

# Using NPDES Data for Program Management

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2023 National NPDES Permitting Meeting



State of Oregon  
**Department of  
Environmental  
Quality**

# Background

## ICIS-NPDES database

- Access is limited
- Reports from ICIS Business Objects

## Get to know your data team

- Access to ICIS reports
- Skills in
  - Database query
  - Data analysis
  - Data visualization



# Background

## State-generated data

- NPDES permit inventory
- Monitoring and reporting requirements
- Inspections
- Enforcements
- Compliance schedules

## Permittee self-reported data

- Influent monitoring
- Effluent monitoring
- Ambient/receiving water monitoring

## ICIS-generated data

- Effluent limit exceedances
- Schedule violations
- Overall compliance status

# Permit Limits and Monitoring Data

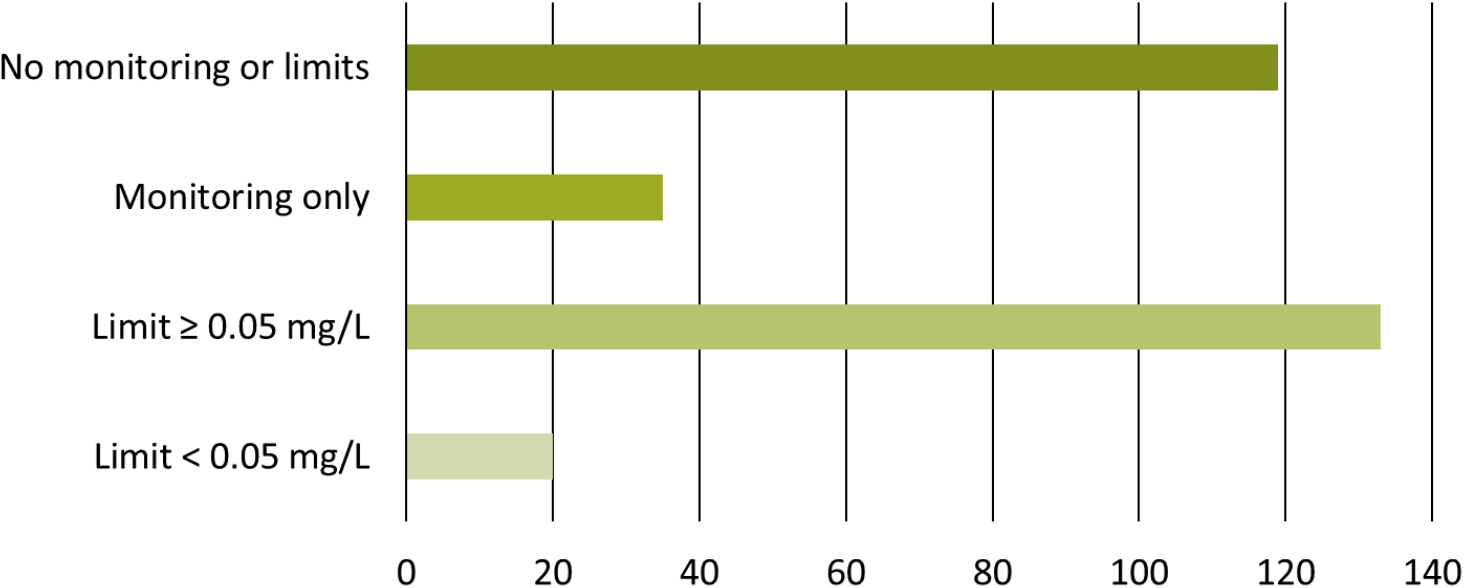
## ICIS Business Objects

- ▢ Public Folders
  - ▢ NPDES
    - ▢ National Standard Reports
      - ▢ Limit Summary Report State Prompt

## Uses

- QA/QC permit reporting setup
- Consistency across permits
- Respond to permittee comments
- Respond to questions from legislators
- Support other water quality staff

# Chlorine Limits in Individual Permits



NPDES ID	Daily average	Daily maximum	Monthly average
OR0000060		0.042	
OR0000329		0.04	0.02
OR0000337		0.02	0.01
OR0000345		0.02	0.01
OR0000566		0.04	
OR0020575			0.03
OR0020699	0.02		
OR0020737		0.03	0.012
OR0020818		0.02	0.01
OR0022560		0.03	0.01
OR0023302		0.02	
OR0026221			0.03
OR0026395		0.04	0.01
OR0027201		0.018	0.007
OR0027561			0.04
OR0028118		0.026	0.019
OR0029777		0.025	0.009
OR0029939			0.03
OR0030660		0.01	0.02
OR0031259		0.04	0.02

# Nutrient Numeric Limits and Monitoring Requirements

NPDES ID	Dissolved ammonia nitrogen	Total ammonia nitrogen	Total nitrogen	Total organic nitrogen	Total inorganic nitrogen	Total Kjeldhal nitrogen	Total nitrate nitrogen	Total nitrite nitrogen	Total phosphorus	Dissolved ortho-phosphate	Total ortho-phosphate	Total phosphate	Dissolved reactive phosphorus
OR0000116		●											
OR0000141						○			○				
OR0000515									○				
OR0000558		○				○	○		○				
OR0000612		●											
OR0000680		○											
OR0000736		●											
OR0001015		●	●										
OR0001112		●											
OR0001635		●		●			●						
OR0001716		●											
OR0002402		○				○			●				
OR0002526						○							
OR0002542		●	●						●				
OR0002585		○	●						●				
OR0020001		○				○			○				
OR0020028		○				○							
OR0020052		●							●				
OR0020168		●				○			●				







# Monitoring Data Availability

Individual NPDES permittees in the Columbia River Basin that monitor for dioxins

State Water Body Name	NPDES ID	Parameter Description	Reported Statistic	
			Daily Maximum	Value
Columbia River	OR0000795	2,3,7,8-Tetrachlorodibenzo-p-dioxin	123	
Willamette River	OR0001741	2,3,7,8-Tetrachlorodibenzo-p-dioxin		11
		Octachlorodibenzo-p-dioxin		11
	OR0001074	2,3,7,8-Tetrachlorodibenzo-p-dioxin	43	
Total number of reported samples			166	22

DMR data downloadable from ECHO effluent charts

# Violation Data

## ICIS Business Objects

- ▢ Public Folders
  - ▢ NPDES
    - ▢ National Standard Reports
      - ▢ Violation Report

## Uses

- Compliance monitoring
- Identify need for technical assistance
- Identify need for CWSRF funding for capital improvements
- Respond to management, legislative, and public information requests

# Monthly Noncompliance Reports

**Data Team compiles  
several data sources**

**Prepared within 2 weeks  
of the DMR due date**

NetDMR non-receipt notices

Missing DMRs

ICIS violation report

Schedule violations

Effluent limit exceedances

ECHO Data Visualization SNC tool

Facilities in SNC

ICIS NODI codes report

NODI code use

# Monthly Noncompliance Reports

## Missing DMRs

OR0023167 Facility Name Redacted - 001-A, 001-G, 002-A (Pinney)

OR0029564 Facility Name Redacted - 001-A (Gasik)

OR0030546 Facility Name Redacted - 001-A (Ullrich)

OR0020346 Facility Name Redacted - 001-CU (McFetridge)

# Monthly Noncompliance Reports

## Facilities in SNC

OR0000612 Facility Name Redacted - for total residual chlorine violations April through June 2022. **Informal enforcement (WL/PEN) needed.** (Bailey)

OR0020389 Facility Name Redacted - TSS permit limit exceedances from August 2021 to January 2022. [2022-PEN-6784](#) was issued January 5, 2022, and revised March 22, 2022, to include additional permit limit exceedances. OCE Case 2022-044 status is *referral received*. (Saylor/Bailey)

OR0022764 Facility Name Redacted - TSS permit limit exceedances from November 2021 and March 2022. Further TSS violations in May and July 2022. [2022-PEN-6988](#) issued March 22, 2022; OCE Case 2022-038 status is *inspector FEA review completed*. (Bachman/Pinney)

# Monthly Noncompliance Reports

## Schedule Violations

OR0044661 Facility Name Redacted - The permittee must submit a brief report to DEQ explaining the operational status of the outfall and any expected changes to the outfall within the next 12 months due August 1, 2022. **Was this submitted?** (Glaser)

# Monthly Noncompliance Reports

## Effluent Violations

OR0000612 Facility Name Redacted (Bailey)

001-AS - pH daily minimum was 5.4 SU, limit is  $\geq 6$  SU

002-AS - pH daily maximum was 9.77 SU, limit is  $\leq 9$  SU

OR0022624 Facility Name Redacted 001-A (Pinney)

BOD percent removal was 83%, limit is  $\geq 85\%$  (13% excursion)

OR0026905 Facility Name Redacted 001-A (Pinney)

Resolved by MAO 2020-182 (send facility email per MAO IMD). Final chlorine limits are not in effect until December 1, 2022.

Total residual chlorine monthly average concentration was 0.41 mg/L, limit is  $\leq 0.19$  mg/L (116% exceedance)

Total residual chlorine daily maximum concentration was 0.8 mg/L, limit is  $\leq 0.27$  mg/L (196% exceedance)







# Other Useful NPDES Data

## Enforcement Action Data

- Compliance team output
- Timeliness of violation resolution

## Compliance Schedule Data

- Facilities are operating under long-term agreements to come into compliance
- Workload planning for report reviews

## NODI Code Data

- Permittees who have not discharged in years
- Patterns of incorrect reporting

# More Information

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Environmental  
Quality**