

Current Dredged Material Management Challenges

- Not enough sediment where we want it (e.g., ecosystems, beaches, wetlands, etc.)
- Too much sediment where we don't want it (e.g., harbors, ports, marinas, etc.)
- 250 M-yd³ of sediment dredged annually to support US navigation program (\$\$)
- Uncoordinated regulatory programs resulting in undeveloped/unrefined watershed goals and objectives
- Insufficient science and engineering to develop “sustainable” management strategies and technologies for contaminated sediment management

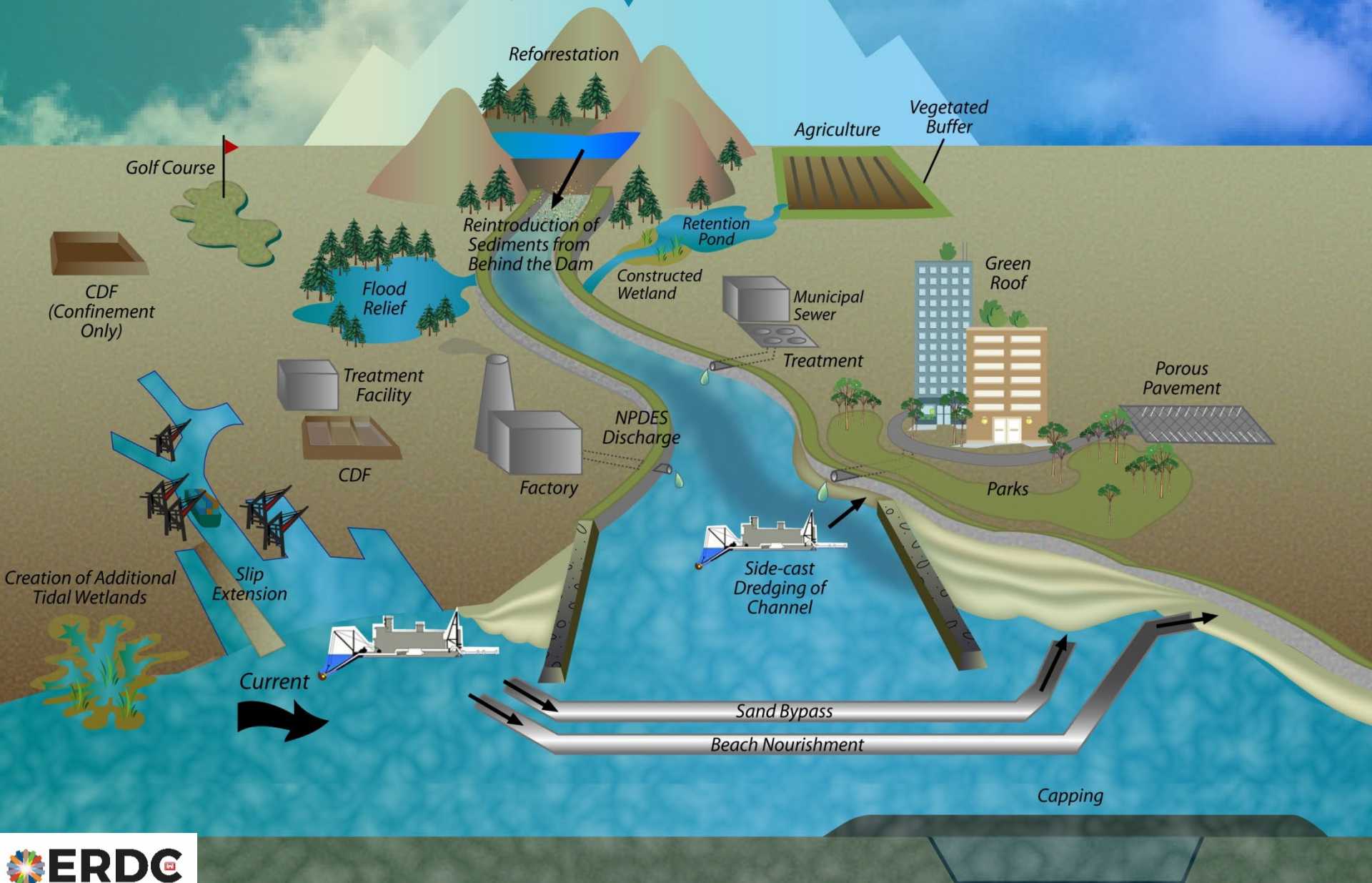
***Sediment management projects
conducted in isolation of long-term
watershed objectives are likely not
sustainable***

Basin Level Considerations

Driver	Sediment Issue	Comments
Navigation	Budget	Shoaling & Channel Stability
Water Quality	Budget & Quality	TSS, Nutrients, Contaminants
Flood Control	Budget	Reduced capacity
Ecological	Budget and Quality	Renourishment & Nutrients, Contaminants

Adapted from Babut et al. 2007

Integrated Sustainable Sediment Management



Sustainable Sediment Management

*A **comprehensive** approach to addressing **long-term** management and conservation of sediments within a **watershed** to maintain current and future **beneficial uses** while addressing regional **environmental**, **economic**, and **social** objectives.*

Sediment is a resource not a waste!?

Beneficial Uses of Dredged Material

- Habitat Restoration/
Enhancement
- Aquaculture
- Parks and Recreation
- Agriculture/
Horticulture/Forestry
- Mine and Quarry
Reclamation
- Landfill Cover for Solid
Waste Management
- Beach Nourishment/
Shoreline Stabilization
- Industrial and
Commercial Use
- Construction Material

Current Impediments

- Multiple Authorities (Corps – Navigation and Flood Control, EPA and States – Inputs and beneficial use designations,)
- Multiple Jurisdictions (Federal, State, County, Cities).
- Competing uses/users (navigation, flood control, water storage, waste discharge, recreation, other ecosystem goods and services....)
- Contamination is often perceived as a “black & white” issue
- Concept of “adaptative management” is not widely accepted/understood.

Promising Signs

- Agencies are increasingly beginning to think, manage/implement and even regulate on a Watershed Basis.
- The Corps has designated Watershed Program Managers.
- Large Scale Restoration/Management programs (e.g., Missouri River, Upper Mississippi, etc.)
- RSM and DMMPs (though focused mainly on the lower end of the watershed) are taking the longer-view and balancing amongst multiple objectives.
- WRDA 2020, Section 125 establishes that “...It is the policy of the United States for the Corps of Engineers to maximize the beneficial use, in an environmentally acceptable manner, of suitable dredged material...”
- The Chief of Engineers in recent congressional testimony targeted a goal of 70% beneficial use by 30% by 2030. (currently 30-35% of DM used beneficially).