

FISH CHIPS &  
CHOWDER



## HAMMOND MARINA TASK FORCE HISTORY, UPDATES AND RECOMMENDATIONS TO THE WARRENTON CITY COMMISSION

The Hammond Marina (basin) is located at the northwest corner of the City of Warrenton in what is within the City of Warrenton, with a total City population of approximately 5250. The basin is within Clatsop County on the south shore of the Columbia River in the northwest corner of Oregon. The small embayment and adjacent lands have been leased for recreational and commercial development which will soon be transferred to the City of Warrenton from the US Army Corp. of Engineers. The marina improvements are owned and operated by the City of Warrenton.

The primary purpose of this task force is to provide recommendations for a plan of improvement to the marina based on the most current information available. An original plan dated June 1991 was prepared by Leslie Simons and Handforth, Larson & Barrett, Inc. and updated again in September 2005. The recommendations have been prepared with the input of the Hammond Marina Task Force, made up of community members and City staff. It is the intention of the Task Force to use this document for the purpose of 1) identifying the priorities for improvements that will revitalize the marina property to its full potential for the economic and recreational benefit of both the community and all of its visitors, 2) pursuing funding for marina improvements, and 3) compiling a plan that summarizes the current community vision of the future of the marina, and Hammond.

The recommendations are not intended to be the final specific facility design. It is based on existing data generated from aerial photography, as-built information and local knowledge. The information in this report is conceptual in nature and should not be used for final layout purposes. This plan is intended to show the direction of development and is not intended to be a construction document.

Special thanks are to be extended to all members of the task force and City staff including but not limited to Pat O'Grady, Paul Kujala, Tim Jenkins, Adam Svensen, Christie Shreckengost, Jim Ray, Gerry Poe, Jane Sweet (Harbor Master), Linda Engbretson (City Manager), and Pam Ackley (City Commissioner) for their assistance in completing this report.

## **TASK FORCE RECOMMENDATIONS**

The task force has discussed a theme focusing on the historic value of Hammond and adopting a small harbor town, recreational marina. Focusing on the architectural features resembling the Craftsman and Victorian styles from the late 1800's to early 1900's of Hammond's history. Buildings within the marina could be similar in features to the Point Adams Coast Guard station and vintage homes in town. At the recommendation of Commissioner Newton, two signs entering Hammond from NW Warrenton Drive and at Ridge Road near the entrance to the Fort Stevens recreational areas noting "Welcome To Historic Hammond, Oregon" would be an initial good neighbor designation we feel the community would embrace. We believe this approach would bring the community together on improvements they could support and be a part of the revitalization efforts.

In order of importance:

- 1. Transfer from the USACE**
- 2. Dredging all affected silt areas November 2018-February 2019 (see attached maps)**
- 3. Pursue grants / budget for the following:**
  - a) Pursue the purchase of our own dredge for future dredging
  - b) Maintenance schedule for repair and replacement of docks
  - c) Add addition transient docks
  - d) Continued bank stabilization
- 4. Discussion on Bait & Tackle shop/ dry storage**
  - a) Add a privacy fence around the dry storage
  - b) Façade improvements to match theme of the town and marina
- 5. Boardwalk**

We would like to keep the boardwalk from the earlier plans around the basin connecting Seafarers Park to the trail system, multipurpose building on the west side of Lake Drive and discuss a pier on the east side with a non-functional lighthouse style and potential take out restaurant location. A boutique style hotel has also been discussed and additional camping space. In an effort to keep parking space open, lodging and retail establishments would be along the interior perimeter allowing for the boardwalk and parking nearer the marina.

- 6. Work with the Parks Board**

Enhance Seafarers Park with additional picnic tables, landscaping and benches along the viewing area. Upon visiting the Garibaldi Marina, their boardwalk featured nautical themed benches as well as plaques along the boardwalk dedicated to the loss of family members to the sea. Benches could be purchased and dedicated as a way to offset costs of these improvements along the boardwalk.



## **7. Discuss options for creating a new Urban Renewal Agency for Hammond**

Simply focusing on the marina does not make sense without looking at Hammond as a whole for a prosperous future in adding more accommodations, commercial businesses and residential housing. With the new water line coming in summer of 2019, this will open up opportunity to look at revitalizing the town as well. This process is one that will take time and much thought as well as input from the community and depend on growth to fund such an undertaking.

## **8. Wish list items:**

There has been discussion from our task force members in the fishing industry regarding a potential mobile offload area for the crab season thus allowing vessels to return to the grounds quicker and capitalize on weather conditions. This would entail a deeper dredging operation to allow for commercial access to offload. We have not discussed a mobile option with Pacific Seafood's for this purpose being that they just finished their multi- million dollar rebuild and believe that this may be a topic discussed down the road if it is deemed possible or cost effective for the fishing fleet.

### **Summary**

Hammond has long been known as the closest port to the fish and was a thriving charter boat and sport boat port. There were multiple charter offices, 2 gas stations, bait and tackle shops, 2 restaurants as well as a grocery store boasting "Rosalie's blessed bait"! We have seen a transition from the traditional charter boat operation to a plethora of open guide boats in the last 15 years along with declines in returning salmon and smaller annual quotas. We have data that is included from Chris

Kern with ODFW on the attached exhibits and there is talk of the Oregon and Washington fish hatcheries increasing their fin clipped production as well as steps to solve the Sea Lion population. Many external issues affect the well being of our eco system thus the vital concern of looking at the big picture for Hammond and the marina. We would like to see a future work session regarding the Hammond Library location with a follow up town hall for the communities input on the best use for that site. Promoting the historic features of Hammond, the Fort Stevens recreational area, and

Warrenton is essential to positive growth and increased tourism to support the efforts of the community and its leaders.



| <b>HAMMOND MARINA IMPROVEMENTS SINCE 2005</b> |   |                 |
|---|---|-----------------|
| <b>2005 - 2006</b>                            | Improvements - Dredging                                     | \$ 11,716.00    |
| <b>2006 - 2007</b>                            | Dredging Sample Plan  | \$ 5,260.00     |
| <b>2007 - 2008</b>                            | Dredging  | \$ 205,537.00   |
| <b>2008 - 2009</b>                            | Fuel Tanks  | \$ 8,502.00     |
| <b>2009 - 2010</b>                            | Removal of fuel Tanks - 9,689                               | \$ 9,689.00     |
|   | Gravel Parking Area   | \$ 63,226.00    |
|   | Paystations   | \$ 26,743.00    |
| <b>2010 - 2011</b>                            | Paystations - \$6728  | \$ 6,728.00     |
| <b>2011 - 2012</b>                            | Parking Lot improvement - \$75                              | \$ 75.00        |
| <b>2012 - 2013</b>                            | Parking Lot improvement & Bank Stabilization - Phase 1 \$37 | \$ 376,249.00   |
| <b>2013 - 2014</b>                            | Pave Parking Lot \$70,613.00                                | \$ 70,613.00    |
|   | Dredging Sample Plan - \$5,260                              | \$ 5,260.00     |
|   | Waterline Upgrade - \$462.                                  | \$ 462.00       |
|   |   |                 |
| <b>2014 - 2015</b>                            | Parking Lot Paving - \$28,447                               | \$ 28,447.00    |
|   | Dredging Sample Plan - 22,120                               | \$ 22,120.00    |
|   |   |                 |
| <b>2015 - 2016</b>                            | Bank Stabilization - Phase 2 - \$56,247                     | \$ 56,247.00    |
|   |   |                 |
| <b>2016 - 2017</b>                            | Cargo Trailer / Portable Marina Office - \$7,493.           | \$ 7,493.00     |
|   | Marina Acquisition Costs \$63,089                           | \$ 63,089.00    |
|   | Hammond Restroom Refresh -                                  | \$ 7,919.80     |
|   | Resurface Launch Ramp                                       | \$ 15,000.00    |
|   |   |                 |
| <b>2017 - 2018</b>                            | Mott McDonald - Dredge Consulting and Permitting            | \$ 82,700.00    |
|   |   |                 |
|   |   | \$ 1,073,075.80 |









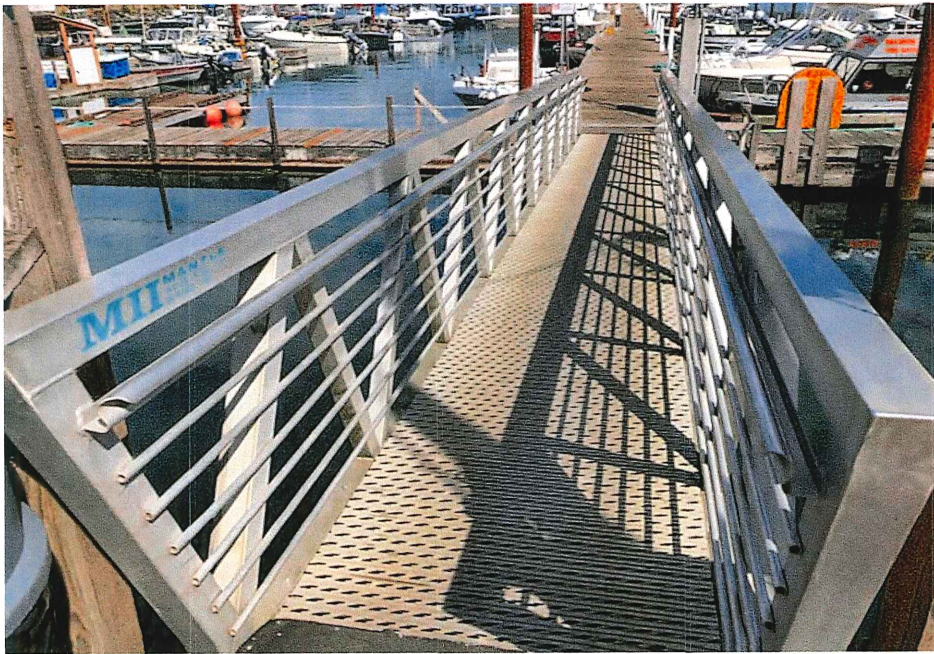












Garibaldi



## Treaty to govern salmon management for decade

A coastwide salmon fishing treaty was developed this week with the intent of ensuring sustainability of the region's iconic fish.

The Pacific Salmon Commission, comprised of representatives from Canada, Oregon, Washington, Alaska, and several indigenous tribes, came to terms on the new 10-year agreement. It covers fishery plans for Chinook, coho and chum salmon stocks.

Commissioners from the United States and Canada will now forward the agreements to their respective governments for approval.

The agreement is an update to the 1985 treaty, which defines the obligations of Canada and the United States. Both must conduct their fisheries in a manner that prevents overfishing and allows each country to receive benefits equal to the production of salmon originating in each nation's waters.

"I praise the efforts of the joint US-Canada Pacific Salmon Commission for approving strong recommendations to the Pacific Salmon Treaty," Oregon Gov. Kate Brown said. "(It) will help ensure long-term sustainable and healthy salmon popula-

tions that are vital to the people of the Pacific Northwest and to the entire ecosystem."

One of the most significant aspects of the new agreement is management of Chinook salmon, particularly those listed under the Endangered Species Act. It includes stocks from Puget Sound and the Columbia River basin, many of which migrate north into marine waters in southeast Alaska and British Columbia, where they are caught in marine fisheries in those regions.

Under the agreement, catches of Chinook in southeast Alaska will be reduced by up to 7.5 percent from recent levels when poor Chinook returns are expected. Canada will reduce Chinook catches by up to 12.5 percent under these conditions. The agreement includes provisions in other West Coast fisheries to ensure harvests remain strongly tied to stock conservation objectives.

As a result, abundances of several Chinook stocks returning to Oregon waters will increase.

"Salmon management is

very complex, so it's no surprise that reaching an agreement was also complex and sometimes difficult," said Rick Klumph, Oregon's commissioner. "However, all of the commissioners understand the critical importance of the treaty process in managing our salmon stocks. I am proud that we were all able to work through the issues and reach an agreement that is good for Oregonians and their salmon resource."

The United States commissioners will begin finalizing requests for federal funding needed to implement the new agreements within the next month. The funding is needed to support Puget Sound efforts to improve and protect habitat and implement hatchery conservation programs. The funding also will be critical to commitments to science and stock assessment needed to successfully manage the interjurisdictional fisheries.

Finally, the funding request will include provisions to support recovery efforts for endangered southern resident killer whales.



# ODFW

Conversation with Chris Kern

August 31, 2018

Coho Clip program

2017 Coho 18 million 83% clipped through Oregon, Washington and Tribal hatcheries =approx. 15 million

Tribal harder to count accurately as they have little data release approx. 1 million fin clipped with less than 20-30,000 wild. Not 100% more like 50-70%

The Mitchell act requires federally funded hatcheries to clip to retain funding lost revenues from many different sources account for some of decline and over the last 15 years we have seen a decline from all areas of the PFMC of approx. 1 billion returning fish. Many factors contribute including survival rates due to El Nino. Possibly coming out of that effect however there is evidence of another warm water migration coming into the Pacific NW.

Most of our Oregon / Washington hatcheries are still running however production is down with changes in funding

Chris is optimistic that we will continue to be stable as the last 4 years indicates however outside controls in the environment and funding are always a variable.



# TASK FORCE CREATION STATEMENT

Statement No. 2  
February 13, 2018

## **Name**

Hammond Marina Vision Plan Update Task Force

## **Issue Introduction**

The US Army Corps of Engineers is conveying the Hammond Boat Basin to the City of Warrenton as directed by Congress under Title VI, Section 6005 (d) of Public Law 113-121 also known as the "Water Resources Reform and Development Act of 2014." The Town of Hammond, prior to its annexation into Warrenton, previously had a master plan drawn up for the visioning and orderly development of the 59 acre boat basin in 1991, but implementation has been confounded by restrictions imposed by the US Army Corps of Engineers. The City of Warrenton had an updated master plan drawn up in 2005, but its realization was stymied by economic factors and a lack of ownership by the city. With the imminent property conveyance, a task force was deemed necessary to update the Hammond Marina Vision Plan.

## **Problem Statement**

The marina is one of the few places in the City that could become an economic hub and are relatively a blank slate for development. Past plans have not been fully implemented and the ownership transfer is imminent. It is necessary to create a task force to review past plans and to recommend a new or at least updated vision for consideration by the City Commission. The vision plan update is necessary to provide a basis for laying out potential anchor developments and amenities, if a theme is recommended, it will be used as a reference for development of design standards.

## **Task Mandate**

To develop and ultimately recommend a package of updates or amendments to the Hammond Marina Master Plan that honors the historic past of the property while providing for contemporary needs and plots a vision for future uses and development. The Task Force is to recommend big picture items.

## **Specific Restrictions**

Under the federal conveyance statute, any and all property conveyed to the City of Warrenton at the Hammond Boat Basin must remain open/available for the public. If the land ever is sold, the conveyance will be nullified and the Boat Basin will be reverted to federal ownership.

Since the previous plans were professionally done and the city already plans its capital improvements 6 years in advance the task force is to not focus on costs or any individual issue/item.

A few examples of what is considered under the task force's mandate and what is not:

Appropriate recommendations:

- That boardwalks span from a particular location to another
- A community wide event be planned and held in the future



- That all new buildings should have a particular architectural theme
- That staff create a dredging and erosion control plan if one is not already in place.
- An extension of the Seafarers park further towards the pilings
- Creation/preservation of public access beaches and where
- Memorial location(s) or enhancements
- Parking lots
- Pedestrian pathways and trail connectivity
- Safe places for picnicking that would avoid traffic or safety hazards
- Recruitment or development of specific business types
  - e.g. That a hotel and/or conference building be built in a specific area within the basin

Recommendations outside of the Task Force mandate:

- Designing the boardwalk
- Requesting staff prepare cost estimates on projects

The above listed items are not prescriptive nor exhaustive but are provided to form a basis of what kind of topics or recommendations are appropriate. The task force may assume that its design theme concepts would be formed into a planning overlay, or new zone. This reduces the change factor associated with amending uses in particular zones citywide, which has much broader and unintended policy implications. An overlay only applies to where it is mapped, same with a new zone.

### Rules

Task force members must be respectful of each other and the chair. The task force may not direct staffing resources nor make representations on behalf of the city, including the task force without consulting the city manager. The task force is not to exceed its mandate, nor delve into staff related work. The City Manager has the sole right to direct all staff resources, including which staff member is to support the task force.

All meetings should be open to public. The authority to invite or allow public comment rests with the chair. The City Recorder shall notice the meetings if required by Oregon Public Meetings Law.

The Mayor may remove and replace members upon the recommendation of the chairperson for lack of attendance, or other such reasons that hinder the task force's business. No meeting may take place without the chair present and the chair shall always be a City Commissioner.

The task force shall consult the 1991 Hammond Marina Master Plan and its subsequent 2005 Update, as well as the Waterfront Revitalization Plan of 1994. Where appropriate, the Warrenton Marina Master Plan and Urban Renewal Plan may be instructive in providing a baseline concept for design standards.

In all, the most important mission of this task force is to provide a vision of what that area could/should look like and what amenities should exist. Cost is not to be figured into this update, as this is simply an update of the vision. In codifying this vision, the city will be committing to its long-term attainment.



## Membership & Appointment

### Authority to Appoint

Chapter V §19 of the Warrenton City Charter

### Charter and Appointments:

Under the authority vested under the Warrenton City Charter, I hereby charter the Hammond Marina Vision Update Task Force and appoint the following persons to it:

- Pam Ackley, Warrenton City Commission and Chair
- Pat O'Grady, Previous Master Plan Update Member
- Ceton Van Meter, Port Warren Marina Manager
- Tim Jenkins, Portland Yacht Club
- Paul Kujala, Commercial Fisherman
- Adam Svensen, Developer
- Gerry Poe, Hammond Resident
- Jim Ray, Hammond Resident
- Christie Schreckengost, Warrenton Resident

### Expected Outcome

The outcome should be an overall vision for the highest and best uses of the Hammond Marina property, recommendations for amenities to recruit or provide, and a design standard consistent with the local history and recommended vision.

### Deadline

This task force is to provide a complete and full vision with recommended Master Plan Updates to the City Commission on or before its last regular meeting in October.

### Sunset

Dissolution of this task force will occur automatically on November 6, 2018 and all appointments shall expire upon that date unless further authorized.

Henry A. Balensifer III  
Mayor







# Map



## Clatsop County Webmaps

Disclaimer: This map was produced using Clatsop County GIS data. The GIS data is maintained by the County to support its governmental activities. This map should not be used for survey or engineering purposes. The County is not responsible for map errors, omissions, misuse or misinterpretation. Photos may not align with taxlots.

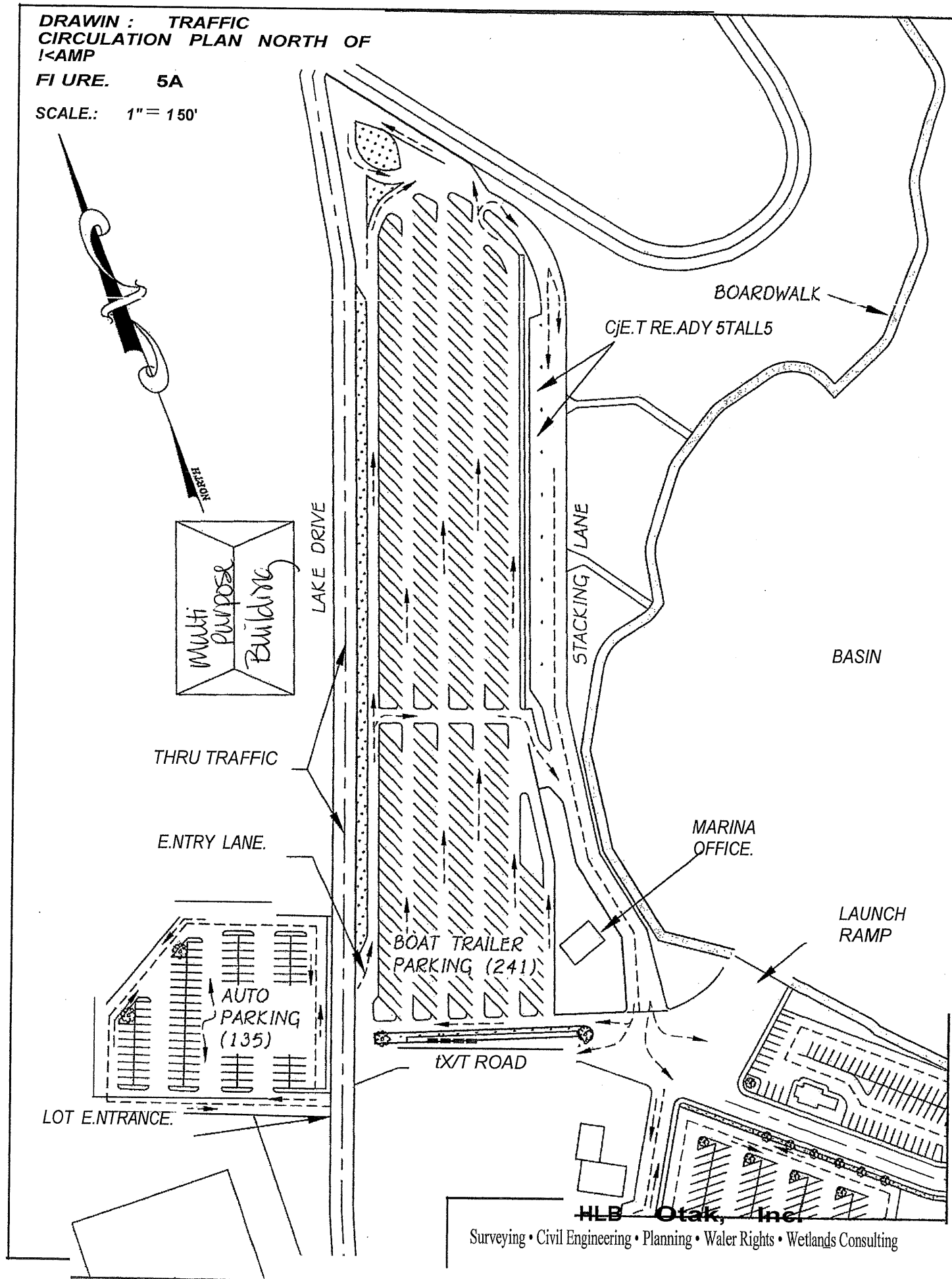




DRAWING : TRAFFIC  
CIRCULATION PLAN NORTH OF  
LAKE

FIGURE 5A

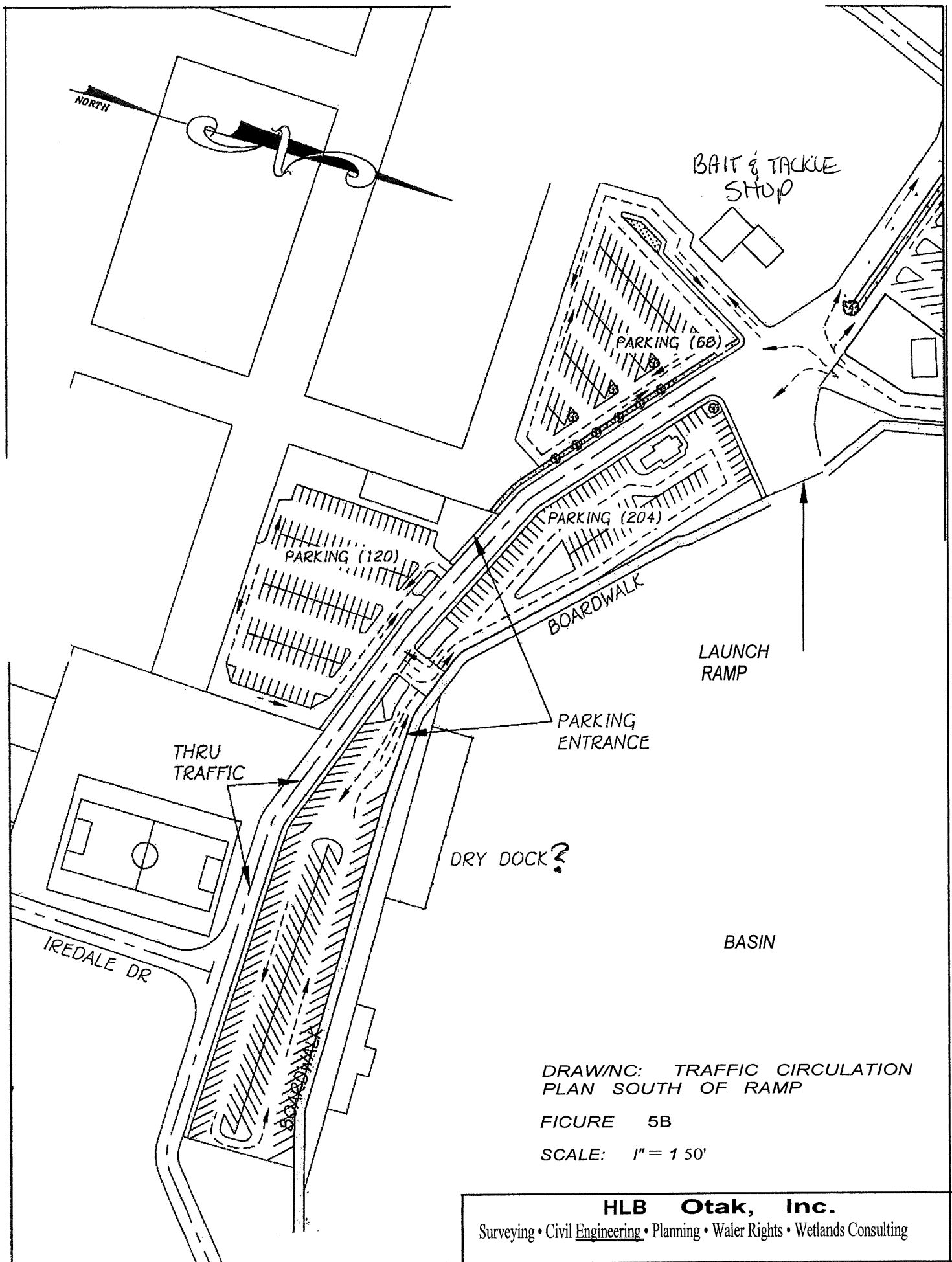
SCALE: 1" = 150'



HLB Otak, Inc.

Surveying • Civil Engineering • Planning • Water Rights • Wetlands Consulting





DRAW/NC: TRAFFIC CIRCULATION  
PLAN SOUTH OF RAMP

FIGURE 5B

SCALE: 1" = 150'

**HLB Otak, Inc.**

Surveying • Civil Engineering • Planning • Water Rights • Wetlands Consulting



City of Warrenton  
Budget Document

Hammond Marina Fund 011 (461)

| Historical Data   |                   |                       | Resources<br>and<br>Requirements               | Budget for Fiscal Year<br>7/1/2018 - 6/30/2019 |                     |                   |
|-------------------|-------------------|-----------------------|--|--|---------------------|-------------------|
| Actual            | Adopted           |                       |  | Proposed by                                    | Approved by         | Adopted by        |
| FYE 6/30/16       | FYE 6/30/17       | Budget<br>FYE 6/30/18 |  | Budget<br>Officer                              | Budget<br>Committee | Governing<br>Body |
|                   |                   |                       | <b>Resources</b>                               |  |                     |                   |
| \$ 162,079        | \$ 168,011        | \$ 140,000            | 300000 Beginning Working Capital               |  |                     |                   |
| 1,230             | 8,016             | 1,600                 | 334602 OSMB Grant - Operating                  | \$ 119,000                                     | \$ 119,000          | \$ 119,000        |
|                   |                   |                       | 334603 OSMB Grant - Capital                    |  |                     |                   |
| 102,960           | 115,485           | 130,000               | 347801 Annual Moorage Rentals                  | 125,000  | 125,000             | 125,000           |
| 11,748            | 12,944            | 8,000                 | 347802 Transient Daily Moorage                 | 16,200   | 16,200              | 16,200            |
| 3,508             | 4,603             | 5,000                 | 347803 Utilities                               | 12,000   | 12,000              | 12,000            |
|                   | 225               |                       | 347804 Boat Storage                            | 150  | 150                 | 150               |
| 71,150            | 51,810            | 50,000                | 347805 Launch Fees                             | 120,000  | 120,000             | 120,000           |
| 23,371            | 21,096            | 20,000                | 347808 Monthly Moorage                         | 20,000   | 20,000              | 20,000            |
| 15,718            | 18,805            | 20,000                | 347810 Parking                                 | 30,000   | 30,000              | 30,000            |
| 34,854            | 38,460            | 35,000                | 347812 Overnight Stays                         | 52,000   | 52,000              | 52,000            |
| 3,284             | 3,526             | 3,000                 | 360000 Miscellaneous                           | 3,500  | 3,500               | 3,500             |
| 1,801             | 4,058             | 2,300                 | 361000 Interest Earnings                       | 8,000  | 8,000               | 8,000             |
| 13,121            | 13,141            | 12,901                | 363000 Lease Receipts                          | 12,901   | 12,901              | 12,901            |
| <u>444,825</u>    | <u>460,179</u>    | <u>427,801</u>        | <b>Total Resources</b>                         | <u>518,751</u>                                 | <u>518,751</u>      | <u>518,751</u>    |
|                   |                   |                       | <b>Requirements</b>                            |  |                     |                   |
| 85,528            | 92,652            | 112,500               | Personnel Services-Marinas:                    |  |                     |                   |
| 1,365             | 2,552             | 5,000                 | 110000 Regular Salaries                        | 115,500  | 115,500             | 115,500           |
| 7,188             | 3,221             | 12,000                | 110001 Overtime                                | 6,000  | 6,000               | 6,000             |
| 6,897             | 7,305             | 9,907                 | 110002 Part-Time Regular Salaries              | 12,000   | 12,000              | 12,000            |
| 5,245             | 5,252             | 7,001                 | 141000 FICA                                    | 10,213   | 10,213              | 10,213            |
| 271               | 282               | 259                   | 142000 Workers Compensation                    | 5,969  | 5,969               | 5,969             |
| 14,091            | 16,719            | 25,067                | 143000 Unemployment                            | 534  | 534                 | 534               |
| 22,137            | 26,806            | 36,034                | 144000 Retirement                              | 24,915   | 24,915              | 24,915            |
| 206               | 156               | 227                   | 145000 Health Insurance                        | 31,870   | 31,870              | 31,870            |
|                   |                   |                       | 146000 Life Insurance                          | 214  | 214                 | 214               |
| 20,868            | 17,699            | 24,456                | 149000 Long Term Disability                    | 320  | 320                 | 320               |
|                   |                   |                       | 199999 Personnel services overhead (.2880 FTE) | 31,733   | 31,733              | 31,733            |
| <u>\$ 163,795</u> | <u>\$ 172,644</u> | <u>\$ 232,451</u>     | <b>Total Personnel Services</b>                | <u>\$ 239,268</u>                              | <u>\$ 239,268</u>   | <u>\$ 239,268</u> |
|                   | 2.3403            |                       | <b>Total Full-Time Equivalent (FTE)</b>        | <u>2.3967</u>                                  | <u>2.3967</u>       | <u>2.3967</u>     |



City of Warrenton  
Budget Document

Hammond Marina Fund 011 (461)

| Historical Data |                   |             | Resources<br>and<br>Requirements | Budget for Fiscal Year<br>7/1/2018 - 6/30/2019 |                     |                   |
|-----------------|-------------------|-------------|----------------------------------|--|---------------------|-------------------|
| Actual          | Adopted<br>Budget |             |                                  | Proposed by                                    | Approved by         | Adopted by        |
| FYE 6/30/16     | FYE 6/30/17       | FYE 6/30/18 |                                  | Budget<br>Officer                              | Budget<br>Committee | Governing<br>Body |
|                 |                   |             |                                  |  |                     |                   |
| Requirements    |                   |             |                                  |  |                     |                   |
| \$ 1,037        | \$ 1,182          | \$ 1,500    | 210000                           | Materials and Services-Marinas:                |                     |                   |
| 123             | 224               | 500         | 211000                           | \$ 1,500                                       | \$ 1,500            | \$ 1,500          |
| 40              |                   |             | 223000                           | 750  | 750                 | 750               |
| 1,593           | 2,089             | 1,500       | 223001                           |  |                     |                   |
| 760             | 1,133             | 4,000       | 223004                           | 1,800  | 1,800               | 1,800             |
| 334             | 308               | 500         | 310000                           | 3,000  | 3,000               | 3,000             |
| 2,053           | 125               | 3,000       | 320000                           | 500  | 500                 | 500               |
| 7,146           | 9,830             | 4,000       | 340000                           | 1,500  | 1,500               | 1,500             |
| 1,979           | 2,047             | 5,000       | 340002                           | 10,000   | 10,000              | 10,000            |
| 6,698           | 7,600             | 10,000      | 340005                           | 5,000  | 5,000               | 5,000             |
| 6,920           | 7,795             | 10,000      | 340006                           | 15,000   | 15,000              | 15,000            |
| 1,384           | 1,559             | 2,500       | 340007                           | 15,000   | 15,000              | 15,000            |
| 20,705          | 20,120            | 28,000      | 340008                           | 4,000  | 4,000               | 4,000             |
| 1,554           | 1,378             | 2,000       | 362000                           | 23,000   | 23,000              | 23,000            |
| 2,932           | 837               | 3,000       | 366000                           | 2,500  | 2,500               | 2,500             |
| 24,539          | 43,234            | 40,000      | 371000                           | 3,000  | 3,000               | 3,000             |
| 2,025           | 1,600             | 1,600       | 375000                           | 40,000   | 40,000              | 40,000            |
| 1,780           | 6,428             | 12,000      | 380000                           | -  | -                   | -                 |
| 3,817           | 3,813             | 6,000       | 380005                           | 10,000   | 10,000              | 10,000            |
| 4,865           | 5,731             | 6,000       | 380020                           | 8,000  | 8,000               | 8,000             |
| 3,986           | 5,041             | 5,000       | 380040                           | 6,000  | 6,000               | 6,000             |
| 1,547           | 3,951             | 5,000       | 380050                           | 6,500  | 6,500               | 6,500             |
|                 |                   | 3,000       | 383000                           | 5,000  | 5,000               | 5,000             |
|                 | 980               | 900         | 410000                           | 3,000  | 3,000               | 3,000             |
| 15,199          | 20,500            | 20,873      | 390090                           | 1,000  | 1,000               | 1,000             |
|                 |                   |             |                                  | 23,819   | 23,819              | 23,819            |
| \$ 113,019      | \$ 147,503        | \$ 175,873  | Total Materials and Services     | \$ 189,869                                     | \$ 189,869          | \$ 189,869        |
|                 |                   |             | 860013                           | Hammond Marina Capital Reserve-Grant           |                     |                   |
|                 |                   |             | 860013                           | Hammond Marina Capital Reserve-operatic        |                     |                   |
|                 |                   |             |                                  | 28,000   | 28,000              | 28,000            |
|                 |                   |             | Total Transfers                  | 28,000   | 28,000              | 28,000            |
|                 |                   | 19,477      | Not allocated:                   |  |                     |                   |
|                 |                   |             | 800000                           | 61,614   | 61,614              | 61,614            |
| 276,814         | 320,147           | 427,801     | Contingency                      |  |                     |                   |
|                 |                   |             | Total Expenditures               | 518,751  | 518,751             | 518,751           |
| 168,011         | 140,032           | -           | 880001                           |  |                     |                   |
|                 |                   |             | Ending Fund Balance              |  |                     |                   |
| \$ 444,825      | \$ 460,179        | \$ 427,801  | Total Requirements               | \$ 518,751                                     | \$ 518,751          | \$ 518,751        |



City of Warrenton  
Budget Document

Established by Resolution No. 2057

Hammond Marina Fund Capital Reserve Fund 013 (461)

To accumulate funds for capital  
improvements at the Hammond Marina

Review Year: 2023

| Historical Data            |             |                   | Resources<br>and<br>Requirements      | Budget for Fiscal Year<br>7/1/2018 - 6/30/2019 |                                    |                                 |
|----------------------------|-------------|-------------------|---------------------------------------|--|------------------------------------|---------------------------------|
| Actual                     |             | Adopted<br>Budget |                                       | Proposed by<br>Budget<br>Officer               | Approved by<br>Budget<br>Committee | Adopted by<br>Governing<br>Body |
| FYE 6/30/16                | FYE 6/30/17 | FYE 6/30/18       |                                       |  |                                    |                                 |
| <b><u>Resources</u></b>    |             |                   |                                       |  |                                    |                                 |
| \$ 365,745                 | \$ 449,501  | \$ 412,000        | 300000 Beginning Fund Balance         | \$ 600,000                                     | \$ 600,000                         |                                 |
|                            |             |                   | 361000 Interest Earnings              |  |                                    |                                 |
| 140,003                    | 140,606     | 146,000           | 364000 Transient Room Tax             | 152,000  | 152,000                            |                                 |
|                            |             |                   | Transfers from Other Funds:           |  |                                    |                                 |
|                            |             |                   | 391030 Hammond Marina Fund-Grant      |  |                                    |                                 |
|                            |             |                   | 391030 Hammond Marina Fund-operations | 28,000   | 28,000                             |                                 |
| 505,748                    | 590,107     | 558,000           |                                       |  |                                    |                                 |
|                            |             |                   | <b>Total Resources</b>                | <b>780,000</b>                                 | <b>780,000</b>                     |                                 |
| <b><u>Requirements</u></b> |             |                   |                                       |  |                                    |                                 |
|                            | 7,493       |                   | Capital Outlay-Marinas:               |  |                                    |                                 |
|                            |             |                   | 610002 Cargo Trailer                  |  |                                    |                                 |
|                            |             | 100,000           | 620000 Improvements - Unallocated     |  |                                    |                                 |
|                            | 63,089      | 75,000            | 620009 Marina Acquisition Costs       | 5,000  | 5,000                              |                                 |
| 56,247                     |             | 75,000            | 620010 Bank Stabilization Project     | 75,000   | 75,000                             |                                 |
|                            |             |                   | 620006 Pave Parking Lot               |  |                                    |                                 |
|                            |             |                   | 620007 Hammond Marina Dredging        | 700,000  | 700,000                            |                                 |
| 56,247                     | 70,581      | 250,000           |                                       |  |                                    |                                 |
|                            |             |                   | <b>Total Capital Outlay</b>           | <b>780,000</b>                                 | <b>780,000</b>                     |                                 |
| 56,247                     | 70,581      | 250,000           |                                       |  |                                    |                                 |
| 449,501                    | 519,526     | 308,000           | <b>Total Expenditures</b>             | <b>780,000</b>                                 | <b>780,000</b>                     |                                 |
|                            |             |                   | <b>Ending Fund Balance</b>            | <b>-</b>                                       | <b>-</b>                           |                                 |
| \$ 505,748                 | \$ 590,107  | \$ 558,000        | <b>Total Requirements</b>             | <b>\$ 780,000</b>                              | <b>\$ 780,000</b>                  |                                 |





# City of Warrenton

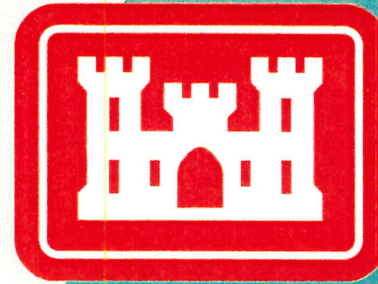
## Hammond Boat Basin Dredging

20 September, 2018



### Project Background for USACE

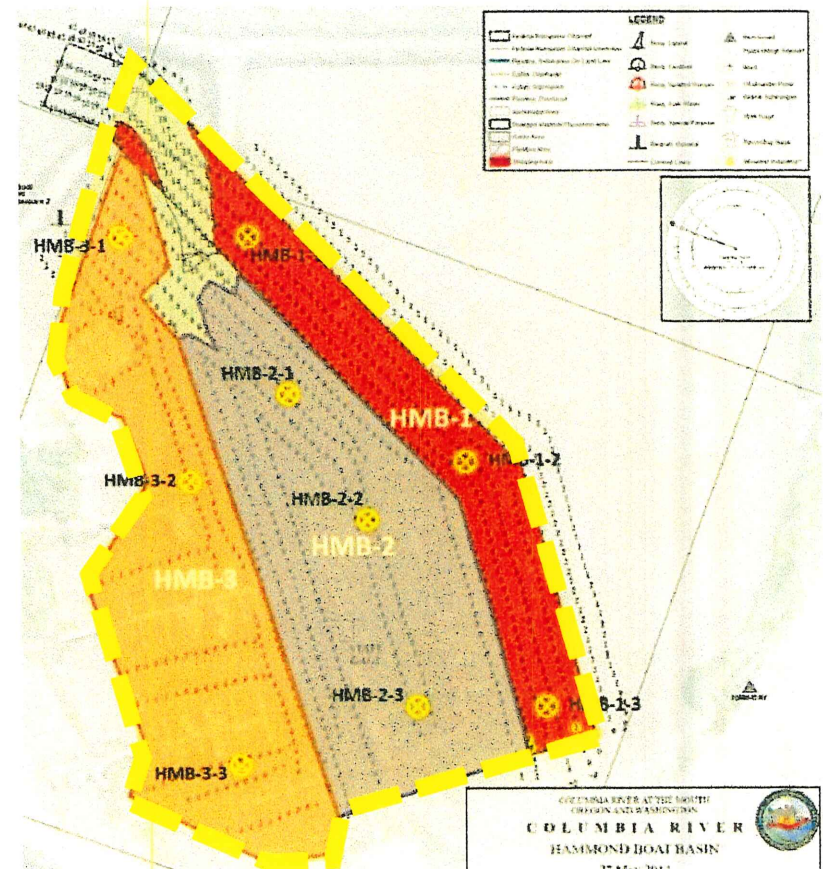
Under the Authority of:  
Shane Phillips, P.E.





# Project Dredge Criteria

- Spatial extents: Approximately equal to DMMUs
- Depth
  - 8 to 10 ft. MLLW
  - No advance maintenance
- Sediment Determination
  - Sediment samples collected in 2014
  - Approved for open water disposal (McMillan & PSET, 2015)
- Disposal:
  - In-water, Approx. 70,000 CY
- Refined dredge area to meet needs for fairway and navigation channel
  - Based on use and vessel size (relative to dock use)



# Project History

- 1950's: Boat Basin Constructed.
- 1950-2008: Boat Basin sporadically surveyed and dredged
- 2007-2008: Portions of the boat basin dredged. No in-water disposal permitted. Upland disposal near project site. Hydraulic Dredge (Port of Astoria)
- 2014: Most recent known USACE survey of basin.
- 2014: Sediment sampling plan/dredge concept prepared by CREST.
- 2015: Sediment Suitability Memo (McMillan & PSET, 2015):
- 2016: Dredge permit declined by USACE.
- 2017: USACE survey does not appear to include boat basin, new survey required.
- 2018: Survey updated by Solmar Hydro



**M** **M**  
**MOTT**  
**MACDONALD**

- [illegible]



# USACE Consultation

- Danielle Erb

- You will need to route the project through our Section 408 team to see if you will need an actual review or not for possible impacts to a civil works project.
- As part of the application you will need to define the disposal location with the coordinates marked at the periphery...
  - Action: Confirm disposal site extents with Jon Gornick, and James Holm to determine if a review is required relative to 408 process.

- Jon Gornick

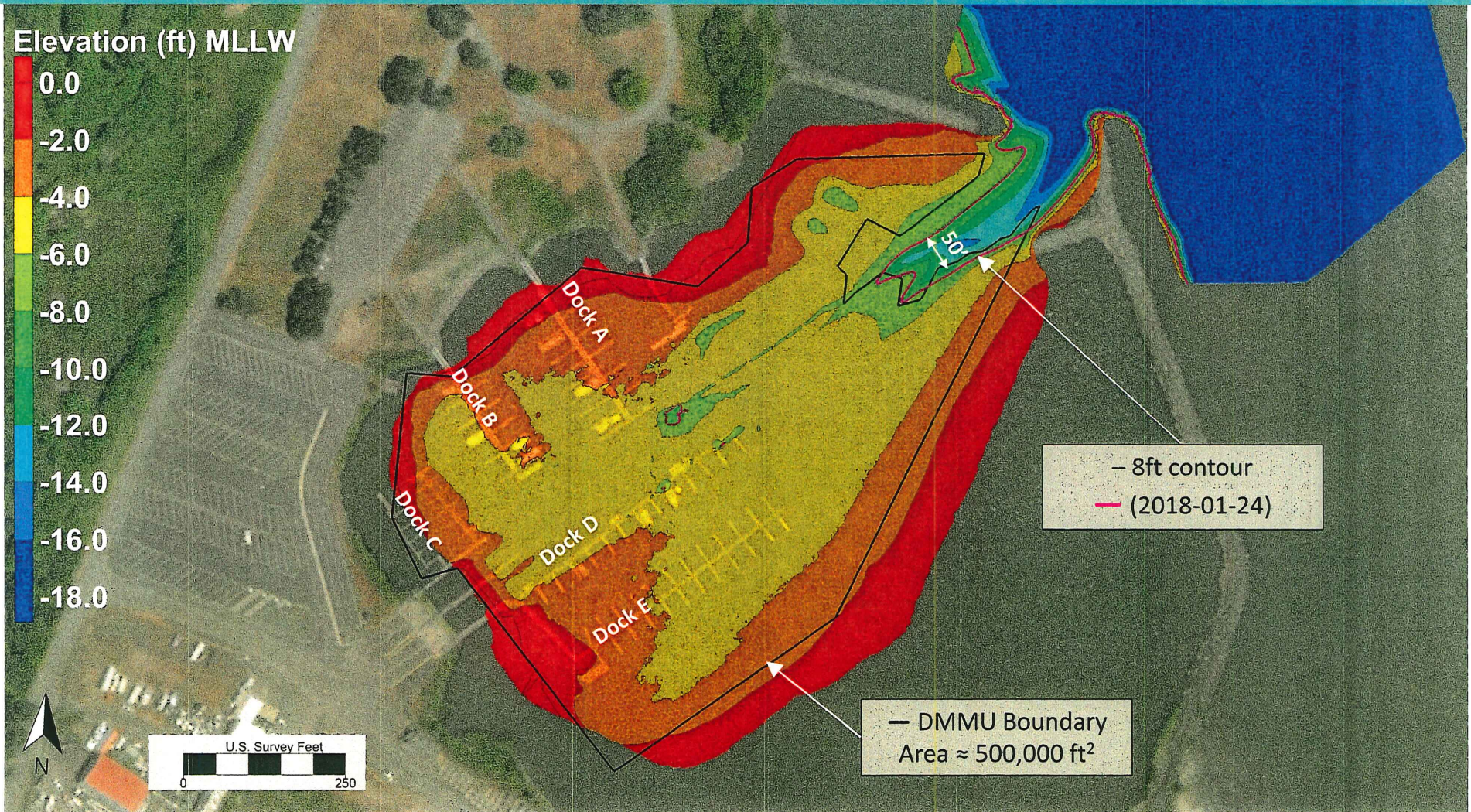
- Based on our review, neither of the aquatic sites shown on your drawings has the potential to adversely affect the Federal navigation channel. However, we do not know whether using the Oregon site will have an affect on future shoaling in the Hammond Boat Basin, given its close proximity to the marina. Our concern is focused primarily on the Federal navigation channel and use of either of the sites you've proposed should not have a negative effect on the channel.
  - Action: MM to confirm selected disposal and corresponding site coordinates with Jon

- James Holm

- The SDM already covers both of those DMMUs, even the small gaps that didn't have shallow shoals at the time it was sampled. The SDM covers dredging all three DMMUs through January 2022. Since there were no detections over SEF SLs, there is no reason to believe contaminants are a concern in that gap area at this time. Dredging after January 2022 or to deeper depths would require revisiting the data and likely resampling the dredge prisms
  - Action: MM to provide project background and description to James Holm and team (this document)

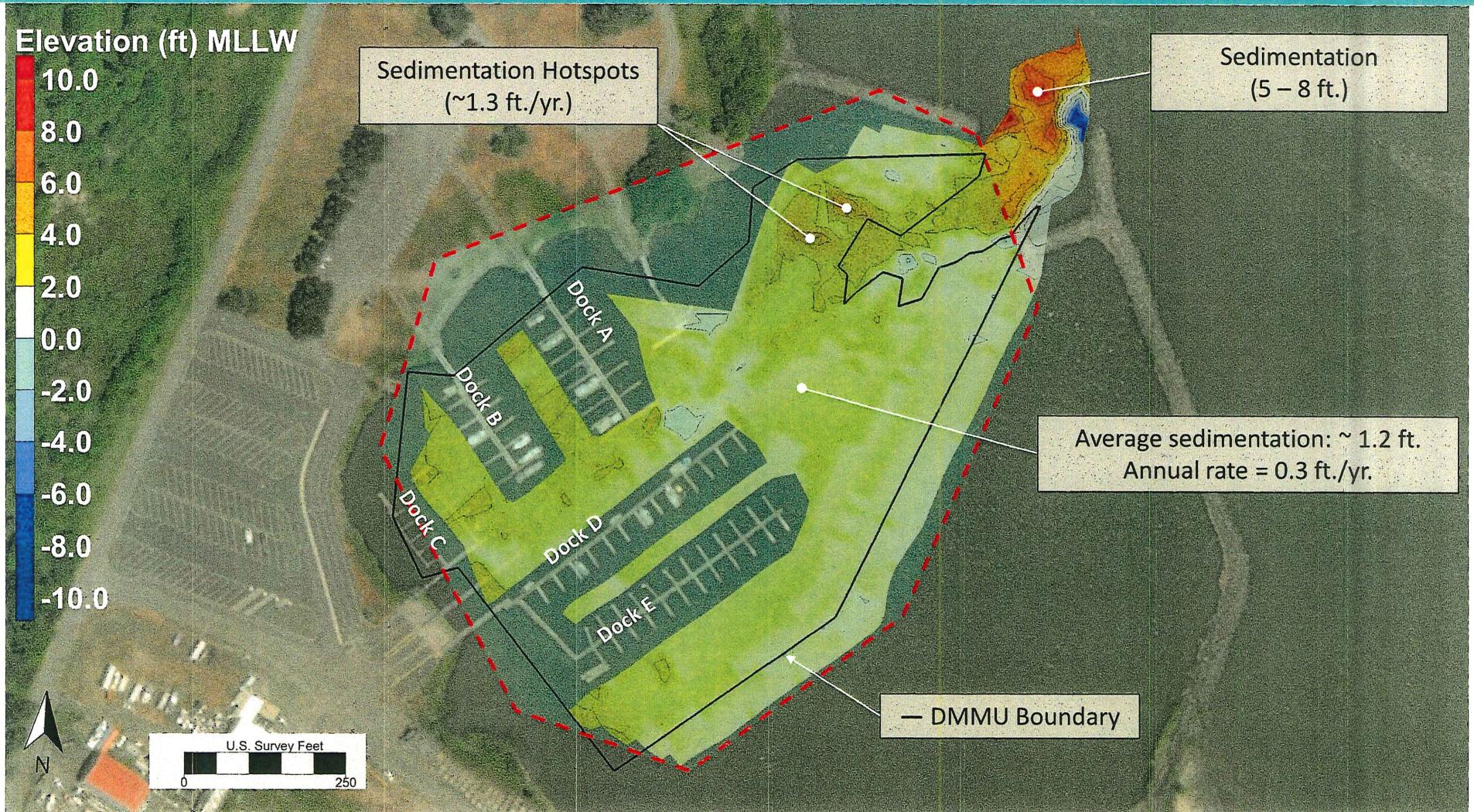


# Bathymetry – 2018-01-24



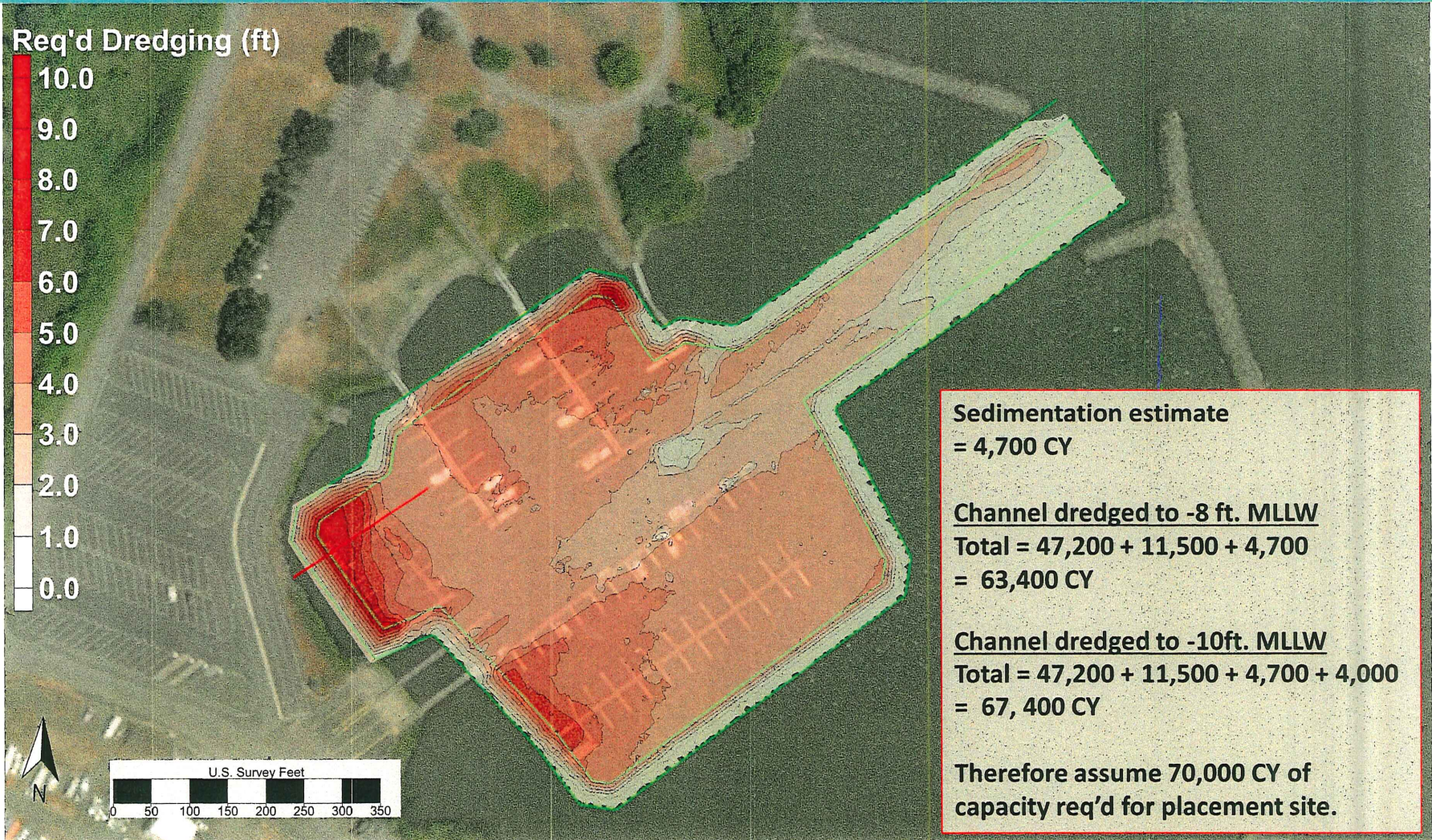


# 2014 to 2018 Sedimentation





# Dredge Plan - Conceptual





# Hydrodynamics Analysis

- Preferred Dredging & Disposal Method:
  - Portable cutter suction dredge with hydraulic pipeline
- Location Criteria:
  - Minimal risk of sediment entering the Federal Navigation Channel → Locate > 150 feet from USACE Channel to (Jon Gornick)
  - Minimal risk of sediment re-entering marina (City)
- Preferred Location (City)
  - Pipeline disposal located in channel thalweg adjacent to marina
- Required analysis
  - Conduct analysis to evaluate risk of disposed sediment re-entering marina
    - 1. Qualitative assessment
    - 2. Geomorphological review
    - 3. Conceptual-level numerical modeling



# Site Hydrodynamics Review - Planning Level

Elevation (ft.) MLLW



## Considerations

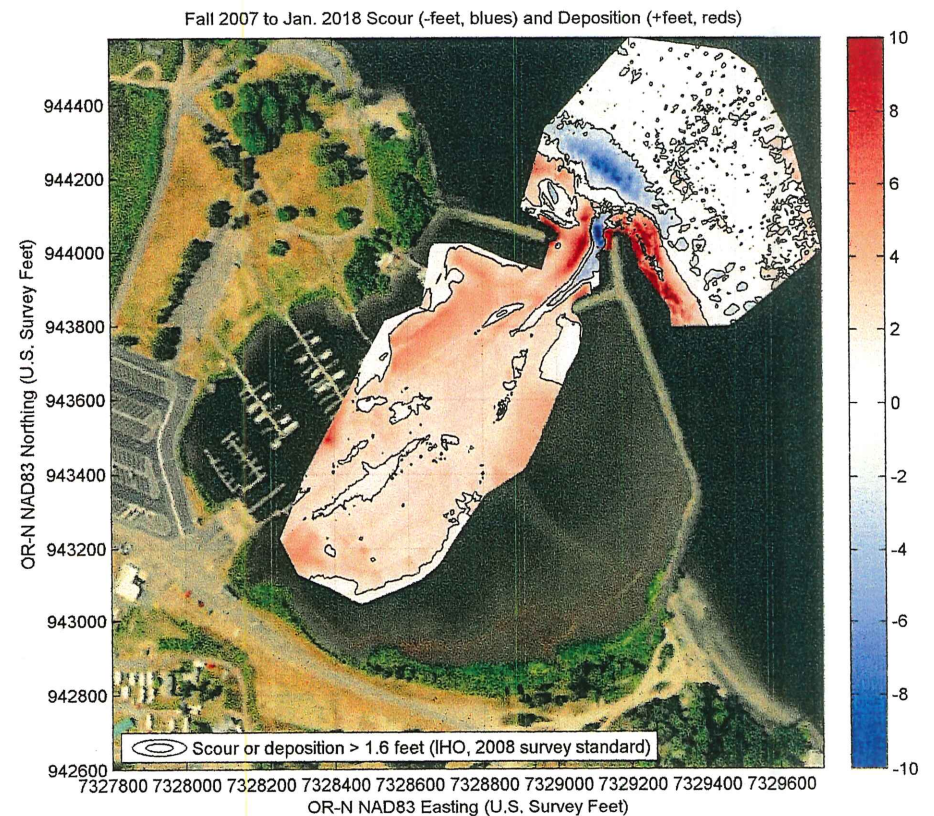
- WQ & Turbidity
- Tidal Currents – Flood vs. Ebb
- Sedimentation of channel?
- Hydrodynamic Analysis



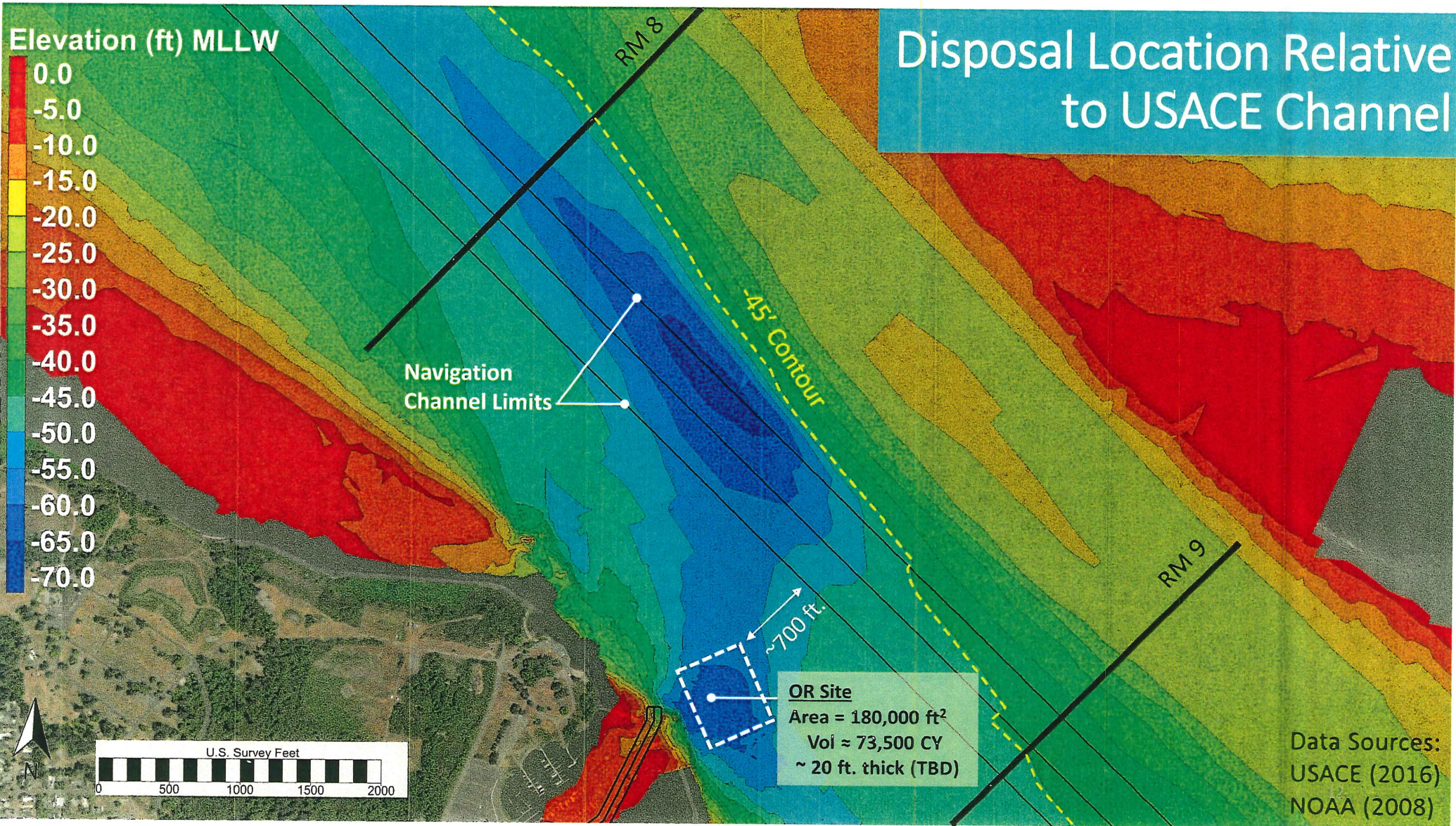
# Geomorphological Review

## Summary of changes from 2007 to 2018:

- Scour in river opposite channel entrance.
- Accumulation along upstream breakwater - likely bedload sediments.
- Shift in entrance channel thalweg toward the southeast:
  - Deposition on northwest side.
  - Scour on southeast side.
- Shift in entrance channel appears to be due to flood currents hugging the upstream breakwater & its spur.
- Incoming flood currents likely bring in material from the river northwest of the basin entrance and deposit the material in the basin.
- Unlikely that material placed in River Thalweg to SE of entrance will be transported into the basin.



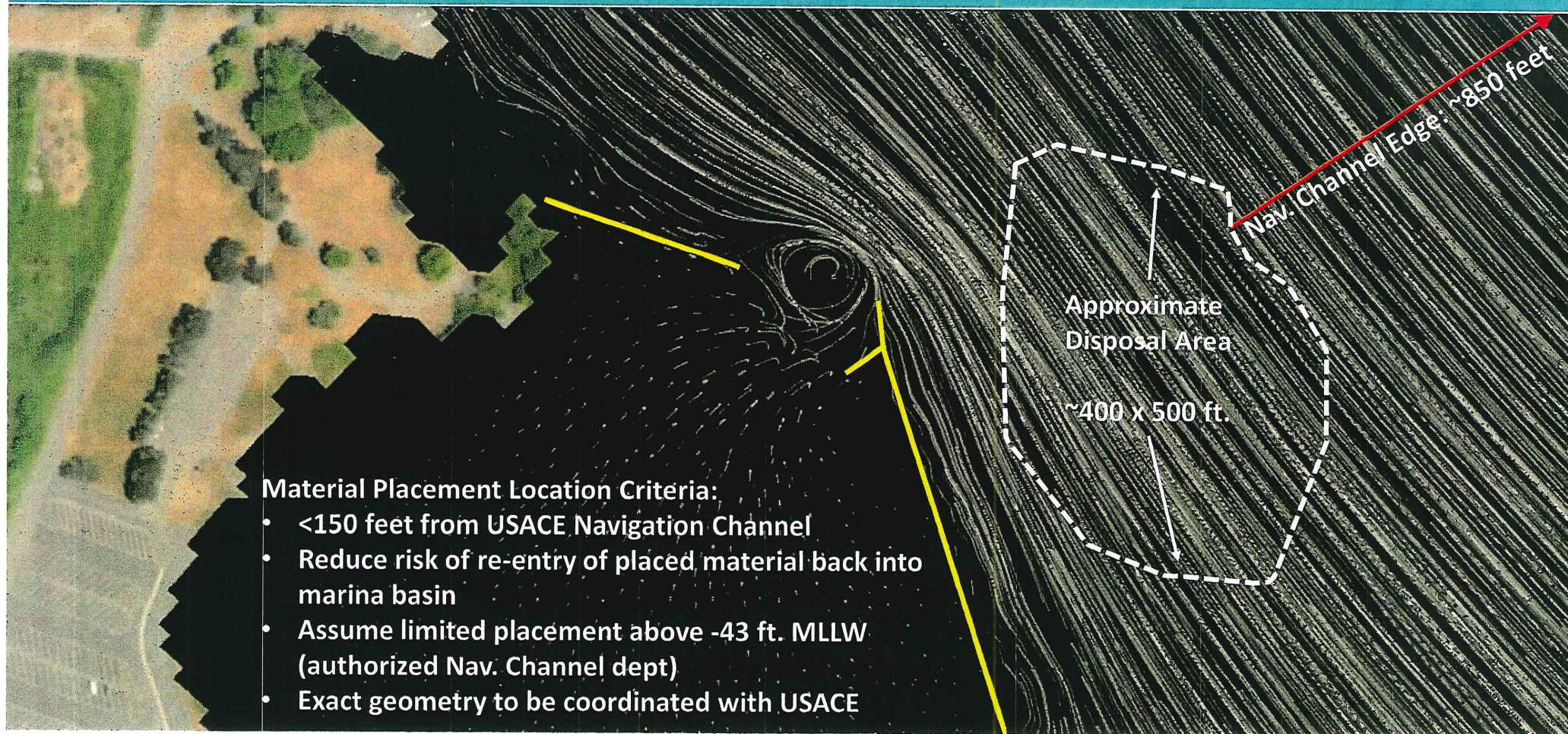






# Site Hydrodynamics Review – DELFT3D Model

*Conceptual Example: Based on USGS Columbia River Model*





# DRAFT Technical Memorandum

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**Project:** City of Warrenton

**Prepared by:** Aaron Porter      **Date:** 6/21/2018

**Approved by:** Shane Phillips      **Checked by:** Greg Clunies

**Subject:** Basis of Design: Hamond Boat Basin Dredging and Disposal

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## 1 Introduction

This technical document outlines the design criteria used to develop permit-level basin dredging and material disposal design for the Hammond Boat Basin. The Hammond Boat Basin is located adjacent to the Columbia River, within the City of Warrenton (City). The City needs to have the Boat Basin dredged to maintain navigable access. Sedimentation of the boat basin and access channel has occurred as a result of accumulated sediment deposition from tidal fluctuations and riverine input, and now requires maintenance dredging work to restore depth conditions to previously permitted depths. The approximate configuration and dredge extents and depths are shown in Figure 1. Construction also includes disposal of the dredged material within the Columbia River, adjacent to the Boat Basin. The preferred alternative by the City is to dispose of the material nearby in the Columbia River via hydraulic pipeline. The alternate disposal location is located on the north side of the U.S. Army Corps of Engineers (USACE) Navigation Channel, and its location would preclude the use of a hydraulic dredge.

## 2 General Project Criteria

General project criteria are intended to characterize conditions and general criteria which apply to all areas within the work limits.

- Vertical Datum
  - MLLW
- Environmental Conditions
  - Boat Basin: Protected from waves and currents.
  - Disposal Area: Flow lane disposal near marina entrance is subject to Columbia River currents and wave action. Current velocity may be in the range of 3-5 feet per second during ebb tide, and 0.5-2 feet per second during flood tide (based on USGS Delft3d Model).
- Geotechnical Data
  - Sediment characterization information provided by the City and is based on the 2015 sediment characterization report developed by Crest Consultants.
  - Gradation: The sediment characterization report indicates the proposed dredge material contains approximately 90% fines (< #200 sieve), across the site.
  - Contamination: Material has been determined by USACE to be suitable for open-water disposal.



- Phasing
  - All in-water work assumed to be conducted in a single work window (November – February).
  - If phasing is required, priority dredge areas will be coordinated with the City.
  - Project will be permitted to provide option for either single to multiple work seasons.
- Plan of Work:
  - A detailed project plan of work will be developed by the dredging contractor for each dredging event and submitted to the Port and Engineer for review and approval prior to construction. The contractor's project-specific work plans will also be submitted to the USACE and other permitting agencies for review and approval, and will be discussed and reviewed during the required pre-dredging conference for each event.

### 3 Marina Dredging

Mott MacDonald will develop a dredge design including the extents, depths, and volume of material to be dredged. The dredge design within the boat basin will be conducted according to the following criteria:

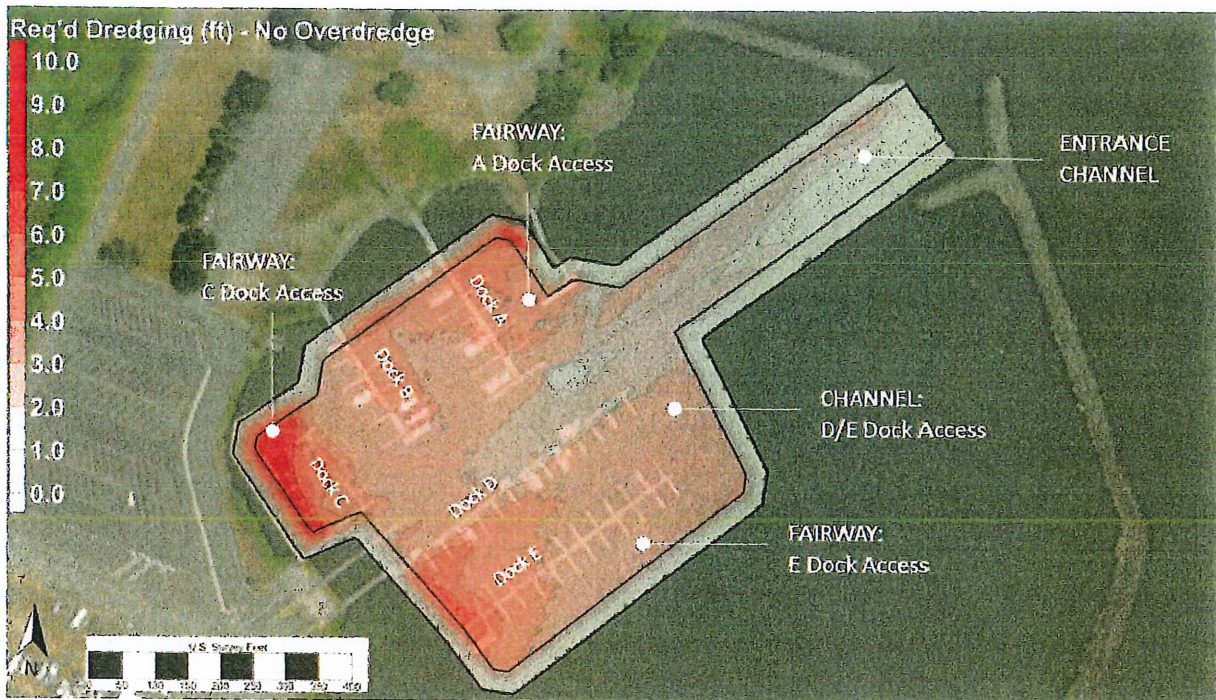
- Dredge Area Extents
  - Dredge area extents are assumed to be approximately the same as developed in the Phase 1 work conducted by Mott MacDonald (Shown in Figure 1).
- Design Dredge Depth
  - Moorage areas and Fairways: -8 feet MLLW.
  - Entrance channel (in DMMU area specifically tested to -10' MLLW): -8 feet or -10 feet MLLW, to be coordinated with the City.
  - No advance maintenance dredging to preclude future sedimentation.
  - A one-foot overdredge allowance will be provided for inaccuracies of dredging work.
- Side Slopes:
  - The access channel and boat basin side slopes will be dredged to a 4H:1V side slope (assumed natural angle of repose). It should be noted that based upon the predominant sediment type within the boat basin access channel and fairways (i.e., cohesive silts/clays), side slopes may flatten due to a variety of factors which include: hydrodynamic processes (e.g., tidal fluctuation and currents); vessel prop wash; and the natural angle of repose of the sediment.
- Dredge Volume:
  - Based upon the most recent compiled hydrographic survey datasets (December 2017), the in-situ volume for dredging of the boat basin access channel, fairways, and float areas, including overdredge allowances, is approximately 63,000 cubic yards (CY). The final volume will account for sedimentation and changes, which may occur between the time of the 2017 survey and the time of dredging work, and will be greater than this volume. The minimum volume recommended for permitting purposes will be coordinated with USACE prior to permit submittal. Prior USACE determination of material suitability for open water disposal included approximately 70,000 CY of material.
  - Actual in-situ maintenance dredging quantities dredged will be refined during preliminary design. Prior to initiation of dredging, in-situ maintenance dredging volumes will be based upon a Contractor-provided pre-dredge survey (conducted by an independent survey company and reviewed by MM). Volumetric dredge quantities will vary, depending on the amount of sedimentation that has occurred between the time of the most recent available hydrographic surveys and the time of the initial dredging work. For permitting purposes,



additional volume will be needed to account for sedimentation from the survey date to the time of dredging. The sedimentation rate is estimated to vary from 0.3-0.5 feet per year.

- Sedimentation
  - Mott MacDonald acquired and analyzed historical hydrographic surveys provided by the USACE for the boat basin access channel, moorage areas, and fairways. Based on historical surveys, anticipate an average of 0.3-0.5 feet of sedimentation per year (higher rate expected in first year after dredging, and some locations may incur higher sedimentation rates).
- Docks
  - Replacement of floats and piles will not be addressed at this time. Due to the age of these floats, temporary removal and reinstallation for dredging work is not feasible. Dredging work will be required to work around the existing floats and piles, resulting in some areas under floats being challenging to achieve full dredge design depth.
- Channel and Fairway Width
  - To optimize dredge area, and reduce the amount of dredging conducted in underused areas, Mott MacDonald has developed recommended fairway navigation width. Recommendations are based on review of the following vessel fairway Design Standards and Guidelines:
    - American Society for Civil Engineers Planning & Design of Small Craft Harbors (ASCE)
    - U.S. Army Corps of Engineers – Small Craft Harbors (USACE)
    - Oregon Marine Board Design Guidelines for Recreational Boating Facilities (2011)
    - International Navigation Association (PIANC)
  - Design Vessel Lengths
    - Dock A: 30 ft.
    - Dock B: 65 ft. (Columbia River Pilots Vessels) to 80 ft. (occasional recreational vessel).
    - Dock C: 20 ft.
    - Dock D: 30 ft.
    - Dock E: 30 ft.
  - Channel and Fairway Navigation Width
    - Safe navigation width is dependent on characteristics of the vessels accessing each dock. Estimated fairway distance (width between docks) for the docks which determined the dredging extents are:
      - Dock A Access Fairway (width between docks): 55 ft.
      - Dock C Access Fairway: 35 ft.
      - Dock E, East Side Fairway: 55 ft.
      - Docks D/E Access Channel: 100 ft. (assume 2-way vessel traffic may occur).
      - Entrance Channel: 100 ft. (same as existing. Note that OR Marine Board Guidelines indicate a 120-ft. wide channel is recommended. However, width is limited by the rock jetties.
  - Navigation Aids
    - Existing navigation aids are assumed to be sufficient. No new design work or modification is required.



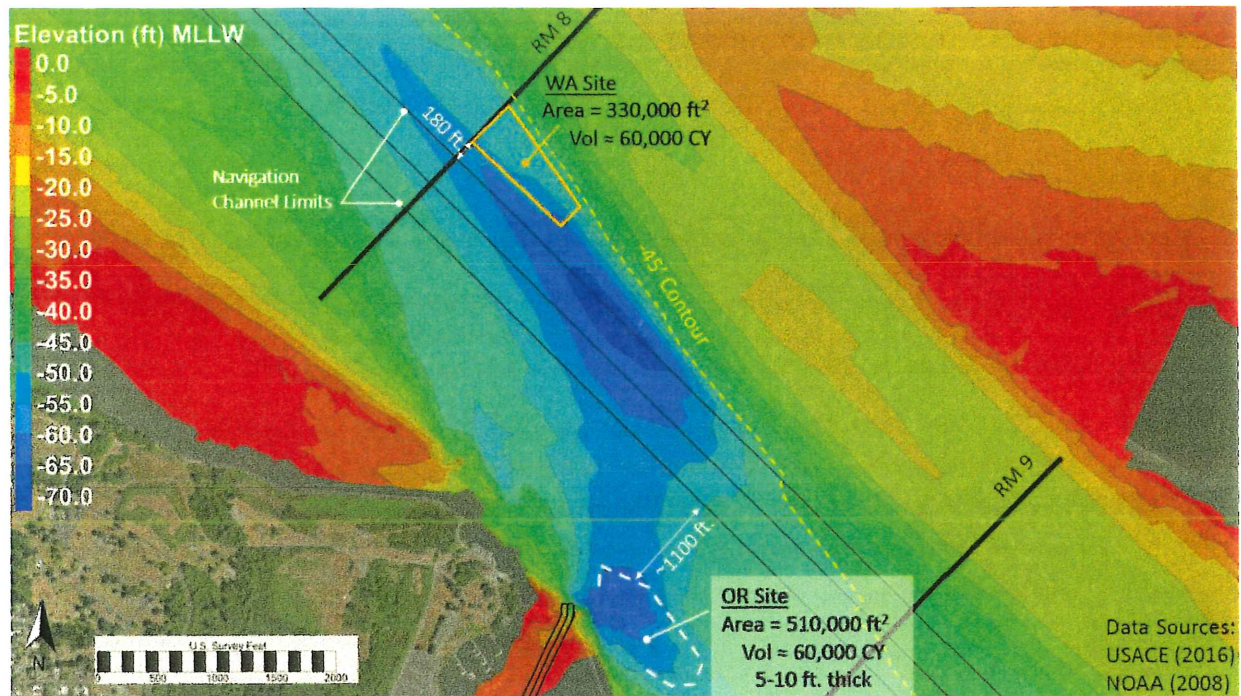


**Figure 1 - Approximate extents of dredging and estimated depth (darker red indicates more dredge depth required)**

## 4 Dredge Disposal

- In-Water Disposal.** Dredged material will be discharged within the Columbia River, at a permitted in-water disposal outflow location. Figure 2 shows the disposal location alternatives developed in Phase 1 in coordination with UASCE, which included locations on the north (Washington) and south (Oregon) sides of the USACE Navigation Channel. The preferred disposal location is shown in Figure 2, as OR Site (white dashed line). The hydraulic pipeline discharge end will be maintained at a minimum depth below the water surface during operation (TBD in coordination with USACE). Based on review of numerical flow modeling at the disposal location, and apparent historical practices, disposal will occur during ebb-tide stages to ensure the dredged sediment is carried away from the boat basin.
- Equipment.** Maintenance dredging work will most likely be conducted utilizing hydraulic dredging equipment. Options for hydraulic dredging equipment that may be utilized for the boat basin maintenance dredging includes hydraulic cutterhead or hydraulic pump equipment (e.g., Toyo pumps mounted to floating cranes). An 8" to 12" pipeline will be utilized to transport dredged material to a permitted in-water disposal outfall location. Booster pumps will most likely not be required due to the relatively short pumping distances required for the dredged material to the existing permitted in-water outfall location. If the disposal location selected is on the WA side of the USACE Federal Navigation Channel, dredging will likely utilize a clamshell bucket dredge and bottom dump barge.





**Figure 2 - Dredge disposal site alternatives from Phase 1, relative to marina and USACE Navigation Channel. Preferred disposal site is OR Site. Exact location to be based on results of numerical modeling and coordination with USACE.**

## 5 Water Quality Monitoring

Construction Monitoring. During dredging construction, the Contractor will be responsible for Water Quality monitoring. Specific water quality monitoring requirements will be developed. Phasing or monitoring of the disposal rate may be required to meet water quality requirements.



# **Mitchell Act Biological Opinion**

## **Executive Summary**

**1-13-2017**

This Opinion describes and assesses the effects of hatchery programs that were funded through the Mitchell Act in FY 2015 and that are proposed for funding using FY 2016 and future FY 2017 funding. It is also intended to serve as NMFS' consultation through 2025, as NMFS implements its new policy direction for the distribution of Mitchell Act funds.

When NMFS assesses a hatchery program, it does so with the knowledge that hatcheries can have positive and negative effects on salmon and steelhead survival and recovery and that the nature and level of effect is largely dependent on the circumstances and conditions that are unique to every location and every program. NMFS' assessment relies on best available scientific information (see Section 2.4 of the Opinion), and ultimately, the effects of hatchery programs are placed in the context of the numerous threats to the survival and recovery of salmon and steelhead in the Columbia River Basin.

In this case and for the hatchery programs described in the Proposed Action, there is a history of long-standing operations undergoing changes and reforms starting with the first ESA-listings of salmon and steelhead in the Columbia River Basin. NMFS first completed ESA consultation on Mitchell Act funded hatchery programs in 1999 and issued a jeopardy opinion with Reasonable and Prudent Alternatives. Since that time, and through subsequent Opinions, NMFS has called for, and the operators have carried out, important reform actions including: new monitoring of the status of salmon and steelhead populations; changes in hatchery production levels and hatchery fish releases into streams; implementation of weir technology to selectively remove excess hatchery-origin fish; and the use of alternative fish release locations. These measures, evaluated through new monitoring, have reduced the negative effects of these hatchery programs and the risks to natural populations of salmon and steelhead.

But these changes have not sufficiently minimized impacts on the affected ESA-listed salmon and steelhead species' and NMFS has realized through continued monitoring that there is more to do at these hatchery programs. Specifically, continued monitoring is showing that the number of hatchery fish on the spawning grounds is too high and continues to pose a genetic risk to natural populations. In addition, some broodstock practices require further adjustment to improve both fitness and abundance, and the potential of competition for limited food resources and habitat in freshwater, the estuary, and perhaps the Columbia River plume is cause for new scientific investigation and understanding.



NMFS has reviewed the hatchery programs that were funded through the Mitchell Act in FY 2015 and is proposing to fund continued hatchery production contingent on several site-specific measures to implement the preferred policy direction identified in the 2014 Final Environmental Impact Statement to Inform Columbia River Basin Hatchery Operations and the Funding of Mitchell Act Hatchery Programs (NMFS 2014). These measures are designed to address new monitoring and evaluation information and to minimize risks to ESA-listed species. NMFS also intends that these measures minimize impacts on Indian and non-Indian fisheries. The proposed measures build on hatchery reform measures implemented by the hatchery operators during the previous 5 to 10 years and are informed by the monitoring of those measures and new scientific information.

The measures or adjustments in hatchery operations, and the criteria for continued hatchery operation included in this Opinion are comprehensive and a sample of those adjustments and criteria are summarized below:

- 1) Elimination of steelhead broodstocks originating from outside the Columbia River (e.g., Puget Sound)
- 2) Development of broodstocks that are local to the hatchery and more compatible with local natural populations
- 3) Reductions in hatchery fish releases from specific hatchery programs that monitoring shows are responsible for hatchery straying
- 4) Status-quo or increased hatchery fish releases from hatchery programs that monitoring shows are not responsible for significant hatchery fish straying
- 5) New research and monitoring to determine whether juvenile hatchery fish are using limited food and habitat resources at the expense of or to the disadvantage of fish from natural populations
- 6) Specific limits on hatchery fish straying
- 7) New monitoring to better understand the status of Chinook salmon natural populations in the Coastal Stratum of the Lower Columbia River Chinook Salmon Evolutionarily Significant Unit
- 8) New monitoring to verify hatchery program compliance with the measures and criteria included in this Opinion

The Mitchell Act is one of NMFS' most important means of mitigating for development activities that have reduced the capacity of the Columbia River, and sub-basins of the Columbia River, to produce salmon and steelhead. The evolution of NMFS policy with respect to the distribution of Mitchell Act funds reflects the complexity of the issues and the multitude of stakeholders. NMFS has strived to update its policy for distributing Mitchell Act funds in ways that harmonize salmon and steelhead conservation, Indian reserved fishing rights, and sustainable recreation and non-tribal commercial fisheries. The implications of this update in NMFS policy were thoroughly explored and vetted in the Environmental Impact Statement completed by NMFS in



2014 and the outcome reflects a balancing of these interests in selecting the appropriate policy direction for annually distributing Mitchell Act funds.

It is NMFS' hope that the comprehensive approach to salmon and steelhead recovery in recovery plans is aggressively implemented because by itself these hatchery actions cannot address all of the factors limiting salmon and steelhead survival and recovery. However, the purpose of this action is to address the factors implicated by hatchery practices, and to distribute Mitchell Act funds in a way that minimizes impacts to threatened or endangered species and we ask all parties to keep these factors in mind when reading the following Opinion.



## **NOAA COMPLETES BIOP FOR MITCHELL ACT HATCHERIES, PROPOSES REDUCTION IN FALL CHINOOK RELEASES**

Posted on Thursday, January 19, 2017 (PST)

NOAA Fisheries West Coast Region has completed a biological opinion of hatcheries funded under the Mitchell Act, potentially freeing the federal agency to make payments to operators of those hatcheries.

A court challenge by the Wild Fish Conservancy March 31, 2016 and an Oregon U.S. District Court stipulation in August had put a stop to the payments until NOAA completed a BiOp for 62 Mitchell Act-funded hatcheries. NOAA signed the BiOp January 15.

The original March 31 filing can be found at: [http://wildfishconservancy.org/copy\\_of\\_news/in-the-news/001.0.complaintMitchellActColumbia33116.pdf](http://wildfishconservancy.org/copy_of_news/in-the-news/001.0.complaintMitchellActColumbia33116.pdf)

The Conservancy had contended that Mitchell Act funds were intended to support hatchery operations that help rather than harm wild fish populations.

Hatchery fish can pose risk to wild fish by overwhelming spawning grounds and reducing the genetic fitness of natural stocks, NOAA said, which is the issue the Wild Fish Conservancy posed in its lawsuit. Hatchery fish also use the limited food and habitat that wild fish depend on.

“The science tells us that hatcheries can have benefits but also present risks we have to consider,” said Rob Jones, chief of Anadromous Production and Inland Fisheries for NOAA Fisheries’ West Coast Region.

“Every hatchery program offers its own unique set of benefits and risks and we’re tailoring hatchery operations to maximize the benefits and minimize the risks. We worked closely with hatchery operators to reach decisions that accomplish this through increases in fish production at some programs and decreases at others.”

The review of the hatcheries – the BiOp -- analyzed the effects of the Mitchell Act hatchery programs on vulnerable salmon and steelhead species protected under the federal Endangered Species Act, NOAA said in a news release this week.

“Hatcheries can have positive and negative effects on salmon and steelhead recovery, and the biological opinion assessed a proposal for funding 62 hatchery programs in the Columbia River Basin designed to reduce impacts on the recovery of these protected wild fish,” the news release said.



Federal funds pay for the operation of Mitchell Act hatcheries through NOAA for hatcheries operated by Oregon, Washington, the U.S. Fish and Wildlife Service, the Yakama Nation and the Nez Perce Tribe. The hatcheries produce salmon and steelhead to offset the impacts of hydropower development that has reduced the capacity of the Columbia River to naturally produce the fish.

More than 40 percent of the annual salmon and steelhead catch in the Columbia River comes from Mitchell Act hatcheries.

Hatchery salmon also helps to sustain tribal and non-tribal fisheries in the ocean off Washington and Oregon.

X The BiOp for the Mitchell Act hatcheries includes a series of changes to hatchery operations: X

- A halt to the use of hatchery broodstock that originates outside the Columbia River to reduce genetic risk to native fish stocks.
- Reduced hatchery production in some places.
- Increased hatchery production where stray hatchery fish are not a threat to recovery of protected salmon and steelhead.
- Additional research and monitoring to better track and understand the effects of hatchery fish on wild salmon and steelhead populations.

"We're interested in the competition between hatchery and wild fish," said NOAA's Jones at a meeting in mid-December. "In addition, to hatchery effectiveness, we're looking at hatchery release levels to reduce straying in the Columbia River basin."

The agency proposes to do this by reducing the overall number of tule chinook juveniles produced at both Mitchell Act and non-Mitchell Act hatcheries by about 4 million fish – about 12 percent – and actually increasing the overall number of coho salmon juveniles by over 1 million fish – 6.8 percent.

No production changes are proposed for steelhead.

The changes would be phased in over several years, with continued monitoring as they proceed. NOAA Fisheries is working with the Pacific Fishery Management Council to gather and consider input from fishing communities and other stakeholders on how to implement and monitor the changes.

NOAA Fisheries previously published an environmental impact statement that analyzed the effects of Mitchell Act hatchery funding. The EIS included a preferred action that prioritized funding for hatchery programs that take steps to minimize impacts on protected wild salmon and steelhead populations. The EIS



at [http://www.westcoast.fisheries.noaa.gov/hatcheries/mitchell\\_act/ma\\_feis.html](http://www.westcoast.fisheries.noaa.gov/hatcheries/mitchell_act/ma_feis.html)

Under the biological opinion, releases of hatchery fall chinook in the Columbia would drop from about 18 million per year to about 14 million per year.

Hatchery steelhead would not be released into wild fish refuges, allowing wild steelhead in the lower Columbia River to rebuild their natural diversity.

Releases of hatchery coho salmon could increase by 4 percent because they pose less risk to protected wild stocks, NOAA Fisheries concluded.

Reductions in chinook salmon hatchery releases would reduce some salmon catches in the lower Columbia and along the Oregon and Washington coasts. NOAA Fisheries estimates that catches in the North of Falcon non-treaty troll and sport fisheries would drop 7 percent, while catches in treaty-Indian troll fisheries would decline 6 percent, and the troll fishery off the Oregon Coast would see a 4 percent decline relative to average catches from 2012 to 2016.

Increases in coho salmon hatchery production would increase coho salmon available for fishing and harvest purposes in the ocean off Oregon and Washington and in the Columbia River.

Also see:

--CBB, December 16, 2016, "NOAA Releases Proposed Changes To Columbia Basin Mitchell Act Hatchery Programs," <http://www.cbbulletin.com/438098.aspx>

--CBB, September 9, 2016, "NOAA Fisheries Stipulates No Mitchell Act Funds For 10 Hatcheries Until Hatchery BiOp Completed," <http://www.cbbulletin.com/437460.aspx>

--CBB, August 5, 2016, "Wild Fish Conservancy Seeks Injunction To Block Use Of Mitchell Act Funds For Basin Hatcheries," <http://www.cbbulletin.com/437254.aspx>

-- CBB, April 1, 2016, "Wild Fish Conservancy Files Lawsuit To Force Federal Consultation On Basin Mitchell Act Hatcheries," <http://www.cbbulletin.com/436361.aspx>

-- CBB, January 15, 2016, "Wild Fish Advocates File Notice Against Mitchell Act Hatcheries, 60 Million Smolts Annually," <http://www.cbbulletin.com/435862.aspx>