

THE REDEVELOPMENT OF DES MOINES MARINA

Assessment and Strategy

Phase 2

Prepared by: Waggoner Marina Services

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Introduction

The City of Des Moines possesses a unique asset. Des Moines Marina has storage for 840 boats in a combination of in-water and dry-land storage. The marina is a destination for local boaters, with a pleasant scenic walkway used by its citizens and visitors. For boat owners, marina moorage space is hard to find in the greater Puget Sound area. The Des Moines Marina's moorage for larger slips is in demand and occupancy is very good, often in the 90% or more range. Wait lists for available year-round moorage in the Puget Sound region continue to be several years out for larger slips. These larger boat slips are the most in demand and at premium rental rates.



The Des Moines Marina is ideally situated on Puget Sound in the greater Seattle Metro area. The marina is close to major highways and SEATAC International airport. It sits at the beginning of the Inside Passage to Alaska, with thousands of miles of cruising grounds from Olympia, continuing through British Columbia to Skagway and Glacier Bay Alaska. Much of these waters are protected and are a boater's dream for locals and those flying into the area from around the world.

Area boaters will tell you Des Moines has the added advantage of not requiring transiting the ship canal locks which can add an hour or more to the transit time. The marina is midway between Seattle and Tacoma and is a frequent fuel stop for local boaters.

The breakwater protected Des Moines Marina was developed in the 1970's and to-date is substantially as originally constructed. While still serviceable and well maintained, elements of the marina do not meet the needs of today's boating community and are not well-positioned for future boating needs. Well over half the marina's in-water slips are 28 feet and smaller. With waiting lists for larger slips, these smaller slips have vacancies and are not meeting their full revenue potential.

The 9 acres of marina grounds property surrounding the marina seawall and floats includes car parking for the marina. CSR Marine leases space on the property. The marina office and restroom facilities are also located on the marina grounds, along with a number of rental storage sheds providing dry-storage for small boats and supplies. The marina grounds are in a prime location that is popular with locals who like to walk the waterfront. The property is not fully developed or used to its fullest potential.

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It is time to start the planning for rebuilding the marina and replacement of the docks, which are aging. Now is the best time to look at how the marina design should evolve to meet the current and future needs of the marina tenants and community. This is also the time to look at the economics for the marina to maximize its revenue potential. The marina grounds require a thorough review to further benefit users, with the goal to maximize the revenue potential for this valuable land and provide funding for investment needs in the Marina.

This report looks at the cost estimates to rebuild the marina and what the expected revenue might be. Having evaluated the marina rates, revenue, and mix of slips, it is evident that a re-configuration of the in-water moorage and dry-land storage would better serve the needs of the marina and boating community. Likewise, a redesign of the upland marina grounds would provide possibilities for new revenue.



This report includes recommendations to improve the marina environment with a design to make it a compelling destination for tenants and visitors. Boaters visiting a marina add to the local economy and are known to spend anywhere between \$150 to \$500 per day when visiting a marina and waterfront town. These expenditures could be for fuel, supplies and provisions, to money spent in bars, restaurants, and local grocery stores. The influx of new money supports jobs and local businesses as well as contributing to Des Moines' base of Taxable Retail Sales.

There is also a social benefit associated with marina improvements. People like to visit a marina and walk on a promenade with a view of the water and the boats. The Des Moines Marina is already a popular destination as evidenced by the number of people that visit on the weekends year-round. The marina and its adjoining Beach Park are valuable assets of interest for Des Moines.

This report is the basis for a phased plan to rebuild and upgrade the marina and develop the marina assets to their full potential for the benefit of the residents, boaters, and visitors.

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Executive Summary

A number of important decisions will need to be made in order to arrive at an optimal configuration, which satisfies the needs of the boating community. These decisions or choices carry weighty outcomes. Based on our analysis:

- The marina at this time is breaking even on a cashflow basis with little to no capital going into reserves for the marina rebuild (or booked as depreciation). From an accrual accounting standpoint, the marina is losing money.
- Small slips – 20, 24, and 28 feet in length – are not being fully utilized and are not returning their full revenue potential. Slightly more than 479 of the marina’s 730 slips are 28 feet and under. Within those 479 smaller slips, the covered slips outnumber the open slips 2 to 1. Demand is higher for larger slips with an additional opportunity for premium pricing. Furthermore, the marina currently offers discounts for advanced payment on smaller slips which have vacancies.
- Start a ten- to twenty-year rebuild and upgrade plan to replace the existing predominately smaller slips, with fewer but larger slips. Since larger slips require wider fairways for boats to maneuver, two or three of the 14 docks will need to be eliminated and therefore, the number of slips will be reduced. The number of covered moorage slips should be reduced proportionately in order to achieve a more balanced open vs covered moorage ratio.
- The Seattle-Tacoma regional moorage market has a wide range of moorage rates, with the highest rates double those at the low end. Some of the highest rates are at marinas more centrally located to Seattle and those with larger and more up-to-date facilities. The table here shows the competitive market for in-water moorage for a 40-foot vessel. The table illustrates that the market for in-water moorage for larger vessels has substantial upward range, which will allow Des Moines Marina to recoup redevelopment investment through future rental rates.
- Remove the existing aged single-story buildings housing approximately 80 dry storage units and equipment storage lockers. These drive-up garage-style units do not produce optimal revenue for their prime marina location and do not maximize boat storage capacity on the ground footprint.
- Construct an enclosed stacked storage facility to house 20- to 34-foot boats. Stacked Storage is an increasingly popular option for storing smaller boats. Stacked storage

Competitive Permanent Moorage Rates

Des Moines Marina	\$12.16
Olympia	\$9.74
Tacoma	\$11.23
Kingston	\$10.22
Seattle Shilshole	\$16.95
Seattle Elliott Bay	\$17.46
Edmonds	\$15.03
Everett	\$13.76
La Conner	\$10.10
Anacortes	\$12.19

Rate per lineal foot per month, for 40-foot Open Moorage slip.

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optimizes footprint space by stacking boats 2 or 3 high in an enclosed, heated storage space. Value-added services are commonly offered as part of the storage fee or as an additional cost feature.

- After rebuilding the in-water moorage with fewer slips in total and replacing the dry storage sheds with higher value stacked storage, the marina can increase revenue from nearly \$3.4 million to just over \$4.4 million. The capital investment to rebuild the existing marina docks and upgrade dry storage could produce a 30% increase in the Marina's annual revenue.
- Replacing the marina docks is a substantial ten-to-twenty-year project best completed in phases. For both capital expenditures and for continuity-of-business, each phase of redevelopment should involve limited sections of the marina, such as two or three main spine docks and associated finger floats. Early phases would include seawall replacement, marina grounds improvements, and related construction.
- Capital investment requirements can be coordinated with project phases as needed. Industry estimates for open moorage average between \$2 and \$3 million per main spine dock, finger floats, and amenities. Covered moorage costs are estimated at 80% to 100% above open moorage costs.
- The addition of stacked storage for smaller boats will allow the marina to accommodate smaller boats that currently occupy in-water storage that will be eliminated as the in-water docks are replaced with larger but fewer slips. Stacked storage will provide better utilization of dry storage.
- The marina office and the neighboring building housing restrooms and showers should be addressed in one of the early phases of redevelopment. The existing office building is limited in space and does not lend itself to ADA access. The existing second floor marina office requires climbing stairs as there is no elevator. The adjacent building housing restrooms and showers is in need of renovation and the addition of laundry facilities.
- Des Moines Marina is uniquely positioned to incorporate sustainable solar and electric vehicle/vessel features in the rebuild. Such a move will put Des Moines well ahead of any comparable area facility.
- Efforts are underway to bring passenger-only ferry service to Des Moines. A pilot project could be realized in 2022 or 2023. It is still too early for any specifics but it is safe to assume that such service will require some marina changes to accommodate the vessel and passengers.
- Marketing the attractions of Des Moines, including the 2-mile-long Des Moines Creek Trail, and the Beach Park venues for meetings and special events/rendezvous, should be included in the strategy to help define the marina as a worthwhile destination.

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Current State of the Marina

Considering the marina was built about 50 years ago, the marina has been well maintained, is serviceable, and is generally in good condition. However, building and safety standards have changed significantly in the decades since the marina was built. The marina’s creosote pilings and foam floatation are no longer considered environmentally friendly and are no longer allowed building materials by today’s standards. In addition, ground fault protection safety devices are now building code requirements for electrical service at new and rebuilt marinas. Fire suppression and aquatic mitigation are now important design features for marine facilities.

Des Moines Marina currently has storage space for 840 boats in a combination of 730 in-water permanent moorage slips, 38 in-water guest moorage slips and side-tie spaces, and 72 dry land storage sheds. The marina has a haul-out facility for boats up to 25 tons and a fueling facility. A self-serve boat ramp, not part of this study, is located south of the marina in Redondo Beach and is funded by city general fund revenues. This study focusses on the in-water permanent moorage, dry land storage, and marina grounds. While not a primary focus of this study, the guest moorage area of the marina is reported to be in good condition and should be part of a future study to determine the future needs for this area. The guest moorage area includes slips and side-tie moorage available for overnight stays during prime season and rented to seasonal monthly tenants during the off-season.

In-water moorage slips at the marina range in size from 20 feet to a maximum of 50 feet with a few larger end-tie spaces. Two-thirds of the marina’s slips are 28 feet in length and under. Slightly more than one-third of the slips are open moorage, while two-thirds are covered moorage. There are tradeoffs between covered and open moorage; covered protects the boat from the elements, but boats are limited by air-draft and beam width (covered slips are double finger slips with finger floats on each side). Open slips are exposed to the elements but have no air-draft limitations; and since most open slips are single finger (finger float on only one side), one wide-beam boat can fit into two neighboring slips.

The marina currently allows boats to exceed the slip size (or overhang into the fairway) by up to 10% of the size of the slip; moorage charges are based upon the slip size or the boat length, whichever is larger. A number of permanent moorage tenants have boats that exceed the slip size. This would suggest that the marina is already in need of larger slips. Because overhanging boats intrude upon already narrow fairways at Des Moines, this practice further reduces fairway maneuvering space for boats entering and exiting slips. While a few

Permanent In-Water Moorage Slip Sizes

Length in Feet	Number of Slips	% of Total
20	38	5%
24	190	26%
28	251	34%
30	14	2%
32	68	9%
36	72	10%
40	64	9%
50	28	4%
54	2	0.3%
64	3	0.4%
TOTAL	730	

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other marinas allow overhang, the majority of marinas do not allow boats larger than the slip size.

The boat moorage and storage market has changed and there is now more demand for large slips and less demand for smaller slips. Smaller boats have several options for boat moorage and storage, including storage on a trailer, upland dry-stacked (rack) storage, and moorage in larger slips.

In-water moorage continues to be in short supply in the greater Puget Sound region with waitlists for larger slips. Des Moines Marina currently has lengthy waitlists for larger slips, while some smaller slips are seasonally vacant and seldom require waiting for availability. The marina’s current and historic waitlist demand suggests that the marina does not have the optimal mix of slip sizes for today’s market. There are too many small slips that are underutilized and not generating maximum revenue potential.

Survey of Current Market Rates

This study surveyed moorage rental rates at representative and comparable marinas in the greater Puget Sound area from Olympia to Anacortes. Survey information shows that in-water moorage rates at Des Moines Marina are at or below rates charged at comparable marinas, with deviations for various slip sizes and covered versus open moorage.

Covered Moorage Rental Rates – Depending upon slip size, Des Moines Marina rates for covered moorage are between 90% and 100% of the average rates charged for same-size slips at comparable marinas. Des Moines rates are approximately 77% of the highest rates surveyed, and 118% of the lowest rates surveyed for the equivalent slip size. Overall, Des Moines Marina rates for covered moorage slips 30-feet to 50-feet are in-line with market rates. Comparable rental rate information is not available for 20-foot and 24-foot covered slips, because marinas normally do not have covered slips of this size.

Covered Moorage Comparable Rental Rates

In Water Slip Size	20	24	28	30	32	36	40	50
Des Moines Marina	\$ 9.74	\$11.16	\$12.57	\$13.65	\$13.90	\$15.84	\$16.17	\$19.43
Des Moines Rates / Average			88.3%	94.4%	89.1%	98.3%	92.1%	103.8%
Average	N/A	N/A	\$14.24	\$14.46	\$15.60	\$16.12	\$17.55	\$18.72
Median	N/A	N/A	\$13.94	\$14.85	\$15.05	\$15.70	\$16.63	\$17.64
High	N/A	N/A	\$15.98	\$17.74	\$18.17	\$19.84	\$22.92	\$25.21
Low	N/A	N/A	\$12.84	\$11.30	\$14.45	\$14.14	\$14.68	\$15.30

Open Moorage Rental Rates – Rental rates for open slips are generally below market rates for comparable sized slips and comparable marinas. Rates for Des Moines Marina slips ranging in size from 28-feet to 50-feet are 91% of the average of similarly sized slips at comparable marinas. Smaller slips of 20-feet and 24-feet at Des Moines are at 80% of similarly sized slips at comparable marinas. Des Moines rates for open slips of all sizes are 68% of the highest rates

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surveyed and 124% of the lowest rates surveyed. Overall, Des Moines Marina rates for open slips are below market rates.

Open Moorage Comparable Rental Rates

In-Water Slip Size	20	24	28	32	36	40	50
Des Moines Marina	\$7.83	\$8.73	\$9.84	\$10.74	\$11.39	\$12.16	\$13.74
Des Moines Rates /Average	73.0%	87.4%	92.1%	88.8%	90.8%	94.1%	98.7%
Average	\$10.73	\$9.99	\$10.68	\$12.10	\$12.54	\$12.92	\$13.93
Median	\$10.58	\$9.09	\$10.61	\$11.95	\$11.56	\$12.71	\$13.90
High	\$13.57	\$13.56	\$13.56	\$16.76	\$17.11	\$17.77	\$18.87
Low	\$8.22	\$8.22	\$8.22	\$9.24	\$9.24	\$9.74	\$10.05

Guest Moorage Rates – Daily rates for guest/transient moorage at Des Moines Marina is at 70% of the average charged at comparable marinas. Des Moines rates are among the lowest daily guest moorage rates at comparable marinas. Guest moorage shore power charges are lower than nearly all comparable marinas.

Peak Season Guest Moorage	Per Foot Per Night	Notes	30 amp Power per Night
Des Moines Marina	\$1.00	\$20 Minimum	\$3.00
Average	\$1.45		\$5.12
Median	\$1.45		\$5.00
High	\$2.30		\$6.00
Low	\$1.00		\$3.00

In general, there are opportunities for Des Moines Marina to increase rates on open moorage slips and guest moorage at this time.

Revenue Potential – The Marina’s in-water moorage is not operating at its full revenue potential. Full revenue potential is calculated by comparing the marina’s actual revenue received in a calendar year and dividing that by the full potential revenue for all slips with no vacancies and at published rates with no discounts. Measuring revenue potential provides metrics for assessing the marina’s rates against competition and the consumer demand for the different types of moorage and storage offered by the marina. Full revenue potential will vary as the greater Puget Sound supply and demand for boat moorage changes. Currently, demand for moorage is very high and revenue potential numbers can be expected to be close to 100%.

For calendar years 2018 and 2019, the Marina’s permanent moorage for all in-water slips operated at 85% of its revenue potential. With the exception of 36-foot open slips, all other slips 30 feet and larger operated at 90% to 100% of their revenue potential. With the exception of 28-foot open slips, slips 28 feet and under operated at less than 80% with a low of 57%.

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In calendar year 2020, covered moorage 30-feet and larger operated at or above 100%, and slips 28-feet and under operated at 81% to 94%. Open moorage slips 28-feet and larger operated at or above 100%, and slips under 28-feet operated at 64% to 84%. Realized revenue exceeds 100% when slips are occupied by boats larger than the slip and monthly rental rates are charged for the larger of the slip size and boat length. The Marina allows boats to exceed slip size and overhang into the fairway by up to 10%.

The disparity in the revenue potential and recognition numbers noted above underscore the need to change the mix of slips in the marina. Demand for smaller slips and the ability to keep them full is indicated by the substantially lower numbers for smaller slips. The marina has seasonal vacancies in the smaller slips and offers special pricing for these smaller slips. The marina historically has waiting lists for larger slips.

Dry Storage Sheds

The marina has 72 storage sheds located on the marina grounds, suited for dry land storage of small boats, generally 20 feet and under in length. There are seldom any vacancies and the sheds consistently generate their full revenue potential and require minimal maintenance. The sheds are very similar to widely available vehicle storage units at self-store locations. The units are intended for storage of small boats and boating related equipment. Rental rates are comparable to self-store vehicle storage units that are not co-located at a marina. The marina provides a self-serve sling hoist for launching of dry stored boats.

The storage sheds are located in a prime spot on the marina grounds, midway between the marina office, guest moorage, Beach Park, and pier, and the southern half of the marina grounds with Anthony's Restaurant, and the planned new tenant restroom building. As the marina grounds develop, storage sheds will block the ability to connect two vital areas of the marina grounds. Even though they are generating market rate revenue compared to widely available self-store units, they are not the highest use of this prime location. The buildings are aging and some are in need of repair or replacement. In addition, there is currently no premium rental rate for their strategic location at the marina. The boat storage function of the storage sheds could be replaced and incorporated into a new structure with revenue generating potential, and/or stacked rack boat storage.

CSR Marine Lease

The CSR Marine boatyard facility is owned and maintained by the Des Moines Marina. CSR Marine owns and operates the business that is located there. While the lease rates for this facility were not included in this study, the City should evaluate lease rates for this valuable property the next time the lease comes up for renewal.

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Marina Redevelopment Timing

Des Moines Marina, in the fall of 2020, engaged the engineering consulting firm of Reid Middleton to evaluate and report upon the condition of the marina's in-water moorage facilities and to estimate the remaining service life expectancy. Reid Middleton's report dated December 8, 2020 was delivered to the City of Des Moines Marina and made available to Waggoner Marina Services. The Reid Middleton report service life estimates are the basis for this report's timing of marina replacement and redevelopment of the marina's facilities.

Now is the time to plan and rebuild the marina over the next 10- to 20-years; with select strategic changes implemented in the coming 5-year period. The boating business is changing and this is the opportunity to optimize the design with the right configuration based on the boats of today and provide flexibility for tomorrow. Other infrastructure such as the electrical system also needs updating. The bulkhead seawall south of M-dock along the in-water moorage areas needs to be replaced and is part of the marina infrastructure that is operated and maintained with marina revenues. The bulkhead seawall surrounding the north parking lot is also in need of replacement. This bulkhead is part of the City's Waterfront Zone, and is operated and maintained with City general fund revenues. Permits have been secured for replacement of the north parking lot surrounding bulkhead.

As demand for reconstruction of our State's aging infrastructure and marine facilities continue, the cost for such construction will also become more costly. Time to obtain all the necessary permits will lengthen the entire process of a rebuild, with permits taking anywhere from 3-5 years. In the meantime, maintenance costs will be ongoing and current marina facilities will continue to deteriorate.

With interest rates at historic lows, the cost of money is very low, making this an excellent time to make capital expenditures and undertake capital intensive projects. Current economic challenges also make for an opportunity to create jobs and stimulate businesses.

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Marina In-Water Redesign Guidelines/Criteria

A subsequent study and report should prepare a detailed configuration for the replacement marina docks that maximizes and optimizes slip sizes to better meet today’s and tomorrow’s demands. The following guidelines and criteria serve as a framework for preparing this detailed design.

- The reconfigured marina should have fewer small slips and more medium to large-size slips. Slip sizes between 30 feet and 50 feet, with a few end-tie spaces for wider and longer boats up to 64 feet in length.
- Plan for six slip sizes to reduce “inventory” and simplify waitlists and billing. Slip sizes in increments of approximately 4 or 5 feet (30, 34, 38, 42, 46, 50 for example)
- Balanced (but not even) distribution of slip sizes – larger inventory in the 38 to 42 feet – bell shaped curve of distribution
- Proportional and balanced distribution of covered vs open slips in each of the six slip sizes. Target about 25% to 50% of the slips covered. The amount of covered moorage will be largely governed and controlled by state and federal permitting requirements. Achieving these percentages may be very challenging. Rental rates for covered slips will be quite a bit more expensive due to the approximately 80% to 100% higher cost of construction. Air draft on covered slips should be increased from the current configuration to accommodate larger vessels.
- Access ramps that parallel or shallow angle with shoreline that provide access to more than one dock/float, thereby reducing the number of ramps, minimizing low-tide ramp incline with longer ramps, and maximizing the number of slips on each dock. ADA access where practical.
- Shore power: twin 30amp for slip sizes 30 feet, 34 feet, 38 feet; one-30amp plus one 50amp for slip sizes 42 feet, 46 feet; twin 50amp for slips 50 feet and larger; and one 50amp plus one 100amp at larger end-tie spaces.

Permanent In-Water Moorage Slip Sizes

Current Configuration	Slip Length in Feet	Redesign Configuration
38	20	
190	24	
251	28	
14	30	69
68	32	
	34	75
72	36	
	38	113
64	40	
	42	106
	46	104
28	50	58
2	54	4
3	64	3
730	TOTAL	532

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- Larger fairways – Dock spacings that provide adequate and industry standard fairways for boats to safely and conveniently maneuver in and out of moorage slips. The proposed rebuild configuration in this study is designed around a minimum fairway width that is 1.5 times the length of the largest slip on either side of the fairway. Fairway widths in the current configuration average 1.3 times the largest slip, with several barely more than 1.0 times. Due to boat overhang allowances up to 10%, the fairway can be even smaller/narrower than 1.0 times the slip size.

In order to optimize the space for fairways and maximize the size and number of moorage slips in the marina, slips on either side of the fairway should be of equal or similar size.

- Inconspicuous security features – such as shelter structures at access ramps that incorporate security access gates. Integrated security cameras.

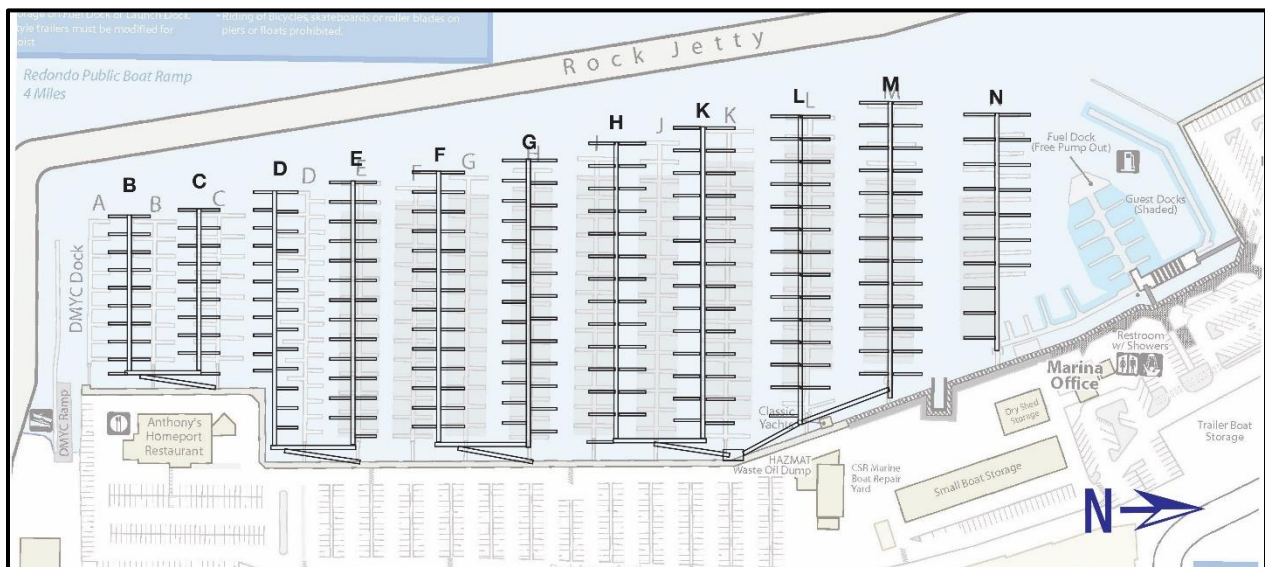
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Rebuilding the Marina

For all the reasons noted previously, the City of Des Moines should begin a 10- to 20-year rebuild process with the goals of:

- A better mix of slip sizes and configurations to meet the needs of current tenants, the waitlist potential tenants, and future customers
- Offer customers a range of different moorage and storage options for their boating needs
- Create a marina facility with sufficient appeal and demand to command self-sustaining operations and future replacement reserves
- Create a destination with appeal that brings water and land-transport visitors to the marina and to the Des Moines business district
- Address environmental pollution and contamination issues inherent with an aging in-water and foreshore facility

Reconfiguring marina docks for larger slips and wider fairways in the same breakwater protected space requires eliminating two to three docks and their finger floats. The figure below shows a proposed reconfiguration with eleven docks replacing the existing fourteen docks. Slight adjustments in slip sizes and fairways may allow for twelve docks. This report and the associated revenue estimates are based upon a conservative eleven dock replacement configuration.



Reconfigured In-Water Docks and Floats

Reconfigured Slip Size (feet) by Dock

North Side	30	30	34	34	38	42	42	46	46	50	50
Dock	B	C	D	E	F	G	H	K	L	M	N
South Side	30	30	30	34	38	38	42	42	46	46	50

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The marina will need to continue its operations and provide moorage for its current tenants throughout the rebuild process. Due to marine life considerations, construction will be limited to a few weeks or months each year. For these reasons, removing and replacing docks and associated pilings should be done in groups of one to three docks per season due to construction windows, temporary moorage needs, and as capital funding allows. The challenge is to create and find temporary moorage within the marina for boats displaced while docks are being removed and replaced. Uplands dry storage would allow for storage of the smaller boats, some of which are currently moored at in-water slips.

Timing of marina construction activities in each of the phases will be constrained by economics, government, and environmental regulations, such as Fish Window timing, and other factors. Pile driving, dredging, and other over-water construction activities must be stopped between specified periods of the year. Noisy pile driving is often restricted to weekdays and limited time periods. The land side infrastructure improvements, such as an Adaptive Purpose Structure, are not subject to the same in-water restrictions, and typically work can commence year-round until it is finished.

As docks are replaced, a schedule will need to be created where old docks can be removed and cleared out, pilings replaced, and the new docks built on land and towed to the marina for installation. This can probably be done in groups of 2, and maybe 3 docks in a season.

As construction starts, begin to market the new moorage in both the dry storage and for larger boats in the new larger slips in the marina. Based on demand at other marinas for both dry storage and in-water moorage, it is probable that tenants can be secured ahead of its completion.

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Reconfigured Marina Revenue Projections

Breakwater protected mooring space is a precious commodity. The marina has a fixed amount of in-water boat moorage space protected by the fixed and permanent breakwater. One of the key elements in redeveloping the marina with larger slips is ensuring that the marina maintains or increases revenue and boat storage capacity.

Calculations based upon marina in-water redesign guidelines and the configuration noted above show that a rebuilt marina consisting of fewer small slips, and additional larger slips, along with more dry land storage can produce more revenue and storage capacity for nearly as many boats. The following table shows recent past revenue and capacities, along with projected revenue and capacities when rebuilt. Revenue projections are based upon existing 2020 rates for in-water storage and today's market rates for dry-storage.

Marina Moorage & Storage Revenue and Capacity

	2018	2019	2020	Rebuild Configuration
In-Water Permanent Moorage	\$2.221M	\$2.291M	\$3.052M	\$3.089M
Number of In-Water Slips	730	730	730	532
Covered/Open Percentage	63%/37%	63%/37%	63%/37%	40%/60%
Dry Storage	\$173K	\$183K	\$225K	\$1.205M
Number of Dry Storage Spaces	72	72	72	240
Guest Moorage Slips & Side-tie	\$130K	\$142K	\$144K	\$146K
Number of Guest Slips & Side-tie	38	38	38	38
Total Slips & Storage Spaces	840	840	840	810
Total Revenue	\$2.524M	\$2.616M	\$3.421M	\$4.440M

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Covered vs Open Moorage

Deciding on the amount of covered moorage vs uncovered or open moorage will affect the cost of construction as well as returned revenue and ongoing maintenance expenses. The City will need to make a determination regarding what percentage of moorage slips in the new marina configuration will be covered vs open. There are trade-offs to consider for both covered and open moorage slips when making this determination. Given today's tight governance and control of construction on or near water, there may not be an option for covered moorage.

Pros and Cons of Covered Moorage Slips.

Construction costs are greater for covered moorage due to additional materials and labor and the need for additional floatation on the docks to support the overhead structure. New environmental concerns for fish may require overhead light-penetrating panels in order to meet permitting requirements. It may be possible to receive mitigation credits for the use of light-penetrating materials. Additionally, the removal of some existing covered moorage might earn mitigation credits towards the installation of new covered areas. Permitting for covered moorage is an open question at this time. More importantly, covered moorage slips limit the type of boats that can be accommodated due to air-draft limitations. Sailboats with masts, and large power boats with tall superstructures, are not able to fit under a covered moorage facility. Covered moorage thus limits the marina's tenants in those spaces to boaters with smaller and medium-sized power vessels.



Covered Moorage on J-Dock



Light-Penetrating Covered Moorage

Covered moorage is highly desirable by many boaters who want to protect the fit and finish of their boat from harsh weather conditions. Covered moorage can save the boater additional maintenance costs in the long-run, and many boaters are willing to pay the higher rate for covered moorage. Marinas charge more for covered moorage than open moorage, providing needed revenue for ongoing maintenance and replacement reserves.

Covered moorage slips are normally configured with finger-floats on both sides of the slip, referred to as double-finger slips. The additional or second finger float is needed to provide the floatation support for the roof/covering. Double-finger slips cannot accommodate wide-beam boats, such as power and sail catamarans.

Des Moines Marina Redevelopment Study

Pros and Cons of Open Moorage Slips. Dock decking material in open slips tend to wear and age sooner than docks that are covered, but open moorage slips are normally more economical to construct and install. The advantage is that open slips can accommodate a variety of different vessels, including sailboats, thus drawing in more tenants.

Open slips are normally single-finger slips with no finger-float between two neighboring slips, allowing wide-beam boats to share two adjoining slips.



Open Moorage

Recommendation. The marina's current configuration has 63% of the permanent moorage slips covered and 37% are open. This study recommends targeting a rebuild configuration with 40% of the slips covered and 60% open. This targeted ratio retains a meaningful portion of covered moorage while providing a better balance between covered and open. There is still no assurance that any covered moorage will be allowed by permitting agents.

Des Moines Marina Redevelopment Study

Development of the Marina Grounds

The marina grounds area comprises over 9 acres of which most of it today is used for parking, storage buildings, and a boat repair business facility and boatyard. There are different options to make efficient use of this space, and the marina may need to go through several iterations of design concepts.

Some of the concept ideas discussed to-date include:

- Replace the 72-space single story storage sheds as part of a larger structure. The boats currently stored here would go into the new building. Dry-stacked storage is determined to be a priority in order to move forward with the marina slip reconfiguration.
- Add dry stacked storage building near the east side of the marina, tucked-up against the hillside embankment.
- Replace the existing and aging small boat, tenant operated sling hoist with a new device or service that provides launching and retrieval for small craft.
- Additional restaurant space, either as an expansion of structures in a cluster like the Quarterdeck casual restaurant and deck, or in a larger Adaptive Purpose Building.
- This marina grounds area would be designed with landscaping and planter beds, walkways, and driveway areas. Run-off water from the hillside would be channeled into the planter beds.
- As part of the City's future redevelopment plan for the marina, a 75-100 room inn could be situated in the northeast corner of the marina grounds. The marina steps would be included as part of this project, providing an attractive pedestrian connection between downtown and the marina.
- The marina tenants have expressed the importance of the social aspects of the marina, where they can enjoy the boating lifestyle. They like to meet with boating friends and socialize at the marina. A plaza or barbeque area would be a welcomed amenity for the marina tenants and guest moorage visitors.



Quarterdeck Restaurant

Des Moines Marina Redevelopment Study

- Repurpose the current harbor office building to a rental property. This plan would include converting the current Harbormaster Office Building that overlooks the marina. Move the marina shop into an area of the new Adaptive Purpose Structure building.



Marina Office

- Encourage the City of Des Moines to design and build a gateway entrance between the north end of the marina and adjacent Beach Park. A visual connection and pathway to Beach Park would be a key element for attracting boaters to Des Moines Marina for hiking and picnicking opportunities.



Beach Park & Des Moines Creek Foot Bridge

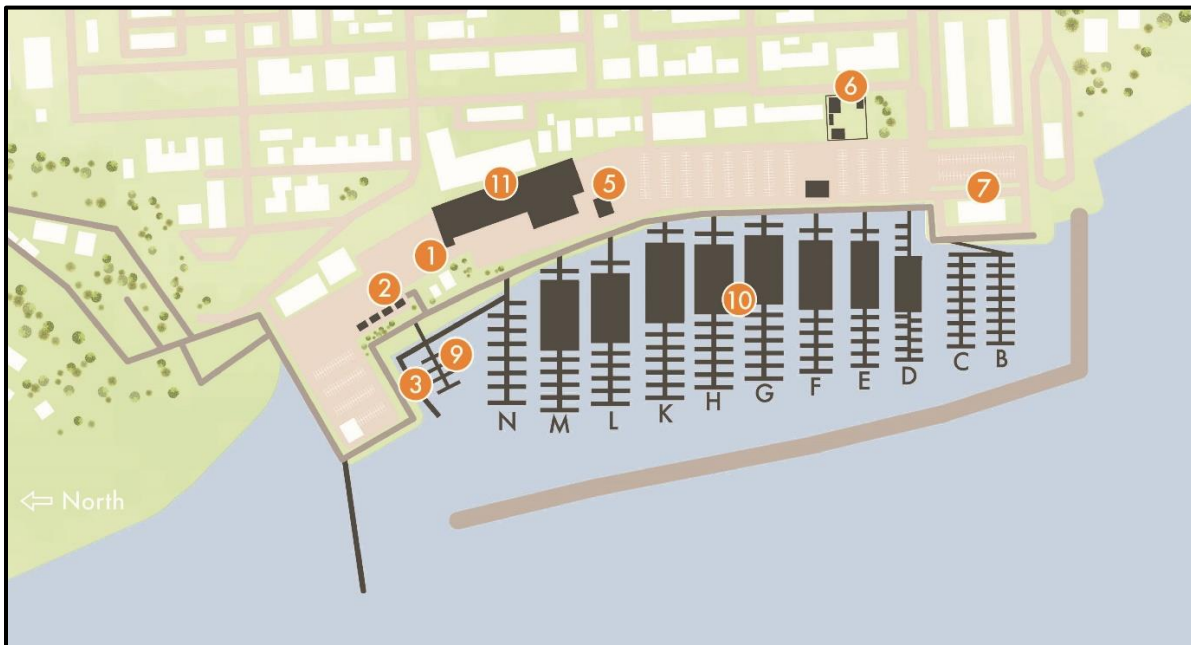
- Design landscaping and planter beds that highlight the promenade and other walkway areas. Consider carrying this hardscape design over to the gated entrances to the dock ramps. This design could include rock facings and flower baskets, or bedding areas.

Des Moines Marina Redevelopment Study

Marina Grounds Plan Rendering



Existing Des Moines Marina Grounds and Docks



Planned Des Moines Marina Grounds and Docks

- | | |
|--|-------------------------------------|
| 1 Marina Office, Restrooms, and Showers | 7 Anthony's Restaurant |
| 2 Quarterdeck Restaurant | 8 Permanent Moorage - Existing |
| 3 Ranger Tug & Cutwater Delivery Center | 9 Guest Moorage & Fuel Dock |
| 4 Shed Storage Units - Existing | 10 Permanent Moorage - Reconfigured |
| 5 CSR Marine | 11 Adaptive Purpose Building |
| 6 SR3 - Sealife Response, Rehabilitation, & Research | |

Des Moines Marina Redevelopment Study

Existing Businesses on/near the Marina Floor

A number of businesses are located on or near the marina grounds. Waggoner Marina Services met with the existing businesses on the marina grounds to understand their future business plans and needs. CSR Marine and Anthony's Restaurant have been in their current locations for many years. The adjacent Des Moines Yacht Club has likewise been in their location for many years. The Quarterdeck began business on the marina grounds a few years ago. Ranger Tug established their presence at Des Moines Marina several years ago. SR3 is the most recent addition to the Marina.

CSR Marine is a successful boat maintenance business with its primary location in Seattle on the Ship Canal in Ballard. The Des Moines location provides services ranging from minor repairs and bottom painting of anti-foulant, to engine and drivetrain repairs for vessels up to 40 feet. They operate the marine lift for the marina at Des Moines.



The CSR Marine Des Moines location currently operates in a building with 3-4 repair bays for trailerable boats, and a parts storage area with a small showroom entrance space. Repairs on larger boats are done outdoors in a fenced/secured repair boatyard. Boats are brought in using the Travelift and blocked on stands for repair work.

The CSR building and boatyard are currently located in the center of the marina grounds. At this time there is no advantage to making any changes to the boatyard area. It might be desirable to replace the existing CSR indoor space with equivalent space in the newly constructed Adaptive Purpose Building and remove the existing CSR building. This change could facilitate better use of the area. CSR prefers outdoor bays, possibly covered, where they can easily move boats of many different sizes around as needed, based on their workload. They considered retail space for selling parts and supplies but concluded they are best focused on their repair business. A small building for parts storage and small bench level repairs is deemed to be adequate for their business needs. They are very agreeable to co-planning a future space for the CSR operation.



It should be noted that the CSR boatyard contains special filtration for storm water runoff to filter water before it drains into Puget Sound. CSR is a leader in storm water runoff from boatyards, and they have invested in their current system. Moving the boatyard would require investment in special stormwater runoff filtration equipment if the boatyard were to be moved to another location. This type of filtration may be required for the proposed dry stack storage

Des Moines Marina Redevelopment Study

area also, and considerations have been made to locate the dry stack storage adjacent to the CSR boatyard space.

Anthony's Restaurants operates seafood restaurants in 14 marina locations around the state. The Anthony's family understands the boating community and has based the core of their business on locations with views of the water and boats. Their successful Des Moines location is located on privately owned property that is accessed through the marina. Anthony's has expanded the casual restaurant concept with cabanas located alongside their larger brick and mortar restaurants in Edmunds and Anacortes on a seasonal basis. The smaller format seasonal approach allows them to adjust their overhead to the prime summer season in locations where there is more summer foot traffic. During Covid, they also saw the opportunity where their open-air seasonal restaurant in Anacortes could be open with patio heaters during periods of restricted indoor seating. Their primary interest at Des Moines in the future would be to offer a seasonal restaurant but only if parking was expanded to accommodate increased demand for parking spaces. They currently use all of the parking they have available in Des Moines during their peak busy periods. Anthony's wishes to review the plan for additional parking on the marina grounds before considering any restaurant options at Des Moines Marina.



The Quarterdeck is an innovative concept for the Des Moines Marina. The idea of a coffee stand and snack bar has evolved into a popular destination for visitors to the marina. In addition to coffee and espresso, The Quarterdeck has expanded to afternoon beer and wine. The outdoor seating area is a popular venue to enjoy the view and the boats while grabbing a morning pastry or a sandwich mid-day. Towards the end of the day, patrons move to the colorful Adirondack chairs on the grass, which worked well for social distancing during Covid. The Quarterdeck is now firmly established as a go-to location and its business prospects have improved to the point where the owner has been in discussion with the City for a second space. This area of the marina grounds is envisioned for up to 4 casual dining venues.



Des Moines Marina Redevelopment Study

SR3 – The SeaLife Response, Rehabilitation, and Research center is located in the southeast corner of the marina grounds. SR3 is a recent tenant for the marina. This non-profit marine animal hospital is the first of its kind in the Pacific Northwest. The newly constructed facility, consisting of pre-fabricated structures, was completed in early 2021



Ranger Tug/Cutwater Delivery Center Fluid Motion Inc., the makers of Ranger Tug and Cutwater Boats, is one of the most successful boat builders in the country. Their experienced management team (many formerly with Bayliner) has found a sweet spot in the market with fully-outfitted turnkey boats that run from just over \$125K to \$1M. With manufacturing in 7 locations around the Seattle area, almost all of their boats go through a completion phase at their location on the Pacific Highway in Kent and then trailered to Des Moines or Everett, and even as far away as Anacortes for launch and delivery to the customer. In conversations with the Ranger Tug/Cutwater marketing and sales team, Waggoner Marina Services promoted the benefits of the Des Moines Marina being close to their sales offices. The results were that Fluid Motion made a long-term commitment for 200 feet of linear dock space and then expanded this to 300 feet near the transient moorage and fuel dock. In their words, this was a “game-changer” for their business. They have a display area for many different models of their boats, and they can whisk a customer out for a demo ride in minutes. Today the company web site touts their new Des Moines Delivery and Training Center as a sales advantage. (<https://www.rangertugs.com/factory-delivery/>)



We have started discussions with the sales and management team to consider expanding their presence in the marina with a land-based sales and delivery center and possibly more office space for their management team. We have promoted the advantages of the Beach Park facilities for training and owners’ meetings.

The strategy here is more than rental and lease income. The factory team sells many boats every year. There is an opportunity to capture the sales tax revenue in Des Moines, where a split of that sales tax will be earned by the City of Des Moines. Consider that Des Moines might provide a sales center office space in return for the sales tax revenue. Based on Fluid Motion selling about 200-300 boats per year from Des Moines, this could total sales of about \$62M with a taxable retail sales benefit to the City. The marina may want to consider adding another

Des Moines Marina Redevelopment Study

boat delivery center tenant in addition to Fluid Motion. The proximity of SeaTac Airport makes the Des Moines Marina a compelling location for a boat manufacturer's sales center.

Des Moines Yacht Club is located on the property to the south, adjacent to the marina grounds. As part of this Waggoner Phase II study, we met with the Des Moines Yacht Club to determine their future needs and comments about the marina development around their property.



The yacht club has a ramp for launching and retrieving boats. Their boatyard and their ramp are a key part of the attraction of the yacht club. Their on-land moorage option offers members moorage space for over 100 different sized boats at reasonable prices. The yacht club moorage is unique in that members build their own large trailers, or own specialty trailers, that are towed to the ramp by an aircraft style tug/tractor. The process works well for them. The yacht club offers many boating activities and is well managed and run with an enthusiastic membership.

At this time the Des Moines Yacht Club is happy with their facility and have no plans to expand or leave the marina area. They do have a need for wider fairway space and more linear launch space for the launch ramp area.

Des Moines Marina Redevelopment Study

Adaptive Purpose Building on the Marina Grounds

The approximately 1.5 acres of marina grounds located between the existing marina office and the CSR Marine boatyard is an important element of the marina. This area should provide a key connection between the marina tenant centric area to the south and the guest, visitor centric area to the north. This 1.5-acre property fronts onto the bulkhead seawall and backs to an embankment, and currently houses shed storage buildings and the associated access driveways.

A better use of this key location on the marina grounds would be a new building designed to accommodate a number of known and yet-to-be-determined purposes, defined in this report as the Adaptive Purpose Building. The building would extend parallel along the embankment and front to a large grassy pedestrian area and promenade. Design of the building is envisioned to have a third-level story against the embankment, stepping down to a second level, and finally stepping down to a first floor that opens to the pedestrian area.

The single-story level fronting on the grassy pedestrian area could include space for specialty retail shops, food service, a convenience store, and yacht brokerage. This space is also a logical venue for a Farmers Market that could spill out into the pedestrian gathering outdoor spaces. The building could also provide space for group gatherings and special events. The second-story level could house light manufacturing businesses, while the three-story area could house a boat stacked storage facility.

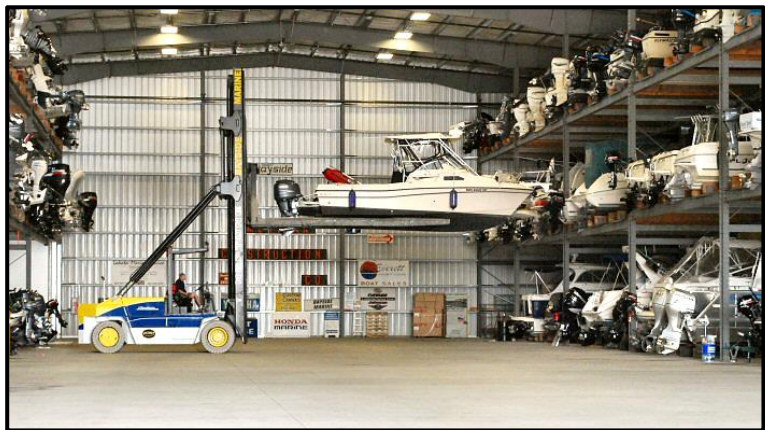
The entire building would be designed for flexible and adaptive future use to generate ongoing revenue for the City. This Adaptive Purpose Building will provide better access and connection between the north and south ends of the marina grounds.

- This building is titled *Adaptive* to underscore the flexibility of the structure to meet future needs. It is likely that the building's functional uses will change over time.
- Design and construction of the building, with large open spaces, will allow for different usage and configurations.
- Possible initial uses and future tenants for the building may include:
 - Stacked boat and boat trailer storage; marina workshop
 - Marina office, restrooms, showers, and laundry
 - Farmers markets, craft and art fairs
 - Special events such as auto shows, boat parts swap meets
 - Offices for boat insurance, boat brokers, boat detailing
 - Restaurant(s), food courts, retail spaces, specialty shops
- The Adaptive building should be marketplace driven with spaces that can be configured for tenants as needed.
- A tenanted Adaptive building would be a potential source of taxable sales revenue

Dry Stacked Storage

The marina needs to reconfigure in-water moorage with fewer small slips and additional large slips. To accommodate the smaller boats, a dry stack storage building for 20- to 30-foot boats could be constructed or be housed in a portion of the Adaptive Purpose Building. An increasingly popular storage option for boats up to 34 feet in length has been shown to be dry stacked storage. Boats are stored in enclosed and heated buildings on racks stacked 2 or 3 boats high. The addition of a dry stacked storage facility at Des Moines will provide boat storage options for smaller boats that otherwise would occupy an in-water slip. Providing dry stacked storage spaces would allow smaller boats an option to the marina's larger in-water moorage slips and provide a boat storage option still within the greater marina area.

The dry stack boat storage building could be located at the east side of the marina grounds backed up to the hillside. The building code currently restricts the height to approximately 35 feet, which would allow a structure that accommodates racks for 3 to 4 boats high. A 145-foot-wide x 331-foot-long building, with two stacks and a central aisle, would allow for storage of about 240 boats from 20 to 30 feet.



Enclosed Dry Stacked Storage

Given the desirable option and interest in an Adaptive Purpose Building, this stacked-storage unit could be incorporated into this building space. A separate, adjacent storage building may be another viable option.

Boats would be moved from the water to the stacked storage building with specialized fork lifts. This provides an alternative to the single-story sheds and in-water storage of smaller boats and allows the marina to reduce the number of smaller in-water slips. With dry stacked storage, customers call ahead to the marina, and their boat is removed from the storage building by forklift and lowered to the water and placed at a staging dock for the customer's use when they arrive. Dry storage services add value by including such services as post-use washdown, engine flush, and waste pumpout. The storage building(s) can be heated so boats do not need to be winterized. The new storage building revenue generating potential is about \$1.2 million per year and would replace the \$250,000 annual revenue from shed storage buildings that currently house small boats. A second dry stack storage building, phased in at a later point along the east side of the marina grounds, could accommodate several hundred additional boats and would provide additional storage space to replace the reduced number of in-water small slips in the redeveloped marina. If implemented, it is recommended that the initial building hold up to 200-248 boats. This project would have a budget of about \$4.1 million.

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Dry Storage Building Estimated Budget

Base building construction	\$2,900K
Project Planning & Permits	225K
Water, Electrical, and Fire	300K
Boat Lift (1)	400K
Miscellaneous	250K
Total	\$4,075K

Thousands of dollars

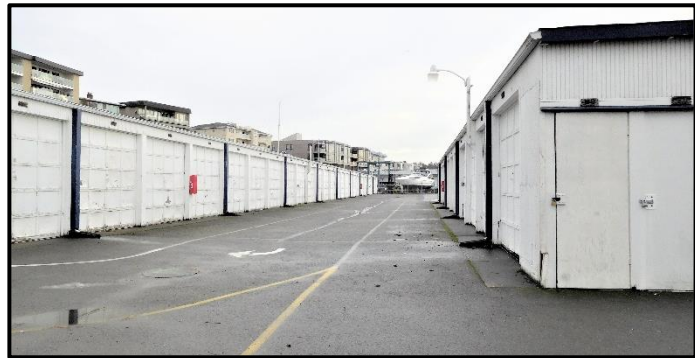
Comparable Dry Stack Rental Rates

Foss Landing, Tacoma	\$340.20
Bayside, Everett	\$425.00
Twin Bridges, Anacortes	\$356.69

Rate per month, for a 24 ft. boat

Boats in dry stacked storage are moved to and from the storage building to lift/launch bays on the seawall by 1 or 2 specially configured large marine forklifts. The facility will require one or two additional FTE staff and will generate \$1.2 million of annual revenue at 90% capacity. Most importantly, it provides a more cost-effective replacement storage solution for boats up to 34 feet in length and 22,000 pounds in weight.

The current dry shed storage units provide storage for boats up to 20 feet in enclosed individual storage units that are rented on a month-to-month basis. The marina's boat lift is available to storage shed tenants to self-launch their stored boats. The rental rate for these units is approximately the same as widely available storage units that are not located at a waterside marina. While the units are intended for boat storage, their street-side vehicle access does allow tenants to use these sheds as general-purpose storage units. The marina recently implemented a policy of increasing the monthly rental by 58% for storing items other than boats. This new policy suggests that dry storage on the Marina Floor warrants a premium price.



Storage Sheds

Des Moines Marina Redevelopment Study

Parking

The marina grounds area has paid parking for marina guests and tenants. The paved parking area to the south of the CSR Marine boatyard is primarily for marina tenants. The area to the north is conveniently situated for guests visiting the marina and the Quarterdeck and also offers paid hourly parking. Currently there is sufficient parking space to meet the needs of both areas.

Future space for parking will need to be addressed when planning for additional buildings and facilities to be placed on the marina grounds. The addition of a hotel, passenger ferry, or restaurant will trigger the need for substantially more parking. Existing parking spaces will likely be lost as facilities are added to the marina grounds. The existing parking would benefit from the beautification of planting strips, which would also reduce the number of existing parking spaces.



Existing Marina Parking

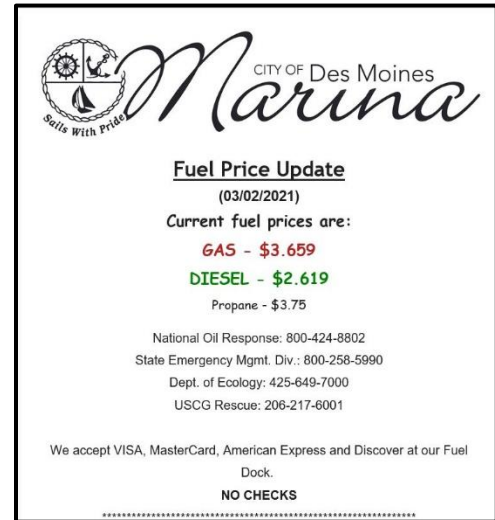
Des Moines Marina Redevelopment Study

Des Moines Marina Identity

Today, Des Moines Marina is often known for having some of the lowest priced marine gas and diesel. Boaters often visit Des Moines Marina to refill their fuel tanks and save money. Looking to the future, as electric vessels gain in popularity and practicality, gas and diesel may be viewed in a less favorable light. A rebuild of Des Moines Marina may be the Marina's opportunity to create a new and future looking identity as one of the leading area marina facilities to provide Electric Vessel charging stations. By incorporating solar into covered moorage, the marina can participate in the ever-growing sources of renewable and sustainable energy.

Electric cars, vans, and delivery vehicles are already an accepted fact for vehicular transportation. The speed with which electric gained market share in vehicles is noteworthy. Boat manufacturers are already producing electric and hybrid watercraft. Advancements in battery technology in the vehicle market will only help to accelerate electrical propulsion for the boating industry. On-the-water charging stations will increasingly be in demand and will be the focus of boating media. Des Moines can take this marina rebuild opportunity to include electric vessel charging stations and solar power generation into the design.

There are new companies, such as Norwegian boat builder and marine electric drive train provider Evoy (www.evoy.no) and Elco, that are looking to market electric boats. The marina can go a step further and pitch Evoy, or another manufacturer to set up their demo center and offices at the Des Moines Marina. The Des Moines Marina could be branded as a center for electric boats thanks to its close proximity to SEATAC and the utility of its location right in the middle of two major boating centers in Seattle and Tacoma. This will play into a story for the marina's environmental and sustainability scenario.



Des Moines Marina Redevelopment Study

Redevelopment Phases

The phased implementation of redevelopment for the Des Moines Marina needs to start sooner rather than later. Redevelopment of the marina grounds in conjunction with reconfiguring docks is a lengthy process, which will involve numerous steps. Improvements and redevelopment for the Des Moines Marina are defined as a 10-20-year process, with the idea that completing projects earlier rather than later is preferred. Due to the relatively short life-expectancy of the existing marina infrastructure, as noted in the Reid Middleton Report, moving forward quickly on projects will save additional costs in the long-run. Constraints that may pushout completion dates in this 10-20-year cycle include capital expenditures, funding, permitting, and logistics to accommodate tenants throughout the process of removing and replacing elements of the marina. The following list shows some of the major steps in this multi-phase process of redevelopment. As with any lengthy project, the initial plan will need to be reviewed and adjusted as major milestones are achieved.

	Description
Phase 1	<ul style="list-style-type: none"> • Finalize marina rebuild guidelines and preliminary dock configuration • Replace building south of CSR housing tenant restrooms with new building to include tenant restrooms and showers • Prepare a detailed design for in-water dock and fairway size and placement • Prepare an integrated design for the marina grounds, rebuilt in-water docks (including ramps and access gates), and bulkhead seawall replacement • Prepare design plan for an Adaptive Purpose Building • Permitting for south portion of bulkhead seawall (north is already permitted) • Prepare materials for in-water and near water permitting process, to include a toolkit of studies, forms, metrics, and documentation that can be used and reused for multiple permitting processes
Phase 2	<ul style="list-style-type: none"> • Bulkhead seawall replacement – north and south • Extend the promenade southward to D-dock • Prepare plans for replacing existing shed storage • Finalize Adaptive Purpose Building and secure needed approvals and permits • Finalize a redeveloped marina in-water design – a detailed design for docks, floats, ramps, and amenities
Phase 3	<ul style="list-style-type: none"> • Remove one of the dry shed storage buildings • Construct dry storage for small boats – possibly the initial construction and part of the Adaptable Purpose Building • Secure permits for replacing docks M, N, and D; docks M and N have some of the shorter life remaining; placement of dock D is critical to optimizing fairway and slips sizes throughout – its current location is not optimal • Coordinate with the City’s plan for use of the marina grounds storage lot in the northeast area for possible use in the marina-steps project

Des Moines Marina Redevelopment Study

Phase 4	<ul style="list-style-type: none"> • Populate the new dry storage area • Remove the remaining dry storage sheds • Construct the remaining portions of the Adaptive Purpose Building and tenant the spaces • Replace docks M, N, and D – repositioning D-dock to its redeveloped location and reconfiguring with larger finger floats
Phase 5	<ul style="list-style-type: none"> • Permits for replacing existing docks E, F, G, and H, with new docks E, F, and G (net loss of one dock but replaced with larger slips) • Design and budget for constructing new marina office and new building with guest restrooms, showers, and laundry
Phase 6	<ul style="list-style-type: none"> • Replace existing docks E, F, G, and H, with new larger slip docks E, F, and G • Permits for replacing existing docks I, J, K, and L, with new docks H, K, and L (net loss of one dock); the new L-dock is in nearly the same location as the existing and could be deferred to a subsequent phase or undertaken earlier with M and N dock replacement
Phase 7	<ul style="list-style-type: none"> • Replace existing docks I, J, K, and L with new docks H, K, and L; see the note above regarding options for L-dock • Permits for replacing existing docks A, B, and C with new docks B and C (net loss of one dock but with larger slips); slight changes in fairway and slip size on the design of new docks B, C, and D might allow for a new A-dock • Relocate CSR Marine indoor building space to a like-sized area in the Adaptive Purpose Building; boatyard space to remain with no changes
Phase 8	<ul style="list-style-type: none"> • Replace existing docks A, B, and C, with new larger slip docks B, C, and possibly A (see note above)
Phase 9	<ul style="list-style-type: none"> • Review and prepare and plan for upgrading the guest moorage area of the marina • Review permanent storage occupancy, capacities, rental rates, and projected future marina requirements

Des Moines Marina Redevelopment Study

Option for Public Private Partnership Model for Development

The development of the marina area is a large project. One of the options to fund the project is to look further into various public private partnerships. For example, the dry stack storage facility could be developed and funded by an experienced operator in the region on a long-term land lease or other business model. A private operator may be able to build and operate under a lower cost structure than a government entity. There are trade-offs to this model. It puts the City into the role of a landlord and not an operator, with limited input on the operation of the facility. Waggoner Marina Services started discussions with several marina operators experienced in public private partnership models such as:

Marina Management Association – Operators of marinas in Seattle and Tacoma;
Marsh Anderson Marinas – Operators of Eagle Harbor Marina; Harbor Place Marine;
Hope Port Marina; Port Hadlock Marina;
Twin Bridges Marina – the dry stack storage operator located near Anacortes.

Public-private partnerships require meetings, planning, and careful negotiations. The City Council may wish to further discuss the pros and cons of a Public-Private Partnership for the marina development and operations, and then look for a decision on whether to pursue this option.

Private operation and maintenance of the Des Moines Marina should also be on the list of options to investigate. There are private parties that are in the business of operating and maintaining marina facilities such as Des Moines Marina.

Des Moines Marina Redevelopment Study

RCO Grant Funding

Local agencies, public utility districts, and port districts may apply for grants from the State to help fund marina related projects. Application for grant funding can be made through the Recreation and Conservations Office (RCO) of Washington State. There are two grant programs offered by the State for boating related projects: Boating Facilities Program (BFP), and the Boating Infrastructure Grant Program (BIG).

Boating Facilities Program – a grant program that provides monies to acquire, develop, and renovate facilities for motorized boats, including launch ramps, guest moorage, and support facilities such as parking, restrooms, and other boating amenities. Applications are accepted every other year for BFP grants; applicants are required to provide a 25 percent match. Match may include bonds, local and private grants, cash, and/or applicant’s labor and materials. Applicants may make grant applications in phases such as Acquisition; Planning & Permitting; Development; or a combination thereof. Grant award limits are generally \$1 million, with monies awarded every two years. Grant funding comes from gasoline tax paid by boaters. As part of the grant process, applicants make a preliminary and final presentation to RCO staff and an Advisory Committee, who evaluate and score each project submitted for BFP grant consideration. Scoring is based on a set criterion, which is provided to applicants ahead of time. Projects are ranked and then submitted to the Funding Board.

Boating Infrastructure Grant Program – a federal grant program that provides funding to develop and renovate boating facilities targeting guest recreational boats 26 feet and larger. Typical projects include renovating guest docks; building moorage docks and floats; installing utilities. Applications are accepted every other year for BIG grants. Applicants must contribute 25 percent in matching resources. The BIG grant program is divided into Tier 1 and Tier 2 – applicants for Tier 1 must ask for \$5,000 to \$192,086; applicants for Tier 2 must ask for \$200,000 to \$1,440,645; monies are generally awarded every two years. Funding comes through the U.S. Fish and Wildlife Service from federal gas taxes deposited in the federal Aquatic Resources Trust Fund.

Des Moines Marina Redevelopment Study

Sustainability

Every modern development project is looking for areas where the project can demonstrate its environment sustainability. There are several opportunities for the Des Moines Marina:

- New marina construction will include new best management practices for areas such as:
 - Elimination of creosote pilings to environmentally-friendly steel pilings.
 - Elimination of foam floats for the docks that release foam particles into Puget Sound.
 - Better light pass-through for fish
 - The above improvements may be required for government permit approval and may be monetized through mediation credits which can sometimes be sold to other developers or government agencies
 - When seeking State grant monies, environmental mitigation is one of several evaluated criteria
- The Marina Floor development will need to include accommodations for run-off water from the streams passing through the property to the water collected in the parking area surface. Some of this water can be used on the property for landscaping, and some will be treated before it drains into Puget Sound.
- Consider using integrated solar roofing materials on the south facing covered moorage roofing. The costs are dropping, and it could add to the environment credentials to power the boat charging stations with solar power. This could be a long shot but is worth an economic consideration to determine if the marina can have a minimal carbon foot-print. There may be grants to support capturing solar power for boating.
- Rising sea levels are a real factor. More than one marina is already dealing with floats that are in danger of rising above the top of existing pilings at king high tides. The redesign and rebuild of the marina should include provisions for larger tides and more extreme tidal and storm conditions.

Des Moines Marina can use its environment sustainability features as a marketing angle for new tenants, which can lead to premium rates. For years, the Des Moines Marina has been known for its low fuel prices. In the future, it could be known for its forward-thinking environmental standards and as a center for electric boating technology.

Des Moines Marina Redevelopment Study

Next Steps

An important next step is to review the information provided in this study with the City Council, the DMMA, and the marina tenants and general public. Input and discussion with stakeholders are crucial parts of any public process.

This study proposes building a number of amenities into the rebuild of the marina. New amenities for a marina design carry a cost, which is typically covered by increases in moorage and other services. Some people in the community would like things to remain the same, including rates. Others would enjoy a special marina experience as a tenant, a visitor, or as a local wanting to enjoy a beautiful waterfront facility.

The City will then need to finalize its master planning process, and comprehensive plan update. This is scheduled for the fall of 2021. The work associated with the master plan will guide the marina's capital improvement planning, and 2022 capital budget.

The City will then need to start the design, engineering, and permitting process on select projects. Initial proposals for design and architecture services will need to be gathered. This is work that can begin now so that time critical permitting work can begin.

Eventually, the selection of specialized contractors will need to be secured to provide bid on the work. Some construction companies have already provided preliminary cost information, which we have used to develop the future financial projections included in this report.

Waggoner Marina Services met with Marine Floats, Bellingham Marine, and Transpac Marine, three local builders of docks and marinas. All three are qualified companies with many ideas to contribute to this process. One option would be to select one of the companies through a "Request for Qualifications" process, where they can contribute their expertise to the design and building of the marina and meeting environmental and permitting standards.

Des Moines Marina Redevelopment Study

The Future Trends

The marina redesign should take into consideration two future trends in recreational boating – more twin hulled sail and power catamarans, and electric boats. Catamarans require slips with double the width. At present, catamarans need to be side-tied to the end-ties at the marina, limiting the number of slips available for these vessels. A number of slips could be reconfigured to accommodate catamarans by the removal of a finger dock. Catamaran slip moorage rates will be double the moorage of that for monohull vessels.

Electric boats are a new trend and Des Moines could be one of the first marinas to offer charging stations for electric boats. Des Moines is already moving forward to support electric boats as a result of a grant it received to build charging stations. At present, charging stations have not yet been installed in the marina.

Regulations to protect fish species and other marine life will undoubtedly continue, resulting in more rules, codes, and restrictions regarding in-water construction. Marinas and boats that meet clean, environmental standards will be looked upon more favorably.

There is currently a growing demand for boats and boating destinations. The boating industry took a hit in the recession of 2008 and began a notable recovery in 2020. Boat brokers are seeing an increased demand for boats, which means an increased demand for boat storage. Marine Parks are busier than ever and there is a pent-up demand for additional quality destinations.

Covid-19 Considerations

The recent Covid-19 Pandemic has brought a new definition to normal. We have yet to discover the near-term and long-term effects of this defining-moment in people's lives today. The City should remain flexible over the coming one to two years of the marina redevelopment to adjust and fine-tune as the effects of this unprecedented event unfold.

It is hard to forecast the economic impact on individual boaters and recreational boating; however, initial indications from the first year of the pandemic has shown that boating was stimulated by this recent event. Individuals and families prefer more local recreating in a self-contained form of transportation that incorporates distancing and does not require interaction with large groups of people. Recreational boating offers the security of recreating with household members within their self-contained transportation, overnight accommodations, and food preparation. Boat sales and boating activity was up substantially in the 2020 boating season.

Des Moines Marina Redevelopment Study

Conclusions

In order for the City of Des Moines to rebuild its marina and accommodate the same number of boats and customers, it is necessary to transition smaller boats from in-water storage to upland storage. There is a fixed amount of breakwater-protected water area that is currently filled with a large number of small slips with undersized access fairways. To accomplish any increase in in-water slip sizes, the number of slips needs to be reduced.

The window of opportunity for a marina rebuild is here and the time-frame to move forward is now. Given the long lead times to replace the marina, which is approaching its end-of-life service, it is imperative that planning, permitting, and construction begin before strategic elements are lost. The year 2020 saw boat sales and boating activity increase significantly, with continued demand for permanent boat slips in the 32 to 45-foot range. The smaller 20 to 28-foot slips at Des Moines Marina are not currently returning their full potential revenue; at the same time, a waitlist of several years for larger slips continues. Providing stacked-storage unit(s) for smaller boats on the marina grounds allows for reconfiguring in-water moorage to accommodate additional larger slips that garner higher moorage rates.

Des Moines Marina has an opportunity to be a leader in the redesign/rebuild of a marina, with modern elements, environmental upgrades, and amenities for the enjoyment of the boating public and the community. The timing is right for electric and solar sustainable energy, along with the service of an electric passenger ferry.

The redesign/rebuild of Des Moines Marina will help revitalize downtown by attracting additional businesses and services appreciated by locals and boaters alike. An attractive new waterfront will not only draw in community members, but will also attract guest boaters who come to see and enjoy all that Des Moines has to offer – a good mix of moorage slips/spaces, restaurant venues, a lovely designed promenade, nearby trails and a park, rendezvous opportunities, and public spaces. Maintaining adequate vehicle parking will be a key element to accommodate the increased traffic from those visiting by land. The need for additional guest moorage will also increase as boaters discover Des Moines to be a revitalized, fun destination. The marina may become more active with their Leaseback Program (“hot-berthing” – the use of unoccupied permanent slips during extended periods when the tenant is away) for more guest moorage.

Report Prepared by:



Waggoner Marina Services

Mark Bunzel
Waggoner Marina Services
Waggoner Media Group
Waggoner Cruising Guide

Leonard Landon
Lorena Landon
Waggoner Cruising Guide

Des Moines Marina Redevelopment Study

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