



TOWN OF FRISCO FRISCO MARINA PARK MASTER PLAN

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ACKNOWLEDGEMENTS

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L O G A N S I M P S O N



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Frisco Bay Marina Park circa 2018

EXECUTIVE SUMMARY



Looking north toward boat ramp



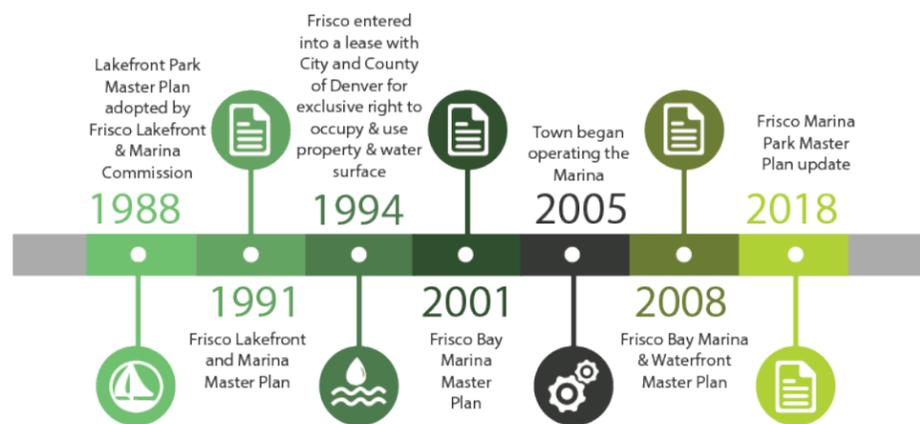
Happy Hour at the Island Grill



Growing demand for "muscle-powered" boats

INTRODUCTION AND BACKGROUND

Since adoption of the first master plan for the marina site in 1991, the Town of Frisco has gradually implemented the community's ideas into the current marina layout. Increased recreational demands in the Town, especially along the waterfront of Lake Dillon, along with rising property values in the surrounding area, make this an opportune time to work with the community to re-envision the future of Frisco Marina Park.



Past Projects Timeline

PURPOSE OF THE PLAN

The Frisco Marina Park Master Plan provides a long term vision based on community input, while also defining actionable steps for implementing improvements to meet short term needs. The Master Plan seeks to balance the use of the site as both a marina and a park, and also looks outside current site boundaries to provide recommendations and a framework for strengthening connections to downtown and adjacent open space areas. The Master Plan includes recommendations for updating the land lease with Denver Water, extending the "Big Dig" program, and anticipating potential future redevelopment of adjacent properties.

PROCESS

The master planning process included an evaluation of existing conditions, recreational and boating use issues, visitor needs, and best practices. The project team, working with Town staff, stakeholders, an Advisory Committee and the public, created alternatives and received feedback which then led to the development of a preferred master plan, which is detailed in this document.

MASTER PLAN

The Master Plan provides an exciting vision for the future of the Frisco Marina Park. Its primary goal is to create a vision for balancing the increasing demand for access to the Town's waterfront with providing a high quality user experience for all visitors. It does so by focusing on several key goals:

- Make the park an extension of Main Street
- Address conflicts to improve public access to the waterfront
- Expand the capacity of the marina for all types of boating
- Better organize uses to improve user experience
- Enhance site and shoreline ecology
- Activate and support year round uses

NEXT STEPS

While the Master Plan is intended to act as a community-supported guide for the Town to implement components of the design as funding allows, it includes steps that can be taken immediately. Phase 1 design has already commenced, and partial funding is in place for components of phases 1 and 2. The plan will also be used to solicit support and funding from various partners and sources. This document is organized into five sections, articulating the project's context, community input, planning process, master plan, and implementation priorities.

COMMUNITY CONVERSATIONS

The Town of Frisco utilizes a process called “Community Conversations” to engage stakeholders and residents in discussions about future projects within the Town. Development of the Frisco Marina Park Master Plan included a robust stakeholder and public outreach program that featured Town staff and stakeholder interviews, an online survey, Advisory Committee reviews, and two multi-day workshops with well attended public open house discussions. Regular project updates were provided on the Town’s website and the Summit Daily published articles about the plan and the process. The community’s input into the master plan was critical to gaining consensus and support for the improvements recommended in this plan.



STAKEHOLDERS

The Town assisted in developing a list of stakeholders who could provide a broad base of input from various perspectives, as well as opportunities and constraints for the project plan. Stakeholders included marina and event staff, public safety personnel, slip holders, boating groups, landowners, w associations and concessionaires. The stakeholders were interviewed in small groups in December 2017. Stakeholders were asked what they liked most and least about the current marina and park, what they thought was missing and what could be improved, and what their vision would be for the best possible outcome for the plan and the place. A full summary of stakeholder input is included in the appendix.

ADVISORY COMMITTEE

The Town convened an Advisory Committee comprised of Town staff and key stakeholders. The Advisory Committee met during the project workshops, prior to the public meetings, and served as a sounding board for plan proposals to identify issues, challenges, and opportunities.

SURVEY

An online survey was linked to the project information on the website between January and March, 2018. Participants were asked twelve questions about important considerations for marina and park improvements. 140 responses were received – most from residents, property owners, and people who work in the Town. A high percentage (61%) use the marina for paddle sports. Another high percentage (74%) visit the park regularly for non-boating activities such as bicycling, events, concerts, and happy hour, while 44% visit regularly for boating activities.

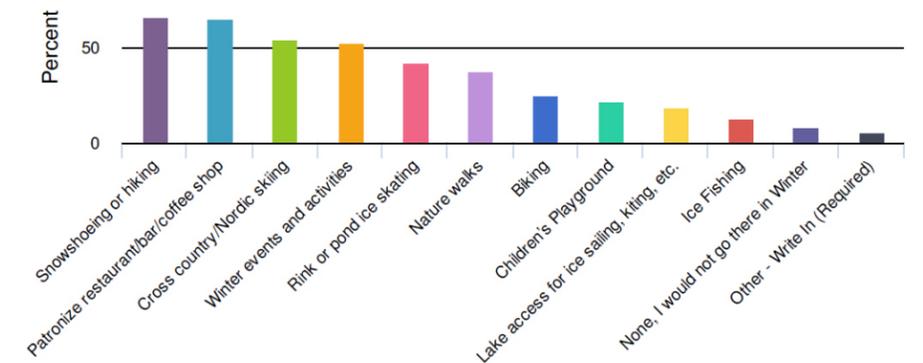
When asked what would be desirable as the marina and park are improved, the responses indicated a desire for areas that support unstructured use, such as public events, activities and areas for picnicking, fishing and walking or biking. Most value a natural landscape with better access to the water’s edge and opportunities for more winter and year-round use. Boating and paddle sports should remain as essential activities and expansion of the popular beach and flexible-use lawn areas is highly desirable.

PUBLIC MEETINGS

Two public meetings were held at the Peninsula Recreation Area Day Lodge. More than 50 people attended the first open house in February 2018 where Town staff and the project team set up several stations illustrating the project’s guiding principles and goals, visual preferences, and conceptual alternatives. Participants were asked to write down their ideas and concerns on sticky notes, and to place green dots on potential park



The Advisory Group participated in developing and evaluating concepts



Survey Question # 9: If the Marina Park was open year round, what activities would you participate in during the winter?

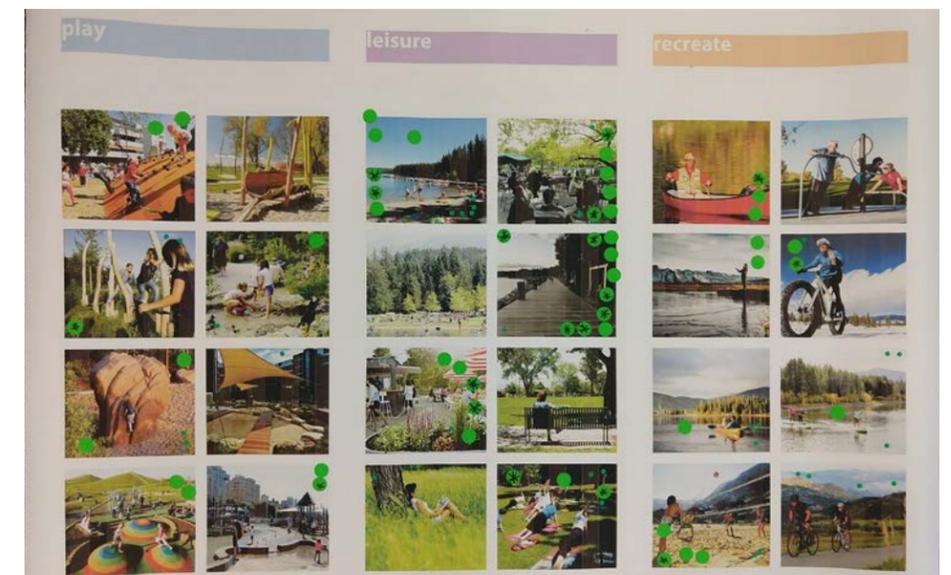
features and programs that they found especially appealing. This public input, recorded in meeting summaries (see appendix), resulted in clear preferences for aspects of the alternative plans and visual preferences that were then incorporated into the preferred master plan concept.

The second public open house was held in April with well over 60 people in attendance. At this meeting Town staff and the project team presented an illustrative plan of a preferred alternative, called "Concept C", along with supporting graphics and narratives, and asked for verbal and written feedback on the preferred plan. Feedback was recorded by the project team and incorporated into the final master plan. In general, participants were excited about, and very supportive of the preferred plan, and brought forward specific comments, concerns, and questions to be addressed in the final plan.

multi-use boathouse community events
 more multi-use areas more open space
 address parking boat size dock amenities
 grassy areas enhanced views traffic congestion
 boathouse storage security and safety improve access
 improve building architecture expand waterfront

Input from Community Conversations

KEY STAKEHOLDER INPUTS (FULL SUMMARY IN APPENDIX)	
Staff	
	Address parking and wayfinding issues
	Keep open spaces available for flexible uses
	Improve connectivity within the site
	Expand waterfront access for all
	Expand the marina operations building and add restrooms
	Address site safety concerns and improve emergency access
	Balance park and marina uses
Public Safety	
	Proximity to off-site propane storage tanks is a concern
	Address increases in vandalism
	Improve lighting
Slip Holders and Boaters	
	Improve access and facilities at docks
	Provide power, water, wifi and dedicated restrooms
	Consider preferred parking for slipholders and renters
Concessionaires	
	Need more kitchen area and storage at Island Grill
	Consider dedicated parking for different uses
	Consolidate rental operations
Rowing Club	
	A boathouse is desirable, potential to combine with kayak/canoe/SUP storage
	Willing to partner with Town to improve facilities
	provide better separation of "muscle-powered" from motorized boats
Others (residents and businesses)	
	Strengthen connection from park to Main Street
	Improve entry and wayfinding
	Promote better land uses along Summit Boulevard
	Encourage and support more year-round activities
	Consider relocating winter boat and snow storage to off-site locations
	Keep the plan simple - provide more beach access
	Relocate playground closer to food and beverage
	Keep the character real/authentic to Frisco



Members of the public provided feedback at the open houses

SITE CONTEXT AND EXISTING CONDITIONS

OVERVIEW

Frisco Marina Park is located on the shores of the scenic Lake Dillon at an elevation of 9,017 feet above sea level (ASL) in Frisco, Colorado. The lake spans 3,300 acres, with 25 miles of shoreline, and serves as the largest storage facility for the Denver Water Board, responsible for 25% of Denver's drinking water. Frisco Marina Park occupies approximately 10 acres, accessible from the intersection of Summit Boulevard (SH9) and Main Street/Marina Road. Marina Road is an extension of Main Street following the old alignment of the highway to the Town of Dillon prior to the creation of the Dillon Reservoir and Recreation Area. The Marina Park includes 3.26 acres of Town-owned land with the remaining leased from the Denver Water Board for recreation purposes. The Marina is operated by the Town as an Enterprise Fund, and retains staff to operate the marina, and maintain and secure the park.



Location Map



Above: The Marina Park is a gateway to Frisco.
Below: Summit Boulevard is a barrier from Main Street.



Above: The marina is one of two primary boat access points to Lake Dillon.
Below: The marina is used extensively for boat and snow storage in winter.





Project Site Context and Environmental Influences Map

SITE CONTEXT

The Town of Frisco is 1.7 square miles in size with a population of 2,683 based on the 2010 census. It is surrounded by vast public open space areas including the Peninsula Recreation Area (PRA) which is part of the larger White River National Forest. The Town continues to experience rapid growth resulting in development pressure, increased traffic, increasing property values, and higher demand for recreational use of open space, especially along the lakefront. The marina and park have seen increasing demands for public use, especially during the summer season, on weekends, and for special events, resulting in wear and tear, inadequate facilities, traffic congestion, and parking challenges.

The Project Site Context Map at left is used to demonstrate environmental influences that might affect use and programming including:

- Sun angles throughout the year
- Prevailing wind directions
- Access and connectivity
- Conceptual hydrology
- Surrounding land uses

EXISTING AREAS AND AMENITIES	
Total Land Area	7 acres
Flexible Use Open Space	1.5 acres
Accessible Shoreline	50 linear feet (beach)
Paved Parking	187 plus 25 spaces for vehicle with trailer
Docks/Boat Slips	140
Boat Storage Racks	222 (kayaks, canoes, SUPs), 120 on waiting list
Buildings	Lund House (marina operations), Island Grill (food and beverage), restroom addition, trailhead restroom, several small sheds for rentals and equipment storage

SITE CONTEXT AND EXISTING CONDITIONS



Existing Land Use

EXISTING CONDITIONS

Land Use

Frisco Marina Park is recognized as a marina first, providing one of two primary access points for larger boats to the lake. It also serves as an important recreational amenity for the Town of Frisco, providing a unique open space with panoramic lake and mountain views. Frisco Marina is one of the few places in Colorado where visitors can experience a lakefront in such close proximity to downtown shops and restaurants.

The areas owned by and leased from the Denver Water Board include areas in the 100-year floodplain and designated wetlands, administered by the US Army Corps of Engineers. The water elevation is controlled by the Denver Water Board to meet downstream water needs, so the level fluctuates between the high water (spillway) elevation of 9,017 ASL and a low water average elevation of approximately 9,007 ASL. Fluctuating water levels limit the ability of the marina to function beyond the normal, lake full summer season between June and September. The Federal Emergency Management Agency (FEMA) 100-year floodplain (approximate elevation 9,025 ASL) limits the location and elevation of occupied buildings on the site.

Adjacent uses include two commercial properties that are privately owned, and the Town's sanitation district wastewater treatment plant. The site is contiguous to open space managed by Dillon Reservoir Recreation Committee (DRReC), an interagency committee that manages Lake Dillon and many of its adjacent properties. The 807-acre Peninsula Recreation Area (overseen by the Town of Frisco, US Forest Service, and Denver Water) includes hiking, biking, Nordic skiing, tubing, and other adventure sports.

A vacant Town of Frisco-owned parcel (parcel B-1) at the southeast corner of Summit Boulevard and Marina Road, the former site of Bighorn Lumber, is used primarily for overflow parking and several food and craft vehicles have established there seasonally, selling fresh produce and local crafts. Part of the park site is set aside as a cemetery, and the non-park parcels along Summit Boulevard are zoned for mixed use development. Another vacant parcel (B-2) is owned by the Frisco Sanitation District and reserved for potential future expansion of the Frisco Water Treatment Plant and a buffer to the park. The Town has held an agreement with the District that allows for certain park uses of this parcel, as well as an easement for future access from the District's property to Marina Road.



Site Environmental Conditions. See Appendix for Wetlands Map

Environmental Conditions

Much of the shoreline is identified as wetlands, although the fluctuating water levels and tributary streams result in highly variable wetlands quality. The Frisco Marina Park site and adjacent lands were reviewed by AlpineEco in May 2018 to generally identify wetland areas and assess their condition. Wetlands were identified by the presence of hydrophytic vegetation and presence of wetland hydrology (hydric soils were assumed), and mapped. Wetland functional condition was generally assessed using the concepts presented in the Functional Assessment of Colorado Wetlands (Johnson, et al. 2013). Plant nomenclature in this document follows the National Wetland Plant List (Corps 2018).

Approximately 5.5 acres of wetlands were mapped in the study area. About 3.1 acres of the wetlands are dominated by shrubs and are classified according to Cowardin, et al. (1979) as palustrine scrub-shrub (PSS). Various species of willow (*Salix* spp.) dominate most areas, with some thinleaf alder (*Alnus incana*) also present. The remaining 2.4 acres of wetlands areas are dominated by herbaceous species (grasses, forbs, and grass-like species) and are classified as palustrine emergent (PEM). Some of the most common species present in these wetlands include leafy tussock sedge (*Carex aquatilis*), Northwest Territory sedge (*Carex utriculata*), bluejoint (*Calamagrostis canadensis*), and Baltic rush (*Juncus balticus*).

Most of the PEM wetlands are found in the lowest portions of the study area, mainly around the perimeter of Lake Dillon and along the immediate edge of Ten Mile Creek and other tributaries of the lake. These wetlands are mainly supported by water in the lake and creeks directly, through flooding and capillary action. Supplemental water is provided by direct precipitation (including snowmelt) and stormwater runoff for those wetlands close to the marina parking lots or otherwise in the direct flow path of water from SH9, Main Street, or other areas of development.

Many of the PSS wetlands are too high above the normal water surface elevation of Lake Dillon to be primarily supported by the water in the reservoir. They appear to be mainly supported by high groundwater associated with the greater historic Ten Mile Creek/Miner's Creek floodplain, although the wetlands are close enough to the lake that their groundwater elevations are likely influenced by changes in lake water levels. Supplemental water for these wetlands comes from direct precipitation (including snowmelt) and stormwater runoff from the marina parking lots, SH9, Main Street, and other nearby developed areas.

Although a detailed assessment of wetland functional condition was not performed for the wetlands in the study area, based on the concepts presented in FACWet, most of the wetlands are considered "Functioning" or a letter grade of "C." FACWet is a stressor-based approach to rating functional condition and measures a wetland's departure from reference condition. A reference site would be considered "Reference" and receive a letter grade of "A," whereas a severely impaired wetland would be considered "Functioning Impaired" and receive a letter grade of "D" ("F" is reserved for those sites that are no longer considered wetland because the stressors are so severe).

The main ecological stressor that reduces the overall functional condition of the wetlands is the general lack of a natural water regime. Nearly all the wetlands have altered vegetation composition from being over saturated (mainly by flooding from the lake) or being dewatered (either by lake draw-down or by the presence of infrastructure that has reduced and/or diverted groundwater and surface water inputs). Other key stressors observed include the presence of infrastructure (SH9, bike path, marina, cemetery, water treatment plant, etc.), including the lake itself that creates barriers for wildlife moving between the wetlands in the study area and other adjacent wetlands; the presence of historic and recent fill, ditches, and other geomorphological changes within the wetlands that have either caused the direct loss of wetlands or degradation by altering water distribution within the wetlands; potential water quality concerns from receiving direct runoff from developed areas; and numerous social trails in and around the wetlands that indicate the regular presence of people (especially north of the marina) which will reduce overall wildlife use and often cause minor impacts to vegetation.

ACCESS AND CIRCULATION



PEM Wetland North of the Marina



PSS Wetland South of the Marina



PEM Wetlands North of the Marina Stressed by Water Fluctuations

SITE CONTEXT AND EXISTING CONDITIONS

Frisco Marina Park is accessible from Summit Boulevard (SH9) at the intersection with Main Street. SH9 is administered by Colorado Department of Transportation (CDOT), who is in the process of improving the section from Main Street to points south as part of what they call the "Gap" Project. The Gap project will result in the removal of the southbound free right turn lane onto Main Street, and reconstruction of the intersection to, among other things, improve access for pedestrians and bicyclists.

The Gap Project

In August 2017, CDOT conducted an evaluation of SH9 from mile post (MP) 94.36 (south of Peak One Drive) to MP 96.25 (North of Main Street) to provide geometric, access and traffic control recommendations to improve operations along SH9. The study included the following recommendations for the SH9 and Marina Road/Main Street intersection:

- Replace the southbound right-turn by-pass lane with a non-channelized right-turn deceleration lane to better accommodate bicycle and pedestrian activity on the north side of Main Street
- Add a pedestrian phase across Main Street

The Town of Frisco's 2017 Trails Master Plan identified SH9 as a barrier between most of Frisco and the waterfront. The primary issue identified at SH9 and Marina Road/Main Street is getting bicycles and pedestrians safely across SH9. The intersection currently provides crosswalks on the south and east legs of the intersection. Bicycles using the Rec Path are currently directed to the south side of the intersection to cross.

During the summer, traffic counts indicate approximately 45 vehicles travel to/from the marina during the AM peak hour and approximately 50 vehicles during the PM peak hour. The heaviest movements at the intersection are the southbound right turn and the eastbound left turn; these movements highlight the heavy pattern of traffic traveling between downtown Frisco to/from the north on SH9.

Parking

Availability of parking, especially for events and peak weekends, has been identified as a major concern to be addressed in the plan. The Marina Park site has a current capacity of approximately 300 parking spaces broken into four distinct areas: the South Parking area, serving the boat ramp, consists of 72 vehicle spaces and 25 vehicle/trailer spaces. The North Parking area, serving the park and playground areas, consists of 88 vehicle spaces. The Trailhead area includes 26 vehicle spaces. Parcel B-1 is a gravel area that serves informal overflow parking for approximately 120 vehicles.



Access and Circulation

Bicycle and Pedestrian Access to the Waterfront and Marina Amenities

Bicycles and pedestrians currently have limited access to the waterfront. The existing site configuration presents the following challenges for bicycles and pedestrians:

- Lack of direct bicycle and pedestrian connections to key marina amenities and the waterfront
- Lack of pedestrian facilities along Marina Road and Summit Boulevard
- Mixed uses on the existing Rec Path (e.g., bicyclists passing through and marina users)
- Concentration of bicycle parking all in one area

Boat Launch

The existing boat ramp is located at the east end of the marina and launches boats on the north side of the pier. Challenges with the current location of the boat launch include:

- Clockwise circulation at the boat ramp does not meet driver expectation and creates a conflict for entering and exiting vehicles.
- The tight turning radius at the curve at the east end of the south parking lot prior to accessing the boat launch cannot easily accommodate large/emergency vehicles.
- State inspections for all boat launching requires ample space for queuing and visibility from marina operations building.
- Vehicles waiting for the boat launch need a better waiting/queuing area.
- Challenges with mixed small and large craft launching occur at the same location.



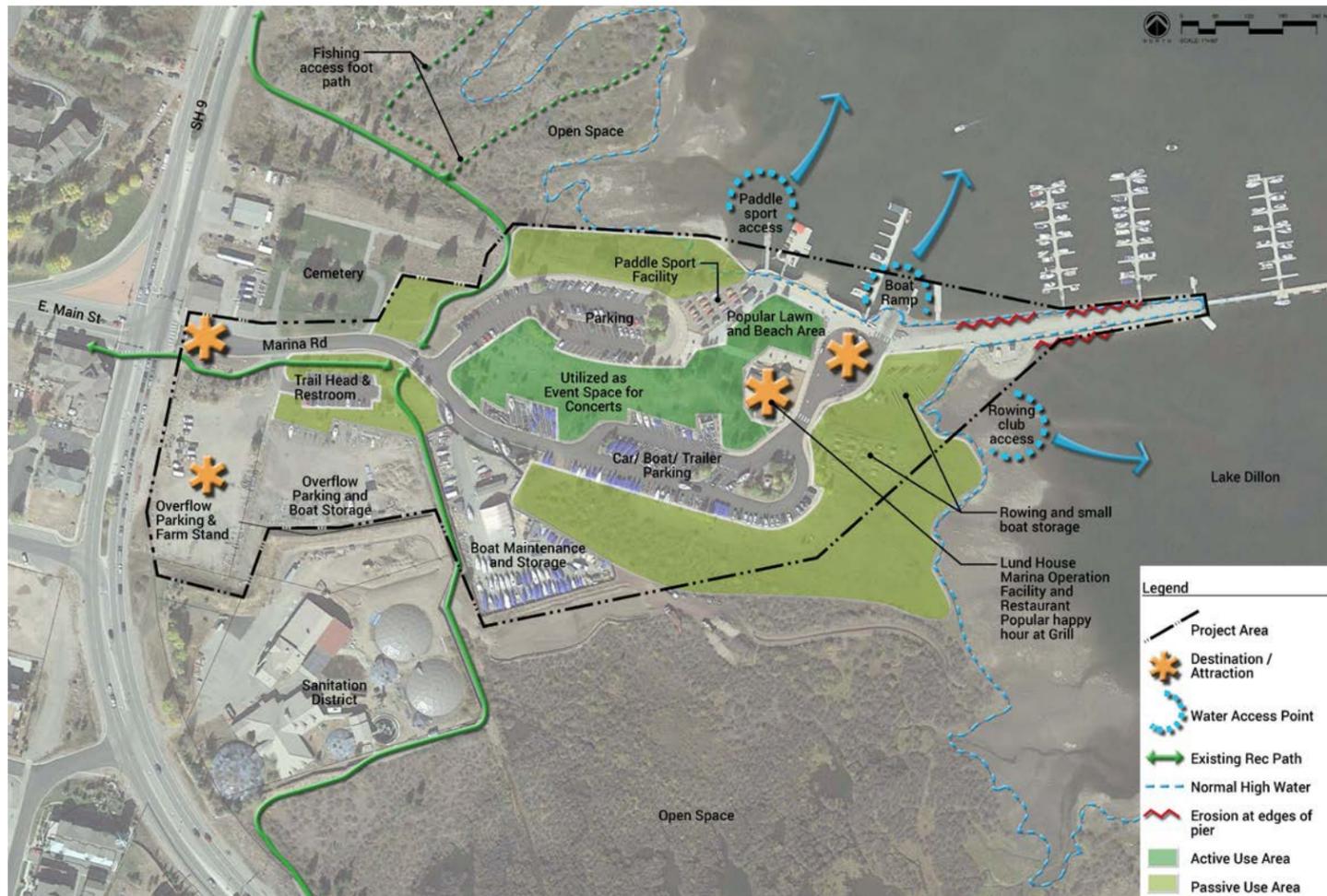
Bicycle parking is often at capacity.



Finding parking is a challenge during events



Boat ramp is a conflict area that divides use areas.



Warm Season Recreation

RECREATIONAL USES

The Town has invested in facilities and programs that have activated a variety of recreational uses within the park. Recreational uses of the Marina Park are heavily skewed to the summer season, when the marina is also operational. The marina provides access and support for boaters, such as seasonal slip rentals, non-motorized and motorized boat rentals, and transient dock space, along with marina retail, repair, and operations support. Non-marina uses include passive recreation such as dog-walking and picnicking, more active uses such as bicycling and children's play, and programmed events such as the Fourth of July fireworks.

Park Uses

Frisco has consistently sought to balance park and marina uses. The current layout of the park, along with the success of the marina, has reduced the area available for land based recreation. There is currently approximately 60,000 square feet (15% of park area) that is available as open space for recreational use. Of approximately 700 feet of shoreline only about 50 feet is currently accessible. Parking, access roads, boat ramp, buildings, storage areas and native and wetland landscapes constrain use areas.



Cold Season Recreation

Buildings

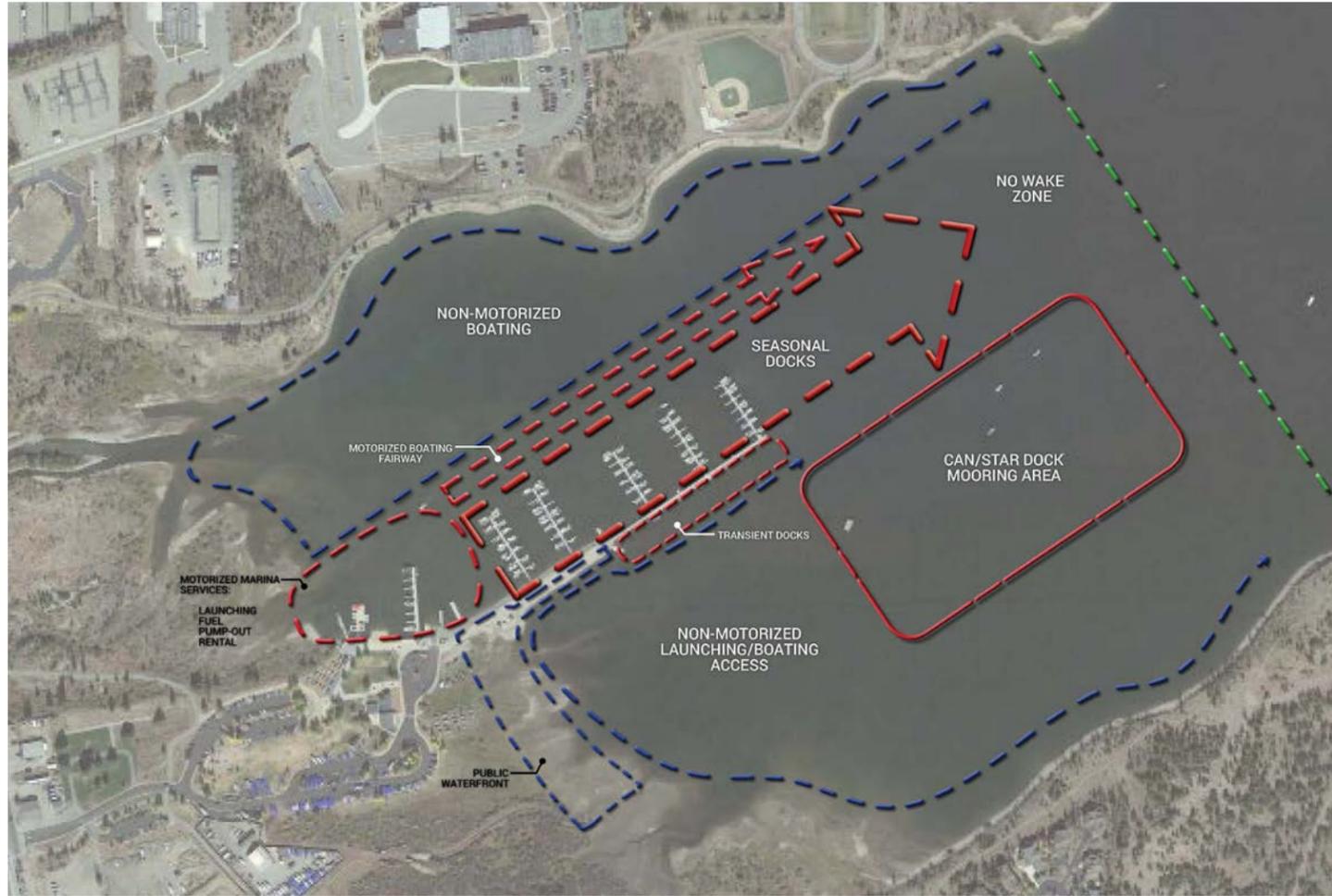
The Town is currently planning an expansion of the Marina Operations Building, currently housed in the Lund House. Other facilities include the restroom building, the grill, the boat maintenance facility and the trail head restrooms, along with several small ticketing kiosks and storage sheds. Current and prior assessments indicate that the operations building is undersized and obsolete, and should be updated to accommodate the services that are provided by the Town's marina staff and vendors.

Marina

Frisco Marina Park is home to approximately 140 seasonal slips ranging in size from 25'-30', spread evenly across five piers accessed by a main central walkway. The docks are a galvanized steel frame system with wood decking and HDPE tub flotation. Anchorage of the dock system utilizes an adjustable steel cable winch system attached to a concrete mass anchor, which allows the marina anchorage to be adjusted to accommodate a wide range of water levels. The slips are not provided with water or power utilities, which along with the relatively small size of the slips, limits access to larger vessels.

As the changing seasonal reservoir levels currently require the docks to be relocated farther out into the reservoir for winter, a tremendous amount of labor and expense is required to reposition the docks each year. Due to the typically late time period in which the reservoir fills, the

SITE CONTEXT AND EXISTING CONDITIONS



Existing Marina Layout

docks cannot currently be placed in the desired location until early July, which effectively cuts the marina season in half. In some years, the docks are moved multiple times to accommodate the water levels. These low water levels are one of the biggest concerns that must be addressed.

The marina also provides swing moorings, power boat rentals, and a fuel dock with sanitary pump-out, as well as dry storage, winter storage, mechanical services, and haul-out that add to the range of services that make the marina a success. In addition, the marina offers extensive on site storage and rental opportunities for non-motorized boating activities such as kayaks, rowing vessels, canoes, and stand up paddle boards.

Parking for seasonal slip holders is limited, and the current vehicular configuration placing the boat launch as the closest point of access to the marina creates extensive vehicular circulation conflicts that limit the effectiveness of the launch. Additionally, these conflicts create potential safety impacts for pedestrians and cyclists. The overall organization of the marina on the water also creates a range of potential conflicts, with most of boating activities located on the north side of the central pier. With this

concentration of motorized and non-motorized boating activities all sharing the same fairways, conflicts are inevitable. The challenges are exacerbated by a mix of more experienced seasonal boaters and less experienced power and non-motorized rental vessels sharing the area with the boat launch and fuel dock.

Boater services, such as showers, restrooms, marina office, etc. are currently insufficient to meet the needs of either the boaters or marina staff.

Overall the quality of the marina location itself is exceptional, and is quite possibly the most attractive marina settings in all of Colorado. The site has great potential, and the existing infrastructure is well maintained and serviced by knowledgeable and friendly staff.



KEY CONCLUSIONS

- The boat ramp is in the wrong place, dividing the park.
- There is too much parking too close to the water's edge
- Pedestrian and bike access to the waterfront is weak
- Leverage the CDOT Gap project to improve pedestrian access at Summit and Main Street
- Buildings should be closer to the waterfront
- Boat storage buildings would reduce clutter and protect boating assets
- Park open spaces are too small and have limited use
- People want to be able to get to the water's edge

MASTER PLAN PROCESS



DATA GATHERING, INVENTORY, AND ASSESSMENT

The project team used a combination of methods to develop a better understanding of the context, conditions, and needs and to facilitate the outcomes of the master planning process. Analysis and assessment included collecting and reviewing prior master plans for the site, as well as other relevant plans that might impact the Marina Park, reviewing land uses, topographic surveys, and documenting existing conditions with photos and plans. Existing conditions plans were organized into site context, access and circulation (with parking), land use, environmental conditions, and recreational uses (summer and off-season).

A base plan representing existing conditions was developed from available Geographic Information System (GIS) sources and from materials and maps provided by the Town. The conditions assessments served as a basis for identifying opportunities and challenges, which were then addressed in developing the conceptual alternatives. A review of opportunities and challenges identified internal and external conditions, conflicts and ideas that suggest change or adaptation for new or expanded facilities and programs. Market based opportunities for development or redevelopment of nearby and adjacent land, along with other Town plans and initiatives, are considered as they may impact access, parking and infrastructure needs for the Marina Park.

COORDINATION WITH RELATED PLANS

Marina Operations Building

Mathew Stais Architects has been commissioned to review current space and program needs and to design the marina office/retail/restroom space known as the Marina Operations Building. The existing facility (the Lund House), was moved to the site in 1997 and adapted for its current uses. The restroom building was added in 2007 to provide capacity to support the park and marina.

The Big Dig Project

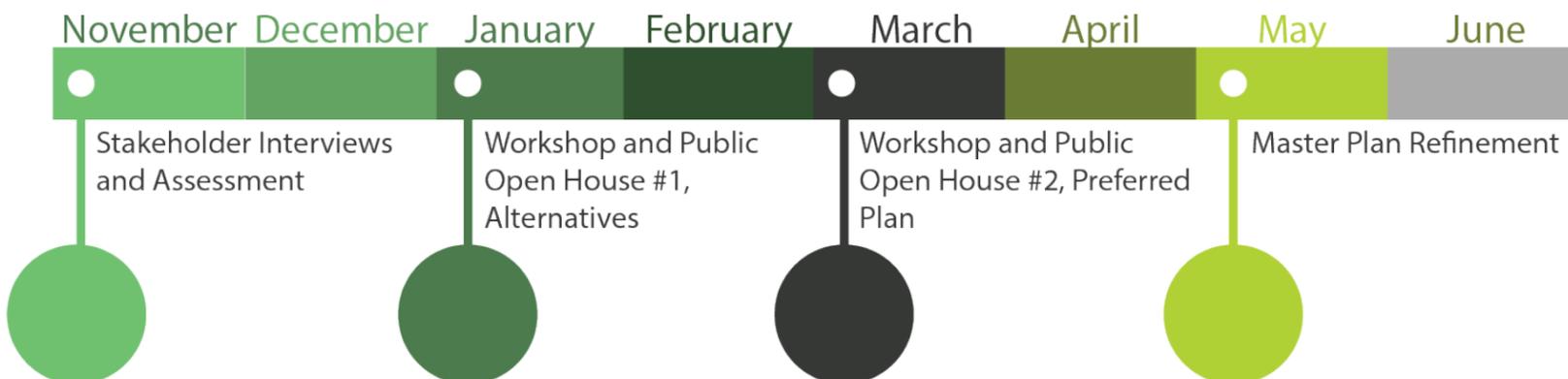
In 2013, the United State Army Corps of Engineers (USACE) approved a permit to authorize the excavation of up to 75,000 cubic yards of lakebed to allow for improved navigation at the marina and expand the recreational facilities at the marina. The permit, which expires in 2019, allows the Town to excavate up to 75,000 cubic yards of material below the ordinary high water mark to add depth to navigable areas. The permit currently requires the excavation to take place in-the-dry, limiting its timing to a drought condition when the lake would be drawn down much lower than normal. It also requires all fill material to be deposited below the normal high water line limiting its use for upland improvements. Use of material must occur in unvegetated lakebed below the normal high water elevation of 9,017 ASL.



Marina Layout Diagram B

Other plans impacting potential project outcomes include:

- Denver Water Board: The Town's lease with the Denver Water Board stipulates the use and terms under which operations of the Frisco Bay Marina occurs. The current lease was renewed in 2013 and expires in 2024.
- PRA: A master plan update for the Peninsula Recreation Area is underway, proposing improved trails and amenities.
- Town of Frisco Trails Master Plan: In March, 2017 the Town of Frisco approved a trails master plan which recommends expansion of the trails connecting to the Marina Park site from the PRA, the existing rec-path and across Summit Boulevard to Main Street.
- Town Community Plan: The Town recently hired a consultant to update the Frisco Community Plan. Elements of the Community Plan may impact proposed land uses in and around the Marina Park.



MASTER PLAN PROCESS

COMMUNITY ENGAGEMENT

Community Conversations were utilized at key touch points during the master planning process to engage residents and stakeholders through communication, input, and review. The Community Conversations for the master plan included stakeholder interviews, advisory committee reviews, an online survey and two public open houses. The discussions focused on the expectations, hopes and concerns for the future of Frisco Marina Park. The following matrix identifies how the alternative concepts were ranked as they best met key project goals.

GUIDING PRINCIPLES, VISION, AND GOALS

The project team established several premises, which evolved into guiding principles for the development of the master plan. Vision and Goals were developed during the first workshop and reviewed with the advisory committee and the public at the second. A multi-day workshop format was employed to flesh out opportunities, develop alternatives, and refine them into a vision, goals and strategies – a master plan - that were then reviewed by the Advisory Committee, stakeholders and the public. The Master Plan is organized into four key areas that communicate the response to project goals and metrics:

- Access and Circulation: addresses the ways that people get to the park, and how they get around once they are there. This element addresses access to the park from Main Street and relocation of the boat ramp to enhance access to the lakefront.
- Land Use: identifies existing and potential land uses, based on zoning and compatibility with the park and Town policies and incentives.
- Ecology: identifies potential impacts on natural resources, need for permits and approvals for the proposed changes to the marina, and project goals for mitigation, restoration and enhancement of natural systems.
- Recreational Use: includes a detailed program for park and marina uses, including buildings, support facilities and year round activation.

Conceptual Alternatives were developed and reviewed to explore the range of opportunities. Evaluation Criteria, based on project goals, were used to evaluate each concept against the intended outcomes.

SUCCESS METRICS

In order to measure future successful implementation of the plan, certain metrics for success were developed. The metrics must be measurable and result in positive change consistent with the goals of the project.

SUCCESS MATRIX	CONCEPT		
	Concept A	Concept B	Concept C
Improves Access	■	■■■	■■■
Expands flexible green space	■■■	■■	■■■
Expands accessible shoreline	■■	■■■	■■■
Improves level of service for boaters	■■■	■■	■■■
Increase rate of return for Town's investment	■■	■■■	■■■



Concept A, The Great Lawn



Concept B, Big Shoreline



Concept A: Marina Layout Diagram



Concept B: Marina Layout Diagram



CONCEPT REVIEW

Two conceptual alternatives were developed and reviewed and compared against a no action baseline condition, to explore a range of options and test stakeholder concerns and support for each. Concept A, called The Great Lawn, and Concept B, The Beach, examined alternatives based primarily on possible locations of the boat ramp and the Marina Operations and Food and Beverage buildings. Concept A located the boat ramp to the northwest side of the site at the end of the existing north parking area, and located the buildings as close to the water's edge as feasible. Concept B explored a ramp location at the southeast end of the site and the buildings being reconstructed in approximately their current location. Pros and cons of each alternative were reviewed with the public and stakeholders and are summarized in the following table.

ALTERNATIVES COMPARISON					
	Parking	Ramp Location	Flexible Open Space	Accessible Shoreline	Cost
Baseline - Existing Condition	187	Central	1.5 acres	50 lin ft	\$
Concept A - Great Lawn	350	North	3.5 acres	350 lin ft	\$\$\$
Concept B - The Beach	300	East	3.0 acres	600 lin ft	\$\$
Concept C - Lakefront (preferred)	300	East	3.0 acres	600 lin ft	\$\$



MASTER PLAN

A third concept was developed based in the feedback from the prior two, Called Concept C, or "The Lakefront", this hybrid places the boat ramp at the southeast corner of the site and the buildings closer to the lakefront. This arrangement has several advantages that will be more fully detailed in the next section.

IMPLEMENTATION

The master plan is intended to provide a long term vision for improving the Frisco Marina Park with the support of Town residents and stakeholders. The plan is aspirational and intended to be more fully designed and developed over time as resources and partnerships become available. The remainder of this document describes the recommended approach to designing, budgeting, phasing and executing the master plan with additional opportunities for public input and updates over time.

FRISCO MARINA MASTER PLAN

GUIDING PRINCIPLES

The following principles guided the development of the final Master Plan:

- Balance water-based and land based recreational uses
- Expand capacity and improve level of service for boating at the marina
- Address access, circulation and parking conflicts and improve access to the lakefront
- Make the Frisco Marina Park an extension of Main Street and connect to downtown Frisco
- Better organize facilities and uses to support high quality visitor experience
- Enhance waterfront ecology
- Support year round activities and leisure uses

THE BIG IDEA

Early in the planning process the alternative concepts identified three key questions that drove development of the Master Plan:

- How can the amount of space available for flexible use recreation and shoreline access be optimized?
- What is the best location of the boat launch ramp – for boaters? For inspectors? For other park users?
- Where should the marina operations/food and beverage buildings be located to best serve the needs of marina staff and concessionaires?

MASTER PLAN

The Master Plan is the result of analysis of existing conditions and program needs, establishment and refinement of project principles and goals, creative development and review of alternative scenarios, and refinement of phased strategies for early wins and longer term investments.

Character

Public and stakeholder input strongly suggested that people like the look and feel of the existing marina and park and that a “light touch” should be used in future improvements. The Town of Frisco has a unique architectural vernacular – which could be described as mountain rustic – that will be applied in future architectural additions at the Frisco Marina Park. Based on feedback from the visual preference boards reviewed at the public open houses it was clear that certain precedents are desirable in the updating and expansion of marina and park facilities and services.



Access and Parking

Access and parking has been identified as one of the biggest challenges with the current site arrangement. The plan addresses these issues by improving the intersection at SH 9 and Main Street/Marina Road, and by relocating and expanding the amount of on-site parking available for marina and park use. It is important to recognize that pavement for parking is not the best use of shoreline areas, and that by selective relocation, pushing it farther from the water’s edge, additional capacity can be realized for both parking and recreational use of lakeshore areas.

The Master Plan anticipates potential changes in the way people in Frisco will get around in the future, to accommodate intuitive and safe access for various modes of travel, and reduce the need to expand parking significantly. It is anticipated that a revival of the “Frisco Flyer” shuttle may eventually connect both ends of Main Street with a terminus at the marina, and that ride sharing and alternative fuel vehicles should be accommodated at the Frisco Marina Park.

The Master Plan identifies several pedestrian and bicycle enhancements that complement and build on the recommended CDOT design for SH 9 and Main Street/Marina Road. Recommendations include:

- Providing crosswalks on all legs of the intersection and a pedestrian-actuated phase for the east-west movement
- Modifying the west leg approach and southwest corner curb line to eliminate crosswalk skew
- Modifying the east leg approach to remove travel lane skew for

PARKING AND BOAT STORAGE		
	Existing	Preferred Alternative
General Parking	187	346
Trailer Parking	25	30
Handicap Parking	6	8
Secure Boat Storage	50	50
Boat Storage	100	50
Snow Storage	80,000 SF	30,000 SF

- east-west vehicles crossing SH9
- Extending the Rec Path connection to the marina across SH9 (consistent with the Trails Master Plan)
- Adding bicycle signal and bicycle detection for east-west bicycle movements
- Increasing the pedestrian waiting area on the southeast corner of SH9 and Marina Road/Main Street
- Providing an enhanced pedestrian facility on the south side of Marina Road/Main Street

The Master Plan includes pedestrian enhancements on the south side of Main Street/Marina Road to encourage pedestrians to use the south crosswalk at the intersection. Providing a high-quality pedestrian facility and crossing on the south side minimizes potential pedestrian-vehicle conflicts for the heavy southbound right and eastbound left turn movements. When actuated, the bicycle and pedestrian crossing phases will reduce the green-time available for conflicting vehicle movements which may result in additional delay for vehicles at the intersection.

Within the Frisco Marina Park the Master Plan recommends the following enhancements to improve vehicular, bicycle, and pedestrian access:

- Provide an alternative to the existing Rec Path along the east side of Summit Boulevard connecting north and south of the Marina Park. This will reduce the amount of bicycle traffic crossing Marina Road within the park.
- Extend multi-use paths through the site to provide access to the marina, lakefront and other park amenities, and to create sub-loops for internal circulation and recreational use.
- Provide additional wayfinding signage for bicyclists and pedestrians to navigate to and within the Marina park site.
- Parcel B-1 and the north lot will provide for an increase in vehicle parking supply, with slightly reduced parking in the south lot to support marina, restaurant, drop-off and boat launch circulation. The increased parking total allows for maintaining a consistent parking supply if Parcel B-1 is developed.
- Pave Parcel B-1 (current overflow parking) to add approximately 160 spaces. If the Town were to determine that this site should be redeveloped, the master plan includes a wrapped parking structure to accommodate the Marina Park, development-related parking, and perhaps additional parking needs for downtown businesses. Access to the development would require access evaluation per CDOT requirements.
- On site parking is expected to continue to operate at capacity; the proposed changes are designed to improve vehicular circulation and access throughout the site.
- Moderate increases to the parking supply, while not anticipated to meet parking demand, may result in increased vehicular traffic on site and at the SH9 and Marina Road/Main Street intersection. Providing real time parking available signing/information may help reduce additional vehicular activity related to vehicles looking for parking.
- Provide dedicated parking and charging stations for electric vehicles.

Recreation and Leisure Uses

Available outdoor public spaces for recreation and leisure are at a premium in Frisco, especially along the lakefront. The master plan recommends activities that complement recreation opportunities provided elsewhere in the Town, including the PRA and the Main Street retail district, providing areas for enjoyment of the spectacular views, and the site's unique access to the waters of Dillon Reservoir. The master plan effectively doubles the amount of flexible use open space within the park by utilizing the Big Dig as an opportunity to relocate the boat ramp and existing parking farther from the shoreline and pier. This allows for needed separation of people and cars, with unencumbered recreational use of internal park and shoreline areas. The playground is relocated closer to the food and beverage to allow parents to enjoy food and view while keeping an eye on the kids.

OUTDOOR WINTER STORAGE		
	Existing	Proposed
Boats	100	50
Secure Boats	50	50
Snow	2 acres	0.5 acres

The Great Lawn is expanded to accommodate more people for events and concerts, along with a sculpted hill that allows climbing, sliding, and access to extraordinary lake and mountain views. Internal park open space areas are better connected directly to the beach and the pier at the lake edge. An area near the pier and food and beverage supports a summer splash pad and winter ice skating, and pavilions provide shaded overlooks near the cove and at the end of the pier.

A primary goal of the Master Plan is to create opportunities for year round use of the park and access to the reservoir. The repositioning of the boat ramp and parking areas create more flexible-use open space and better trail connections that promote year round use. Equally important however is the reduction of winter storage at the site. Currently winter storage of boats and snow create conditions that limit access and create security and safety concerns. The Master Plan recommends moving a majority of the snow storage off site (this is being addressed in a separate plan), and reducing the amount of boats stored on site.

Improvements support continuation and expansion of current programming for events such as the sand castle competition, Rock the Dock party and the Fourth of July fireworks display. Opportunities for winter use include winter festivals similar to the ice castle that the Town of Dillon hosts, a pond skating rink, possibly covered, a sliding hill and vastly improved pedestrian with year-round visual access to the pier and waterfront.

Marina and Boating Facilities

The Master Plan proposes a range of improvements to the marina infrastructure that are intended to expand access to the waterfront, enhance boater enjoyment of the marina through the addition of modern marina amenities, and update the facilities to comply with all current codes and marina standards, and reorganize the layout of the marina to reduce conflicts between motorized and non-motorized boaters.

The overall reorganization of the marina relocates the seasonal slips and boat launch to the south side of the main pier, immediately opposite where they are today. The north side of the pier will be dedicated to boat rental, fueling, transient docking, and all non-motorized boating activities. This structure separates the majority of the motorized boaters from the non-motorized

boaters, as well as separating the "resident" seasonal boaters from the transient and rental boaters. Conversations with the boating community suggest that this organization will greatly reduce conflicts on the water and make the area much safer to navigate.

The completion of the Big Dig project will transform the operation of Frisco Bay Marina by creating navigable water depths at water elevations as low as 9,000 ASL, greatly expanding access to the waterfront and extending the boating season. In a typical year, this would allow the docks to be relocated in their normal summer position in early May and provide the seasonal slip renters with a full boating season in the marina, allowing the marina to overcome its greatest current limitation.

Access to the floating docks is reorganized to simplify relocation and placement of the docks, enhance security, and facilitate expansion of utilities. This is achieved by organizing access to the floating docks from "marginal walkways", which are linear floating docks that run parallel along both the north and south sides of the main pier. These walkways are accessed from upland areas via 80' long ADA compliant gangways and ADA compliant parking and pathways throughout the upland areas. Additional modifications to the existing docks to achieve compliance with the 2010 ADA Standards for Recreational Boating include providing an appropriate number of 5' wide finger piers, appropriate landings and door handles on all access gates, and compliance with appropriate reach range requirements on all pedestals.

MARINA BOAT SLIPS		
	Existing	Proposed
Seasonal Lease	140	162+
Rental	14	14+
Moorings	40	40

The Master Plan proposes adding one new pier of 22 slips that are 35'-40' in length, with utilities, and extending the utilities to at least one of the existing piers that currently have 28 (30' long) slips. This initial installation of utilities will serve as a "test market" for utilities in the marina, and indicate whether further expansion of utilities to other slips is necessary. Should additional utilities be desired in the future, the marginal walkways provide a flexible structure by which electrical and water utilities can be extended throughout the marina easily and cost effectively. All electrical utilities will be compliant with all current standards for electrical distribution to reduce the risk of Electrical Shock Drowning (ESD). ESD occurs when a person in the water encounters stray electrical current that enters the water - most often from a boat, but occasionally from the docks. If the current exceeds 30mA, the person in the water can become paralyzed and drown. This is prevented through installation of marina electrical infrastructure with appropriate ground fault interruption at all distribution points, making it nearly impossible for stray current to enter the water.





Legend

- ① Improved Park Entry
- ② Improved Surface Parking
- ③ Existing Trailhead Parking
- ④ Picnic Area
- ⑤ Improved Boater Services
- ⑥ Wetland Overlook
- ⑦ "The Promontory"
- ⑧ Improved Parking
- ⑨ "The Boathouse"
- ⑩ Children's Playground
- ⑪ "The Great Lawn"
- ⑫ Utility & Service Area
- ⑬ Marina Building
- ⑭ "The Beach"
- ⑮ Food and Beverage
- ⑯ Splash Pad & Skating Pond
- ⑰ "The Cove"
- ⑱ Relocated Boat Ramp
- ⑲ Lakefront Promenade
- ⑳ Improved Floating Docks
- ㉑ "The Pier"



View from "The Pier" looking towards the splash pad

MASTER PLAN

The current anchoring system is very well suited for the changing water levels and existing equipment should be inspected regularly to ensure the cables and winches are in sound condition.

By deepening boating channels, the proposed Big Dig project will extend the boating season and keep the marina open for about two added months each year. Lakebed material excavated from the lakebed will be used to extend the existing pier, improve the shoreline and provide expansion opportunities for upland park recreation and leisure facilities such as flexible use, parking, and picnic areas.

Building Architecture

Several new or expanded buildings are proposed. It is important that the architectural character of these buildings complement each other and the site uses and views and user experiences. The parallel effort to develop an expanded Marina Operations Facility, led by Matthew Stais Architects, has obtained public input into the character of building architecture to establish a precedent for future buildings. Buildings should be designed to seamlessly integrate indoor and outdoor spaces by providing terraces, decks, rooftop, and open walls that supports programming and complements park activities.

Landscaping

The high altitude site location, combined with topography, soils and location in a floodplain, suggests utilizing a hierarchy of landscape treatments that transition from upland to lowland and urban to natural, from west to east. Integrate and balance active use areas with protected open space, and carefully site buildings, parking areas, and support facilities to minimize negative impacts on vegetation and views. Spaces should be thoughtfully designed to use of changes of grade and variety of vegetation and surface treatments, to create variety, challenge and interest while providing access for people of all ages and abilities. Reduce the number of evergreen trees, which break up the space and inhibit the valued view, and add more shade trees and flexible use lawn areas to create comfortable and defensible space areas for public use and gathering.

Shoreline

The beach and the adjacent areas are by far the most popular areas in the current park. In the summertime activities and events are concentrated in the small lawn and sand areas north of the Lund House. The plan utilizes Big Dig materials to expand the amount of accessible water's edge by lengthening and widening the sandy beach areas on the north shore, and by providing a re-shaped shoreline on the east side that allows for a more naturalistic water's edge that balances access for people with constructed wetlands and lowland landscape that will better support vegetation and habitat.

Ecology

The existing project site is surrounded by wetlands that provide water quality and habitat value for the larger region. Implementation of the master plan will require that any disturbed wetlands be mitigated by providing new constructed wetlands on or off the project site. While high quality wetland areas north and south of the project site will be protected and preserved, the northern and eastern shores of the Frisco Marina Park will be re-contoured to provide park and marina user access. Detention and water quality treatment will be required to accommodate runoff from the addition of impervious surfaces.

Although implementation of the Master Plan is expected to result in some permanent losses of wetlands by filling them to create new marina amenities, wetlands should be avoided whenever possible. Any placement of fill within those wetlands (or into the reservoir itself) will require a Section 404 of the Clean Water Act permit from the US Army Corps of Engineers. Generally, the Section 404 permitting program requires that unavoidable wetland impacts be compensated for by creating new wetlands of similar form and function, or by restoring/enhancing nearby previously degraded wetlands.

Great opportunities exist for restoring and/or enhancing already impaired larger areas of adjacent wetlands to compensate for those losses. Most of the PSS wetlands close to the marina (but outside the footprint of the proposed facilities) have been partially dewatered by historic activities and could be enhanced by restoring a more natural water regime. New wetlands could also be created in and around the existing PSS wetlands within minimal earthwork required.

While it may be possible to restore or create new wetlands around the immediate lake perimeter (supported by water in the lake and stormwater runoff) to compensate for wetland losses, this approach is less likely to succeed than those supported by a more predictable and natural water source like Ten Mile Creek or other tributaries.

Infrastructure

Due to its location and prior development Frisco Marina Park has access to sufficient utility infrastructure to support future needs. Potable water and sewer serve existing and proposed buildings, and are being upgraded as part of the proposed relocation of the marina operations building. Dry utilities such as power and communications are existing on the site and will be upgraded as part of future improvements to provide enhanced services to the marina and new buildings, including upgraded wireless communications (WiFi). Stormwater management is a critical consideration as water entering the lake must meet both Town of Frisco and Denver Water's standards for water quality. The master plan includes requirements for adding detention and water quality treatment for all new buildings, parking and other uses that increase runoff from the site.

Adjacent Sites

The privately owned properties north of Marina Road, the sanitation district facility to the south, and the cemetery all limit opportunities for expansion of marina and park uses. The wastewater treatment plant and its adjacent property at Parcel B-2, and the cemetery are essential functions that will not change. Mixed use zoning and a very strong real estate market suggest that potential opportunities for redevelopment of the Farrell Gas and Pet Supply store sites may exist. The plan anticipates that if redevelopment were to occur, it should be compatible and complementary to the marina and park uses. Such uses suggested in the plan include structured parking wrapped with mixed use space facing SH9.

Parcel B-1, while owned by the Town, is not dedicated park land and its zoning suggests that there may be other uses that support the Town's goals. As it is currently used to support the park by providing areas for overflow parking, storage and mobile vendors, the master plan recommends that it be used in the short term for expansion of marina park parking, and that any future redevelopment include parking dedicated to marina and park uses.

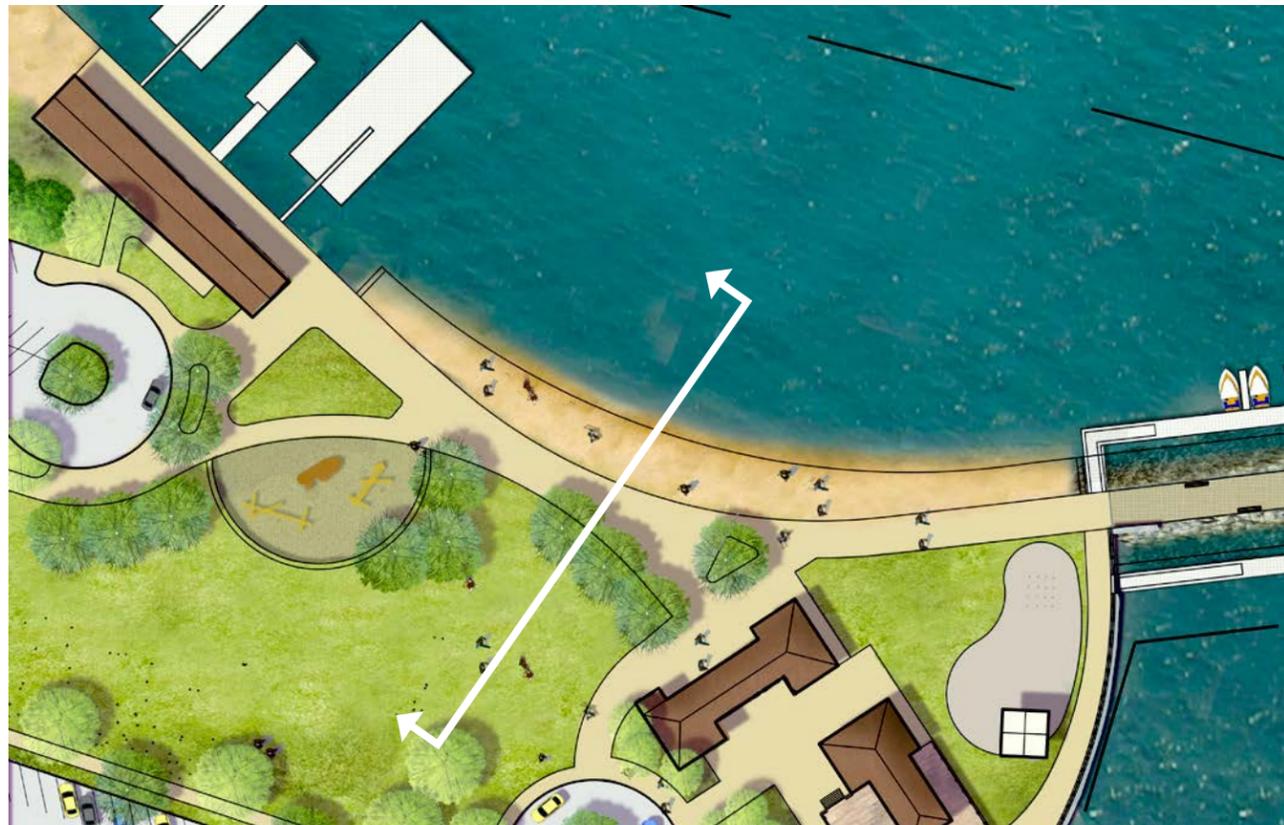
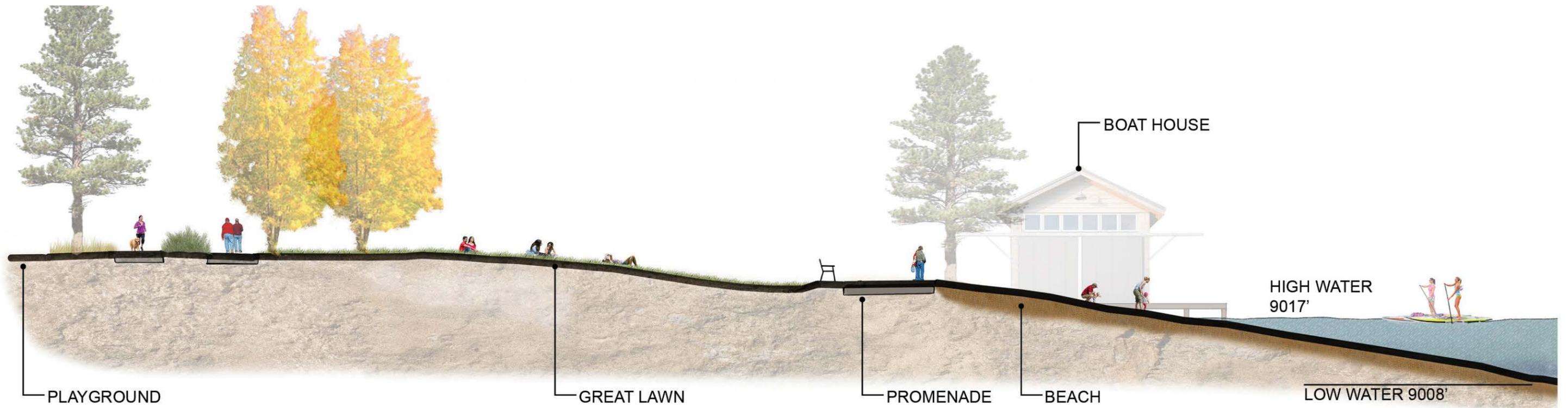
PARK ENTRY

Section A The Park Entry. The entry to the Frisco Marina Park is an important part of the visitor experience as well as a gateway opportunity for the Town at Main Street. As an extension of Main Street, Marina Road winds through the park exposing the visitor to expansive views of the lake. The improved intersection, pedestrian and bicycle access improvements, and the redevelopment of the SH 9 frontage will be a more attractive front door to downtown, while supporting improved wayfinding and access for various modes of movement within the park.



Trails at park entry

MASTER PLAN



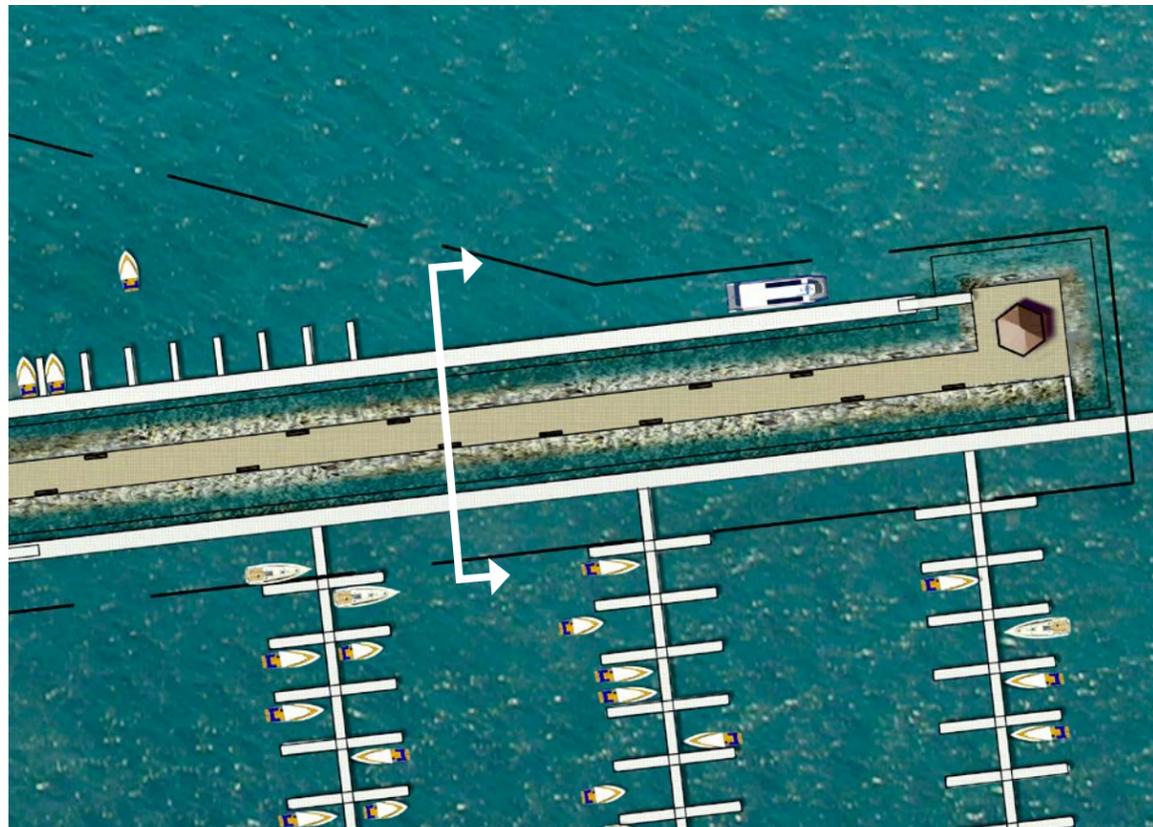
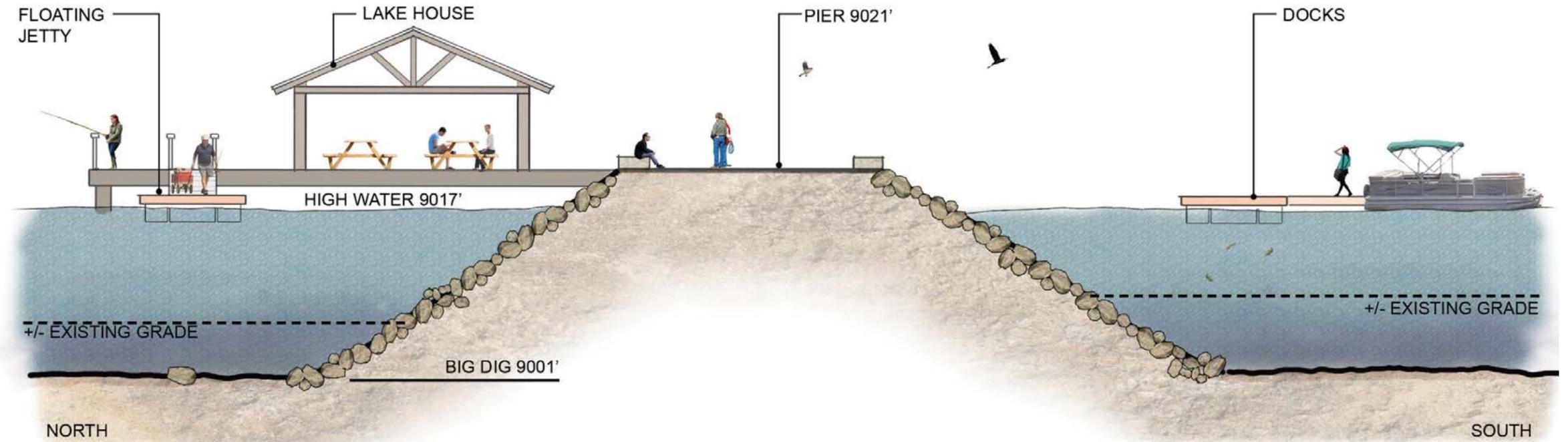
THE BEACH

Section B: The Beach. Since the sand beach was added it has become one of the most popular spots in the park, providing a rare opportunity for people to wade and touch the water. By relocating the boat ramp, a continuous shoreline of both sandy beach and more natural shoreline, extending the length of the park, will support water-oriented activities such as sand play, wading, sunbathing, nature exploration, boating, and perhaps eventually swimming.

Photo by Matthew Stais

THE PIER

Section C: The Pier: A signature asset of the existing marina is the constructed pier that juts into Frisco Bay. An historic remnant of the former state highway to Dillon, this will become an improved pedestrian walkway, separated from the boat docks, extending farther into the bay, with a pavilion overlook at the end. The pier will allow marina functions, such as boat launching and low water access, to continue, while encouraging visitors to get closer to the lake to stroll, watch boats and fireworks, and get to their boats.

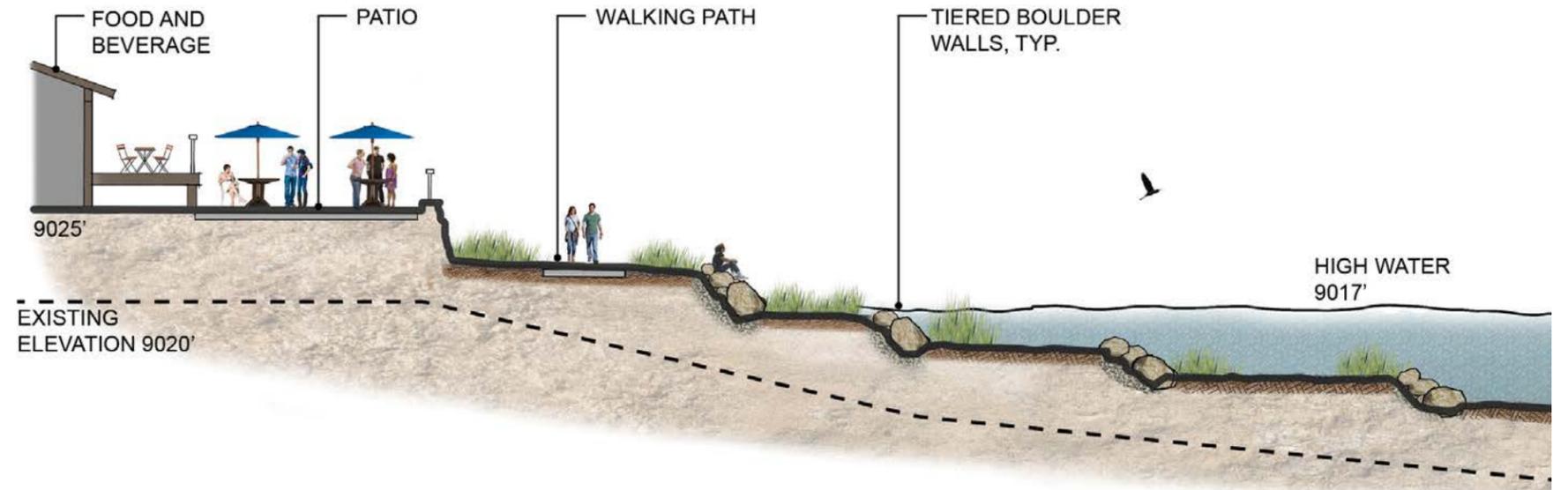


View from "The Pier" looking towards the skate pond

MASTER PLAN

THE COVE

Section D: The Cove. The eastern shoreline provides wonderful views of the marina with the backdrop of the lake and distant mountains. This area will be reshaped with the Big Dig to include a new location for the boat ramp, a bulkhead that allows access to the water's edge, and a natural boulder and native vegetation treatment that restores the lake edge to a more pristine condition. Wetlands that are disturbed will be mitigated (both on and off-site) to continue providing terrestrial and aquatic habitat, erosion control and water quality treatment for site stormwater runoff.



Shoreline treatment at "the Cove"

PHASING AND PRIORITIZATION

IMPLEMENTATION

Frisco Marina Park is a unique community asset and economic development opportunity for the Town. Currently operated as an Enterprise Fund, revenues generated from on-site facilities and activities are, and can be, used to reinvest in improvements, operations and maintenance of new facilities. The Enterprise Fund allows the marina great flexibility in developing public-private partnerships (P-3s) to help manage and operate the facilities at a high level. Current and potential partners include:

- DRReC
- Denver Water
- Town of Frisco
- Summit County
- CDOT
- Colorado Parks and Wildlife
- Grants, such as Great Outdoors Colorado
- Concessionaires and Local Businesses

Over time, the Town can look to additional sources of funding to enhance and support the Frisco Marina Park's design, construction, programming and operations, such as the Town's Capital Improvements Program, real estate development, philanthropy, sponsorships, programming, permits, and concessions. In order to plan for both immediate and future needs and funding opportunities, and to be prepared for opportunities that may arise for grants and partnerships, the Frisco Bay Marina master plan provides a phased approach to implementation.

Phasing recommendations follow priority needs as established in the master planning process. Projects already funded and under way are included in earlier phases while those requiring additional planning, community input, funding and/or partnerships are included in later phases. Maintaining flexibility is important when prioritizing phasing as factors such as changing leadership priorities, economic cycles that impact available funding, and even weather will contribute to changes over the course of time.

MARINA MARKET ANALYSIS

The marina market in Colorado is limited by the very small number of navigable lakes in the state, and demand for boating remains very strong throughout Colorado. On Lake Dillon, the marina market is limited to the Dillon Marina and Frisco Marina. Both marinas are reasonably modern facilities with very strong occupancy (both have waiting lists for slips of all sizes), but Dillon Marina currently offers more deep water slips and greater access to modern marina utilities. Most significantly, Dillon Marina offers slips that are in place and accessible throughout the entire boating season, whereas Frisco Marina is not currently fully accessible until early July in typical years. Dillon Marina charges higher rates for nearly all of their services and facilities when compared to Frisco Marina, sometimes significantly higher.

It is clear that there is sufficient market demand to support significant expansion of both public marinas on the reservoir, as well as significant increases in slip rates. As Frisco Marina is modernized to offer comparable facilities to Dillon Marina, one could easily argue that the exceptional quality of the Frisco Marina site, staff, and access to the adjacent Frisco downtown are worth rates at least equal to those charged at Dillon Marina, if not somewhat higher.

While all slips in Frisco Marina are occupied and there is a waiting list for slips of all sizes, there is little desire among the community to significantly expand the marina or add more than the 30 additional slightly larger slips proposed in the plan. The community expressed a desire that the marina focus on providing slips under 40' in length and maintain all existing 25'-30' slips to ensure that local residents and longtime slip holders can continue to use the facility.

As stewards of Frisco's waterfront, it is incumbent on the Town of Frisco to charge fair market value for the services provided in order to provide sufficient and sustainable funding for the ongoing operation of the marina, maintenance of facilities to protect the environment, and expansion of access to the very limited waterfront for residents and visitors alike. In response to the Town of Frisco's goal of achieving equitable access to the marina facilities for all residents of Frisco, we believe a reasonable approach would be a tiered rate structure that offers lower rates to residents as needed and higher rates for non-residents. This is a very common approach in municipal marinas nationwide, as it recognizes the additional financial support provided to marina operations and infrastructure by residents when compared to non-residents.

As marina improvements come on line, we recommend Frisco Marina rates match those charged by Dillon Marina, with serious consideration given to increasing rates to 5% over Lake Dillon over time. We also recommend increasing rates every year to keep up with inflation for two primary reasons. First, it is the responsibility of the Town of Frisco to maintain a financially viable marina in order to maintain your Clean Marina Standards and minimize environmental risk to the reservoir. Second, too often municipal marinas fail to increase rates for many years, when suddenly a financial crisis requires dramatic increases. While boaters understand the effect of inflation on prices and generally tolerate small annual increases reasonably well, they generally react very poorly to occasional increases of 10% or 15% even when rates haven't increased in many years. It is a sound business practice to increase charges as operational expenses increase every year.



Precedent imagery

PHASING AND PRIORITIZATION



Phase 1: Marina Operations Building and Park Entry Improvements.

The proposed new Marina Operations Building will be built to replace the aging Lund House in order to better serve the needs of marina staff for management, retail and rental operations. At the same time the CDOT "Gap" project will include improvements along SH 9. The intersection of SH 9 with Main Street/Marina Road will be reconstructed to improve pedestrian and bicycle access and safety to and from the park, and create an alternative RecPath alignment along SH 9. The property known as Parcel B-1 will be paved and landscaped to accommodate additional parking for the marina and park areas while improving the look of this important frontage along SH 9. A paved and landscaped area will also accommodate events and other uses such as food trucks, vendors and farmer's markets.

Improvements to SH9 and Marina Road include realignment of the intersection to align the south curb of Marina Road with Main Street, for turn lane efficiency and pedestrian safety. Discussions with CDOT have indicated the potential for crosswalk and curb ramp enhancements, and the addition of median refuges and bicycle priority signals.

Paved and landscaped improvements of Parcel B-1 will increase parking capacity to at least 150 spaces, and reduce the need for staffing for traffic control during events. This also provides additional capacity for parking to serve Main Street and will continue to allow permitted vendors with visibility from summit Boulevard, while providing a much more attractive frontage.

The relocation of the marina operations building puts it in a location where it can best serve the needs of the marina – maximizing views of the marina, bay, and boat ramp. The increased size of the building will provide retail, rental and restroom operations where easily accessed from the waterfront.



Phase 2: Big Dig and Related Park Improvements.

This phase is to be coordinated with, and is in part dependent on, the work of the "Big Dig". Big Dig earthwork excavated from the lakebed will be used to improve upland areas of the park and allow for relocation of the boat ramp, extension of the pier and parking areas, reshape the open space and shoreline, and expand the promenade, marina facilities, and docks. Phase 2 can further be subdivided to reflect Town priorities and availability of funding as follows:

- Phase 2a: Big Dig regrading, including reshaping of shoreline and marina operations building area, including the extension of the pier and promenade, including finishing sitework around the new buildings.
- Phase 2b: Relocate boat ramp and access drives including improvements to south parking area and drop-off.
- Phase 2c: Expand flexible use open space by adding to the north parking area, adding the food and beverage building, removing or re-purposing existing buildings, and providing remaining internal park path improvements.

The Big Dig permit allows up to 75,000 cubic yards of material to be excavated from the lakebed to improve navigation in the bay and extend the boating season. The permit will need to be modified to allow material from the excavation to be used to reshape the shoreline, add fill, impact wetlands, and be done when the lake is high. Permits and approvals will be required for impacts on the floodplain (CLOMR/LOMR), wetlands (404 permit), and approvals from Denver Water for work outside the current lease area. Relocation of the boat ramp will require support facilities for rigging, sanitary pump-out, fueling dock, inspections, wash outs and regulatory signage associated with state requirements.

Realignment of parking will be designed to make use of as much existing pavement as possible while moving parking farther from the water edge, and providing drop-off access to the new building area. The realignment of parking opens up the great lawn area to provide flexible use open space for recreation, leisure and event activities. Marina improvements include extension of and improvements to the pier, addition of docks with power and water, reshaping of "the beach" and "the cove", providing additional access to the shoreline. The area around the marina operations building would be improved to include a new food and beverage building with outdoor patios, a multi-season use area that includes a splash pad, pond skating rink and a pavilion that can host smaller groups and events year round.



Phase 3: Boathouse and Service Yard.

In order to provide a more efficient boating support facilities and to consolidate storage of non-motorized boats that are currently stored on outdoor racks, the boat storage and boater service buildings will be added as shown on the plans. Additional improvements to water front access, added launch facilities for kayaks, canoes and stand up paddle boards, and areas for winter boat storage, rigging and boat wash facilities will be added along with associated infrastructure, site and landscape improvements.

Boathouse architectural character will be consistent with the design of the marina operations building currently being developed. The facility, built into the side slope at the north shoreline, is envisioned as a two story facility with the lower level providing access and storage for the rowing club (60 boats) and the upper story providing capacity for storage of kayaks, canoes and SUPs (rentals and racked). Lakefront improvements include shoreline launch area and expansion of floating docks with rollers.

The Boat repair facility has outgrown its current facility, which was originally intended to be temporary. Increased demand for mechanical and non-mechanical repairs and storage, as well as the inefficient current site layout drives the need for redesign to include a larger winterized building to include work areas, restrooms, a small office, paved access, and more efficient boat storage areas. Changes to the secured (fenced) perimeter area will open up the areas outside the compound for better visibility along the trail and an opportunity to better integrate into the park and natural areas landscape.

Adding a boardwalk across the wetlands to the south of the site to the PRA was included in the 2017 Trails Master Plan. While consideration of this new boardwalk may continue, the sensitivity of the wetlands as habitat for a variety of birds and mammals, suggests an alternative overlook area, accessed from the existing RecPath, providing views to the lake and wetlands area.



Phase 4: Redevelopment on Out-parcels

Based on the outcomes of the ongoing Community Plan update, Town Council and Community Development objectives, and market forces, opportunities may arise for redevelopment of some or all of the mixed use zoned properties along Summit Boulevard flanking the entrance to the marina park. The plan identifies possible building footprints and access and parking opportunities for these parcels that complement and support the marina park and larger downtown area.

Redevelopment of Parcel B-1 is indicated as a potential option to wrap structured parking with multi-story mixed use development. Redevelopment of this parcel will take into account the need for parking to support the marina as well as other uses on the site. It will also require coordination with CDOT regarding access to SH 9, and the Sanitation District regarding access from Marina Road to their parcel.

Planning alternatives for relocation of boat and trailer storage initiated in earlier phases should be fully implemented at this stage. Potential to use the Sanitation District's property (Parcel B-2) for ongoing storage should be explored as an alternative to off-site storage, which is limited in and around Frisco.

PHASING AND PRIORITIZATION

BUDGET COSTS

Frisco Marina Park is envisioned as a high quality facility for the residents of and visitors to Frisco. Utilizing thoughtful design and sustainable materials and construction requires significant investment that will pay for itself in timelessness and longevity. One of the primary reasons of developing a master plan is to identify potential costs and funding mechanisms to allow for efficient implementation of recommended improvements. The following cost breakdown by phase is a high level budget (in 2018 dollars) that is conservative in that it includes assumptions and contingencies. Further detail and analysis is recommended to allow the Town to establish basis and strategies for seeking additional funding, partners, and other sources of revenue required to construct, maintain and operate the proposed Frisco Marina Park.

The Master Plan suggests a range of operational (pricing) and infrastructure (new docks) improvements that can generate significant new revenue to offset the cost of new infrastructure proposed in the plan. These improvements can generate new revenues that can be clearly quantified within the Enterprise Fund and be used to service revenue bonds to construct infrastructure. Conversations with the Town of Frisco indicate bond interest rates of 4% over 20 years are reasonably available to the Town of Frisco and are used below to identify the potential construction value of at least \$6,850,000 that could be supported by the following elements, which are for comparison only and subject to Town Council review and direction:

1. New Slips: Construction of 22 new slips at 35' with power and water will generate approximately \$62,200 in yearly revenues. These new slips will not have a meaningful impact on operational expenses, so this revenue will support approximately \$850,000 in construction value at 4% over 20 years.
2. Add Power to Slips: Providing modern marina utilities supports higher slip lease rates, and the plan proposes a modest expansion of utilities to 28 existing slips. This will generate approximately \$15,000 in additional yearly revenue, supporting approximately \$200,000 in construction value.
3. Increase Rental Rates to Match Dillon Marina Rates: Simply matching Dillon Marina's rates will generate an additional \$216,000 per year, supporting approximately \$3,000,000 in construction value.
4. Double Food & Beverage Revenues: With the construction of a new, larger restaurant, we believe F&B revenues will easily double, providing an additional \$53,000 in revenue supporting approximately \$750,000 in construction value.
5. Increase Rates to 5% above Dillon Marina: Given the exceptional quality of the Frisco Marina Park site and surrounding community, we believe the market will easily support rates 5% above Dillon Marina rates. This would generate an additional \$84,000 in yearly revenues, supporting approximately \$1,350,000 in construction value.
6. 10% Increase in Paddle Sports Revenue: The recently implemented 10% increase is expected generate an additional \$50,000 per year, which would support a construction value of approximately \$700,000.
7. In-the-wet excavation (dredging) for the Big Dig is estimated to be approximately double the cost of in-the-dry excavation (\$1,200,000), which is included in the budget costs.

Frisco Marina Park Budget Costs	Phase 1	Phase 2	Phase 3	Phase 4
2018 dollars. Include 25% contingency.	\$2,500,000	\$8,000,000	\$2,500,000	\$-
	partially funded for new operations building	can be subdivided as indicated in Master Plan		not estimated (developer participation)
General Improvements				
Demolition of Existing Drives and Parking	■	■	■	
Salvage/Relocation of Park and Marina Elements	■	■	■	
Big Dig Grading (in the Dry)		■		
Site Grading and Prep		■	■	
Entry Road/Intersection Improvements	■			
New Driveways and Parking	■	■	■	
Boat Ramp Relocation		■		
Utilities and Infrastructure	■	■	■	
Sidewalks and Paths (Conc)		■	■	
Bulkheads and Retaining Walls		■		
Boardwalk			■	
Playground		■		
Site Amenities and Furnishings		■	■	
Site Lighting		■		
Landscaping and Irrigation	■	■	■	
Shoreline/Beach		■		
Wetlands Mitigation	■	■	■	
Buildings				
Marina Operations and Retail	■			
Food and Beverage		■		
Non Motorized boat Storage			■	
Boater Service			■	
Marina improvements				
Pier and Lakefront Promenades		■		
Marginal Walkway		■		
Transient Marginal Walkway		■		
80 ft Gangways with Platforms		■		
Dock Utilities (Power and Water)		■		
Shoreside Electrical Supply		■		
Relocate Fuel Dock		■		
Rock Revetment		■		
Other Features (Optional)				
Structure Parking				■
Permanent Stage			■	
Splash Pad and Pond Skating Rink			■	
Non-motorized boat launch dock			■	
Sand Volleyball Courts		■		



Overall Master Plan- for more detail see page 16 & 17

NEXT STEPS

The Frisco Marina Park master plan was developed as a vision for the next generation of improvements to the site. In order to advance these recommendations projects will need to be identified based on phasing priorities and available funding. In general the more that is completed within each given phase creates economies of scale that can significantly reduce overall project costs, both in time and capital.

Recommended Actions to further develop the plan and begin implement its recommendations include:

1. Update the USACE Big Dig permit to include: "in the wet" excavation (dredging); relocating some excavated material outside of the lake, above the 9017 contour, as required to reshape the shoreline and add fill in the park; allow for wetlands impacts requiring a 404 permit and mitigation; and work in the floodplain requiring a CLOMR/LOMR.
2. Renew the Marina's lease with Denver Water to include: expanded park boundaries; include updated uses; and further explore permitting swimming in the marina park.
3. Design of Phase 1 and 2 improvements to including ongoing design and construction of marina operations building, coordination of Summit Boulevard improvements with CDOT.
4. Design of phase 2 improvements to include lake bottom grading plan for extended season navigable channels consistent with the new boat launch ramp, extension and improvements to the pier, relocation of the slips to the south side, and transient and non-motorized boating on the north side.
5. Coordination with the Frisco Sanitation District regarding potential ongoing use of Parcel B-2 for boat trailer storage and as an alternative location for winter boat storage, potentially sharing revenue with the District.

6. Coordinate with town-wide snow removal master plan to reduce on-site snow storage requirements.
7. Review and update marina park rules to define what is appropriate for overnight stays, especially once power and water are provided to the docks.
8. Review and update winter boat storage plan to reduce on-site needs for boat storage to free up site to accommodate off-season uses.
9. Phased removal of existing buildings once new buildings are in place. This includes finding an off-site location to receive the historic Lund House.
10. Perform a market analysis of the potential Food and Beverage opportunity for the site. The improved facility with a new location on the waterfront should draw more customers, and adding winter recreation amenities may support year-round viability. Explore opportunities to support picnics, boater supplies, shuttle visitors, and catering. Explore design-build-operate potential to fund construction costs.

