



# Cost of Dredging on Today's Projects

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Partnering Team comprised of  
DCA & USACE

Pacific Chapter of the Western Dredging Association  
Fall 2008 Conference



**DRAFT**

## Abstract

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A review from both the Corps and contractor perspective.

The Cost Estimating PDT is an outgrowth of issues raised in the DCA/Corps HQ Partnering sessions. Concerns about Corps estimating process amid rapidly changing dredging costs led to formation of a team to find ways to better mutually communicate and share information that might lead to more accurate Corps budget and project estimates.

This presentation will review some of the first steps, expectations, and future plans for the PDT.

- Presenters will be Kim Callan and Bill Hanson



## Dec 2007 –Partnering Meeting

Attendees:

- USACE:
  - Angela Premo, SAD;
  - Kim Callan, NWW;
  - Anne Fore, POA;
  - Jon Gornick, NWP;
  - Brian Blake, SAJ;
  - Al Fletcher, SAJ;
  - James Henderson, SAW
- DCA:
  - Bill Hussin, Manson Construction,
  - Bill Hanson, Great Lakes Dredge & Dock, and
  - Chuck Broussard, Weeks Marine Inc.



## Dec 2007 –Meeting Outcome

- Established Strategic Plan for Identifying Potential Cost Issues. Path Forward was generated.
- Focus would be on cost and schedule information. (Note: Initial presentation by DCA centered on areas outside of this team, ie Environmental, Design issues etc.)
- Outline for Next Meeting:
  - Detailed discussion of risk pertaining to cost and schedule
  - Development of Equipment and Crew Data Call Survey
  - Detailed discussion of procedures used in preparation of Fair Cost Estimate by Government.
  - Partnering Agreement: Both Govt and Private would provide input. Open discussion would not be used against government in claims and negotiations.
  - Next Meeting: 18 - 19 March 2008, Washington DC, DCA office.



## Mar 2008 –Partnering Meeting

Attendees:

- USACE:
  - Angela Premo, SAD;
  - Kim Callan, NWW;
  - Anne Fore, POA;
  - Jon Gornick, NWP;
  - Brian Blake, SAJ;
  - Al Fletcher, SAJ;
  - James Henderson, SAW
  - Ray Lynn and Mark Fascher HQ
- DCA:
  - Bill Hanson and John Karas, Great Lakes Dredge & Dock, and
  - Chris Champigny, Weeks Marine Inc.
  - Barry Holliday, DCA



## Mar 2008 –Meeting Outcome

- Team Partnering Agreement accepted
- Generic Estimating Project was presented, team discussed cost drivers items that estimators consider when putting together an estimate.
  - Corps 1<sup>st</sup> presented a generic estimate and the typical development strategy for preparation of Fair Cost Estimate.
  - In two separate closed sessions among cost personnel from the Corps and represented dredging industry. Specific cost development methods were discussed.



## Mar 2008 –Meeting Outcome

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- Need to update the Dredging Industry Equipment Characteristics (Plant size, Crew Size, Age etc...)
- FY09 - Corps to Study of “Dredging Use Months”
- FY09 - Corps to develop “Information Memo” to be provided to corps cost engineers on potential cost risk items.
- FY09 - Corps Dredge Estimating Class will highlight additional areas of potential risk.



## Corps Dredge Estimating

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- CEDEP Dredge Estimating Program
- Historic Dredge Production
- Questions & Discussions



## Pipeline CEDEP Example – Page 7-9

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**OTHER PRODUCTION FACTORS**

CURRENT DREDGE SELECTED: 30" Outer-Suction Dredge

Bank Factor for 5.3 ft of Bank: 0.75 (From Chart)

Bank Factor Override: 0.75 (Used)

Description: [Redacted]

Other Factor: [Redacted]

Description: [Redacted]

Cleanup Dredging: Percent Additional Time (Cleanup Factor = 1.00)

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**HISTORICAL PRODUCTION OVERRIDES**

(In order to use this screen, Overrides must be entered for all three categories.)

	Override	Computed	Used
Production (QPH)	[Redacted]	1368	1368
Operating Time (Hr/Mo)	[Redacted]	334	334
Number of Boosters	[Redacted]	1	1

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**OTHER PRICING ADJUSTMENTS**

Other Monthly Costs:

Telinput: [Redacted] Per Month

Description: [Redacted]

(For Additional Inputs Go to Sheet DA) Go to Sheet DA

Fixed Costs:

Telinput: [Redacted] Lump Sum

Description: [Redacted]

(For Additional Inputs Go to Sheet E) Go to Sheet E

(To Adjust Labor Go to Sheet DE\_L) Go to Sheet DE\_L

(To Adjust Equipment Go to Sheet DE\_E) Go to Sheet DE\_E

## Pipeline CEDEP Example – Page 10

The Factors below normally will not change for every estimate

**LOCAL AREA FACTORS** PG 10 of 11

Percent Fuel: [Redacted] (Equipment Calculated)

Economic Index: [Redacted] (EP-1110-1.8, APP-E)

Labor Adjustment Factor: [Redacted] (Local Data (Bacon Rates))

Full Cost of Money Rate: [Redacted] (EP-1110-1.8, APP-E)

Dates for Money Rate: [Redacted]

Annual Months Available for Dredging: [Redacted] Return

Pipeline: [Redacted] Months per Year

Bucket: [Redacted] Months per Year

Hopper: [Redacted] Months per Year

Current Fuel Price: [Redacted] Per Gallon (Based on price quote of 06/12/06)

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**HP & BOOSTER FACTOR ADJUSTMENTS**

	Override	Database	Used
Total Available			
Pump Horsepower	[Redacted]	8,700	8,700
Booster Pump HP	[Redacted]	7,200	7,200
% Loss per booster when job lasts			
Less than 1 month (%)	[Redacted]	15%	15%
More than 1 month (%)	[Redacted]	10%	10%

Without Booster Losses, this job would last 1.31 months. Therefore, the 10% figure will be used.



