine and dishwasher, they need less water 234
- Safna og skila málningu og öðrum efnum í stað þess að hella þeim í vaskinn. / Collect and return paint and other chemicals instead of pouring them into the sink 292
- Beina vatni af þakrennum annað en í fráveituna t.d. með því að safna því í tank og nota það til vökvunar á þurrari dögum. / Collect rainwater from the roofs to reduce the burden on the wastewater treatment and to use it for watering the garden in times when it rains less. 138

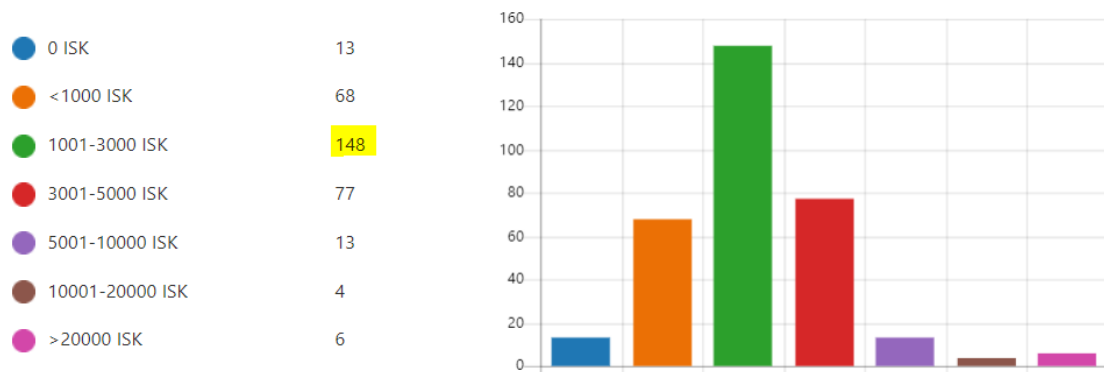


We are aware that the **improvement of the wastewater treatment plant would need a great investment**. Therefore, we asked the participants **how much they will be willing to pay for it. 1000-3000 ISK/month was the most common answer**:

8. Með betri hreinsun skólps hækka gjöld fólks sem býr á Akureyri. Hversu mikið á mánuði værir þú tilbúinn að borga fyrir betri skólphreinsun á mánuði?  
Improving waste water treatment will increase the fees for people living in Akureyri. How much would your household be willing to pay per month for better waste water treatment?

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We were surprised by the high percentage of participants that also submitted a comment in the free-text part of the survey. The **majority of the comments were demanding better sewage treatment** and lots of them expressed their surprise and concern about the low standards of wastewater treatment in Akureyri:

9. Ef það er eitthvað annað sem þú vilt segja okkur um þetta mál erum við mjög ánægð að heyra um það:

If there is anything else you want to tell us about this issue we are very happy to hear about it:

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Responses

Latest Responses

### Some of the answers

Frábært að vekja athygli á þessu, umhverfisbærinn Akureyri ætti að setja hærra standa og vera leiðandi í þessum málum. Oft gleymist umræða um skólphreinsun þegar umhverfismál eru rædd vegna þess að þetta er dýrt og lítill skilningur á kerfinu hjá almenningi, það er ábyrgð sveitarfélags að upplýsa um mikilvægi þess til að tryggja stuðning við framkvæmdir. Plastpokar og endurvinnsla/flokkun er háværari umræða vegna þess að það er nær fólki í daglegu lífi, en ætti ekki að vera það. Pólitíkin þarf að snúast um stóru málin sem hafa mikil áhrif. Einnig finnst mér að Akureyri ætti að vera leiðandi í blágrænum ofanvatnslausnum og tryggja tvöfalt fráveitukerfi til að auðvelda hreinsun skólps. En einnig til þess að vernda viðtakann og fá grænni byggð með góða grunnvatnsstöðu.

Takk fyrir að vekja máls á þessu. Meðferð Íslendinga á fráveituvatni og skólpi er til skammar.

I have been aware of this issue for a very long time and have always thought that it was rather shameful that we place such a high value on our marine resources but fail to take measures in line with other western countries. I have visited many poor countries in Africa that have more expensive treatment that we have here in Iceland, one of the wealthiest nations per capita. While I know that what we discharge is a fairly low quantity in the grand scheme of things, we really need to do more to protect our oceans. Also, this is a public health issue (cholera, despite popular opinion, does not die in salt water!). Thanks you for calling attention to this issue!

Því fyrr sem hreinsunin verður bætt, því betra. Þetta þarf að gerast sem fyrst.

Það þarf að auka umræðu og fræðslu um þessi mál

Góð könnun - þessir punktar þyrftu að fara í bækling. Koma þessari fræðslu til fólksins.

Það ætti að huga að því að hætta að veita skólpi í sjó og safna frekar í þrær og hreinsa og nota svo sem áburð.

Það er 2022 og það er engin framför í skólphreinsun, það er vandræðalegt fyrir Ísland

með því að fara með leikskóla- og grunnskólabörn í skoðunarferðir í skólphreynsistöðina þá eykst þekking heimilanna á því hvað má fara í klósettið. Við hérna í leikskólanum Koti höfum farið og börnin höfðu mjög gaman af því

Finally, we also asked a few questions to characterize the participants. A dominance of female participants is probably explained by the in general higher availability of women to participate in surveys, but may also reflect a greater interest among women in this topic:

## 10. Kyn / gender

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<span style="color: blue;">●</span> Karl / Man	127
<span style="color: orange;">●</span> Kona / Woman	199
<span style="color: green;">●</span> Annað / Other	3
<span style="color: red;">●</span> Other	1

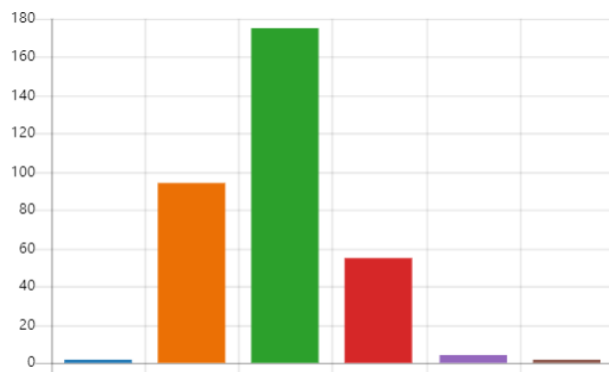


## 11. Þinn aldur / Your age:

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<span style="color: blue;">●</span> <18	2
<span style="color: orange;">●</span> 18-30	94
<span style="color: green;">●</span> 31-55	175
<span style="color: red;">●</span> 56-70	55
<span style="color: purple;">●</span> >70	4
<span style="color: brown;">●</span> Other	2

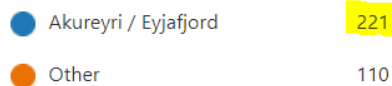


We also asked about **where participants live and where they come from**. **67%** of participants were living in **Akureyri/Eyjafjord** and **77%** were from **Iceland**, **implying that one fourth of respondents were immigrants**. As this does not reflect the proportion of immigrants in the Icelandic population we could either conclude that this survey was better distributed among immigrants, or immigrants were more willing to respond to the survey. The latter could reflect a greater concern about wastewater treatment among immigrants.

12. Hvar áttu heima? / Where do you live?

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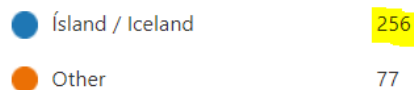
[Insights](#)



13. Hvaðan ertu? / Where are you from?

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If you need further information, you are welcome contact the representatives of this project:

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