



Tools for Achieving Standards in Longer Timeframes

Problem Statement

- ◆ Current Standards Cannot Be Attained Within a Five Year Horizon (and often much longer)
- ◆ It May Be Unknown What Can Be Attained in a Longer Horizon
- ◆ Timeframe to Achieve a Solution Has Become a Barrier to Getting Started

Problem statement, cont'd...

- ◆ Public Wishes to Retain Long Term Goals
- ◆ TMDLs and Permits Need to Reflect What is Attainable in the Shorter Term

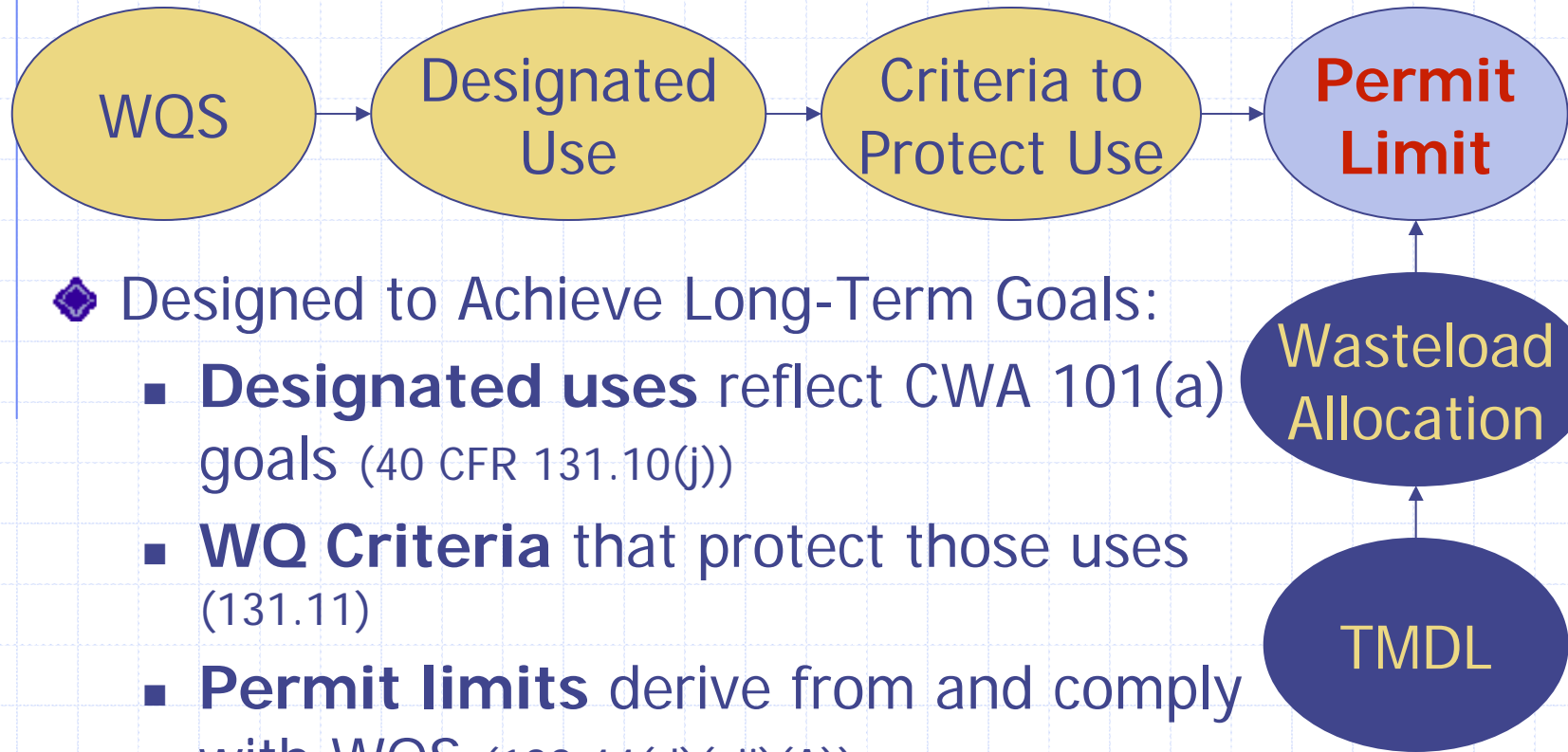
Possible Applicable Scenarios...

- ◆ Legacy Contamination
- ◆ Abandoned Mines
- ◆ Urban/Agricultural Land Use Impacts
- ◆ Nonpoint Source Dominated Situations (e.g., nutrients)
- ◆ Combined Sewer Overflows (CSOs)
- ◆ Municipalities/Industries Facing Limited Resources

Guiding Principles

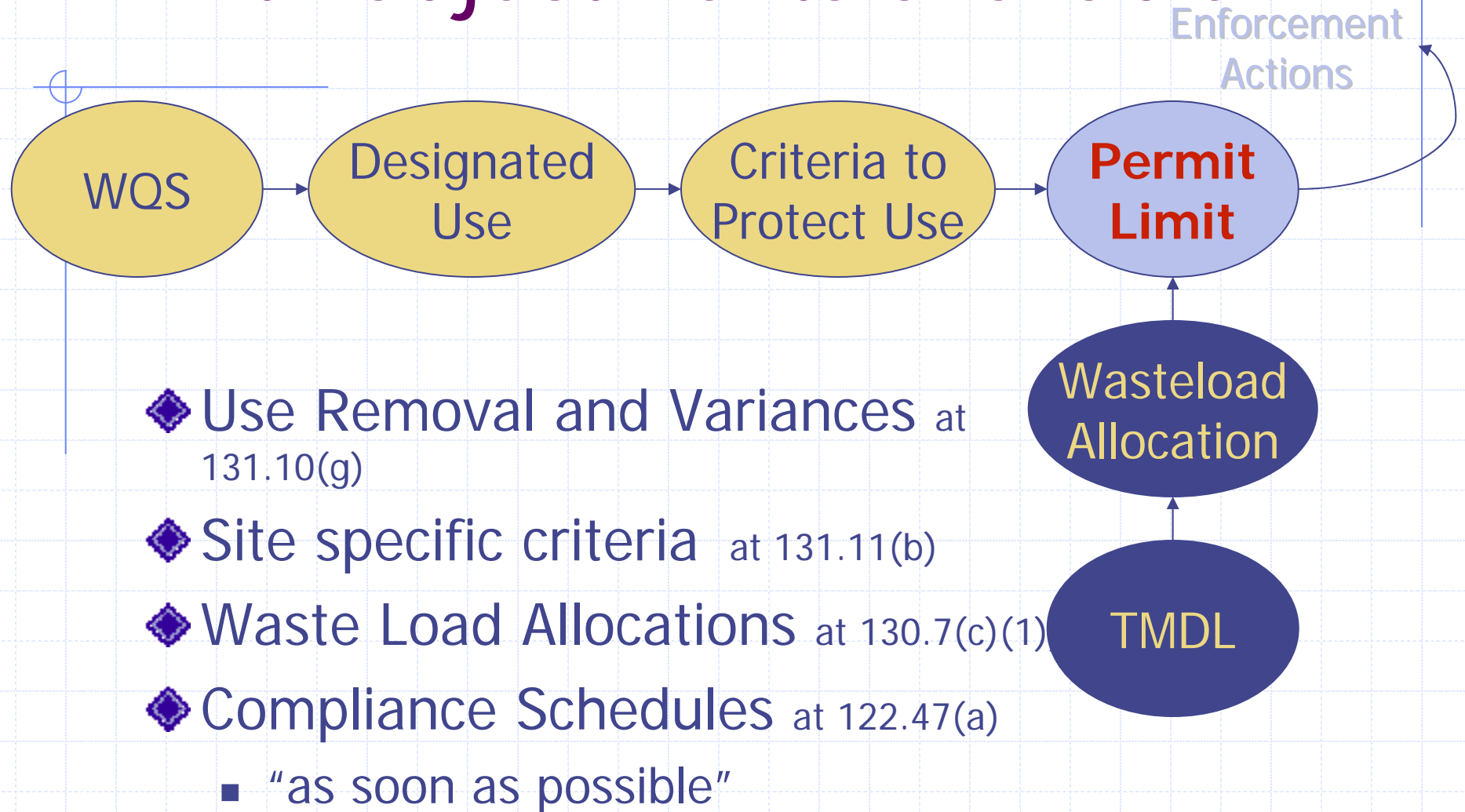
- ◆ Standards Should Guide the Process of Restoration and Inform Decisions
- ◆ Standards Should Not Be a Barrier to Achieving Incremental Water Quality Improvement

A Demanding System...

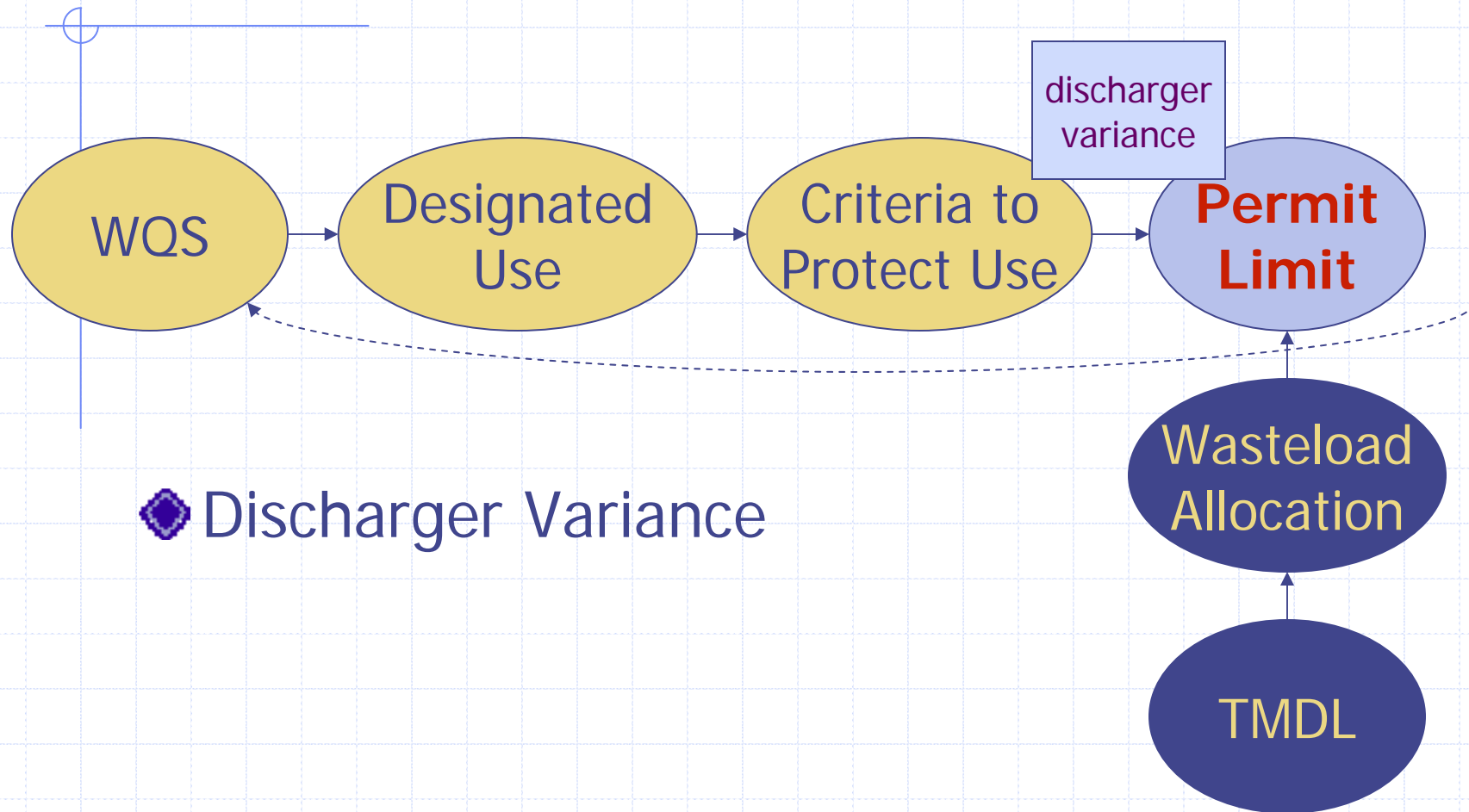


- ◆ Designed to Achieve Long-Term Goals:
 - **Designated uses** reflect CWA 101(a) goals (40 CFR 131.10(j))
 - **WQ Criteria** that protect those uses (131.11)
 - **Permit limits** derive from and comply with WQS (122.44(d)(vii)(A))
 - **TMDL** at levels to attain WQS (130.7(c)(1))

...With adjustments available...



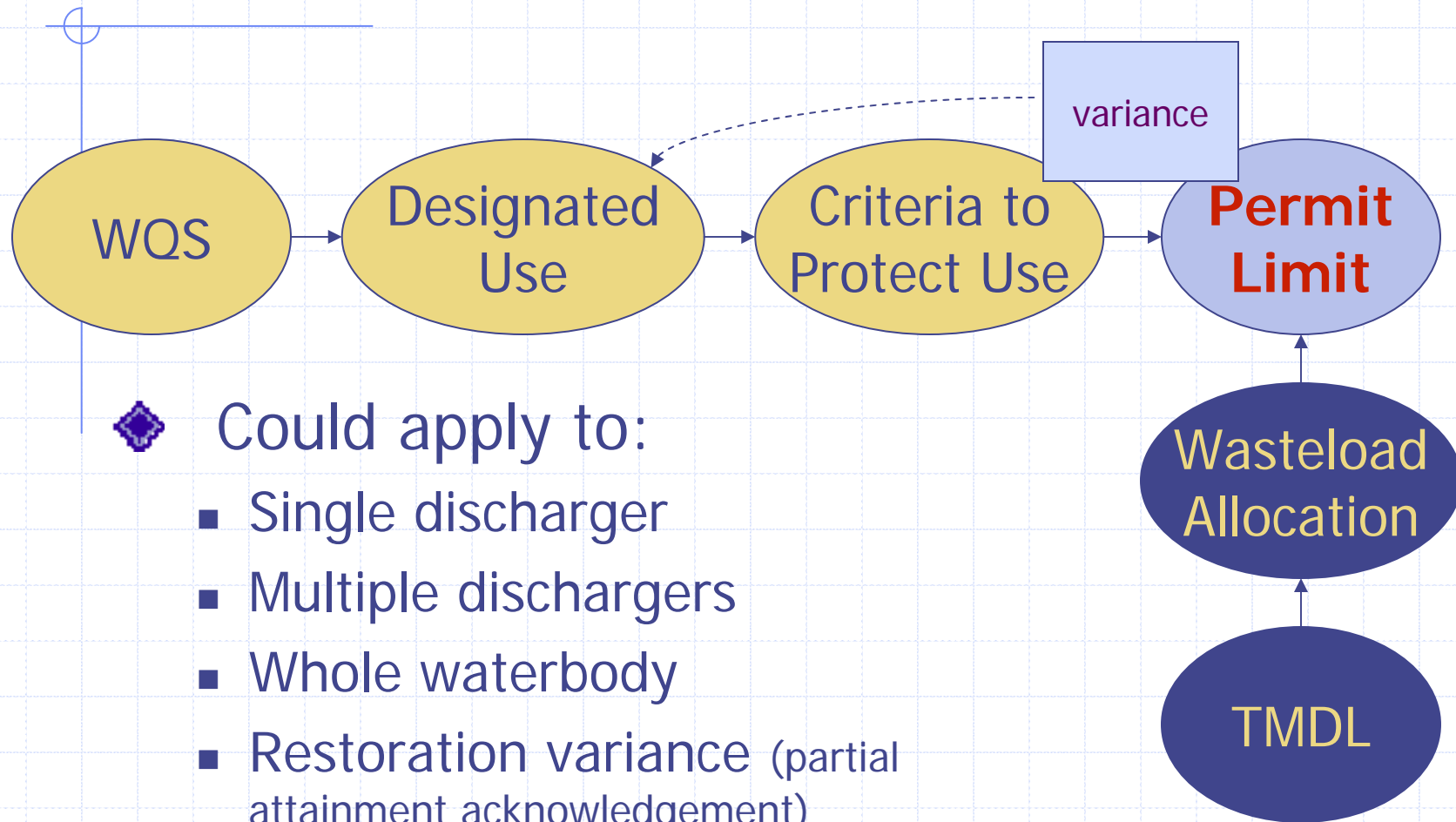
Available Tools: Traditional



Properties of a Variance

- ◆ Relies on same regulatory basis as use removal (131.10(g))
- ◆ Adopted and Approved as Applicable WQS
- ◆ Can be limited in scope by:
 - Sources and Pollutants addressed
 - Geography (space) and Time
- ◆ May include additional provisions
 - Monitoring
 - Attainability analyses

WQS Variance: Alternatives

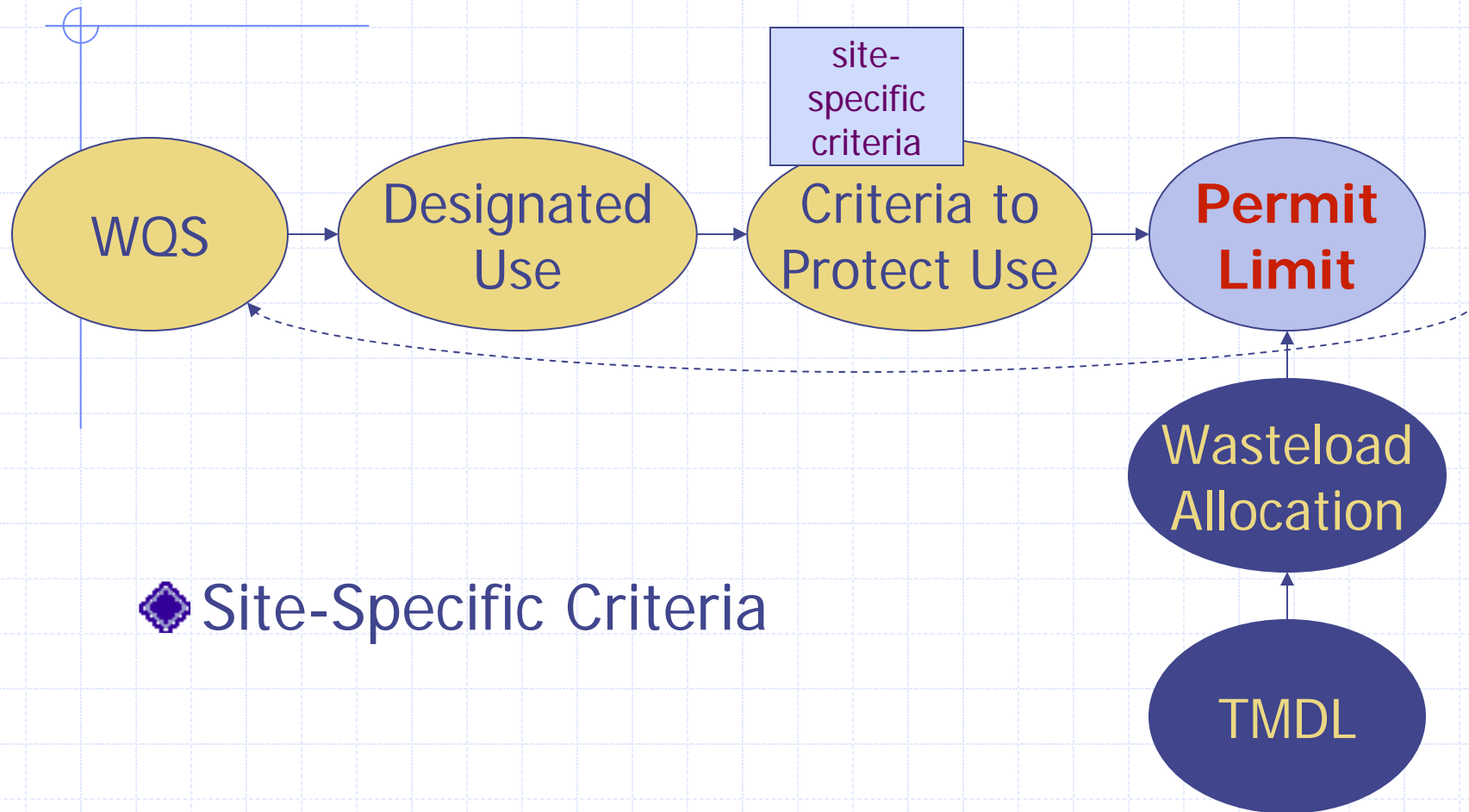


- ◆ Could apply to:
 - Single discharger
 - Multiple dischargers
 - Whole waterbody
 - Restoration variance (partial attainment acknowledgement)

Waterbody Variance Examples:

- ◆ Colorado and Montana Temporary Standards (*adopted and approved*)
 - allows time to determine highest attainable use
 - facilitates progress toward improving water quality and better defining uses
- ◆ Maryland-Chesapeake Bay Restoration Variance (*adopted and approved*)
 - specifies degree of attainment without modifying use or criteria

Available Tools: Traditional



◆ Site-Specific Criteria

Site Specific Criteria

- ◆ The physical/chemical characteristics of the site alter the bioavailability / toxicity of the pollutant

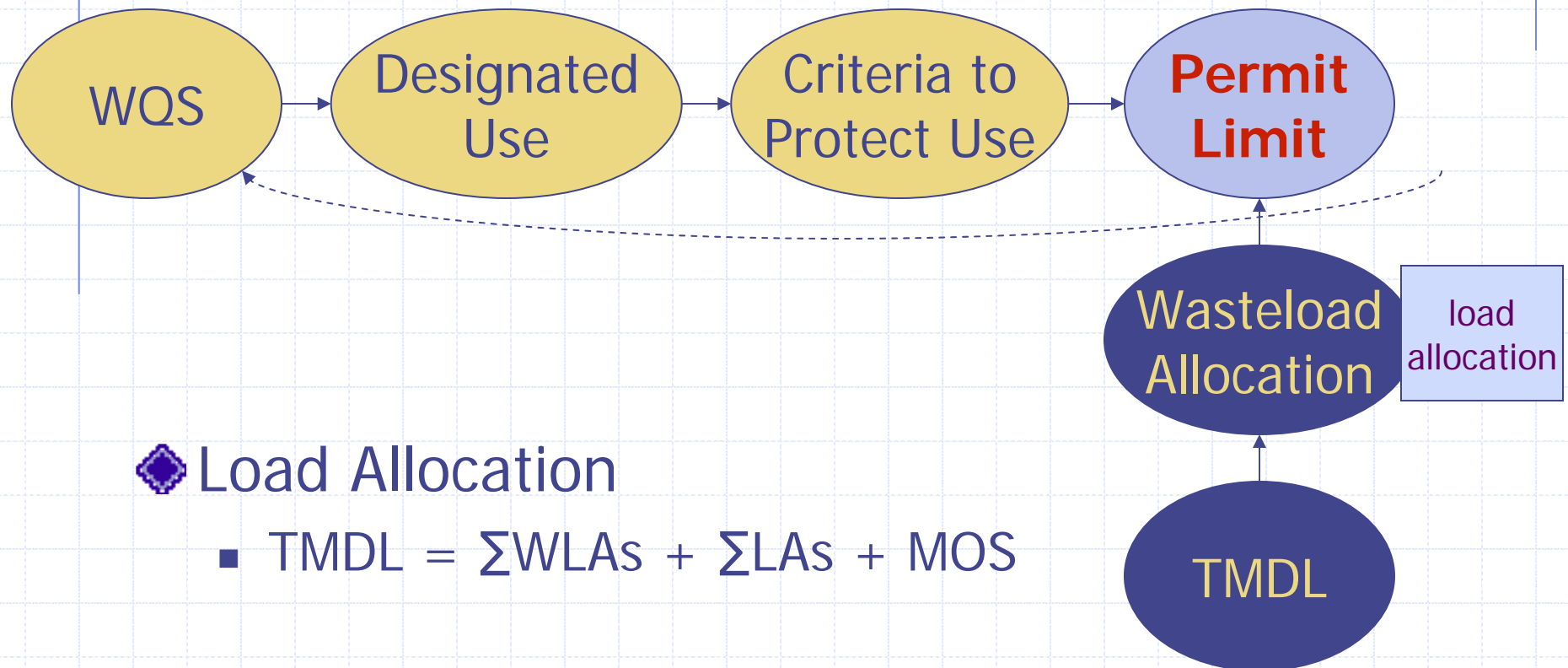
AND/OR

- ◆ When the sensitivities of the site species differ from those used to develop the national criteria

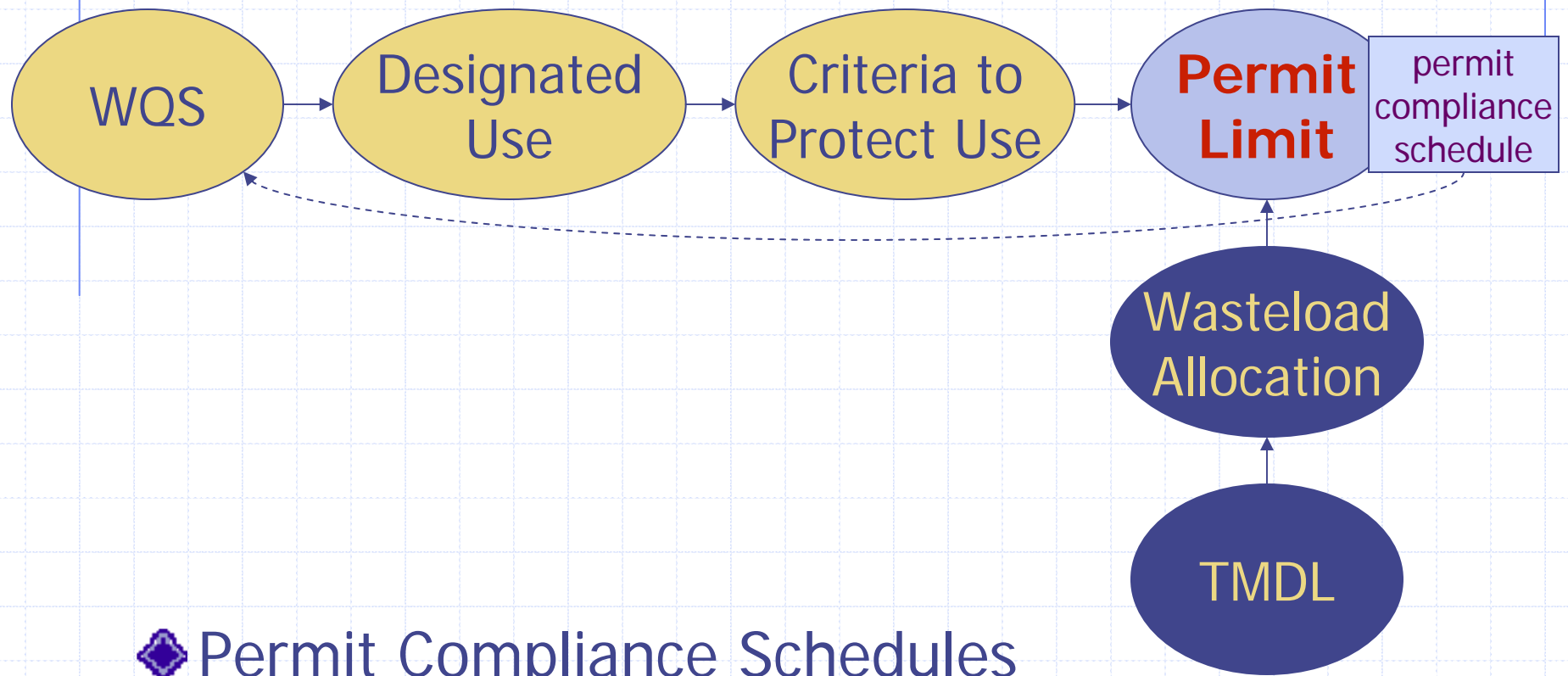
OR

- ◆ A state or tribe wishes to establish a criteria equal to "natural background"

Available Tools: Traditional



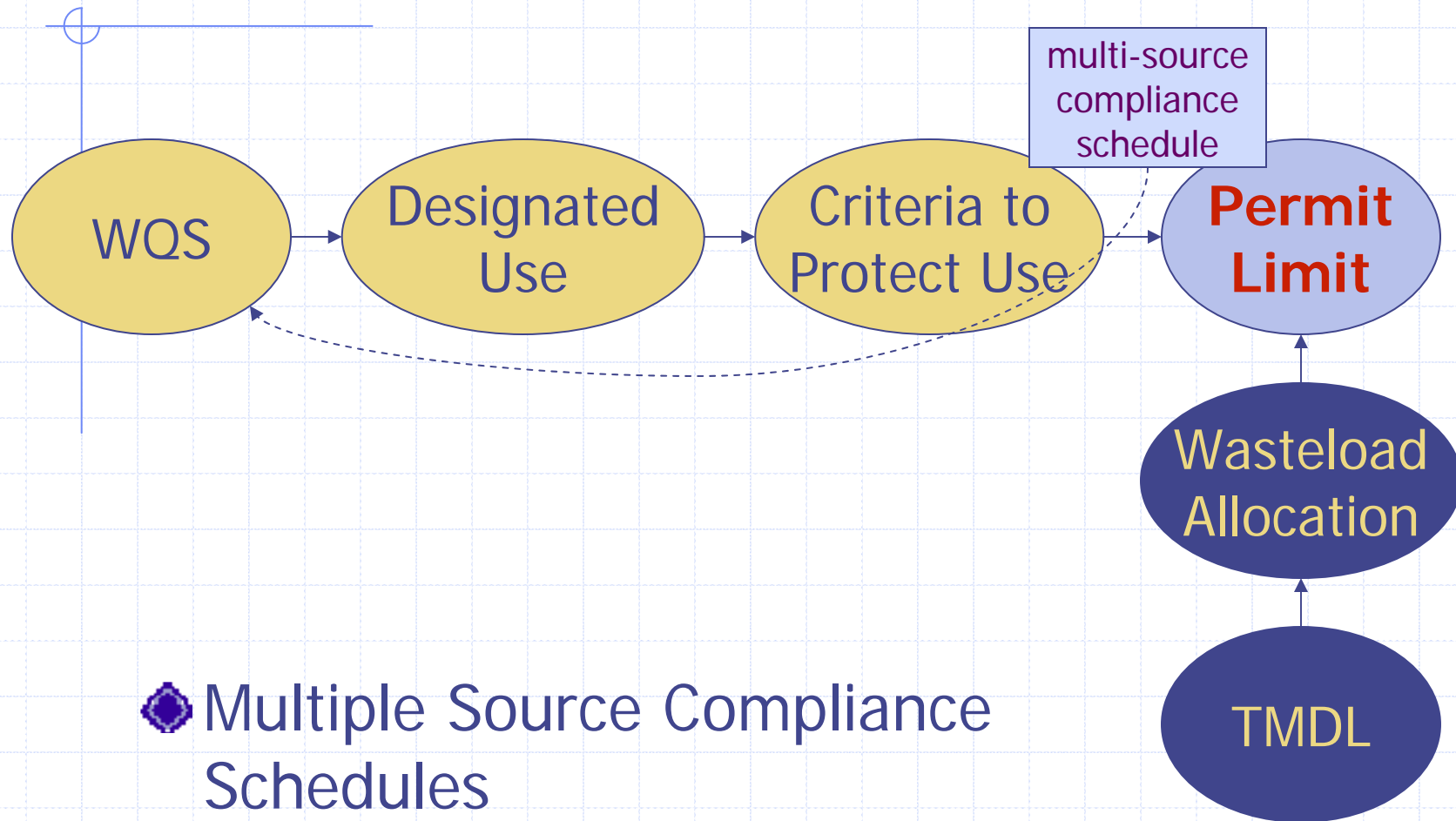
Available Tools: Traditional



Compliance Schedules

- ◆ Time granted to a permittee in an NPDES permit to meet new or revised WQS “as soon as possible”
 - Must be authorized in state or tribal water quality standards or implementing regulations
- ◆ Time granted for waters to attain a new or revised criterion in WQS (e.g. Everglades Forever Act)

Available Tools: Alternatives



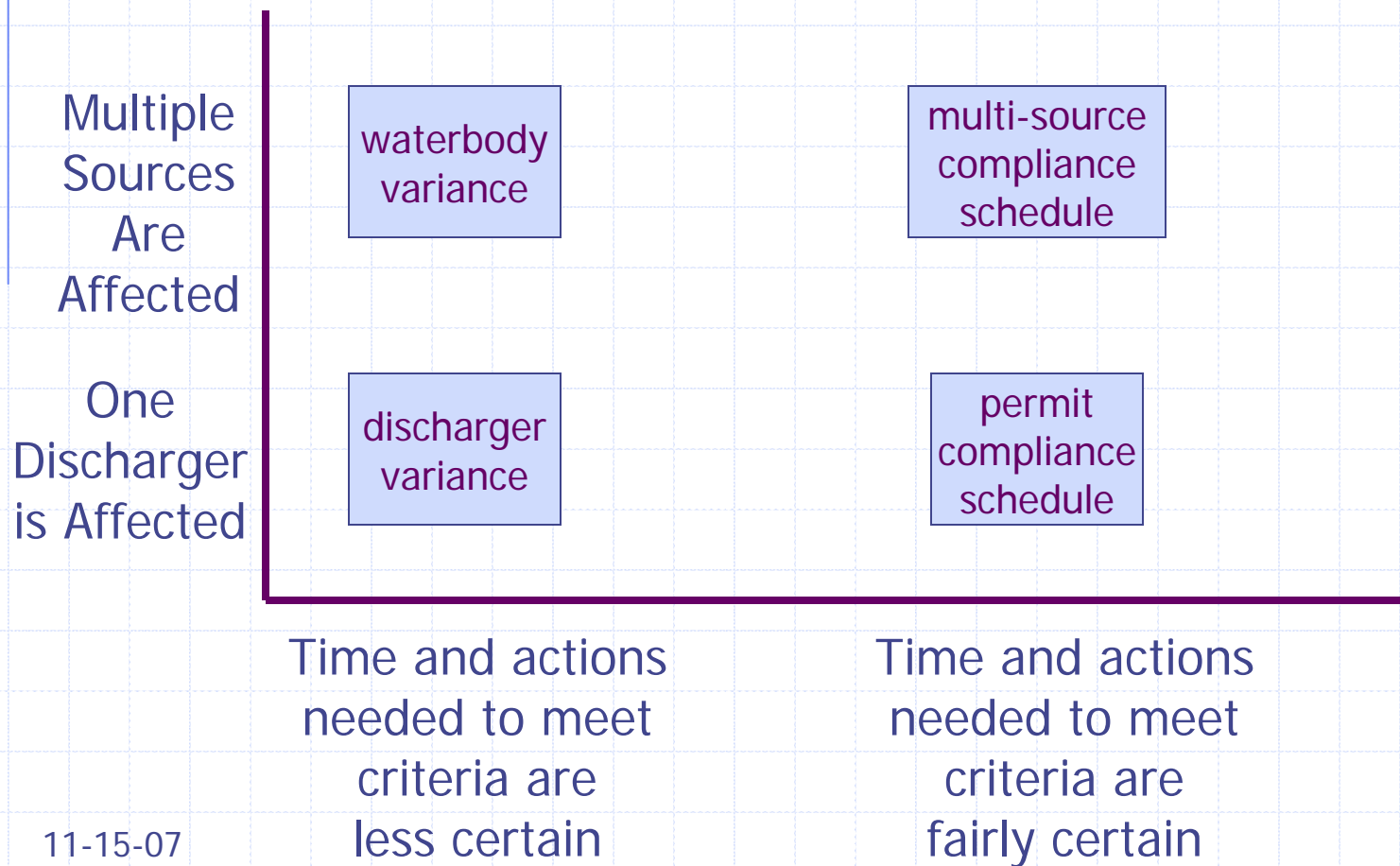
Compliance Schedules for Multiple Sources: Examples

- ◆ Connecticut: Long Island Sound
 - Implemented via TMDL with pollutant trading
- ◆ Florida: Everglades
 - EPA determination that 13 year time for compliance for agricultural sources was reasonable upheld by circuit court
- ◆ California: Grassland
 - Included interim performance goals and dates for full achievement

Ways to Distinguish Tools

- ◆ Tools That Change WQS and Tools That Do Not
- ◆ Tools That Require a UAA Type of Analysis and Tools That Do Not
- ◆ Tools That Apply to a Discharger and Tools That Apply to a Waterbody
- ◆ Tools Supported By Current Practice, Guidance, or Regulation and Tools That Are Less Developed

Other Ways to Distinguish Tools...



Summary:

Alternatives to Use Removal

- ◆ WQS Variance
 - Same regulatory basis as use removal
 - Can be limited by source, pollutant, space, time
- ◆ Site Specific Criteria
 - No change to designated use
 - Permanent change to criteria based on natural background, biological assemblage present, or water conditions
 - Must be scientifically defensible
- ◆ Waste Load Allocation Adjustments
- ◆ Compliance Schedules
 - Must be authorized by WQS or implementing regulations
 - Timetable in permit to meet standards
 - Difficult for criteria adopted before 1977