



US Army Corps
of Engineers
Portland District

Challenges, Successes, and Lessons Learned from the West Coast Regional Hopper Contract 2008/2009

- PORTLAND DISTRICT
- SEATTLE DISTRICT
- SAN FRANCISCO DISTRICT

Karen L. Garmire, P.E

Resident Engineer (Portland District)
(Acting NWD Navigation Program Manager)



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CONTRACT SCOPE



Seattle District

Grays Harbor 500,000 CY

San Francisco District

Humboldt 1,100,000 CY

SF Main Ship Channel 200,000 CY

Richmond Harbor 29 days

Portland District

Mouth of the Columbia 3,200,000 CY

N. Jetty Berm Pump Off 125,000 CY

Coos Bay Entrance 700,000 CY

Columbia River 2,100,000 CY

Total Cost: \$24 mil



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West Coast Regional Hopper Contract



- Decision to Regionalize
- Planning Efforts
- Contract Work
- Challenges
- Successes
- Lessons Learned



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Why Regionalize?

- Government Dredge *Essayons* out for the season
- Share mobilization cost
- Large volume of work
- Compatible environmental work windows
- Consecutive & continuous work periods
- Expected duration w/in weather & sea constraints
- Aligned with Corps initiatives in Regionalization



Essayons



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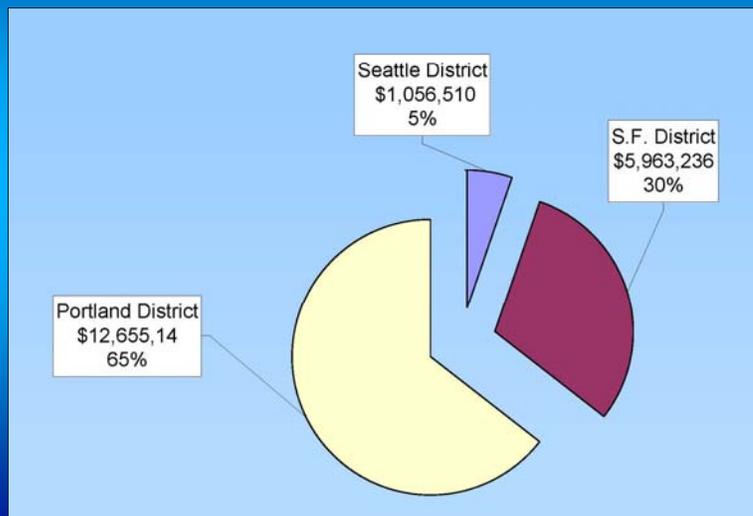
Planning Efforts (Pre-Contract)

- Environmental work windows
- Funding
- Procurement method evaluation & selection
 - Firm fixed price with single District Administration *versus*
 - Stand-alone task orders for each District
- Preparation of Plans and Specifications (Portland)
- Determine of scope, dredging volume & duration
- Selection of payment method
 - ◆ “bin measure” payment for most work areas
- Hydrosurvey support



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Distribution of Work





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Planning for Contract Execution

The contract is awarded – now what?

NTP: March 25, 2008

Dredging Start: April 13, 2008

- ◆ New staff hired including 6 new inspectors
- ◆ Intensive three day in-house training
- ◆ New dredge inspection teams & schedules established
- ◆ Internal meetings and teleconferences with partner Districts
 - Local requirements, weather, seas, ship traffic
 - Logistics & travel
 - Environmental concerns
 - Understanding disposal site requirements
 - Identification of dredging priorities
- ◆ Preconstruction conference



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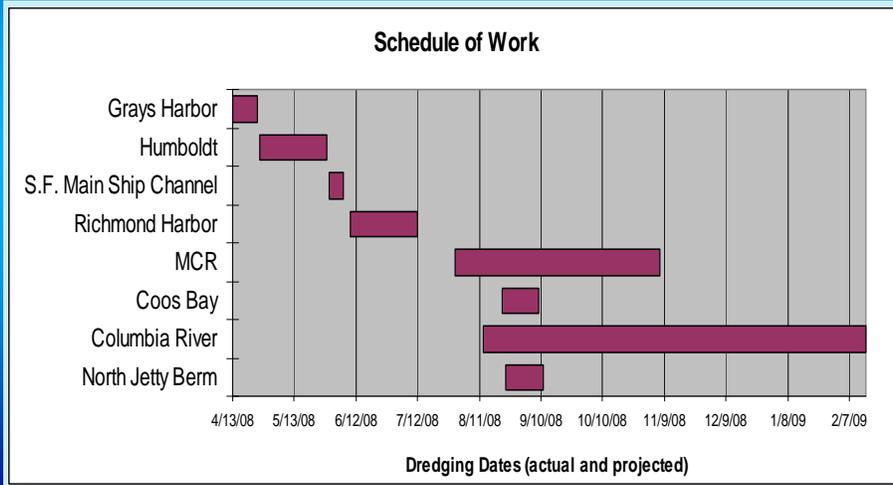
Planning for Contract Execution continued

- Internal partnering with PMs and technical support staff
- Formal partnering sessions with dredging contractor (GLDD)
- Establish dredging areas
 - ◆ Predredge surveys
 - ◆ Matching of priority dredging areas to available funding – present options to PMs
 - ◆ Identification of foul weather back-up dredging areas
 - ◆ Layout drawings and work instructions
- Understanding local reporting needs
- Development of spreadsheets for reporting dredging and disposal quantities, productions, etc



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Schedule of Work



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Seattle District (Grey's Harbor)

- Scope: 500 kcy
- Time: 2 weeks
- Disposal:
Pt. Chehalis





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San Francisco District (Humboldt, SF Main Ship Channel, Richmond Harbor)



Humboldt

- Scope: 1.1 mcy
- Time: 4 weeks
- Ocean disposal



Richmond Harbor

- Scope: 29 days rental
- Disposal: SF-10 & SF-11 (Alcatraz)



SF Main Ship Channel

- Scope: 200 kcy
- Time: 1 week
- Disposal: SF-8



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Portland District (Coos Bay Entrance, Mouth of the Columbia River, Columbia River & North Jetty Berm)



Coos Bay Entrance

- Scope: 700 kcy
- Time: 3 weeks
- Disposal: Site F (Near shore) & Site F-OS (off shore)



North Jetty Berm

- Scope: 125 kcy
- Time: 2+ weeks
- Disposal: Pump-off over the North Jetty onto Benson Beach



Mouth of the Columbia River

- Scope: 3.2 mcy
- Time: 11 Weeks
- Disposal: Shallow Water site, Deep Water Site, North Jetty Disposal Site



Columbia River

- Scope: 2.1 mcy
- Time: 7 weeks (est)
- Maintenance at various locations RM 3-103
- Disposal: Flowlane, various locations



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Challenges

- **Three weeks between NTP & Dredging**
- **Increased staffing**
- **Local environmental requirements (air quality, overflow restrictions, etc.)**
- **Competing priorities from 8 projects (7 project managers)**
- **Logistics & travel**
- **Numerous changes/modifications, funding, scope**
- **Understanding local work areas – weather, seas, dredging priorities, disposal requirements**
- **Establishing local points of contacts**
- **Communications and data transfer; cell coverage**
- **Funding: timely funds transfer, allocating project costs, projecting expenditures**



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Successes

- **Substantial savings in mobilization costs by sharing among 8 projects**
- **No outstanding claims or disputes**
- **No stand-by costs despite underruns in estimated quantities and other challenges**
- **All projects completed on time & within environmental work windows**
- **Satisfied customers and partner districts**



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Lessons Learned

- **Pre-contract planning and coordination is critical**
- **Environmental work windows, dredging priorities and dredging durations must be aligned**
- **A single contract administration office should administer the contract**
 - ◆ Consistent contract administration & interpretation
 - ◆ Consistent reporting
 - ◆ Allows use of specialized personnel & same inspection teams
 - ◆ Single POC for coordinating work, minimizing delays
 - ◆ One Contracting Officer
 - ◆ Streamlines modification/changes process
 - ◆ Better production and cost estimating data
 - ◆ Lines of authority are clear to contractors



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Lessons Learned - Cont

- **Substantial savings can be realized for mobilization**
- **Providing consecutive work with no stand-by or down time is challenging and labor intensive; requires increased staffing & experienced technical personnel**
- **Foul weather and back-up work areas are necessary for all locations**
- **A daily rental rate should be established up front as a bid item to deal with the unanticipated.**
- **Bin measure is the preferred payment method for most locations**
- **Weekly coordination with PMs is critical**
- **Special requirements for one project can create risks and drive costs for the entire project**
 - ◆ Unique environmental constraints or requirements
 - ◆ Uncertain funding
 - ◆ Uncertain dredging needs or quantities



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When to regionalize?

- When specialized or limited-availability equipment is needed
- When environmental work windows are compatible
- When dredging projects can be done consecutively with enough flexible overlap to avoid stand-by costs
- When project teams are well aligned with clear priorities
- When the volume of work warrants shared mobilization
- When the advantages in cost savings from shared mobilization & administration outweigh the risks
- When specialized personnel are available to respond to technical issues, set priorities, schedules, work areas, monitor dredging, etc.



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QUESTIONS?

