Introduction

Resource Management Plans (RMPs) are working documents that provide a guide to the short- and long-term management of properties under the stewardship of the Department of Conservation and Recreation (DCR). They include an inventory and assessment of natural, cultural, and recreational resources; identify unique characteristics and values of a property; and analyze complex resource protection and recreation issues. They guide the management of DCR's properties by setting priorities, targeting capital and operational resources, protecting sensitive resources, and improving communication and cooperation with park visitors, stakeholder organizations and the surrounding communities.

The Department of Conservation and Recreation is directed by a legislative mandate (M.G.L. Chapter 21: Section 2F) to prepare management plans for "all reservations, parks, and forests under the management of the department." Although the mandate does not specify the format or content of these management plans, it does require that:

"Said management plans shall include guidelines for the operation and land stewardship of the aforementioned reservations, parks and forests, shall provide for the protection and stewardship of natural and cultural resources and shall ensure consistency between recreation, resource protection, and sustainable forest management."

The legislative mandate also establishes two other requirements. First, that the DCR "shall seek and consider public input in the development of management plans, and shall make draft plans available for a public review and comment period through notice in the Environmental Monitor." Second, management plans must be reviewed and adopted by the DCR Stewardship Council, a volunteer citizen oversight entity. Within 30 days of adoption, the Commissioner "...shall file a copy of such management plans as adopted by the council" with the Secretary of State and the Joint Committee on the Environment, Natural Resources and Agriculture.

CHARLES RIVER ESPLANADE - NEW BASIN COMPLEX

This plan covers the Charles River Esplanade - New Basin Complex located at the mouth of the Charles River in the municipalities of Boston and Cambridge. The Charles River Esplanade - New Basin Complex is one of 32 management units maintained and operated by DCR. This designed landscape includes parkways, parks and natural areas along a 3-mile long portion of the Charles River Basin extending from the BU Bridge to Boston Harbor. The Charles River Esplanade is well known for its Independence Day celebrations at the Hatch Shell.

DCR staff assigned to the Charles River Esplanade - New Basin Complex manages the Cambridge and Boston Esplanades, New Basin Parks, City Square Park, Memorial and Storrow Drives, two indoor skating rinks, two dams and six pedestrian bridges connecting adjacent neighborhoods to the parks. Seven boathouses, two yacht clubs, a food concession, and the Museum of Science are operated by private organizations on DCR property within the Complex. Boston University, the Massachusetts Institute of Technology and Massachusetts General Hospital are located adjacent to the Complex.

MANAGEMENT PRINCIPLE AND GOALS

The resource management planning process has identified the following management principle and associated goals to guide future management of the Charles River Esplanade - New Basin parks, and provide a foundational structure for this plan.

Management Principle

Create a more sustainable, universally accessible pastoral landscape that restores the park's historic character and provides high-quality recreational facilities through the creative use of limited state resources and private partnerships.

Management Goals

Improve river water quality.

• Achieve swimmable and fishable water quality.

- Maximize public access to the water while ensuring a safe and quality experience for all.
- Raise awareness of water-access opportunities.

Enhance the natural landscape.

- Diversify plant communities for a healthier and more attractive native landscape.
- Enhance wildlife habitats while managing invasive plant species.
- Establish a more sustainable and easily maintained landscape.
- Establish best management practices for achieving the highest quality of design, sustainability, maintenance and landscape restoration for the park.
- Interpret the natural resource systems of the parks and the region.

Restore the Cambridge Esplanade.

- Enhance the character-defining features of the landscape while adapting the park for contemporary users.
- Install historical lighting and benches.
- Separate footpaths and bike paths.

Provide contemporary recreation facilities on the Boston Esplanade.

- Assure that all park uses shall be public in nature or provide direct and substantial public benefits.
- Support a variety of uses that relate to and directly benefit from the river setting.
- Balance and distribute active and passive uses along the banks in a manner that minimizes conflicts, restores historic buildings and protects the landscape.
- Separate footpaths and bike paths.
- Ensure that park structures complement the pastoral river setting.
- Improve public access to the banks and water for people of all ages, abilities and backgrounds.
- Support use of the park during the winter months and evening hours wherever possible.
- Provide a wide range of regional events and programs while mitigating impacts on both the park and surrounding neighborhoods.
- Reduce the impact of cars on pedestrian paths and parklands.

Complete the New Basin parks and pathways.

- Provide safe and continuous bicycle, skating, running, jogging and pedestrian access along the entire length of the New Basin.
- Complete riverfront parks at the old lock area and Lovejoy Wharf.
- Establish easier and safer pedestrian and bike access across the river, railroads and dams.
- Reclaim as much previously public open space from parking uses as required by Ch. 91.

MANAGEMENT RECOMMENDATIONS

Recommendations are characterized on the basis of priority (i.e., High, Medium, or Low) and resource availability. High priority recommendations are those that address regulatory compliance or public health and safety; prevent immediate damage to, or loss of, resources; or repair or replace damaged equipment or systems critical to park operations. They are typically time sensitive. Medium priority recommendations maintain existing resources and visitor experiences. Low priority recommendations enhance resources or visitor experiences; they are not time sensitive.

Resource availability considers both funding and labor. A resource availability of "1" indicates that funding and/or labor are available to implement the recommendation. A resource availability of "2" indicates that funding and/or labor are not currently available but may become so in the near future (i.e., the next five years). A resource availability of "3" indicates that funding and/or labor are not anticipated in the next five years. Resources to implement these recommendations may, or may not, become available after five years.

This RMP identifies 52 recommendations; 25 are classified as high priorities (see Table 1). Resources are currently available to implement 13 of these high priority recommendations. It is anticipated that resources will be available within the next five years to implement the remaining 12 high priority recommendations. Short-term actions to advance the management recommendations and the lead DCR unit responsible for coordinating their implementation are identified in the Action Plan that accompanies this Executive Summary (see Table 2).

Table 1. Number of Management Recommendations by Priority and Resource Availability

Resource Availability^a **Priority** Total 1 2 3 High 13 12 0 25 Medium 7 17 0 24 0 2 3 Low Total 20 31 52

Table 2. Action Plan 2015-2018

Short Term Action	DCR Lead Unit
Improve river water quality.	
Require that all capital projects employ stormwater best management practices, treatment systems that remove phosphorus from stormwater, and state-of-the-art Low Impact Development techniques to encourage stormwater infiltration and reduce surface runoff into the River (e.g., vegetated swales, infiltration catch basins and stormceptors).	Engineering
Establish and maintain low vegetative riparian buffers using native species along the shoreline to provide wildlife forage and cover; increase stormwater infiltration directly into the groundwater table; restrict the ability of geese to move between water and lawn without flying; and absorb sediments and nutrients before they enter the River.	Planning
Enhance the natural landscape.	
Collaborate with the Division of Marine Fisheries to support an evaluation of diadromous fish migration at the New Charles River Dam in order to optimize fish passage, with consideration for the dam's operation, existing hydrologic and hydraulic conditions. Decommission the existing fish passage to minimize migratory fish kills in the fish ladder.	Planning
Implement invasive plant best management practices to support native plant populations along the River. Work with stakeholder organizations to develop an Invasive Plant Management Plan for species determined to be "invasive" or "likely-invasive" by the Massachusetts Invasive Plant Advisory Group. Implement the Plan after appropriate review and approval by local and state regulatory authorities.	Planning
Discourage Canada geese from congregating along the riverbanks by mowing the lawn as infrequently as possible and planting less-palatable grass species (e.g., tall fescue K-31 instead of Kentucky bluegrass). Use low vegetative buffers adjacent to the riverbank, solar powered geese beacons and trained dogs to discourage geese from feeding in active recreation areas.	MassParks

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a. Availability of resources for implementing recommendations: 1 = funding and/or labor is currently available; 2 = funding and/or labor is currently unavailable, but may become so in the next five years; and 3 = funding and/or labor is currently unavailable, but may become so in more than five years.

Table 2. Action Plan 2015-2018 (Continued)

Short Term Action	DCR Lead Unit
Restore the Cambridge Esplanade.	
Construct the previously designed and permitted Memorial Drive Phase II project that will introduce a parallel multi-use path along Memorial Drive to separate pedestrian and bike traffic, install historic lighting and make landscape improvements. Add stormwater improvements to promote stormwater infiltration and implement best management practices to remove nutrients, pollutants and suspended sediments from stormwater.	Engineering
In conjunction with the Longfellow Bridge project, create new traffic signals and crosswalks to link the Broad Canal path to Cambridge Parkway.	Planning
Provide contemporary recreation facilities on the Boston Esplanade.	
Work with The Esplanade Association to develop and implement a comprehensive ecologically sustainable landscape management plan for the Lower Basin.	Planning
Work with stakeholder organizations to develop an interpretive master plan for the Complex including recommended themes, interpretive signage, program descriptions and staff requirements.	Ranger Services
Work with Community Boating to repair the boathouse roof and exterior masonry, and install a lift to provide ADA access to the second floor.	Engineering
Where feasible, separate bicycle paths from lower speed walking paths throughout the basin and use softer surfaces on paths for runners and joggers. Work with stakeholder organizations to improve visitor safety through pavement markings, signage, public awareness campaign, changes to pathway surfaces and enforcement.	Planning
Design, permit and construct a new multi-use path connecting the Emerald Necklace at Beacon Street to the Boston Esplanade using the Harvard Bridge multi-use ramp.	Planning
Work with stakeholder organizations to develop a uniform directional, regulatory, informational and donor recognition signage system for the Lower and New Basin Parks to enhance pedestrian and bicycle connectivity.	Planning
Work with MassDOT and the Mass Eye and Ear Infirmary to integrate new parkland into the Boston Esplanade created by relocating the Storrow Drive west bound lanes under the inland Longfellow Bridge arch adding 75 feet of useable riverfront parkland at a critical choke point; and constructing a garage under the Charles Circle ramps with a new surface park that connects the Boston Esplanade to the hospital area and Charles/MGH station.	Planning
Work with The Esplanade Association (TEA) to prepare a coordinated public/private action plan to implement the Esplanade 2020 Vision for the Hatch Shell area.	Planning
Restore Commissioners Landing and the Grand Promenade on the Boston Esplanade. Build a new events/services court with seating and picnic areas.	Planning
DCR undertake a reuse study of the Lee Pool area that incorporates current DCR program needs and considers the feasibility of the TEA Esplanade 2020 Vision for an all-seasons recreation program.	Planning
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Table 2. Action Plan 2015-2018 (Continued)

Short Term Action	DCR Lead Unit
Complete the New Basin parks and pathways.	
Stabilize the historic Upper Lock Gate House and Boat House by renovating the building exterior, repairing structural defects and removing hazardous materials.	Planning
Seek legislative authorization to include the historic Upper Lock Gate House, Boat House and Stable Buildings in the DCR Historic Curatorship Program.	Planning
Remediate the North Point CA/T contaminated soil stockpile.	Engineering
The on-going DCAM, State Police, DCR facility study of the Old Lock Area consider the recommendations of the TEA Esplanade 2020 Vision to create a new entry plaza to greet and orient visitors to the Esplanade.	Planning
Fund MBTA design and construction of a multi-use pathway on the upstream side of the Bascule Railroad Drawbridge connecting the North Point and Nashua Street parks.	Planning
Design, permit and construct a new 12' wide multi-use South Bank Bridge over the MBTA railroad tracks behind North Station connecting Nashua Street Park to the proposed South Bank Park.	Engineering
Design and construct inundation protections for the Charles River Dam Pump Station to protect the flood control pumps from rising sea levels.	Engineering