



# WQS VARIANCES AND NPDES PERMITS: COORDINATION ACROSS PROGRAMS

ACWA NATIONAL NPDES PERMIT WRITERS' WORKSHOP

SEPTEMBER 17, 2019

Office of Science and Technology and  
Office of Wastewater Management

Office of Water  
U.S. Environmental Protection Agency

# DISCLAIMERS

➤ **This presentation does not:**

- Impose any binding requirements
  - Determine the obligations of the regulated community
  - Change or substitute for any statutory provision or regulation requirement
  - Represent, change or substitute for any Agency policy or guidance
  - Control in any case of conflict between this discussion and statute, regulation, policy or guidance
- The views expressed in presentation are those of the author[s] and do not necessarily represent the views or policies of the U.S. Environmental Protection Agency.

# SESSION GOALS

- Learn how coordination between the water quality standards (WQS) and permitting programs during the development, submittal and implementation stages of WQS variances can help to ensure a successful process and achieve the desired environmental outcomes.
  - EPA, Colorado, Kansas and Wisconsin will present their experiences with collaboration and how it impacts the WQS variance development and implementation process.
- Achieve a common understanding of how state permitting staff work with their WQS counterparts, what kinds of experiences they have with WQS variances and what advantages/disadvantages they see with increasing collaboration on WQS variances.

# SESSION AGENDA

- |   |            |
|---|------------|
| <b>1) Introduction/Overview of WQS Variances</b>                              | EPA        |
| <b>2) Examples of State Cross-Program Coordination</b>                        | CO; KS; WI |
| <b>3) Group Discussion:<br/>Opportunities for Cross-Program Collaboration</b> | All        |

# EPA CROSS PROGRAM COORDINATION ON WQS VARIANCES

EPA is currently working to improve coordination across the water programs (water quality standards, NPDES permitting and TMDL programs)

More effective coordination between the NPDES and WQS programs could have numerous benefits, including:

- Identifying any concerns that should be addressed in the WQS variance early on in the development process
- Accurately describing the actions the discharger can take during the WQS variance term, thus increasing the likelihood that WQS variance requirements will be implementable in permits
- Increasing the effectiveness and efficiency of the periodic reevaluation of the WQS variance

# INTENT OF 40 CFR 131.14

- ❖ EPA promulgated 40 CFR 131.14 to explicitly authorize the use of WQS variances and clearly identify the requirements to obtain EPA approval.
- ❖ Unlike for permit compliance schedules, states and authorized tribes are not required to adopt their own authorizing provisions or procedures for WQS variances.
- ❖ The variance regulation:
  - ❖ Reduces uncertainty and facilitates appropriate, consistent, and effective implementation over a defined period of time.
  - ❖ Ensures transparency and accountability to both the regulated community and the public.

# A WQS VARIANCE IS:

- ❖ A time-limited designated use and criterion:
  - for a specific pollutant.
  - from a specific source or for a specific water body.
  - that reflects the highest attainable condition for a specific time period.
- ❖ A regulatory mechanism that **ensures incremental water quality improvements** when the designated use and criterion are not currently attainable.

Transparent path, accountable progress

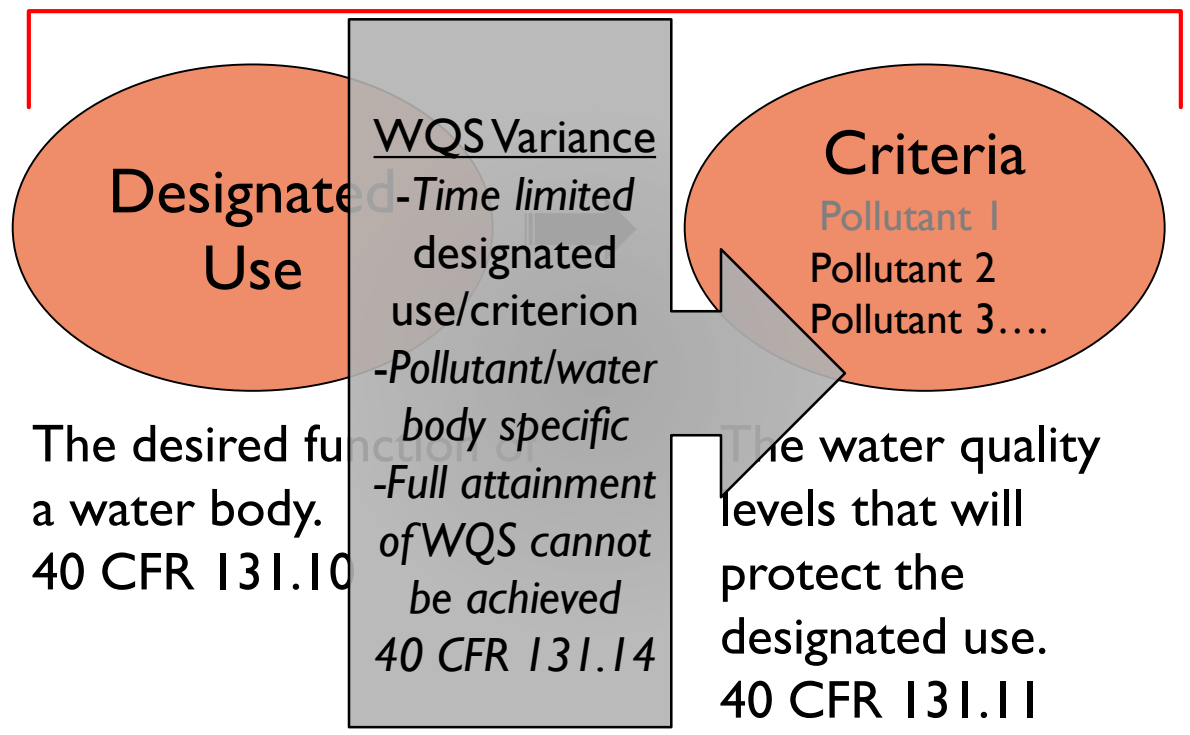
# WHEN WQS VARIANCES CAN BE USEFUL

- ❖ Incremental water quality improvements can be made even though:
  - The designated use and criterion is not attainable now, but the state or authorized tribe believes it can be in the future, or
  - The feasibility of attaining the designated use and criterion in the future is uncertain, but feasible progress towards attaining the designated use can still be made by implementing known controls and tracking environmental improvements.

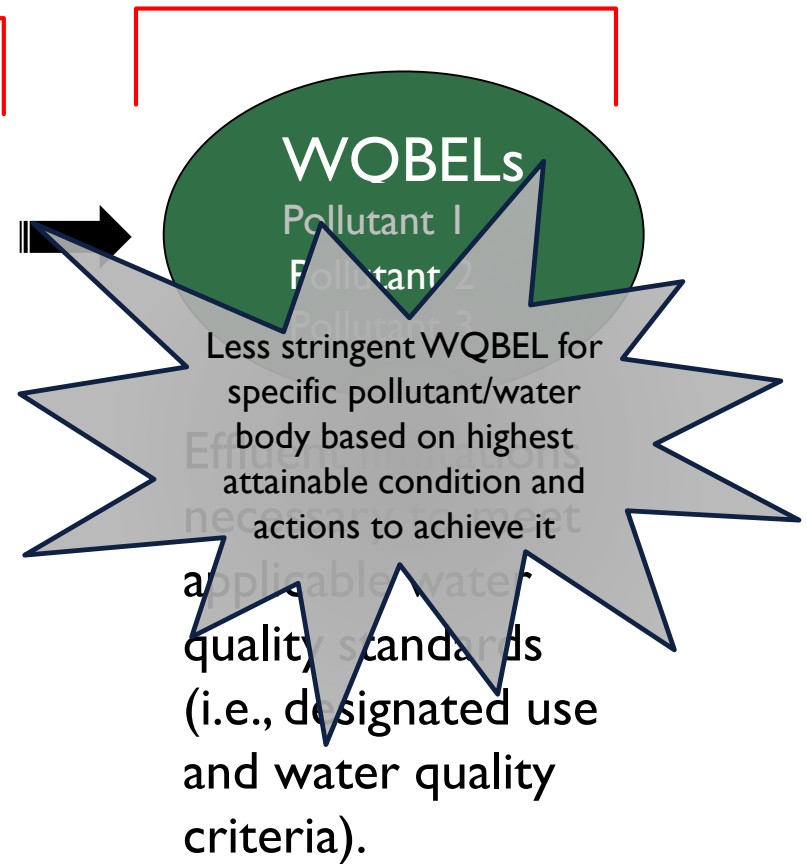


# LINK BETWEEN WQS VARIANCES AND NPDES PERMITS

## Water Quality Standards



## Implementation: NPDES Permit



# WQS VARIANCE INTERIM REQUIREMENTS: HIGHEST ATTAINABLE CONDITION (HAC)

1. Highest attainable interim criterion; or
  2. Interim effluent condition reflecting greatest pollutant reduction achievable; or
  3. *If no additional feasible pollutant controls*, the interim criterion or interim effluent condition reflecting greatest pollutant reduction with optimization of installed treatment **AND** adoption and implementation of a pollutant minimization program (PMP).
- ❖ *Pollutant Minimization Program (131.3(p))* – “in the context of 131.14, is a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings.”

# WQS VARIANCE: SUMMARY OF REQUIREMENTS

- 1) Scope – Identification of the pollutant(s) or water quality parameter(s) and water body or waterbody segment.
- 2) Interim Requirements - Requirements that apply throughout the term of the variance (i.e. Highest Attainable Condition (HAC)), which must be quantifiable but can be expressed as an interim ambient criterion or as an effluent condition.
- 3) Variance Term – term of the variance that is only as long as necessary to achieve the HAC, expressed as an interval of time from the date of EPA approval or a specific date.
- 4) Reevaluation
  - Reevaluation schedule and process for public input where variance term > 5 years.
  - Statement that variance requirements are the more stringent of either HAC at time of adoption, or HAC identified at reevaluation.

# WQS VARIANCES: A BRIDGE BETWEEN WQS AND NPDES EFFLUENT LIMITS

A WQS variance is a WQS that requires review and approval by EPA.

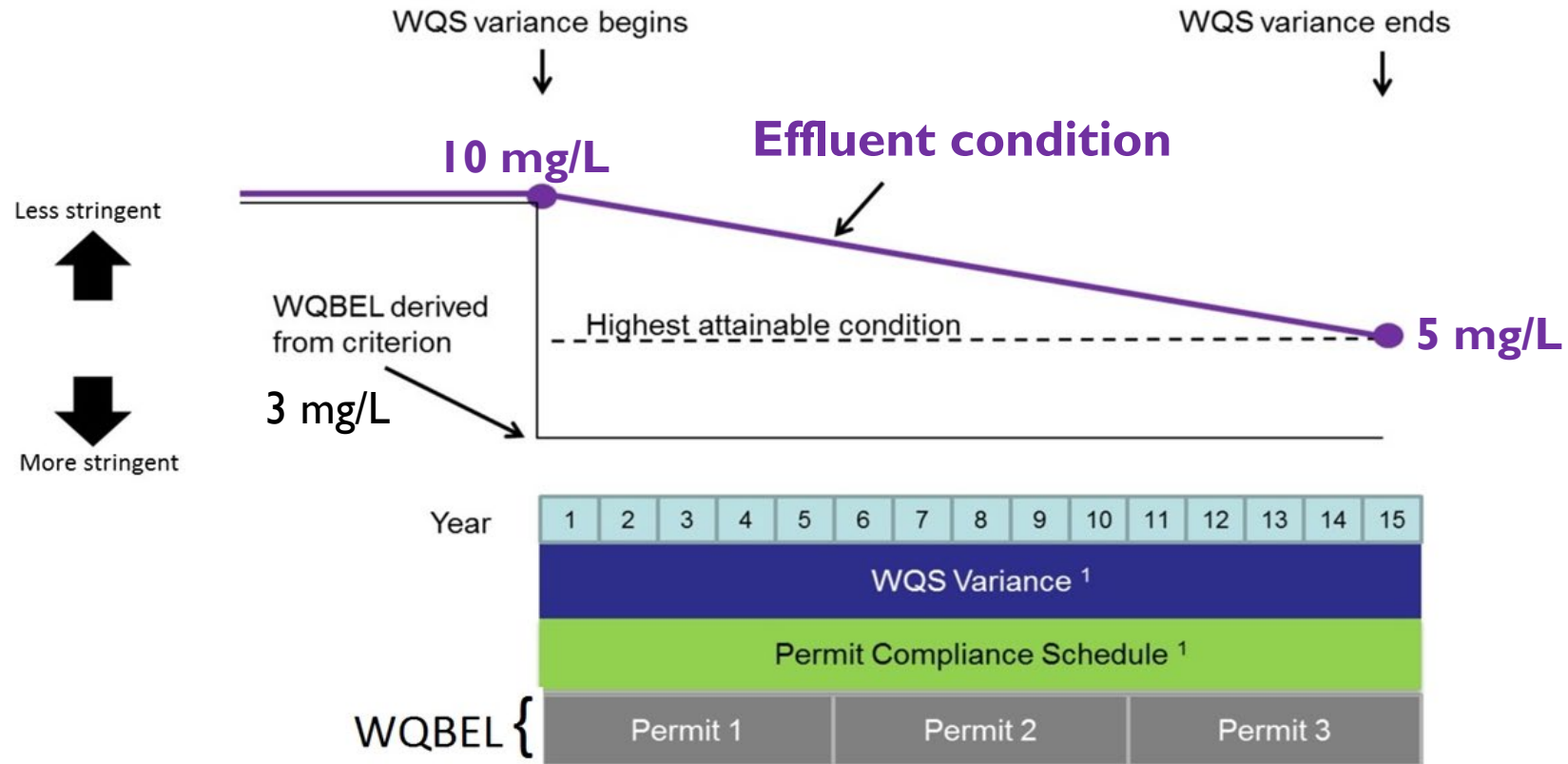
Permitting authorities implement the requirements of WQS variances by:

- Establishing less stringent water quality based effluent limits (WQBELs) for a specific pollutant based on what is the best condition (i.e. HAC) that the discharger (or water body) can achieve,
- for a specified period of time (only as long as necessary to achieve HAC),
- that still derive from and comply with all applicable WQS consistent with 40 CFR 122.44(d)(1)(vii)(A).

# PERMIT COMPLIANCE SCHEDULES AND WQS VARIANCES

Permit Compliance Schedule	WQS Variance
<p>Actions and time needed to comply with the WQBEL based on the designated use and criterion are known.</p>	<p>Actions and time needed to comply with the WQBEL based on the underlying designated use and criterion are uncertain.</p>
<p>The permit requires compliance with final WQBELs “as soon as possible.” See 40 CFR 122.47</p>	<p>The WQS variance is a temporary designated use and criterion and WQBELs are adjusted to reflect what is highest attainable and incremental progress is made.</p>
<p>A special condition included in a permit and can only be changed as described in 40 CFR Sec.122.62(a) (4) and (13); and 122.63(c).</p>	<p>WQS basis for a less stringent permit limit and a subsequent variance can be obtained if it can be re-justified.</p>

# EXAMPLE: USING A PERMIT COMPLIANCE SCHEDULE WITH A DISCHARGER-SPECIFIC WQS VARIANCE



<sup>1</sup> Meets all statutory and regulatory requirements.

# Opportunities for Cross Program Collaboration

WQS Variance Process Step	Considerations for the NPDES Permit Writer
<p>State determines if a WQS variance is the right tool</p>	<p>Can the underlying designated use and criterion be achieved by implementing TBELs?</p>
	<p>Is the permittee subject to the WQS variance already meeting the WQBEL based on the underlying designated use and criterion?</p>
	<p>Are there specific actions that the permittee can take to meet the WQBEL based on the underlying designated use and criterion?</p>
<p>State determines the interim requirements of the WQS variance (i.e. HAC)</p>	<p>How will the WQS variance, if adopted and approved, impact the NPDES permit for the discharger(s) subject to the WQS variance?</p>
	<p>Will a permit compliance schedule be needed to provide time to meet a WQBEL derived from the HAC?</p>
	<p>Is there information to help identify the highest attainable effluent condition or the feasible PMP activities and help identify how much time is needed to accomplish either?</p>

# OPPORTUNITIES FOR CROSS PROGRAM COLLABORATION- CONTINUED

<b>WQS Variance Process Step</b>	<b>Considerations for the NPDES Permit Writer</b>
State implements the WQS variance after EPA approval	Permitting authority ensures permit derives from/complies with the HAC and includes any limitations and requirements necessary to implement the WQS variance as enforceable conditions of the permit (if using HAC3).
State conducts WQS variance reevaluations (for WQS variances with term >5years)	Is there useful information to inform any WQS variance reevaluation using data gathered through the permit reissuance process, monitoring data and other oversight?



# THANK YOU

**Melissa Dreyfus**  
**National Water Quality Standards Branch, SHPD**  
**Office of Science and Technology**  
**Office of Water**  
**U.S. Environmental Protection Agency**

**Phone: 202-566-9989**  
**email: [dreyfus.melissa@epa.gov](mailto:dreyfus.melissa@epa.gov)**

**Nizanna Bathersfield**  
**National Program Branch, WPD**  
**Office of Wastewater Management**  
**Office of Water**  
**US Environmental Protection Agency**

**Phone: 202-564-2258**  
**email: [bathersfield.nizanna@epa.gov](mailto:bathersfield.nizanna@epa.gov)**