

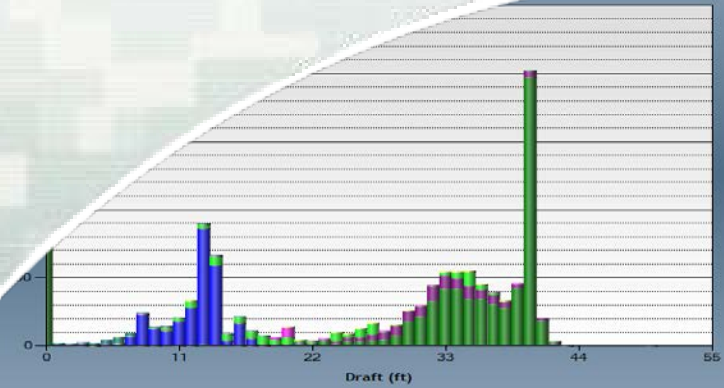
2015 Portland District and Walla Walla District, Joint Lock Users Meeting

Michael Ott

USACE Portland District

May 29, 2015

Boardman, OR



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US Army Corps of Engineers
BUILDING STRONG®



US Army Corps
of Engineers®
Portland District

Channels & Harbors Operational Projects



1. Mouth of The
Columbia River (MCR)



19. Baker Bay



18. Chinook



17. Cowlitz River



16b. Lower Columbia River



2. Skipanon Channel



3. Nehalem River



4. Tillamook Bay



6. Depoe Bay



6. Yaquina Bay & Harbor



7. Yaquina River



8. Siuslaw River



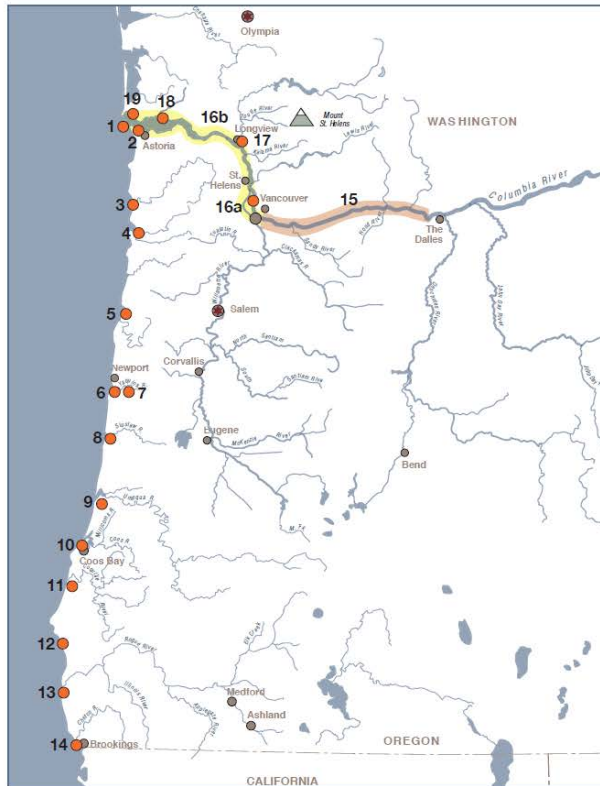
9. Umpqua Rver



10. Coos Bay



11. Coquille River



16a. Lower
Willamette River



15. Vancouver to The Dalles



14. Chetco River



13. Rogue River at
Gold Beach



12. Port Orford



PORTLAND DISTRICT
BUILDING STRONG®

USACE Civil Works Vision

Contribute to the strength of the Nation through innovative and environmentally sustainable solutions to the Nation's water resources challenges

Strategic Goals



Objective 1.1

Modernize the Civil Works project planning program.

Objective 1.2

Deliver quality solutions and services.

Objective 1.3

Develop a ready and resilient workforce through innovative talent management and leader development strategies and programs.

Objective 2.1

Reduce the Nation's risk and increase resilience to disasters.

Objective 2.2

Support the Department of Homeland Security Federal Emergency Management Agency to provide life-cycle public works and engineering support in response to disasters.

Objective 2.3

Effectively and efficiently execute response, recovery, and mitigation.

Objective 3.1

Facilitate commercial navigation by providing safe, reliable, highly cost-effective and environmentally sustainable waterborne transportation systems.

Objective 4.1

Restore aquatic habitat to a more natural condition in ecosystems in which structure, function, and dynamic processes have been degraded.

Objective 4.2

Reduce adverse impacts to the Nation's wetlands and waterways through an effective, transparent, and efficient Regulatory process.

Objective 4.3

Clean up radioactive waste sites.

Objective 4.4

Manage, conserve, and preserve natural resources at USACE projects.

Objective 4.5

Provide opportunities for quality outdoor public recreation.

Objective 5.1

Support the Nation and the Army in achieving our energy security and sustainability goals.

Objective 5.2

Capitalize, recapitalize, operate and maintain water resources infrastructure to provide maximum value to the Nation.

Objective 5.3

Provide reliable, renewable, hydropower to the Nation.

Objective 5.4

Provide water supply storage in partnership with state and local interests.



Civil Works Strategic Plan 2014-2018
EP 1165-2-503, 31 Dec 14



Greater Pacific Navigation Medium Class Hopper Scope

Division

District

NWD

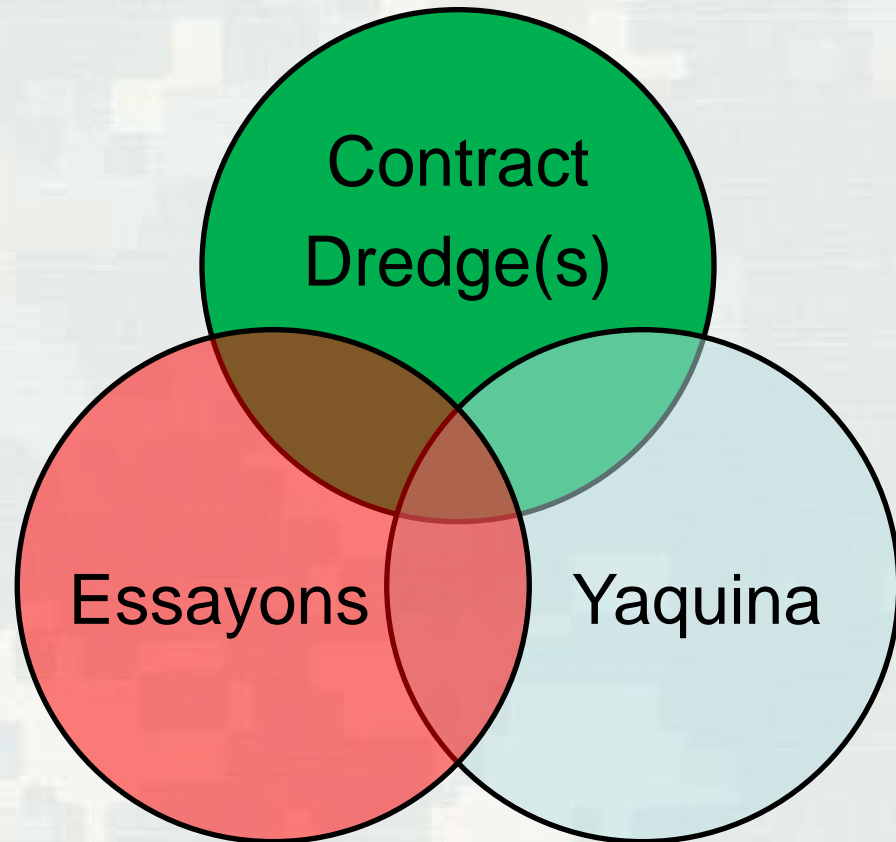
- Seattle
- Portland

SPD

- San Francisco
- Los Angeles

POD

- Alaska
- Hawaii

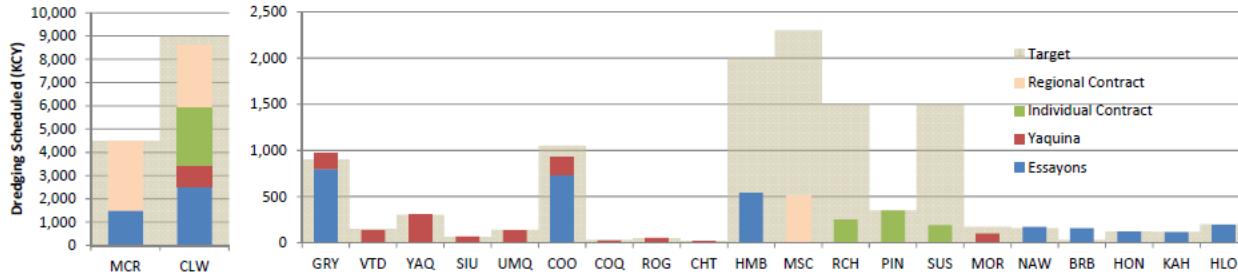


Alternative Number: 16
Alternative Name: Draft Plan B

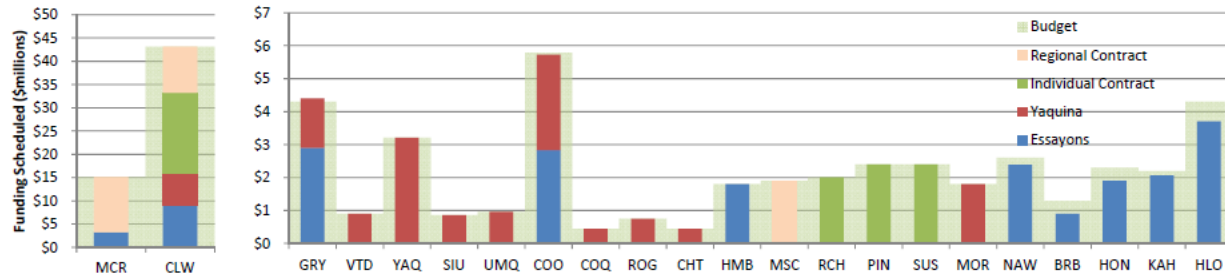
Essayons Daily Rate: \$125,000
 Yaquina Daily Rate: \$100,000

Alternative Notes:	Essayons Notes:	Yaquina Notes:
If the contract at GRY doesn't work out, Essayons handles GRY	Defer steering gear. Do POH and GRY and HMB, put RCH/PIN in a separate clamshell contract to reduce regional contract	Do GRY, SUS replaced with CLW days

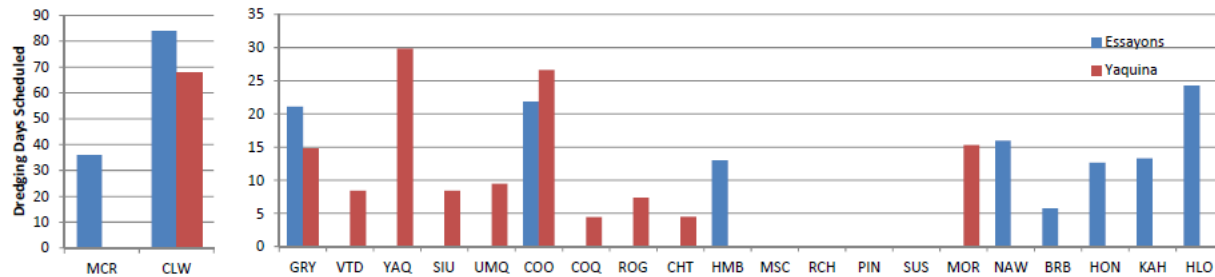
Scheduled Dredging Summary: Alt 16 (Draft Plan B)



Scheduled Funding Summary: Alt 16 (Draft Plan B)



Scheduled Government Dredging Days: Alt 16 (Draft Plan B)



2015 Maintenance dredging Lower Columbia River

- Channel condition hydrosurveys scheduled for Jan - Dec
- Dredge Oregon, Hopper Dredges work May - Dec
- Post-dredge channel hydrosurveys scheduled for May - Dec

<http://www.nwp.usace.army.mil/Missions/Navigation/Surveys.aspx>



11th AIRBORNE DIVISION
BUILDING STRONG®

Mouth of Columbia River

- Dredge ESSAYONS
 - ▶ (12 days complete, 24 days Aug-Sept)
- West Coast Regional Hopper
 - ▶ MCR, Columbia River, (Grays Harbor, San Francisco Main Ship Channel, *Humboldt, Coos Bay*)
 - ▶ Awarded February 18, 2015
- Regional Clamshell
 - ▶ Baker Bay, Chinook, Coastal
 - ▶ Expected Advertise May 2015



Columbia River Maintenance

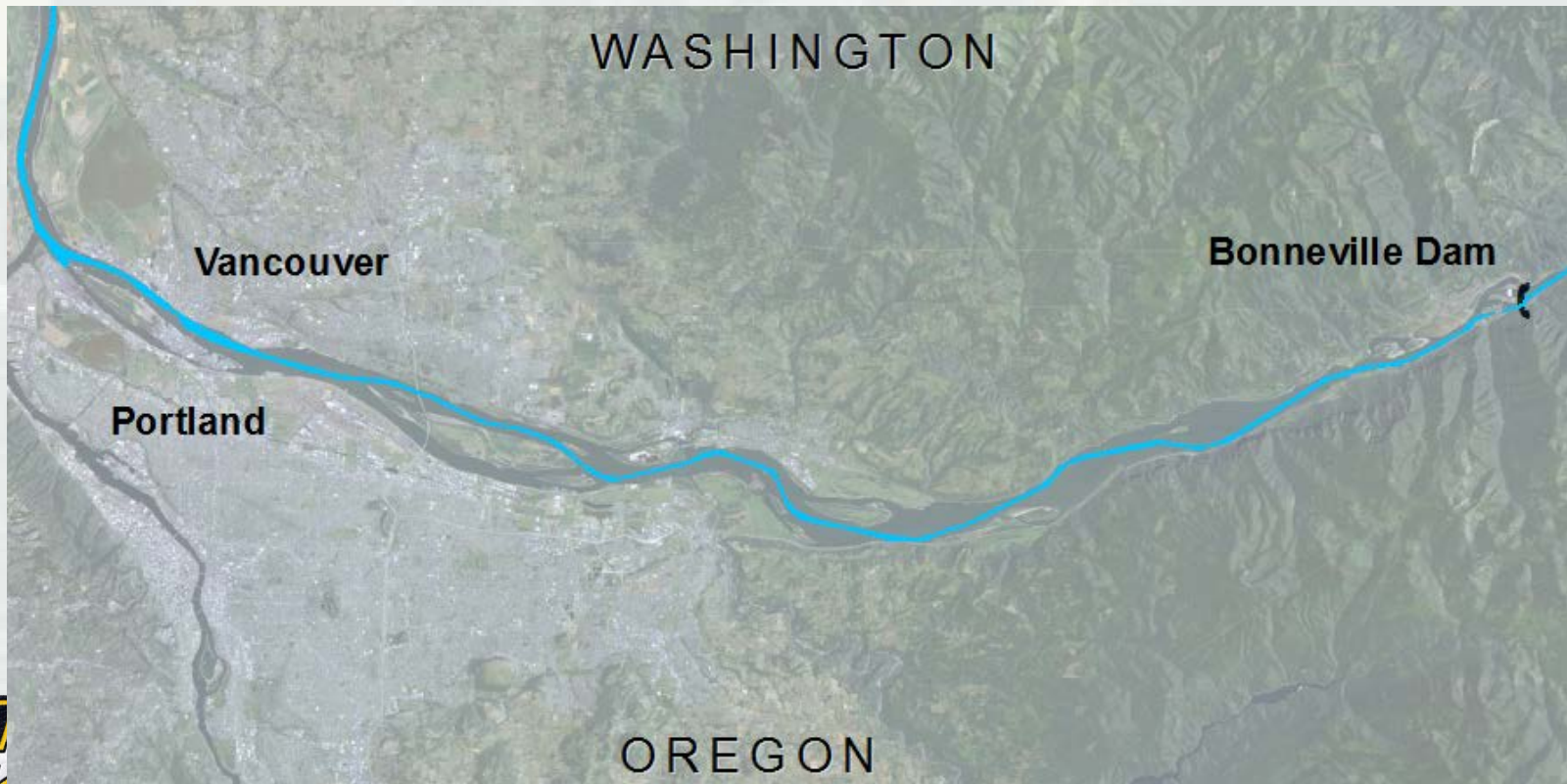
43-ft Channel – RM 3 to 106.5

- Dredge ESSAYONS
 - ▶ 33 days complete, 34 days June-Sept
- Dredge YAQUINA
 - ▶ 46 days complete, 27 days May-Sept
- West Coast Hopper Contract
 - ▶ ~~30~~ days starting late June/July
- Dredge OREGON Contract
 - ▶ Fourth year of (5) years w/ Port of Portland
 - ▶ 4-6 months starting June
 - ▶ Planned placement at Rice, Miller, Pillar, Welch, Puget upland, Crims, Howard, Lower Deer, and/or Sand Is.



2015 Maintenance dredging between Vancouver and Bonneville Dam

- Channel condition hydrosurveys scheduled for July-Aug
 - Hopper Dredge YAQUINA to work 7-9 days in Aug-Sep
 - Post-dredge channel hydrosurveys scheduled for Sep-Oct
- <http://www.nwp.usace.army.mil/Missions/Navigation/Surveys.aspx>



Columbia River Channel Status

MOUTH OF COLUMBIA RIVER	57	57	52	42
MOUTH OF COLUMBIA RIVER	52	53	52	42
MOUTH OF COLUMBIA RIVER				42
LOWER DESDEMONA SHOAL	46	47	49	50
UPPER DESDEMONA SHOAL	44	45	44	41
FLAVEL BAR	43	43	44	36
UPPER SANDS	41	43	44	42
UPPER SANDS	41	44	43	40
TONGUE POINT CROSSING	40	44	44	44
TONGUE POINT CROSSING	41	44	42	38
MILLER SANDS	39	45	44	36
MILLER SANDS	41	45	44	40
MILLER SANDS	42	44	45	41
PILLAR ROCK RANGES	40	44	43	38
PILLAR ROCK RANGES	46	48	45	42
BROOKFIELD-WELCH ISLAND	46	48	46	44
BROOKFIELD-WELCH ISLAND	46	49	42	31
SKAMOKAWA BAR	38	43	42	40
SKAMOKAWA BAR	45	45	45	42
PUGET ISLAND BAR	55	55	52	49
PUGET ISLAND BAR	42	43	44	42
WALUNA & DRISCOLL RANGES	40	43	42	38
WALUNA & DRISCOLL RANGES	40	44	44	42
WESTPORT BAR	42	43	43	42
WESTPORT BAR	42	44	44	39
EUREKA BAR	41	43	42	40
EUREKA BAR	45	46	42	41
EUREKA BAR	41	43	44	42
GULL ISLAND BAR	43	45	43	41
GULL ISLAND BAR	49	45	44	38
STELLA FISHER BAR	47	48	46	42
STELLA FISHER BAR	42	43	43	40
WALKER ISLAND REACH	46	48	46	40
WALKER ISLAND REACH	44	45	44	40
WALKER ISLAND REACH	47	48	43	41
SLAUGHTERS BAR	41	43	43	41
SLAUGHTERS BAR	41	43	43	41
LOWER DOBELBOWER BAR	42	43	45	41
LOWER DOBELBOWER BAR	45	45	44	40
UPPER DOBELBOWER BAR	45	42	43	37
UPPER DOBELBOWER BAR	41	43	43	42
KALAMA BAR	47	57	57	57
KALAMA BAR	41	45	44	33
KALAMA BAR	41	44	43	40
LOWER MARTIN BAR	39	44	44	42
LOWER MARTIN BAR	43	44	44	41
LOWER MARTIN BAR	44	44	45	39
UPPER MARTIN BAR	48	45	44	41
UPPER MARTIN BAR	42	43	43	43
UPPER MARTIN BAR	41	43	43	41
ST. HELENS BAR	39	42	43	37
ST. HELENS BAR	42	44	41	38
WARRIOR ROCK BAR	49	50	50	45
WARRIOR ROCK BAR	40	42	42	43
WARRIOR ROCK BAR	39	43	44	43
HENRICI BAR	39	43	43	38
HENRICI BAR	43	43	43	41
WILLOW BAR		44	44	40
WILLOW BAR	40	43	42	41
MORGAN BAR	42	44	44	44
MORGAN BAR	44	46	48	50
MORGAN BAR	43	44	43	43
LOWER VANCOUVER BAR	47	47	46	38
LOWER VANCOUVER BAR	42	42	42	38
LOWER VANCOUVER BAR	45	44	41	40
VANCOUVER BAR	39	33	33	41
VANCOUVER BAR	30	24	22	

Astoria

Longview

Kalama

Portland & Vancouver

Comparison of Draft Restrictions

Year	Days	Percent of Time
2014	39	11
2013	67	18
2012	121	33
2011	258	71

- 7 or more feet above project depth
- 5 or 6 feet above project depth
- 3 or 4 feet above project depth
- 1 or 2 feet above project depth
- At or 1 foot below project depth
- 2 or 3 feet below project depth
- 4 feet or more below project depth

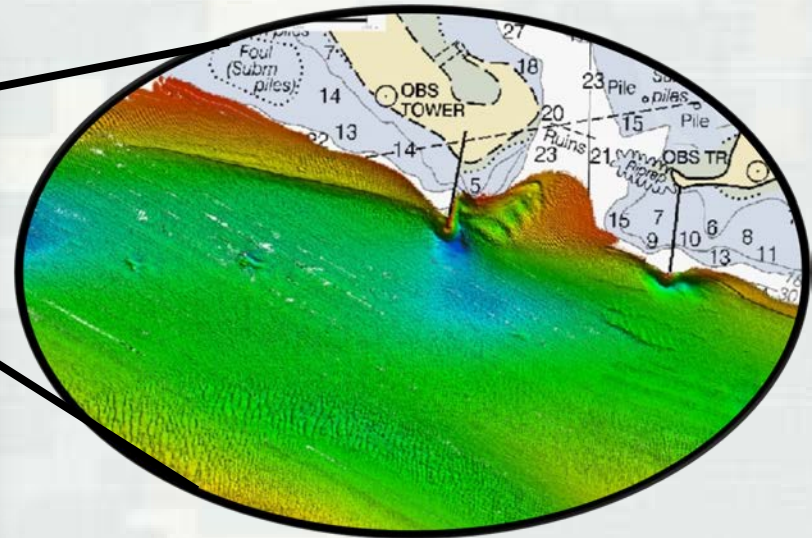
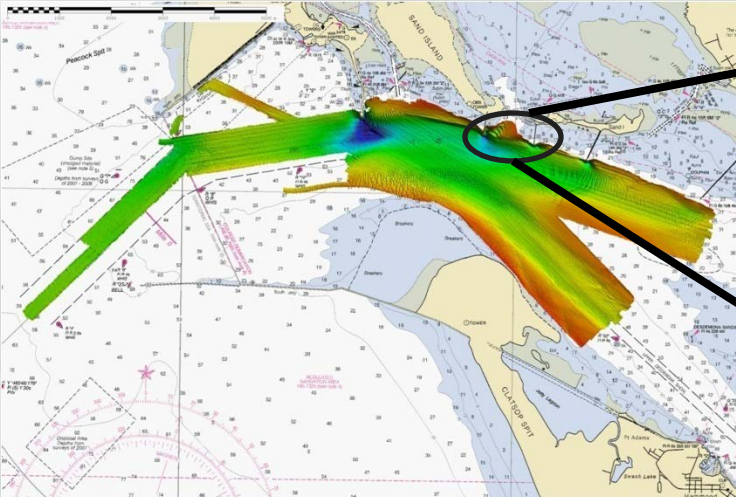


October 2014



Pile Dikes

Passive Channel Maintenance

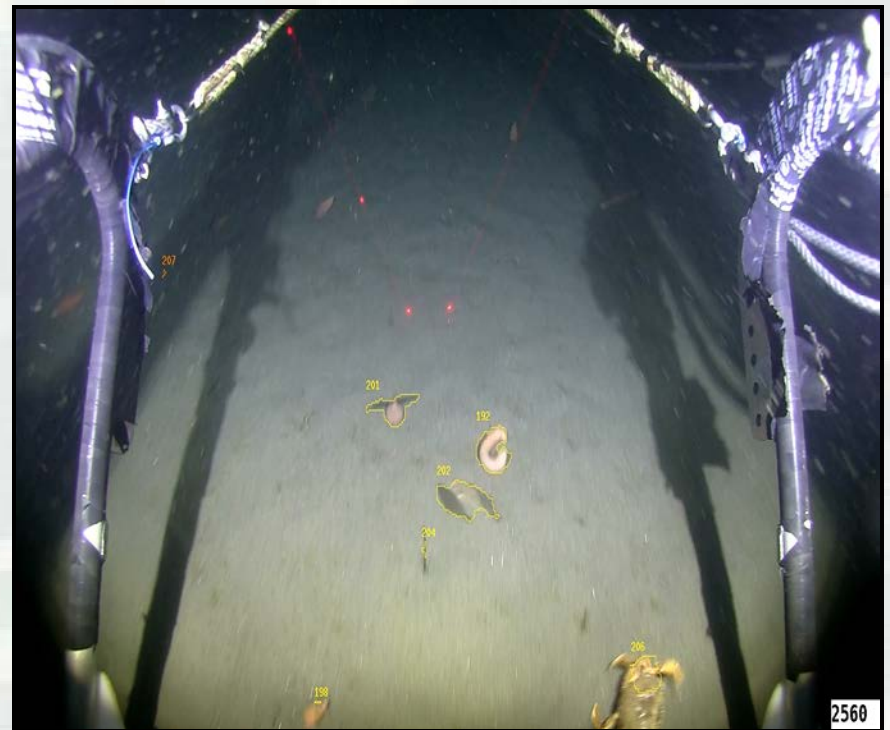


- Pile Dikes: decreased dredging requirements and increased habitat creation
- Focusing Attention – 2013 OCA review of 4 most critical near Mouth of the Columbia River
- Poor condition and expensive rehab requirements



Automated Event Detection and Classification (AVEDac) Software

- Developed by MBARI, Caltech, and USC for analysis of ROV video
- Software is capable of tracking objects of interest through video frames
- Continued development of the software to review video and classify species
- Quality Control by OSU graduate student
- Once developed it should reduce labor requirement



Contact Information

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