Tools for Achieving Water Quality Standards

VIRTUAL WQS ACADEMY

MAY 2023

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- **This presentation does not:**
  - Impose any binding requirements.
  - Determine the obligations of the regulated community.
  - Change or substitute for any statutory provision or regulatory requirement.
  - Change or substitute for any Agency policy or guidance.
  - Control in any case of conflict between this discussion and statute, regulation, policy or guidance.

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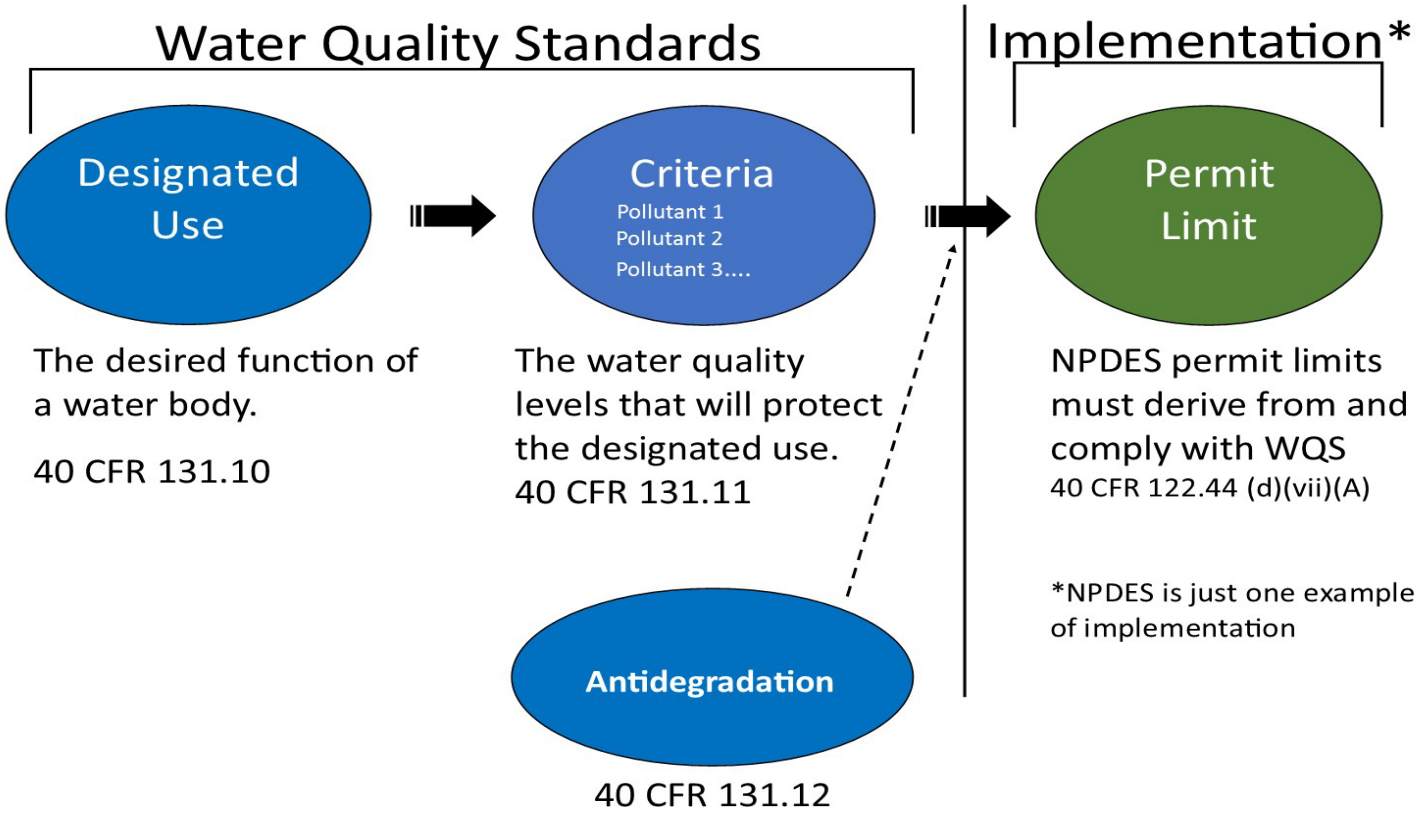
Guiding Principles

Standards should guide the process of restoration.

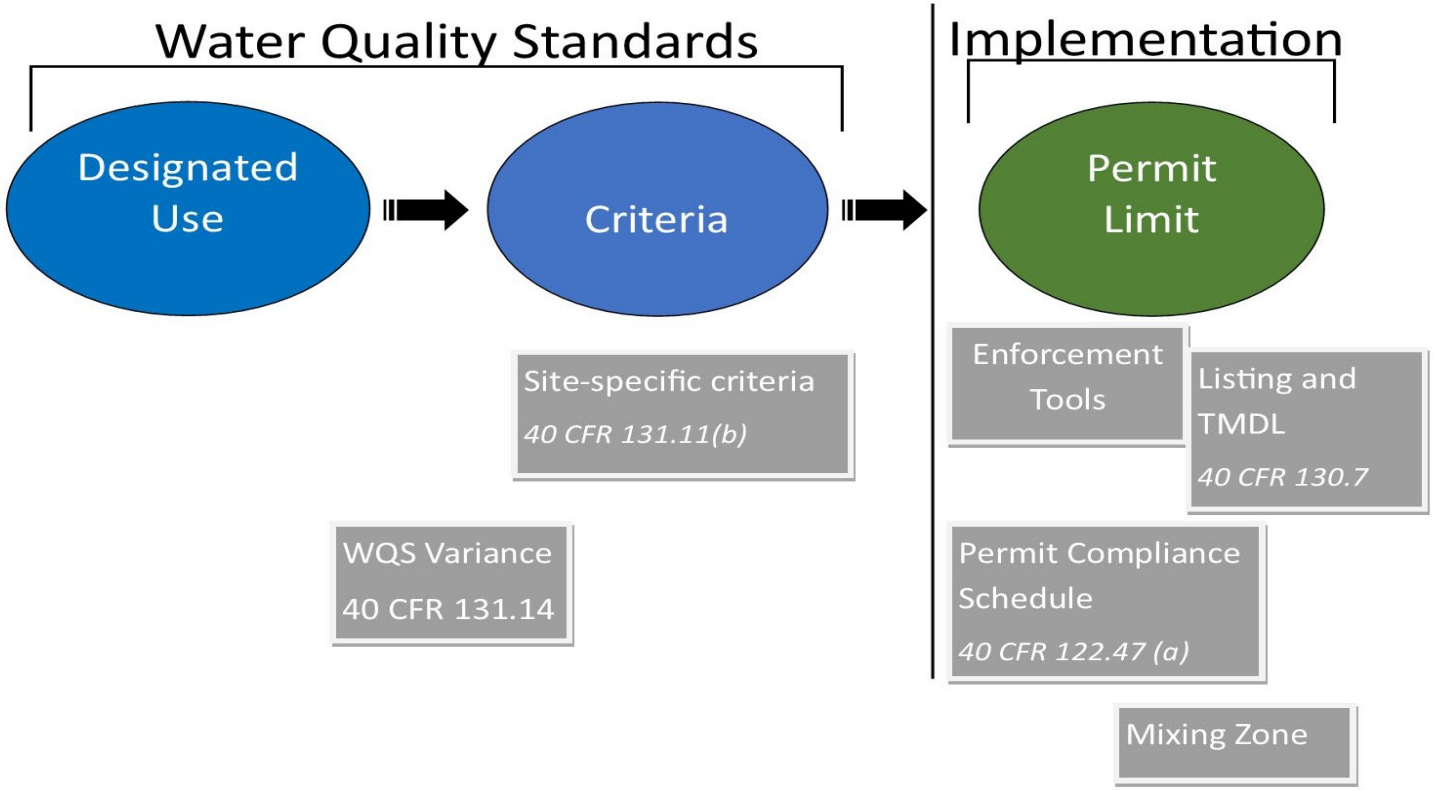
Standards need not be the same for every water body.

Standards should not be a barrier to achieving incremental water quality improvement.

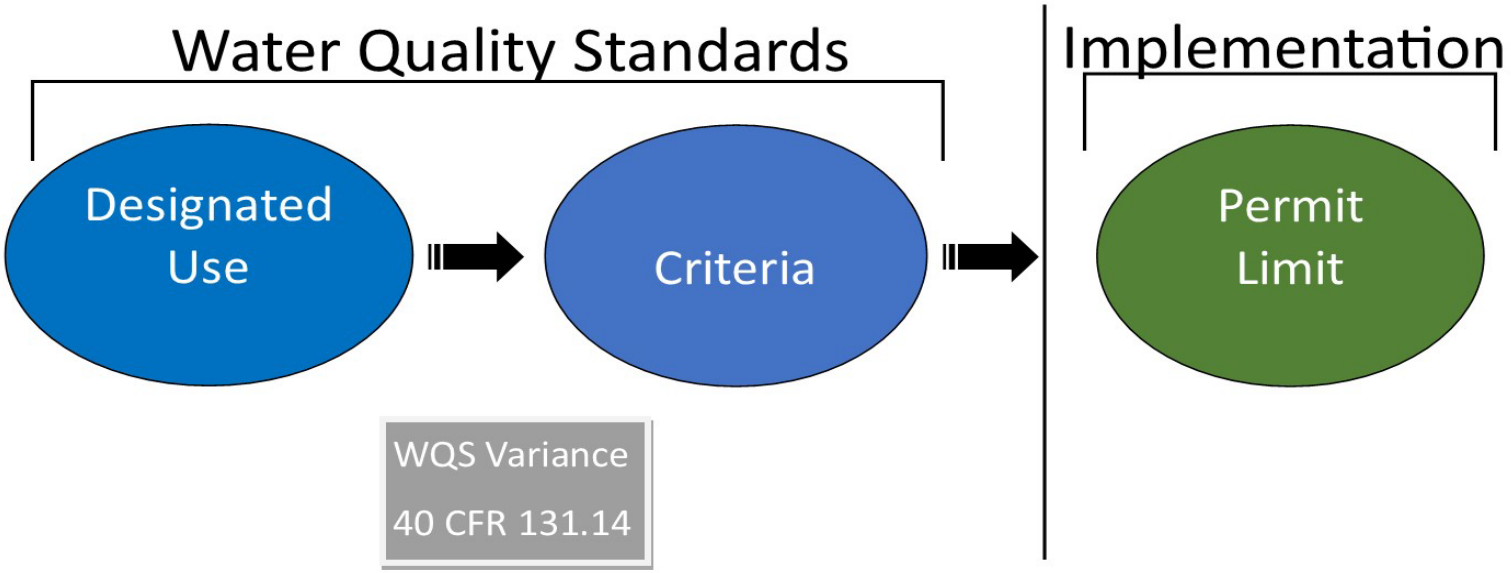
Water Quality Standards Schematic



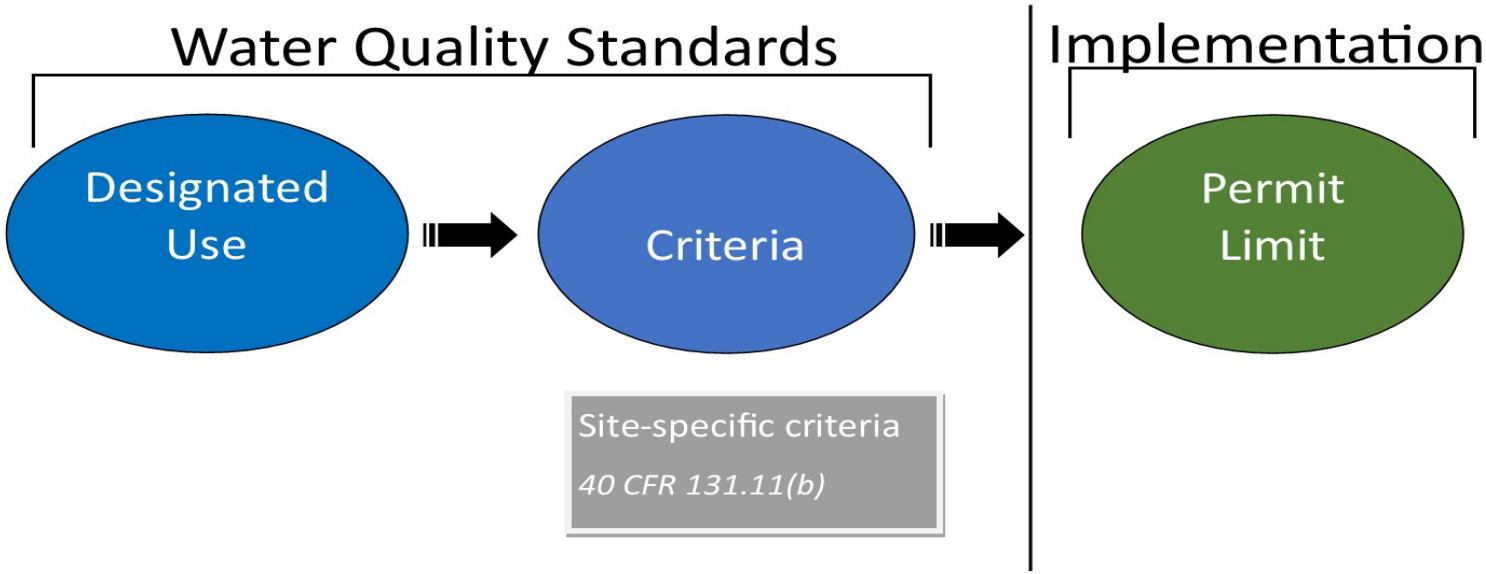
A Variety of Tools To Help Meet WQS



WQS Variance: time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflects the highest attainable condition during the term of the WQS variance (131.14).

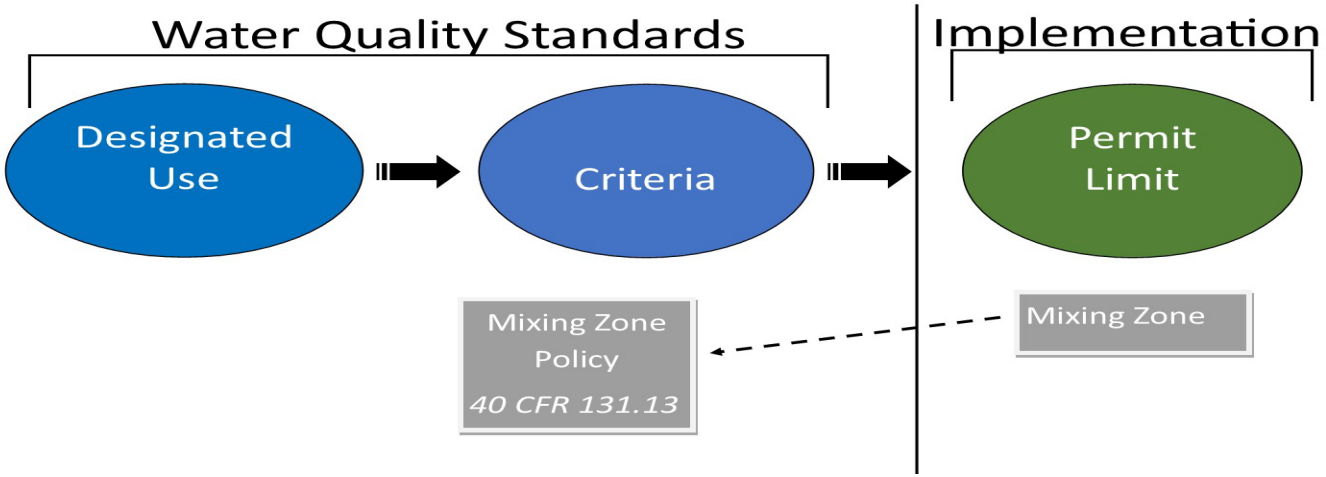


Site Specific Criteria: a tool to tailor standards to local conditions/key species



- Best used when you have additional scientific information that more accurately expresses a level/concentration for a water quality parameter to protect the designated use.
- Under Section 131.11(b)(1) of the regulations, States and Tribes may adopt numeric criteria based on:
  - Published CWA Section 304(a) guidance;
  - Section 304(a) guidance modified to reflect site specific conditions; or,
  - Other scientifically defensible methods.

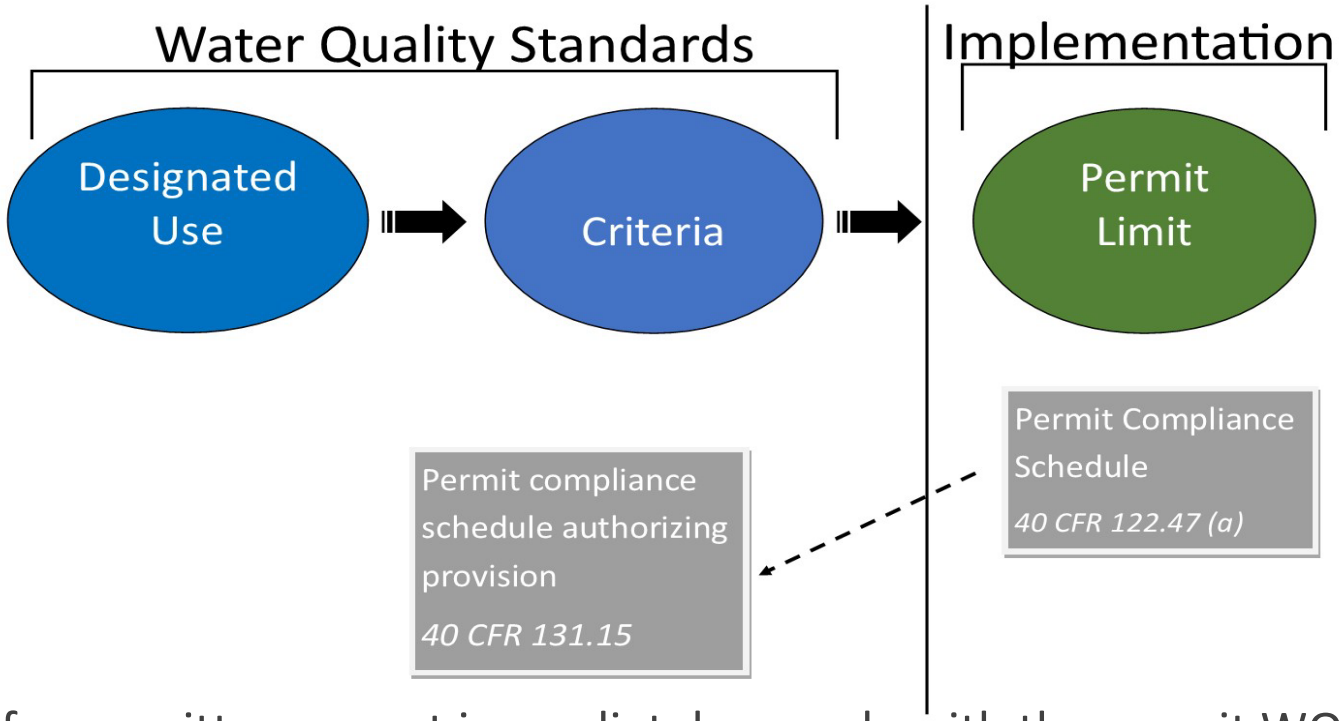
Mixing Zone: a tool that allows for dilution of a discharge before criteria must be met



A **mixing zone** is a limited area or volume of water where initial dilution of a discharge takes place and where certain numeric water quality criteria may be exceeded.

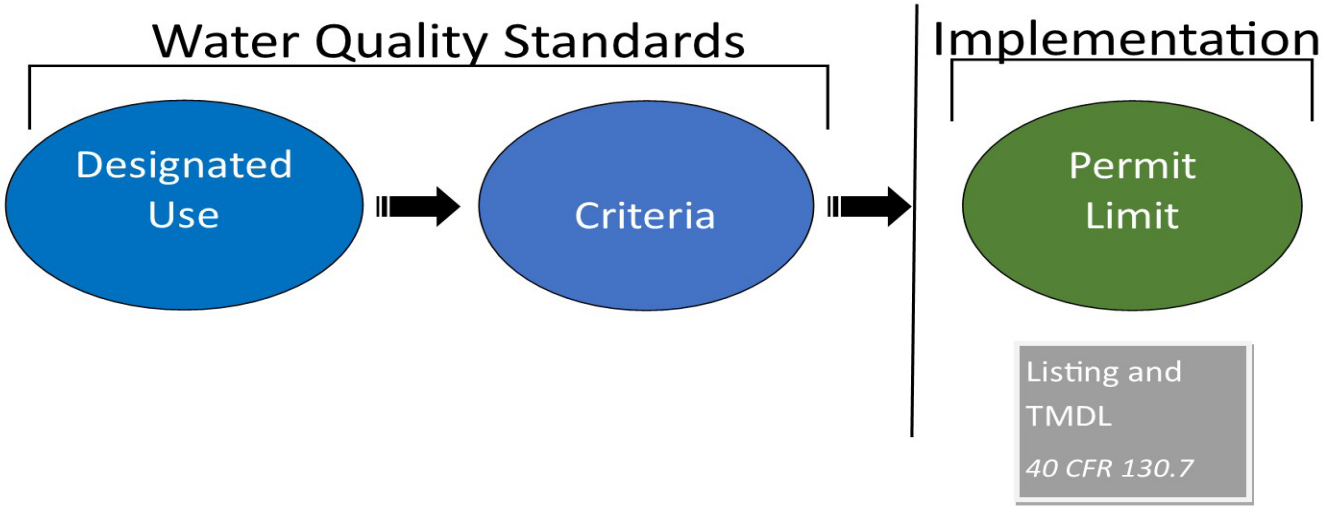
Rationale: Sometimes organisms can be exposed to pollutant concentrations above a criterion magnitude for a short duration without interfering with the designated use of a waterbody as a whole.

Permit Compliance Schedule: a tool that allows additional time to take specific actions to meet an NPDES WQBEL



If a permittee cannot immediately comply with the permit WQBEL upon effective date of permit, the permit may include, where appropriate, a schedule of compliance granting time to a NPDES permittee to meet new or revised WQS "as soon as possible."

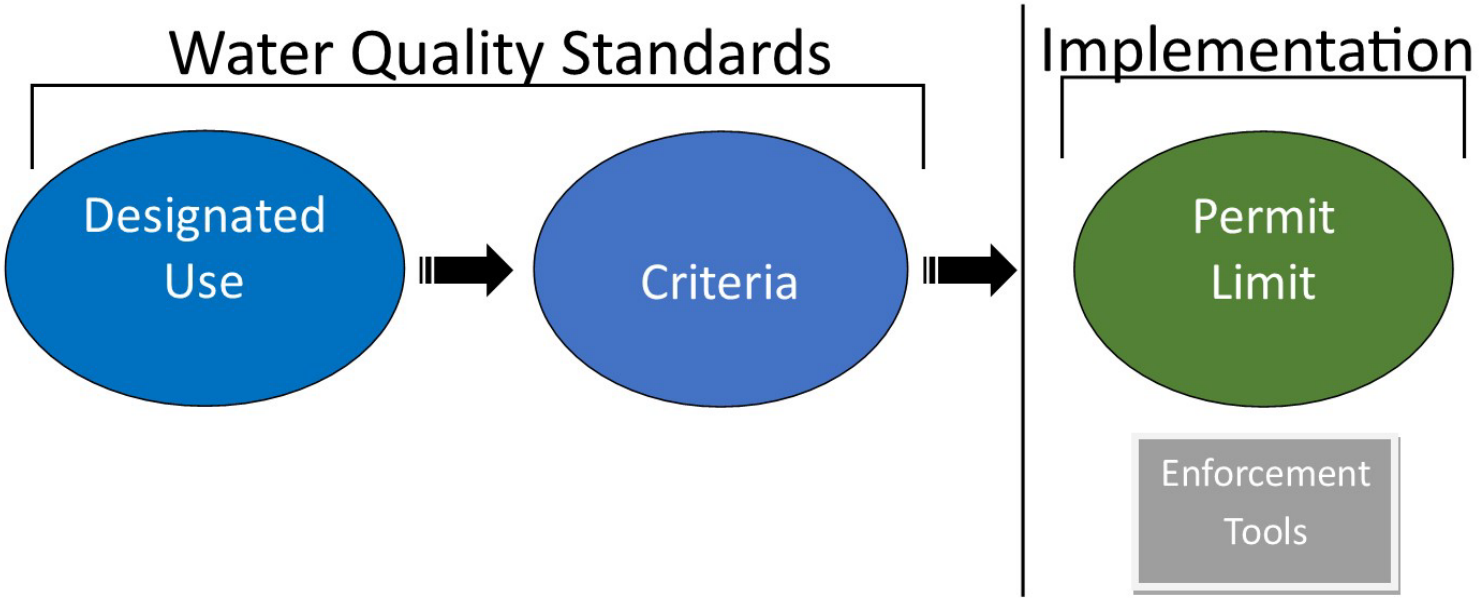
TMDL: a tool to calculate needed source reductions (PS & NPS) to meet WQS



A TMDL is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources (waste load allocations for PS and load allocations for nonpoint sources).

- Every 2 years states/tribes develop a list of waters that are not meeting applicable WQS and need a TMDL.

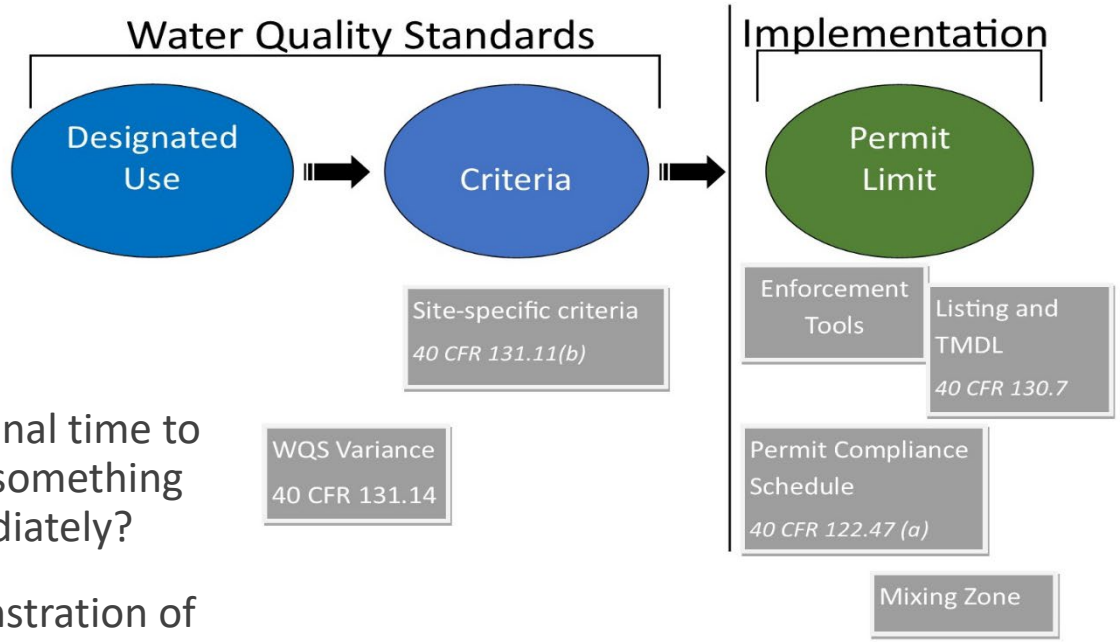
Enforcement Tools: requirements outside of WQS to take specific actions



Enforcement tools support implementation of NPDES permit limits and the underlying WQS.

- For example, administrative orders and civil judicial consent decrees contain enforceable corrective actions and deadlines to return to compliance.

Ways to Distinguish Tools



- Is the tool a WQS?
- Does the tool allow for additional time to meet WQS, or does it change something so the WQS can be met immediately?
- Does the tool require a demonstration of need?
- Does the tool apply to a discharger or to a water body?
- Is the tool appropriate if you have more certainty or less certainty about the time or actions needed to meet WQS?

Summary

WQS Variance: a tool that allows additional time to make incremental progress towards the designated use and criteria.

Mixing Zone: limited area or volume of water where initial dilution of a discharge takes place and where certain numeric water quality criteria may be exceeded.

Site Specific Criteria: a tool to tailor criteria to local conditions / key species that still protect the designated use.

Permit Compliance Schedule: a tool that allows additional time to take specific, enforceable actions to meet an NPDES WQBEL.

Total Maximum Daily Load (TMDL): a tool to calculate needed source reductions (PS & NPS) to meet WQS.

Enforcement Tools: actions taken outside of WQS and NPDES permits development process resulting in enforceable corrective measures that support implementation of permit limits and the underlying WQS.