



US Army Corps of Engineers

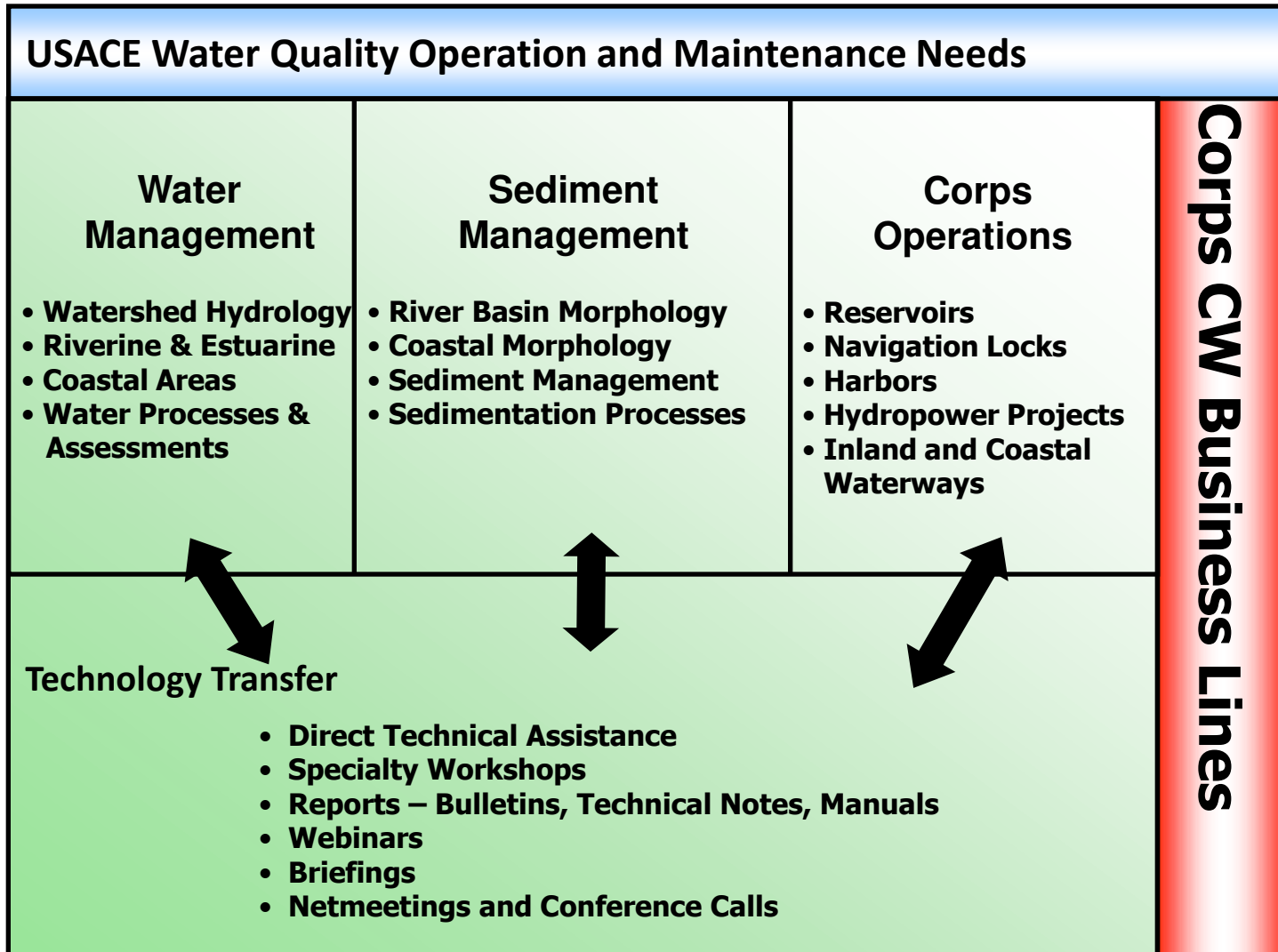


# Water Operations Technical Support WOTS





## WOTS Program Structure





# Water Control Plans

- Developed for reservoirs, locks and dams, reregulation and major control structures and interrelated systems
- Consideration for efficient water control management are to produce beneficial water savings and improvements in the availability and quality of water resulting from project regulation/operation



# Water Control Plan

- Actions should be taken to keep approved plans up-to-date
- Project operations should be monitored
- Developed in concert will all basin interests which are or could be impacted by project regulation



# Authorized Purposes

- Laws initially authorizing construction of the project
- Laws specific to the project passed subsequent to construction
- Laws that apply generally to all Corps reservoirs



# Operating Purposes

- Typically, for a reservoirs authorized purposes
- Studies during post-authorization can demonstrate operation may not be economically feasible
- Changed conditions in the river basin may void operation for an authorized purpose
- Incidental Benefits



# Operating Purposes

- Flood control
- Navigation
- Hydroelectric power
- Irrigation
- Municipal/industrial water supply
- Water quality
- Fish/wildlife
- Recreation



# Additional Purposes

- Sediment control
- Low flow augmentation
- Drainage and water control
- Saltwater intrusion
- Groundwater recharge
- Water conservation
- Preservation of the Everglades National Park





# Operation Considerations

- How could we enhance existing operations?



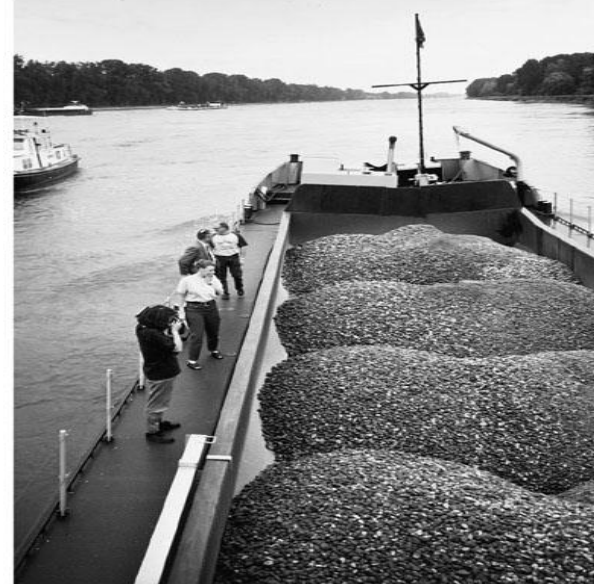


# EWN & Water Operations

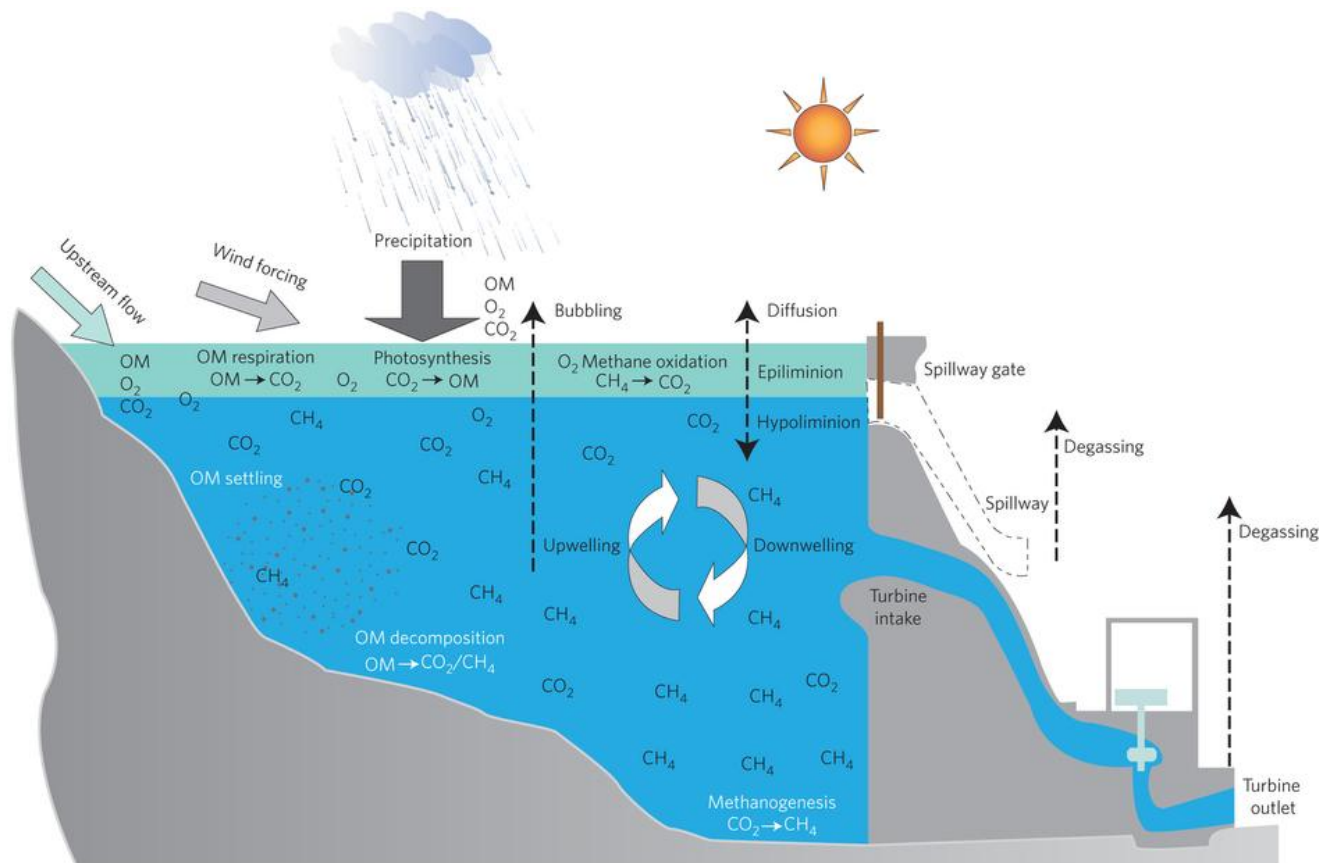
- Enhancing existing water operation plans
  - Watershed, headwater activities
  - Reservoir pool
  - Tailwater
- Natural Processes
  - Physical
  - Chemical
  - Biological



## Gravel Augmentation



# Greenhouse Gas Budgets





# Harmful Algal Blooms





# Ivanhoe Reservoir





## Questions



### *Using Reservoir Operations to Address Ecosystem Impacts at Shasta Lake*

*January 21, 2014,  
12:00 p.m. – 1:00 p.m.  
Capitol Park Tower  
980 Ninth Street  
2nd Floor Conference Room  
Sacramento, CA 95814*