

## FOURTH ANNUAL IDAHO WASTEWATER TREATMENT PLANT PERFORMANCE EVALUATION

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

# Jolations

## During 2017–2019, There Were 1,606 Violations of the Clean Water Act

4th Annual Report Reviewing Years 2017 through 2019

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#### **EXECUTIVE SUMMARY**

Idahoans take clean water for granted. We drink it, play in it, use it for irrigation, and even raise fish in it.

Clean water and adequate sewage treatment are two essential services provided by Idaho cities, towns, and municipalities. But more than 75% of all sewage facilities in Idaho failed to comply with U.S. Environmental Protection Agency discharge permits for harmful bacteria, chemicals, toxic metals and other substances as found in the Idaho Conservation League's fourth annual assessment. Repeat, nearly 8 out of every 10 sewage treatment plant failed to comply.

That means that the water we, our families, our pets and Idaho's wildlife drink, swim and recreate in may seriously harm or endanger our health.

Even more telling is that 10 of the 112 facilities spread across Idaho were responsible for nearly half of all violations reported statewide. All 10 of these worst performing facilities were located in relatively small rural communities.

The top 3 worst performers were located in southern Idaho: Driggs, Wilder and Hagerman. Amazingly, these top three worst-performing facilities are responsible for 20% of all violations in the state.

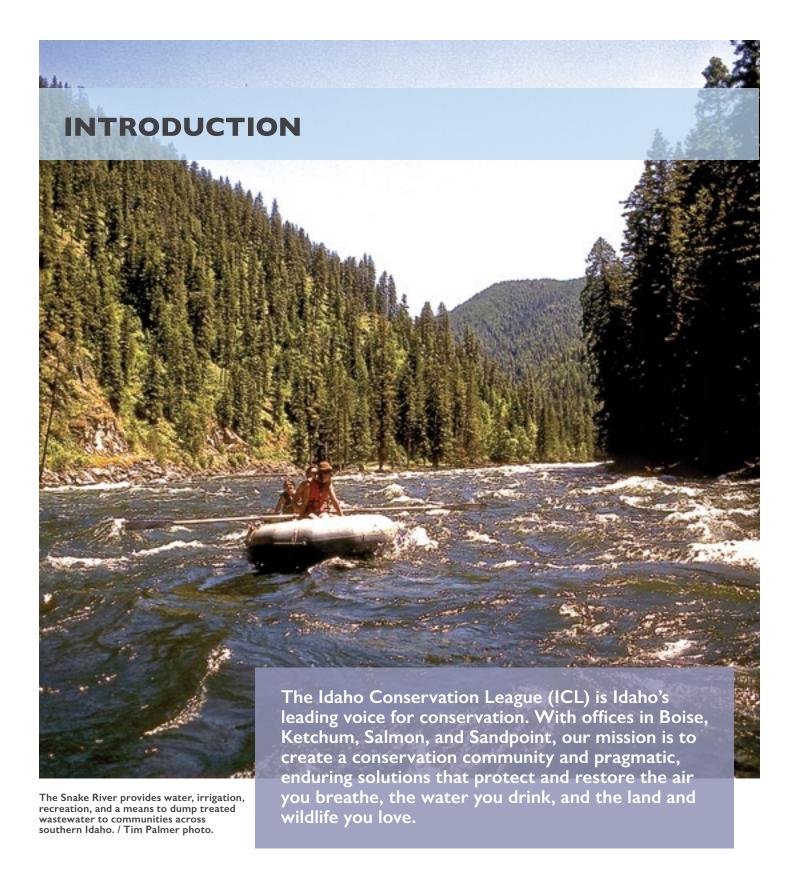
But the top 10 worst were more evenly split between communities above and below Grangeville.

On the positive side, 28 cities or towns reported zero discharge violations during the three-year period of our review. Of these, 19 also had zero violations in our report last year (for years 2016–2018).

Six facilities – American Falls, Fruitland (Payette River), Fruitland (Snake River), Kamiah, McCall, and Middleton – improved their performance to zero violations for our review of the 2017-2019 period. Those that improved should be commended.

But facilities in Idaho without any violations still number just 25% of the total, an abysmal rate. Idahoans and local leaders who live in areas with facilities that have violations should act now to fix the problem. The end of this report has concrete suggestions on ways to engage local leaders to act to improve sewage treatment plants with violations.





ICL's water program 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 issuance of discharge permits in Idaho.

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 a community's sewage. 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. Increasingly, smaller communities are deciding that treating their wastewater and then land-applying it to vegetation is a cost-effective and environmentally preferred strategy. This report reviews only municipalities that have discharge permits and retain the option of discharging to local waterbodies.

Wastewater treatment plants must receive permits prior to discharging wastewater. These permits, which are unique to each facility, guide operations and limit pollutants in the treated wastewater discharged to receiving lakes or streams. To protect water quality, the U.S. Environmental Protection Agency (EPA) tracks compliance with these permits. Results are available online.

The mission of the Idaho Conservation League, a statewide conservation organization, is to protect Idaho's environment — and clean water is a large part of our focus. 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.

We are concerned that many Idahoans may not know what it takes to protect our state's waterbodies; they may not understand wastewater discharge permits or know how well their communities' treatment plants are operating. To make this issue more accessible to the public, we reviewed the permits and all available discharge and monitoring reports and assessed whether wastewater treatment plants across Idaho were complying with their permits.

This report, which is the fourth annual report, provides background on discharge permits and summarizes our findings for a three-year period (January 2017 through December 2019). We hope cities will feel pressure to do a better job operating their facilities as Idahoans learn more about wastewater discharge permits, how these permits guide operations and limit pollutants, and whether their communities' wastewater treatment plants are complying with their permits. We encourage concerned citizens to contact their city or local government to learn more or provide feedback.



Peter Lovera photo.

## WASTEWATER TREATMENT PLANTS AND PERMITS

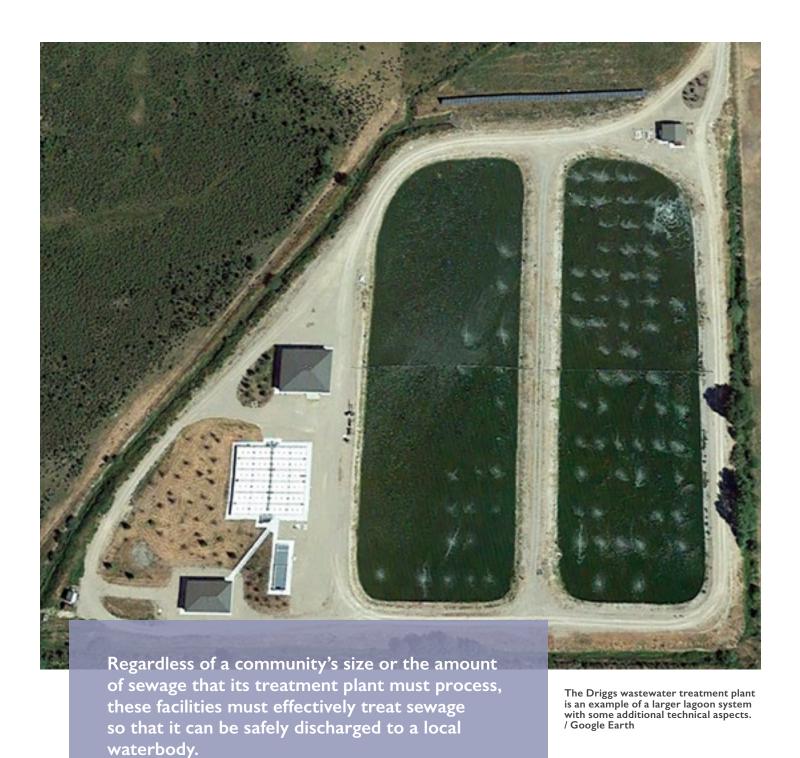
Municipal wastewater treatment plants play a critical role in protecting water quality — keeping our rivers and lakes fishable and swimmable. These treatment plants come in all shapes and sizes. Generally speaking, bigger cities like Boise have facilities capable of treating larger daily inflows of sewage. 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



The Inkom wastewater treatment plant is an example of a small lagoon-based facility. / Google Earth



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.

#### 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 is shifting to the Idaho Department of Environmental Quality (IDEQ). Current EPA-issued permits will stay in effect until they expire and are replaced by permits from the IDEQ. These new permits will be called Idaho Pollutant Discharge Elimination System (IPDES) permits.

Every wastewater treatment plant is different. Similarly, discharge permits also 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.



South Fork Snake River / BLM Photo.



Aquatic weed growth in Boyer Slough, into which the effluent from the Kootenai-Ponderay wastewater treatment plant discharges. / Justin Hayes.

## WHAT POLLUTANTS ARE COVERED IN DISCHARGE PERMITS?

Discharge permits regulate what can and cannot be discharge. 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 phosphorus. Too much 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 can consume oxygen from the water. The resulting low oxygen levels harm fisheries. Phosphorus and other pollutants 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 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 I).

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

POLLUTANT	EXPLANATION
Ammonia	High levels of ammonia 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.
рН	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	Phosphorus 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.

#### 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 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 dire. The Clean Water Act provides for penalties of up to \$51,570 per violation per day.

Although the EPA 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 this data in the field.

We reviewed discharge data for all 112 municipal wastewater treatment plants with NPDES or IPDES permits. This data covered the last three years (January 2017 through December 2019), and we accessed the information at the EPA's Enforcement and Compliance History Online website: echo.epa.gov.

This website 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 (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.

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 they are the easiest to explain to the public.

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 treated the same — it is a violation of the permit condition and thus a violation of the Clean Water Act.

There is a significant range in the performance of facilities across Idaho. Over our three-year review period, some facilities reported zero violations, many facilities reported less than 10 violations, while others reported over 100 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 7. 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.



South Fork Snake River / BLM Photo.

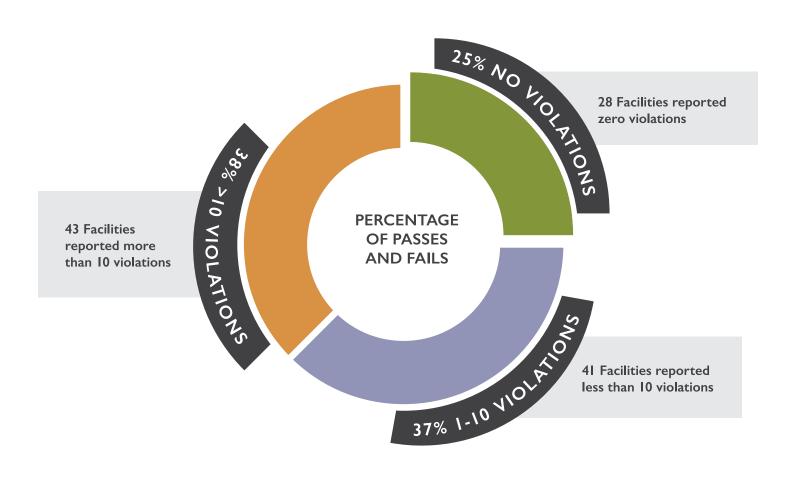
## RESULTS OF IDAHO CONSERVATION LEAGUE'S REVIEW

#### **HOW MANY FACILITIES HAD VIOLATIONS?**

In Idaho, II2 municipal wastewater treatment plants have NPDES or IPDES permits. Our review showed that only 28 of the municipal wastewater treatment plants (25%) had no violations (Figure I). The remaining 84 municipal wastewater facilities (75%) violated their permit limits in some form.

Appendix I lists all II2 municipal wastewater treatment plants in Idaho and the number of discharge violations, if any, during the three-year period of our review.

Figure 1: Percentage of the 112 wastewater treatment plants with no discharge violations or with a discharge violation, January 2017 through December 2019.



#### WHO HAD A PERFECT RECORD?

Twenty-eight cities reported zero discharge violations during the three-year period of our review. Of these, 21 had previously reported zero violations over the 2016-2018 period that we reported on last year. Six facilities – American Falls, Fruitland (Payette River), Fruitland (Snake River), Kamiah, McCall, and Middleton – improved their performance to zero violations in our review of the 2017-2019 period.

#### **COMMUNITIES WITH NO DISCHARGE VIOLATIONS FOR 2016-2018**

- American Falls
- Bonners Ferry
- Buhl
- Carey
- Cascade
- Dover
- Emida
- Filer
- Fruitland (Payette River)
- Fruitland (Snake River)
- Georgetown
- Grace
- Kamiah
- Ketchum

- Nez Perce Tribe Lapwai Valley
- Lava Hot Springs
- Lewiston
- McCall
- Middleton
- Moscow
- New Plymouth
- Payette
- Riggins
- Roberts
- Rockland
- Star
- Viola

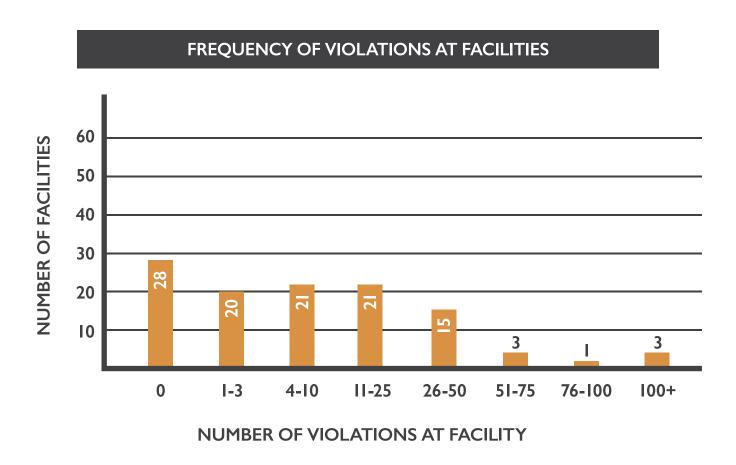
Achieving 100% compliance with one's discharge permit is not an accident. These communities deserve praise for prioritizing clean water.

#### WHO HAD DISCHARGE VIOLATIONS?

Our review found that 84 facilities had violated their NPDES/IPDES permits during the last three years. In total, these facilities reported 1,606 discharge violations over the three-year period from January 2017 through December 2019.

However, the data revealed huge variability among facilities with regard to the frequency of violations. Most of the facilities that violated their NPDES/IPDES permits reported fewer than 10 violations over the last three years (Figure 2). At the other end of the spectrum, several facilities reported that they had violated their permits more than 100 times. Clearly, there are gradations of compliance — and some facilities are struggling.

Figure 2: Number of municipal wastewater treatment plants in Idaho with the associated number of violations, January 2017 through December 2019.

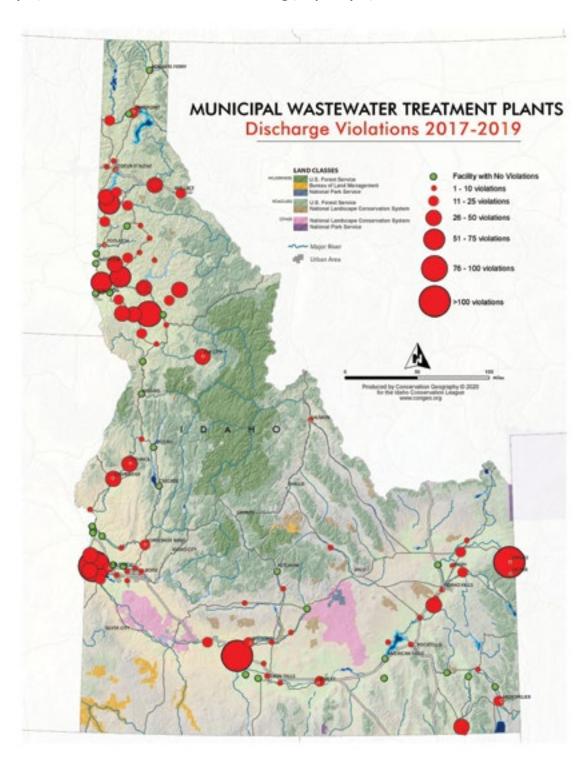




Aimee Moran photo.

And as shown in the map, cities and towns, big and small, and distributed all across Idaho have experienced violations (Figure 3).

Figure 3: Map of violations with relative size indicating frequency of violations.



#### WHAT ARE THE 10 WORST FACILITIES IN IDAHO?

While no violations are acceptable, some of Idaho's municipal wastewater treatment plants are struggling much more than others. Indeed, a small subset of the II2 municipal facilities spread across Idaho is responsible for a hugely disproportionate number of the violations. Just 10 facilities accounted for nearly half (46.4%) of all of the violations that occurred statewide (Figures 4 and 5). The worst performing facilities in Idaho clearly have some significant structural or operational problems that must be addressed.

Amazingly, Driggs, Hagerman, and Wilder - the three worst performing facilities in the state – are collectively responsible for 20% of all violations in the state.

Figure 4: The 10 worst performing facilities have nearly half the violations in the entire state.

### VIOLATIONS AT THE 10 WORST WWTPS COMPARED TO VIOLATIONS AT ALL OTHER WWTPS

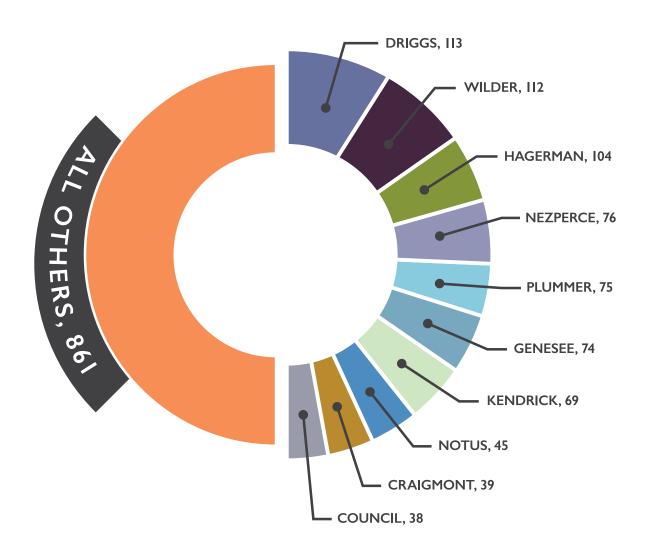
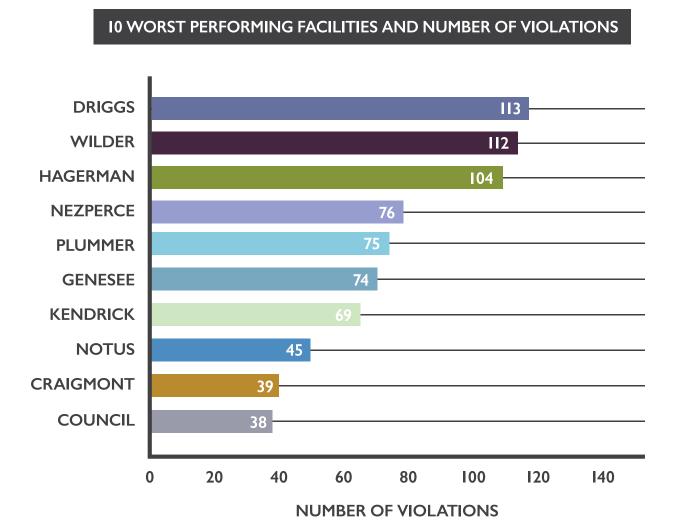


Figure 5: The number of violations at each of the 10 worst facilities in Idaho.



While the map of municipal wastewater treatment plants (Figure 3) showed that violations occurred all across the state at big and small facilities in both urban and rural settings, the same is not true of the 10 worst facilities (Figure 6). All of the 10 worst performing wastewater treatment plants are located in relatively small rural communities.

#### WHAT WAS THE NATURE OF THESE VIOLATIONS?

Data submitted by these 10 facilities demonstrate that they amassed a total of 745 discharge violations from January 2017 through December 2019. These violations were for a variety of pollutants including coliform bacteria (E. coli), ammonia, chlorine, and excess solids (Table 2). In each of these instances, a facility discharged these pollutants into a lake or stream at levels that violated its permit, placing downstream users, human health and fish at risk.

Figure 6: Map showing the location of the 10 worst performing facilities with relative size indicating frequency of violations.

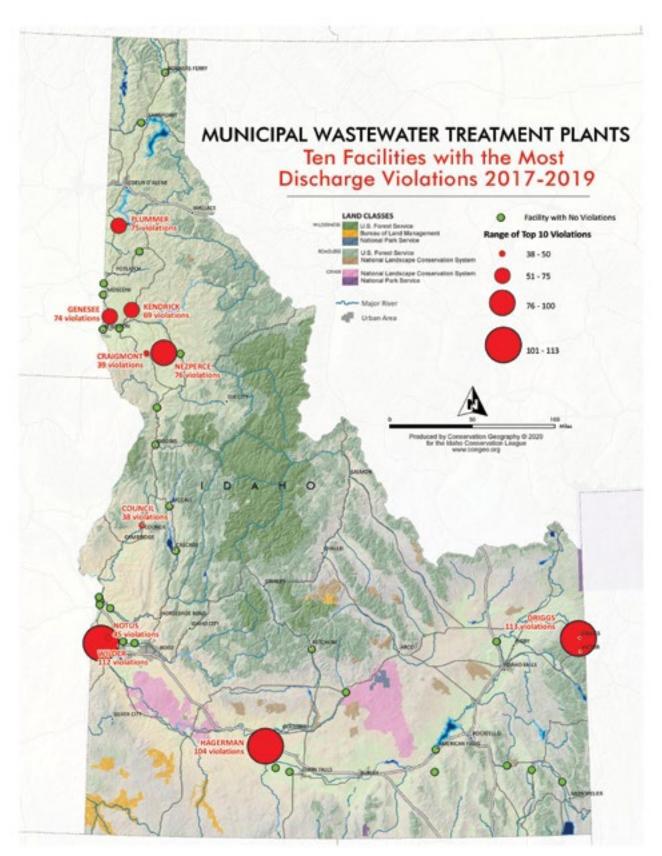


Table 2: The 10 worst performing wastewater treatment plants, number of violations, and pollutants leading to the violation, January 2017 through December 2019.

FACILITY	VIOLATIONS	POLLUTANTS
Driggs	113	Ammonia   BOD, 5-day, 20 deg. C   Solids, suspended percent removal
Wilder	112	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Hagerman	104	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Nezperce	76	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Plummer	75	Ammonia   E. coli   Phosphorus   Solids, total suspended
Genesee	74	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Kendrick	69	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Notus	45	Ammonia   BOD, 5-day, 20 deg. C   E. coli   Phosphorus   Solids, total suspended   pH
Craigmont	39	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Council	38	BOD, 5-day, 20 deg. C   E. coli   Solids, suspended percent removal   Solids, total suspended

#### **COMPARISON WITH 2016-2018 VIOLATIONS**

This report is our fourth annual wastewater treatment plant compliance report. Our previous reports reviewed data from three-year intervals, including 2014-2016, 2015-2017, and 2016–2018. Previous reports are available at <a href="mailto:bit.ly/2014\_2016|CLIdWastewaterRpt">bit.ly/2014\_2016|CLIdWastewaterRpt</a>

When comparing results from last year's report (2016–2018) and this report (2017–2019), it is important to understand that our reports cover three-year windows that overlap. Therefore, violations that occurred in 2016 are not tallied in the 2017–2019 report. But a violation that occurred in 2017 or 2018 is documented in both reports.

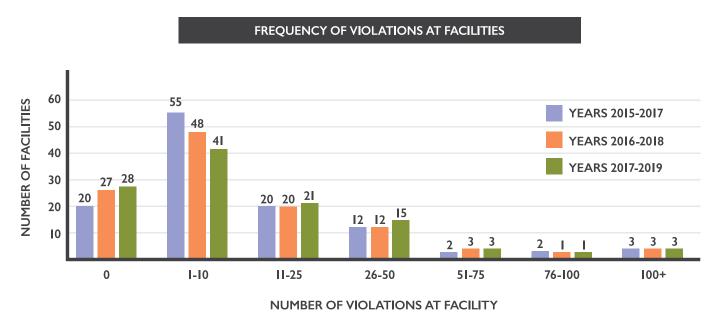
Overall, it is promising to see that the total number of violations continues to decrease from 1,732 for the 2016–2018 period to 1,606 for the 2017-2019 period. However, two facilities – including the historically worst performing facility in Inkom – are no longer discharging wastewater to a river or lake and were thus not included in our review. Though the overall number of violations is still quite high, it is trending in the proper direction.

The number of facilities that achieved zero discharge violations increased for the 2017-2019 reporting period, from 27 in the 2016-2018 report to 28 facilities. Figure 7 compares the frequency of violations reported at facilities over the last three review periods.



Tim Palmer photo.

Figure 7: Comparison of frequency of violations at the 112 wastewater treatment plants between the 2015-2017, 2016-2018, and the 2017–2019 review periods.



For the most part, facilities that were highlighted as very poor performers in our 2016–2018 report continued to perform poorly in this review. In fact, 8 of the prior 10 worst facilities remained in the 10 worst category for the 2017–2019 report, and 7 facilities have been listed as a "10 Worst Facility" for each review period (Table 3). The cities of Notus and Craigmont have newly joined the ranks of the 10 worst, becoming the 8th and 9th, respectively, worst performers in 2017–2019. In last year's report, Notus was ranked 11th and Craigmont was ranked 14th.

Table 3: Ranking and number of violations for the top 10 worst performing wastewater treatment plants for the 2017–2019 period, compared with their ranking and number of violations of these same facilities for the 2016–2018 and 2015-2017 periods.

TOP 10 WORST	2017-20	019	2016-	2018	2015-	2017
PERFORMERS	# OF VIOLATIONS	RANK	# OF VIOLATIONS	RANK	# OF VIOLATIONS	RANK
Driggs	161	I	116	3	124	3
Wilder	112	2	95	4	77	5
Hagerman	104	3	133	2	125	2
Nezperce	76	4	59	7	51	7
Plummer	75	5	74	5	94	4
Genesee	74	6	71	6	63	6
Kendrick	69	7	50	8	39	10
Notus	45	8	39	11	21	26
Craigmont	39	9	29	14	32	13
Council	38	10	48	9	46	8
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#### WHAT'S CHANGED OVER FOUR YEARS

This is the fourth year ICL has produced a report on wastewater treatment plant performance. 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 ICL will continue to track each facility's compliance, particularly those with poor track records

There is still work to be done, but multiple facilities have improved and are ensuring the water they discharge meets regulatory standards. The publishing of this report and additional pressure on municipalities and the plants themselves are responsible for some of this progress.

As mentioned previously, violating a permit limit is a violation of the Clean Water Act, which can result in significant penalties. Table 4 lists the cities that have received penalties during the last three years for violating their permit limits.

Table 4: Summary of penalties imposed on facilities due to wastewater treatment plant discharge violations.

СІТҮ	PENALTY	POLLUTANTS WITH VIOLATIONS
Glenns Ferry	\$2,000	BOD   TSS   E. coli
Council	\$15,000	BOD   TSS
Genesee	\$30,000	pH  TRC  TSS  E. coli   BOD
St. Maries	\$12,500	pH  TRC   BOD
Kendrick	\$9,900	E. coli   BOD   TSS   pH   TRC
Worley	\$4,100	E. coli   TSS   BOD   ammonia
Richfield	\$13,500	pH  TRC   E. coli   BOD
Driggs	\$13,500	E. coli   BOD   TSS   TRC   ammonia

CITY	PENALTY	POLLUTANTS WITH VIOLATIONS
Nezperce	\$6,500	E. coli   TSS   BOD   TRC   pH.
Wilder	\$8,900	E. coli   TSS   BOD   TRC   pH
Plummer	\$2,500	E. coli   BOD   TSS   ammonia   phosphorus
Plummer	\$2,500	E. coli   BOD   155   ammonia   phosphorus

E. coli: Escherichia coli

BOD: Biological Oxygen Demand

TSS: Total Suspended Solids
TRC: Total Residual Chlorine

In addition to – or in lieu of – financial penalties, certain facilities were either ordered, or are voluntarily choosing, to make operational changes or upgrades to their systems in order to rectify permit violations. Below is a list of facilities that either are, or soon will be, making changes to achieve compliance with their permit.

- The City of Troy entered into a consent order with the EPA, agreeing to spend \$10,100 and to a timeline for completion of operational and structural changes and a facility plan.
- The City of Genesee agreed to enter into a compliance order that requires the City to identify and
  complete capital improvements to both the collection system and wastewater treatment facility by July I,
  2023. These upgrades will improve the water quality of the receiving waters by minimizing the occurrence
  of future effluent limit violations.
- The City of St. Maries agreed to enter into a compliance order that requires the City to identify and
  complete capital improvements to both the collection system and wastewater treatment facility by
  October 31, 2020. These upgrades will improve the water quality of the receiving waters by minimizing the
  occurrence of future effluent limit violations.
- The City of Worley has agreed to reassess effluent sampling protocols; procure new sampling equipment; improve influent piping; provide refresher training to its wastewater employees; and update its Emergency Response and Notification Plan. The Environmental Benefits of this enforcement action will be a reduction in the quantity of pollutants reaching the Spokane River, a water of the United States, which includes 31 pounds per year of suspended solids.
- The City of Driggs has agreed to enter into a compliance order that requires the City to identify and complete modifications and corrective actions to the facility within two years. The upgrades will minimize the occurrence of future effluent limit violations.
- The City of Fairfield agreed to a timeline to study the cause of permit limit exceedances for total
  suspended solids (TSS), pH, and biochemical oxygen demand (BOD), conduct a sampling plan, and select
  and implement a course of action to eliminate effluent limit exceedances. Compliance with the Order will
  eliminate future discharges to waters of the U.S. in quantities greater than allowed by the permit.
- The City of Pierce and the EPA have agreed to a timeline for completion of a multiphase upgrade project due to violating permit limits for E. coli, total suspended solids (TSS), biochemical oxygen demand, 5-day 20% removal (BOD5), and total residual chlorine (TRC).

This information was gathered using the EPA's Enforcement and Compliance History Online website. If you would like more information on enforcement actions taken against your local facility, please visit: <a href="mailto:echo.epa.gov/">echo.epa.gov/</a>

#### CONCLUSIONS

Idahoans feel very strongly about their right to clean water for drinking, fishing and swimming. Municipal wastewater treatment plants are really the front line for protecting water quality and human health. Properly built, operated and maintained, sewage treatment plants are critical for keeping our rivers and lakes fishable and swimmable. Yet just 25% of the sewage treatment plants reviewed for this report are operating without 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 NPDES/IPDES 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 — and can result in significant financial penalties and enforcement actions.

Unfortunately, 84 facilities reported violations. These facilities reported 1,606 water quality violations that jeopardized Idaho's drinking water, public health and fisheries.



We commend facilities that protect water for aquatic life, public health and recreation. / Lana Weber.

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 well over 100 violations. Facilities reporting violations need to carefully evaluate the causes for their violations and then identify and implement solutions.

ICL commends the 28 facilities that achieved full compliance with their NPDES/IPDES permits in the study period. 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 reported violations in this report — especially if your community reported more than 10 violations — 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 and ending up in court and then having to pay penalties can be very costly. The 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 inevitable litigation.



Money is well spent if it protects human health and water quality. / Scott Knickerbocker

Facilities that are violating their permits, especially those facilities that stand out as having frequent violations, are at grave risk of enforcement actions in the coming years. Indeed, ICL will soon initiate enforcement actions against many of the facilities noted in this report. 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



Educate yourself about wastewater discharge in your favorite lakes and streams. / Angel Hart

This report is intended for a variety of audiences — from community members to locally elected officials. The actions you can take depend on your role in the community. Regardless of your role, start by 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.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/



Brook Vinnedge photo.

#### 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, or better yet, go to a city council meeting and say thank you.

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

- Contact your local elected officials and tell them that you are concerned. Better yet, bring a copy of this report to a city or town council meeting and raise your concerns directly to your elected officials.
- Tell them that you are concerned because you want your community's wastewater treatment plant to be part of protecting water quality not harming it.
- Also tell them that you are concerned that the 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.



Justin Hayes photo.

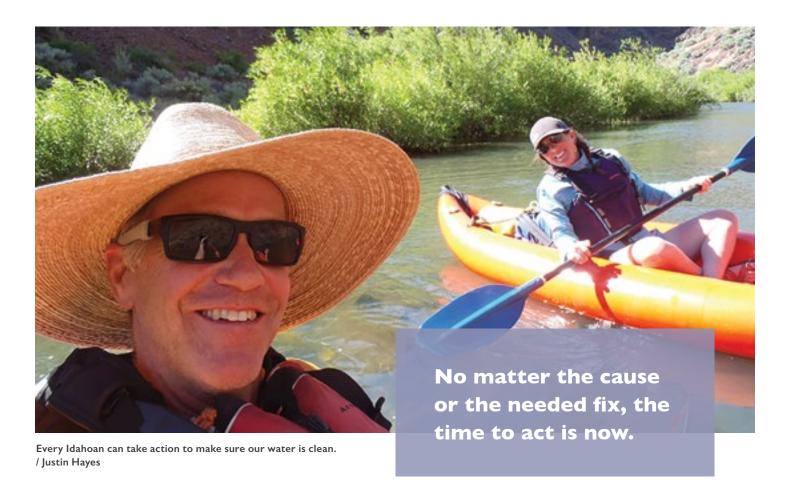
#### IF YOU'RE AN ELECTED OFFICIAL IN A COMMUNITY WITH VIOLATIONS...

It's probably safe to say that no town councilors or mayors want their wastewater treatment plants to 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 not the norm. Or perhaps you didn't realize violations placed your community at huge financial risk.

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.



#### **APPENDIX I**

Alphabetical list of all 112 municipal wastewater treatment plants in Idaho that have NPDES or IPDES permits and the violations incurred over the past three years, if applicable.

FACILITY	VIOLATIONS	POLLUTANTS
Aberdeen	7	E. coli   Solids, total suspended
Ahsahka	28	Chlorine E. coli Solids, suspended percent removal Solids, total suspended
American Falls	0	
Blackfoot	10	BOD, 5-day, 20 deg. C   E. coli   Floating solids or foam   Phosphorus   Solids, suspended percent removal   Solids, total suspended
Boise - Lander	2	Ammonia
Boise - West	I	E. coli
Bonners Ferry	0	
Bovill	5	BOD, 5-day, 20 deg. C E. coli Solids, total suspended
Buhl	0	
Burley	6	Ammonia Coliform, fecal general E. coli
Caldwell	12	Ammonia   E. coli   Floating solids or foam   Solids, total suspended
Cambridge	26	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Carey	0	
Cascade	0	
Clarkia	6	Chlorine   Solids, total suspended
Coeur d'Alene	8	BOD, carbonaceous, 5-day, 20 deg. C E. coli Solids
Cottonwood	П	BOD, 5-day, 20 deg. C Chlorine  E.coli
Council	38	BOD, 5-day, 20 deg. C   E. coli   Solids, suspended percent removal   Solids, total suspended
Craigmont	39	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended   pH

FACILITY	VIOLATIONS	POLLUTANTS	
Culdesac	16	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli	
Deary	23	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended   pH	
Dover	0		
Driggs	113	Ammonia   BOD, 5-day, 20 deg. C   Solids, suspended percent removal	
Elk City	32	BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Temperature, water deg. centigrade   pH	
Elk River	5	E. coli pH	
Emida	0		
Emmett	2	Coliform, fecal general E. coli	
Fairfield	6	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal	
Filer	0		
Firth	33	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Phosphorus   Solids, suspended percent removal   Solids, total suspended	
Franklin	9	BOD, 5-day, 20 deg. C   Chlorine   Solids, total suspended	
Fruitland (Payette)	0		
Fruitland (Snake)	0		
Genesee	74	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-da percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended	
Georgetown	0		
Glenns Ferry	14	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended	
Gooding	16	Ammonia	
Grangeville	I	Solids, total suspended	
Greenleaf	I	E. coli	

FACILITY	VIOLATIONS	POLLUTANTS
Hagerman	104	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Hailey	6	Ammonia   E. coli   Phosphorus
Hansen	8	Chlorine   E. coli   Solids, total suspended
Harrison	18	Ammonia   BOD, 5-day, 20 deg. C   E. coli   Solids, suspended percent removal   Solids, total suspended
Hayden	I	Zinc
Heyburn	16	Coliform, fecal general   E. coli   Phosphorus   Solids, suspended percent removal   Solids, total suspended
Homedale	27	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Phosphorus   Solids, suspended percent removal   Solids, total suspended   pH
Horseshoe Bend	18	рН
Idaho Falls	7	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli
Jerome	I	Phosphorus
Juliaetta	I	Temperature, water deg. centigrade
Kamiah	0	
Kendrick	69	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Ketchum	0	
Kooksia	5	BOD, 5-day, 20 deg. C   pH
Kootenai-Ponderay	2	Solids, suspended percent removal
Kuna	2	Ammonia
Lapwai	0	
Lava Hot Springs	0	
Lewiston	0	
Mackay	3	BOD, 5-day, percent removal   Chlorine

FACILITY	VIOLATIONS	POLLUTANTS
Marsing	19	BOD, 5-day, 20 deg. C   E. coli   Solids, total suspended
McCall	0	
Meridian	2	Coliform, fecal general
Middleton	0	
Montpelier	11	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   Solids, suspended percent removal   Solids, total suspended
Moscow	0	
Nampa	4	E. coli
New Meadows	7	Chlorine   Phosphorus   Solids, total suspended
New Plymouth	0	
Nezperce	76	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Notus	45	Ammonia   BOD, 5-day, 20 deg. C   E. coli   Phosphorus   Solids, total suspended   pH
Orofino	8	Chlorine   Solids, total suspended
Osburn	18	Ammonia   BOD, 5-day, percent removal   Cadmium   Lead   Solids, suspended percent removal   Solids, total suspended   Zinc
Parma	37	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Phosphorus   Solids, suspended percent removal   Solids, total suspended
Payette	0	
Pierce	26	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Plummer	75	Ammonia   E. coli   Phosphorus   Solids, total suspended
Pocatello	2	Phosphorus
Post Falls	I	Zinc
Potlatch	6	BOD, 5-day, 20 deg. C   E. coli   Solids, total suspended

FACILITY	VIOLATIONS	POLLUTANTS
Preston	29	Ammonia   BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Phosphorus   Solids, total suspended
Priest River	15	E. coli Solids, total suspended
Rexburg	16	Ammonia   Lead   Silver   Solids, suspended percent removal   Solids, total suspended   pH
Richfield	6	BOD, 5-day, 20 deg. C   E. coli   Solids, total suspended
Rigby	5	BOD, 5-day, 20 deg. C
Riggins	0	
Ririe	П	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Solids, suspended percent removal   Solids, total suspended
Riverside Water	П	BOD, 5-day, percent removal   E. coli   Solids, suspended percent removal   Solids, total suspended
Roberts	0	
Rockland	0	
Saint Anthony	10	Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH
Saint Maries	20	BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   pH
Salmon	I	E. coli
Sandpoint	16	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended   pH
Shelley	I	Phosphorus

FACILITY	VIOLATIONS	POLLUTANTS
Shoshone	2	Chlorine E. coli
Smelterville	25	Ammonia   BOD, 5-day, 20 deg. C   E. coli   Lead   Solids, suspended percent removal   Solids, total suspended
Soda Springs	4	Ammonia   E. coli   Solids, suspended percent removal
South Fork Coeur d'Alene	26	Ammonia   Cadmium   E. coli   Solids, total suspended   Zinc
Star	0	
Tensed	21	BOD, 5-day, 20 deg. C   Chlorine   E. coli   Solids, total suspended
Troy	27	BOD, 5-day, 20 deg. C   E. coli   Solids, total suspended
Twin Falls	2	E. coli
Viola	0	
Weippe	20	BOD, 5-day, percent removal   Chlorine   E. coli   Floating solids or foam   Solids, suspended percent removal   pH
Weiser	I	BOD, 5-day, percent removal
White Bird	0	
Wilder	112	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Solids, suspended percent removal   Solids, total suspended
Winchester	26	BOD, 5-day, 20 deg. C   BOD, 5-day, percent removal   Chlorine   E. coli   Floating solids or foam   Oil and grease   Solids, suspended percent removal   Solids, total suspended
Worley	28	Ammonia   BOD, 5-day, percent removal   Chlorine   Solids, suspended percent removal   Solids, total suspended