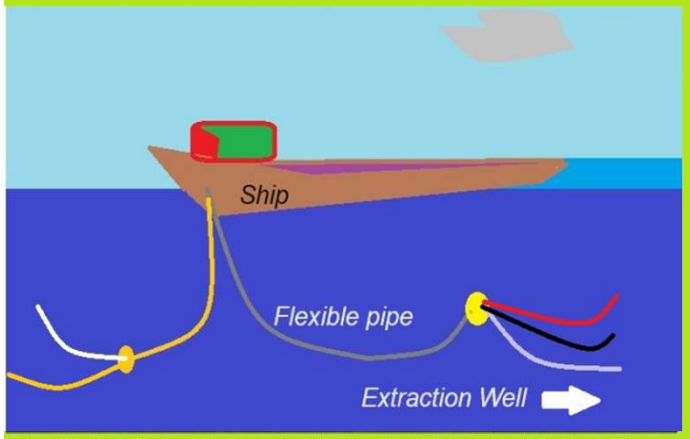
From Flexible Pipes to Hydraulic Capsule Pipelines

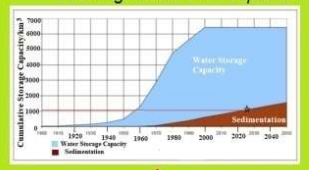


Many plastic and flexibles pipes were installed since the 1970's to extract oil and gas. They are very difficult to recycle.

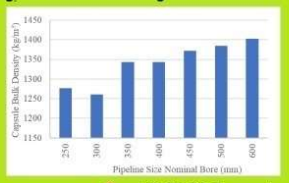
Decommissioning of off-shore wells is anticipated to cost $200 Billion in the next few years.

We propose to cut them into smaller segments and fabricate capsules to transport goods in freight pipelines

Desilting Reservoirs respects water rights of Native Americans

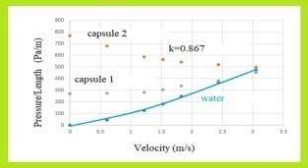


By 2050 a quarter of the water storage volume will be lost to sediments

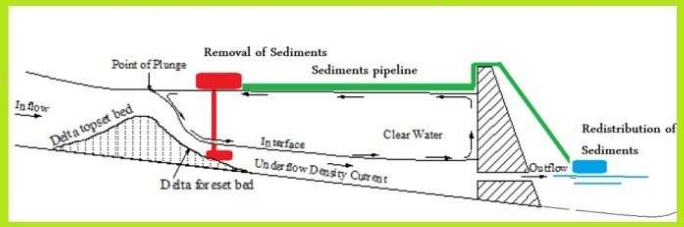


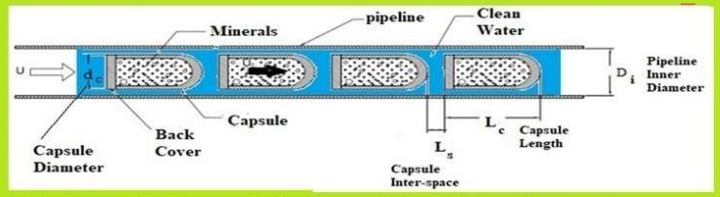
HDPE DR 7 capsules filled with wet sand

There are 92,027 reservoirs in the nation, many need de-silting



At a certain velocity for capsules with overall bulk density of 1500 kg/m3, offers the same resistance as water

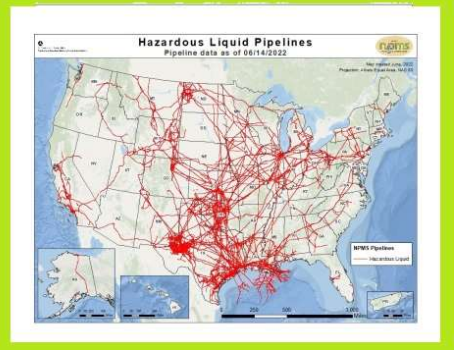




Hydraulic capsule pipelines do not suffer from wear due to sediments and consume less water than slurry pipelines used in dredging and mining

We invented a new capsule launcher and pump for sending capsules into a hydraulic pipeline

New job opportunities in decommissioning, repurposing pipelines and manufacture of capsules and their systems



As the US Economy moves away from fossil fuels many hazardous pipelines could be cleaned and repurposed into freight and capsule pipelines serving isolated and economically depressed communities with goods at lower emissions and lower cost than trucking