



The WM Sediment Extraction System

The WSES

Innovative, Flexible and Reliable

"Innovation in Dredging"

The System

The Wing Marine Spread

The Fluidizer (The Sweeper)



Onshore Facilities

The Dewatering Unit



The Extraction Pump



Disposal or Beneficial Upgrading

Sediment Disposal

- **Deposit Locations**
 - Clean fill sites
 - Abandoned Mines and Quarries
 - Levee Construction
- **Beneficial Upgrading**
 - Light Weight Aggregate or Bricks
 - Refreshing or building Islands or Beaches

“Innovation in Dredging”



The WSES

Two Markets – One System

Features of the Tool Kit

- The system can extract greater than 4,000 cubic yards of sediment per day
- The system operates in water depths from 10ft to over 100ft
- Because the Wing Marine Fluidizer unit operates above the sediment, debris and trash do not affect performance
- Sediment is not entrained in the water column
- All elements of the system are road transportable
- The fluidizer has been demonstrated to the USACE and presented in papers by them
- Only the system components used are billed for each project
- A maintenance package for reservoirs

Reservoir Sediment Management

- ✓ **Measurement Basis**
- ✓ **Frequently Required**
- ✓ **Frequently Required**
- ✓ **Tested and Confirmed**
- ✓ **For Limited Access Reservoirs**
- ✓ **Simplifies Permitting**
- ✓ **Helps Tight Budgets**
- ✓ **Helps Tight Budgets**

Problematic Harbor Locations

- ✓ **Typical Berth Size**
- ✓ **Depth not an issue**
- ✓ **Frequently Required**
- ✓ **Tested and Confirmed**
- ✓ **For Emergencies**
- ✓ **Simplifies Permitting**
- ✓ **Helps Tight Budgets**

“Innovation in Dredging”

Our Team

The WSES

Position	Name	Technical							Marketing			Administrative						Permitting						
		Equipm't Operating Req.mnts	Eng'rng		Fab	Marine			Fac's	Business Dev			Marine			Business								
			Conceptual Design	Detailed Design	Contracting	Quality Assurance	Operations Managmnt	Dredging Technology	Sediment Dynamics	Beneficial Upgrading of Sediments	Marine Spreads, Transport & Facilities	Image and Strategy	Media / Message	Proposals	Operating Procedures	Dedging Operations	Training	Reporting / Control	Procurement & Contracting	Finance / Accounting	Human Resources	Audit, IP, Legal, etc.		
Coordinator	Mel Friedman																							
Operations Manager	John Crowson																							
Technical Support	Doug Thompson																							
Facilities & Logistics	Joe McDermott																							
Design & Integration	Bryan Longhurst																							
Proposals Manager	Peter Crossland																							
Business Manager	Joel Friedman																							
Permitting	James Coats																							
Business Development	Graham Heaton																							
Health, Safety and Environment	Not Yet Staffed																							

	Overall Subject			Wing Fluidizer Hands- On		
	Harbors	Reservoirs		Harbors	Reservoirs	
Subject Matter Expert	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue	Dark Blue
Conversant	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue	Light Blue
Casual	White	White	White	White	White	White

"Innovation in Dredging"



The WSES

For Information

Contact

Mel Friedman

Mel.at.Wing.Marine@GMail.Com

+1 832 407 0651

"Innovation in Dredging"