



— BUREAU OF —
RECLAMATION

Glen Canyon Dam Fish Exclusion: Project Overview

Clarence Fullard, Reclamation

Process

- Engineering team – Reclamation TSC
- Develop Subject Matter Expert Panel
- Review exclusion report + other ideas
- Selection criteria:
 - 1) Demonstrated effectiveness
 - 2) Short deployment time
- Result: net and/or curtain barrier chooses
- Next steps:
 - 1) Site visit
 - 2) Engineering design
 - 3) Work with contractor

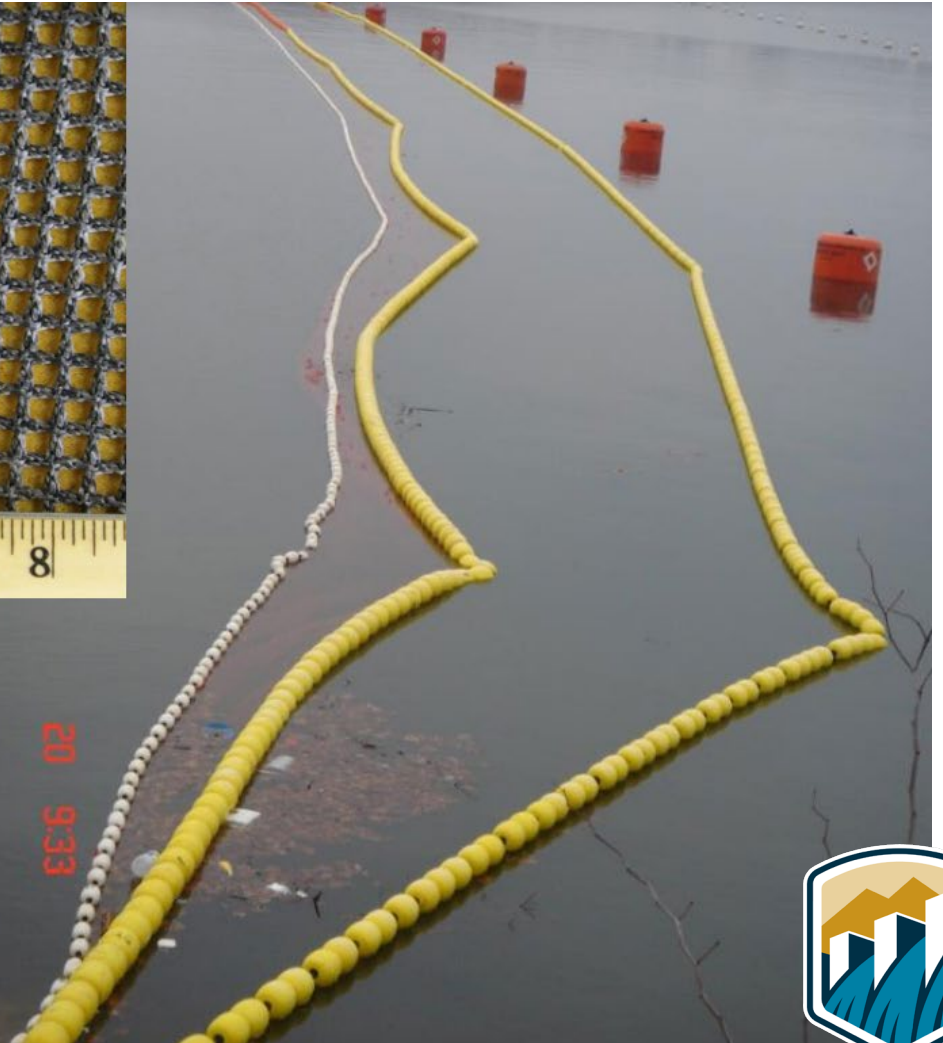
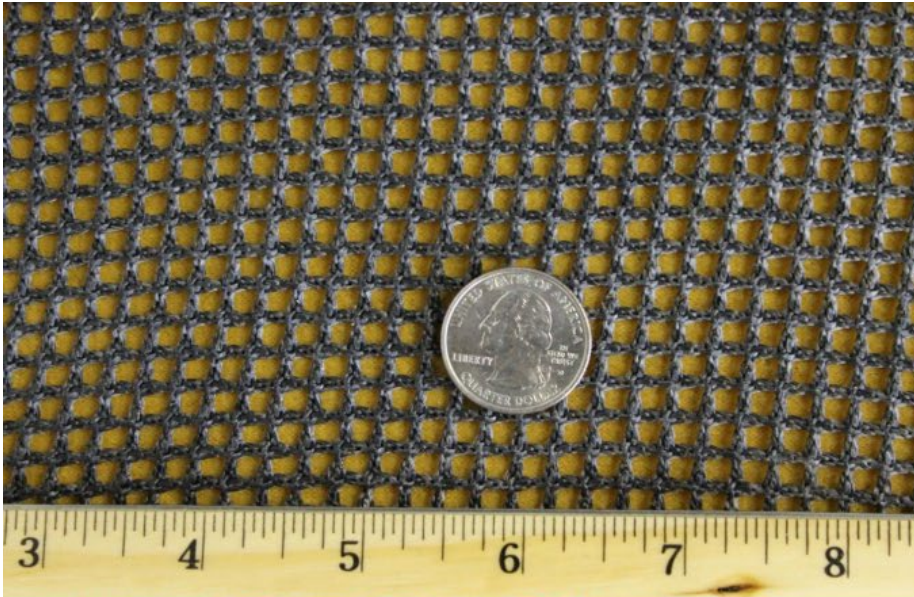


Net Barrier



Highline Lake spillway
barrier net, 363' long,
20' deep.





Example: Ludington, MI Fish Barrier Net



55' deep, ~3 miles long, installed/removed seasonally



Thermal Curtain



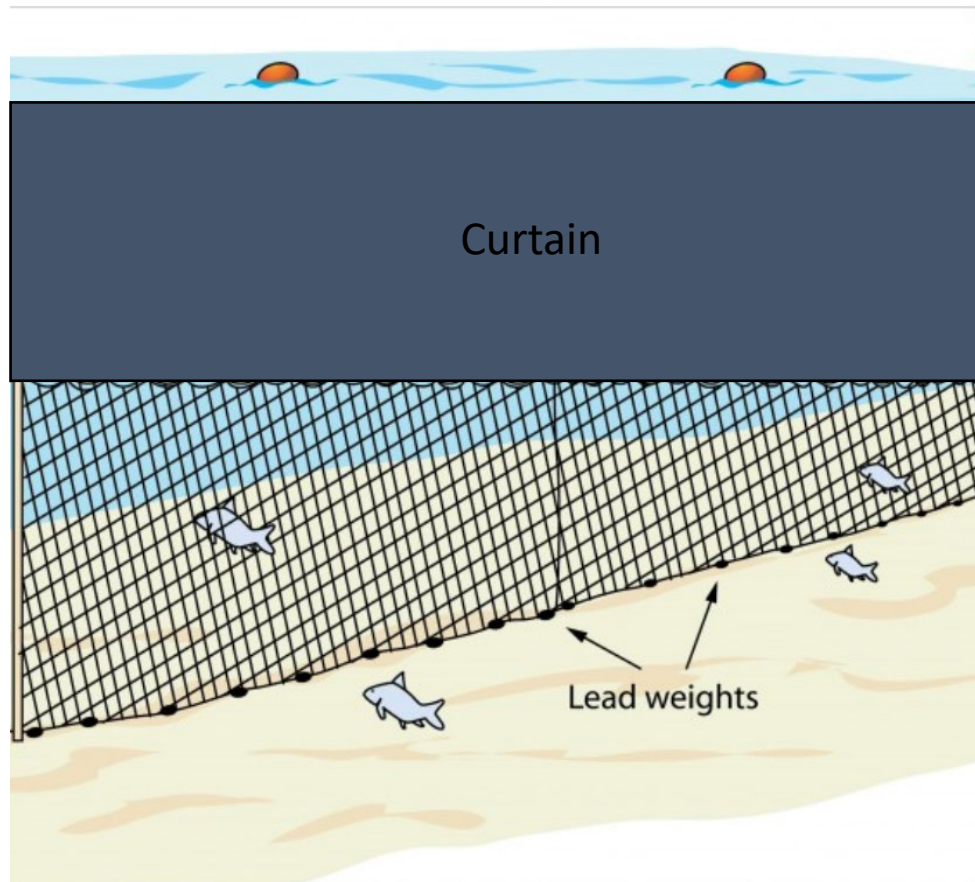
Photo: Bob Gee



Thermal Curtain



Concept



Net/Curtain Hybrid

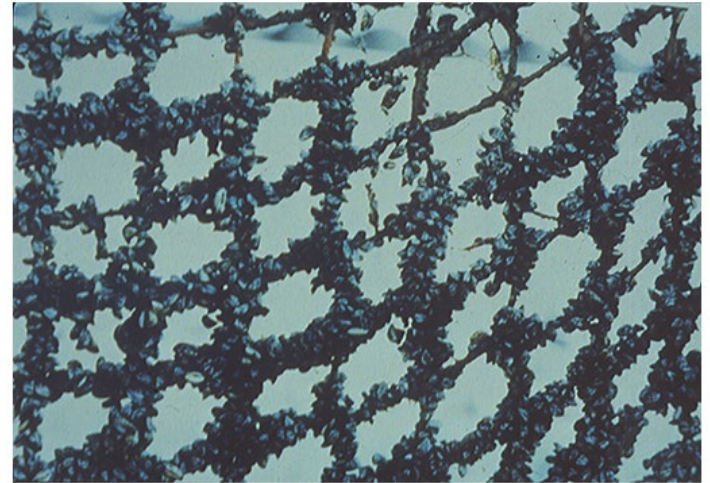
- Requirements:

- >1000' long
- Thermal curtain ~100' deep
- 1/4" mesh netting
- Seamless attachment to canyon wall
- Possible mid-reservoir support column and shore anchors



Engineering/Design Concerns

- Construction access
- Attachment to canyon wall
- Middle support
- Biofouling
- Other maintenance/cleaning
- Dam safety



Lake Huron – Ontario
Hydro Block Net



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