

TMDLs as a Tool for Sediment Management

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*Managing Sediments in the Watershed: Bringing
Dredged Material and Watershed Managers Together*

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This presentation covers...

- How TMDL fit in CWA framework
- Basic Information on Sediment and TMDLs
- Identify several questions/challenges related to dredging

CWA Water-Quality based Framework

Adopt Water Quality Standards



Monitor & Assess Water

303(d) Program
40 CFR 130.7



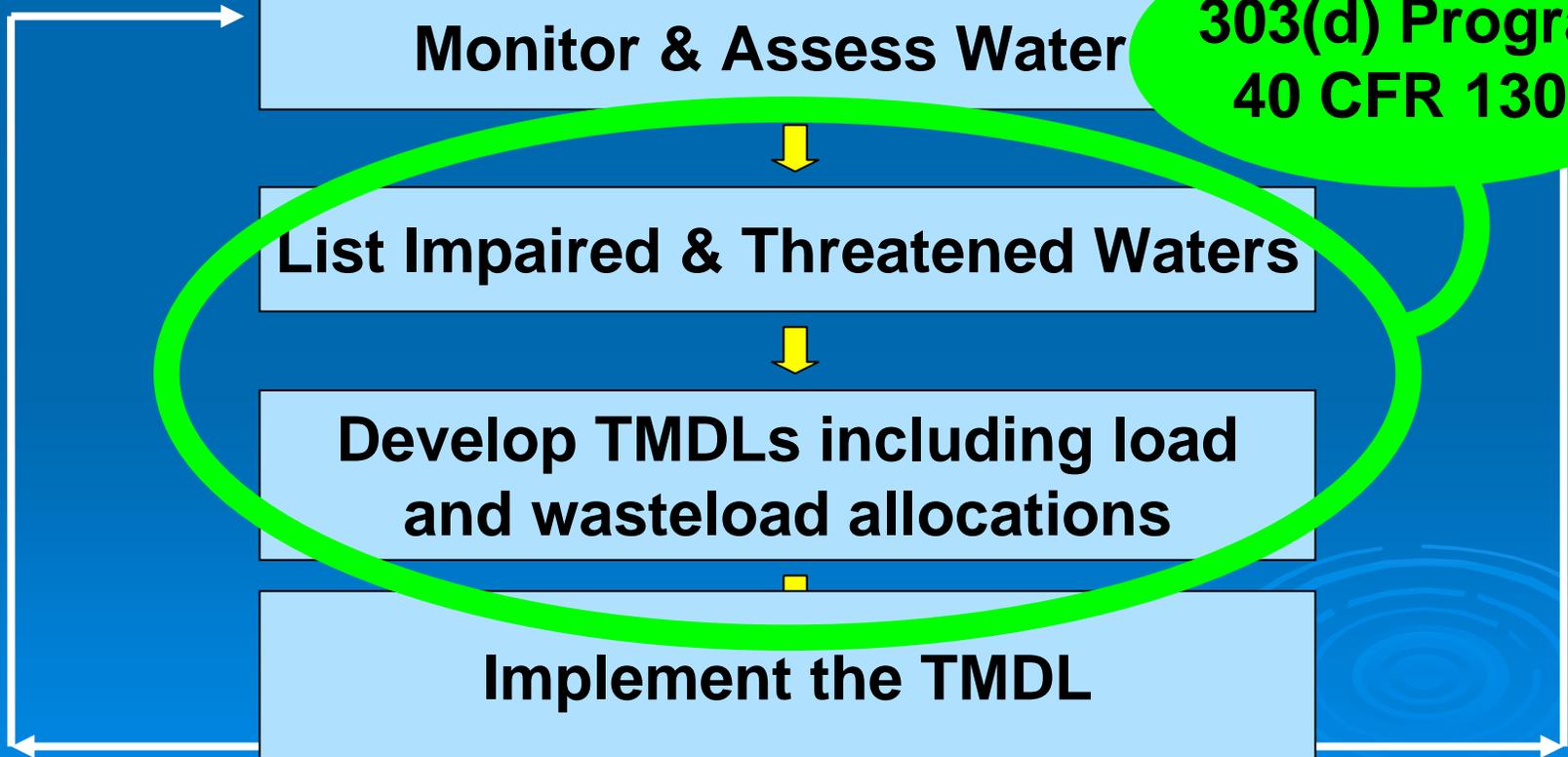
List Impaired & Threatened Waters



Develop TMDLs including load
and wasteload allocations



Implement the TMDL



What is a TMDL?

- A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards (WQS), and an allocation of that amount among the pollutant's sources.

→ ***“Pollutant Budget”***

How many TMDLs are needed?

- 25,000+ listed waters
 - Based on assessment of ~ 30% of waters

Top causes of impairments:

- pathogens
 - metals
 - nutrients
 - sediment
 - low dissolved oxygen
- Over 20,000 TMDLs have been done, more than 40,000 remain to be done

TMDLs can work for sediments!

Before....



After



Deep Creek, MT

Some info on sediment TMDLs

- 2538 TMDLs for clean sediment
- 480 TMDLs for turbidity
- 209 TMDLs for PCBs and TMDLs for heavy metals, dioxins, pesticides and other toxic constituents of contaminated sediments ,
- Clean sediment TMDLs in upper reaches of watershed can be powerful tool to minimize need for dredging downstream
 - In Upper Northwest working with forest service to do TMDLs or alternative plans to address excess sedimentation

TMDLs and dredging

- TMDLs can also directly affect dredging activities:
 - Newport bay sediment TMDL : reduce the frequency of dredging to no more than once every 10 yrs, long term goal every 20 to 30 years

Issues/Challenges

- How can TMDLs better account for dredging activities?
 - Additions to the system
 - Removals from the system
- How can section 404/401 permit process coordinate with TMDL program?
- Can comprehensive dredging strategy eliminate the need for TMDLs?

Contact Information

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