

IDAHO
CONSERVATION
LEAGUE



SIXTH ANNUAL IDAHO WASTEWATER TREATMENT PLANT REPORT

SEWAGE TREATMENT PLANTS IN
IDAHO FAILING TO MEET CLEAN
WATER ACT STANDARDS

September 26, 2023

Consistent Polluters: Many Idaho Wastewater Treatment Facilities Have Been Violating the Clean Water Act for Nearly a Decade

During 2022, there were
520
violations of the Clean Water Act.

**6th Annual Report
(Reviewing 2022 Data)**

Copyright © 2023 by the Idaho Conservation League

Will Tiedemann, Conservation Associate
Idaho Conservation League
PO Box 844
Boise, ID 83701

www.idahoconservation.org
208.345.6933

EXECUTIVE SUMMARY

In Idaho, water is everywhere. From our fast flowing rivers, to our snowy mountaintops, to the faucets in our kitchen sinks, to farm fields—water is a necessity for us to live, prosper, and enjoy life. It's no coincidence that most Idaho cities and towns are located adjacent to a river, stream or lake. These water bodies conveniently deliver a crucial resource to towns and cities. They also provide habitat for Idaho's flora and fauna, and allow for unparalleled recreational activities. However, they also have historically served a less glamorous purpose—to carry away the untreated waste and by-products of the towns and cities.

Today, the federal Clean Water Act (CWA) requires these waste and by-products (most commonly sewage) to be cleaned and treated before they are discharged to a water body. Clean water and adequate sewage treatment are essential services provided by Idaho cities, towns, and municipalities. Idahoans, just like any other U.S. citizens, depend on our municipalities to make sure our water is clean and safe. However, the Idaho Conservation League's (ICL) sixth annual assessment found that 57% of all sewage facilities in Idaho failed to comply with CWA standards for harmful bacteria, chemicals, toxic metals, or other substances at least once during 2022.

In other words, over half of sewage treatment plants discharged pollutants at levels higher than legally allowed.

Even more telling is that 11 of the 119 sewage treatment plants spread across Idaho were responsible for more than half of all violations reported statewide. All 11 of these worst-performing facilities were located in relatively small rural communities.

Unfortunately, this is not new or novel information. Since ICL began publishing these reports in 2016, we have seen many of the same facilities failing to meet their permit requirements. When you add it all up, we are looking at hundreds and hundreds of violations from these facilities.

On the positive side, 51 cities or towns across the state reported no discharge violations in 2022.

Many treatment facilities—in particular, ones serving the municipalities of Blackfoot, Firth, Wilder, Tensed, Marsing, and Kendrick—made strong improvements to reduce or even eliminate their discharge violations from 2021 to 2022. These facilities should be commended for the improvements.

However, statewide the overall picture remains troublesome; just 43% of treatment facilities operated in 2022 without any violations, an abysmal rate for something so essential as clean water. Idahoans and local leaders who live in areas with facilities that have violations should act now to fix the problem. This report provides concrete recommendations for ways to engage local leaders to act to improve sewage treatment plants with violations.



INTRODUCTION



*The Snake River in Eastern Idaho.
Bob Wick Photo.*

The Idaho Conservation League (ICL) is Idaho's leading voice for conservation. With offices in Boise, Ketchum, Sandpoint, and McCall, our mission is to create a conservation community and pragmatic, enduring solutions that protect and restore the air you breathe, the water you drink, and the land and wildlife you love.

ICL's mission is to create a conservation community and pragmatic, enduring solutions that protect and restore the air you breathe, the water you drink, and the land and wildlife you love.

When it comes to water, ICL is actively involved in all aspects of water quality protection in Idaho. We participate in state-led efforts to develop appropriate water quality standards for Idaho's lakes and rivers. We work on policy matters related to how the state manages waterways, regulates pollution, and promotes restoration. We also review and participate in the development and issuances of wastewater discharge permits in Idaho. Through our work, we talk to state and federal regulatory agency staff, as well as to Idaho citizens who fish and recreate in our lakes and streams.

Nearly every city in Idaho is located on the banks of a river or lake. Why? Because these waterbodies play a key role in getting rid of sewage from communities. When someone flushes a toilet, the contents do not go straight into the river. This sewage is first processed in the community's wastewater treatment plant. Treated wastewater, also called effluent, is then often discharged to a lake or river. Because treatment plants discharge directly into water bodies, facilities are required to ensure the treated discharge meets all water quality standards set forth in the Clean Water Act.

To ensure facilities are in compliance with the Clean Water Act, wastewater treatment plants must receive permits prior to discharging wastewater. These permits, which are unique to each facility, guide operations and set pollution limits in the treated wastewater. The U.S. Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (IDEQ) track compliance to ensure that facilities are meeting the pollution limits.

This report provides an opportunity for Idahoans to learn the basics of wastewater permitting and to begin understanding how well their local wastewater treatment plants are complying with their permits. To make this issue more accessible to the public, ICL reviewed the permits and all available discharge and monitoring reports, then assessed whether wastewater treatment plants across Idaho were complying with their permits.

This report, which is in its sixth year, provides background on discharge permits and summarizes our findings for a one-year period (January 2022 through December 2022). In years past, reports have focused on three-year periods. However, moving forward, ICL has decided to focus on a single year review period—allowing for better comparison and incorporation of year-to-year changes or improvement that facilities can make.

As Idahoans learn more about wastewater discharge permits, how permits guide operations and limit pollutants, and whether their communities' wastewater treatment plants are complying with permits, our hope is that cities will feel pressure to do a better job operating their facilities. Everyone deserves clean water. We encourage concerned citizens to contact their city or local government to learn more or provide feedback.

Blue Heart Springs on the Snake River. Will Tiedemann Photo



WASTEWATER TREATMENT PLANTS AND PERMITS

Municipal wastewater treatment plants play a critical role in protecting water quality—keeping our rivers and lakes fishable and swimmable as well as providing a healthy habitat for plants and animals. These treatment plants come in all shapes and sizes. Generally speaking, bigger cities have facilities capable of treating larger daily inflows of sewage. These larger wastewater treatment plants rely on more advanced mechanical and biological treatment. Smaller cities use scaled-down versions that may be less complex. Smaller towns may use even less complicated lagoon systems.



The Nampa wastewater treatment plant is an example of a large facility with mechanical and biological treatment. Google Earth photo.

Each treatment plant has a unique discharge permit that outlines how the facility is operated, limits the amount of pollution that the facility can discharge to a nearby lake or stream, and guides how and when the pollutants are measured.



Regardless of a community's size or the amount of sewage that its treatment plant must process, these facilities must effectively treat sewage so that it can be safely discharged to a local waterbody.

The Driggs wastewater treatment plant is an example of a larger lagoon system with some additional technical aspects.

Google Earth photo.

WHO ISSUES AND MONITORS DISCHARGE PERMITS?

Permits for these facilities are required under the Clean Water Act and authorized through the National Pollutant Discharge Elimination System (NPDES). These permits are often referred to as NPDES permits or discharge permits. In Idaho, the EPA has historically issued these permits. However, this role shifted to the Idaho Department of Environmental Quality (IDEQ) in 2018. Current EPA-issued permits will stay in effect until they expire and are replaced by permits from the IDEQ. These new permits are called Idaho Pollutant Discharge Elimination System (IPDES) permits.

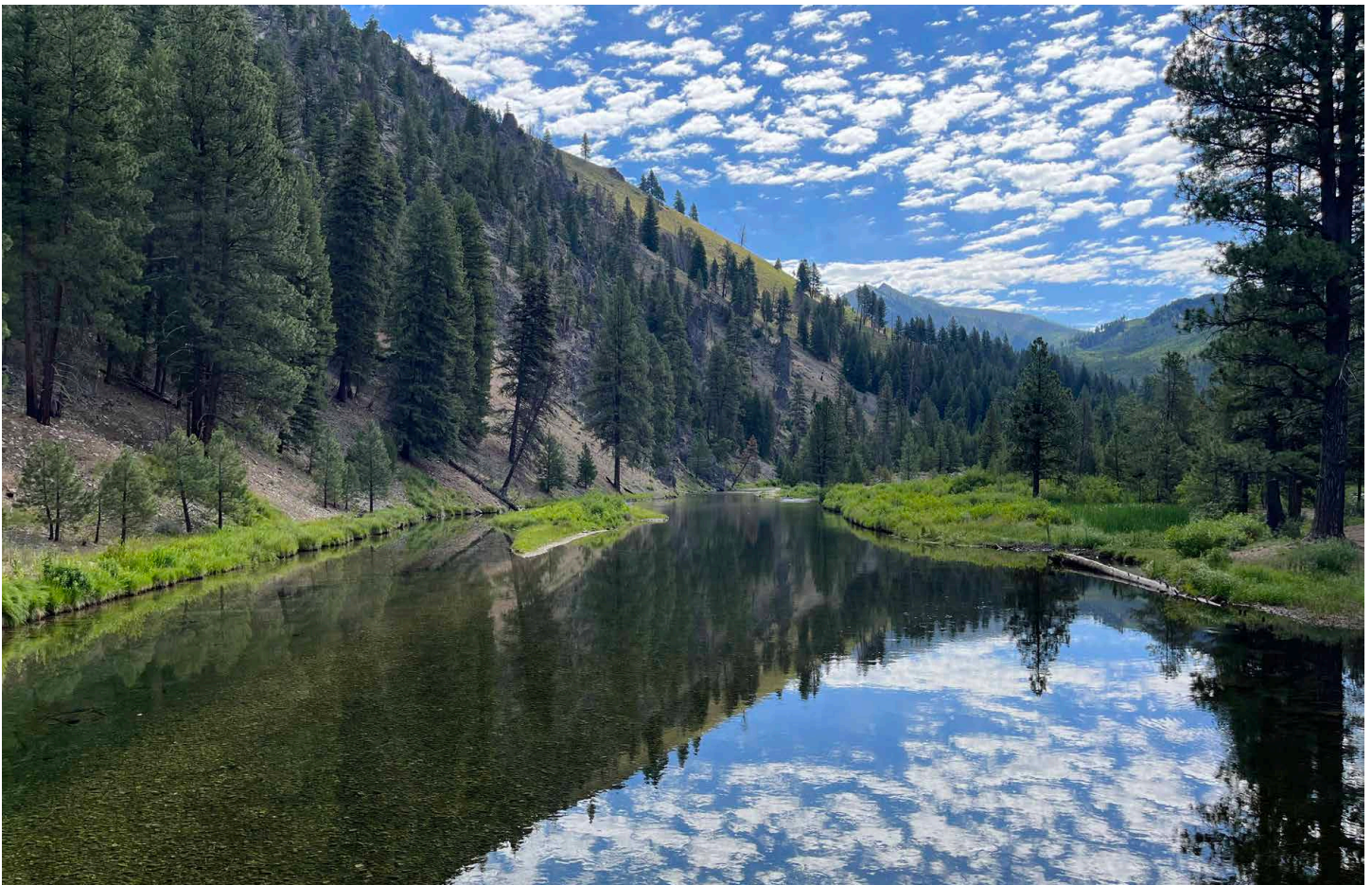
Every wastewater treatment plant is different. Similarly, discharge permits differ from facility to facility. Each permit is developed using water quality data and other metrics to ensure protection of the health of the lake or stream receiving the treated sewage, the aquatic life in that waterbody, the health of people who recreate in the water, and the water supply of downstream communities.

The EPA and IDEQ maintain online databases of all current discharge permits issued in the state of Idaho. Complete copies of these permits and supporting documents can be found at the following websites:

EPA: www.epa.gov/npdes-permits/idaho-npdes-permits

IDEQ: www.deq.idaho.gov/permitting/issued-permits

Each wastewater treatment facility is charged with monitoring the pollutants regulated by its permit and reporting results (often analyzed by independent labs to ensure integrity) to the EPA.



Middle Fork Boise near Atlanta, Idaho. Will Tiedemann Photo.



ICL's Brad Smith monitors aquatic weed growth in Boyer Slough, which receives the effluent discharged from the Kootenai-Ponderay wastewater treatment plant. ICL photo.

WHAT POLLUTANTS ARE COVERED IN DISCHARGE PERMITS?

Discharge permits regulate what can and cannot be discharged from treatment facilities into waterbodies. They also contain limits on how much of a particular pollutant can be discharged on a daily, weekly, or monthly basis. These limits cover a variety of pollutants that can harm human health, fish, and other aquatic life in the waterbody.

For example, limits are required for pollutants like coliform bacteria. Most people are familiar with the bacterium *Escherichia coli*, better known as *E. coli*. This pollutant comes from fecal contamination and can cause serious diseases, making it unsafe for people to swim and play downstream of a facility that is not complying with its coliform bacteria limit.

Limits are also frequently required for nutrients like nitrogen and phosphorus. Too much nitrogen and phosphorus in a waterbody acts as a fertilizer and can cause excessive amounts of algae and aquatic weed growth. When these aquatic plants die and decompose, they consume oxygen from the water. The resulting low oxygen levels harm fisheries. Nitrogen and phosphorus can also lead to toxic algal outbreaks that can kill fish, livestock, and pets, and sicken humans.

Permits may also contain limits on pollutants such as mercury, lead, copper, and other toxic metals and chemicals. These limits are in place to help protect fish and ensure that anglers can safely eat the fish they catch. Other pollutants like chlorine and ammonia are toxic to fish and can kill them outright if levels become too high.

While a permit may contain limits on any number of pollutants, several pollutants account for the vast majority of violations at municipal wastewater treatment plants (Table 1).

Table 1: Pollutants most often exceeded at wastewater treatment plants and a description of each.

POLLUTANT	EXPLANATION
Ammonia and Nitrite	High levels of ammonia and nitrite in water can kill aquatic organisms.
BOD (biochemical oxygen demand)	BOD is a surrogate of the degree of organic pollution in effluent. As this material decomposes, it can deplete oxygen from the waterbody.
Chlorine	Chlorine, which is added during wastewater treatment to kill harmful microorganisms, is toxic to aquatic life.
Coliform, fecal general	Coliform bacteria are a type of bacteria that comes from human or animal waste and can cause gastrointestinal upset, fever, abdominal cramps, and diarrhea.
E. coli	Escherichia coli is a type of fecal coliform commonly found in animal and human waste. Some strains of E. coli can cause severe illness and death.
pH	This numeric scale expresses the acidity or alkalinity of a substance. A pH range of 6.0 to 9.0 is necessary to protect aquatic life in fresh water.
Phosphorus and nitrogen	Phosphorus and nitrogen can cause excessive algae and aquatic plant growth, which in turn can deplete oxygen from the waterbody.
Solids, total suspended	Total suspended solids include sediment and other fine-grained particles. These particles reduce water clarity and can harm aquatic life.
Toxic metals (e.g., zinc, copper, lead)	A high concentration of metals in effluent can cause health issues in aquatic life and humans.

WHAT IF TREATMENT PLANTS VIOLATE THEIR PERMITS?

If a community's wastewater treatment plant fails to comply with pollutant limits in its permit, that facility can endanger human and aquatic health and harm water quality. Failure to operate a wastewater treatment plant properly is not only harmful for people who rely on a waterbody for drinking water, irrigation, recreation, and fisheries, but it is also against the law.

Permit violations can lead to penalties. Because the health and environmental implications of these violations can be so dire, consequences to a municipality that violates its NPDES permit can be equally severe. The Clean Water Act provides for penalties of up to \$51,570 per violation per day.

Although IDEQ issues these discharge permits, the Clean Water Act enables ordinary citizens to pursue enforcement action in court. Because of this provision, ICL frequently takes enforcement actions when we observe that a facility is polluting a lake or stream by violating its discharge permit.

IDAHO CONSERVATION LEAGUE'S REVIEW OF DATA

Individual facilities monitor their discharges and report this data to the EPA in accordance with the monitoring requirements in their permits. Typically, a facility must sample and analyze its wastewater discharge every week. This means that a month generally has four separate, consecutive data collection periods in it. A few pollutants may be monitored continuously, while others require only monthly sampling.

WHAT DATA DID ICL REVIEW?

We accessed the data collected and reported by each facility and used this data to compile our report. ICL did not collect any of our own discharge data for this report.

We reviewed discharge data for all 119 municipal wastewater treatment plants with NPDES or IPDES permits. This data covered the past year (January 2022 through December 2022), and we accessed the information at the EPA's Enforcement and Compliance History Online website.

This website (echo.epa.gov) is a searchable database of all the facilities in the United States that are permitted to discharge pollution to water or air. Information about individual facilities can be found by clicking the 'Explore Facilities' tab and searching for facilities in Idaho or a specific community.

HOW DID WE DETERMINE VIOLATIONS?

Discharge violations occur when a facility fails to meet its permit limit for an individual pollutant during a single sampling period. For instance, if a facility exceeds its limits for both phosphorus and E. coli during a single sampling period (for example, one week), two separate discharge violations are reported, one for each infraction. If exceedances continue for a second effluent sampling period, the record shows a total of four violations.

Permit effluent typically come in three types:

- Concentration, typically measured in milligrams per liter (mg/L).
- Load, typically measured in kilograms or pounds per day (kg/d or lbs/d).
- Percent Removal, measured as the fraction of pollutants that are removed from treated wastewater vs the amount that is allowed to be discharged from the facility.

From a regulatory sense, a violation of any of these effluent limit types are treated the same in tallying the number of discharges a facility had. Furthermore, in our review, we tallied only discharge violations. Permit violations not related to discharge—such as those related to operating conditions; reporting, maintenance and compliance schedules; or recordkeeping requirements—were not integrated into our review framework (even though they are enforceable violations). We focused solely on discharge violations because these are the sorts of violations that cause immediate impacts to water quality and are the most straightforward to explain to the public.

Legally, compliance with permit limits is rigid. The Clean Water Act contains no provision for a minor violation or forgiveness for barely or infrequently violating a permit limit. Exceeding a limit by 50%, 10%, or just 1% is a violation of the permit condition and thus a violation of the Clean Water Act.

However, it is important to note that the gravity of a discharge violation is considered in enforcement and compliance procedures for discharge violators. How much a facility discharges a pollutant over its limit, how relatively harmful or toxic a pollutant is, and how readily and significantly the discharge harms human health and/or the environment are all factors when determining the gravity of discharge violations.

There is a significant range in the performance of facilities across Idaho. Over our 2022 review period, some facilities reported zero violations while others reported upwards of 40 or 50 violations.

Though it is standard to do so when calculating a penalty for an enforcement action, for our assessment, we did not multiply each discharge violation by the number of days in a sampling period. For example, using this standard approach, a discharge violation documented in a weekly sampling period would normally be multiplied by seven. Therefore, a single limit exceedance is recognized as a daily violation for every day of the sampling period and penalties are calculated accordingly. But for this report, we did not use the multiplier because we wanted to present the municipalities with their own data in the form that they reported it to the EPA.

ICL Photo.



RESULTS OF IDAHO CONSERVATION LEAGUE'S REVIEW

HOW MANY FACILITIES HAD VIOLATIONS?

In Idaho, 119 municipal wastewater treatment plants have NPDES or IPDES permits. In past reports we have graded each facility using only two classifications: pass or fail. Under that prior approach, only facilities that reported zero effluent violations in our review period received a passing grade. If facilities reported a violation frequency that was greater than zero, they received a failing grade.

However, this year and moving forward, we have changed our grading approach to better reflect the complexities and nuances in how and why facilities violate discharge limits. Accordingly, we have moved away from a simple pass or fail label and instead evaluated facilities on a more holistic approach that considered the total number of violations, the gravity of the violation, and the size and resources of violating facilities.

Our review showed that 51 of the 119 municipal wastewater treatment plants (43%) had no violations. The remaining 68 municipal wastewater facilities (57%) violated their discharge permit limits in some form.

Appendix A lists all 119 municipal wastewater treatment plants in Idaho and the number of discharge violations, if any, during the 2022 review period.

WHO HAD A PERFECT RECORD?

Of the 51 facilities that reported zero discharge violations during the 2022 review period, 31 of those facilities continued their exemplary performance and had no violations in 2021 (denoted with an asterisk in the table below). The remaining 16 facilities had an average of four violations per facility in 2021 but all improved their performance to zero violations in 2022.

Achieving 100% compliance with one's discharge permit is not an accident. These communities deserve praise for prioritizing clean water.

COMMUNITIES WITH NO DISCHARGE VIOLATIONS FOR 2022

American Falls*	Shelley*	Hailey	Rigby*	Weiser
Ashton*	Fairfield*	Hayden*	Orofino*	Inkom*
Boise*	Filer*	Heyburn	Roberts*	Kooskia*
Bonnars Ferry	Firth	Horseshoe Bend	Rockland*	Lava Hot Springs*
Buhl	Franklin*	New Plymouth*	Fernwood	Lewiston*
Burley	Fruitland*	Lapwai*	Smelterville*	Mackay*
Caldwell*	Georgetown*	Orofino	Star*	Middleton*
Sandpoint*	Grangeville	Mccall*	Stites*	Moscow*
Council	Greenleaf*	Payette*	Tensed	Moyie Springs*
Culdesac	Hagerman*	Pocatello*	Viola*	Nampa

**denotes facilities who also had no violations in 2021 (in addition to 2022)*

WHO HAD DISCHARGE VIOLATIONS?

Our review found that 68 facilities had violated their discharge permits during 2022. In total, these facilities reported 520 discharge violations.

However, the data revealed a large variability in total recorded discharge violations among facilities. Thirty-two facilities had three or less discharge violations. A mere three facilities accounted for a quarter of all violations and 11 facilities accounted for 51% of all violations. Figure 1 below shows facilities with at least one discharge violation in 2022. Clearly, there are gradations of compliance—and some facilities are struggling.

Violations per Wastewater Treatment Plant (WWTP)

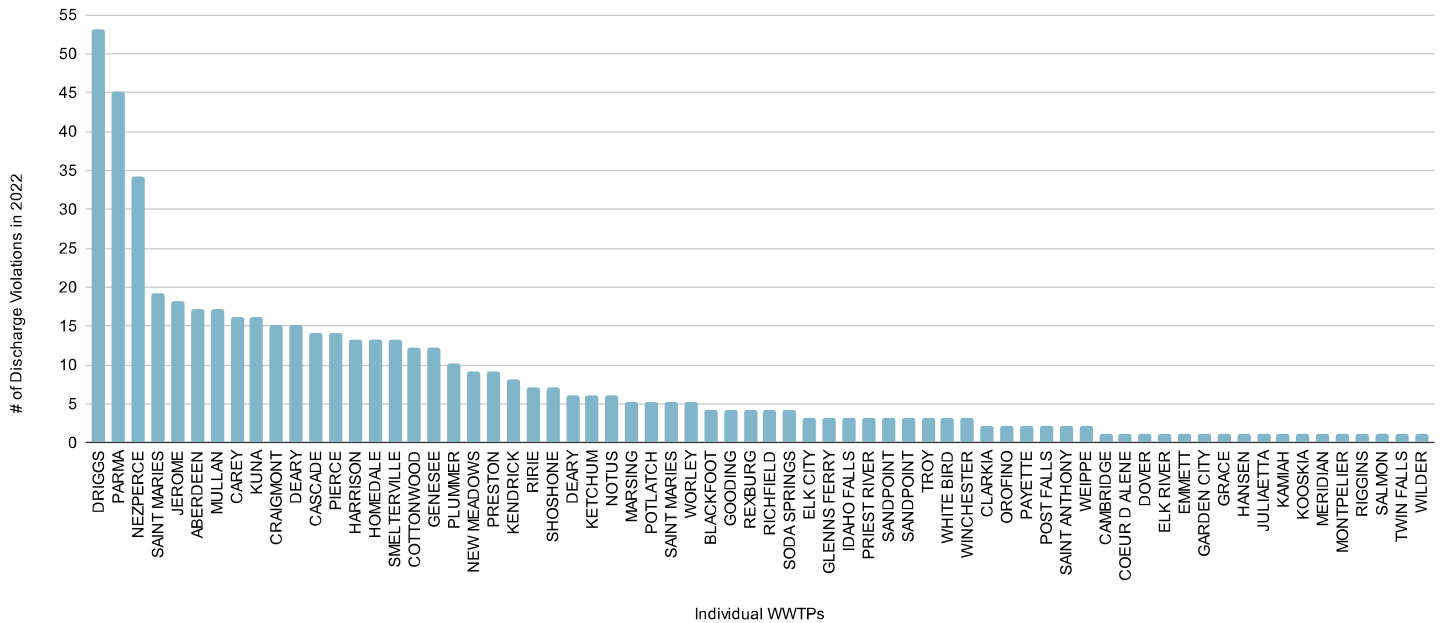
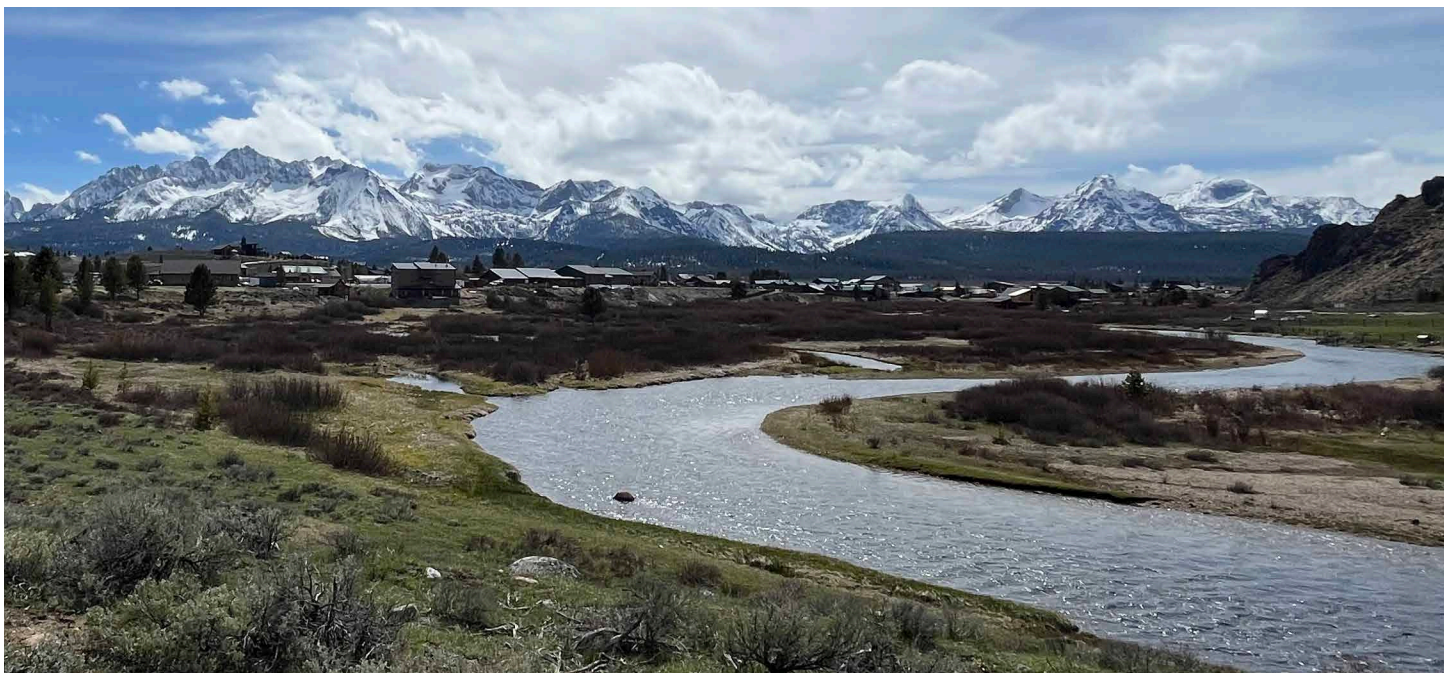


Figure 1: Facilities with at least one discharge violation in 2022 plotted against their total number of violations in 2022.



Salmon River at Stanley. ICL Photo.

WHAT ARE THE WORST FACILITIES IN IDAHO BY VIOLATION COUNT?

While any number of violations is problematic, some of Idaho’s municipal wastewater treatment plants are struggling much more than others. Indeed, a small subset of the 119 municipal facilities spread across Idaho is responsible for a hugely disproportionate number of the violations. As noted above, just 11 facilities accounted for more than half (51%) of all of the violations that occurred statewide (Figure 2). The worst-performing facilities in Idaho clearly have some significant structural or operational problems that must be addressed.

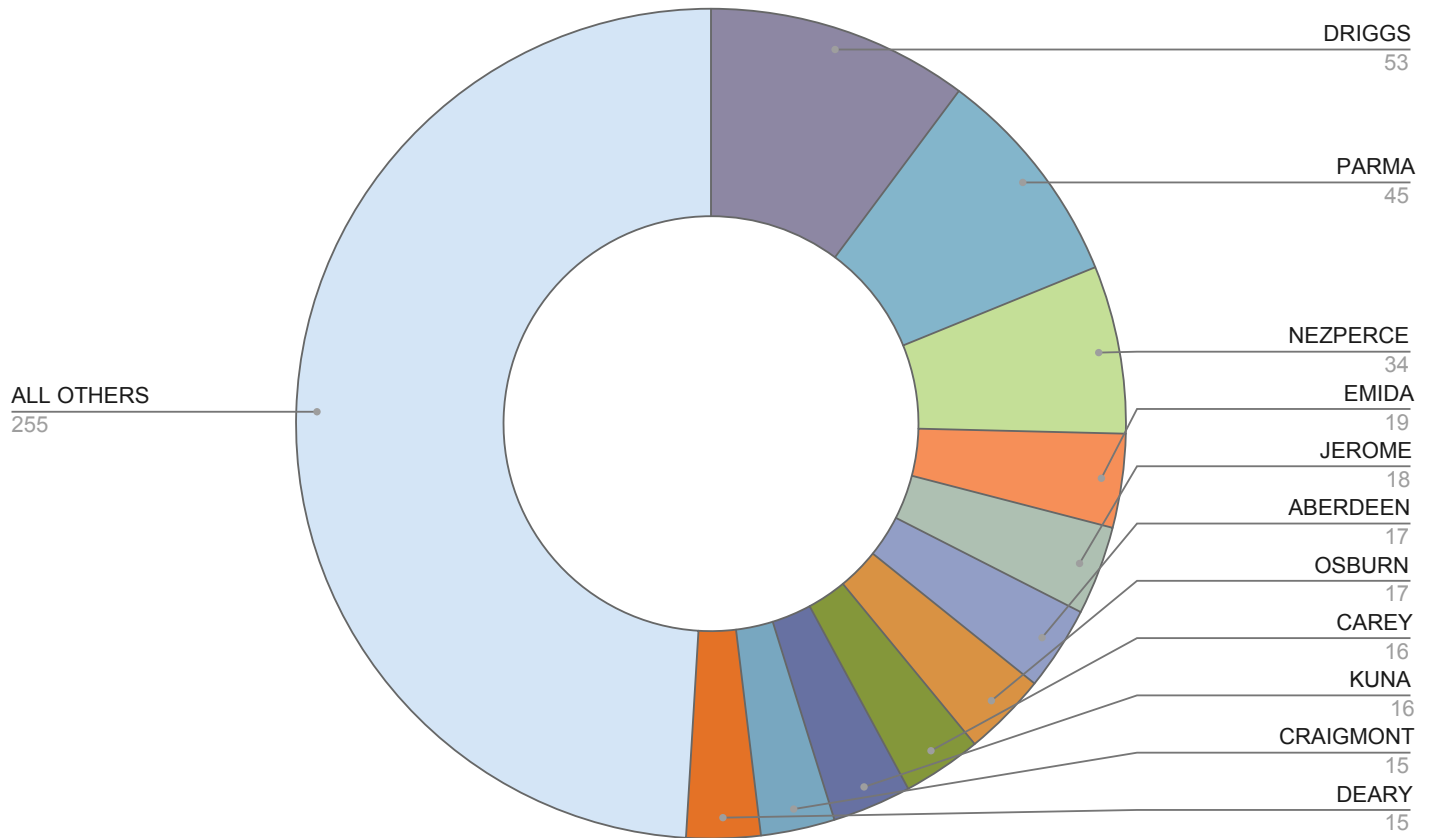


Figure 2: The 11 worst performing facilities have over half the violations in the entire state.

A higher number of discharge violations correlates to greater harm to human health and the environment, and also signals a facility’s inability to adequately respond to an issue. However, as noted previously, simply looking at the total number of violations does not always tell the whole story. The gravity of discharge violations is also important to evaluate—this includes factors like how much a facility discharges a pollutant over its limit (total load), how relatively harmful or toxic a pollutant is, and how readily and significantly the discharge harms human health or the environment.

Consider one facility that had dozens of moderate to low-load violations for a pollutant like total suspended solids (TSS) or phosphorus, and another that had only one or two violations but at high loads for a pollutant like ammonia or chlorine. Which case is “worse”? Ammonia and chlorine have direct toxic properties while phosphorus and TSS generally do not and pound for pound are less harmful to the environment. Given these nuances, comparing and ranking the severity of a facility’s violations is not a straightforward process.

Thankfully, another metric can be used to help evaluate facility violations—the physical weight of pollutants a facility discharged over allowed limits.

WHAT ARE THE WORST FACILITIES IN IDAHO BY POLLUTANT LOAD?

There are three common types of discharge violations: concentration, load, and percent removal. While a violation of any of the three types constitutes a discharge violation, the EPA collects data on load violations that can be used to rank facilities in the total weight of pollutants discharged above what their permit allows them to (known as total load over limit). Of the 68 facilities noted above that had effluent violations, 25 of them had total load over limits violations adding up to 108,755 pounds of pollutants over limits.

Figure 3 below shows all 25 facilities with their total load over limits broken out by pollutant category. It's important to note that these load over limits totals are summed over each applicable individual monitoring period for the facility (most commonly, monthly). They are also not a net calculation, i.e. monitoring periods where a facility discharged a load below limits were not treated as a negative value counted against a yearly total. While this may not credit facilities for periods where they have done their job well, wastewater pollutants often have quick effects that are not appropriately measured over a yearly average or can have disproportionately larger effects during different times of the year (say during salmon, steelhead, or bull trout spawning seasons).

As is similar to the total violation counts presented earlier, a small minority of facilities accounted for the vast majority of the total load over limits. In some cases, facilities with the highest number of violations like Driggs and Nez Perce also had high loads over limits. However, some facilities with a high number of violations, like Parma (45 total), discharged only 39 pounds of pollutants over load limits (all phosphorus). Vice versa this is also true. Potlatch, Richfield, and Ririe combined for 16 violations in 2022 (3% of 2022 total violations) but 8,326 pounds of pollutants over load limits (18% of 2022 total load over limits).

Clearly, evaluating the severity of discharge violations is an inexact science. However, next we will focus on some facilities with particularly significant violations.

WWTP with Loads Over Limits

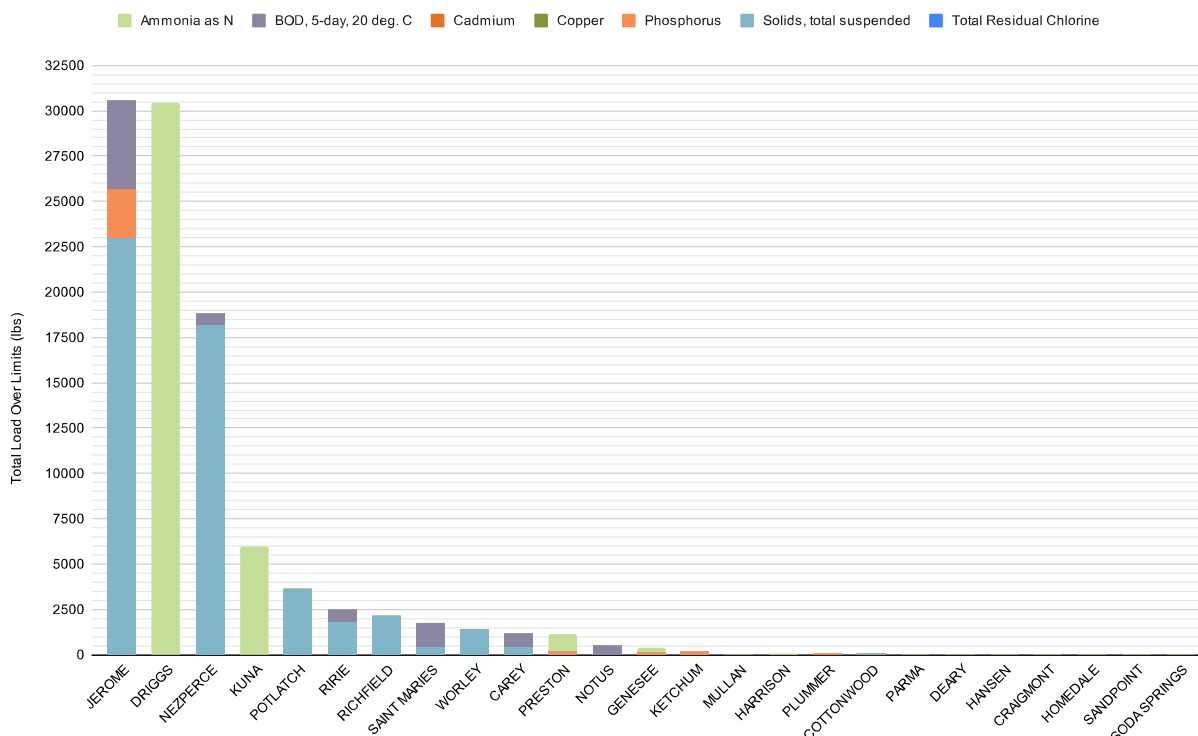


Figure 3: Facilities with Load Over Limit Violations

THE WORST OF THE WORST

This report is our sixth annual wastewater treatment plant compliance report. Our previous reports reviewed data from three-year intervals, starting from 2014. As noted above, this year we have changed our approach to focus our review on just the data from the previous year. Below we will highlight a few facilities with notable violations accounting for past history, number of violations, load, and other relevant special factors.

We should also note, ICL reached out to each of the facilities/municipalities below in an attempt to better understand the issues each are facing. However, only the City of Driggs responded.

City of Driggs WWTP

The Driggs wastewater treatment facility had 53 total violations in 2021 and 53 violations again in 2022. The facility also had the second largest load over limits in 2022 at 36,457 pounds of ammonia. The facility discharges its wastewater to an unnamed tributary of the Teton River. The Teton River is already impaired by high water temperatures and total suspended solids (TSS).

Driggs has perennially had issues with its wastewater treatment plant ever since it was significantly upgraded in 2013. For a variety of reasons, the facility has never been able to properly remove enough ammonia from its wastewater. We do acknowledge that the city has made sincere and diligent efforts to correct the issue over the years; however, a sustainable solution to their problems has not yet been found. In the fall of 2022, the EPA sued the City of Driggs for its long-term failure to meet discharge limits. The city is now in the process of developing a new Facility Plan and a compliance timeline will likely result from the EPA's lawsuit.

While ICL acknowledges the complexity of the issue and the City of Driggs' efforts, it is unfortunate that significant discharge violations have been allowed to occur for years. We hope to see progress resulting from the EPA lawsuit and plan to monitor the compliance of the facility closely.

City of Jerome WWTP

The Jerome wastewater treatment facility dealt with significant new effluent issues in 2022. The facility only had a single effluent violation in 2021 but that number ballooned to 18 violations in 2022. Based on our reviewed data, it appears the facility had serious issues in January and February of 2022, discharging 30,584 pounds of pollutants (see Figure 3 above) in that two-month time span while also violating discharge limits for BOD, TSS, chlorine, and phosphorus. The facility discharges its wastewater to an irrigation canal that eventually discharges to a section of the Snake River that is already impaired by phosphorus, BOD, and TSS.

To try to get to the root of this issue, ICL submitted a public records request to IDEQ to obtain effluent exceedance reports that the facility would have been required to submit. However, IDEQ denied the release of any effluent exceedance reports from the facility, citing a public records release exception for "Investigatory Records" (Idaho Code §74-105(1)). IDEQ also declined to provide any additional information. ICL will continue to investigate the nature of the facility's violations and review additional information as it becomes available.

City of Kuna WWTP

The City of Kuna’s “North” wastewater treatment facility jumped from three discharge violations in 2021 to 16 in 2022. The facility also discharged the fourth most load over limits in 2022 (7,301 pounds of ammonia). These load over limit discharges occurred over January, March, and April of 2022. This is concerning considering that the City’s website states, “The treatment plant uses an advanced membrane bio-reactor to filter the water to a very high standard¹.” The facility discharges its wastewater to Indian Creek, a tributary of the Boise River. Indian Creek is noted by DEQ as being impaired by several pollutants already (including TSS, high water temperatures, BOD, and E. Coli,) and runs directly through the cities of Nampa and Caldwell. Indian Creek has also been the center of significant urban revitalization efforts and restoration by the City of Caldwell at Indian Creek Plaza².

SIGNIFICANTLY IMPROVED FACILITIES

Just as it is important to call out facilities with current discharge violations, it is also important to recognize and give credit to facilities that have improved upon or corrected past discharge issues. Several facilities have made significant improvements from 2021 to 2022.

The City of Blackfoot’s wastewater treatment plant had significant issues in 2021 with properly treating for E. Coli, TSS, ammonia, and phosphorus—resulting in 29 discharge violations and 32,442 pounds of pollutants over load limits. However, in 2022, the facility only had 4 discharge violations for more minor concentration exceedances of phosphorus and ammonia limits and did not discharge any load over limits.

The City of Firth’s wastewater treatment plant has been featured in past ICL WWTP reports on the “worst discharge violators” list. The facility had 18 discharge violations in 2021 related to BOD and TSS, but did not have a single violation in 2022.

Wastewater treatment plants in the cities of Wilder and Tensed have also been featured in past reports on the worst discharge violators list, but they have rectified their past long-term issues. In 2022 the Wilder treatment plant reported only one violation while the Tensed treatment plant reported no violations.

Wastewater treatment plants in the cities of Marshing and Kendrick have also had recurring issues in the past with discharge violations and/or load over limits. However, both facilities have made significant progress in reducing their total number of violations in 2022, while bringing their loads over limits to zero.

Finally, it is important to note that while many facilities have had notable discharge violations in 2022 and many have made improvements since 2021, we have chosen to give extra focus on a select few. This decision weighs many factors including the nature, number, and gravity of a facility’s violations. It also weighs the sensitivity of the watershed that the facility discharges and their economic means to correct violations that often require costly upgrades. To provide information on all facilities, Appendix A of this report lists all wastewater treatment plants in Idaho with their 2022 and 2021 discharge violation totals, as well as their corresponding load over limits.

¹<https://kunacity.id.gov/131/Wastewater>

²<https://www.indiancreekplaza.com/about-indian-creek-plaza>

HAVE FACILITIES BEEN HELD ACCOUNTABLE?

This is the sixth year that ICL has produced this report. ICL has presented these reports at meetings and conferences to mayors, city officials, regulating agencies, and the general public. It's important that these groups recognize that pollution of Idaho's waters won't be overlooked, and that ICL will continue to track each facility's compliance—particularly those with poor track records. Despite the fact that some facilities remain on the "Worst Polluters" list, progress has still been made, due at least in part, to the publishing of this report.

The Idaho Department of Environmental Quality (IDEQ) is the lead agency in charge of holding facilities accountable when they violate their permit limits. Typically, when faced with a notice of violation from IDEQ, the facility will sign a compliance agreement with the agency that details (1) how the facility intends to come into compliance with their permit and (2) how much the facility will be fined for the violations.

First and foremost, it's important that the facility fix any operational issues that are preventing it from meeting its limits. The compliance agreement details tasks the facility must complete to come into compliance. These tasks can range from upgrading one aspect of its treatment process to building an entirely new treatment facility.

Second, it's important that these facilities are held accountable for violating their permits. As mentioned previously, violating a permit limit is a violation of the Clean Water Act, which can result in significant monetary penalties.

Over the one year period analyzed for this report, only one wastewater treatment facility has been penalized for violating their permit limits (Twin Falls). Since the process of developing and finalizing IPDES penalties can be a lengthy process, it is possible additional penalties for 2022 violations at other facilities are forthcoming.

We need to be holding more of these polluters accountable. If not, we risk poor water quality, detrimental impacts to aquatic life, and human health concerns.



Cascade Reservoir. Will Tiedemann Photo.

CONCLUSIONS

Idahoans feel very strongly about their right to clean water for drinking, irrigation, fishing, and swimming. Municipal wastewater treatment plants are the front line for protecting water quality and human health. Properly built and operated, well-maintained sewage treatment plants are critical for keeping our rivers and lakes fishable and swimmable. Yet, over 50% of the sewage treatment plants reviewed for this report are violating their pollution discharge limits.

Each wastewater treatment plant has a unique permit, specifically developed using information about the facility and the conditions of the waterbody into which the facility discharges. Since the goal of these discharge permits is to ensure that the operation of the facility does not pose a risk to the health of people swimming and fishing downstream, a permit violation means that the facility is endangering people and harming the environment. Violations are serious—they can result in significant financial penalties and enforcement actions.

Unfortunately, 68 facilities reported violations during the years reviewed for this report. These facilities reported 520 water quality violations that jeopardized Idaho's drinking water, public health, and fisheries.



Silver Creek. ICL Photo.

There is a wide variation in the number of violations that facilities reported. Some facilities reported very few violations. At the other end of the spectrum, several facilities reported over 40 violations. Facilities reporting violations need to carefully evaluate the causes for their violations and then identify and implement solutions.

Many facilities—Driggs, Jerome, and Kuna in particular—recorded significant and concerning violations. These facilities need to put more effort into upgrading their facilities and meeting their permit limits.

ICL commends the 49 facilities that fully complied with their discharge permits in 2022. Those facilities deserve to be recognized for protecting water that is vital for aquatic life, public health, and recreation.

NEXT STEPS

ICL takes these violations very seriously. One of the purposes of this report is to remind facilities that it is a violation of the Clean Water Act to discharge pollution from wastewater treatment plants at levels that exceed their permitted limits. If your community's wastewater treatment plant recorded violations in this report, your local sewage treatment plant could find itself charged with violating the Clean Water Act.

No municipality wants to be on the receiving end of a Clean Water Act citizen enforcement case. Bringing in lawyers, going to court, and paying penalties can be very costly. The best way to avoid this situation is to instead prioritize efforts to ensure that a facility is operated and maintained to meet its permit limits. A community may need to invest additional money in equipment or upgrades. This is money well spent if it serves the dual purpose of protecting human health and water quality and avoiding litigation.



South Fork of the Snake River. ICL Photo.

Facilities that are violating their permits, especially those facilities that stand out as having frequent violations or large loads over limits, are at grave risk of enforcement actions in the coming years. We encourage these communities to carefully review their facilities' performance and ensure local officials are taking the necessary steps to bring them into compliance with their permits.

WHAT YOU CAN DO



Fishing on the Snake River. Will Tiedemann Photo.

From community members to locally elected officials, this report is intended for a variety of audiences. The actions you can take depend on your role in the community. The steps outlined below can be used to start educating yourself about the wastewater treatment plant in your community or one that discharges into a river or lake where you and your family fish and swim.

- Review the municipal wastewater treatment plant's NPDES/IPDES permit. These documents, as well as fact sheets that provide greater detail and explain the permit conditions, can be accessed online: www.deq.idaho.gov/permits/issued-permits-and-water-quality-certifications/ and www.epa.gov/npdes-permits/idaho-npdes-permits or
- Visit the EPA's Enforcement and Compliance History Online website to review the performance of your local facility: echo.epa.gov/

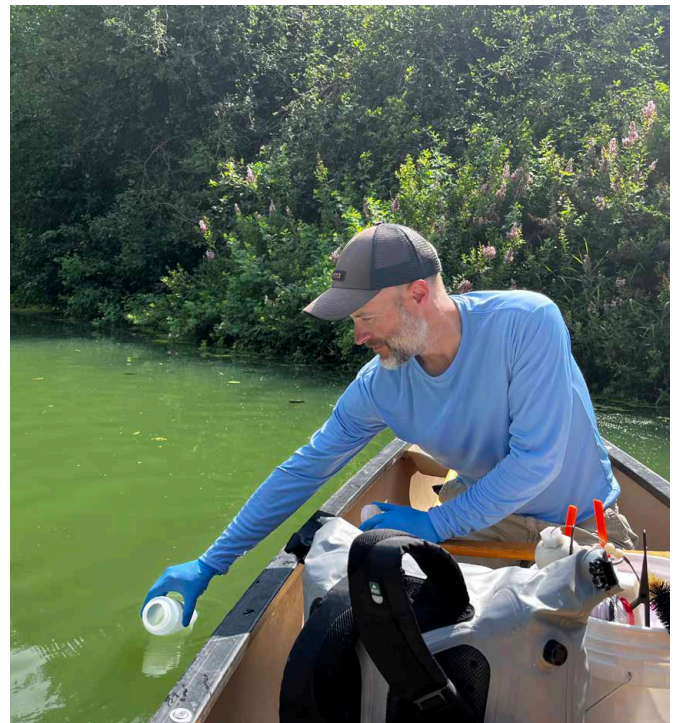
IF YOU LIVE IN A COMMUNITY WITH ZERO VIOLATIONS...

Contact your local elected officials and thank them. Having a well-run facility is no accident. Chances are your local city council has made key decisions—such as allocating financial resources and staffing—that reflect the importance of protecting your local water quality.

Consider writing a letter to city leaders or go to a city council meeting and say thank you.

IF YOU LIVE IN A COMMUNITY WITH VIOLATIONS...

Contact your local elected officials and voice your concerns. Bring a copy of this report to a city or town council meeting and raise your concerns directly to your elected officials.



ICL North Idaho Director, Brad Smith collecting a water quality sample in Boyer Slough. ICL Photo.

Tell local leaders that you are concerned because you want your community’s wastewater treatment plant to be part of protecting water quality—not harming it.

Tell them that you are concerned that violations at your sewage plant are a huge financial liability for the community. Fines of up to \$51,570 per violation per day could be very hard on your town. It would be much better for this money to be invested in fixing the problem instead of a lawsuit.

IF YOU’RE AN ELECTED OFFICIAL IN A COMMUNITY WITH VIOLATIONS...

It’s probably safe to say that no town councilors or mayors want their wastewater treatment plants to illegally pollute. Perhaps you didn’t know that your facility was violating the law, or perhaps you knew that it was racking up violations but didn’t realize this behavior was irregular, or perhaps you didn’t realize violations placed your community at huge financial risk. No matter how it happens, as an elected official, you have a responsibility to ensure that your community’s facility is well-run and complies with state and federal laws. This means that you need to be talking about this issue at council meetings and impressing on the operator of your facility that violations are unacceptable.

Some violations may indicate that your facility is not being operated correctly. Other violations may be the result of broken or old equipment that needs to be repaired or replaced. Eliminating violations may be as simple as paying better attention to how your plant is run or it may require that your community prioritize increased funding for the facility.

We encourage facilities struggling with compliance to contact the Idaho Department of Environmental Quality (IDEQ) to discuss the reasoning behind violations and possible solutions. In addition to providing technical support, IDEQ can provide guidance on how best to fund needed infrastructure improvement, such as low-interest loans or grant opportunities.

In fact, IDEQ and the State of Idaho administer wastewater treatment facility planning grants as well as construction loans themselves. These grants and loans are generally allocated according to the greatest need

No matter the cause or the needed fix, the time to act is now—all Idahoans need and deserve clean water.



No matter the cause or the needed fix, the time to act is now.

ICL Photo.

APPENDIX A

Facility	2022 Effluent Violations	2021 Effluent Violations	2022 Load Over Limits	2021 Load Over Limits	Violation Trend
ABERDEEN	17	2	0	0	↑
AHSAHKA	2	0	0	0	↑
AMERICAN FALLS	0	0	0	0	★
ASHTON	0	0	0	0	★
BLACKFOOT	4	29	0	32442	↓
BOISE (WEST)	1	3	0	0	↓
BOISE (LANDER ST.)	0	0	0	0	★
BONNERS FERRY	0	4	0	0	↓
BOVILL	6	7	39	0	↓
BUHL	0	7	0	0	↓
BURLEY	0	1	0	0	↓
CALDWELL	0	0	0	0	★
FARMWAY VILLAGE (CALDWELL)	0	0	0	0	★
CAMBRIDGE	1	2	0	0	↓
CAREY	16	0	1191	0	↑
CASCADE	14	0	0	0	↑
CLARKIA	2	1	0	0	↑
COEUR D'ALENE	1	1	0	0	↔
COTTONWOOD	12	1	45	0	↑
COUNCIL	0	4	0	4774	↓
CRAIGMONT	15	0	27	0	↑
CULDESAC	0	1	0	0	↓
DEARY	15	10	0	533	↑
DOVER	1	0	0	0	↑
DRIGGS	53	53	36457	45740	↔
ELK CITY	3	1	0	0	↑
ELK RIVER	1	0	0	0	↑
EMIDA	19	5	1774	0	↑
EMMETT	1	0	0	0	↑
FAIRFIELD	0	0	0	0	★

Facility	2022 Effluent Violations	2021 Effluent Violations	2022 Load Over Limits	2021 Load Over Limits	Violation Trend
FERNWOOD	0	2	0	93	↓
FILER	0	0	0	0	★
FIRTH	0	18	0	0	↓
FRANKLIN	0	0	0	0	★
FRUITLAND (PAYETTE RIVER)	2	6	0	99	↓
FRUITLAND (SNAKE RIVER)	0	0	0	0	★
GENESEE	12	14	362	976	↓
GEORGETOWN	0	0	0	0	★
GLENNS FERRY	3	2	0	0	↑
GOODING	4	10	0	0	↓
GRACE	1	0	0	0	↑
GRANGEVILLE	0	2	0	0	↓
GREENLEAF	0	0	0	0	★
HAGERMAN	0	0	0	0	★
HAILEY	0	6	0	58	↓
HANSEN	1	2	30	62	↓
HARRISON	13	9	66	205	↑
HAYDEN	0	0	0	0	★
HEYBURN	0	1	0	0	↓
HOMEDALE	13	3	24	22	↑
HORSESHOE BEND	0	3	0	0	↓
IDAHO FALLS	3	6	0	13609	↓
INKOM	0	0	0	0	★
JEROME	18	1	30584	0	↑
JULIAETTA	1	3	0	0	↓
KAMIAH	1	5	0	506	↓
KENDRICK	8	27	0	378	↓
KETCHUM	6	0	213	0	↑
KOOSKIA	1	3	0	0	↓
KUNA	16	3	7301	0	↑
LAPWAI	0	0	0	0	★
LAVA HOT SPRINGS	0	0	0	0	★
LEWISTON	0	0	0	0	★

Facility	2022 Effluent Violations	2021 Effluent Violations	2022 Load Over Limits	2021 Load Over Limits	Violation Trend
MACKAY	0	0	0	0	★
MARSING	5	20	0	0	↓
MCCALL	0	0	0	0	★
MERIDIAN	1	1	0	0	↔
MIDDLETON	0	0	0	0	★
MONTPELIER	1	2	0	0	↓
MOSCOW	0	0	0	0	★
MOYIE SPRINGS	0	0	0	0	★
NAMPA	0	2	0	0	↓
NEW MEADOWS	9	1	0	0	↑
NEW PLYMOUTH	0	0	0	0	★
NEZPERCE	34	7	18868	437	↑
NOTUS	6	0	540	0	↑
RIVERSIDE	0	8	0	0	↓
OROFINO	0	1	0	0	↓
OSBURN	17	0	153	0	↑
PARMA	45	48	39	0	↓
PAYETTE	0	0	0	0	★
PIERCE	14	5	0	0	↑
PLUMMER	10	23	65	336	↓
POCATELLO	0	0	0	0	★
POST FALLS	2	0	0	0	↑
POTLATCH	5	2	3662	0	↑
PRESTON	9	1	1120	0	↑
PRIEST RIVER	3	1	0	0	↑
REXBURG	4	10	0	0	↓
RICHFIELD	4	2	2162	0	↑
RIGBY	0	0	0	0	★
RIGGINS	1	0	0	0	↑
RIRIE	7	0	2502	0	↑
ROBERTS	0	0	0	0	★
ROCKLAND	0	0	0	0	★
SAINT ANTHONY	2	3	0	0	↓
SAINT MARIES	5	4	0	0	↑
SALMON	1	2	0	0	↓

Facility	2022 Effluent Violations	2021 Effluent Violations	2022 Load Over Limits	2021 Load Over Limits	Violation Trend
KOOTENAI - PONDERRAY	3	2	4	0	↑
SANDPOINT	3	1	0	0	↑
SAND CREEK	0	0	0	0	★
SHELLEY	0	0	0	0	★
SHOSHONE	7	2	0	0	↑
SMELTERVILLE	13	16	0	0	↓
PAGE	0	0	0	0	★
SODA SPRINGS	4	3	3	0	↑
STAR	0	0	0	0	★
STITES	0	0	0	0	★
TENSED	0	8	0	239	↓
TROY	3	1	0	0	↑
TWIN FALLS	1	0	0	0	↑
VIOLA	0	0	0	0	★
WEIPPE	2	1	0	0	↑
WEISER	0	1	0	0	↓
WHITE BIRD	3	0	0	0	↑
WILDER	1	7	0	0	↓
WINCHESTER	3	0	0	0	↑
WORLEY	5	8	1522	2434	↓

- ↓ A downward blue arrow indicates the facility had less effluent violations in 2022 than 2021.
- ↑ An upward red arrow indicates the facility had more effluent violations in 2022 than 2021.
- ★ A gold star indicates the facility had no violations in 2022 or 2021.
- ↔ A sideways double arrow indicates the facility had the same number of violations on 2022 and 2021