



IDAHO
CONSERVATION
LEAGUE



THIRD ANNUAL IDAHO WASTEWATER TREATMENT PLANT PERFORMANCE EVALUATION

**MOST SEWAGE TREATMENT PLANTS IN IDAHO
ARE NOT MAKING THE GRADE**

1,732

VIOLATIONS

During 2016–2018, There Were 1,732 Violations
of the Clean Water Act

3rd Annual Report
Reviewing Years 2016 through 2018

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EXECUTIVE SUMMARY

Idahoans need clean water. We drink it, rely on it for healthy fisheries, and recreate in it.

One of the most vital components of keeping our water clean is how we deal with wastewater. Sewage treatment plants are required by the U.S. Environmental Protection Agency (EPA) to meet certain standards of water quality before the wastewater is discharged into Idaho's water bodies. But the Idaho Conservation League's third assessment of all of the sewage treatment plants in the state found that more than 76% of such facilities failed to comply with their discharge limits for harmful bacteria, chemicals, toxic metals and other substances. Nearly 8 out of every 10. Idahoans rely on these treatment plants to keep our water clean and safe for us, our families, our pets and Idaho's wildlife, but many of them are falling short.

This report compiles and examines the permit violations for every facility in the state and rates them on their record of meeting the important legal standards for clean water. **Facilities with no discharge violations received a passing grade. Facilities with violations received a failing grade.**

Interestingly, we found that 10 of the 114 facilities spread across Idaho were responsible for nearly half of all violations reported statewide. The top 3 worst performers were located in southern Idaho: Inkom, Hagerman and Driggs. But the top 10 were evenly split between communities north and south of the Salmon River.

Amazingly, Inkom, the single worst performing facility in the state, is responsible for 9% of all violations in the entire state.

On the positive side, 27 cities or towns reported zero discharge violations during the three-year period of our review. Of these, 18 had received a passing grade for the 2015–2017 period that we reviewed and reported on last year. Eight facilities — Boise (Lander St), Bonners Ferry, Buhl, Post Falls, Juliaetta, Ketchum, Kuna and Moscow — improved their grades from fail for the 2015–2017 period to pass in our review of the 2016–2018 period.

Those that improved and those that maintained passing grades should be commended. But all passing facilities in Idaho still number just 24% of the total, an abysmal pass rate. Idahoans and local leaders who live in areas with facilities that have failing grades should act now to fix the problem. This report contains suggestions on ways to engage local leaders to act to improve sewage treatment plants with failing grades.



Tim Palmer photo.

Idahoans rely on wastewater treatment facilities to keep our water clean for us, our families, our pets and Idaho's wildlife.

INTRODUCTION



The Idaho Conservation League is Idaho's leading voice for conservation. With offices in Boise, Ketchum and Sandpoint, we work to protect the air you breathe, the water you drink and the wild places you and your family love.

Clean water is important to Idahoans who fish and recreate in our lakes and streams. / Hannah Binninger photo.

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 third annual report, provides background on discharge permits and summarizes our findings for a three-year period (January 2016 through December 2018). 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



Regardless of a community's size or the amount of sewage that its treatment plant must process, the bottom line is the same: 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

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 (DEQ). Current EPA-issued permits will stay in effect until they expire and are replaced by permits from DEQ. 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 maintains an online database 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 website: www.epa.gov/npdes-permits/idaho-npdes-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, where effluent is discharged from the Kootenai-Ponderay wastewater treatment plant.

WHAT POLLUTANTS ARE COVERED IN DISCHARGE PERMITS?

Discharge permits regulate what can and cannot be discharged; 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 nutrients 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 1).

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. |
| 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 | 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 bad 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. In fact, 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 114 municipal wastewater treatment plants with NPDES permits. This data covered the last three years (January 2016 through December 2018), 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 grading 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 either pass or fail. 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.

Facilities with no discharge violations received a passing grade. Facilities with violations received a failing grade.

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.

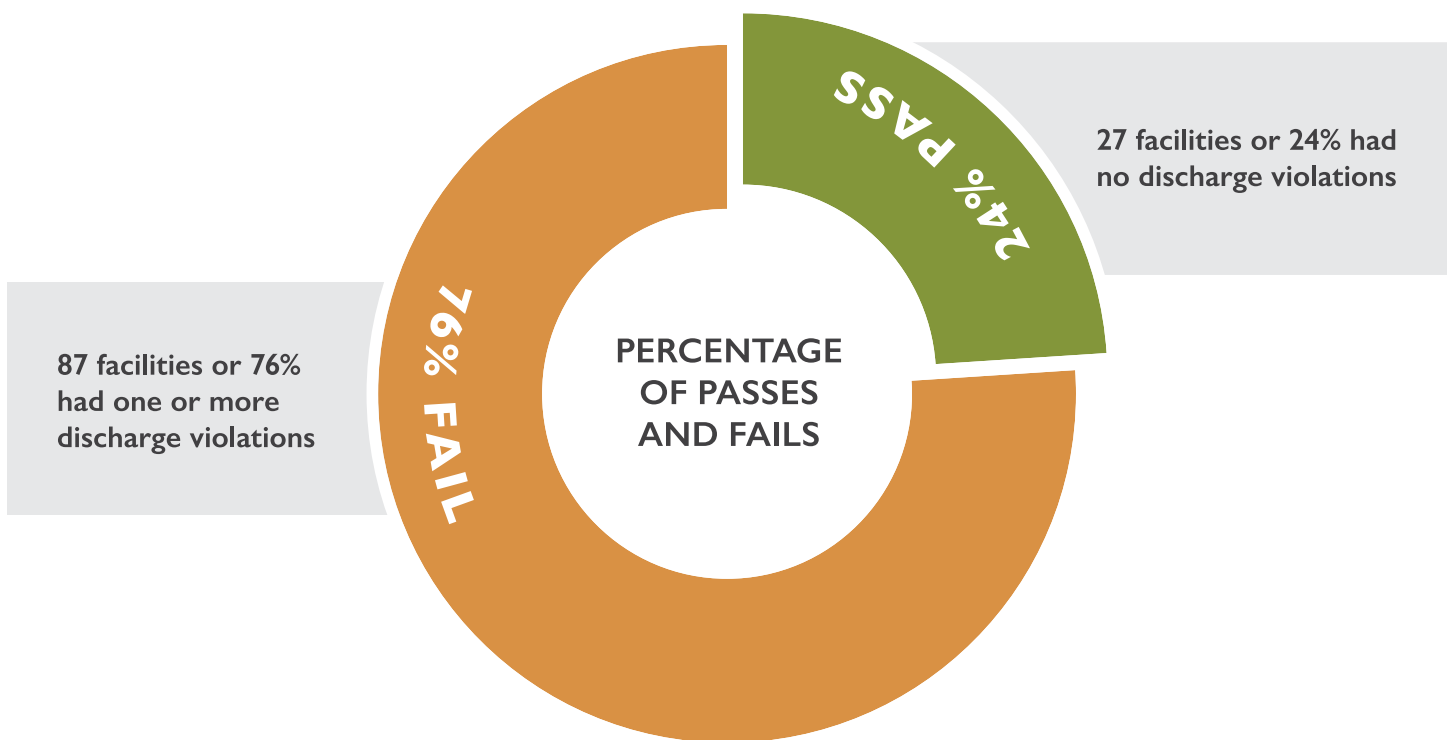
RESULTS OF IDAHO CONSERVATION LEAGUE'S REVIEW

HOW MANY FACILITIES PASSED? HOW MANY FAILED?

In Idaho, 114 municipal wastewater treatment plants have NPDES permits. Our review showed that only 27 of the municipal wastewater treatment plants (23.7%) had no violations. These 27 facilities received a passing grade (Figure 1). The remaining 87 municipal wastewater facilities (76.3%) violated their permit limits and thus received a failing grade.

Appendix I lists all 114 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 114 wastewater treatment plans receiving a passing or failing grade, January 2016 through December 2018.



WHO GOT A PASSING GRADE?

Twenty-seven cities reported zero discharge violations during the three-year period of our review. Of these, 18 had received a passing grade for the 2015–2017 period that we reviewed and reported on last year. Eight facilities — Boise (Lander St), Bonners Ferry, Buhl, Post Falls, Juliaetta, Ketchum, Kuna and Moscow — improved their grades from fail for the 2015–2017 period to pass in our review of the 2016–2018 period.

COMMUNITIES WITH NO DISCHARGE VIOLATIONS FOR 2016-2018

- | | |
|--|---|
| <ul style="list-style-type: none">• Boise — Lander Street• Bonners Ferry• Buhl• Carey• Cascade• Post Falls• Dover• Emida• Filer• Georgetown• Grace• Juliaetta• Ketchum | <ul style="list-style-type: none">• Kootenai-Ponderay Sewer District• Kuna• Lava Hot Springs• Lewiston• Moscow• Mountain Home• New Plymouth• Nez Perce Tribe — Lapwai Valley• Payette• Riggins• Rockland• Star• Viola |
|--|---|

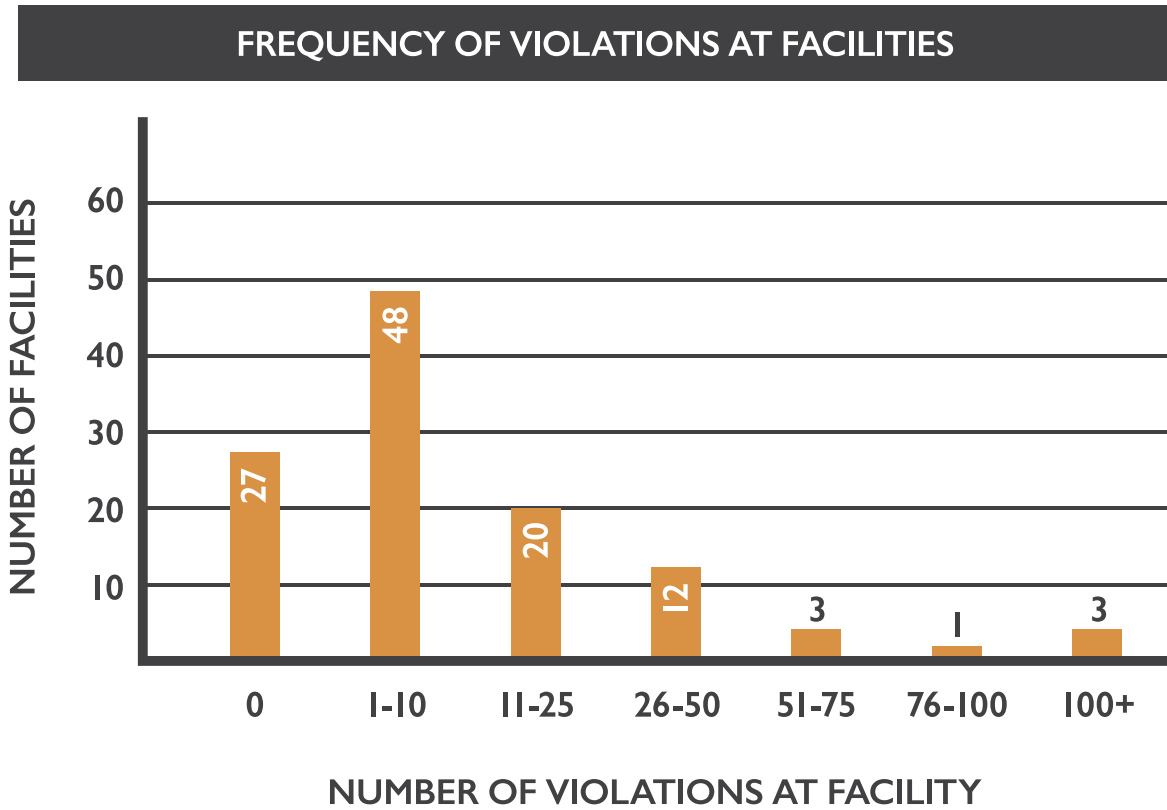
Achieving 100% compliance with one's NPDES permit is not an accident. These communities deserve praise for prioritizing clean water.

WHO GOT A FAILING GRADE?

Our review found that 87 facilities violated their NPDES permits during the last three years, earning them a failing grade. In total, these facilities reported 1,732 discharge violations over the three-year period from January 2016 through December 2018.

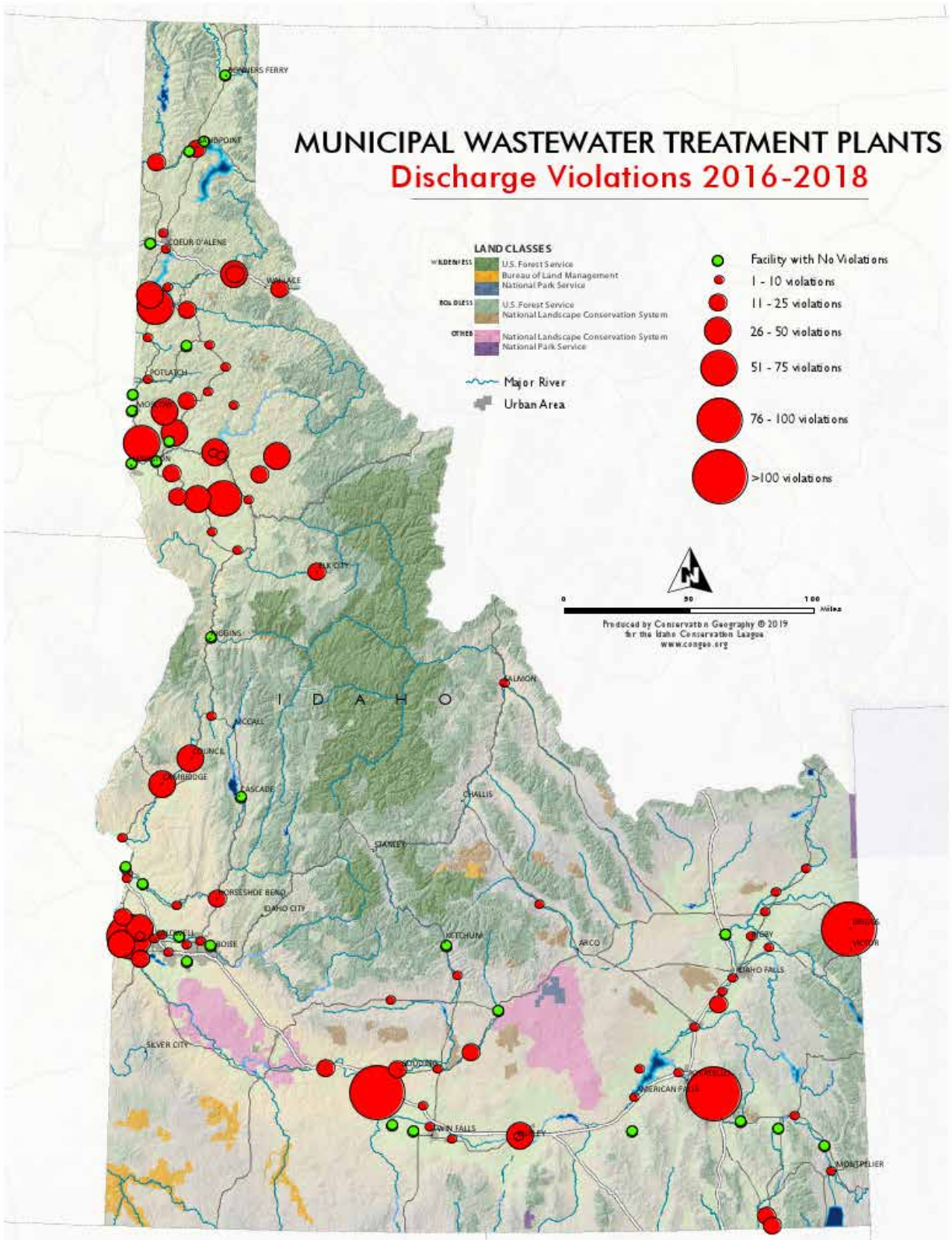
However, the data revealed huge variability among facilities with regard to the frequency of violations. Most of the facilities that violated their NPDES permits reported fewer than 10 violations over the last three years (Figure 2). At the other end of the spectrum, several facilities reported that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

Figure 2: Number of municipal wastewater treatment plants in Idaho with the associated number of violations, January 2016 through December 2018.



Aimee Moran photo.

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 failing much worse than others. Indeed, a small subset of the 114 municipal facilities spread across Idaho is responsible for a hugely disproportionate number of the violations. Just 10 facilities accounted for nearly half (49.2%) 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, Inkom, the single worst performing facility in the state, is responsible for 9% of all violations in the entire 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

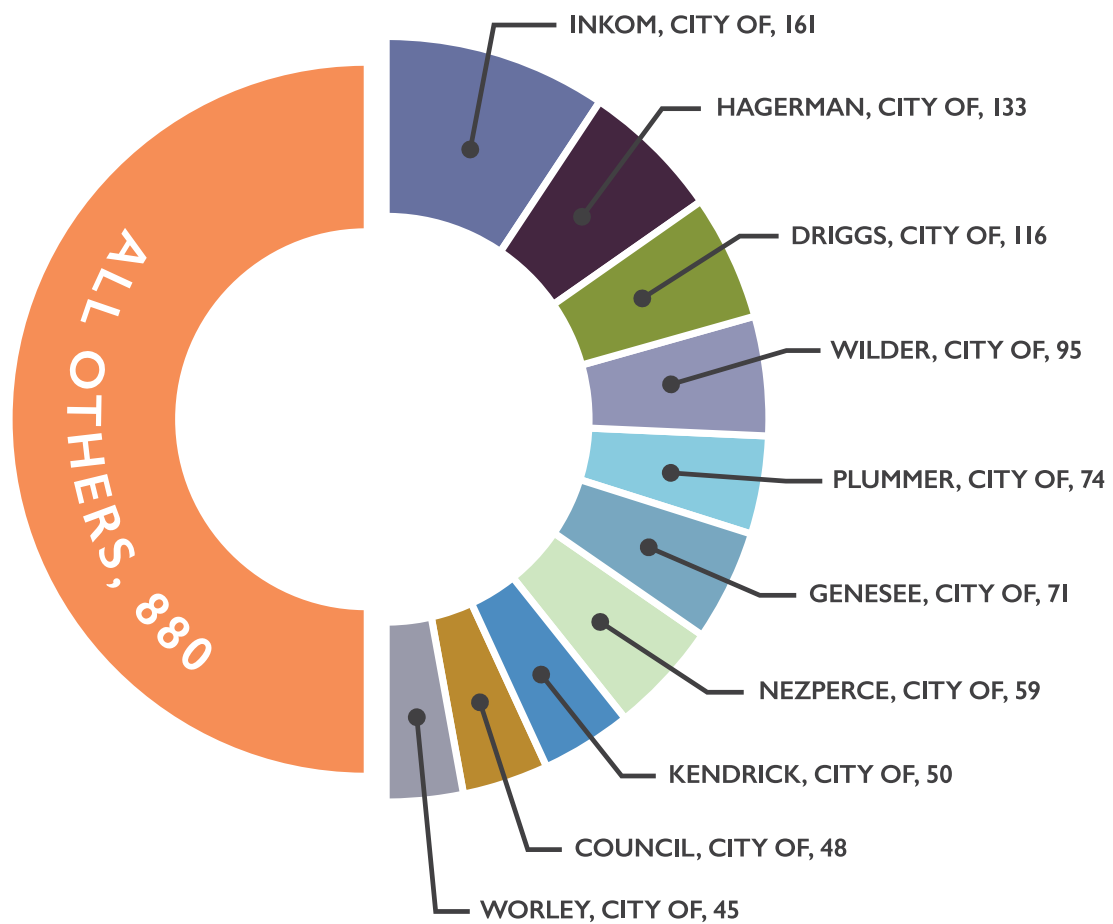
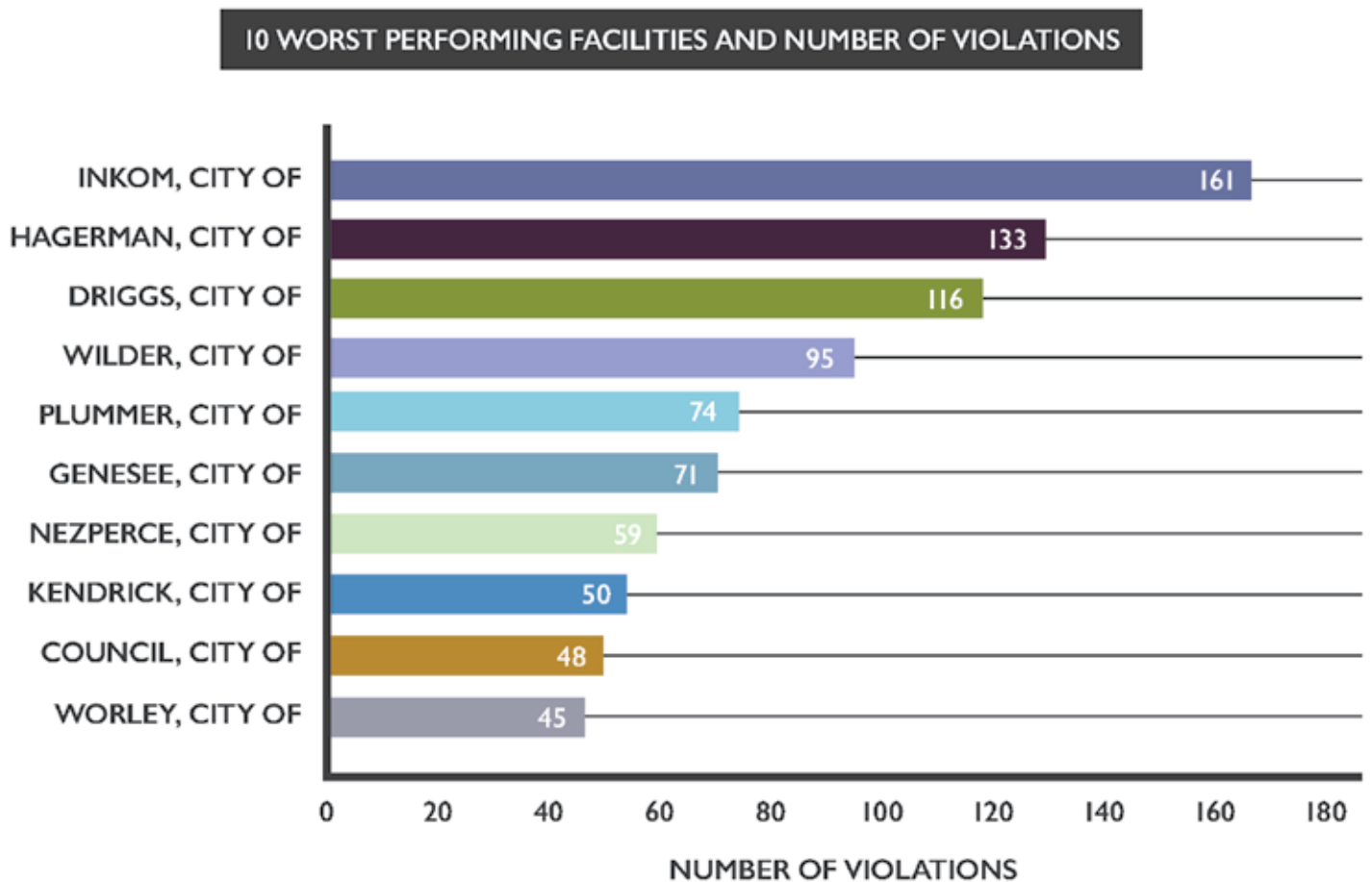


Figure 5: The number of violations at each of the 10 worst facilities in Idaho.



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 852 discharge violations from January 2016 through December 2018. These violations were for a variety of pollutants, including phosphorus, coliform bacteria, 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.

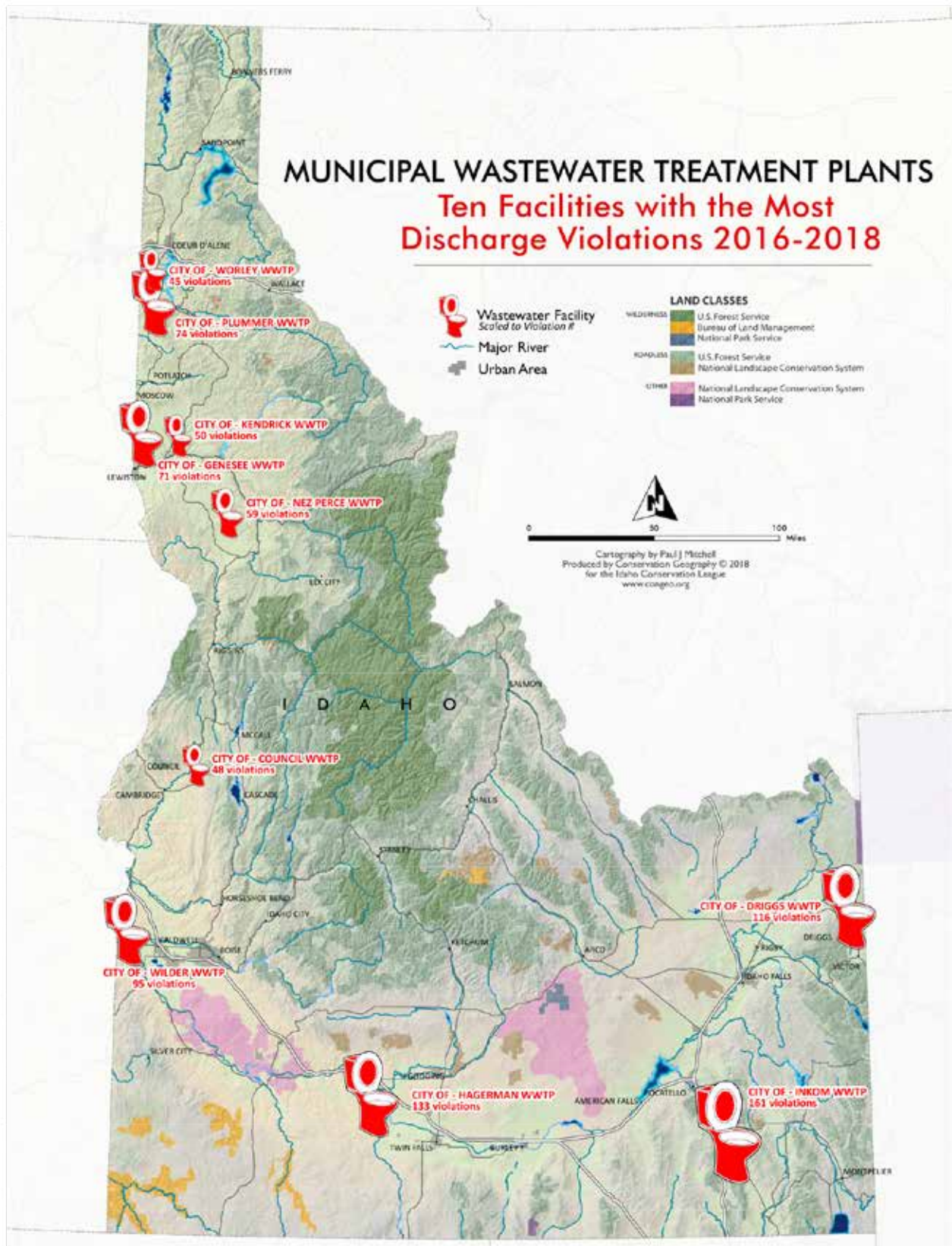


Table 2: The 10 worst performing wastewater treatment plants, number of violations, and pollutants leading to the violations, January 2016 through December 2018.

| FACILITY | VIOLATIONS | POLLUTANTS |
|-----------------|-------------------|---|
| Inkom | 161 | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Nitrogen Phosphorus Solids, suspended percent removal Solids, total suspended pH |
| Hagerman | 133 | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Driggs | 116 | Ammonia BOD, 5-day, 20 deg. C Solids, suspended percent removal |
| Wilder | 95 | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Plummer | 74 | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Phosphorus Solids, suspended percent removal Solids, total suspended pH |
| Genesee | 71 | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Nezperce | 59 | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Solids, suspended percent removal Solids, total suspended pH |
| Kendrick | 50 | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Council | 48 | BOD, 5-day, 20 deg. C Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Worley | 45 | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine Solids, suspended percent removal Solids, total suspended |

COMPARISON WITH 2015-2017 VIOLATIONS

This report is our third annual wastewater treatment plant compliance report. Our previous reports reviewed data for January 2014 through December 2016, and January 2015 through December 2017. The digital version of this waste water treatment plant report and past year's reports are available at www.idahoconservation.org/WWTP.

When comparing results from last year's report (2015–2017) and this report (2016–2018), it is important to understand that our reports cover three-year windows that overlap. Therefore, violations that occurred in 2015 are not tallied in the 2016–2018 report. But a violation that occurred in 2016 or 2017 is documented in both reports.

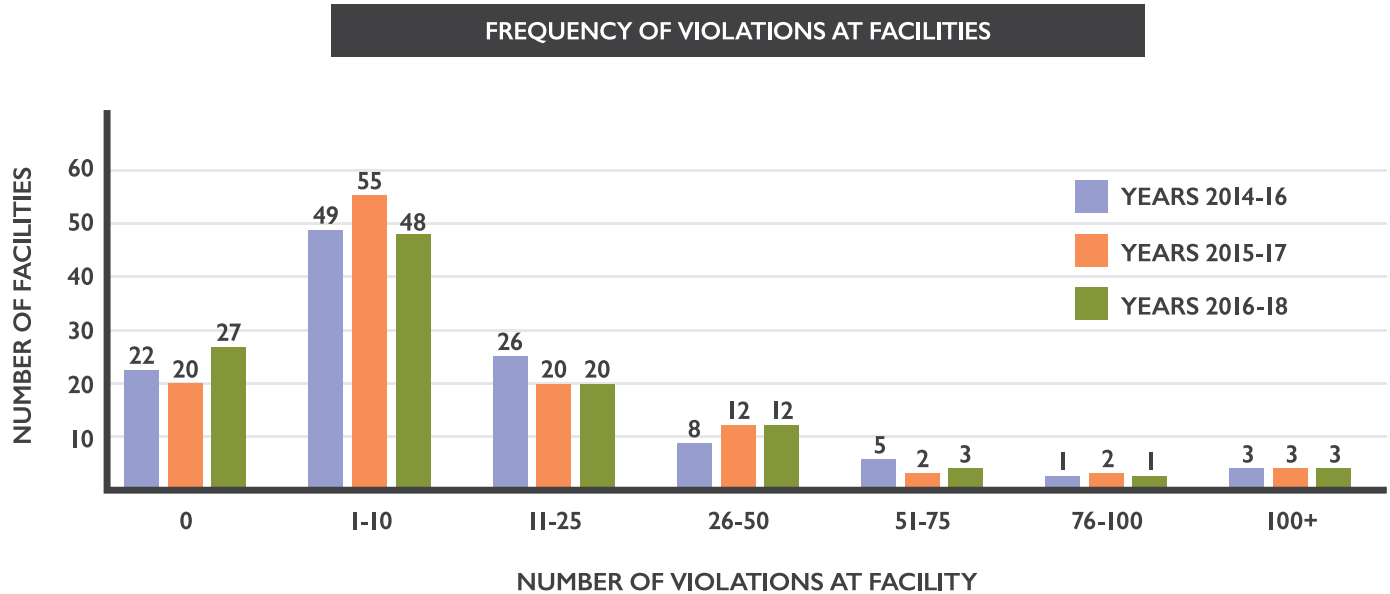
Overall, it is promising to see that the total number of violations continues to decrease from 1,742 for the 2015–2017 period to 1,732 for the 2016-2018 period. Though this reduction is small, it is trending in the proper direction.

The number of facilities that earned a passing grade increased to 27 for the 2016-2018 reporting period, from 20 in the 2015-2017 report. In the 2014-2016 report, the number of facilities that passed equaled 22. Figure 7 compares the frequency of violations reported at facilities over the three review periods.



Tim Palmer photo.

Figure 7: Comparison of frequency of violations at the 114 wastewater treatment plants between the 2014–2016, 2015–2017 and the 2016–2018 review periods.



For the most part, facilities that were highlighted as very poor performers in our 2015–2017 report continued to perform poorly in this review. In fact, 9 of the prior 10 worst facilities remained in the 10 worst category for the 2016–2018 report, and 7 facilities have been listed as a “10 Worst Facility” for each review period (Table 3). One facility, the City of Worley, newly joined the ranks of the 10 worst, becoming the 10th worst performer in the 2016–2018 period after moving from the 16th worst performing facility in 2014–2016 to the 11th worst performer in the 2015–2017 period.

Table 3: Ranking and number of violations for the top 10 worst performing wastewater treatment plants for the 2016–2018 period, compared with their ranking and number of violations of these same facilities for the 2014–2016 and 2015–2017 periods.

| TOP 10 WORST PERFORMERS | 2016-2018 | | 2015-2017 | | 2014-2016 | |
|-------------------------|-----------------|------|-----------------|------|-----------------|------|
| | # OF VIOLATIONS | RANK | # OF VIOLATIONS | RANK | # OF VIOLATIONS | RANK |
| Inkom | 161 | 1 | 185 | 1 | 194 | 1 |
| Hagerman | 133 | 2 | 125 | 2 | 88 | 4 |
| Driggs | 116 | 3 | 124 | 3 | 135 | 2 |
| Wilder | 95 | 4 | 77 | 5 | 59 | 6 |
| Plummer | 74 | 5 | 94 | 4 | 105 | 3 |
| Genesee | 71 | 6 | 63 | 6 | 47 | 10 |
| Nezperce | 59 | 7 | 51 | 7 | 67 | 5 |
| Kendrick | 50 | 8 | 39 | 10 | 24 | 21 |
| Council | 48 | 9 | 46 | 8 | 35 | 13 |
| Worley | 45 | 10 | 33 | 11 | 29 | 16 |

WHAT'S CHANGED OVER THREE YEARS?

This is the third 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.

| CITY | PENALTY | POLLUTANTS WITH VIOLATIONS |
|-------------------|----------|---|
| Genesee | \$30,000 | pH, total residual chlorine (TRC), total suspended solids (TSS), Escherichia coli (E. coli), and 5-day biological oxygen demand (BOD) |
| Council | \$15,000 | biological oxygen demand (BOD) and total suspended solids |
| Driggs | \$13,500 | Escherichia coli (E. coli), biochemical oxygen demand (BOD), total suspended solids (TSS), total residual chlorine and total ammonia |
| Richfield | \$13,500 | pH, total residual chlorine (TRC), Escherichia coli (E. coli), and 5-day biological oxygen demand (BOD) |
| St. Maries | \$12,500 | pH, total residual chlorine (TRC), and 5-day biological oxygen demand (BOD) |

| CITY | PENALTY | POLLUTANTS WITH VIOLATIONS |
|-----------------|---------|---|
| Kendrick | \$9,900 | Escherichia coli (E. coli), Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), pH, and Total Residual Chlorine (TRC) |
| Nezperce | \$6,500 | Escherichia coli (E. coli), Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), pH, and Total Residual Chlorine (TRC) |
| Worley | \$4,100 | Escherichia coli (E. coli), total suspended solids (TSS), biochemical oxygen demand (BOD), and ammonia |
| Plummer | \$2,500 | pH, Escherichia coli (E. coli), biochemical oxygen demand (BOD), total suspended solids (TSS), total ammonia and total phosphorus |

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 Inkom is requesting to forfeit their NPDES permit and convert their system to one that applies treated wastewater to crops. Once approved, the City will no longer be legally allowed to discharge to a surface water body.
- The City of Heyburn is planning to spend from \$7 million to \$8 million to upgrade their treatment facility and rectify persistent issues.
- The City of Driggs, which has been one of the Top 5 worst performing facilities during each review period and was recently fined \$13,500, has filed a formal Consent Agreement with the EPA that requires the City to identify and complete modifications and corrective actions to their facility within two years.
- The City of Fairfield agreed to a timeline to study the cause of their permit violations, conduct a sampling plan, and select and implement a course of action to eliminate effluent limit exceedances.
- 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).
- In addition to paying the fine listed above, the City of Worley has entered into a compliance order with the EPA and 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.

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: echo.epa.gov/

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 24% 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 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, 87 facilities received failing grades. These facilities reported 1,732 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. / Bill Robinson 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 well over 100 violations. Facilities reporting violations need to carefully evaluate the causes for their violations and then identify and implement solutions.

ICL praises the 27 facilities that received passing grades for complying with their NPDES permits in the study period. Those facilities deserve to be commended 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 received a failing grade 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 photo.

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 that they 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 photo.

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 permit. These documents, as well as the fact sheets that provide greater detail and explain the permit conditions, can be accessed online: www.epa.gov/npdes-permits/idaho-npdes-permits
- 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 is 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 you didn't realize that this behavior was not the norm. Or perhaps you didn't realize that your 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 (DEQ) to discuss the reasoning behind violations and possible solutions. In addition to providing technical support, DEQ can provide guidance on how best to fund needed infrastructure improvement, such as low-interest loans or grant opportunities.



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

Every Idahoan can take action to make sure our water is clean. / Justin Hayes photo.

APPENDIX I

Alphabetical list of all 114 municipal wastewater treatment plans in Idaho that have NPDES permits, their pass or fail status, and their violations, if applicable.

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|----------------------------------|------------|-------|--|
| Aberdeen | 6 | Fail | E. coli Solids, total suspended |
| Ahsahka Water and Sewer District | 41 | Fail | Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| American Falls | 1 | Fail | E. coli |
| Ashton | 4 | Fail | Ammonia E. coli Solids, suspended percent removal Solids, total suspended |
| Blackfoot | 10 | Fail | BOD, 5-day, 20 deg. C E. coli Floating solids or foam Phosphorus Solids, suspended percent removal Solids, total suspended |
| Boise - Lander | 0 | Pass | |
| Boise - West | 2 | Fail | E. coli Temperature, water deg. centigrade |
| Bonnars Ferry | 0 | Pass | |
| Bovill | 6 | Fail | BOD, 5-day, 20 deg. C E. coli Solids, total suspended |
| Buhl | 0 | Pass | |
| Burley | 6 | Fail | Ammonia Coliform, fecal general E. coli |
| Caldwell | 2 | Fail | E. coli |
| Cambridge | 29 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Solids, total suspended pH |
| Carey | 0 | Pass | |
| Cascade | 0 | Pass | |
| Clarkia | 5 | Fail | Chlorine Solids, total suspended |
| Coeur d'Alene | 7 | Fail | BOD, carbonaceous [5 day, 20 C] E. coli Solids, total suspended pH |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|--|------------|-------|--|
| Cottonwood | 7 | Fail | BOD, 5-day, 20 deg. C Chlorine E. coli |
| Council | 48 | Fail | BOD, 5-day, 20 deg. C Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Craigmont | 29 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal pH |
| Culdesac | 22 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli |
| Deary | 24 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Solids, total suspended pH |
| Dover | 0 | Pass | |
| Driggs | 116 | Fail | Ammonia BOD, 5-day, 20 deg. C Solids, suspended percent removal |
| Eastern Idaho Regional Wastewater Authority - Oxbow WWTP | 1 | Fail | Phosphorus |
| Elk City Water and Sewer Association | 24 | Fail | BOD, 5-day, percent removal E. coli Solids, suspended percent removal Temperature, water deg. centigrade pH |
| Elk River | 6 | Fail | E. coli pH |
| Emida | 0 | Pass | |
| Emmett | 2 | Fail | Coliform, fecal general E. coli |
| Fairfield | 6 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Solids, suspended percent removal |
| Filer | 0 | Pass | |
| Firth | 22 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Phosphorus Solids, suspended percent removal Solids, total suspended |
| Franklin | 13 | Fail | BOD, 5-day, 20 deg. C Chlorine E. coli Solids, total suspended |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|--------------------------------|------------|-------|--|
| Fruitland - Payette River WWTP | 9 | Fail | BOD, 5-day, 20 deg. C Solids, total suspended pH |
| Fruitland - Snake River WWTP | 3 | Fail | Solids, suspended percent removal Solids, total suspended |
| Genesee | 71 | Fail | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Georgetown | 0 | Pass | |
| Glenns Ferry | 14 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Solids, suspended percent removal Solids, total suspended |
| Gooding | 17 | Fail | Ammonia Coliform, fecal general |
| Grace | 0 | Pass | |
| Grangeville | 1 | Fail | Solids, suspended percent removal |
| Greenleaf | 1 | Fail | E. coli |
| Hagerman | 133 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Hailey | 3 | Fail | E. coli Phosphorus |
| Hansen | 8 | Fail | Chlorine E. coli Solids, total suspended |
| Harrison | 8 | Fail | Ammonia BOD, 5-day, 20 deg. C Chlorine E. coli Solids, suspended percent removal |
| Hayden | 1 | Fail | Zinc |
| Heyburn | 32 | Fail | Coliform, fecal general E. coli Phosphorus Solids, suspended percent removal Solids, total suspended |
| Homedale | 34 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Phosphorus Solids, suspended percent removal Solids, total suspended pH |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|-------------------|------------|-------|---|
| Horseshoe Bend | 24 | Fail | Solids, suspended percent removal Solids, total suspended pH |
| Idaho Falls | 5 | Fail | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal |
| Inkom | 161 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Nitrogen Phosphorus Solids, suspended percent removal Solids, total suspended pH |
| Jerome | 1 | Fail | Phosphorus |
| Juliaetta | 0 | Pass | |
| Kamiah | 1 | Fail | Solids, total suspended |
| Kendrick | 50 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Ketchum | 0 | Pass | |
| Kooksia | 4 | Fail | BOD, 5-day, 20 deg. C pH |
| Kootenai-Ponderay | 0 | Pass | |
| Kuna | 0 | Pass | |
| Lava Hot Springs | 0 | Pass | |
| Lewiston | 0 | Pass | |
| Mackay | 3 | Fail | BOD, 5-day, percent removal Chlorine |
| Marsing | 12 | Fail | BOD, 5-day, 20 deg. C E. coli Solids, total suspended |
| McCall | 0 | Pass | |
| Meridian | 2 | Fail | Coliform, fecal general |
| Middleton | 1 | Fail | pH |
| Montpelier | 8 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine Solids, suspended percent removal Solids, total suspended |
| Moscow | 0 | Pass | |
| Mountain Home | 0 | Pass | |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|--------------------------------------|------------|-------|---|
| Nampa | 3 | Fail | E. coli |
| New Meadows | 8 | Fail | Chlorine Phosphorus Solids, total suspended |
| New Plymouth | 0 | Pass | |
| Nez Perce Tribe - Lapwai Valley WWTP | 0 | Pass | |
| Nezperce | 59 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Solids, suspended percent removal Solids, total suspended pH |
| Notus | 39 | Fail | Ammonia BOD, 5-day, 20 deg. C E. coli Solids, total suspended pH |
| Orofino | 6 | Fail | Chlorine Solids, total suspended |
| Parma | 15 | Fail | BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Payette | 0 | Pass | |
| Pierce | 29 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended |
| Plummer | 74 | Fail | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal E. coli Phosphorus Solids, suspended percent removal Solids, total suspended pH |
| Pocatello | 9 | Fail | Ammonia E. coli Phosphorus |
| Post Falls | 0 | Pass | |
| Potlatch | 4 | Fail | BOD, 5-day, 20 deg. C |
| Preston | 25 | Fail | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Phosphorus Solids, total suspended |
| Priest River | 16 | Fail | E. coli Solids, total suspended |
| Rexburg | 2 | Fail | Solids, total suspended pH |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|---|------------|-------|---|
| Richfield | 21 | Fail | Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Rigby | 5 | Fail | BOD, 5-day, 20 deg. C |
| Riggins | 0 | Pass | |
| Ririe | 7 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Solids, suspended percent removal Solids, total suspended |
| Riverside Water and Sewer District | 8 | Fail | BOD, 5-day, percent removal E. coli Solids, suspended percent removal Solids, total suspended |
| Roberts | 0 | Pass | |
| Rockland | 0 | Pass | |
| Salmon | 1 | Fail | E. coli |
| Sandpoint | 20 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Santa Fernwood | 4 | Fail | Solids, suspended percent removal pH |
| Shoshone | 3 | Fail | Chlorine E. coli |
| Smeltonville | 20 | Fail | Ammonia BOD, 5-day, 20 deg. C E. coli Lead Solids, total suspended |
| Soda Springs | 2 | Fail | E. coli Solids, suspended percent removal |
| South Fork Coeur d'Alene River Sewer District - Mullan WWTP | 21 | Fail | Ammonia BOD, 5-day, percent removal Cadmium E. coli Lead Solids, suspended percent removal Solids, total suspended Zinc |
| South Fork Coeur d'Alene Sewer District - Page WWTP | 28 | Fail | Ammonia Cadmium E. coli Solids, total suspended Zinc |
| St. Anthony | 10 | Fail | Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |

| FACILITY | VIOLATIONS | GRADE | POLLUTANTS |
|------------|------------|-------|---|
| St. Maries | 14 | Fail | BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal pH |
| Star | 0 | Pass | |
| Tensed | 10 | Fail | Chlorine Solids, total suspended |
| Troy | 27 | Fail | BOD, 5-day, 20 deg. C E. coli Solids, total suspended |
| Twin Falls | 2 | Fail | E. coli |
| Viola | 0 | Pass | |
| Weippe | 18 | Fail | BOD, 5-day, percent removal Chlorine E. coli Floating solids or foam Solids, suspended percent removal pH |
| Weiser | 1 | Fail | Phosphorus |
| Wilder | 95 | Fail | BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine E. coli Solids, suspended percent removal Solids, total suspended pH |
| Winchester | 23 | Fail | Chlorine E. coli Floating solids or foam Oil and grease Solids, suspended percent removal Solids, total suspended |
| Worley | 45 | Fail | Ammonia BOD, 5-day, 20 deg. C BOD, 5-day, percent removal Chlorine Solids, suspended percent removal Solids, total suspended |