

10

WATER RESOURCE REGULATION



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10.1 Compliance Monitoring and Enforcement

The Compliance Monitoring function promotes and monitors the status of compliance of water users to standards, with water use authorisation conditions and regulations across the full water value chain of all sectors in a way that triggers appropriate enforcement or other regulatory-enhancing action if needed.

The Enforcement function ensures that a set of actions (administrative, criminal, and civil) are taken against non-compliance with the provisions of the National Water Act as a Specific Environmental Management Act (SEMA) under the National Environmental Management Act (NEMA) (Act no. 107 of 1998).

The Department of Water and Sanitation (DWS) constantly strives to enhance the compliance monitoring and enforcement (CME) procedures, protocols and instruments for effective functioning within the Environmental Management Network. The development of the DWS CME / Environmental Management Inspector (EMI) Standard Operating Procedure (SOP) Manual has been finalised to harmonise and standardise operating procedures within the water sector that will allow the CME officials and EMIs to perform their duties in an administrative just and legal defensive manner and conform to the chain of custody process and actions at national, regional and Catchment Management Agency (CMA) levels to result in successful court cases.

In support of an enhanced compliance and enforcement capacity, there is ongoing training and designation of officials as Environmental Management Inspectors (EMIs). The current total of EMIs designated by the Minister of Water and Sanitation is one hundred and twenty-four (124). The DWS is part of the blue sector (freshwater) and brown sector (waste), and its performance data is also reported by the Environmental Secretariat and EMI network. Presently, there are 65 EMIs in provincial offices, 15 in CMAs, and 44 at the National Office, which is distributed throughout the DWS. In terms of their designation, one (1) is a Grade 3, one hundred and fourteen (114) are Grade 2 and nine (9) are Grade 1 (Figure 10.1). There are 21 CME officials who were trained during the reporting period that awaited their EMI designation and have been since designated as EMIs, increasing the EMIs designated to 145 to date. It needs to be noted that during this financial year, only 141 DWS and CMA CME officials are performing the CME functions, and about 93 officials are within the regions and CMAs to regulate all the water sectors registered on the Water use Authorisation & Registration Management System (WARMS) of about 134 524 water users as well as identified unlawful activities.

A significant part of the DWS Compliance Monitoring and Enforcement (CME) Strategy is the commitment to training and capacity building as well as access to information

relating to CME. The National Compliance Information Management System (NCIMS) and the Enforcement Case Management System (ECMS) are operational, with future integration planned into one Integrated Regulatory Information System (IRIS) together with Wastewater and Drinking Water (Green Drop and Blue Drop Programmes).

The two established CMAs, namely Breede-Olifants CMA (BOCMA) and Inkomati-Usuthu CMA (IUCMA), are conducting CME functions in their respective WMAs, and these CME functions were also incorporated into the national Annual CME Report 2023/24 with respect to their CME Annual Performance Plan (APP) targets to give a holistic overview of the water sector performance and status of compliance in South Africa.

The Department is in the process of implementing the approved organizational structure and NWA delegations, 2023. The relocation of the Compliance Monitoring & Enforcement function from the Regional Head (offices) to the CMAs necessitates a concerted effort to bolster the CME capacity as well as the criminal enforcement capacity of new officials that will be integrating into the CMAs / National Office from various units encompassed within the Department.

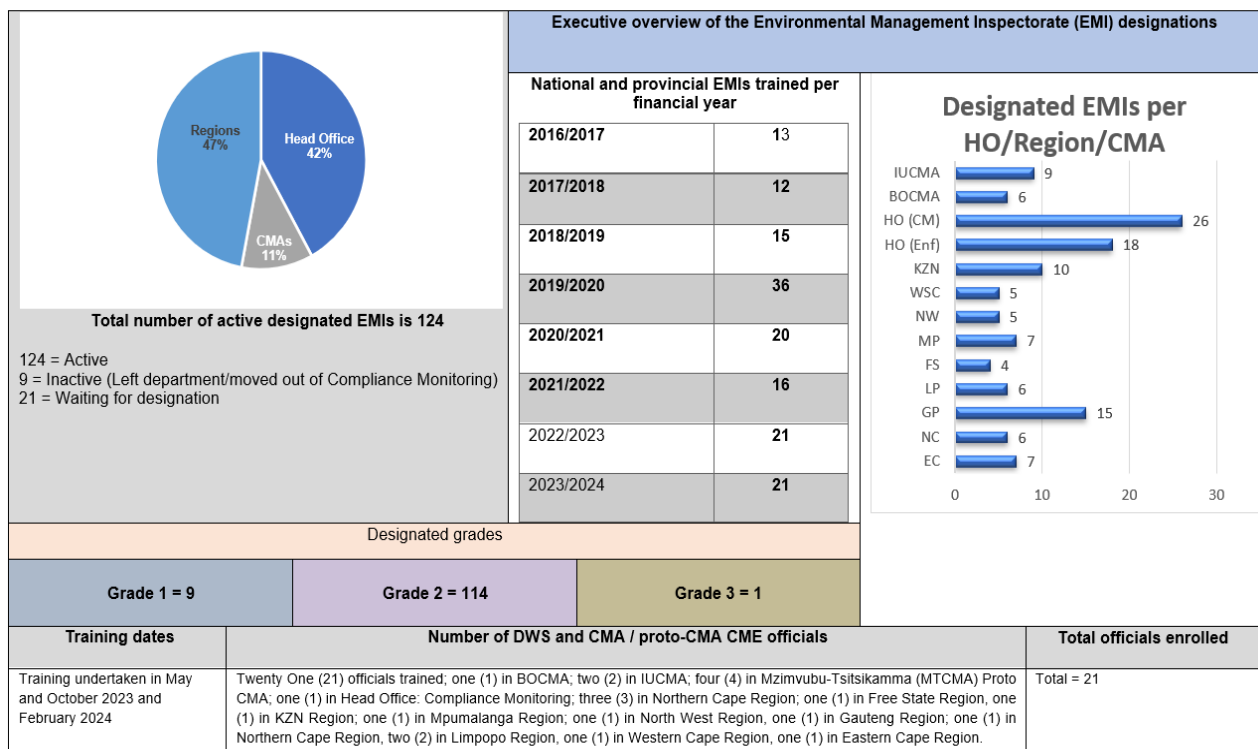


Figure 10.1: The Environmental Management Inspectorate – DWS and its entities' component

10.1.1 Compliance Monitoring

The Compliance Monitoring team set a target to monitor 406 authorised water users across the various sectors for the 2023/2024 financial year (including Dam Safety). The Compliance Monitoring team achieved 433 (including Dam Safety) and exceeded the target by 34 due to additional inspections done by the Provincial Offices as well as the Western Cape joint operation Blitz.

Figure 10.2 reflects the trend analysis for compliance inspections. The number of water users monitored has increased for the past three (3) financial years since taking a sharp decline in 2019 due to the COVID-19 pandemic that forced regions to conduct desktop compliance inspections.

The average number of water users monitored in the past 3 years is 401 water users (including Dam Safety). Although there has been an improvement, this is still a far cry considering the large number of water users that must be monitored. The number of water users registered with the DWS is close to 134524. This implies that DWS monitors only 0.30 % (401/134524) of water users per year. Unfortunately, the compliance monitoring officials in the provincial offices are not distributed evenly according to the number of inspections to be conducted for all the water sectors per year.

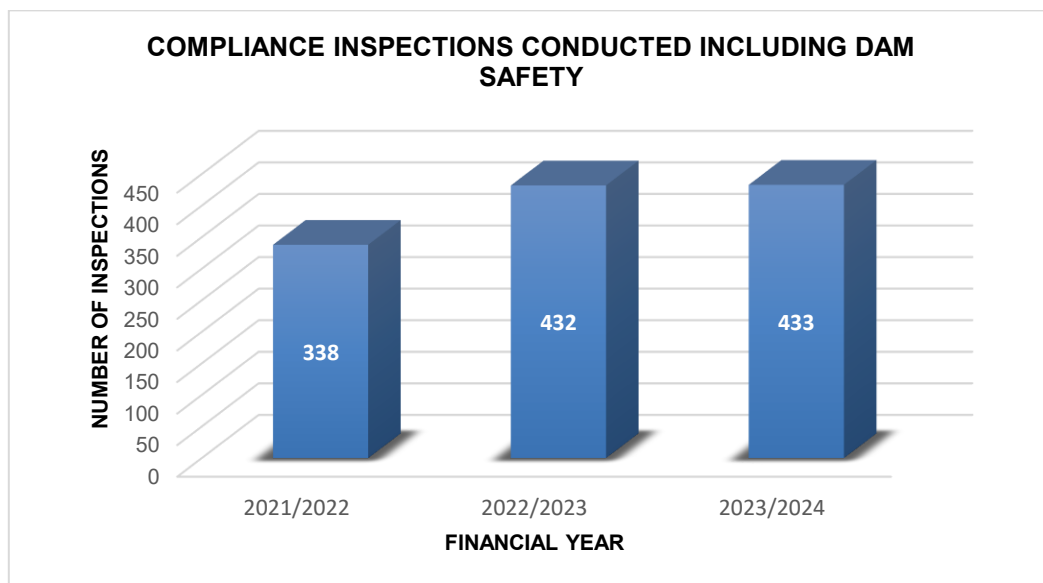


Figure 10.2: Overview of Compliance Inspections from 2021/2022 -2023/2024

The mining sector received more attention from the compliance inspections conducted during the financial year 2023/24, followed by the Irrigation and Industry sectors, as reflected in Figure 10.3.

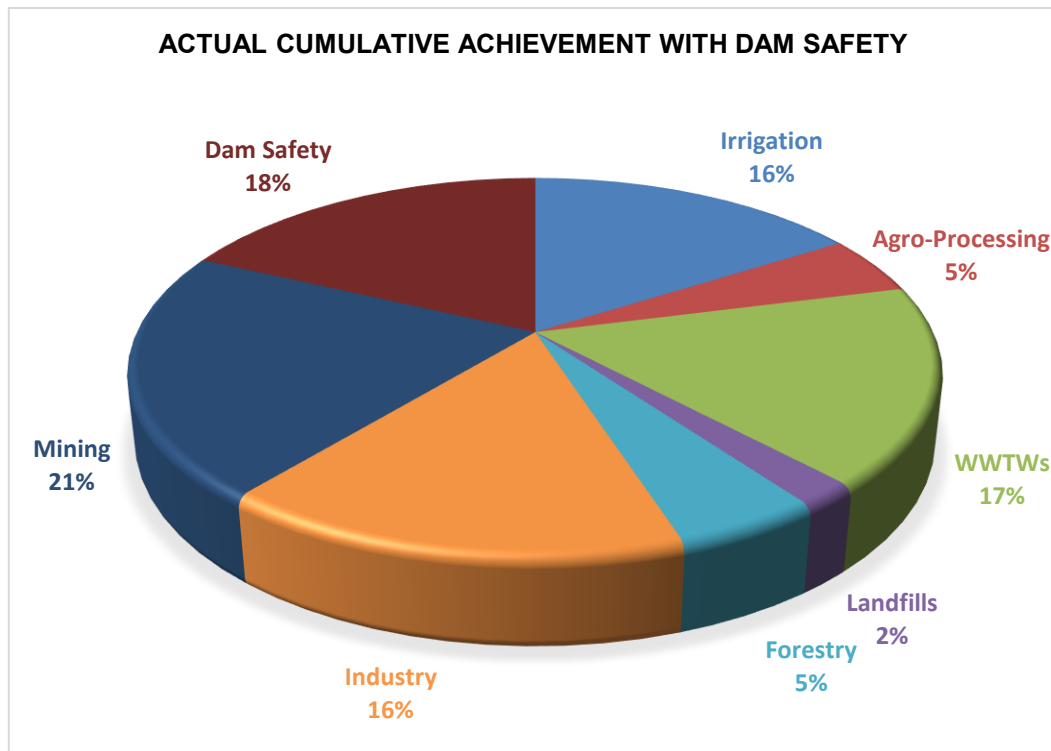


Figure 10.3: Compliance inspections conducted per water sector for the 2023/2024 financial year

In the Medium-Term Strategic Framework (MTSF) and Outcome 10 performance agreement, an impact indicator is used to determine the level of performance of the water users and sectors. The purpose of the impact indicator is to add value to the statistics of users monitored by indicating the status of compliance against the conditions of the authorisation. A scorecard has been developed and used to accurately and consistently measure/score performance and forms part of the portfolio of evidence together with the inspection report.

The target set for % compliance with water user authorisations obligations per sector is 65%. The DWS Compliance Monitoring (without Dam Safety inspections) planned to monitor 329 facilities and achieved 357 water users inspected. The 357 water users monitored achieved a combined average performance level of 56% during 2023/24. The combined average performance percentage level of all water users per sector monitored for compliance from 2022/2023 (58%) to 2023/2024 (56%) shows a decline of 2%.

The compliance inspections conducted for the financial year for the different water sectors were as follows: Mining (91); Industry (73); Agro-Processing (20); Agricultural/Irrigation (69); Afforestation - SFRA (20); Government: Municipal Wastewater Treatment Works (75); and Waste disposal facilities (landfills) (9) shown in Figure 10.4.

The SFRA (Plantations) at (73%), Industry at 67% and Agro-Processing at 67% achieved a compliance percentage score above 65%. The compliance percentage score for Mining was 60%, and Irrigation was 60%, below the 65% target. The Government (WWTWs) (36%) and Waste Disposal Facilities (Landfills) (32%) are sectors that scored a compliance level of less than 50%.

The results indicate a lower-than-desired performance level. To improve this, follow-up inspections must be emphasised to ensure findings are implemented and that enforcement actions and consequences are followed where required.

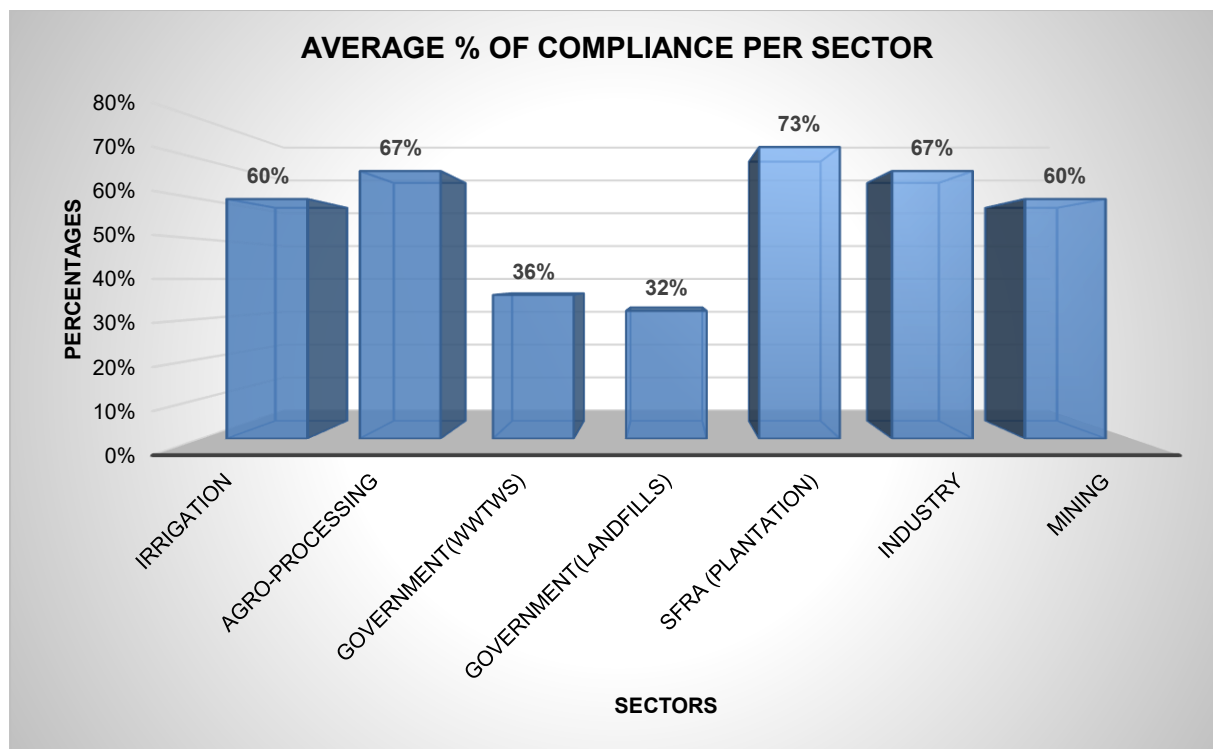


Figure 10.4: Overview of compliance performance of the water sectors for 2023/2024

DWS conducted 357 compliance inspections, and BOCMA conducted 72 compliance inspections. It amounts to 429 compliance inspections conducted in combination between DWS and BOCMA. Joint compliance monitoring of thirteen (13) for compliance with WARMS unit was performed under Irrigation Sector for Water Management Institutions (WMIs), and two (2) joint compliance monitoring inspections for Waste Disposal Facilities (WDF) were conducted with DFFE as well as two (2) self-regulation desktop audits for WDF were conducted. Additionally, IUCMA conducted 92 desktop audits and BOCMA 9 desktop audits. It must be noted that the SOPs and use of the NCIMS were not applied with the latter IUCMA and BOCMA desktop audits, the status of compliance for water users was not calculated, and no PoE was provided in this financial year for audits conducted.

10.1.2 Enforcement for DWS

During the 2023/2024 financial year, a total of 583 cases of non-compliance were reported. Of these, 467 were duly investigated, meeting the target with an 80% achievement rate Figure 10.5. It must be noted that these results for cases and enforcement actions taken include BOCMA and IUCMA for those enforcement cases registered on the Enforcement Case Management System (ECMS).

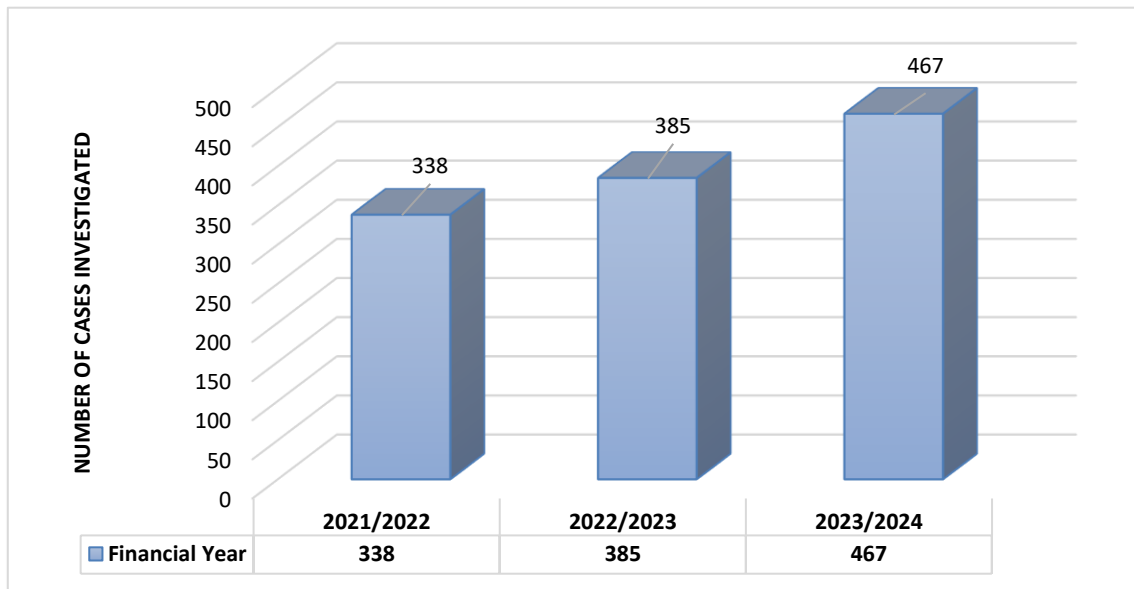


Figure 10.5: Overview of Enforcement cases investigated from 202/21 -2022/23

Findings arising from the cases investigated revealed non-compliance with the aforementioned water-related regulations. In response to these contraventions, the Department invoked its authority to initiate administrative enforcement actions aimed at rectifying the identified contraventions. Furthermore, it was necessary for the DWS to initiate criminal charges or pursue civil actions in instances where such enforcement measures were deemed appropriate and necessary to address cases of significant non-compliance.

The Department undertook both administrative and criminal actions against water users who were found to be non-compliant. A total of two hundred and seven (207) notices of intention to issue directives were duly issued. Subsequently, fifty-nine (59) directives were issued.

During the reporting period, the Department successfully closed 126 cases, as the transgressors complied by rectifying the contraventions and implementing the requirements outlined in the Notices and Directives issued. Some of the administrative actions resolved originated from or dated back to periods outside the financial year under review.

Furthermore, the Department laid sixty-three (63) criminal charges against non-compliant water users and polluters, and twelve (12) case dockets were finalised and referred to the National Prosecuting Authority for a decision. For comprehensive specifics pertaining to the aforementioned information, please refer to Table 10-1 below.

Table 10-1: Enforcement actions taken against non-compliant water users and water polluters in the various provincial offices.

Region	Percentage of reported non-compliant cases investigated	*Notices Issued	*Directives Issued	*Cases Registered with SAPS	*Cases referred to NPA
Breede-Olifants CMA	16	31	6	4	3
Eastern Cape	84	26	1	2	2
Free State	23	26	8	3	0
Gauteng	66	4	1	11	1
IUCMA	19	11	9	1	0
KwaZulu Natal	55	14	2	3	0
Limpopo	19	15	8	2	1
Mpumalanga	67	34	11	9	6
North-West	80	26	9	9	1
Northern Cape	28	10	4	18	1
Western Cape	10	10	0	1	0
Total	467	207	59	63	12

Numerous complaints have been lodged concerning illegal water usage and pollution, indicating widespread non-compliance across various sectors. The agriculture sector is the primary offender, responsible for 28% of the complaints, and local government municipalities, particularly those managing wastewater treatment, represent 28% of the issue. Commercial activities and domestic/private water usage each account for 5% of the complaints. Government sectors, including national and provincial entities, are involved in 1% of the cases. The industrial sector shows non-compliance in 9% of the complaints. The mining sector is another major concern, with 17% of the complaints. Tourism and other sectors also contribute to 5% and 2% of the reported cases, respectively (Figure 10.6).

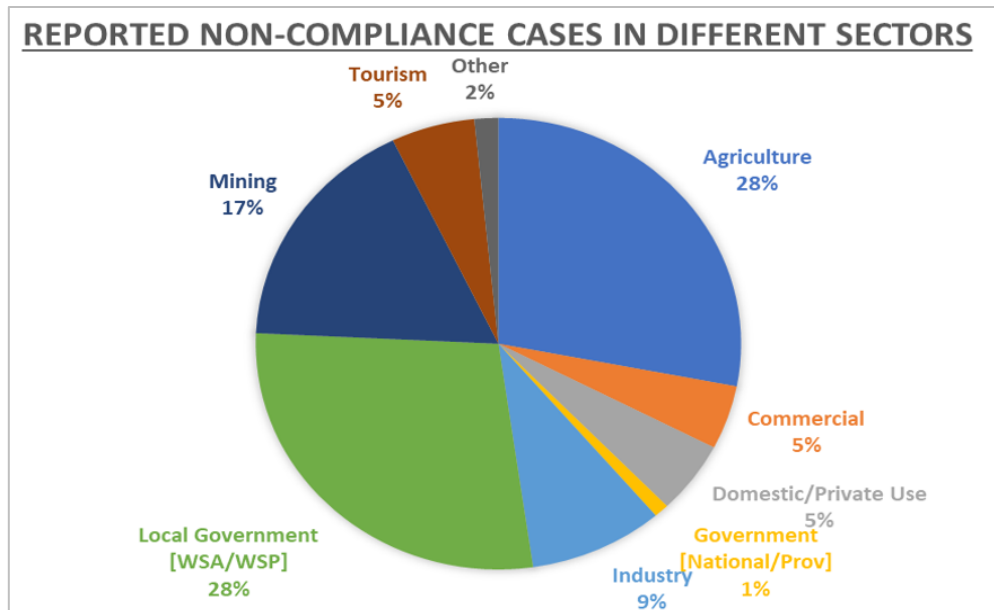


Figure 10.6 Enforcement cases per water sector for the 2023/24 financial year

During the 2023/2024 financial year, there were twenty-two (22) cases where compliance was achieved through administrative actions, demonstrating a positive response by water users to regulatory requirements. In eighty (80) instances, investigations concluded with no contraventions detected. No cases were marked as *nolle prosequi* or declined for prosecution, highlighting the decisive actions taken without needing to forgo charges. One case was resolved through a plea sentence agreement, indicating an admission of guilt. Additionally, remedial actions were taken in 22 cases during the investigation phase, emphasizing a commitment to early mitigation. These outcomes reflect the effectiveness of the regulatory framework and the diligence of enforcement efforts across various sectors (Table 10-2).

Throughout the 2023/2024 period, the Department referred a total of twelve (12) cases to the National Prosecuting Authority (NPA) for decision to prosecute. Comparatively, seven cases were referred to the NPA in the previous financial year 2022/2023.

During this period, legal proceedings led to the successful issuance of 1 court order and the conclusion of 1 plea sentencing agreement. These outcomes were achieved following the court's careful review and finalisation of both cases in accordance with the applicable legal procedures and standards.

The Department has opened sixty-three (63) criminal cases against non-compliant water users, with the majority of these charges targeting local government entities, particularly municipalities, for polluting water resources. This represents a significant increase compared to the previous financial year of 2022/2023, during which only seventeen (17) criminal charges were filed against offenders. The rise in criminal charges demonstrates stricter enforcement of legislation aimed at protecting water resources from pollution. This stance is essential in addressing and mitigating impacts

on water resources caused by non-compliance, ensuring that water resources are protected for future use.

The Department has implemented its recently approved organisational structure. As part of this process, the Enforcement Unit introduced and added a new official responsible for the Criminal Investigation Unit. This role has been established to ensure the thorough investigation and finalisation of criminal cases for prosecution.

Furthermore, officials were seconded to the Criminal Investigation Unit, where they assisted in opening criminal cases, having been trained to manage case dockets for investigation. This has significantly strengthened the capacity of the Criminal Investigation Unit at DWS Head Office.

Table 10-2 Summary of resolved enforcement cases in financial year 2023/24.

Summary of Resolved Cases	No
Complied with Administrative Action	22
No Contravention Detected	80
Court (order) Interdict	1
Plea Sentence Agreement (Admission of guilt)	1
Remedial action taken in Investigation Phase	22
Total	126

Overall, this analysis provides insights into the various resolutions achieved following enforcement interventions, emphasizing the significance of enforcing compliance and taking appropriate measures to rectify non-compliance instances.

10.1.3 Joint Compliance And Enforcement Operations

Over the past three financial years, the joint operations by DWS Enforcement Units have shown fluctuating trends in the number of reported non-compliance cases. In 2021/2022, a total of 30 joint operations were conducted to address reported non-compliances. This number increased significantly in 2022/2023, with 25 joint operations conducted. In the current 2023/2024, there has been an increase to 46 joint operations (Figure 10.7). **IUCMA** did not deal with any joint operations in 2023/2024. During 2023/2024, **BOCMA** conducted two blitz operations in the third quarter and fourth quarter with DWS and DEADP EMI's.

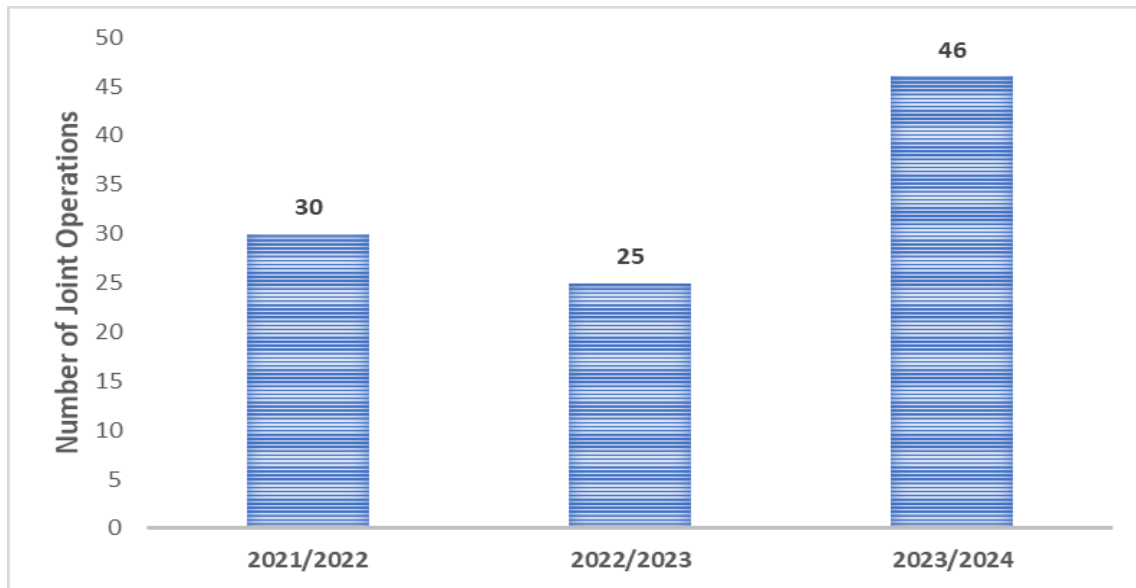


Figure 10.7 Number of DWS joint enforcement operations over the last three financial years 2021/2022-2023/24.

10.1.4 Pollution Incident Enforcement

During the 2023/2024 review period, a total of five hundred and eighty-three (583) cases of non-compliance were reported. Among these cases, one hundred and forty-one (141) were related to the control of incidents resulting in water resource pollution, which includes emergency incidents. In response to these incidents, the Department conducted thorough investigations and, when necessary, initiated administrative enforcement actions or filed criminal charges against those responsible. These actions were aimed at compelling individuals or entities involved to undertake corrective measures to mitigate pollution.

The Department issued one hundred and nineteen (119) notices, and forty-six (46) directives were issued, while (56) criminal cases were opened against the facility operator who, either intentionally or negligently, engaged in activities that resulted in the pollution or potential pollution of a water resource. Collaboratively, the Department is actively engaged with SAPS to facilitate the completion of the case docket, which will then be forwarded to the NPA for a decision. Furthermore, eight (8) cases have been closed as facility operators have undertaken corrective measures to clean and rehabilitate the affected areas, effectively mitigating the pollution risk to our water resources.

During the period under review, the CME division under Inkomati-Usuthu Catchment Management Agency (IUCMA) received twenty-seven (27) reported pollution incidents-related cases for investigation. All reported matters were attended to within 24 hours of the reported period as per the IUCMA SOP. Verbal directives were issued on-site as provided for in terms of S 20 of NWA. Most of these issues were related to

sewage overflow due to municipal infrastructure failure. Eighteen (18) of the reported matters were resolved with a verbal directive. Only nine (09) directives were confirmed in writing within 14 days of issuing a verbal directive. Follow-up inspections were conducted, and all users issued directives fully complied with the IUCMA's requirements. For the quarter under review, all directive matters were resolved.

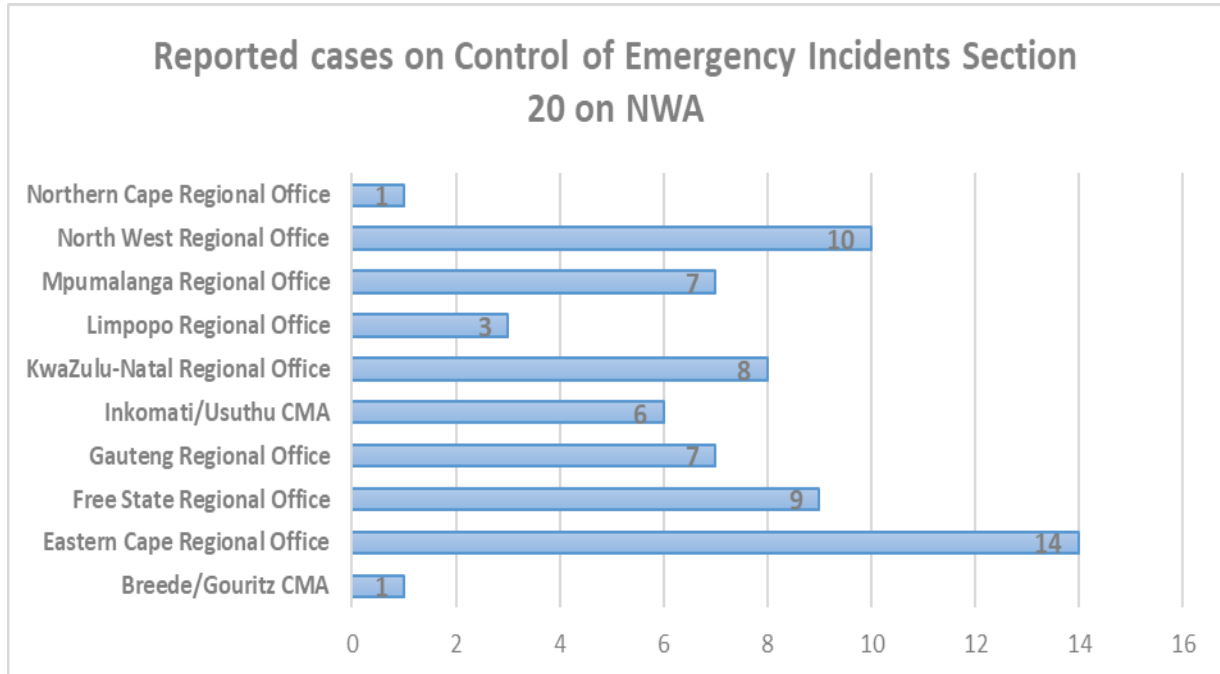


Figure 10.8 Number of emergency pollution incidents of non-compliance reported per DWS/CMA offices.

During the 2023/2024 financial year, the BOCMA CME unit dealt with one (1) emergency pollution incident (section 20) related cases for investigation and obtained from the ECMS. Other pollution incidents are not captured on the ECMS and provided by BOCMA at the time of publication of this report.

10.1.5 CME Capacity Building

The DWS CME Strategy approved in March 2018 is progressively being implemented with the further training of DWS and CMA CME/EMI personnel and external stakeholders. In respect of EMI Basic Training undertaken during 2023/2024, 21 of the DWS and CMAs officials received training by DFFE. The 21 CME officials are awaiting designation as EMIs by the end of March 2024 but have been designated since April 2024.

Internal DWS / CMA training courses for officials to perform their duties more effectively and efficiently and to enable them to be designated as EMIs. A WUCME database register is updated on a quarterly basis for official receiving training and

which training sessions attended for 2023/24. It gives a good indication of who still needs to be trained and for which advanced courses to take.

Phase 1 (3-days) & Phase 2 (2-days) CME training was developed, and training was provided to Proto-CMAs that already appointed staff and will be conducting CME functions and existing CME Regional Office officials that will be moving over to the CMAs on:

- **Phase 1:** Generic concepts, processes, procedures and IT Application tools (NCIMS and ECMS) and how to compile a Compliance Inspection Report to CMAs/Proto-CMAs
- **Phase 2:** CME training on compliance monitoring SOPs and requirements for specific water sectors, as well as enforcement SOPs and actions to be taken.

IUCMA already received training on Phase 1 in the previous financial year 2022/2023 (8-10 February 2023) and requested to be trained on Phase 2 at a later stage due to internal organizational structure issues. When VO Proto-CMAs North West and Gauteng; PM Proto-CMA (KZN) and LO Proto-CMA (Mpumalanga & Bronkhorstspuit offices) appoint CME officials, the CME Phase 1 & Phase 2 training will also be rolled out to them in 2024/25.

The development of an advanced EMI Waste and Pollution Sampling training course in collaboration with DFFE is completed and training will be provided in the 2024/25 financial year.

Additionally, during the 2023/2024 financial year the sub-directorate Enforcement Support conducted legally oriented capacity-building training sessions with its external stakeholders such as SAPS, NPA and Traditional leaders. The external stakeholders have a direct involvement in the investigation and prosecution of criminal matters and thereby enforce compliance with the National Water Act. Therefore, these engagements are important to build the capacity and skills base of the personnel within these institutions to successfully investigate and deal with water-related criminal cases. The external stakeholder training sessions were held for 16 SAPS, 5 NPA and 2 Traditional communities for capacity-building initiatives.

During the last 10 years DWS has conducted a total of 3608 compliance inspections for various water users (excluding dam safety infrastructure inspections). Therefore, an average of 361 compliance inspections have been conducted each year. With 134524 water users registered on WARMS on 1 April 2024 only 2.7 % water users have been inspected. This gives a reality check on the enormous task at hand for about 70 Compliance Monitoring officials in DWS and CMAs to conduct these compliance monitoring inspections and audits.

10.1.6 Reflection of the last decade for CME performance

During the last 10 years DWS has conducted a total of 3608 compliance inspections for various water users (excluding dam safety infrastructure inspections). Therefore, an average of 361 compliance inspections have been conducted each year (Figure 10.9). With 134524 water users registered on WARMS on 1 April 2024 only 2.7 % water users have been inspected. This gives a reality check on the enormous task at hand for about 70 Compliance Monitoring officials in DWS and CMAs to conduct these compliance monitoring inspections and audits.

The average of the compliance performance percentage (%) for the water sector are 55% over the last 10 years for DWS. Compliance inspections in these graphs do not include CMA data as BOCMA and IUCMA only commence with compliance inspections in 2023/24.

KEY FINDINGS *cont...*

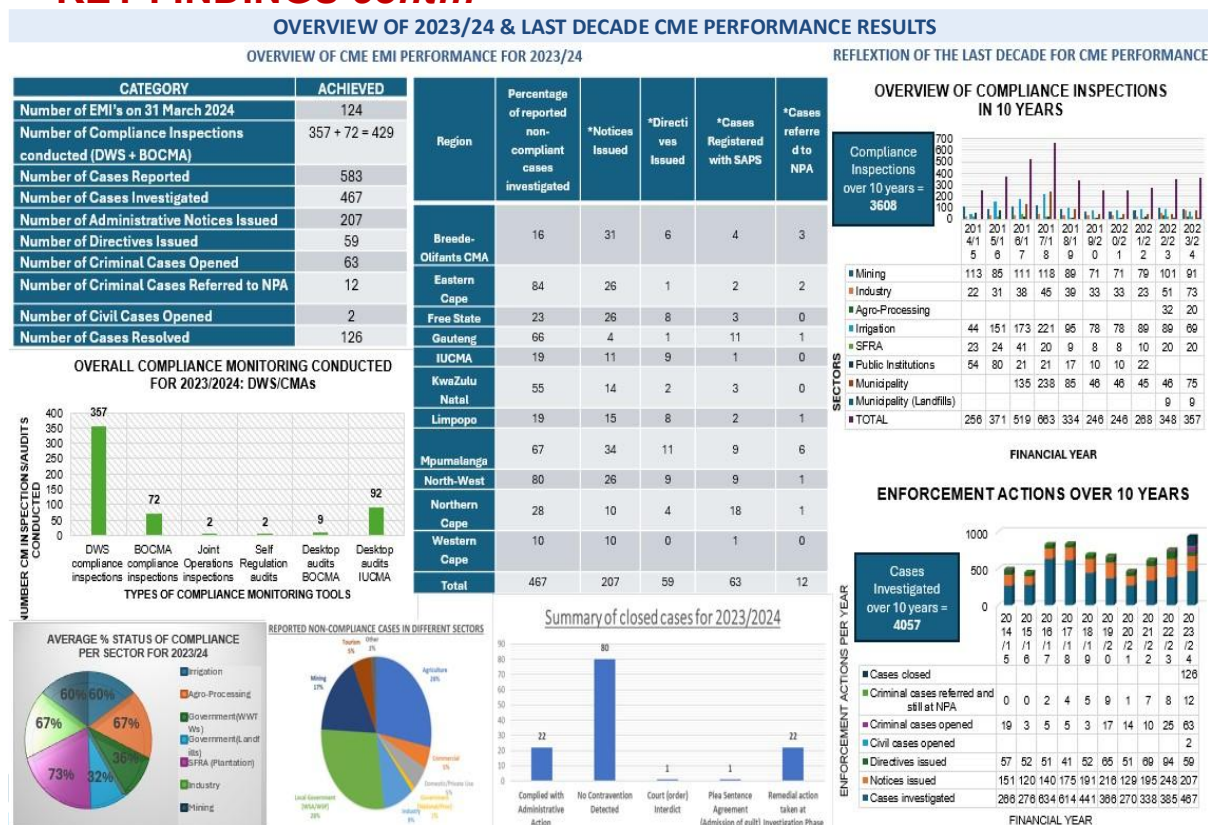


Figure 10.9 Reflection of the last 10 years of compliance inspections conducted per water sector and enforcement actions.

During the last 10 years 4057 cases were investigated. Enforcement cases investigated, notices and directives issued, criminal cases opened and referred to NPA for the last decade as per the ECMS data are tabled above in Figure 10. Cases closed

were only recorded during the 2023/24 annual reporting period. CMAs BOCMA & IUCMA included.

10.2 Drinking Water Regulation

In South Africa, the South African National Standard for Drinking Water (SANS:241) is the definitive reference on acceptable limits for drinking water quality determinants. SANS:241 prescribes the minimum numerical limits that must be met for drinking water quality to be deemed safe for human consumption. There are approximately 1300 drinking water treatment works (WTWs) in South Africa, mostly owned by municipalities and water boards, and they are privately owned. There are several determinants that are analysed in the laboratory to determine compliance, and they are mainly grouped into microbiological, chemical (acute), and chemical (chronic). In addition, operational and aesthetic determinants are also monitored.

In terms of SANS 241, Water services authorities (WSAs) are required to monitor the microbiological and chemical quality of the water provided to the residents at specified intervals, including hourly, daily, weekly, fortnightly and monthly tests of various types. The Water Services Act (Act No. 108 of 1997) prescribes the legislative duty of WSAs to provide drinking water to residents of all municipalities. The Act requires the Minister to establish and maintain a National information system and monitor the performance of all water services institutions. Based on this, the Department has established the Integrated Regulatory Information System (IRIS) to monitor drinking water quality. The IRIS is accessible to the public at <http://ws.dwa.gov.za/IRIS/documents.aspx>.

10.2.1 Chemical Drinking Water Compliance

Chemical quality is determined by determinants prescribed by SANS:241 or the World Health Organization (WHO), which may be acute or chronic in nature, with each determinant carrying specific health risks. Acute health risks can result in death if the limit is exceeded, whereas chronic limits provide maximum limits that can be consumed over time before health effects become apparent.

Chemical determinants could be monitored at least once a year, assuming no prior risk to consumers has been identified. In compliance monitoring, all WSAs must perform a full SANS:241 as specified by the standard. To be considered safe, drinking water must meet at least 95% chemical compliance. A total of 144 water services authorities were monitored in the current reporting period, however, 36 of the 144 water services authorities did not upload data on the IRIS. The results of the water supply systems compliance in terms of chemical drinking water quality from October 2023 to September 2024 are presented in Figure 10.10 below.

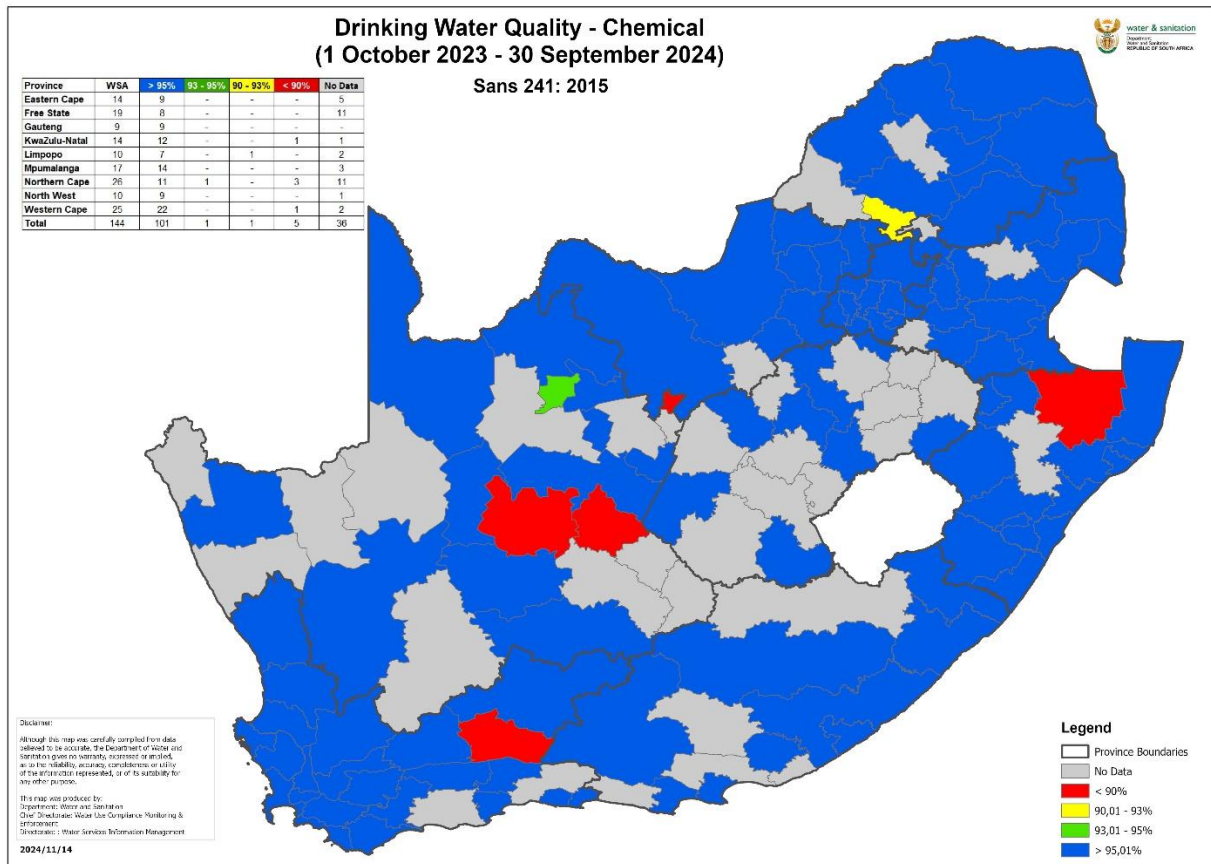


Figure 10.10: Status of drinking water chemical quality compliance.

The (Oct 2023-Sept 2024) results presented in Figure 10.10 show that 70% of water supply systems demonstrated excellent chemical quality compliance, while 4.2% demonstrated poor to critical chemical quality compliance. IRIS reports non-compliance (<90%) to the Municipality monthly. The Department will continue to monitor and support non-reporting and non-compliant Water Service Authorities at their regional offices.

10.2.2 Microbiological Drinking Water Compliance

Microbiological compliance reflects the actual compliance of the final water and distribution systems between October 2023 and September 2024 against microbiological determinants. The presence of these determinants in water is a strong indication of recent sewage or animal waste contamination. There is potential for contracting diseases from pathogens; thus, the Water Services Institutions are expected to be 99.9% compliant with **all microbial indicators** analysed. The results for the drinking water microbiological compliance for the reporting period are presented in Figure 10.11.

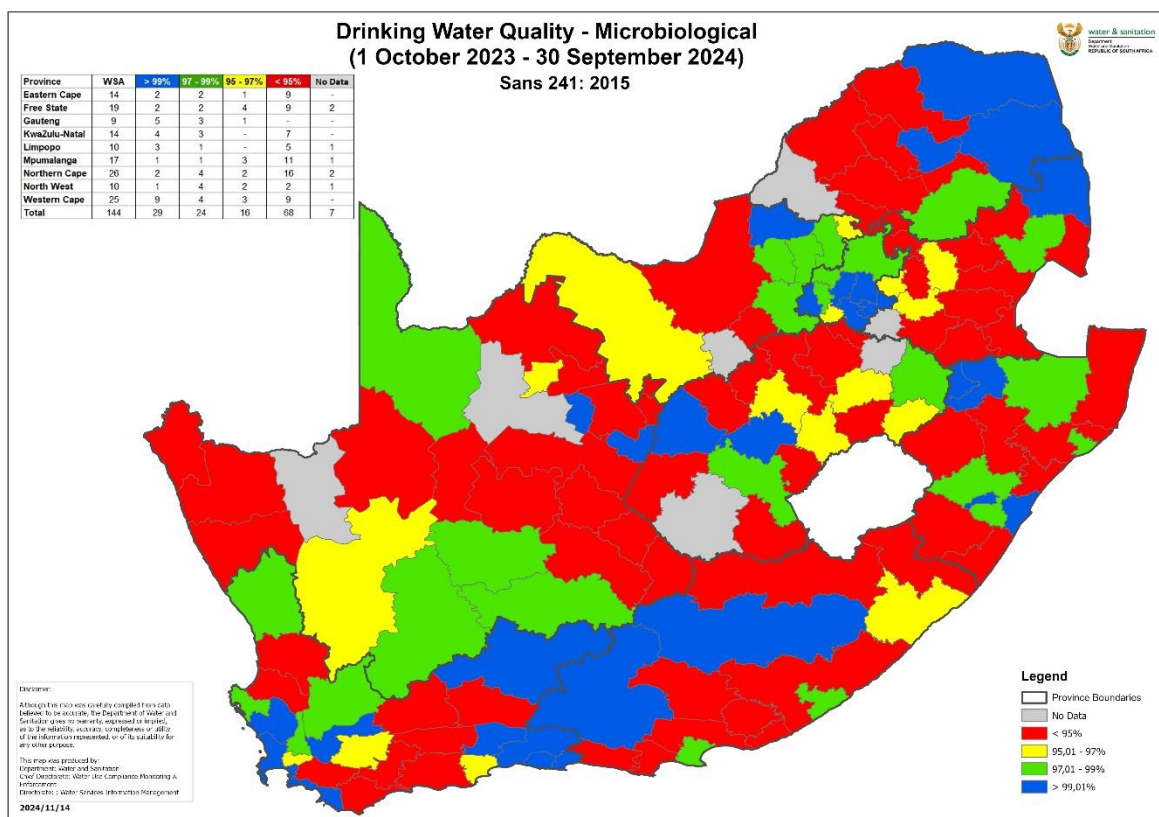


Figure 10.11: Status of drinking water microbiological quality compliance.

The results show that **75% of the water services authorities in the country did not meet SANS:241 actual compliance requirements for the reporting period (1 October 2023- 30 September 2024)**, and only 20% of the water supply systems achieved an excellent status (>99.9%). It was also noted that 7 WSAs did not submit their drinking water quality data as prescribed by the norms and standards, thus affecting the national outlook as these WSAs could not be assessed in the absence of drinking water quality data submission to the Department.

The Department is deeply concerned about the overall poor compliance results, as most water supply systems pose a potential health risk to consumers. Through its provincial offices, the Department is constantly monitoring and engaging with relevant WSAs that have achieved microbiological compliance levels below 99.9%, including those that do not provide water quality data to the Department.